zehnder
always the best climate

Zehnder Charleston

Prices and Technology 2022 - Sales International

ALWAYS THE BEST CLIMATE

“We strive to improve the quality of life by providing the finest indoor climate solutions.”

Excellent team
Every day we combine passion, expert knowledge and commitment to give you the best results.

Great solutions, products and services
Great products and unique service for an energy-efficient, healthy and comfortable indoor climate.

WE ARE THE SPECIALISTS FOR A HEALTHY, COMFORTABLE AND ENERGY-EFFICIENT

The broad and clearly structured portfolio from the Zehnder Group is split into five product lines. Consequently, we can provide our customers with the right product, perfect system and matching service for all types of projects – from new build to renovations, single or multi-occupancy homes, as well as commercial projects. This variety ensures that our wealth of experience is continuously expanding, providing tangible added value to our customers on a daily basis.

Comfortable indoor ventilation
Our comfortable indoor ventilation is energy-efficient and provides a healthy indoor climate. It promotes the wellbeing of the occupants and increases the value of the property.

OUR BRAND REPRESENTS INNOVATION, QUALITY AND DESIGN

zehnder

The Zehnder brand offers excellent indoor climate solutions within the product lines of decorative radiators, comfortable indoor ventilation, heating and cooling ceiling and clean air solutions.

First choice for customers
Always close to the needs of our customers, to grow with you and overcome all challenges together.

INNOVATION OVER 5 GENERATIONS

MANUFACTURER OF THE WORLD'S **1st** STEEL AND BATHROOM RADIATORS

REPRESENTED IN MORE THAN **70** COUNTRIES

AROUND **3,500** EMPLOYEES

17 OF OUR OWN PRODUCTION PLANTS IN EUROPE, NORTH AMERICA AND CHINA

INNOVATION SINCE **1895**

900 PATENTS AND DESIGN RIGHTS THROUGHOUT THE WORLD

AROUND **40,000** TRAINED CUSTOMERS PER YEAR

INDOOR CLIMATE

Decorative radiators
Our individual decorative radiators make every room – wether at home or in commercial or public buildings – not only warmer, but also more attractive. They combine iconic design with outstanding comfort experience.

Heating and cooling ceiling
The ceiling is the perfect place to supply a room with convenient heating and cooling. Energy-efficient climate via radiant panels work perfectly with our suite of solutions from office to manufacturing spaces.

Clean air solutions
Air cleaning systems from Zehnder effectively reduce the amount of dust and other particles in the air. The result: clean working environments, significantly improved employee health and enhanced business performance.

BEST QUALITY CERTIFICATES

Zehnder Group products are frequently awarded prizes for design and innovative technology.

iF DESIGN AWARD 2020

reddot winner 2020

General Sales and Delivery Conditions:

Our General Sales and Delivery Conditions apply. You can find these under “Legal notice” on our homepage at www.international.zehnder-systems.com.

About Zehnder Charleston

Zehnder Charleston - discover the original 4
Zehnder Charleston Benefits 8
Zehnder Charleston Individual Solutions 10
Zehnder Charleston Variety 12

Zehnder Charleston radiators

Zehnder Charleston 17
Zehnder Charleston Clinic 57
Zehnder Charleston Retrofit 93
Zehnder Charleston Turned 115
Zehnder Charleston Bench 121
Zehnder Radiator Bench 129
Zehnder Charleston Electric 137

Accessories

Mounting Sets 144
Valves 153
Rail 159
Miscellaneous 159

General

Keyword list 162
Pressure loss graph 167
Conversion table 168
Packaging 170
Coloursystem 172

Hot water operation

Electric operation

A radiator with tradition. The Zehnder Charleston.

Discover the original. Zehnder applied for the patent for Europe's first tube radiator as early as 1930 – marking the birth of Zehnder Charleston.

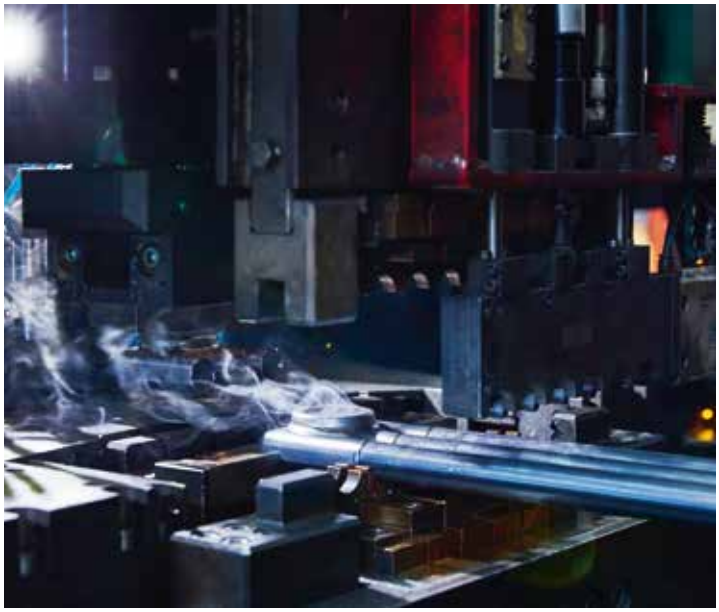
This began a success story that continues to the present day. Maybe it's due to the high quality "Made in Germany", maybe it's the timeless contemporary designs, maybe it's the countless customized solutions – or maybe it's all these things: Zehnder Charleston is and remains the classic, or better put, the original tube radiator.

Today, with an over 100 year company history, Zehnder is the specialist in heating, cooling, and fresh clean air. In addition to radiators for the bathroom, living room and buildings, our product portfolio also includes heating and cooling radiators, climate-controlling systems and Clean Air Solutions to filter dust.

As you can see: With Zehnder, you are choosing experience and know-how, a product portfolio that has something for everyone – and an expert service, that is tailored to your requirements and needs.

What's your project? The original Zehnder Charleston helps you realize your goals.

An idea generates sparks.
A classic is born.



TODAY AS ALWAYS, A FIRM FAVOURITE.

Even an original has to move with the times. For Zehnder Charleston, this meant having to switch over to modern industrial production methods: the manufacturing of Zehnder Charleston with LaZer made. This innovative laser welding method for the production of sectional radiators is setting new standards for quality and technology in terms of precision,quality and functionality.

MASTERFUL. THE ZEHNDER FACTORY.

For all the technological progress, there are some things that only “good old-fashioned handicraft”can accomplish: In the Zehnder factory, special productions are made to individual requirements and wishes – masterfully.

MADE IN GERMANY. PUT THROUGH ITS PACES.

You can rightly expect that Zehnder Charleston is made – and tested – in Germany. For example, all radiators are fully tested for leaks. And delivery is also done with care: Sturdy cardboard packaging carries the radiator safely to its destination and a further packaging of stretch film protects it during and after installation.

Zehnder Charleston.
Benefits of the classic radiator.

THE ORIGINAL

Often copied, but never bettered: When Zehnder registered its patent for Europe's first steel tubular radiator on March 18, 1930, no-one could have known that this invention would still be at the cutting edge over almost 90 years later. Zehnder Charleston was, is and remains without doubt a truly timeless classic.

1

MADE IN GERMANY

Innovation, design, quality – you should expect nothing but the best from Zehnder. All radiators are 100 % approved against leaks and can even be delivered galvanized for humid rooms. The specially developed primer and powder coating process gurantees a smooth and durable surface.

2

COSY WARMTH - EVERYWHERE

Zehnder Charleston ensures a balanced and pleasant room climate. Its large heating surface enables the Zehnder Charleston to powerful radiant heat and rapid warm-up period ensure cosy warmth straight away. And all this with the minimum of dust movement, which is good news for people with allergies.

3

CLEAN, HYGIENIC AND HEALTH

The distance between the elements enables easy cleaning of the radiator. Zehnder Charleston meets the highest hygiene standards (Certified by Düsseldorf University), and can also be delivered with the TopCare anti-microbe surface (in RAL 9016). The paint contains no solvents.

4

5 WARMTH AS YOU WANT IT

Curved, single or multi-angle or as a room divider: Thanks to its countless special designs, Zehnder Charleston can fit in all buildings. Even the building heights of 30 - 600 cm can be undercut or exceeded as required.

6 MORE THAN JUST WHITE

Zehnder Charleston is available in over 700 colours and surfaces, from classic tones, contemporary and metallic colours through to metal surfaces, such as Technoline – this means you have to make no compromises when it comes to aesthetics.
All these lacquers are free of solvents and heavy metals, and therefore do not release any toxic fumes.

7 QUICK AND SIMPLE

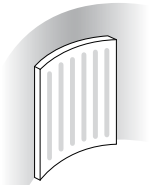
Thanks to the Zehnder EasyFix assembly system, all radiators can be installed simply, safely and quickly. This saves installation time, and money. The location of the mounting points behind the tubes can barely be seen – another aesthetic benefit.

8 DELIVERED AS ORDERED

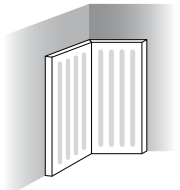
A bar code-based logistics system ensures reliable, punctual delivery. A robust fully cardboard packaging prevents any kind of transport damages, and an extra film covering protects the radiator during and after installation. It is only removed during the move-in.

Individual solutions

Homes, studios, offices, banks, hospitals...Buildings have highly varied uses, and their architecture can be just as varied. So it's good when top plans even work out for warmth: Zehnder's radiators allow you to realise your ideas in the most diverse of architectural designs.



Curved



Angled

Zehnder Radiator Bench

Enjoy total relaxation:
The Zehnder radiator bench offers a warm and comfortable seating area.
Heating and a seat - a space-saving alternative, for example for the hall. In addition: You can choose the bench type yourself.

Zehnder Charleston Bench

Warmth through the bench: Thanks to Zehnder Charleston Bench, you can turn your radiator into an additional storage option or a bench upon which you can sit and enjoy the glowing warmth. In addition: You can choose the bench type yourself.

Zehnder Charleston Retrofit

From old to new: Zehnder Charleston Retrofit is the right choice for swapping old for new, and cold for warm. Can be mounted to existing connections without major building work.

Zehnder Charleston Turned

Zehnder Charleston Turned, the original steel tubular radiator with a new look, boasts a fresh design and great performance. The orientation, rotated by 90°, lends the classic radiator a new dimension and gives Zehnder Charleston Turned an exceptionally slim design. Due to its outstanding performance, the steel tubular radiator turns large living spaces into an oasis of well-being. Available in almost any colour and finish from the Zehnder colour chart.

Zehnder Charleston Completto

Top preliminary work:
Zehnder Charleston Completto is the ideal radiator for new buildings – pre-installation in the unfinished structure, and then radiator installation once the building is complete.
And thanks to it's integrated valve, not only the mounting is easier, but also the operation.

Zehnder Charleston Clinic

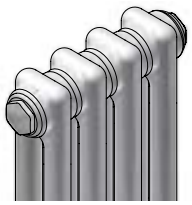
Easy cleaning, greater hygiene: Thanks to the large space between the tubes, the Charleston Clinic is quick and easy to clean, making it ideal for doctor's surgeries, hospitals and children's bedrooms.

Zehnder Charleston

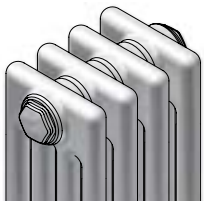
	Overview of models	Product description	List prices	Special versions	Connections	Fixings	Technical data	Installation points
Zehnder Charleston								
■ Classic tubular radiator ■ Element length 46 mm ■ Flexible connection options	18	19	21	41	43	47	50	55

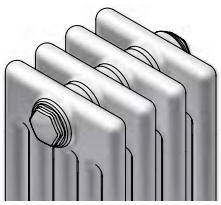
Zehnder Charleston

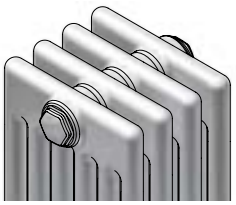
Zehnder Charleston


2-column

3-column


4-column


5-column


6-column

Height [1] mm	Depth mm				
	62	100	136	173	210
260	2026	3026	4026	5026	6026
300	2030	3030	4030	5030	6030
350	2035	3035	4035	5035	6035
400	2040	3040	4040	5040	6040
450	2045	3045	4045	5045	6045
500	2050	3050	4050	5050	6050
550	2055	3055	4055	5055	6055
600	2060	3060	4060	5060	6060
750	2075	3075	4075	5075	6075
900	2090	3090	4090	5090	6090
1000	2100	3100	4100	5100	6100
1100	2110	3110	4110	5110	6110
1200	2120	3120	4120	5120	6120
1500	2150	3150	4150	5150	6150
1800	2180	3180	4180	5180	6180
2000	2200	3200	4200	5200	6200
2200	2220	3220	4220	5220	6220
2500	2250	3250	4250	5250	6250
2800	2280	3280	4280	5280	6280
3000	2300	3300	4300	5300	6300

[1] The values shown here are the so-called nominal height; the exact height varies by a few mm for 2-column radiators and for some of the 3-column radiators as well, see "Technical specifications"; larger heights over 3000 mm or intermediate heights are available on request.

Maximum radiator lengths on piece (per block)

Zehnder Charleston (also see price tables from page 21 onwards)

Model	Height mm						
	260 - 600	> 600 - 750	> 750 - 900	> 900 - 1000	> 1000 - 2000	> 2000 - 2500	> 2500 - 3000
2-, 3-column	64	64	64	64	22	22	22
4-column	64	64	64	60	22	22	22
5-column	64	64	50	50	22	22	17
6-column	64	55	46	42	22	17	14

Zehnder Charleston

zehnder
Made in Germany

Zehnder Charleston

Completto version

Product description

Zehnder Charleston – the original tube radiator.
The construction of individual elements gives the multi-column radiator enormous possibilities for adapting to the architectural circumstances found in new and old buildings. Nowadays, Zehnder Charleston generally comes with a custom finish, delivered in a single piece with connections to order. In the case of excess lengths or lengths on request, the radiator can also be delivered to the building site in several parts and assembled on site.
Zehnder Charleston meets individual expectations for the widest range of applications and has therefore been successfully used in all areas of buildings for decades. From private homes to public buildings, schools, homes, prisons, offices, shops as well as workshops and industrial buildings. Its versatility and variability are what allow the Charleston to create such varied looks, combined with the hygienic suitability (certificate) and cleanability, safety aspects during mounting and installation.
Special versions by agreement supplement the products on offer. No other radiator is as flexible in all regards — and everything is made in Germany.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Customisation options

- Large choice of connection types, including integrated valve
- Mounting sets for all applications
- Special colours and antibacterial coating
- Galvanised and painted
- Energy saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved, etc.
- High pressure version up to max. 18 bar
- Operating temperature at 120 °C on request

Advantages

- Residue-free laser welding technology LaZer made
- Classic elegance
- Accident-safe
- Cleaning with Zehnder lambswool cleaning brush
- Simple and secure with non-lift-out feature: Installation with Zehnder EasyFix
- Radiant heat with feel-good factor
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front
- Connection S001: 1 blanking plug ½", directional air vent ½"
- Complete packaging in stretch film and carton
- Heights greater than 2200 mm with stabilising brace welded at the factory

Scope of delivery for Completto version

- Primed and painted in RAL 9016
- Valve unit integrated on side, with valve insert AV 9, max. flow rate 250 kg/h
- Connections 2 x ½" female thread from bottom 50 mm
- Integrated baffle
- 1 directional air vent ½"
- Complete packaging in stretch film and carton

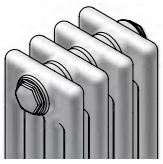
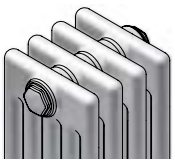
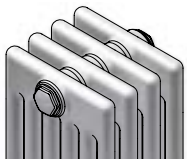
Zehnder Charleston

Calculation example of a standard version

Price per element		Amount of elements		Colour		Connection		Accessories
3030		14		RAL 9016		№ 1270		CVD0 + BH in RAL 9016
18,40 €	x	**257,60 €**	+	**0 € (Standard)**	+	**0 € (Standard)**	+	**18,41 €**
2026		32		RAL 3000		№ V001		SMB
16,67 €		**533,40 €**		**20% = 106,69 €**		**159,33 €**		**41,05 €**

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	260									
											
Model		**2026**		**3026**		**4026**		**5026**		**6026**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,25		1,25		1,25		1,27	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**19,74**		**21,27**		**23,67**		**28,84**		**33,60**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	85	**78,96**	112	**85,08**	146	**94,68**	181	**115,36**	214	**134,40**
5	230	106	**98,70**	140	**106,35**	183	**118,35**	226	**144,20**	268	**168,00**
6	276	127	**118,44**	168	**127,62**	219	**142,02**	271	**173,04**	321	**201,60**
7	322	148	**138,18**	196	**148,89**	256	**165,69**	316	**201,88**	375	**235,20**
8	368	169	**157,92**	224	**170,16**	292	**189,36**	361	**230,72**	428	**268,80**
9	414	190	**177,66**	252	**191,43**	329	**213,03**	406	**259,56**	482	**302,40**
10	460	211	**197,40**	279	**212,70**	365	**236,70**	451	**288,40**	535	**336,00**
11	506	233	**217,14**	307	**233,97**	402	**260,37**	497	**317,24**	589	**369,60**
12	552	254	**236,88**	335	**255,24**	438	**284,04**	542	**346,08**	642	**403,20**
13	598	275	**256,62**	363	**276,51**	475	**307,71**	587	**374,92**	696	**436,80**
14	644	296	**276,36**	391	**297,78**	511	**331,38**	632	**403,76**	749	**470,40**
15	690	317	**296,10**	419	**319,05**	548	**355,05**	677	**432,60**	803	**504,00**
16	736	338	**315,84**	447	**340,32**	584	**378,72**	722	**461,44**	856	**537,60**
17	782	359	**335,58**	475	**361,59**	621	**402,39**	767	**490,28**	910	**571,20**
18	828	380	**355,32**	503	**382,86**	657	**426,06**	812	**519,12**	963	**604,80**
19	874	401	**375,06**	531	**404,13**	694	**449,73**	857	**547,96**	1017	**638,40**
20	920	422	**394,80**	558	**425,40**	730	**473,40**	902	**576,80**	1070	**672,00**
21	966	444	**414,54**	586	**446,67**	767	**497,07**	948	**605,64**	1124	**705,60**
22	1012	465	**434,28**	614	**467,94**	803	**520,74**	993	**634,48**	1177	**739,20**
23	1058	486	**454,02**	642	**489,21**	840	**544,41**	1038	**663,32**	1231	**772,80**
24	1104	507	**473,76**	670	**510,48**	876	**568,08**	1083	**692,16**	1284	**806,40**
25	1150	528	**493,50**	698	**531,75**	913	**591,75**	1128	**721,00**	1338	**840,00**
26	1196	549	**513,24**	726	**553,02**	949	**615,42**	1173	**749,84**	1391	**873,60**
27	1242	570	**532,98**	754	**574,29**	986	**639,09**	1218	**778,68**	1445	**907,20**
28	1288	591	**552,72**	782	**595,56**	1022	**662,76**	1263	**807,52**	1498	**940,80**
29	1334	612	**572,46**	810	**616,83**	1059	**686,43**	1308	**836,36**	1552	**974,40**
30	1380	633	**592,20**	837	**638,10**	1095	**710,10**	1353	**865,20**	1605	**1008,00**
31	1426	655	**611,94**	865	**659,37**	1132	**733,77**	1399	**894,04**	1659	**1041,60**
32	1472	676	**631,68**	893	**680,64**	1168	**757,44**	1444	**922,88**	1712	**1075,20**
33	1518	697	**651,42**	921	**701,91**	1205	**781,11**	1489	**951,72**	1766	**1108,80**
34	1564	718	**671,16**	949	**723,18**	1241	**804,78**	1534	**980,56**	1819	**1142,40**
35	1610	739	**690,90**	977	**744,45**	1278	**828,45**	1579	**1009,40**	1873	**1176,00**
36	1656	760	**710,64**	1005	**765,72**	1314	**852,12**	1624	**1038,24**	1926	**1209,60**
37	1702	781	**730,38**	1033	**786,99**	1351	**875,79**	1669	**1067,08**	1980	**1243,20**
38	1748	802	**750,12**	1061	**808,26**	1387	**899,46**	1714	**1095,92**	2033	**1276,80**
39	1794	823	**769,86**	1089	**829,53**	1424	**923,13**	1759	**1124,76**	2087	**1310,40**
40	1840	844	**789,60**	1116	**850,80**	1460	**946,80**	1804	**1153,60**	2140	**1344,00**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

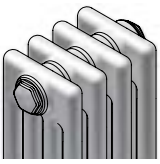
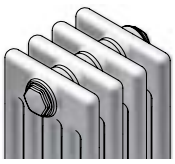
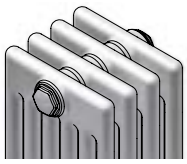
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	300				
					
Model	**2030**	**3030**	**4030**	**5030**	**6030**
Depth mm	62	100	136	173	210
Exponent n	1,24	1,25	1,25	1,25	1,26
Max. number of elements	64	64	64	64	64
Price/element €	**20,08**	**21,79**	**24,20**	**28,87**	**33,64**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	95	**80,32**	128	**87,16**	168	**96,80**	207	**115,48**	246	**134,56**
5	230	118	**100,40**	160	**108,95**	210	**121,00**	259	**144,35**	307	**168,20**
6	276	142	**120,48**	192	**130,74**	252	**145,20**	311	**173,22**	368	**201,84**
7	322	166	**140,56**	224	**152,53**	294	**169,40**	362	**202,09**	430	**235,48**
8	368	189	**160,64**	256	**174,32**	336	**193,60**	414	**230,96**	491	**269,12**
9	414	213	**180,72**	288	**196,11**	378	**217,80**	466	**259,83**	552	**302,76**
10	460	236	**200,80**	320	**217,90**	419	**242,00**	517	**288,70**	613	**336,40**
11	506	260	**220,88**	352	**239,69**	461	**266,20**	569	**317,57**	675	**370,04**
12	552	284	**240,96**	384	**261,48**	503	**290,40**	621	**346,44**	736	**403,68**
13	598	307	**261,04**	416	**283,27**	545	**314,60**	673	**375,31**	797	**437,32**
14	644	331	**281,12**	448	**305,06**	587	**338,80**	724	**404,18**	859	**470,96**
15	690	354	**301,20**	480	**326,85**	629	**363,00**	776	**433,05**	920	**504,60**
16	736	378	**321,28**	512	**348,64**	671	**387,20**	828	**461,92**	981	**538,24**
17	782	402	**341,36**	544	**370,43**	713	**411,40**	879	**490,79**	1043	**571,88**
18	828	425	**361,44**	576	**392,22**	755	**435,60**	931	**519,66**	1104	**605,52**
19	874	449	**381,52**	608	**414,01**	797	**459,80**	983	**548,53**	1165	**639,16**
20	920	472	**401,60**	640	**435,80**	838	**484,00**	1034	**577,40**	1226	**672,80**
21	966	496	**421,68**	672	**457,59**	880	**508,20**	1086	**606,27**	1288	**706,44**
22	1012	520	**441,76**	704	**479,38**	922	**532,40**	1138	**635,14**	1349	**740,08**
23	1058	543	**461,84**	736	**501,17**	964	**556,60**	1190	**664,01**	1410	**773,72**
24	1104	567	**481,92**	768	**522,96**	1006	**580,80**	1241	**692,88**	1472	**807,36**
25	1150	590	**502,00**	800	**544,75**	1048	**605,00**	1293	**721,75**	1533	**841,00**
26	1196	614	**522,08**	832	**566,54**	1090	**629,20**	1345	**750,62**	1594	**874,64**
27	1242	638	**542,16**	864	**588,33**	1132	**653,40**	1396	**779,49**	1656	**908,28**
28	1288	661	**562,24**	896	**610,12**	1174	**677,60**	1448	**808,36**	1717	**941,92**
29	1334	685	**582,32**	928	**631,91**	1216	**701,80**	1500	**837,23**	1778	**975,56**
30	1380	708	**602,40**	960	**653,70**	1257	**726,00**	1551	**866,10**	1839	**1009,20**
31	1426	732	**622,48**	992	**675,49**	1299	**750,20**	1603	**894,97**	1901	**1042,84**
32	1472	756	**642,56**	1024	**697,28**	1341	**774,40**	1655	**923,84**	1962	**1076,48**
33	1518	779	**662,64**	1056	**719,07**	1383	**798,60**	1707	**952,71**	2023	**1110,12**
34	1564	803	**682,72**	1088	**740,86**	1425	**822,80**	1758	**981,58**	2085	**1143,76**
35	1610	826	**702,80**	1120	**762,65**	1467	**847,00**	1810	**1010,45**	2146	**1177,40**
36	1656	850	**722,88**	1152	**784,44**	1509	**871,20**	1862	**1039,32**	2207	**1211,04**
37	1702	874	**742,96**	1184	**806,23**	1551	**895,40**	1913	**1068,19**	2269	**1244,68**
38	1748	897	**763,04**	1216	**828,02**	1593	**919,60**	1965	**1097,06**	2330	**1278,32**
39	1794	921	**783,12**	1248	**849,81**	1635	**943,80**	2017	**1125,93**	2391	**1311,96**
40	1840	944	**803,20**	1280	**871,60**	1676	**968,00**	2068	**1154,80**	2452	**1345,60**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

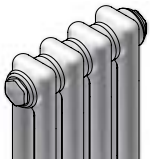
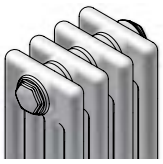
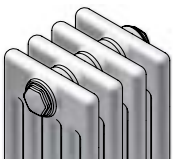
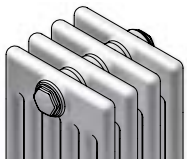
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	350									
											
Model		**2035**		**3035**		**4035**		**5035**		**6035**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,24		1,25		1,25		1,26		1,26	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**20,44**		**22,39**		**25,02**		**29,53**		**34,69**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	110	**81,76**	148	**89,56**	194	**100,08**	240	**118,12**	284	**138,76**
5	230	138	**102,20**	185	**111,95**	243	**125,10**	300	**147,65**	355	**173,45**
6	276	165	**122,64**	222	**134,34**	291	**150,12**	360	**177,18**	426	**208,14**
7	322	193	**143,08**	259	**156,73**	340	**175,14**	420	**206,71**	497	**242,83**
8	368	220	**163,52**	296	**179,12**	388	**200,16**	480	**236,24**	568	**277,52**
9	414	248	**183,96**	333	**201,51**	437	**225,18**	540	**265,77**	639	**312,21**
10	460	275	**204,40**	370	**223,90**	485	**250,20**	599	**295,30**	710	**346,90**
11	506	303	**224,84**	407	**246,29**	534	**275,22**	659	**324,83**	781	**381,59**
12	552	330	**245,28**	444	**268,68**	582	**300,24**	719	**354,36**	852	**416,28**
13	598	358	**265,72**	481	**291,07**	631	**325,26**	779	**383,89**	923	**450,97**
14	644	385	**286,16**	518	**313,46**	679	**350,28**	839	**413,42**	994	**485,66**
15	690	413	**306,60**	555	**335,85**	728	**375,30**	899	**442,95**	1065	**520,35**
16	736	440	**327,04**	592	**358,24**	776	**400,32**	959	**472,48**	1136	**555,04**
17	782	468	**347,48**	629	**380,63**	825	**425,34**	1019	**502,01**	1207	**589,73**
18	828	495	**367,92**	666	**403,02**	873	**450,36**	1079	**531,54**	1278	**624,42**
19	874	523	**388,36**	703	**425,41**	922	**475,38**	1139	**561,07**	1349	**659,11**
20	920	550	**408,80**	740	**447,80**	970	**500,40**	1198	**590,60**	1420	**693,80**
21	966	578	**429,24**	777	**470,19**	1019	**525,42**	1258	**620,13**	1491	**728,49**
22	1012	605	**449,68**	814	**492,58**	1067	**550,44**	1318	**649,66**	1562	**763,18**
23	1058	633	**470,12**	851	**514,97**	1116	**575,46**	1378	**679,19**	1633	**797,87**
24	1104	660	**490,56**	888	**537,36**	1164	**600,48**	1438	**708,72**	1704	**832,56**
25	1150	688	**511,00**	925	**559,75**	1213	**625,50**	1498	**738,25**	1775	**867,25**
26	1196	715	**531,44**	962	**582,14**	1261	**650,52**	1558	**767,78**	1846	**901,94**
27	1242	743	**551,88**	999	**604,53**	1310	**675,54**	1618	**797,31**	1917	**936,63**
28	1288	770	**572,32**	1036	**626,92**	1358	**700,56**	1678	**826,84**	1988	**971,32**
29	1334	798	**592,76**	1073	**649,31**	1407	**725,58**	1738	**856,37**	2059	**1006,01**
30	1380	825	**613,20**	1110	**671,70**	1455	**750,60**	1797	**885,90**	2130	**1040,70**
31	1426	853	**633,64**	1147	**694,09**	1504	**775,62**	1857	**915,43**	2201	**1075,39**
32	1472	880	**654,08**	1184	**716,48**	1552	**800,64**	1917	**944,96**	2272	**1110,08**
33	1518	908	**674,52**	1221	**738,87**	1601	**825,66**	1977	**974,49**	2343	**1144,77**
34	1564	935	**694,96**	1258	**761,26**	1649	**850,68**	2037	**1004,02**	2414	**1179,46**
35	1610	963	**715,40**	1295	**783,65**	1698	**875,70**	2097	**1033,55**	2485	**1214,15**
36	1656	990	**735,84**	1332	**806,04**	1746	**900,72**	2157	**1063,08**	2556	**1248,84**
37	1702	1018	**756,28**	1369	**828,43**	1795	**925,74**	2217	**1092,61**	2627	**1283,53**
38	1748	1045	**776,72**	1406	**850,82**	1843	**950,76**	2277	**1122,14**	2698	**1318,22**
39	1794	1073	**797,16**	1443	**873,21**	1892	**975,78**	2337	**1151,67**	2769	**1352,91**
40	1840	1100	**817,60**	1480	**895,60**	1940	**1000,80**	2396	**1181,20**	2840	**1387,60**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

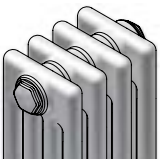
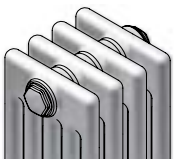
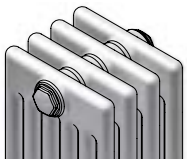
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	400				
					
Model	**2040**	**3040**	**4040**	**5040**	**6040**
Depth mm	62	100	136	173	210
Exponent n	1,24	1,25	1,26	1,26	1,27
Max. number of elements	64	64	64	64	64
Price/element €	**20,85**	**23,06**	**25,47**	**30,14**	**35,75**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	125	**83,40**	168	**92,24**	220	**101,88**	272	**120,56**	322	**143,00**
5	230	156	**104,25**	210	**115,30**	275	**127,35**	340	**150,70**	403	**178,75**
6	276	188	**125,10**	252	**138,36**	330	**152,82**	408	**180,84**	483	**214,50**
7	322	219	**145,95**	294	**161,42**	385	**178,29**	476	**210,98**	564	**250,25**
8	368	250	**166,80**	336	**184,48**	440	**203,76**	544	**241,12**	644	**286,00**
9	414	281	**187,65**	378	**207,54**	495	**229,23**	612	**271,26**	725	**321,75**
10	460	312	**208,50**	419	**230,60**	549	**254,70**	679	**301,40**	805	**357,50**
11	506	344	**229,35**	461	**253,66**	604	**280,17**	747	**331,54**	886	**393,25**
12	552	375	**250,20**	503	**276,72**	659	**305,64**	815	**361,68**	966	**429,00**
13	598	406	**271,05**	545	**299,78**	714	**331,11**	883	**391,82**	1047	**464,75**
14	644	437	**291,90**	587	**322,84**	769	**356,58**	951	**421,96**	1127	**500,50**
15	690	468	**312,75**	629	**345,90**	824	**382,05**	1019	**452,10**	1208	**536,25**
16	736	500	**333,60**	671	**368,96**	879	**407,52**	1087	**482,24**	1288	**572,00**
17	782	531	**354,45**	713	**392,02**	934	**432,99**	1155	**512,38**	1369	**607,75**
18	828	562	**375,30**	755	**415,08**	989	**458,46**	1223	**542,52**	1449	**643,50**
19	874	593	**396,15**	797	**438,14**	1044	**483,93**	1291	**572,66**	1530	**679,25**
20	920	624	**417,00**	838	**461,20**	1098	**509,40**	1358	**602,80**	1610	**715,00**
21	966	656	**437,85**	880	**484,26**	1153	**534,87**	1426	**632,94**	1691	**750,75**
22	1012	687	**458,70**	922	**507,32**	1208	**560,34**	1494	**663,08**	1771	**786,50**
23	1058	718	**479,55**	964	**530,38**	1263	**585,81**	1562	**693,22**	1852	**822,25**
24	1104	749	**500,40**	1006	**553,44**	1318	**611,28**	1630	**723,36**	1932	**858,00**
25	1150	780	**521,25**	1048	**576,50**	1373	**636,75**	1698	**753,50**	2013	**893,75**
26	1196	812	**542,10**	1090	**599,56**	1428	**662,22**	1766	**783,64**	2093	**929,50**
27	1242	843	**562,95**	1132	**622,62**	1483	**687,69**	1834	**813,78**	2174	**965,25**
28	1288	874	**583,80**	1174	**645,68**	1538	**713,16**	1902	**843,92**	2254	**1001,00**
29	1334	905	**604,65**	1216	**668,74**	1593	**738,63**	1970	**874,06**	2335	**1036,75**
30	1380	936	**625,50**	1257	**691,80**	1647	**764,10**	2038	**904,20**	2415	**1072,50**
31	1426	968	**646,35**	1299	**714,86**	1702	**789,57**	2105	**934,34**	2496	**1108,25**
32	1472	999	**667,20**	1341	**737,92**	1757	**815,04**	2173	**964,48**	2576	**1144,00**
33	1518	1030	**688,05**	1383	**760,98**	1812	**840,51**	2241	**994,62**	2657	**1179,75**
34	1564	1061	**708,90**	1425	**784,04**	1867	**865,98**	2309	**1024,76**	2737	**1215,50**
35	1610	1092	**729,75**	1467	**807,10**	1922	**891,45**	2377	**1054,90**	2818	**1251,25**
36	1656	1124	**750,60**	1509	**830,16**	1977	**916,92**	2445	**1085,04**	2898	**1287,00**
37	1702	1155	**771,45**	1551	**853,22**	2032	**942,39**	2513	**1115,18**	2979	**1322,75**
38	1748	1186	**792,30**	1593	**876,28**	2087	**967,86**	2581	**1145,32**	3059	**1358,50**
39	1794	1217	**813,15**	1635	**899,34**	2142	**993,33**	2649	**1175,46**	3140	**1394,25**
40	1840	1248	**834,00**	1676	**922,40**	2196	**1018,80**	2716	**1205,60**	3220	**1430,00**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

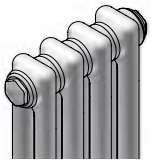
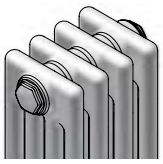
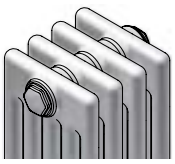
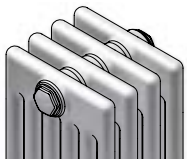
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	450									
											
Model		**2045**		**3045**		**4045**		**5045**		**6045**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,24		1,25		1,26		1,26		1,27	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**21,27**		**23,85**		**26,48**		**31,66**		**36,99**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	140	**85,08**	188	**95,40**	246	**105,92**	304	**126,64**	360	**147,96**
5	230	175	**106,35**	234	**119,25**	307	**132,40**	379	**158,30**	449	**184,95**
6	276	210	**127,62**	281	**143,10**	368	**158,88**	455	**189,96**	539	**221,94**
7	322	245	**148,89**	328	**166,95**	430	**185,36**	531	**221,62**	629	**258,93**
8	368	280	**170,16**	375	**190,80**	491	**211,84**	607	**253,28**	719	**295,92**
9	414	315	**191,43**	422	**214,65**	552	**238,32**	683	**284,94**	809	**332,91**
10	460	349	**212,70**	468	**238,50**	613	**264,80**	758	**316,60**	898	**369,90**
11	506	384	**233,97**	515	**262,35**	675	**291,28**	834	**348,26**	988	**406,89**
12	552	419	**255,24**	562	**286,20**	736	**317,76**	910	**379,92**	1078	**443,88**
13	598	454	**276,51**	609	**310,05**	797	**344,24**	986	**411,58**	1168	**480,87**
14	644	489	**297,78**	656	**333,90**	859	**370,72**	1062	**443,24**	1258	**517,86**
15	690	524	**319,05**	702	**357,75**	920	**397,20**	1137	**474,90**	1347	**554,85**
16	736	559	**340,32**	749	**381,60**	981	**423,68**	1213	**506,56**	1437	**591,84**
17	782	594	**361,59**	796	**405,45**	1043	**450,16**	1289	**538,22**	1527	**628,83**
18	828	629	**382,86**	843	**429,30**	1104	**476,64**	1365	**569,88**	1617	**665,82**
19	874	664	**404,13**	890	**453,15**	1165	**503,12**	1441	**601,54**	1707	**702,81**
20	920	698	**425,40**	936	**477,00**	1226	**529,60**	1516	**633,20**	1796	**739,80**
21	966	733	**446,67**	983	**500,85**	1288	**556,08**	1592	**664,86**	1886	**776,79**
22	1012	768	**467,94**	1030	**524,70**	1349	**582,56**	1668	**696,52**	1976	**813,78**
23	1058	803	**489,21**	1077	**548,55**	1410	**609,04**	1744	**728,18**	2066	**850,77**
24	1104	838	**510,48**	1124	**572,40**	1472	**635,52**	1820	**759,84**	2156	**887,76**
25	1150	873	**531,75**	1170	**596,25**	1533	**662,00**	1895	**791,50**	2245	**924,75**
26	1196	908	**553,02**	1217	**620,10**	1594	**688,48**	1971	**823,16**	2335	**961,74**
27	1242	943	**574,29**	1264	**643,95**	1656	**714,96**	2047	**854,82**	2425	**998,73**
28	1288	978	**595,56**	1311	**667,80**	1717	**741,44**	2123	**886,48**	2515	**1035,72**
29	1334	1013	**616,83**	1358	**691,65**	1778	**767,92**	2199	**918,14**	2605	**1072,71**
30	1380	1047	**638,10**	1404	**715,50**	1839	**794,40**	2274	**949,80**	2694	**1109,70**
31	1426	1082	**659,37**	1451	**739,35**	1901	**820,88**	2350	**981,46**	2784	**1146,69**
32	1472	1117	**680,64**	1498	**763,20**	1962	**847,36**	2426	**1013,12**	2874	**1183,68**
33	1518	1152	**701,91**	1545	**787,05**	2023	**873,84**	2502	**1044,78**	2964	**1220,67**
34	1564	1187	**723,18**	1592	**810,90**	2085	**900,32**	2578	**1076,44**	3054	**1257,66**
35	1610	1222	**744,45**	1638	**834,75**	2146	**926,80**	2653	**1108,10**	3143	**1294,65**
36	1656	1257	**765,72**	1685	**858,60**	2207	**953,28**	2729	**1139,76**	3233	**1331,64**
37	1702	1292	**786,99**	1732	**882,45**	2269	**979,76**	2805	**1171,42**	3323	**1368,63**
38	1748	1327	**808,26**	1779	**906,30**	2330	**1006,24**	2881	**1203,08**	3413	**1405,62**
39	1794	1362	**829,53**	1826	**930,15**	2391	**1032,72**	2957	**1234,74**	3503	**1442,61**
40	1840	1396	**850,80**	1872	**954,00**	2452	**1059,20**	3032	**1266,40**	3592	**1479,60**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

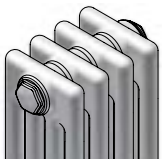
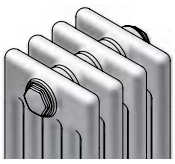
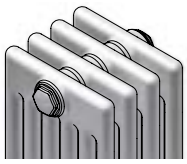
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	500				
					
Model	**2050**	**3050**	**4050**	**5050**	**6050**
Depth mm	62	100	136	173	210
Exponent n	1,25	1,25	1,26	1,27	1,28
Max. number of elements	64	64	64	64	64
Price/element €	**21,77**	**24,48**	**27,46**	**32,24**	**37,93**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	154	**87,08**	207	**97,92**	271	**109,84**	334	**128,96**	396	**151,72**
5	230	192	**108,85**	258	**122,40**	338	**137,30**	418	**161,20**	495	**189,65**
6	276	231	**130,62**	310	**146,88**	406	**164,76**	501	**193,44**	594	**227,58**
7	322	269	**152,39**	362	**171,36**	474	**192,22**	585	**225,68**	693	**265,51**
8	368	308	**174,16**	413	**195,84**	541	**219,68**	668	**257,92**	792	**303,44**
9	414	346	**195,93**	465	**220,32**	609	**247,14**	752	**290,16**	891	**341,37**
10	460	384	**217,70**	516	**244,80**	676	**274,60**	835	**322,40**	990	**379,30**
11	506	423	**239,47**	568	**269,28**	744	**302,06**	919	**354,64**	1089	**417,23**
12	552	461	**261,24**	620	**293,76**	812	**329,52**	1002	**386,88**	1188	**455,16**
13	598	500	**283,01**	671	**318,24**	879	**356,98**	1086	**419,12**	1287	**493,09**
14	644	538	**304,78**	723	**342,72**	947	**384,44**	1169	**451,36**	1386	**531,02**
15	690	576	**326,55**	774	**367,20**	1014	**411,90**	1253	**483,60**	1485	**568,95**
16	736	615	**348,32**	826	**391,68**	1082	**439,36**	1336	**515,84**	1584	**606,88**
17	782	653	**370,09**	878	**416,16**	1150	**466,82**	1420	**548,08**	1683	**644,81**
18	828	692	**391,86**	929	**440,64**	1217	**494,28**	1503	**580,32**	1782	**682,74**
19	874	730	**413,63**	981	**465,12**	1285	**521,74**	1587	**612,56**	1881	**720,67**
20	920	768	**435,40**	1032	**489,60**	1352	**549,20**	1670	**644,80**	1980	**758,60**
21	966	807	**457,17**	1084	**514,08**	1420	**576,66**	1754	**677,04**	2079	**796,53**
22	1012	845	**478,94**	1136	**538,56**	1488	**604,12**	1837	**709,28**	2178	**834,46**
23	1058	884	**500,71**	1187	**563,04**	1555	**631,58**	1921	**741,52**	2277	**872,39**
24	1104	922	**522,48**	1239	**587,52**	1623	**659,04**	2004	**773,76**	2376	**910,32**
25	1150	960	**544,25**	1290	**612,00**	1690	**686,50**	2088	**806,00**	2475	**948,25**
26	1196	999	**566,02**	1342	**636,48**	1758	**713,96**	2171	**838,24**	2574	**986,18**
27	1242	1037	**587,79**	1394	**660,96**	1826	**741,42**	2255	**870,48**	2673	**1024,11**
28	1288	1076	**609,56**	1445	**685,44**	1893	**768,88**	2338	**902,72**	2772	**1062,04**
29	1334	1114	**631,33**	1497	**709,92**	1961	**796,34**	2422	**934,96**	2871	**1099,97**
30	1380	1152	**653,10**	1548	**734,40**	2028	**823,80**	2505	**967,20**	2970	**1137,90**
31	1426	1191	**674,87**	1600	**758,88**	2096	**851,26**	2589	**999,44**	3069	**1175,83**
32	1472	1229	**696,64**	1652	**783,36**	2164	**878,72**	2672	**1031,68**	3168	**1213,76**
33	1518	1268	**718,41**	1703	**807,84**	2231	**906,18**	2756	**1063,92**	3267	**1251,69**
34	1564	1306	**740,18**	1755	**832,32**	2299	**933,64**	2839	**1096,16**	3366	**1289,62**
35	1610	1344	**761,95**	1806	**856,80**	2366	**961,10**	2923	**1128,40**	3465	**1327,55**
36	1656	1383	**783,72**	1858	**881,28**	2434	**988,56**	3006	**1160,64**	3564	**1365,48**
37	1702	1421	**805,49**	1910	**905,76**	2502	**1016,02**	3090	**1192,88**	3663	**1403,41**
38	1748	1460	**827,26**	1961	**930,24**	2569	**1043,48**	3173	**1225,12**	3762	**1441,34**
39	1794	1498	**849,03**	2013	**954,72**	2637	**1070,94**	3257	**1257,36**	3861	**1479,27**
40	1840	1536	**870,80**	2064	**979,20**	2704	**1098,40**	3340	**1289,60**	3960	**1517,20**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

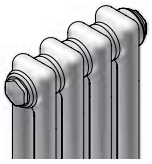
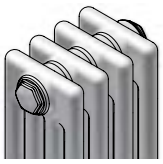
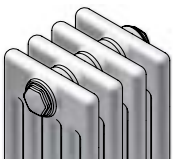
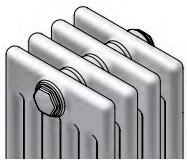
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	550									
											
Model		**2055**		**3055**		**4055**		**5055**		**6055**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,26		1,26		1,27		1,28	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**22,26**		**25,16**		**28,48**		**33,43**		**39,73**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	168	**89,04**	226	**100,64**	295	**113,92**	364	**133,72**	432	**158,92**
5	230	210	**111,30**	282	**125,80**	369	**142,40**	456	**167,15**	540	**198,65**
6	276	252	**133,56**	338	**150,96**	443	**170,88**	547	**200,58**	648	**238,38**
7	322	294	**155,82**	395	**176,12**	516	**199,36**	638	**234,01**	756	**278,11**
8	368	336	**178,08**	451	**201,28**	590	**227,84**	729	**267,44**	864	**317,84**
9	414	378	**200,34**	507	**226,44**	664	**256,32**	820	**300,87**	972	**357,57**
10	460	419	**222,60**	563	**251,60**	737	**284,80**	911	**334,30**	1080	**397,30**
11	506	461	**244,86**	620	**276,76**	811	**313,28**	1002	**367,73**	1188	**437,03**
12	552	503	**267,12**	676	**301,92**	885	**341,76**	1093	**401,16**	1296	**476,76**
13	598	545	**289,38**	732	**327,08**	959	**370,24**	1184	**434,59**	1404	**516,49**
14	644	587	**311,64**	789	**352,24**	1032	**398,72**	1275	**468,02**	1512	**556,22**
15	690	629	**333,90**	845	**377,40**	1106	**427,20**	1367	**501,45**	1620	**595,95**
16	736	671	**356,16**	901	**402,56**	1180	**455,68**	1458	**534,88**	1728	**635,68**
17	782	713	**378,42**	958	**427,72**	1253	**484,16**	1549	**568,31**	1836	**675,41**
18	828	755	**400,68**	1014	**452,88**	1327	**512,64**	1640	**601,74**	1944	**715,14**
19	874	797	**422,94**	1070	**478,04**	1401	**541,12**	1731	**635,17**	2052	**754,87**
20	920	838	**445,20**	1126	**503,20**	1474	**569,60**	1822	**668,60**	2160	**794,60**
21	966	880	**467,46**	1183	**528,36**	1548	**598,08**	1913	**702,03**	2268	**834,33**
22	1012	922	**489,72**	1239	**553,52**	1622	**626,56**	2004	**735,46**	2376	**874,06**
23	1058	964	**511,98**	1295	**578,68**	1696	**655,04**	2095	**768,89**	2484	**913,79**
24	1104	1006	**534,24**	1352	**603,84**	1769	**683,52**	2186	**802,32**	2592	**953,52**
25	1150	1048	**556,50**	1408	**629,00**	1843	**712,00**	2278	**835,75**	2700	**993,25**
26	1196	1090	**578,76**	1464	**654,16**	1917	**740,48**	2369	**869,18**	2808	**1032,98**
27	1242	1132	**601,02**	1521	**679,32**	1990	**768,96**	2460	**902,61**	2916	**1072,71**
28	1288	1174	**623,28**	1577	**704,48**	2064	**797,44**	2551	**936,04**	3024	**1112,44**
29	1334	1216	**645,54**	1633	**729,64**	2138	**825,92**	2642	**969,47**	3132	**1152,17**
30	1380	1257	**667,80**	1689	**754,80**	2211	**854,40**	2733	**1002,90**	3240	**1191,90**
31	1426	1299	**690,06**	1746	**779,96**	2285	**882,88**	2824	**1036,33**	3348	**1231,63**
32	1472	1341	**712,32**	1802	**805,12**	2359	**911,36**	2915	**1069,76**	3456	**1271,36**
33	1518	1383	**734,58**	1858	**830,28**	2433	**939,84**	3006	**1103,19**	3564	**1311,09**
34	1564	1425	**756,84**	1915	**855,44**	2506	**968,32**	3097	**1136,62**	3672	**1350,82**
35	1610	1467	**779,10**	1971	**880,60**	2580	**996,80**	3189	**1170,05**	3780	**1390,55**
36	1656	1509	**801,36**	2027	**905,76**	2654	**1025,28**	3280	**1203,48**	3888	**1430,28**
37	1702	1551	**823,62**	2084	**930,92**	2727	**1053,76**	3371	**1236,91**	3996	**1470,01**
38	1748	1593	**845,88**	2140	**956,08**	2801	**1082,24**	3462	**1270,34**	4104	**1509,74**
39	1794	1635	**868,14**	2196	**981,24**	2875	**1110,72**	3553	**1303,77**	4212	**1549,47**
40	1840	1676	**890,40**	2252	**1006,40**	2948	**1139,20**	3644	**1337,20**	4320	**1589,20**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

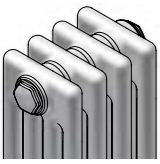
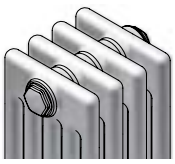
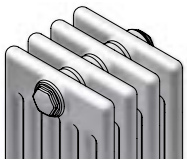
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	600				
					
Model	**2060**	**3060**	**4060**	**5060**	**6060**
Depth mm	62	100	136	173	210
Exponent n	1,25	1,26	1,27	1,27	1,29
Max. number of elements	64	64	64	64	64
Price/element €	**22,74**	**25,85**	**29,74**	**34,95**	**41,21**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	182	**90,96**	244	**103,40**	320	**118,96**	395	**139,80**	468	**164,84**
5	230	227	**113,70**	305	**129,25**	399	**148,70**	493	**174,75**	585	**206,05**
6	276	272	**136,44**	366	**155,10**	479	**178,44**	592	**209,70**	702	**247,26**
7	322	318	**159,18**	427	**180,95**	559	**208,18**	691	**244,65**	819	**288,47**
8	368	363	**181,92**	488	**206,80**	639	**237,92**	789	**279,60**	936	**329,68**
9	414	408	**204,66**	549	**232,65**	719	**267,66**	888	**314,55**	1053	**370,89**
10	460	453	**227,40**	609	**258,50**	798	**297,40**	986	**349,50**	1170	**412,10**
11	506	499	**250,14**	670	**284,35**	878	**327,14**	1085	**384,45**	1287	**453,31**
12	552	544	**272,88**	731	**310,20**	958	**356,88**	1184	**419,40**	1404	**494,52**
13	598	589	**295,62**	792	**336,05**	1038	**386,62**	1282	**454,35**	1521	**535,73**
14	644	635	**318,36**	853	**361,90**	1118	**416,36**	1381	**489,30**	1638	**576,94**
15	690	680	**341,10**	914	**387,75**	1197	**446,10**	1479	**524,25**	1755	**618,15**
16	736	725	**363,84**	975	**413,60**	1277	**475,84**	1578	**559,20**	1872	**659,36**
17	782	771	**386,58**	1036	**439,45**	1357	**505,58**	1677	**594,15**	1989	**700,57**
18	828	816	**409,32**	1097	**465,30**	1437	**535,32**	1775	**629,10**	2106	**741,78**
19	874	861	**432,06**	1158	**491,15**	1517	**565,06**	1874	**664,05**	2223	**782,99**
20	920	906	**454,80**	1218	**517,00**	1596	**594,80**	1972	**699,00**	2340	**824,20**
21	966	952	**477,54**	1279	**542,85**	1676	**624,54**	2071	**733,95**	2457	**865,41**
22	1012	997	**500,28**	1340	**568,70**	1756	**654,28**	2170	**768,90**	2574	**906,62**
23	1058	1042	**523,02**	1401	**594,55**	1836	**684,02**	2268	**803,85**	2691	**947,83**
24	1104	1088	**545,76**	1462	**620,40**	1916	**713,76**	2367	**838,80**	2808	**989,04**
25	1150	1133	**568,50**	1523	**646,25**	1995	**743,50**	2465	**873,75**	2925	**1030,25**
26	1196	1178	**591,24**	1584	**672,10**	2075	**773,24**	2564	**908,70**	3042	**1071,46**
27	1242	1224	**613,98**	1645	**697,95**	2155	**802,98**	2663	**943,65**	3159	**1112,67**
28	1288	1269	**636,72**	1706	**723,80**	2235	**832,72**	2761	**978,60**	3276	**1153,88**
29	1334	1314	**659,46**	1767	**749,65**	2315	**862,46**	2860	**1013,55**	3393	**1195,09**
30	1380	1359	**682,20**	1827	**775,50**	2394	**892,20**	2958	**1048,50**	3510	**1236,30**
31	1426	1405	**704,94**	1888	**801,35**	2474	**921,94**	3057	**1083,45**	3627	**1277,51**
32	1472	1450	**727,68**	1949	**827,20**	2554	**951,68**	3156	**1118,40**	3744	**1318,72**
33	1518	1495	**750,42**	2010	**853,05**	2634	**981,42**	3254	**1153,35**	3861	**1359,93**
34	1564	1541	**773,16**	2071	**878,90**	2714	**1011,16**	3353	**1188,30**	3978	**1401,14**
35	1610	1586	**795,90**	2132	**904,75**	2793	**1040,90**	3451	**1223,25**	4095	**1442,35**
36	1656	1631	**818,64**	2193	**930,60**	2873	**1070,64**	3550	**1258,20**	4212	**1483,56**
37	1702	1677	**841,38**	2254	**956,45**	2953	**1100,38**	3649	**1293,15**	4329	**1524,77**
38	1748	1722	**864,12**	2315	**982,30**	3033	**1130,12**	3747	**1328,10**	4446	**1565,98**
39	1794	1767	**886,86**	2376	**1008,15**	3113	**1159,86**	3846	**1363,05**	4563	**1607,19**
40	1840	1812	**909,60**	2436	**1034,00**	3192	**1189,60**	3944	**1398,00**	4680	**1648,40**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

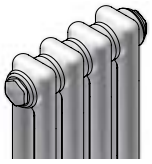
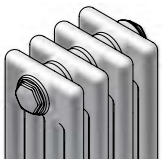
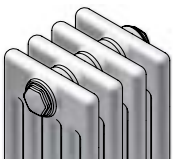
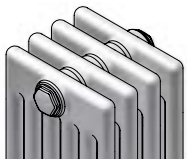
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	750									
											
Model		**2075**		**3075**		**4075**		**5075**		**6075**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,26		1,27		1,29		1,30	
Max. number of elements		64		64		64		64		55	
Price/element	**€**	**24,20**		**28,00**		**33,64**		**40,05**		**46,96**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	220	**96,80**	298	**112,00**	390	**134,56**	480	**160,20**	572	**187,84**
5	230	275	**121,00**	372	**140,00**	487	**168,20**	600	**200,25**	715	**234,80**
6	276	330	**145,20**	446	**168,00**	585	**201,84**	720	**240,30**	858	**281,76**
7	322	385	**169,40**	521	**196,00**	682	**235,48**	840	**280,35**	1001	**328,72**
8	368	440	**193,60**	595	**224,00**	780	**269,12**	960	**320,40**	1144	**375,68**
9	414	495	**217,80**	669	**252,00**	877	**302,76**	1080	**360,45**	1287	**422,64**
10	460	550	**242,00**	743	**280,00**	974	**336,40**	1200	**400,50**	1430	**469,60**
11	506	605	**266,20**	818	**308,00**	1072	**370,04**	1320	**440,55**	1573	**516,56**
12	552	660	**290,40**	892	**336,00**	1169	**403,68**	1440	**480,60**	1716	**563,52**
13	598	715	**314,60**	966	**364,00**	1267	**437,32**	1560	**520,65**	1859	**610,48**
14	644	770	**338,80**	1041	**392,00**	1364	**470,96**	1680	**560,70**	2002	**657,44**
15	690	825	**363,00**	1115	**420,00**	1461	**504,60**	1800	**600,75**	2145	**704,40**
16	736	880	**387,20**	1189	**448,00**	1559	**538,24**	1920	**640,80**	2288	**751,36**
17	782	935	**411,40**	1264	**476,00**	1656	**571,88**	2040	**680,85**	2431	**798,32**
18	828	990	**435,60**	1338	**504,00**	1754	**605,52**	2160	**720,90**	2574	**845,28**
19	874	1045	**459,80**	1412	**532,00**	1851	**639,16**	2280	**760,95**	2717	**892,24**
20	920	1100	**484,00**	1486	**560,00**	1948	**672,80**	2400	**801,00**	2860	**939,20**
21	966	1155	**508,20**	1561	**588,00**	2046	**706,44**	2520	**841,05**	3003	**986,16**
22	1012	1210	**532,40**	1635	**616,00**	2143	**740,08**	2640	**881,10**	3146	**1033,12**
23	1058	1265	**556,60**	1709	**644,00**	2241	**773,72**	2760	**921,15**	3289	**1080,08**
24	1104	1320	**580,80**	1784	**672,00**	2338	**807,36**	2880	**961,20**	3432	**1127,04**
25	1150	1375	**605,00**	1858	**700,00**	2435	**841,00**	3000	**1001,25**	3575	**1174,00**
26	1196	1430	**629,20**	1932	**728,00**	2533	**874,64**	3120	**1041,30**	3718	**1220,96**
27	1242	1485	**653,40**	2007	**756,00**	2630	**908,28**	3240	**1081,35**	3861	**1267,92**
28	1288	1540	**677,60**	2081	**784,00**	2728	**941,92**	3360	**1121,40**	4004	**1314,88**
29	1334	1595	**701,80**	2155	**812,00**	2825	**975,56**	3480	**1161,45**	4147	**1361,84**
30	1380	1650	**726,00**	2229	**840,00**	2922	**1009,20**	3600	**1201,50**	4290	**1408,80**
31	1426	1705	**750,20**	2304	**868,00**	3020	**1042,84**	3720	**1241,55**	4433	**1455,76**
32	1472	1760	**774,40**	2378	**896,00**	3117	**1076,48**	3840	**1281,60**	4576	**1502,72**
33	1518	1815	**798,60**	2452	**924,00**	3215	**1110,12**	3960	**1321,65**	4719	**1549,68**
34	1564	1870	**822,80**	2527	**952,00**	3312	**1143,76**	4080	**1361,70**	4862	**1596,64**
35	1610	1925	**847,00**	2601	**980,00**	3409	**1177,40**	4200	**1401,75**	5005	**1643,60**
36	1656	1980	**871,20**	2675	**1008,00**	3507	**1211,04**	4320	**1441,80**	5148	**1690,56**
37	1702	2035	**895,40**	2750	**1036,00**	3604	**1244,68**	4440	**1481,85**	5291	**1737,52**
38	1748	2090	**919,60**	2824	**1064,00**	3702	**1278,32**	4560	**1521,90**	5434	**1784,48**
39	1794	2145	**943,80**	2898	**1092,00**	3799	**1311,96**	4680	**1561,95**	5577	**1831,44**
40	1840	2200	**968,00**	2972	**1120,00**	3896	**1345,60**	4800	**1602,00**	5720	**1878,40**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

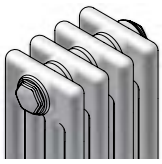
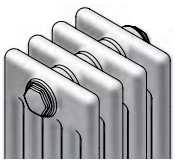
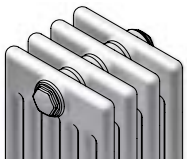
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	900				
					
Model	**2090**	**3090**	**4090**	**5090**	**6090**
Depth mm	62	100	136	173	210
Exponent n	1,25	1,27	1,28	1,30	1,31
Max. number of elements	64	64	64	50	46
Price/element €	**25,56**	**30,13**	**38,60**	**45,62**	**52,82**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	256	**102,24**	348	**120,52**	456	**154,40**	564	**182,48**	668	**211,28**
5	230	320	**127,80**	435	**150,65**	570	**193,00**	705	**228,10**	835	**264,10**
6	276	384	**153,36**	522	**180,78**	684	**231,60**	846	**273,72**	1002	**316,92**
7	322	448	**178,92**	609	**210,91**	798	**270,20**	987	**319,34**	1169	**369,74**
8	368	512	**204,48**	696	**241,04**	912	**308,80**	1128	**364,96**	1336	**422,56**
9	414	576	**230,04**	783	**271,17**	1026	**347,40**	1269	**410,58**	1503	**475,38**
10	460	639	**255,60**	870	**301,30**	1140	**386,00**	1410	**456,20**	1670	**528,20**
11	506	703	**281,16**	957	**331,43**	1254	**424,60**	1551	**501,82**	1837	**581,02**
12	552	767	**306,72**	1044	**361,56**	1368	**463,20**	1692	**547,44**	2004	**633,84**
13	598	831	**332,28**	1131	**391,69**	1482	**501,80**	1833	**593,06**	2171	**686,66**
14	644	895	**357,84**	1218	**421,82**	1596	**540,40**	1974	**638,68**	2338	**739,48**
15	690	959	**383,40**	1305	**451,95**	1710	**579,00**	2115	**684,30**	2505	**792,30**
16	736	1023	**408,96**	1392	**482,08**	1824	**617,60**	2256	**729,92**	2672	**845,12**
17	782	1087	**434,52**	1479	**512,21**	1938	**656,20**	2397	**775,54**	2839	**897,94**
18	828	1151	**460,08**	1566	**542,34**	2052	**694,80**	2538	**821,16**	3006	**950,76**
19	874	1215	**485,64**	1653	**572,47**	2166	**733,40**	2679	**866,78**	3173	**1003,58**
20	920	1278	**511,20**	1740	**602,60**	2280	**772,00**	2820	**912,40**	3340	**1056,40**
21	966	1342	**536,76**	1827	**632,73**	2394	**810,60**	2961	**958,02**	3507	**1109,22**
22	1012	1406	**562,32**	1914	**662,86**	2508	**849,20**	3102	**1003,64**	3674	**1162,04**
23	1058	1470	**587,88**	2001	**692,99**	2622	**887,80**	3243	**1049,26**	3841	**1214,86**
24	1104	1534	**613,44**	2088	**723,12**	2736	**926,40**	3384	**1094,88**	4008	**1267,68**
25	1150	1598	**639,00**	2175	**753,25**	2850	**965,00**	3525	**1140,50**	4175	**1320,50**
26	1196	1662	**664,56**	2262	**783,38**	2964	**1003,60**	3666	**1186,12**	4342	**1373,32**
27	1242	1726	**690,12**	2349	**813,51**	3078	**1042,20**	3807	**1231,74**	4509	**1426,14**
28	1288	1790	**715,68**	2436	**843,64**	3192	**1080,80**	3948	**1277,36**	4676	**1478,96**
29	1334	1854	**741,24**	2523	**873,77**	3306	**1119,40**	4089	**1322,98**	4843	**1531,78**
30	1380	1917	**766,80**	2610	**903,90**	3420	**1158,00**	4230	**1368,60**	5010	**1584,60**
31	1426	1981	**792,36**	2697	**934,03**	3534	**1196,60**	4371	**1414,22**	5177	**1637,42**
32	1472	2045	**817,92**	2784	**964,16**	3648	**1235,20**	4512	**1459,84**	5344	**1690,24**
33	1518	2109	**843,48**	2871	**994,29**	3762	**1273,80**	4653	**1505,46**	5511	**1743,06**
34	1564	2173	**869,04**	2958	**1024,42**	3876	**1312,40**	4794	**1551,08**	5678	**1795,88**
35	1610	2237	**894,60**	3045	**1054,55**	3990	**1351,00**	4935	**1596,70**	5845	**1848,70**
36	1656	2301	**920,16**	3132	**1084,68**	4104	**1389,60**	5076	**1642,32**	6012	**1901,52**
37	1702	2365	**945,72**	3219	**1114,81**	4218	**1428,20**	5217	**1687,94**	6179	**1954,34**
38	1748	2429	**971,28**	3306	**1144,94**	4332	**1466,80**	5358	**1733,56**	6346	**2007,16**
39	1794	2493	**996,84**	3393	**1175,07**	4446	**1505,40**	5499	**1779,18**	6513	**2059,98**
40	1840	2556	**1022,40**	3480	**1205,20**	4560	**1544,00**	5640	**1824,80**	6680	**2112,80**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

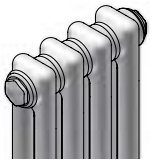
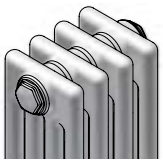
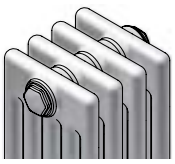
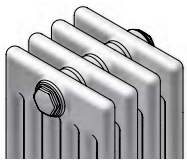
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	1000									
											
Model		**2100**		**3100**		**4100**		**5100**		**6100**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,25		1,27		1,29		1,30		1,31	
Max. number of elements		64		64		60		50		42	
Price/element	**€**	**26,48**		**31,45**		**41,74**		**48,64**		**56,93**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	278	**105,92**	381	**125,80**	500	**166,96**	616	**194,56**	732	**227,72**
5	230	348	**132,40**	476	**157,25**	625	**208,70**	770	**243,20**	915	**284,65**
6	276	417	**158,88**	571	**188,70**	750	**250,44**	924	**291,84**	1098	**341,58**
7	322	487	**185,36**	666	**220,15**	875	**292,18**	1078	**340,48**	1281	**398,51**
8	368	556	**211,84**	761	**251,60**	1000	**333,92**	1232	**389,12**	1464	**455,44**
9	414	626	**238,32**	856	**283,05**	1125	**375,66**	1386	**437,76**	1647	**512,37**
10	460	695	**264,80**	951	**314,50**	1250	**417,40**	1540	**486,40**	1830	**569,30**
11	506	765	**291,28**	1047	**345,95**	1375	**459,14**	1694	**535,04**	2013	**626,23**
12	552	834	**317,76**	1142	**377,40**	1500	**500,88**	1848	**583,68**	2196	**683,16**
13	598	904	**344,24**	1237	**408,85**	1625	**542,62**	2002	**632,32**	2379	**740,09**
14	644	973	**370,72**	1332	**440,30**	1750	**584,36**	2156	**680,96**	2562	**797,02**
15	690	1043	**397,20**	1427	**471,75**	1875	**626,10**	2310	**729,60**	2745	**853,95**
16	736	1112	**423,68**	1522	**503,20**	2000	**667,84**	2464	**778,24**	2928	**910,88**
17	782	1182	**450,16**	1617	**534,65**	2125	**709,58**	2618	**826,88**	3111	**967,81**
18	828	1251	**476,64**	1712	**566,10**	2250	**751,32**	2772	**875,52**	3294	**1024,74**
19	874	1321	**503,12**	1807	**597,55**	2375	**793,06**	2926	**924,16**	3477	**1081,67**
20	920	1390	**529,60**	1902	**629,00**	2500	**834,80**	3080	**972,80**	3660	**1138,60**
21	966	1460	**556,08**	1998	**660,45**	2625	**876,54**	3234	**1021,44**	3843	**1195,53**
22	1012	1529	**582,56**	2093	**691,90**	2750	**918,28**	3388	**1070,08**	4026	**1252,46**
23	1058	1599	**609,04**	2188	**723,35**	2875	**960,02**	3542	**1118,72**	4209	**1309,39**
24	1104	1668	**635,52**	2283	**754,80**	3000	**1001,76**	3696	**1167,36**	4392	**1366,32**
25	1150	1738	**662,00**	2378	**786,25**	3125	**1043,50**	3850	**1216,00**	4575	**1423,25**
26	1196	1807	**688,48**	2473	**817,70**	3250	**1085,24**	4004	**1264,64**	4758	**1480,18**
27	1242	1877	**714,96**	2568	**849,15**	3375	**1126,98**	4158	**1313,28**	4941	**1537,11**
28	1288	1946	**741,44**	2663	**880,60**	3500	**1168,72**	4312	**1361,92**	5124	**1594,04**
29	1334	2016	**767,92**	2758	**912,05**	3625	**1210,46**	4466	**1410,56**	5307	**1650,97**
30	1380	2085	**794,40**	2853	**943,50**	3750	**1252,20**	4620	**1459,20**	5490	**1707,90**
31	1426	2155	**820,88**	2949	**974,95**	3875	**1293,94**	4774	**1507,84**	5673	**1764,83**
32	1472	2224	**847,36**	3044	**1006,40**	4000	**1335,68**	4928	**1556,48**	5856	**1821,76**
33	1518	2294	**873,84**	3139	**1037,85**	4125	**1377,42**	5082	**1605,12**	6039	**1878,69**
34	1564	2363	**900,32**	3234	**1069,30**	4250	**1419,16**	5236	**1653,76**	6222	**1935,62**
35	1610	2433	**926,80**	3329	**1100,75**	4375	**1460,90**	5390	**1702,40**	6405	**1992,55**
36	1656	2502	**953,28**	3424	**1132,20**	4500	**1502,64**	5544	**1751,04**	6588	**2049,48**
37	1702	2572	**979,76**	3519	**1163,65**	4625	**1544,38**	5698	**1799,68**	6771	**2106,41**
38	1748	2641	**1006,24**	3614	**1195,10**	4750	**1586,12**	5852	**1848,32**	6954	**2163,34**
39	1794	2711	**1032,72**	3709	**1226,55**	4875	**1627,86**	6006	**1896,96**	7137	**2220,27**
40	1840	2780	**1059,20**	3804	**1258,00**	5000	**1669,60**	6160	**1945,60**	7320	**2277,20**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

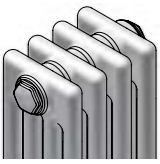
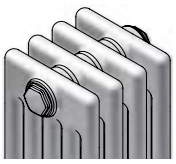
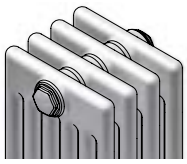
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1100				
					
Model	**2110**	**3110**	**4110**	**5110**	**6110**
Depth mm	62	100	136	173	210
Exponent n	1,25	1,28	1,29	1,31	1,32
Max. number of elements	22	22	22	22	22
Price/element €	**27,46**	**35,51**	**46,26**	**56,44**	**67,13**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	299	**109,84**	412	**142,04**	540	**185,04**	668	**225,76**	792	**268,52**
5	230	374	**137,30**	515	**177,55**	675	**231,30**	835	**282,20**	990	**335,65**
6	276	449	**164,76**	618	**213,06**	810	**277,56**	1002	**338,64**	1188	**402,78**
7	322	523	**192,22**	721	**248,57**	945	**323,82**	1169	**395,08**	1386	**469,91**
8	368	598	**219,68**	824	**284,08**	1080	**370,08**	1336	**451,52**	1584	**537,04**
9	414	673	**247,14**	927	**319,59**	1215	**416,34**	1503	**507,96**	1782	**604,17**
10	460	747	**274,60**	1030	**355,10**	1350	**462,60**	1670	**564,40**	1980	**671,30**
11	506	822	**302,06**	1133	**390,61**	1485	**508,86**	1837	**620,84**	2178	**738,43**
12	552	897	**329,52**	1236	**426,12**	1620	**555,12**	2004	**677,28**	2376	**805,56**
13	598	972	**356,98**	1339	**461,63**	1755	**601,38**	2171	**733,72**	2574	**872,69**
14	644	1046	**384,44**	1442	**497,14**	1890	**647,64**	2338	**790,16**	2772	**939,82**
15	690	1121	**411,90**	1545	**532,65**	2025	**693,90**	2505	**846,60**	2970	**1006,95**
16	736	1196	**439,36**	1648	**568,16**	2160	**740,16**	2672	**903,04**	3168	**1074,08**
17	782	1270	**466,82**	1751	**603,67**	2295	**786,42**	2839	**959,48**	3366	**1141,21**
18	828	1345	**494,28**	1854	**639,18**	2430	**832,68**	3006	**1015,92**	3564	**1208,34**
19	874	1420	**521,74**	1957	**674,69**	2565	**878,94**	3173	**1072,36**	3762	**1275,47**
20	920	1494	**549,20**	2060	**710,20**	2700	**925,20**	3340	**1128,80**	3960	**1342,60**
21	966	1569	**576,66**	2163	**745,71**	2835	**971,46**	3507	**1185,24**	4158	**1409,73**
22	1012	1644	**604,12**	2266	**781,22**	2970	**1017,72**	3674	**1241,68**	4356	**1476,86**
23	1058	1719	**631,58**	2369	**816,73**	3105	**1063,98**	3841	**1298,12**	4554	**1543,99**
24	1104	1793	**659,04**	2472	**852,24**	3240	**1110,24**	4008	**1354,56**	4752	**1611,12**
25	1150	1868	**686,50**	2575	**887,75**	3375	**1156,50**	4175	**1411,00**	4950	**1678,25**
26	1196	1943	**713,96**	2678	**923,26**	3510	**1202,76**	4342	**1467,44**	5148	**1745,38**
27	1242	2017	**741,42**	2781	**958,77**	3645	**1249,02**	4509	**1523,88**	5346	**1812,51**
28	1288	2092	**768,88**	2884	**994,28**	3780	**1295,28**	4676	**1580,32**	5544	**1879,64**
29	1334	2167	**796,34**	2987	**1029,79**	3915	**1341,54**	4843	**1636,76**	5742	**1946,77**
30	1380	2241	**823,80**	3090	**1065,30**	4050	**1387,80**	5010	**1693,20**	5940	**2013,90**
31	1426	2316	**851,26**	3193	**1100,81**	4185	**1434,06**	5177	**1749,64**	6138	**2081,03**
32	1472	2391	**878,72**	3296	**1136,32**	4320	**1480,32**	5344	**1806,08**	6336	**2148,16**
33	1518	2466	**906,18**	3399	**1171,83**	4455	**1526,58**	5511	**1862,52**	6534	**2215,29**
34	1564	2540	**933,64**	3502	**1207,34**	4590	**1572,84**	5678	**1918,96**	6732	**2282,42**
35	1610	2615	**961,10**	3605	**1242,85**	4725	**1619,10**	5845	**1975,40**	6930	**2349,55**
36	1656	2690	**988,56**	3708	**1278,36**	4860	**1665,36**	6012	**2031,84**	7128	**2416,68**
37	1702	2764	**1016,02**	3811	**1313,87**	4995	**1711,62**	6179	**2088,28**	7326	**2483,81**
38	1748	2839	**1043,48**	3914	**1349,38**	5130	**1757,88**	6346	**2144,72**	7524	**2550,94**
39	1794	2914	**1070,94**	4017	**1384,89**	5265	**1804,14**	6513	**2201,16**	7722	**2618,07**
40	1840	2988	**1098,40**	4120	**1420,40**	5400	**1850,40**	6680	**2257,60**	7920	**2685,20**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

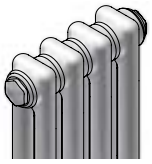
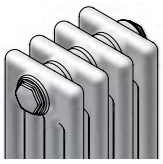
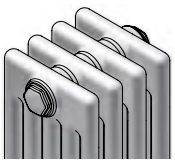
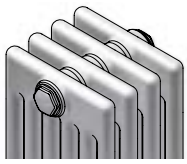
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	1200									
											
Model		**2120**		**3120**		**4120**		**5120**		**6120**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,26		1,29		1,30		1,31		1,32	
Max. number of elements		22		22		22		22		22	
Price/element	**€**	**29,53**		**41,46**		**52,23**		**65,31**		**76,11**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	331	**118,12**	460	**165,84**	588	**208,92**	716	**261,24**	840	**304,44**
5	230	414	**147,65**	575	**207,30**	735	**261,15**	895	**326,55**	1050	**380,55**
6	276	497	**177,18**	690	**248,76**	882	**313,38**	1074	**391,86**	1260	**456,66**
7	322	579	**206,71**	805	**290,22**	1029	**365,61**	1253	**457,17**	1470	**532,77**
8	368	662	**236,24**	920	**331,68**	1176	**417,84**	1432	**522,48**	1680	**608,88**
9	414	745	**265,77**	1035	**373,14**	1323	**470,07**	1611	**587,79**	1890	**684,99**
10	460	827	**295,30**	1150	**414,60**	1470	**522,30**	1790	**653,10**	2100	**761,10**
11	506	910	**324,83**	1265	**456,06**	1617	**574,53**	1969	**718,41**	2310	**837,21**
12	552	993	**354,36**	1380	**497,52**	1764	**626,76**	2148	**783,72**	2520	**913,32**
13	598	1076	**383,89**	1495	**538,98**	1911	**678,99**	2327	**849,03**	2730	**989,43**
14	644	1158	**413,42**	1610	**580,44**	2058	**731,22**	2506	**914,34**	2940	**1065,54**
15	690	1241	**442,95**	1725	**621,90**	2205	**783,45**	2685	**979,65**	3150	**1141,65**
16	736	1324	**472,48**	1840	**663,36**	2352	**835,68**	2864	**1044,96**	3360	**1217,76**
17	782	1406	**502,01**	1955	**704,82**	2499	**887,91**	3043	**1110,27**	3570	**1293,87**
18	828	1489	**531,54**	2070	**746,28**	2646	**940,14**	3222	**1175,58**	3780	**1369,98**
19	874	1572	**561,07**	2185	**787,74**	2793	**992,37**	3401	**1240,89**	3990	**1446,09**
20	920	1654	**590,60**	2300	**829,20**	2940	**1044,60**	3580	**1306,20**	4200	**1522,20**
21	966	1737	**620,13**	2415	**870,66**	3087	**1096,83**	3759	**1371,51**	4410	**1598,31**
22	1012	1820	**649,66**	2530	**912,12**	3234	**1149,06**	3938	**1436,82**	4620	**1674,42**
23	1058	1903	**679,19**	2645	**953,58**	3381	**1201,29**	4117	**1502,13**	4830	**1750,53**
24	1104	1985	**708,72**	2760	**995,04**	3528	**1253,52**	4296	**1567,44**	5040	**1826,64**
25	1150	2068	**738,25**	2875	**1036,50**	3675	**1305,75**	4475	**1632,75**	5250	**1902,75**
26	1196	2151	**767,78**	2990	**1077,96**	3822	**1357,98**	4654	**1698,06**	5460	**1978,86**
27	1242	2233	**797,31**	3105	**1119,42**	3969	**1410,21**	4833	**1763,37**	5670	**2054,97**
28	1288	2316	**826,84**	3220	**1160,88**	4116	**1462,44**	5012	**1828,68**	5880	**2131,08**
29	1334	2399	**856,37**	3335	**1202,34**	4263	**1514,67**	5191	**1893,99**	6090	**2207,19**
30	1380	2481	**885,90**	3450	**1243,80**	4410	**1566,90**	5370	**1959,30**	6300	**2283,30**
31	1426	2564	**915,43**	3565	**1285,26**	4557	**1619,13**	5549	**2024,61**	6510	**2359,41**
32	1472	2647	**944,96**	3680	**1326,72**	4704	**1671,36**	5728	**2089,92**	6720	**2435,52**
33	1518	2730	**974,49**	3795	**1368,18**	4851	**1723,59**	5907	**2155,23**	6930	**2511,63**
34	1564	2812	**1004,02**	3910	**1409,64**	4998	**1775,82**	6086	**2220,54**	7140	**2587,74**
35	1610	2895	**1033,55**	4025	**1451,10**	5145	**1828,05**	6265	**2285,85**	7350	**2663,85**
36	1656	2978	**1063,08**	4140	**1492,56**	5292	**1880,28**	6444	**2351,16**	7560	**2739,96**
37	1702	3060	**1092,61**	4255	**1534,02**	5439	**1932,51**	6623	**2416,47**	7770	**2816,07**
38	1748	3143	**1122,14**	4370	**1575,48**	5586	**1984,74**	6802	**2481,78**	7980	**2892,18**
39	1794	3226	**1151,67**	4485	**1616,94**	5733	**2036,97**	6981	**2547,09**	8190	**2968,29**
40	1840	3308	**1181,20**	4600	**1658,40**	5880	**2089,20**	7160	**2612,40**	8400	**3044,40**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

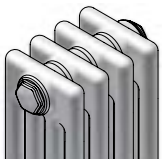
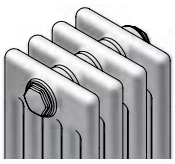
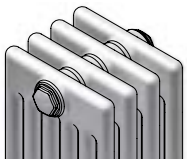
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1500				
					
Model	**2150**	**3150**	**4150**	**5150**	**6150**
Depth mm	62	100	136	173	210
Exponent n	1,28	1,31	1,31	1,32	1,32
Max. number of elements	22	22	22	22	22
Price/element €	**37,58**	**53,70**	**70,20**	**87,70**	**104,51**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	416	**150,32**	560	**214,80**	720	**280,80**	876	**350,80**	1024	**418,04**
5	230	520	**187,90**	700	**268,50**	900	**351,00**	1095	**438,50**	1280	**522,55**
6	276	624	**225,48**	840	**322,20**	1080	**421,20**	1314	**526,20**	1536	**627,06**
7	322	728	**263,06**	980	**375,90**	1260	**491,40**	1533	**613,90**	1792	**731,57**
8	368	832	**300,64**	1120	**429,60**	1440	**561,60**	1752	**701,60**	2048	**836,08**
9	414	936	**338,22**	1260	**483,30**	1620	**631,80**	1971	**789,30**	2304	**940,59**
10	460	1040	**375,80**	1400	**537,00**	1800	**702,00**	2190	**877,00**	2560	**1045,10**
11	506	1144	**413,38**	1540	**590,70**	1980	**772,20**	2409	**964,70**	2816	**1149,61**
12	552	1248	**450,96**	1680	**644,40**	2160	**842,40**	2628	**1052,40**	3072	**1254,12**
13	598	1352	**488,54**	1820	**698,10**	2340	**912,60**	2847	**1140,10**	3328	**1358,63**
14	644	1456	**526,12**	1960	**751,80**	2520	**982,80**	3066	**1227,80**	3584	**1463,14**
15	690	1560	**563,70**	2100	**805,50**	2700	**1053,00**	3285	**1315,50**	3840	**1567,65**
16	736	1664	**601,28**	2240	**859,20**	2880	**1123,20**	3504	**1403,20**	4096	**1672,16**
17	782	1768	**638,86**	2380	**912,90**	3060	**1193,40**	3723	**1490,90**	4352	**1776,67**
18	828	1872	**676,44**	2520	**966,60**	3240	**1263,60**	3942	**1578,60**	4608	**1881,18**
19	874	1976	**714,02**	2660	**1020,30**	3420	**1333,80**	4161	**1666,30**	4864	**1985,69**
20	920	2080	**751,60**	2800	**1074,00**	3600	**1404,00**	4380	**1754,00**	5120	**2090,20**
21	966	2184	**789,18**	2940	**1127,70**	3780	**1474,20**	4599	**1841,70**	5376	**2194,71**
22	1012	2288	**826,76**	3080	**1181,40**	3960	**1544,40**	4818	**1929,40**	5632	**2299,22**
23	1058	2392	**864,34**	3220	**1235,10**	4140	**1614,60**	5037	**2017,10**	5888	**2403,73**
24	1104	2496	**901,92**	3360	**1288,80**	4320	**1684,80**	5256	**2104,80**	6144	**2508,24**
25	1150	2600	**939,50**	3500	**1342,50**	4500	**1755,00**	5475	**2192,50**	6400	**2612,75**
26	1196	2704	**977,08**	3640	**1396,20**	4680	**1825,20**	5694	**2280,20**	6656	**2717,26**
27	1242	2808	**1014,66**	3780	**1449,90**	4860	**1895,40**	5913	**2367,90**	6912	**2821,77**
28	1288	2912	**1052,24**	3920	**1503,60**	5040	**1965,60**	6132	**2455,60**	7168	**2926,28**
29	1334	3016	**1089,82**	4060	**1557,30**	5220	**2035,80**	6351	**2543,30**	7424	**3030,79**
30	1380	3120	**1127,40**	4200	**1611,00**	5400	**2106,00**	6570	**2631,00**	7680	**3135,30**
31	1426	3224	**1164,98**	4340	**1664,70**	5580	**2176,20**	6789	**2718,70**	7936	**3239,81**
32	1472	3328	**1202,56**	4480	**1718,40**	5760	**2246,40**	7008	**2806,40**	8192	**3344,32**
33	1518	3432	**1240,14**	4620	**1772,10**	5940	**2316,60**	7227	**2894,10**	8448	**3448,83**
34	1564	3536	**1277,72**	4760	**1825,80**	6120	**2386,80**	7446	**2981,80**	8704	**3553,34**
35	1610	3640	**1315,30**	4900	**1879,50**	6300	**2457,00**	7665	**3069,50**	8960	**3657,85**
36	1656	3744	**1352,88**	5040	**1933,20**	6480	**2527,20**	7884	**3157,20**	9216	**3762,36**
37	1702	3848	**1390,46**	5180	**1986,90**	6660	**2597,40**	8103	**3244,90**	9472	**3866,87**
38	1748	3952	**1428,04**	5320	**2040,60**	6840	**2667,60**	8322	**3332,60**	9728	**3971,38**
39	1794	4056	**1465,62**	5460	**2094,30**	7020	**2737,80**	8541	**3420,30**	9984	**4075,89**
40	1840	4160	**1503,20**	5600	**2148,00**	7200	**2808,00**	8760	**3508,00**	10240	**4180,40**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

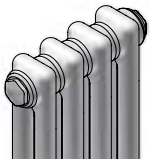
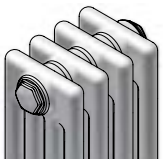
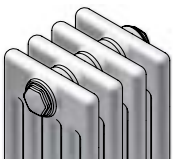
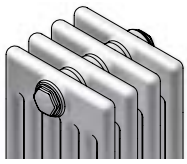
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	1800									
											
Model		**2180**		**3180**		**4180**		**5180**		**6180**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,31		1,33		1,33		1,32		1,33	
Max. number of elements		22		22		22		22		22	
Price/element	**€**	**44,42**		**66,29**		**84,27**		**103,45**		**122,84**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	496	**177,68**	664	**265,16**	852	**337,08**	1036	**413,80**	1212	**491,36**
5	230	620	**222,10**	830	**331,45**	1065	**421,35**	1295	**517,25**	1515	**614,20**
6	276	744	**266,52**	996	**397,74**	1278	**505,62**	1554	**620,70**	1818	**737,04**
7	322	868	**310,94**	1162	**464,03**	1491	**589,89**	1813	**724,15**	2121	**859,88**
8	368	992	**355,36**	1328	**530,32**	1704	**674,16**	2072	**827,60**	2424	**982,72**
9	414	1116	**399,78**	1494	**596,61**	1917	**758,43**	2331	**931,05**	2727	**1105,56**
10	460	1240	**444,20**	1660	**662,90**	2130	**842,70**	2590	**1034,50**	3030	**1228,40**
11	506	1364	**488,62**	1826	**729,19**	2343	**926,97**	2849	**1137,95**	3333	**1351,24**
12	552	1488	**533,04**	1992	**795,48**	2556	**1011,24**	3108	**1241,40**	3636	**1474,08**
13	598	1612	**577,46**	2158	**861,77**	2769	**1095,51**	3367	**1344,85**	3939	**1596,92**
14	644	1736	**621,88**	2324	**928,06**	2982	**1179,78**	3626	**1448,30**	4242	**1719,76**
15	690	1860	**666,30**	2490	**994,35**	3195	**1264,05**	3885	**1551,75**	4545	**1842,60**
16	736	1984	**710,72**	2656	**1060,64**	3408	**1348,32**	4144	**1655,20**	4848	**1965,44**
17	782	2108	**755,14**	2822	**1126,93**	3621	**1432,59**	4403	**1758,65**	5151	**2088,28**
18	828	2232	**799,56**	2988	**1193,22**	3834	**1516,86**	4662	**1862,10**	5454	**2211,12**
19	874	2356	**843,98**	3154	**1259,51**	4047	**1601,13**	4921	**1965,55**	5757	**2333,96**
20	920	2480	**888,40**	3320	**1325,80**	4260	**1685,40**	5180	**2069,00**	6060	**2456,80**
21	966	2604	**932,82**	3486	**1392,09**	4473	**1769,67**	5439	**2172,45**	6363	**2579,64**
22	1012	2728	**977,24**	3652	**1458,38**	4686	**1853,94**	5698	**2275,90**	6666	**2702,48**
23	1058	2852	**1021,66**	3818	**1524,67**	4899	**1938,21**	5957	**2379,35**	6969	**2825,32**
24	1104	2976	**1066,08**	3984	**1590,96**	5112	**2022,48**	6216	**2482,80**	7272	**2948,16**
25	1150	3100	**1110,50**	4150	**1657,25**	5325	**2106,75**	6475	**2586,25**	7575	**3071,00**
26	1196	3224	**1154,92**	4316	**1723,54**	5538	**2191,02**	6734	**2689,70**	7878	**3193,84**
27	1242	3348	**1199,34**	4482	**1789,83**	5751	**2275,29**	6993	**2793,15**	8181	**3316,68**
28	1288	3472	**1243,76**	4648	**1856,12**	5964	**2359,56**	7252	**2896,60**	8484	**3439,52**
29	1334	3596	**1288,18**	4814	**1922,41**	6177	**2443,83**	7511	**3000,05**	8787	**3562,36**
30	1380	3720	**1332,60**	4980	**1988,70**	6390	**2528,10**	7770	**3103,50**	9090	**3685,20**
31	1426	3844	**1377,02**	5146	**2054,99**	6603	**2612,37**	8029	**3206,95**	9393	**3808,04**
32	1472	3968	**1421,44**	5312	**2121,28**	6816	**2696,64**	8288	**3310,40**	9696	**3930,88**
33	1518	4092	**1465,86**	5478	**2187,57**	7029	**2780,91**	8547	**3413,85**	9999	**4053,72**
34	1564	4216	**1510,28**	5644	**2253,86**	7242	**2865,18**	8806	**3517,30**	10302	**4176,56**
35	1610	4340	**1554,70**	5810	**2320,15**	7455	**2949,45**	9065	**3620,75**	10605	**4299,40**
36	1656	4464	**1599,12**	5976	**2386,44**	7668	**3033,72**	9324	**3724,20**	10908	**4422,24**
37	1702	4588	**1643,54**	6142	**2452,73**	7881	**3117,99**	9583	**3827,65**	11211	**4545,08**
38	1748	4712	**1687,96**	6308	**2519,02**	8094	**3202,26**	9842	**3931,10**	11514	**4667,92**
39	1794	4836	**1732,38**	6474	**2585,31**	8307	**3286,53**	10101	**4034,55**	11817	**4790,76**
40	1840	4960	**1776,80**	6640	**2651,60**	8520	**3370,80**	10360	**4138,00**	12120	**4913,60**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

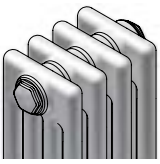
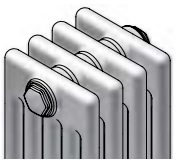
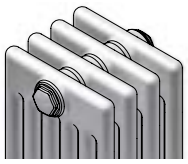
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2000				
					
Model	**2200**	**3200**	**4200**	**5200**	**6200**
Depth mm	62	100	136	173	210
Exponent n	1,31	1,33	1,32	1,32	1,32
Max. number of elements	22	22	22	22	22
Price/element €	**50,18**	**71,69**	**94,14**	**115,42**	**136,72**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	552	**200,72**	732	**286,76**	936	**376,56**	1140	**461,68**	1336	**546,88**
5	230	690	**250,90**	915	**358,45**	1170	**470,70**	1425	**577,10**	1670	**683,60**
6	276	828	**301,08**	1098	**430,14**	1404	**564,84**	1710	**692,52**	2004	**820,32**
7	322	966	**351,26**	1281	**501,83**	1638	**658,98**	1995	**807,94**	2338	**957,04**
8	368	1104	**401,44**	1464	**573,52**	1872	**753,12**	2280	**923,36**	2672	**1093,76**
9	414	1242	**451,62**	1647	**645,21**	2106	**847,26**	2565	**1038,78**	3006	**1230,48**
10	460	1380	**501,80**	1830	**716,90**	2340	**941,40**	2850	**1154,20**	3340	**1367,20**
11	506	1518	**551,98**	2013	**788,59**	2574	**1035,54**	3135	**1269,62**	3674	**1503,92**
12	552	1656	**602,16**	2196	**860,28**	2808	**1129,68**	3420	**1385,04**	4008	**1640,64**
13	598	1794	**652,34**	2379	**931,97**	3042	**1223,82**	3705	**1500,46**	4342	**1777,36**
14	644	1932	**702,52**	2562	**1003,66**	3276	**1317,96**	3990	**1615,88**	4676	**1914,08**
15	690	2070	**752,70**	2745	**1075,35**	3510	**1412,10**	4275	**1731,30**	5010	**2050,80**
16	736	2208	**802,88**	2928	**1147,04**	3744	**1506,24**	4560	**1846,72**	5344	**2187,52**
17	782	2346	**853,06**	3111	**1218,73**	3978	**1600,38**	4845	**1962,14**	5678	**2324,24**
18	828	2484	**903,24**	3294	**1290,42**	4212	**1694,52**	5130	**2077,56**	6012	**2460,96**
19	874	2622	**953,42**	3477	**1362,11**	4446	**1788,66**	5415	**2192,98**	6346	**2597,68**
20	920	2760	**1003,60**	3660	**1433,80**	4680	**1882,80**	5700	**2308,40**	6680	**2734,40**
21	966	2898	**1053,78**	3843	**1505,49**	4914	**1976,94**	5985	**2423,82**	7014	**2871,12**
22	1012	3036	**1103,96**	4026	**1577,18**	5148	**2071,08**	6270	**2539,24**	7348	**3007,84**
23	1058	3174	**1154,14**	4209	**1648,87**	5382	**2165,22**	6555	**2654,66**	7682	**3144,56**
24	1104	3312	**1204,32**	4392	**1720,56**	5616	**2259,36**	6840	**2770,08**	8016	**3281,28**
25	1150	3450	**1254,50**	4575	**1792,25**	5850	**2353,50**	7125	**2885,50**	8350	**3418,00**
26	1196	3588	**1304,68**	4758	**1863,94**	6084	**2447,64**	7410	**3000,92**	8684	**3554,72**
27	1242	3726	**1354,86**	4941	**1935,63**	6318	**2541,78**	7695	**3116,34**	9018	**3691,44**
28	1288	3864	**1405,04**	5124	**2007,32**	6552	**2635,92**	7980	**3231,76**	9352	**3828,16**
29	1334	4002	**1455,22**	5307	**2079,01**	6786	**2730,06**	8265	**3347,18**	9686	**3964,88**
30	1380	4140	**1505,40**	5490	**2150,70**	7020	**2824,20**	8550	**3462,60**	10020	**4101,60**
31	1426	4278	**1555,58**	5673	**2222,39**	7254	**2918,34**	8835	**3578,02**	10354	**4238,32**
32	1472	4416	**1605,76**	5856	**2294,08**	7488	**3012,48**	9120	**3693,44**	10688	**4375,04**
33	1518	4554	**1655,94**	6039	**2365,77**	7722	**3106,62**	9405	**3808,86**	11022	**4511,76**
34	1564	4692	**1706,12**	6222	**2437,46**	7956	**3200,76**	9690	**3924,28**	11356	**4648,48**
35	1610	4830	**1756,30**	6405	**2509,15**	8190	**3294,90**	9975	**4039,70**	11690	**4785,20**
36	1656	4968	**1806,48**	6588	**2580,84**	8424	**3389,04**	10260	**4155,12**	12024	**4921,92**
37	1702	5106	**1856,66**	6771	**2652,53**	8658	**3483,18**	10545	**4270,54**	12358	**5058,64**
38	1748	5244	**1906,84**	6954	**2724,22**	8892	**3577,32**	10830	**4385,96**	12692	**5195,36**
39	1794	5382	**1957,02**	7137	**2795,91**	9126	**3671,46**	11115	**4501,38**	13026	**5332,08**
40	1840	5520	**2007,20**	7320	**2867,60**	9360	**3765,60**	11400	**4616,80**	13360	**5468,80**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

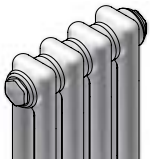
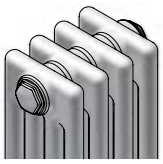
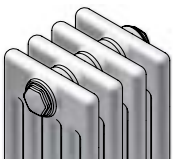
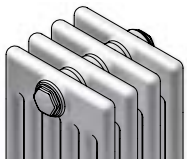
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2200				
					
Model	**2220**	**3220**	**4220**	**5220**	**6220**
Depth mm	62	100	136	173	210
Exponent n	1,31	1,32	1,32	1,32	1,32
Max. number of elements	22	22	22	22	17
Price/element €	**55,67**	**80,66**	**104,73**	**128,26**	**152,25**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	604	**222,68**	800	**322,64**	1024	**418,92**	1248	**513,04**	1460	**609,00**
5	230	755	**278,35**	1000	**403,30**	1280	**523,65**	1560	**641,30**	1825	**761,25**
6	276	906	**334,02**	1200	**483,96**	1536	**628,38**	1872	**769,56**	2190	**913,50**
7	322	1057	**389,69**	1400	**564,62**	1792	**733,11**	2184	**897,82**	2555	**1065,75**
8	368	1208	**445,36**	1600	**645,28**	2048	**837,84**	2496	**1026,08**	2920	**1218,00**
9	414	1359	**501,03**	1800	**725,94**	2304	**942,57**	2808	**1154,34**	3285	**1370,25**
10	460	1510	**556,70**	2000	**806,60**	2560	**1047,30**	3120	**1282,60**	3650	**1522,50**
11	506	1661	**612,37**	2200	**887,26**	2816	**1152,03**	3432	**1410,86**	4015	**1674,75**
12	552	1812	**668,04**	2400	**967,92**	3072	**1256,76**	3744	**1539,12**	4380	**1827,00**
13	598	1963	**723,71**	2600	**1048,58**	3328	**1361,49**	4056	**1667,38**	4745	**1979,25**
14	644	2114	**779,38**	2800	**1129,24**	3584	**1466,22**	4368	**1795,64**	5110	**2131,50**
15	690	2265	**835,05**	3000	**1209,90**	3840	**1570,95**	4680	**1923,90**	5475	**2283,75**
16	736	2416	**890,72**	3200	**1290,56**	4096	**1675,68**	4992	**2052,16**	5840	**2436,00**
17	782	2567	**946,39**	3400	**1371,22**	4352	**1780,41**	5304	**2180,42**	6205	**2588,25**
18	828	2718	**1002,06**	3600	**1451,88**	4608	**1885,14**	5616	**2308,68**	6570	**2740,50**
19	874	2869	**1057,73**	3800	**1532,54**	4864	**1989,87**	5928	**2436,94**	6935	**2892,75**
20	920	3020	**1113,40**	4000	**1613,20**	5120	**2094,60**	6240	**2565,20**	7300	**3045,00**
21	966	3171	**1169,07**	4200	**1693,86**	5376	**2199,33**	6552	**2693,46**	7665	**3197,25**
22	1012	3322	**1224,74**	4400	**1774,52**	5632	**2304,06**	6864	**2821,72**	8030	**3349,50**
23	1058	3473	**1280,41**	4600	**1855,18**	5888	**2408,79**	7176	**2949,98**	8395	**3501,75**
24	1104	3624	**1336,08**	4800	**1935,84**	6144	**2513,52**	7488	**3078,24**	8760	**3654,00**
25	1150	3775	**1391,75**	5000	**2016,50**	6400	**2618,25**	7800	**3206,50**	9125	**3806,25**
26	1196	3926	**1447,42**	5200	**2097,16**	6656	**2722,98**	8112	**3334,76**	9490	**3958,50**
27	1242	4077	**1503,09**	5400	**2177,82**	6912	**2827,71**	8424	**3463,02**	9855	**4110,75**
28	1288	4228	**1558,76**	5600	**2258,48**	7168	**2932,44**	8736	**3591,28**	10220	**4263,00**
29	1334	4379	**1614,43**	5800	**2339,14**	7424	**3037,17**	9048	**3719,54**	10585	**4415,25**
30	1380	4530	**1670,10**	6000	**2419,80**	7680	**3141,90**	9360	**3847,80**	10950	**4567,50**
31	1426	4681	**1725,77**	6200	**2500,46**	7936	**3246,63**	9672	**3976,06**	11315	**4719,75**
32	1472	4832	**1781,44**	6400	**2581,12**	8192	**3351,36**	9984	**4104,32**	11680	**4872,00**
33	1518	4983	**1837,11**	6600	**2661,78**	8448	**3456,09**	10296	**4232,58**	12045	**5024,25**
34	1564	5134	**1892,78**	6800	**2742,44**	8704	**3560,82**	10608	**4360,84**	12410	**5176,50**
35	1610	5285	**1948,45**	7000	**2823,10**	8960	**3665,55**	10920	**4489,10**	12775	**5328,75**
36	1656	5436	**2004,12**	7200	**2903,76**	9216	**3770,28**	11232	**4617,36**	13140	**5481,00**
37	1702	5587	**2059,79**	7400	**2984,42**	9472	**3875,01**	11544	**4745,62**	13505	**5633,25**
38	1748	5738	**2115,46**	7600	**3065,08**	9728	**3979,74**	11856	**4873,88**	13870	**5785,50**
39	1794	5889	**2171,13**	7800	**3145,74**	9984	**4084,47**	12168	**5002,14**	14235	**5937,75**
40	1840	6040	**2226,80**	8000	**3226,40**	10240	**4189,20**	12480	**5130,40**	14600	**6090,00**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

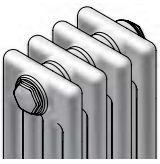
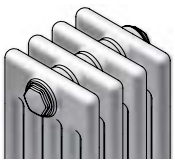
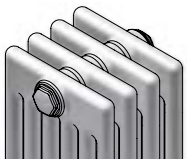
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2500				
					
Model	**2250**	**3250**	**4250**	**5250**	**6250**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,32	1,31	1,31	1,32
Max. number of elements	22	22	22	22	17
Price/element €	**62,15**	**91,24**	**117,49**	**143,50**	**171,02**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	684	**248,60**	900	**364,96**	1156	**469,96**	1408	**574,00**	1648	**684,08**
5	230	855	**310,75**	1125	**456,20**	1445	**587,45**	1760	**717,50**	2060	**855,10**
6	276	1026	**372,90**	1350	**547,44**	1734	**704,94**	2112	**861,00**	2472	**1026,12**
7	322	1197	**435,05**	1575	**638,68**	2023	**822,43**	2464	**1004,50**	2884	**1197,14**
8	368	1368	**497,20**	1800	**729,92**	2312	**939,92**	2816	**1148,00**	3296	**1368,16**
9	414	1539	**559,35**	2025	**821,16**	2601	**1057,41**	3168	**1291,50**	3708	**1539,18**
10	460	1710	**621,50**	2250	**912,40**	2890	**1174,90**	3520	**1435,00**	4120	**1710,20**
11	506	1881	**683,65**	2475	**1003,64**	3179	**1292,39**	3872	**1578,50**	4532	**1881,22**
12	552	2052	**745,80**	2700	**1094,88**	3468	**1409,88**	4224	**1722,00**	4944	**2052,24**
13	598	2223	**807,95**	2925	**1186,12**	3757	**1527,37**	4576	**1865,50**	5356	**2223,26**
14	644	2394	**870,10**	3150	**1277,36**	4046	**1644,86**	4928	**2009,00**	5768	**2394,28**
15	690	2565	**932,25**	3375	**1368,60**	4335	**1762,35**	5280	**2152,50**	6180	**2565,30**
16	736	2736	**994,40**	3600	**1459,84**	4624	**1879,84**	5632	**2296,00**	6592	**2736,32**
17	782	2907	**1056,55**	3825	**1551,08**	4913	**1997,33**	5984	**2439,50**	7004	**2907,34**
18	828	3078	**1118,70**	4050	**1642,32**	5202	**2114,82**	6336	**2583,00**	7416	**3078,36**
19	874	3249	**1180,85**	4275	**1733,56**	5491	**2232,31**	6688	**2726,50**	7828	**3249,38**
20	920	3420	**1243,00**	4500	**1824,80**	5780	**2349,80**	7040	**2870,00**	8240	**3420,40**
21	966	3591	**1305,15**	4725	**1916,04**	6069	**2467,29**	7392	**3013,50**	8652	**3591,42**
22	1012	3762	**1367,30**	4950	**2007,28**	6358	**2584,78**	7744	**3157,00**	9064	**3762,44**
23	1058	3933	**1429,45**	5175	**2098,52**	6647	**2702,27**	8096	**3300,50**	9476	**3933,46**
24	1104	4104	**1491,60**	5400	**2189,76**	6936	**2819,76**	8448	**3444,00**	9888	**4104,48**
25	1150	4275	**1553,75**	5625	**2281,00**	7225	**2937,25**	8800	**3587,50**	10300	**4275,50**
26	1196	4446	**1615,90**	5850	**2372,24**	7514	**3054,74**	9152	**3731,00**	10712	**4446,52**
27	1242	4617	**1678,05**	6075	**2463,48**	7803	**3172,23**	9504	**3874,50**	11124	**4617,54**
28	1288	4788	**1740,20**	6300	**2554,72**	8092	**3289,72**	9856	**4018,00**	11536	**4788,56**
29	1334	4959	**1802,35**	6525	**2645,96**	8381	**3407,21**	10208	**4161,50**	11948	**4959,58**
30	1380	5130	**1864,50**	6750	**2737,20**	8670	**3524,70**	10560	**4305,00**	12360	**5130,60**
31	1426	5301	**1926,65**	6975	**2828,44**	8959	**3642,19**	10912	**4448,50**	12772	**5301,62**
32	1472	5472	**1988,80**	7200	**2919,68**	9248	**3759,68**	11264	**4592,00**	13184	**5472,64**
33	1518	5643	**2050,95**	7425	**3010,92**	9537	**3877,17**	11616	**4735,50**	13596	**5643,66**
34	1564	5814	**2113,10**	7650	**3102,16**	9826	**3994,66**	11968	**4879,00**	14008	**5814,68**
35	1610	5985	**2175,25**	7875	**3193,40**	10115	**4112,15**	12320	**5022,50**	14420	**5985,70**
36	1656	6156	**2237,40**	8100	**3284,64**	10404	**4229,64**	12672	**5166,00**	14832	**6156,72**
37	1702	6327	**2299,55**	8325	**3375,88**	10693	**4347,13**	13024	**5309,50**	15244	**6327,74**
38	1748	6498	**2361,70**	8550	**3467,12**	10982	**4464,62**	13376	**5453,00**	15656	**6498,76**
39	1794	6669	**2423,85**	8775	**3558,36**	11271	**4582,11**	13728	**5596,50**	16068	**6669,78**
40	1840	6840	**2486,00**	9000	**3649,60**	11560	**4699,60**	14080	**5740,00**	16480	**6840,80**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

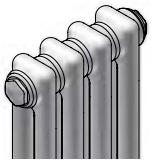
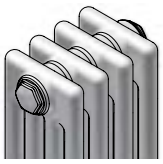
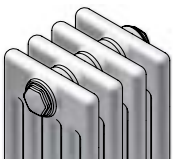
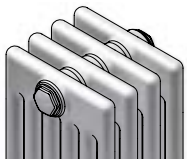
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	2800									
											
Model		**2280**		**3280**		**4280**		**5280**		**6280**	
Depth	mm	62		100		136		173		210	
Exponent	n	1,30		1,30		1,30		1,30		1,30	
Max. number of elements		22		22		22		17		14	
Price/element	**€**	**70,80**		**102,43**		**133,98**		**160,81**		**193,50**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	756	**283,20**	1004	**409,72**	1292	**535,92**	1568	**643,24**	1836	**774,00**
5	230	945	**354,00**	1255	**512,15**	1615	**669,90**	1960	**804,05**	2295	**967,50**
6	276	1134	**424,80**	1506	**614,58**	1938	**803,88**	2352	**964,86**	2754	**1161,00**
7	322	1323	**495,60**	1757	**717,01**	2261	**937,86**	2744	**1125,67**	3213	**1354,50**
8	368	1512	**566,40**	2008	**819,44**	2584	**1071,84**	3136	**1286,48**	3672	**1548,00**
9	414	1701	**637,20**	2259	**921,87**	2907	**1205,82**	3528	**1447,29**	4131	**1741,50**
10	460	1890	**708,00**	2510	**1024,30**	3230	**1339,80**	3920	**1608,10**	4590	**1935,00**
11	506	2079	**778,80**	2761	**1126,73**	3553	**1473,78**	4312	**1768,91**	5049	**2128,50**
12	552	2268	**849,60**	3012	**1229,16**	3876	**1607,76**	4704	**1929,72**	5508	**2322,00**
13	598	2457	**920,40**	3263	**1331,59**	4199	**1741,74**	5096	**2090,53**	5967	**2515,50**
14	644	2646	**991,20**	3514	**1434,02**	4522	**1875,72**	5488	**2251,34**	6426	**2709,00**
15	690	2835	**1062,00**	3765	**1536,45**	4845	**2009,70**	5880	**2412,15**	6885	**2902,50**
16	736	3024	**1132,80**	4016	**1638,88**	5168	**2143,68**	6272	**2572,96**	7344	**3096,00**
17	782	3213	**1203,60**	4267	**1741,31**	5491	**2277,66**	6664	**2733,77**	7803	**3289,50**
18	828	3402	**1274,40**	4518	**1843,74**	5814	**2411,64**	7056	**2894,58**	8262	**3483,00**
19	874	3591	**1345,20**	4769	**1946,17**	6137	**2545,62**	7448	**3055,39**	8721	**3676,50**
20	920	3780	**1416,00**	5020	**2048,60**	6460	**2679,60**	7840	**3216,20**	9180	**3870,00**
21	966	3969	**1486,80**	5271	**2151,03**	6783	**2813,58**	8232	**3377,01**	9639	**4063,50**
22	1012	4158	**1557,60**	5522	**2253,46**	7106	**2947,56**	8624	**3537,82**	10098	**4257,00**
23	1058	4347	**1628,40**	5773	**2355,89**	7429	**3081,54**	9016	**3698,63**	10557	**4450,50**
24	1104	4536	**1699,20**	6024	**2458,32**	7752	**3215,52**	9408	**3859,44**	11016	**4644,00**
25	1150	4725	**1770,00**	6275	**2560,75**	8075	**3349,50**	9800	**4020,25**	11475	**4837,50**
26	1196	4914	**1840,80**	6526	**2663,18**	8398	**3483,48**	10192	**4181,06**	11934	**5031,00**
27	1242	5103	**1911,60**	6777	**2765,61**	8721	**3617,46**	10584	**4341,87**	12393	**5224,50**
28	1288	5292	**1982,40**	7028	**2868,04**	9044	**3751,44**	10976	**4502,68**	12852	**5418,00**
29	1334	5481	**2053,20**	7279	**2970,47**	9367	**3885,42**	11368	**4663,49**	13311	**5611,50**
30	1380	5670	**2124,00**	7530	**3072,90**	9690	**4019,40**	11760	**4824,30**	13770	**5805,00**
31	1426	5859	**2194,80**	7781	**3175,33**	10013	**4153,38**	12152	**4985,11**	14229	**5998,50**
32	1472	6048	**2265,60**	8032	**3277,76**	10336	**4287,36**	12544	**5145,92**	14688	**6192,00**
33	1518	6237	**2336,40**	8283	**3380,19**	10659	**4421,34**	12936	**5306,73**	15147	**6385,50**
34	1564	6426	**2407,20**	8534	**3482,62**	10982	**4555,32**	13328	**5467,54**	15606	**6579,00**
35	1610	6615	**2478,00**	8785	**3585,05**	11305	**4689,30**	13720	**5628,35**	16065	**6772,50**
36	1656	6804	**2548,80**	9036	**3687,48**	11628	**4823,28**	14112	**5789,16**	16524	**6966,00**
37	1702	6993	**2619,60**	9287	**3789,91**	11951	**4957,26**	14504	**5949,97**	16983	**7159,50**
38	1748	7182	**2690,40**	9538	**3892,34**	12274	**5091,24**	14896	**6110,78**	17442	**7353,00**
39	1794	7371	**2761,20**	9789	**3994,77**	12597	**5225,22**	15288	**6271,59**	17901	**7546,50**
40	1840	7560	**2832,00**	10040	**4097,20**	12920	**5359,20**	15680	**6432,40**	18360	**7740,00**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

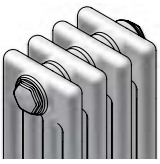
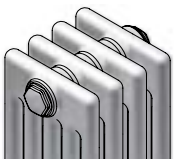
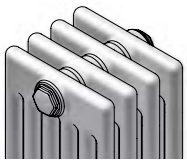
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	3000				
					
Model	**2300**	**3300**	**4300**	**5300**	**6300**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,30	1,30	1,30	1,30
Max. number of elements	22	22	22	17	14
Price/element €	**75,14**	**110,91**	**143,34**	**172,22**	**205,89**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	804	**300,56**	1076	**443,64**	1380	**573,36**	1680	**688,88**	1964	**823,56**
5	230	1005	**375,70**	1345	**554,55**	1725	**716,70**	2100	**861,10**	2455	**1029,45**
6	276	1206	**450,84**	1614	**665,46**	2070	**860,04**	2520	**1033,32**	2946	**1235,34**
7	322	1407	**525,98**	1883	**776,37**	2415	**1003,38**	2940	**1205,54**	3437	**1441,23**
8	368	1608	**601,12**	2152	**887,28**	2760	**1146,72**	3360	**1377,76**	3928	**1647,12**
9	414	1809	**676,26**	2421	**998,19**	3105	**1290,06**	3780	**1549,98**	4419	**1853,01**
10	460	2010	**751,40**	2690	**1109,10**	3450	**1433,40**	4200	**1722,20**	4910	**2058,90**
11	506	2211	**826,54**	2959	**1220,01**	3795	**1576,74**	4620	**1894,42**	5401	**2264,79**
12	552	2412	**901,68**	3228	**1330,92**	4140	**1720,08**	5040	**2066,64**	5892	**2470,68**
13	598	2613	**976,82**	3497	**1441,83**	4485	**1863,42**	5460	**2238,86**	6383	**2676,57**
14	644	2814	**1051,96**	3766	**1552,74**	4830	**2006,76**	5880	**2411,08**	6874	**2882,46**
15	690	3015	**1127,10**	4035	**1663,65**	5175	**2150,10**	6300	**2583,30**	7365	**3088,35**
16	736	3216	**1202,24**	4304	**1774,56**	5520	**2293,44**	6720	**2755,52**	7856	**3294,24**
17	782	3417	**1277,38**	4573	**1885,47**	5865	**2436,78**	7140	**2927,74**	8347	**3500,13**
18	828	3618	**1352,52**	4842	**1996,38**	6210	**2580,12**	7560	**3099,96**	8838	**3706,02**
19	874	3819	**1427,66**	5111	**2107,29**	6555	**2723,46**	7980	**3272,18**	9329	**3911,91**
20	920	4020	**1502,80**	5380	**2218,20**	6900	**2866,80**	8400	**3444,40**	9820	**4117,80**
21	966	4221	**1577,94**	5649	**2329,11**	7245	**3010,14**	8820	**3616,62**	10311	**4323,69**
22	1012	4422	**1653,08**	5918	**2440,02**	7590	**3153,48**	9240	**3788,84**	10802	**4529,58**
23	1058	4623	**1728,22**	6187	**2550,93**	7935	**3296,82**	9660	**3961,06**	11293	**4735,47**
24	1104	4824	**1803,36**	6456	**2661,84**	8280	**3440,16**	10080	**4133,28**	11784	**4941,36**
25	1150	5025	**1878,50**	6725	**2772,75**	8625	**3583,50**	10500	**4305,50**	12275	**5147,25**
26	1196	5226	**1953,64**	6994	**2883,66**	8970	**3726,84**	10920	**4477,72**	12766	**5353,14**
27	1242	5427	**2028,78**	7263	**2994,57**	9315	**3870,18**	11340	**4649,94**	13257	**5559,03**
28	1288	5628	**2103,92**	7532	**3105,48**	9660	**4013,52**	11760	**4822,16**	13748	**5764,92**
29	1334	5829	**2179,06**	7801	**3216,39**	10005	**4156,86**	12180	**4994,38**	14239	**5970,81**
30	1380	6030	**2254,20**	8070	**3327,30**	10350	**4300,20**	12600	**5166,60**	14730	**6176,70**
31	1426	6231	**2329,34**	8339	**3438,21**	10695	**4443,54**	13020	**5338,82**	15221	**6382,59**
32	1472	6432	**2404,48**	8608	**3549,12**	11040	**4586,88**	13440	**5511,04**	15712	**6588,48**
33	1518	6633	**2479,62**	8877	**3660,03**	11385	**4730,22**	13860	**5683,26**	16203	**6794,37**
34	1564	6834	**2554,76**	9146	**3770,94**	11730	**4873,56**	14280	**5855,48**	16694	**7000,26**
35	1610	7035	**2629,90**	9415	**3881,85**	12075	**5016,90**	14700	**6027,70**	17185	**7206,15**
36	1656	7236	**2705,04**	9684	**3992,76**	12420	**5160,24**	15120	**6199,92**	17676	**7412,04**
37	1702	7437	**2780,18**	9953	**4103,67**	12765	**5303,58**	15540	**6372,14**	18167	**7617,93**
38	1748	7638	**2855,32**	10222	**4214,58**	13110	**5446,92**	15960	**6544,36**	18658	**7823,82**
39	1794	7839	**2930,46**	10491	**4325,49**	13455	**5590,26**	16380	**6716,58**	19149	**8029,71**
40	1840	8040	**3005,60**	10760	**4436,40**	13800	**5733,60**	16800	**6888,80**	19640	**8235,60**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

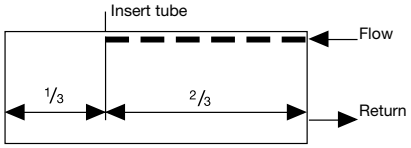
Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

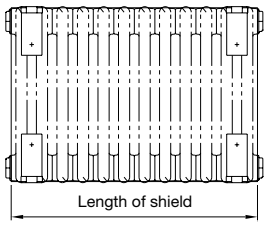
Warning: Weight over 100 kg

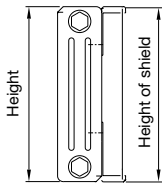
Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston

	Price €
High pressure version max. 18 bar (not for Completto version) - with welded plugs 2- to 3-column - with welded plugs and tied rod 4- to 6-column - for radiators comprising several blocks additionally per welded joint (at top and bottom)	**215,71 per RAD** **317,69 per RAD** **108,00**
Operating temperature 120 °C	**On request**
Further connections	**On request**
Insert tube for Zehnder Charleston radiators with same-side connections, a flow insert tube is factory-installed in 2/3 of the radiator length from the following element numbers or lengths, in order to guarantee the thermal outputs shown in the catalogue. 2-column from 87 elements = length 4002 mm 3-column from 85 elements = length 3910 mm 4-column from 81 elements = length 3726 mm 5-column from 71 elements = length 3266 mm 6-column from 55 elements = length 2530 mm 	**239,79 per RAD**
Intermediate heights calculated on next-higher catalogue height	**On request**
Angled or curved design (see page 43)	**On request**
Radiator designs over height 3000 mm	**On request**
Welded lugs, price per lug	**29,88**
Galvanising (see also explanations on galvanising in section "General") with subsequent standard finish (RAL 9016), maximum dimensions: 3000 x 850 x 450 mm	**On request**
Completto version with valve inserts for clip seal (Danfoss thermostat) instead of M 30 x 1,5 threaded connection	**No surcharge**
Completto Q-Tech Charleston Completto Q-Tech is built in factory-made, for an automatic hydraulic balancing of pressure differences that can occure when, e.g. connecting or turning off system parts. By the integrated diaphragm-sensed flow-control in the valve insert, the differential pressure is constantly kept above the pre-setting and standard cross section value. Therefore it is possible to quickly and easily do the hydraulic balancing of new and old systems or unknown pipe networks. The pre-setting of the needed flow for the customer needs on site, is achieved by turning the regulation ring with the pre-setting key which is integrated in the scope of delivery. Large flows of 10 to 170 l/h and very big differential pressure (max. 1,5 bar). The Q-Tech valve cannot be retrofitted with AV6, AV9 or other valves.	**123,20** (Surcharge on the corresponding price for Completto connection, see page 45)
Thermal radiation shield Heights from 260 mm to 750 mm and a maximum length of the thermal radiation shield of up to 2024 mm; for large lengths, the thermal radiation shields are supplied in 2 or more pieces. The thermal radiation shield consists of special 6 mm safety glass with thermal coating, rounded corners, finely polished edges, including holders for on-site attachment to the last row of columns. Bracket painted with powder-coating in the colour of the radiator.	





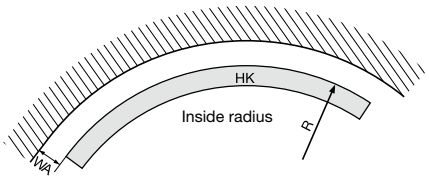
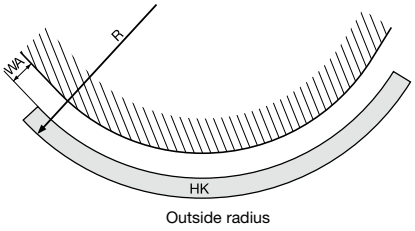
Number of elements Zehnder Charleston	Number of shields	Number of brackets
7 to 30	1	4
31 to 44	1	6
45 to 60	2	8
61 to 88	2	12
89 to 114	3	18
115 to 130	3	18

Basic price per reflective cover plate	**189,17**
Price per metre, thermal radiation shield:	
H = 260 - 450 mm	**91,70**
H = 500 - 750 mm	**139,65**
H = Height of shield	

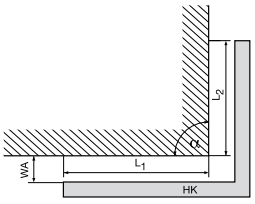
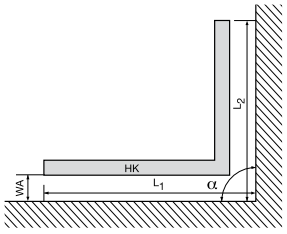
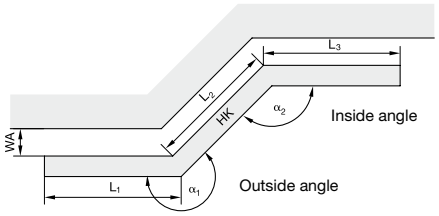
Basis for calculating the surcharge is the standard finish

Zehnder Charleston

Curved version

Version	Sketch/template	Prices €
Zehnder Charleston radiators are available with the following minimum external curve radii: 2-column: 400 mm 3-column: 650 mm 4-column: 750 mm 5-column: 900 mm 6-column: 1000 mm The first three elements are not curved for the Zehnder Charleston Completto.		**On request**
		**On request**

Angled version

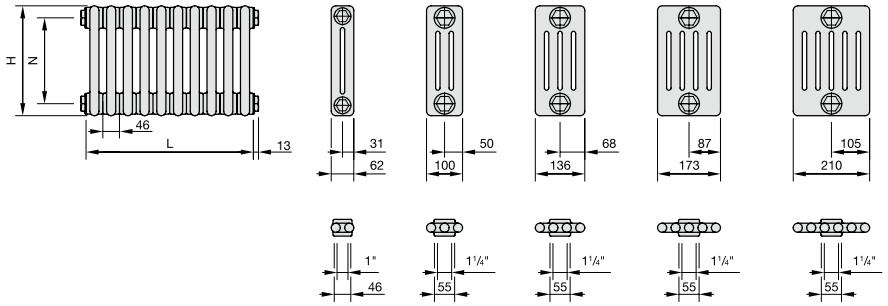
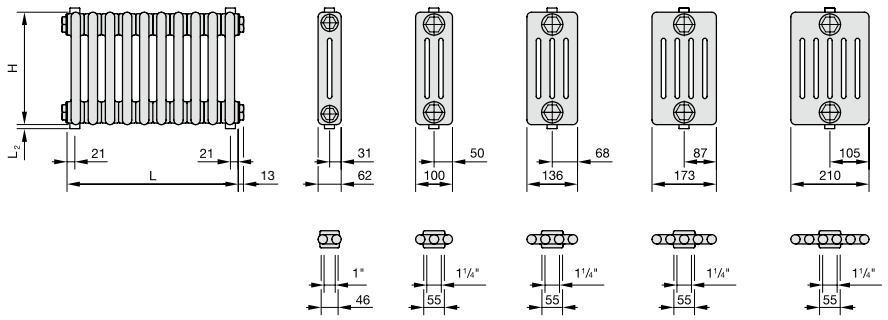
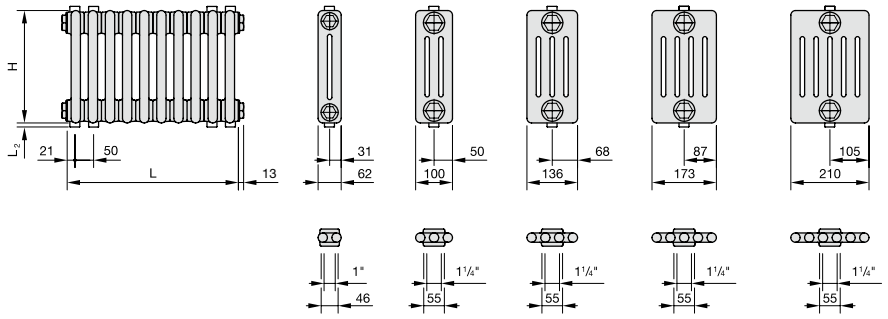
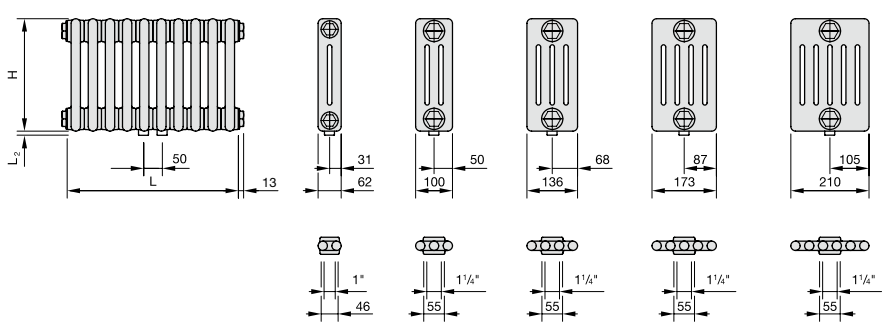
Version	Sketch/template	Prices €
Special version angled, available from 90° to 179°. When making a price enquiry, please provide the following dimensions on the dimensional drawing: L_1, L_2, L_3 in mm, angle α_1, α_2 in degrees. Please provide sturdy templates when placing your order.		**On request**
		**On request**
		**On request**

When ordering or requesting prices of curved and angled radiators, please enclose a template or dimensional drawing with all dimensions indicated.

HK = Radiator
WA = Wall clearance
R = Radius
α_1, α_2 = Angle [°]
L_1, L_2, L_3 = Lengths

Dimensions in mm

Zehnder Charleston, Zehnder Charleston Clinic[1)]

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 2-tube with external valve		
same-side or opposite end S001 1270 * 7610 * 1670 * 7210 *	**No additional charge**	
* 2716 Δ 6172 * Δ	**59,90**	
2670 * 6210 *	**18,67**	
1706 Δ 7102 Δ	**41,25**	
from bottom to bottom 3570 * 5310 * Please note: For Completto, see p. 45	**94,89**	
from top to top 9806 Δ 8902 Δ	**117,48**	
from bottom to bottom, at side 50 mm 3370 * 5510 * Please note: For Completto, see p. 45	**94,89**	
from top to top, at side 50 mm 9906 Δ 8802 Δ	**117,48**	
from bottom to bottom, central 50 mm 3470 * 5410 * Please note: For Completto, see page 45	**139,26**	 Central arrangement of connection fitting only with even number of elements [2)]

When orders are placed without indication of the connection type, the standard connection 4 x ½" (S001) will be delivered. Possible connections: 1270/7610 and 1670/7210.

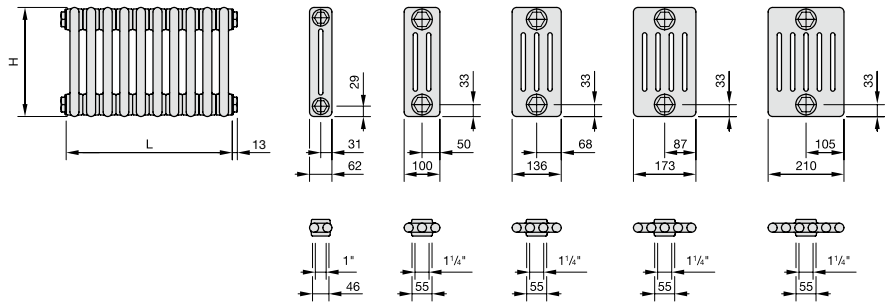
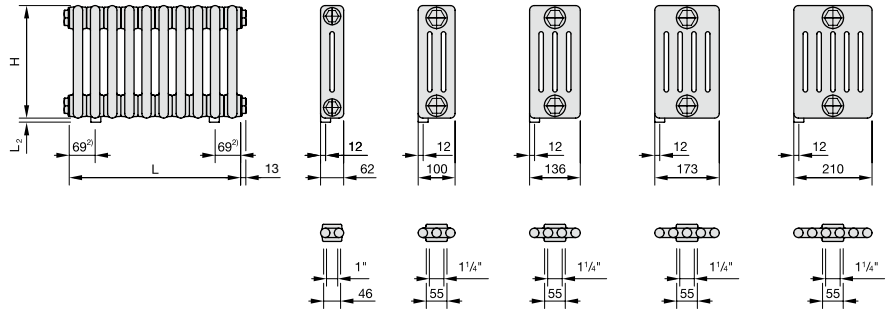
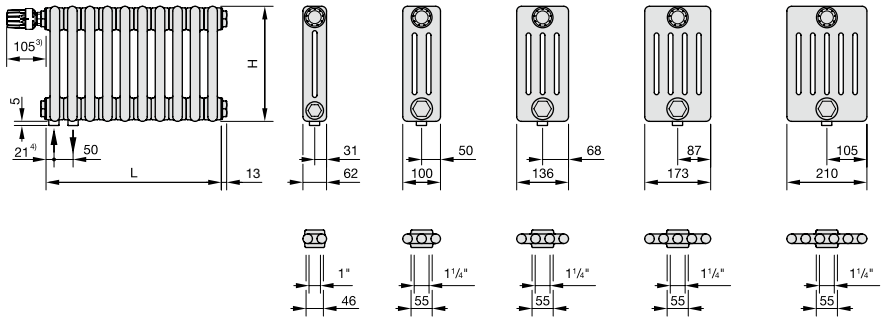
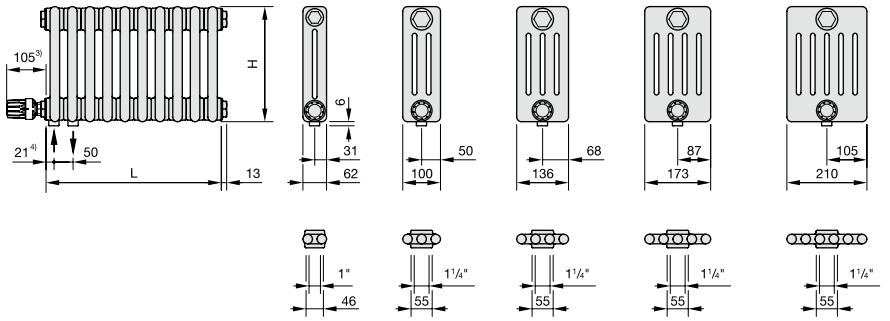
H = Height
L = Length
N = Boss spacing
L_2 = Excess length thread, ½" = 5; ¾" = 15

* = Venting
Δ = Draining
• = Internal installations

Dimensions in mm

[1)] The dimensions shown also apply to Zehnder Charleston Clinic (without graphic illustration), unless noted otherwise.
[2)] With an uneven number of elements: One additional element on the return side

Zehnder Charleston, Zehnder Charleston Clinic[1)]

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 1-tube with external valve		
for horizontal lance valve 2070 * * 6010	**No additional charge**	 Specify valve unit when placing order
for vertical lance valve 3070 * * 5010	**38,12**	 Specify valve unit when placing order
Completto connection with integrated valve (prices without thermostat)		
valve at top, connection on side 50 mm V001 * * V002	**159,33**	
valve at bottom, connection on side 50 mm * V003 * * V004 *	**225,37 5)**	 Reduced thermal output of the first element due to insufficient circulation.

When orders are placed without indication of the connection type, the standard connection 4 x ½" (S001) will be delivered. Possible connections: 1270/7610 and 1670/7210.

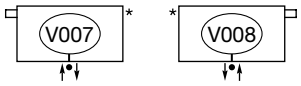
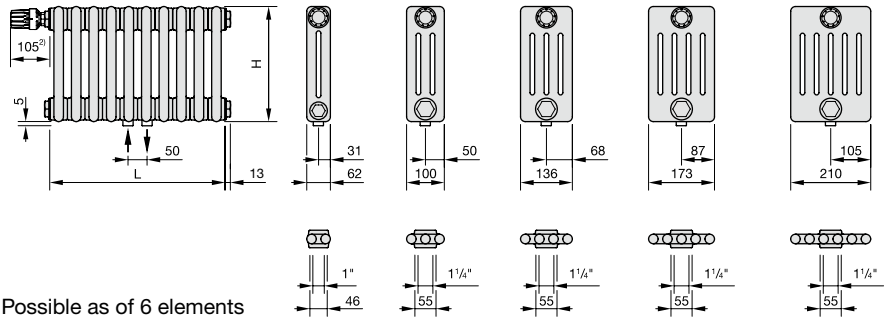
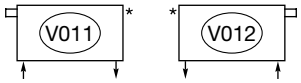
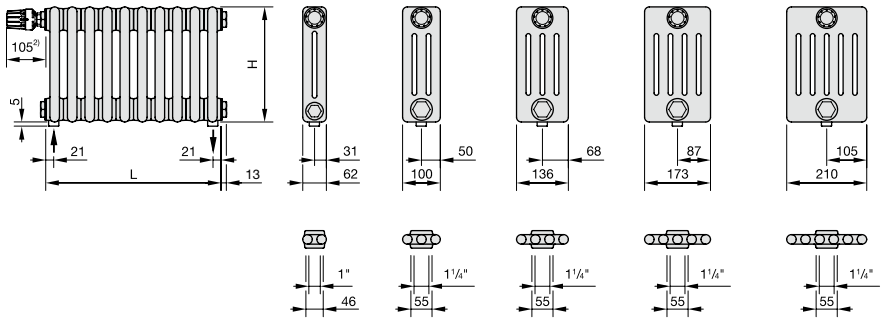
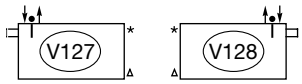
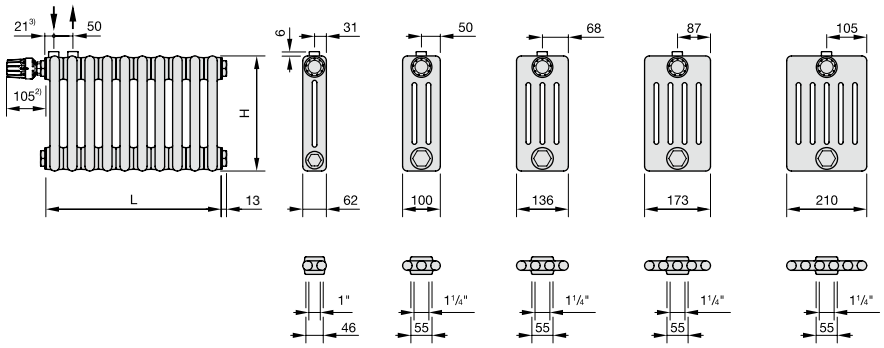
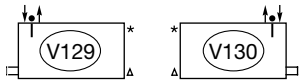
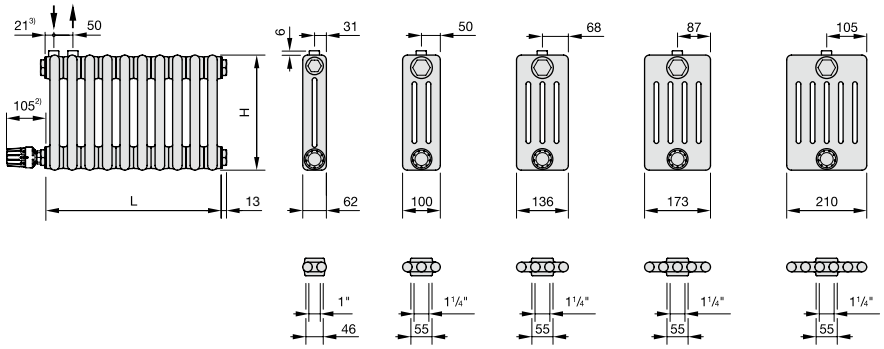
H = Height
L = Length
N = Boss spacing
L_2 = Excess length thread, ½" = 5; ¾" = 15

* = Venting
Δ = Draining
• = Internal installations

Dimensions in mm

1) The dimensions shown also apply to Zehnder Charleston Clinic (without graphic illustration), unless noted otherwise.
2) For Zehnder Charleston Clinic 88 mm
3) Only valid for Zehnder thermostat LH2
4) For Zehnder Charleston Clinic 31 mm
5) When exceeding the max. number of elements (see page 18), the radiator is nippled factory-made.

Zehnder Charleston, Zehnder Charleston Clinic[1)]

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Completto connection with integrated valve (prices without thermostat)		
valve at top, connection central 50 mm 	**211,72**	 Possible as of 6 elements Central arrangement of the connections only with even number of elements [4)]
valve at top, opposite end connection 	**159,33**	
valve at top, connection from top to top on side 50 mm 	**290,30 [5)]**	
valve at bottom, connection from top to top on side 50 mm 	**330,07 [5)]**	

When orders are placed without indication of the connection type, the standard connection 4 x ½" (S001) will be delivered. Possible connections: 1270/7610 and 1670/7210.

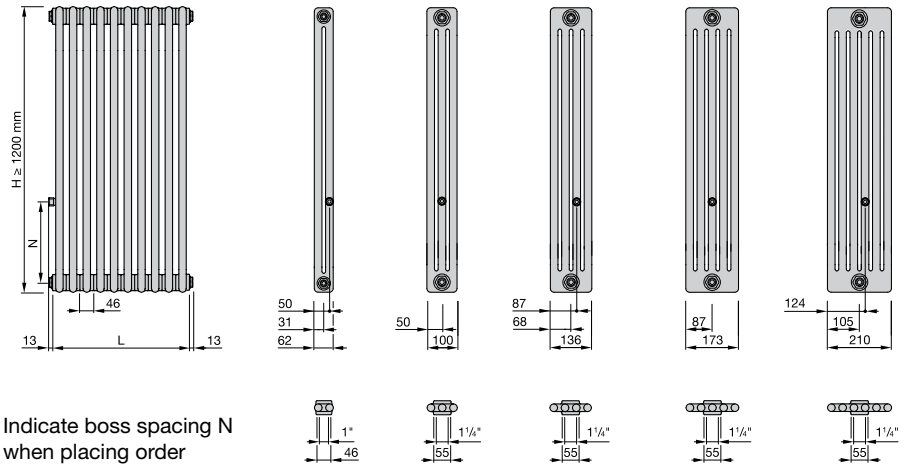
Valve parameters: Special control valve OV 1" (for 2-column) or OV 5/4" (for 3- to 6-column) is installed at the factory. Max. recommended flow rate 250 kg/h. Data for special control valve on page 169.

H = Height
L = Length
N = Boss spacing
* = Venting
Δ = Draining

[1)] The dimensions shown also apply to Zehnder Charleston Clinic (without graphic illustration), unless noted otherwise.
[2)] Only applies to Zehnder thermostat LH2
[3)] For Zehnder Charleston Clinic 31 mm
[4)] With an uneven number of elements: One additional element on the return side
[5)] When exceeding the max. number of elements (see page 18), the radiator is nippled factory-made.

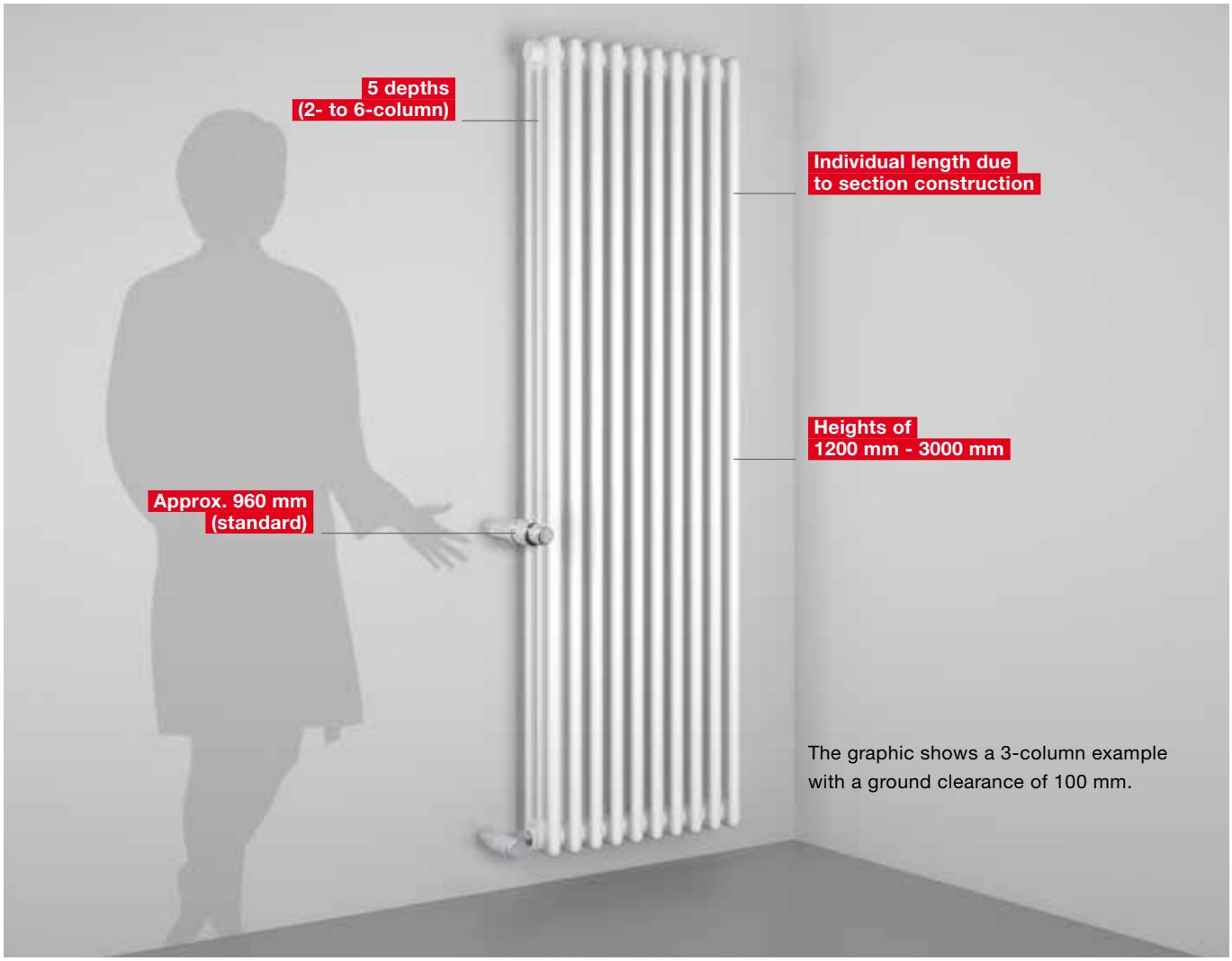
Dimensions in mm

Zehnder Charleston, Zehnder Charleston Clinic[1)]

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 2-tube with external valve		
Convenient operation for easy-access, same-side 2270 * * 6610	133,27	 Indicate boss spacing N when placing order Connection as of height ≥ 1200 mm possible

H = Height
L = Length
N = 500, 600, 619, 700, 800, 819, 900 mm
* = Venting
Δ = Draining

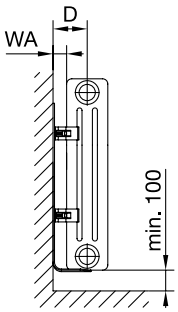
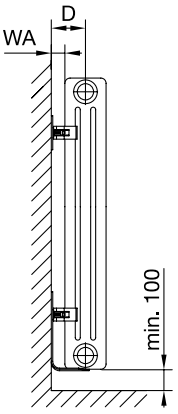
Dimensions in mm



Zehnder Charleston

with EasyFix

Fixing details for accessory set SMB

Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no.[3] Set white	€/Set White	Colour
Set SMB 30-75	 Distance D: 2-column 66 mm 3-column 85 mm 4-column 103 mm 5-column 122 mm 6-column 140 mm	**H = 300-369**					
		All models					
		L = 4-22 el. L = 23-39 el. L = 40-50 el. L = 51-60 el.	35	2 x SMB30 3 x SMB30 4 x SMB30 5 x SMB30	173521 173621 173721 173821	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 370-484					
		All models					
		L = 4-22 el. L = 23-39 el. L = 40-50 el. L = 51-60 el.	35	2 x SMB40 3 x SMB40 4 x SMB40 5 x SMB40	173531 173631 173731 173831	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 485-679					
		All models					
		L = 4-22 el. L = 23-39 el. L = 40-50 el. L = 51-60 el.	35	2 x SMB50 3 x SMB50 4 x SMB50 5 x SMB50	173541 173641 173741 173841	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 680-1000					
		2- to 4-column					
		L = 4-22 el. L = 23-39 el. L = 40-55 el. L = 56-65 el.	35	2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		5- to 6-column					
Set SMB 2T[2]	 Distance D: 2-column 66 mm 3-column 85 mm 4-column 103 mm 5-column 122 mm 6-column 140 mm	L = 4-15 el. L = 16-29 el. L = 30-42 el. L = 43-55 el.	35	2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 1001-1500					
		2- to 4-column					
		L = 4-15 el. L = 16-30 el. L = 31-45 el. L = 46-60 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		5- to 6-column					
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 1501-2200					
		2- to 4-column					
		L = 4-11 el. L = 12-21 el. L = 22-31 el. L = 32-41 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		5- to 6-column					
		L = 4-10 el. L = 11-16 el. L = 17-21 el. L = 22-27 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**

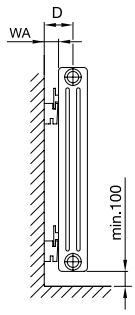
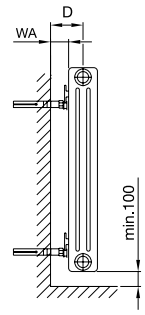
H = Height of radiator in mm L = Length of radiator in elements D = Dimension from wall to middle of connection
WA = Wall clearance

[2] Further allocations of the bracket SMB 2T for heights from 245 mm and up to 3000 mm on request.

[3] The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston

Fixing details for accessory sets CVD, BKE

Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no.[3] Set white	€/Set White	Colour
Set CVD	 Distance D: 2-column 59 mm 3-column 78 mm 4-column 96 mm 5-column 114 mm 6-column 133 mm	**All models**					
		Height 260 - 1000 mm		with retaining spring			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	28	4 x BH + CVD 0 6 x BH + CVD 0 8 x BH + CVD 0	774401 774601 774801	**21,80** **31,72** **41,65**	**57,37** **85,08** **112,78**
		Height 1001 - 1500 mm		with retaining spring			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	28	4 x BH + CVD 0 8 x BH + CVD 0 10 x BH + CVD 0	774401 774801 774901	**21,80** **41,65** **51,56**	**57,37** **112,78** **140,49**
		2- to 5-column					
		Height 1501 - 2200 mm		with retaining spring			
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	28	4 x BH + CVD 0 6 x BH + CVD 0 8 x BH + CVD 0 10 x BH + CVD 0	774401 774601 774801 774901	**21,80** **31,72** **41,65** **51,56**	**57,37** **85,08** **112,78** **140,49**
		6-column					
		Height 1501 - 2200 mm		with retaining spring			
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	28	4 x BH + CVD 0 8 x BH + CVD 0 10 x BH + CVD 0 14 x BH + CVD 0	774401 774801 774901 -	**21,80** **41,65** **51,56** **-**	**57,37** **112,78** **140,49** **-**
Set BKE[2]	 Distance D: 2-column 77 mm 3-column 96 mm 4-column 114 mm 5-column 133 mm 6-column 151 mm	**All models**					
		Height 260 - 1000 mm		with retaining spring			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	46	4 x BH + BKE160 6 x BH + BKE160 8 x BH + BKE160	774461 774661 774861	**35,00** **49,01** **63,05**	**55,16** **79,07** **102,99**
		Height 1001 - 1500 mm		with retaining spring			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	46	4 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160	774461 774861 774961	**35,00** **63,05** **77,04**	**55,16** **102,99** **126,91**
		2- to 5-column					
		Height 1501 - 2200 mm		with retaining spring			
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	46	4 x BH + BKE160 6 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160	774461 774661 774861 774961	**35,00** **49,01** **63,05** **77,04**	**55,16** **79,07** **102,99** **126,91**
		6-column					
		Height 1501 - 2200 mm		with retaining spring			
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	46	4 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160 14 x BH + BKE160	774461 774861 774961 -	**35,00** **63,05** **77,04** **-**	**55,16** **102,99** **126,91** **-**

L = Length of radiator in mm D = Dimension from wall to middle of connection WA = Wall clearance

[2] Average distances are given for D and WA for set BKE, as bracket installation depth is variable.

[3] The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston

Illustration	Description	Model			
		Application	Amount + type of brackets	Article no. Piece	**Price/white €/piece**
For other fixing options using accessories, see page 148 onwards.					
Wall bracket AK [3]	For adjustable wall clearance, short and long version possible, standard: Short, RAL 9016, for details see “Accessories”	**All models**			
		Height 260 - 1000 mm			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	4 x BH + AK 1 6 x BH + AK 1 8 x BH + AK 1	Bracket BH: 774001 Bracket AK1: 796011	**2,64** **11,96**
		Height 1001 - 1500 mm			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	4 x BH + AK 1 8 x BH + AK 1 10 x BH + AK 1	Bracket BH: 774001 Bracket AK 1: 796011	**2,64** **11,96**
T-bracket AKK	For mounting, for adjustable wall clearance, combination with bracket TKK is recommended, standard: RAL 9016, for details, see “Accessories”	**All models**			
		Height 260 - 500 mm			
		L = 4-20 el. L = 21-30 el. L = 31-40 el. L = 41-50 el. L = 51-60 el.	2 x AKK 3 x AKK 4 x AKK 5 x AKK 6 x AKK	By length	**8,66 - 13,76**
Free-standing floor support STF	For mounting on unfinished or finished floor, different lengths possible, standard: RAL 9016, for details, see “Accessories”	**All models**			
		Height H: 260 to < 600 mm [2]			
		L = 4-20 el. L = 21-40 el. L = 41-60 el. L = 61-80 el.	2 x STF 2 / STF 3 3 x STF 2 / STF 3 4 x STF 2 / STF 3 5 x STF 2 / STF 3	By height	STF2: **38,90 - 43,43** STF3: **37,76 - 42,32**
Floor support HFK	For mounting on unfinished or finished floor, standard: RAL 9016, for details see “Accessories”	**All models**			
		Height H: 190 to < 600 mm [2]			
		L = 4-20 el. L = 21-40 el. L = 41-60 el. L = 61-80 el.	2 x HFK 3 x HFK 4 x HFK 5 x HFK	By height	**42,62 / 47,48**

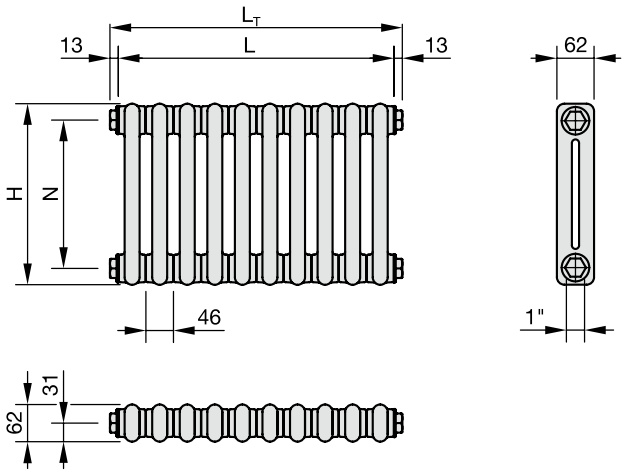
H = Height of radiator in mm L = Length of radiator in elements D = Dimension from wall to middle of connection

[2] Provided from a height of 600 mm for requirements class 2 additional brackets

[3] An on-site locking device may be required depending on the installation and connection situation and net weight of the radiator

Zehnder Charleston

Model 2-column



H = Height
L = Length = elements x 46 mm
L_T = Total length = elements x 46 mm + 2 x 13 mm
N = Boss spacing = H - 58 mm
T = Depth of radiator
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

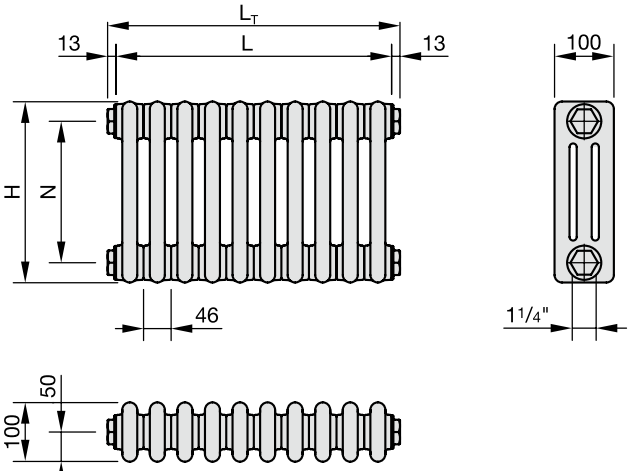
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m^2	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	$\Phi_s=\Delta T$ 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
2026	260	202	62	0,04	0,3	0,40	25	2,0	1,25	21,1	17,1	11,1
2030	292	234	62	0,04	0,4	0,44	25	2,0	1,24	23,6	19,1	12,4
2035	342	284	62	0,05	0,4	0,51	24	2,0	1,24	27,5	22,3	14,5
2040	392	334	62	0,06	0,4	0,55	25	3,0	1,24	31,2	25,3	16,4
2045	442	384	62	0,07	0,5	0,62	24	3,0	1,24	34,9	28,3	18,4
2050	492	434	62	0,07	0,5	0,69	23	3,0	1,25	38,4	31,1	20,1
2055	542	484	62	0,08	0,6	0,75	23	4,0	1,25	41,9	33,9	22,0
2060	592	534	62	0,09	0,6	0,82	23	4,0	1,25	45,3	36,6	23,7
2075	742	684	62	0,11	0,7	1,01	22	5,0	1,25	55,0	44,5	28,8
2090	892	834	62	0,14	0,8	1,21	22	5,0	1,25	63,9	51,7	33,5
2100	992	934	62	0,15	0,9	1,34	22	6,0	1,25	69,5	56,2	36,4
2110	1092	1034	62	0,17	1,0	1,47	22	6,0	1,25	74,7	60,4	39,2
2120	1192	1134	62	0,18	1,1	1,60	22	7,0	1,26	82,7	66,8	43,1
2150	1492	1434	62	0,23	1,3	2,00	23	9,0	1,28	104,0	83,7	53,7
2180	1792	1734	62	0,28	1,5	2,39	23	11,0	1,31	124,0	99,3	63,0
2200	1992	1934	62	0,31	1,7	2,65	23	12,0	1,31	138,0	110,5	70,1
2220	2192	2134	62	0,34	1,9	2,92	23	13,0	1,31	151,0	120,9	76,7
2250	2492	2434	62	0,39	2,1	3,31	23	15,0	1,30	171,0	137,2	87,3
2280	2792	2734	62	0,44	2,4	3,70	23	16,0	1,30	189,0	151,6	96,5
2300	2992	2934	62	0,47	2,5	3,97	23	17,0	1,30	201,0	161,2	102,7

Zehnder Charleston

Model 3-column



H	=	Height
L	=	Length = elements x 46 mm
L_T	=	Total length = elements x 46 mm + 2 x 13 mm
N	=	Boss spacing = H - 66 mm
T	=	Depth of radiator
A	=	Surface
V	=	Water content
M	=	Weight
s_k	=	Proportion of radiation
q_{ms}	=	Nominal flow rate
n	=	Exponent
Φ_s	=	Nominal heat output according to EN 442 (75/65/20 °C)
Φ	=	Thermal output at system temperatures

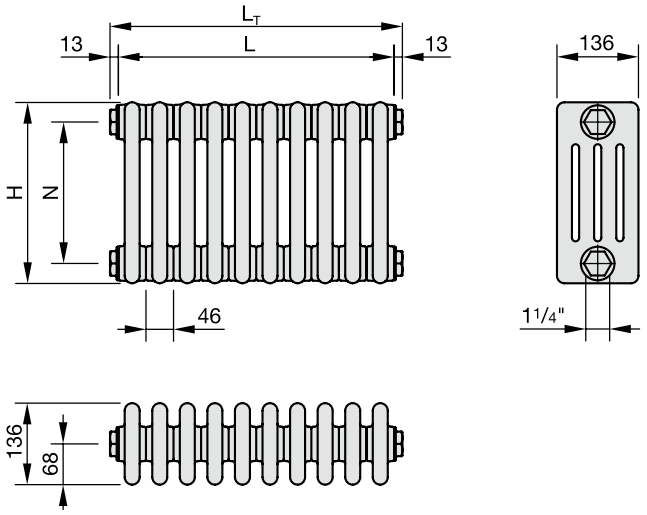
Dimensions in mm

Technical specifications per element

Model	H	N	T	A	V	M	s_k	q_{ms}	Exp.	Φ_s=ΔT 50 K EN442	Φ 70/55/20 °C	Φ 55/45/20 °C
	mm	mm	mm	m^2	dm^3	kg	%	kg/h	n	Watt	Watt	Watt
3026	260	194	100	0,06	0,5	0,56	21	2,0	1,25	27,9	22,6	14,6
3030	300	234	100	0,07	0,6	0,63	20	3,0	1,25	32,0	25,9	16,8
3035	350	284	100	0,08	0,6	0,73	20	3,0	1,25	37,0	29,9	19,4
3040	400	334	100	0,09	0,7	0,83	19	4,0	1,25	41,9	33,9	22,0
3045	450	384	100	0,10	0,7	0,93	19	4,0	1,25	46,8	37,9	24,5
3050	500	434	100	0,11	0,8	1,03	18	4,0	1,25	51,6	41,7	27,0
3055	550	484	100	0,12	0,9	1,13	18	5,0	1,26	56,3	45,5	29,4
3060	600	534	100	0,14	0,9	1,23	18	5,0	1,26	60,9	49,2	31,8
3075	750	684	100	0,17	1,1	1,52	18	6,0	1,26	74,3	60,0	38,7
3090	900	834	100	0,21	1,3	1,81	18	7,0	1,27	87,0	70,1	45,1
3100	1000	934	100	0,23	1,4	2,01	18	8,0	1,27	95,1	76,7	49,3
3110	1100	1034	100	0,25	1,5	2,21	18	9,0	1,28	103,0	82,9	53,2
3120	1200	1134	100	0,28	1,6	2,40	18	10,0	1,29	115,0	92,4	59,0
3150	1500	1434	100	0,35	2,0	2,99	18	12,0	1,31	140,0	112,1	71,1
3180	1800	1734	100	0,42	2,4	3,58	18	14,0	1,33	166,0	132,5	83,5
3200	2000	1934	100	0,47	2,6	3,97	18	16,0	1,33	183,0	146,0	92,0
3220	2200	2134	100	0,51	2,9	4,36	18	17,0	1,32	200,0	159,9	101,1
3250	2500	2434	100	0,58	3,2	4,95	18	19,0	1,32	225,0	179,9	113,7
3280	2800	2734	100	0,65	3,6	5,54	18	22,0	1,30	251,0	201,3	128,2
3300	3000	2934	100	0,70	3,9	5,93	18	23,0	1,30	269,0	215,8	137,4

Zehnder Charleston

Model 4-column



H	=	Height
L	=	Length = elements x 46 mm
L_T	=	Total length = elements x 46 mm + 2 x 13 mm
N	=	Boss spacing = H - 66 mm
T	=	Depth of radiator
A	=	Surface
V	=	Water content
M	=	Weight
s_k	=	Proportion of radiation
q_{ms}	=	Nominal flow rate
n	=	Exponent
Φ_s	=	Nominal heat output according to EN 442 (75/65/20 °C)
Φ	=	Thermal output at system temperatures

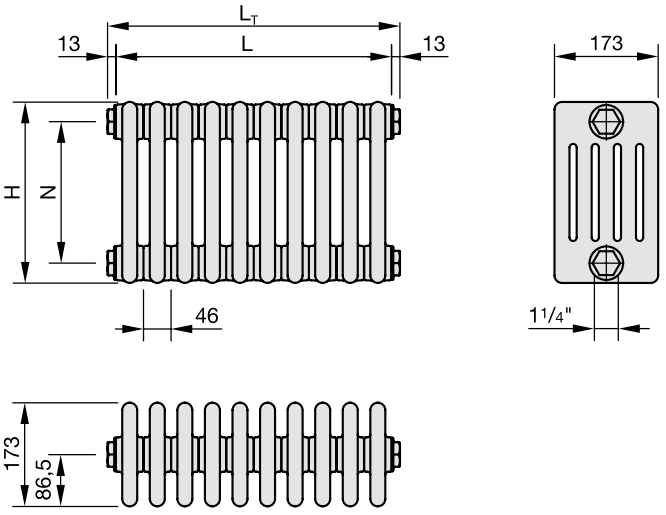
Dimensions in mm

Technical specifications per element

Model	H	N	T	A	V	M	s_k	q_{ms}	Exp.	$\Phi_s=\Delta T$ 50 K EN442	Φ 70/55/20 °C	Φ 55/45/20 °C
	mm	mm	mm	m^2	dm^3	kg	%	kg/h	n	Watt	Watt	Watt
4026	260	194	136	0,08	0,7	0,77	18	3,0	1,25	36,5	29,5	19,1
4030	300	234	136	0,09	0,7	0,88	18	4,0	1,25	41,9	33,9	22,0
4035	350	284	136	0,11	0,8	1,01	17	4,0	1,25	48,5	39,2	25,4
4040	400	334	136	0,12	0,9	1,16	16	5,0	1,26	54,9	44,3	28,6
4045	450	384	136	0,14	1,0	1,29	16	5,0	1,26	61,3	49,5	32,0
4050	500	434	136	0,15	1,0	1,42	16	6,0	1,26	67,6	54,6	35,2
4055	550	484	136	0,17	1,1	1,55	16	6,0	1,26	73,7	59,5	38,4
4060	600	534	136	0,19	1,2	1,67	15	7,0	1,27	79,8	64,3	41,4
4075	750	684	136	0,23	1,4	2,06	15	8,0	1,27	97,4	78,5	50,5
4090	900	834	136	0,28	1,7	2,45	15	10,0	1,28	114,0	91,7	58,8
4100	1000	934	136	0,31	1,8	2,70	15	11,0	1,29	125,0	100,4	64,2
4110	1100	1034	136	0,34	2,0	2,96	15	12,0	1,29	135,0	108,5	69,3
4120	1200	1134	136	0,37	2,1	3,22	15	13,0	1,30	147,0	117,9	75,1
4150	1500	1434	136	0,47	2,6	3,99	15	15,0	1,31	180,0	144,1	91,5
4180	1800	1734	136	0,56	3,1	4,76	15	18,0	1,33	213,0	170,0	107,1
4200	2000	1934	136	0,63	3,4	5,28	15	20,0	1,32	234,0	187,1	118,3
4220	2200	2134	136	0,69	3,8	5,79	15	22,0	1,32	256,0	204,6	129,4
4250	2500	2434	136	0,78	4,3	6,56	15	25,0	1,31	289,0	231,4	146,9
4280	2800	2734	136	0,88	4,8	7,33	15	28,0	1,30	323,0	259,1	165,0
4300	3000	2934	136	0,94	5,1	7,85	15	30,0	1,30	345,0	276,7	176,2

Zehnder Charleston

Model 5-column



H = Height
L = Length = elements x 46 mm
L_T = Total length = elements x 46 mm + 2 x 13 mm
N = Boss spacing = H - 66 mm
T = Depth of radiator
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

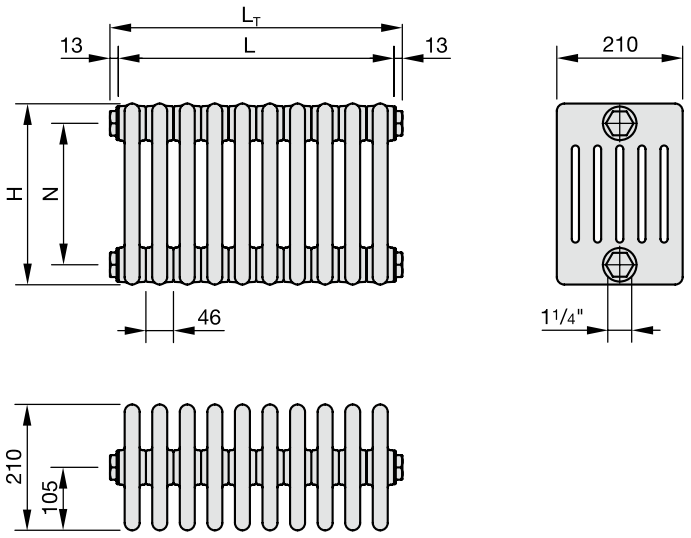
Dimensions in mm

Technical specifications per element

Model	H	N	T	A	V	M	s_k	q_{ms}	Exp.	Φ_s=ΔT 50 K EN442	Φ 70/55/20 °C	Φ 55/45/20 °C
	mm	mm	mm	m^2	dm^3	kg	%	kg/h	n	Watt	Watt	Watt
5026	260	194	173	0,10	0,8	0,88	17	4,0	1,25	45,1	36,5	23,6
5030	300	234	173	0,12	0,9	1,01	16	4,0	1,25	51,7	41,8	27,1
5035	350	284	173	0,13	1,0	1,18	15	5,0	1,26	59,9	48,4	31,2
5040	400	334	173	0,15	1,1	1,51	15	6,0	1,26	67,9	54,8	35,4
5045	450	384	173	0,17	1,2	1,67	14	7,0	1,26	75,8	61,2	39,5
5050	500	434	173	0,19	1,3	1,83	14	7,0	1,27	83,5	67,3	43,3
5055	550	484	173	0,20	1,3	2,00	14	8,0	1,27	91,1	73,4	47,3
5060	600	534	173	0,23	1,5	2,16	13	8,0	1,27	98,6	79,5	51,1
5075	750	684	173	0,29	1,8	2,65	13	10,0	1,29	120,0	96,4	61,6
5090	900	834	173	0,35	2,1	3,14	13	12,0	1,30	141,0	113,1	72,0
5100	1000	934	173	0,39	2,3	3,47	13	13,0	1,30	154,0	123,5	78,7
5110	1100	1034	173	0,43	2,5	3,79	13	14,0	1,31	167,0	133,7	84,9
5120	1200	1134	173	0,47	2,7	4,12	13	15,0	1,31	179,0	143,3	91,0
5150	1500	1434	173	0,59	3,3	5,10	13	19,0	1,32	219,0	175,1	110,7
5180	1800	1734	173	0,70	3,9	6,08	13	22,0	1,32	259,0	207,0	130,9
5200	2000	1934	173	0,78	4,3	6,73	13	25,0	1,32	285,0	227,8	144,1
5220	2200	2134	173	0,86	4,7	7,39	13	27,0	1,32	312,0	249,4	157,7
5250	2500	2434	173	0,98	5,3	8,37	13	30,0	1,31	352,0	281,9	178,9
5280	2800	2734	173	1,10	5,9	9,35	13	34,0	1,30	392,0	314,4	200,2
5300	3000	2934	173	1,18	6,4	10,00	13	36,0	1,30	420,0	336,9	214,5

Zehnder Charleston

Model 6-column



H = Height
L = Length = elements x 46 mm
L_T = Total length = elements x 46 mm + 2 x 13 mm
N = Boss spacing = H - 66 mm
T = Depth of radiator
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

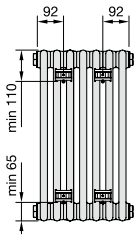
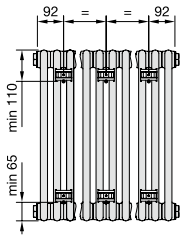
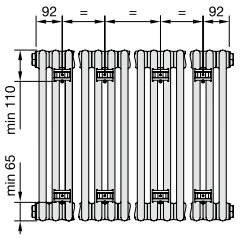
Dimensions in mm

Technical specifications per element

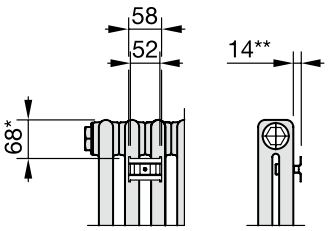
Model	H mm	N mm	T mm	A m^2	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	$\Phi_s=\Delta T$ 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
6026	260	194	210	0,12	1,0	1,26	18	5,0	1,27	53,5	43,1	27,8
6030	300	234	210	0,14	1,1	1,42	15	5,0	1,26	61,3	49,5	32,0
6035	350	284	210	0,16	1,2	1,62	14	6,0	1,26	71,0	57,3	37,0
6040	400	334	210	0,19	1,3	1,79	14	7,0	1,27	80,5	64,9	41,8
6045	450	384	210	0,21	1,4	1,99	13	8,0	1,27	89,8	72,4	46,6
6050	500	434	210	0,23	1,5	2,19	13	9,0	1,28	99,0	79,7	51,1
6055	550	484	210	0,26	1,6	2,38	12	9,0	1,28	108,0	86,9	55,7
6060	600	534	210	0,28	1,8	2,58	12	10,0	1,29	117,0	94,0	60,1
6075	750	684	210	0,35	2,1	3,17	12	12,0	1,30	143,0	114,7	73,0
6090	900	834	210	0,42	2,5	3,76	12	14,0	1,31	167,0	133,7	84,9
6100	1000	934	210	0,47	2,7	4,16	12	16,0	1,31	183,0	146,5	93,0
6110	1100	1034	210	0,52	3,0	4,55	12	17,0	1,32	198,0	158,3	100,1
6120	1200	1134	210	0,56	3,2	4,95	12	18,0	1,32	210,0	167,9	106,2
6150	1500	1434	210	0,70	4,0	6,13	12	22,0	1,32	256,0	204,6	129,4
6180	1800	1734	210	0,85	4,7	7,31	12	26,0	1,33	303,0	241,8	152,4
6200	2000	1934	210	0,94	5,2	8,10	12	29,0	1,32	334,0	267,0	168,8
6220	2200	2134	210	1,03	5,6	8,89	12	31,0	1,32	365,0	291,8	184,5
6250	2500	2434	210	1,18	6,3	10,07	12	35,0	1,32	412,0	329,3	208,3
6280	2800	2734	210	1,33	7,0	11,25	12	39,0	1,30	459,0	368,2	234,4
6300	3000	2934	210	1,41	7,5	12,04	12	42,0	1,30	491,0	393,8	250,8

Zehnder Charleston

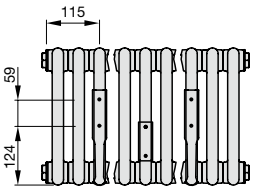
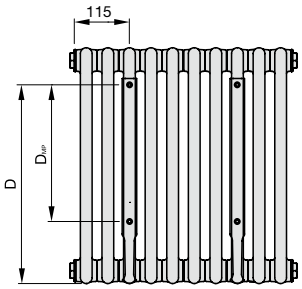
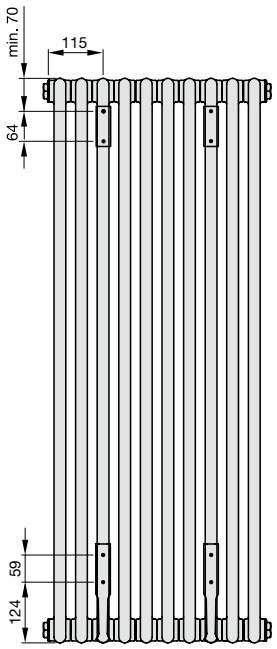
Dimensions for the bores when using CVD brackets (upper drill hole)

Number of fixings	2 axes / 4 brackets	3 axes / 6 brackets	4 axes / 8 brackets
		 If there is an odd number of sections then the middle axis is offset by 23 mm.	

Detail of suspension



Dimensions for the bores when using EasyFix brackets[1)]

For height mm	SMB 2T H = 245-299	SMB 30-75 H = 300-1000	SMB 2T H = 1001-3000
			

H	D_{MP}	D
300 - 369	134	241
370 - 484	204	309
485 - 679	309	414
680 - 1000	518	623

[1)] For connection type 3370/5510 and V001-V004, the bracket must be offset inwards by one element

- • = Position of drill hole
- L = Length
- H = Height
- * = Smallest possible dimension
- ** = Front edge of bracket to radiator
- D = Dimension from bottom edge of radiator to upper drill hole
- D_{MP} = Spacing of drill holes

Dimensions in mm

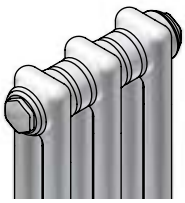
For the recommended number of brackets, see page 48 onwards.

Zehnder Charleston Clinic

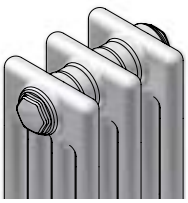
	Overview of models	Product description	List prices	Special versions	Connections	Fixings	Technical data	Installation points
Zehnder Charleston Clinic								
■ Element length 65 mm ■ Larger element spacings ■ Particularly easy to clean	58	59	60	80	81	82	85	90

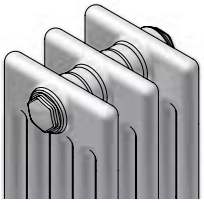
Zehnder Charleston Clinic

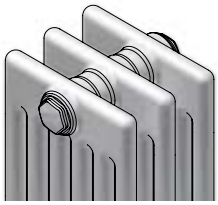
Zehnder Charleston Clinic


2-column

3-column


4-column


5-column


6-column

Height [1] mm	Depth mm				
	62	100	136	173	210
260	K2026	K3026	K4026	K5026	K6026
300	K2030	K3030	K4030	K5030	K6030
350	K2035	K3035	K4035	K5035	K6035
400	K2040	K3040	K4040	K5040	K6040
450	K2045	K3045	K4045	K5045	K6045
500	K2050	K3050	K4050	K5050	K6050
550	K2055	K3055	K4055	K5055	K6055
600	K2060	K3060	K4060	K5060	K6060
750	K2075	K3075	K4075	K5075	K6075
900	K2090	K3090	K4090	K5090	K6090
1000	K2100	K3100	K4100	K5100	K6100
1100	K2110	K3110	K4110	K5110	K6110
1200	K2120	K3120	K4120	K5120	K6120
1500	K2150	K3150	K4150	K5150	K6150
1800	K2180	K3180	K4180	K5180	K6180
2000	K2200	K3200	K4200	K5200	K6200
2200	K2220	K3220	K4220	K5220	K6220
2500	K2250	K3250	K4250	K5250	K6250
2800	K2280	K3280	K4280	K5280	K6280
3000	K2300	K3300	K4300	K5300	K6300

[1] The values shown here are the so-called nominal height; the exact height varies by a few mm for 2-column radiators and for some of the 3-column radiators as well, see "Technical specifications"; larger heights over 3000 mm or intermediate heights are available on request.

Maximum radiator lengths on piece (per block)

Zehnder Charleston Clinic (also see price tables from page 60 onwards)

Model	Height mm		
	260 - 1000	> 1000 - 2500	> 2500 - 3000
2-5-column	44	16	16
6-column	44	16	14

Zehnder Charleston Clinic

Made in Germany

Zehnder Charleston Clinic

Product description

There are rooms where cleanliness and hygiene are high priorities, such as hospitals and doctors' surgeries, for example. Zehnder Charleston Clinic is there to help. Ample clearance between the individual elements of the radiator ensures cleaning is a simple process. The Zehnder EasyFix fixing system for simple and anti-lift assembly ensures easy installation. Available in almost any colour and finish from the Zehnder colour chart.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 65 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Customisation options

- Large choice of connection types, including integrated valve
- Mounting sets for all applications
- Special colours and antibacterial coating
- Galvanised and painted
- Energy saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved, with handrail, etc.
- High pressure version up to max. 18 bar
- Operating temperature at 120 °C on request

Advantages

- Ample spaces between tubes make cleaning easy
- Residue-free laser welding technology LaZer made
- Classic elegance
- Accident-safe
- Cleaning with Zehnder lambswool cleaning brush
- Simple and secure with non-lift-out feature: Installation with Zehnder EasyFix
- Radiant heat with feel-good factor
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

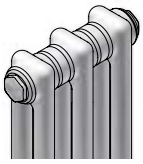
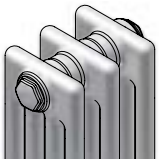
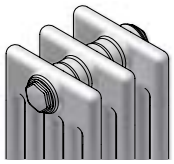
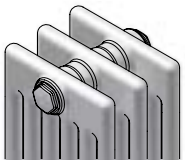
- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front
- Connection S001: 1 blanking plug ½", directional air vent ½"
- Complete packaging in stretch film and carton
- Heights greater than 2200 mm with stabilising brace welded at the factory

Scope of delivery for Completto version

- Primed and painted in RAL 9016
- Valve unit integrated on side, with valve insert AV 9, max. flow rate 250 kg/h
- Connections 2 x ½" female thread from bottom 50 mm
- Integrated baffle
- 1 directional air vent ½"
- Complete packaging in stretch film and carton

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	260				
					
Model	**K2026**	**K3026**	**K4026**	**K5026**	**K6026**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,27	1,26	1,25	1,28
Max. number of elements	44	44	44	44	44
Price/element €	**47,63**	**54,10**	**59,39**	**66,84**	**74,31**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	96	**190,52**	125	**216,40**	162	**237,56**	198	**267,36**	232	**297,24**
5	306	120	**238,15**	156	**270,50**	202	**296,95**	247	**334,20**	291	**371,55**
6	371	143	**285,78**	187	**324,60**	242	**356,34**	296	**401,04**	349	**445,86**
7	436	167	**333,41**	218	**378,70**	283	**415,73**	346	**467,88**	407	**520,17**
8	501	191	**381,04**	250	**432,80**	323	**475,12**	395	**534,72**	465	**594,48**
9	566	215	**428,67**	281	**486,90**	364	**534,51**	445	**601,56**	523	**668,79**
10	631	239	**476,30**	312	**541,00**	404	**593,90**	494	**668,40**	581	**743,10**
11	696	263	**523,93**	343	**595,10**	444	**653,29**	543	**735,24**	639	**817,41**
12	761	287	**571,56**	374	**649,20**	485	**712,68**	593	**802,08**	697	**891,72**
13	826	311	**619,19**	406	**703,30**	525	**772,07**	642	**868,92**	755	**966,03**
14	891	335	**666,82**	437	**757,40**	566	**831,46**	692	**935,76**	813	**1040,34**
15	956	359	**714,45**	468	**811,50**	606	**890,85**	741	**1002,60**	872	**1114,65**
16	1021	382	**762,08**	499	**865,60**	646	**950,24**	790	**1069,44**	930	**1188,96**
17	1086	406	**809,71**	530	**919,70**	687	**1009,63**	840	**1136,28**	988	**1263,27**
18	1151	430	**857,34**	562	**973,80**	727	**1069,02**	889	**1203,12**	1046	**1337,58**
19	1216	454	**904,97**	593	**1027,90**	768	**1128,41**	939	**1269,96**	1104	**1411,89**
20	1281	478	**952,60**	624	**1082,00**	808	**1187,80**	988	**1336,80**	1162	**1486,20**
21	1346	502	**1000,23**	655	**1136,10**	848	**1247,19**	1037	**1403,64**	1220	**1560,51**
22	1411	526	**1047,86**	686	**1190,20**	889	**1306,58**	1087	**1470,48**	1278	**1634,82**
23	1476	550	**1095,49**	718	**1244,30**	929	**1365,97**	1136	**1537,32**	1336	**1709,13**
24	1541	574	**1143,12**	749	**1298,40**	970	**1425,36**	1186	**1604,16**	1394	**1783,44**
25	1606	598	**1190,75**	780	**1352,50**	1010	**1484,75**	1235	**1671,00**	1453	**1857,75**
26	1671	621	**1238,38**	811	**1406,60**	1050	**1544,14**	1284	**1737,84**	1511	**1932,06**
27	1736	645	**1286,01**	842	**1460,70**	1091	**1603,53**	1334	**1804,68**	1569	**2006,37**
28	1801	669	**1333,64**	874	**1514,80**	1131	**1662,92**	1383	**1871,52**	1627	**2080,68**
29	1866	693	**1381,27**	905	**1568,90**	1172	**1722,31**	1433	**1938,36**	1685	**2154,99**
30	1931	717	**1428,90**	936	**1623,00**	1212	**1781,70**	1482	**2005,20**	1743	**2229,30**
31	1996	741	**1476,53**	967	**1677,10**	1252	**1841,09**	1531	**2072,04**	1801	**2303,61**
32	2061	765	**1524,16**	998	**1731,20**	1293	**1900,48**	1581	**2138,88**	1859	**2377,92**
33	2126	789	**1571,79**	1030	**1785,30**	1333	**1959,87**	1630	**2205,72**	1917	**2452,23**
34	2191	813	**1619,42**	1061	**1839,40**	1374	**2019,26**	1680	**2272,56**	1975	**2526,54**
35	2256	837	**1667,05**	1092	**1893,50**	1414	**2078,65**	1729	**2339,40**	2034	**2600,85**
36	2321	860	**1714,68**	1123	**1947,60**	1454	**2138,04**	1778	**2406,24**	2092	**2675,16**
37	2386	884	**1762,31**	1154	**2001,70**	1495	**2197,43**	1828	**2473,08**	2150	**2749,47**
38	2451	908	**1809,94**	1186	**2055,80**	1535	**2256,82**	1877	**2539,92**	2208	**2823,78**
39	2516	932	**1857,57**	1217	**2109,90**	1576	**2316,21**	1927	**2606,76**	2266	**2898,09**
40	2581	956	**1905,20**	1248	**2164,00**	1616	**2375,60**	1976	**2673,60**	2324	**2972,40**

Surcharge for Completto, valve at top, connections V001/V002 €:	**188,72**
Surcharge for Completto, valve at top, connections V007/V008 €:	**250,77**
Surcharge for Completto, valve at bottom, connections V003/V004 €:	**266,94**

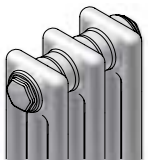
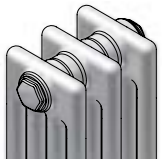
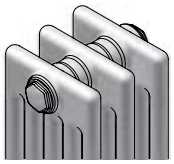
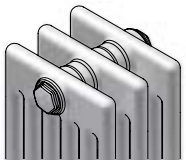
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	300				
					
Model	**K2030**	**K3030**	**K4030**	**K5030**	**K6030**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,27	1,26	1,25	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**48,00**	**54,46**	**60,18**	**67,27**	**74,70**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	106	**192,00**	142	**217,84**	183	**240,72**	224	**269,08**	264	**298,80**
5	306	133	**240,00**	177	**272,30**	229	**300,90**	280	**336,35**	330	**373,50**
6	371	159	**288,00**	212	**326,76**	275	**361,08**	336	**403,62**	395	**448,20**
7	436	186	**336,00**	248	**381,22**	321	**421,26**	392	**470,89**	461	**522,90**
8	501	212	**384,00**	283	**435,68**	366	**481,44**	448	**538,16**	527	**597,60**
9	566	239	**432,00**	319	**490,14**	412	**541,62**	504	**605,43**	593	**672,30**
10	631	265	**480,00**	354	**544,60**	458	**601,80**	560	**672,70**	659	**747,00**
11	696	292	**528,00**	389	**599,06**	504	**661,98**	616	**739,97**	725	**821,70**
12	761	318	**576,00**	425	**653,52**	550	**722,16**	672	**807,24**	791	**896,40**
13	826	345	**624,00**	460	**707,98**	595	**782,34**	728	**874,51**	857	**971,10**
14	891	371	**672,00**	496	**762,44**	641	**842,52**	784	**941,78**	923	**1045,80**
15	956	398	**720,00**	531	**816,90**	687	**902,70**	840	**1009,05**	989	**1120,50**
16	1021	424	**768,00**	566	**871,36**	733	**962,88**	896	**1076,32**	1054	**1195,20**
17	1086	451	**816,00**	602	**925,82**	779	**1023,06**	952	**1143,59**	1120	**1269,90**
18	1151	477	**864,00**	637	**980,28**	824	**1083,24**	1008	**1210,86**	1186	**1344,60**
19	1216	504	**912,00**	673	**1034,74**	870	**1143,42**	1064	**1278,13**	1252	**1419,30**
20	1281	530	**960,00**	708	**1089,20**	916	**1203,60**	1120	**1345,40**	1318	**1494,00**
21	1346	557	**1008,00**	743	**1143,66**	962	**1263,78**	1176	**1412,67**	1384	**1568,70**
22	1411	583	**1056,00**	779	**1198,12**	1008	**1323,96**	1232	**1479,94**	1450	**1643,40**
23	1476	610	**1104,00**	814	**1252,58**	1053	**1384,14**	1288	**1547,21**	1516	**1718,10**
24	1541	636	**1152,00**	850	**1307,04**	1099	**1444,32**	1344	**1614,48**	1582	**1792,80**
25	1606	663	**1200,00**	885	**1361,50**	1145	**1504,50**	1400	**1681,75**	1648	**1867,50**
26	1671	689	**1248,00**	920	**1415,96**	1191	**1564,68**	1456	**1749,02**	1713	**1942,20**
27	1736	716	**1296,00**	956	**1470,42**	1237	**1624,86**	1512	**1816,29**	1779	**2016,90**
28	1801	742	**1344,00**	991	**1524,88**	1282	**1685,04**	1568	**1883,56**	1845	**2091,60**
29	1866	769	**1392,00**	1027	**1579,34**	1328	**1745,22**	1624	**1950,83**	1911	**2166,30**
30	1931	795	**1440,00**	1062	**1633,80**	1374	**1805,40**	1680	**2018,10**	1977	**2241,00**
31	1996	822	**1488,00**	1097	**1688,26**	1420	**1865,58**	1736	**2085,37**	2043	**2315,70**
32	2061	848	**1536,00**	1133	**1742,72**	1466	**1925,76**	1792	**2152,64**	2109	**2390,40**
33	2126	875	**1584,00**	1168	**1797,18**	1511	**1985,94**	1848	**2219,91**	2175	**2465,10**
34	2191	901	**1632,00**	1204	**1851,64**	1557	**2046,12**	1904	**2287,18**	2241	**2539,80**
35	2256	928	**1680,00**	1239	**1906,10**	1603	**2106,30**	1960	**2354,45**	2307	**2614,50**
36	2321	954	**1728,00**	1274	**1960,56**	1649	**2166,48**	2016	**2421,72**	2372	**2689,20**
37	2386	981	**1776,00**	1310	**2015,02**	1695	**2226,66**	2072	**2488,99**	2438	**2763,90**
38	2451	1007	**1824,00**	1345	**2069,48**	1740	**2286,84**	2128	**2556,26**	2504	**2838,60**
39	2516	1034	**1872,00**	1381	**2123,94**	1786	**2347,02**	2184	**2623,53**	2570	**2913,30**
40	2581	1060	**1920,00**	1416	**2178,40**	1832	**2407,20**	2240	**2690,80**	2636	**2988,00**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

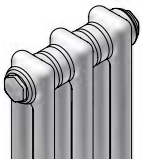
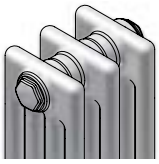
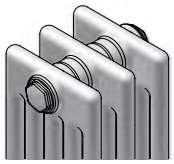
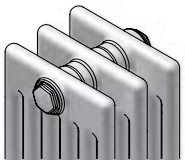
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	350				
					
Model	**K2035**	**K3035**	**K4035**	**K5035**	**K6035**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,28	1,26	1,25	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**48,24**	**54,72**	**61,17**	**68,20**	**75,81**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	122	**192,96**	162	**218,88**	210	**244,68**	257	**272,80**	302	**303,24**
5	306	152	**241,20**	203	**273,60**	263	**305,85**	321	**341,00**	378	**379,05**
6	371	182	**289,44**	244	**328,32**	315	**367,02**	385	**409,20**	453	**454,86**
7	436	213	**337,68**	284	**383,04**	368	**428,19**	449	**477,40**	529	**530,67**
8	501	243	**385,92**	325	**437,76**	420	**489,36**	514	**545,60**	604	**606,48**
9	566	274	**434,16**	365	**492,48**	473	**550,53**	578	**613,80**	680	**682,29**
10	631	304	**482,40**	406	**547,20**	525	**611,70**	642	**682,00**	755	**758,10**
11	696	334	**530,64**	447	**601,92**	578	**672,87**	706	**750,20**	831	**833,91**
12	761	365	**578,88**	487	**656,64**	630	**734,04**	770	**818,40**	906	**909,72**
13	826	395	**627,12**	528	**711,36**	683	**795,21**	835	**886,60**	982	**985,53**
14	891	426	**675,36**	568	**766,08**	735	**856,38**	899	**954,80**	1057	**1061,34**
15	956	456	**723,60**	609	**820,80**	788	**917,55**	963	**1023,00**	1133	**1137,15**
16	1021	486	**771,84**	650	**875,52**	840	**978,72**	1027	**1091,20**	1208	**1212,96**
17	1086	517	**820,08**	690	**930,24**	893	**1039,89**	1091	**1159,40**	1284	**1288,77**
18	1151	547	**868,32**	731	**984,96**	945	**1101,06**	1156	**1227,60**	1359	**1364,58**
19	1216	578	**916,56**	771	**1039,68**	998	**1162,23**	1220	**1295,80**	1435	**1440,39**
20	1281	608	**964,80**	812	**1094,40**	1050	**1223,40**	1284	**1364,00**	1510	**1516,20**
21	1346	638	**1013,04**	853	**1149,12**	1103	**1284,57**	1348	**1432,20**	1586	**1592,01**
22	1411	669	**1061,28**	893	**1203,84**	1155	**1345,74**	1412	**1500,40**	1661	**1667,82**
23	1476	699	**1109,52**	934	**1258,56**	1208	**1406,91**	1477	**1568,60**	1737	**1743,63**
24	1541	730	**1157,76**	974	**1313,28**	1260	**1468,08**	1541	**1636,80**	1812	**1819,44**
25	1606	760	**1206,00**	1015	**1368,00**	1313	**1529,25**	1605	**1705,00**	1888	**1895,25**
26	1671	790	**1254,24**	1056	**1422,72**	1365	**1590,42**	1669	**1773,20**	1963	**1971,06**
27	1736	821	**1302,48**	1096	**1477,44**	1418	**1651,59**	1733	**1841,40**	2039	**2046,87**
28	1801	851	**1350,72**	1137	**1532,16**	1470	**1712,76**	1798	**1909,60**	2114	**2122,68**
29	1866	882	**1398,96**	1177	**1586,88**	1523	**1773,93**	1862	**1977,80**	2190	**2198,49**
30	1931	912	**1447,20**	1218	**1641,60**	1575	**1835,10**	1926	**2046,00**	2265	**2274,30**
31	1996	942	**1495,44**	1259	**1696,32**	1628	**1896,27**	1990	**2114,20**	2341	**2350,11**
32	2061	973	**1543,68**	1299	**1751,04**	1680	**1957,44**	2054	**2182,40**	2416	**2425,92**
33	2126	1003	**1591,92**	1340	**1805,76**	1733	**2018,61**	2119	**2250,60**	2492	**2501,73**
34	2191	1034	**1640,16**	1380	**1860,48**	1785	**2079,78**	2183	**2318,80**	2567	**2577,54**
35	2256	1064	**1688,40**	1421	**1915,20**	1838	**2140,95**	2247	**2387,00**	2643	**2653,35**
36	2321	1094	**1736,64**	1462	**1969,92**	1890	**2202,12**	2311	**2455,20**	2718	**2729,16**
37	2386	1125	**1784,88**	1502	**2024,64**	1943	**2263,29**	2375	**2523,40**	2794	**2804,97**
38	2451	1155	**1833,12**	1543	**2079,36**	1995	**2324,46**	2440	**2591,60**	2869	**2880,78**
39	2516	1186	**1881,36**	1583	**2134,08**	2048	**2385,63**	2504	**2659,80**	2945	**2956,59**
40	2581	1216	**1929,60**	1624	**2188,80**	2100	**2446,80**	2568	**2728,00**	3020	**3032,40**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

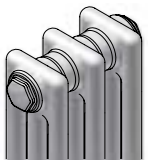
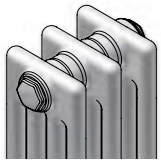
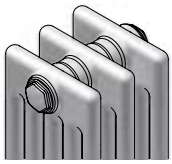
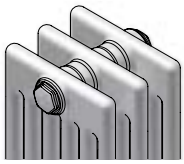
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	400				
					
Model	**K2040**	**K3040**	**K4040**	**K5040**	**K6040**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,28	1,27	1,26	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**48,68**	**54,86**	**61,98**	**68,98**	**77,24**

Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	241	137	**194,72**	183	**219,44**	237	**247,92**	289	**275,92**	340	**308,96**
5	306	171	**243,40**	229	**274,30**	296	**309,90**	362	**344,90**	426	**386,20**
6	371	205	**292,08**	274	**329,16**	355	**371,88**	434	**413,88**	511	**463,44**
7	436	239	**340,76**	320	**384,02**	414	**433,86**	506	**482,86**	596	**540,68**
8	501	274	**389,44**	366	**438,88**	474	**495,84**	578	**551,84**	681	**617,92**
9	566	308	**438,12**	411	**493,74**	533	**557,82**	651	**620,82**	766	**695,16**
10	631	342	**486,80**	457	**548,60**	592	**619,80**	723	**689,80**	851	**772,40**
11	696	376	**535,48**	503	**603,46**	651	**681,78**	795	**758,78**	936	**849,64**
12	761	410	**584,16**	548	**658,32**	710	**743,76**	868	**827,76**	1021	**926,88**
13	826	445	**632,84**	594	**713,18**	770	**805,74**	940	**896,74**	1106	**1004,12**
14	891	479	**681,52**	640	**768,04**	829	**867,72**	1012	**965,72**	1191	**1081,36**
15	956	513	**730,20**	686	**822,90**	888	**929,70**	1085	**1034,70**	1277	**1158,60**
16	1021	547	**778,88**	731	**877,76**	947	**991,68**	1157	**1103,68**	1362	**1235,84**
17	1086	581	**827,56**	777	**932,62**	1006	**1053,66**	1229	**1172,66**	1447	**1313,08**
18	1151	616	**876,24**	823	**987,48**	1066	**1115,64**	1301	**1241,64**	1532	**1390,32**
19	1216	650	**924,92**	868	**1042,34**	1125	**1177,62**	1374	**1310,62**	1617	**1467,56**
20	1281	684	**973,60**	914	**1097,20**	1184	**1239,60**	1446	**1379,60**	1702	**1544,80**
21	1346	718	**1022,28**	960	**1152,06**	1243	**1301,58**	1518	**1448,58**	1787	**1622,04**
22	1411	752	**1070,96**	1005	**1206,92**	1302	**1363,56**	1591	**1517,56**	1872	**1699,28**
23	1476	787	**1119,64**	1051	**1261,78**	1362	**1425,54**	1663	**1586,54**	1957	**1776,52**
24	1541	821	**1168,32**	1097	**1316,64**	1421	**1487,52**	1735	**1655,52**	2042	**1853,76**
25	1606	855	**1217,00**	1143	**1371,50**	1480	**1549,50**	1808	**1724,50**	2128	**1931,00**
26	1671	889	**1265,68**	1188	**1426,36**	1539	**1611,48**	1880	**1793,48**	2213	**2008,24**
27	1736	923	**1314,36**	1234	**1481,22**	1598	**1673,46**	1952	**1862,46**	2298	**2085,48**
28	1801	958	**1363,04**	1280	**1536,08**	1658	**1735,44**	2024	**1931,44**	2383	**2162,72**
29	1866	992	**1411,72**	1325	**1590,94**	1717	**1797,42**	2097	**2000,42**	2468	**2239,96**
30	1931	1026	**1460,40**	1371	**1645,80**	1776	**1859,40**	2169	**2069,40**	2553	**2317,20**
31	1996	1060	**1509,08**	1417	**1700,66**	1835	**1921,38**	2241	**2138,38**	2638	**2394,44**
32	2061	1094	**1557,76**	1462	**1755,52**	1894	**1983,36**	2314	**2207,36**	2723	**2471,68**
33	2126	1129	**1606,44**	1508	**1810,38**	1954	**2045,34**	2386	**2276,34**	2808	**2548,92**
34	2191	1163	**1655,12**	1554	**1865,24**	2013	**2107,32**	2458	**2345,32**	2893	**2626,16**
35	2256	1197	**1703,80**	1600	**1920,10**	2072	**2169,30**	2531	**2414,30**	2979	**2703,40**
36	2321	1231	**1752,48**	1645	**1974,96**	2131	**2231,28**	2603	**2483,28**	3064	**2780,64**
37	2386	1265	**1801,16**	1691	**2029,82**	2190	**2293,26**	2675	**2552,26**	3149	**2857,88**
38	2451	1300	**1849,84**	1737	**2084,68**	2250	**2355,24**	2747	**2621,24**	3234	**2935,12**
39	2516	1334	**1898,52**	1782	**2139,54**	2309	**2417,22**	2820	**2690,22**	3319	**3012,36**
40	2581	1368	**1947,20**	1828	**2194,40**	2368	**2479,20**	2892	**2759,20**	3404	**3089,60**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

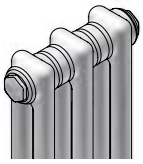
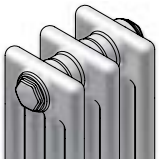
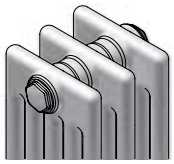
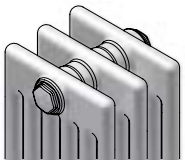
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	450				
					
Model	**K2045**	**K3045**	**K4045**	**K5045**	**K6045**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,28	1,27	1,26	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**48,98**	**55,13**	**62,95**	**70,20**	**78,23**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	152	**195,92**	203	**220,52**	263	**251,80**	322	**280,80**	378	**312,92**
5	306	190	**244,90**	254	**275,65**	329	**314,75**	402	**351,00**	473	**391,15**
6	371	227	**293,88**	305	**330,78**	394	**377,70**	482	**421,20**	568	**469,38**
7	436	265	**342,86**	356	**385,91**	460	**440,65**	563	**491,40**	662	**547,61**
8	501	303	**391,84**	406	**441,04**	526	**503,60**	643	**561,60**	757	**625,84**
9	566	341	**440,82**	457	**496,17**	591	**566,55**	724	**631,80**	851	**704,07**
10	631	379	**489,80**	508	**551,30**	657	**629,50**	804	**702,00**	946	**782,30**
11	696	417	**538,78**	559	**606,43**	723	**692,45**	884	**772,20**	1041	**860,53**
12	761	455	**587,76**	610	**661,56**	788	**755,40**	965	**842,40**	1135	**938,76**
13	826	493	**636,74**	660	**716,69**	854	**818,35**	1045	**912,60**	1230	**1016,99**
14	891	531	**685,72**	711	**771,82**	920	**881,30**	1126	**982,80**	1324	**1095,22**
15	956	569	**734,70**	762	**826,95**	986	**944,25**	1206	**1053,00**	1419	**1173,45**
16	1021	606	**783,68**	813	**882,08**	1051	**1007,20**	1286	**1123,20**	1514	**1251,68**
17	1086	644	**832,66**	864	**937,21**	1117	**1070,15**	1367	**1193,40**	1608	**1329,91**
18	1151	682	**881,64**	914	**992,34**	1183	**1133,10**	1447	**1263,60**	1703	**1408,14**
19	1216	720	**930,62**	965	**1047,47**	1248	**1196,05**	1528	**1333,80**	1797	**1486,37**
20	1281	758	**979,60**	1016	**1102,60**	1314	**1259,00**	1608	**1404,00**	1892	**1564,60**
21	1346	796	**1028,58**	1067	**1157,73**	1380	**1321,95**	1688	**1474,20**	1987	**1642,83**
22	1411	834	**1077,56**	1118	**1212,86**	1445	**1384,90**	1769	**1544,40**	2081	**1721,06**
23	1476	872	**1126,54**	1168	**1267,99**	1511	**1447,85**	1849	**1614,60**	2176	**1799,29**
24	1541	910	**1175,52**	1219	**1323,12**	1577	**1510,80**	1930	**1684,80**	2270	**1877,52**
25	1606	948	**1224,50**	1270	**1378,25**	1643	**1573,75**	2010	**1755,00**	2365	**1955,75**
26	1671	985	**1273,48**	1321	**1433,38**	1708	**1636,70**	2090	**1825,20**	2460	**2033,98**
27	1736	1023	**1322,46**	1372	**1488,51**	1774	**1699,65**	2171	**1895,40**	2554	**2112,21**
28	1801	1061	**1371,44**	1422	**1543,64**	1840	**1762,60**	2251	**1965,60**	2649	**2190,44**
29	1866	1099	**1420,42**	1473	**1598,77**	1905	**1825,55**	2332	**2035,80**	2743	**2268,67**
30	1931	1137	**1469,40**	1524	**1653,90**	1971	**1888,50**	2412	**2106,00**	2838	**2346,90**
31	1996	1175	**1518,38**	1575	**1709,03**	2037	**1951,45**	2492	**2176,20**	2933	**2425,13**
32	2061	1213	**1567,36**	1626	**1764,16**	2102	**2014,40**	2573	**2246,40**	3027	**2503,36**
33	2126	1251	**1616,34**	1676	**1819,29**	2168	**2077,35**	2653	**2316,60**	3122	**2581,59**
34	2191	1289	**1665,32**	1727	**1874,42**	2234	**2140,30**	2734	**2386,80**	3216	**2659,82**
35	2256	1327	**1714,30**	1778	**1929,55**	2300	**2203,25**	2814	**2457,00**	3311	**2738,05**
36	2321	1364	**1763,28**	1829	**1984,68**	2365	**2266,20**	2894	**2527,20**	3406	**2816,28**
37	2386	1402	**1812,26**	1880	**2039,81**	2431	**2329,15**	2975	**2597,40**	3500	**2894,51**
38	2451	1440	**1861,24**	1930	**2094,94**	2497	**2392,10**	3055	**2667,60**	3595	**2972,74**
39	2516	1478	**1910,22**	1981	**2150,07**	2562	**2455,05**	3136	**2737,80**	3689	**3050,97**
40	2581	1516	**1959,20**	2032	**2205,20**	2628	**2518,00**	3216	**2808,00**	3784	**3129,20**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

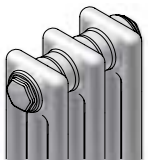
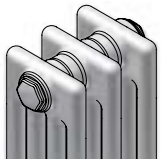
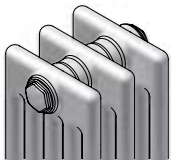
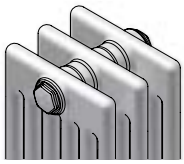
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	500				
					
Model	**K2050**	**K3050**	**K4050**	**K5050**	**K6050**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,28	1,27	1,26	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**49,81**	**55,66**	**64,30**	**71,36**	**79,57**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	166	**199,24**	224	**222,64**	289	**257,20**	354	**285,44**	416	**318,28**
5	306	208	**249,05**	280	**278,30**	362	**321,50**	442	**356,80**	520	**397,85**
6	371	250	**298,86**	335	**333,96**	434	**385,80**	530	**428,16**	624	**477,42**
7	436	291	**348,67**	391	**389,62**	506	**450,10**	619	**499,52**	728	**556,99**
8	501	333	**398,48**	447	**445,28**	578	**514,40**	707	**570,88**	832	**636,56**
9	566	374	**448,29**	503	**500,94**	651	**578,70**	796	**642,24**	936	**716,13**
10	631	416	**498,10**	559	**556,60**	723	**643,00**	884	**713,60**	1040	**795,70**
11	696	458	**547,91**	615	**612,26**	795	**707,30**	972	**784,96**	1144	**875,27**
12	761	499	**597,72**	671	**667,92**	868	**771,60**	1061	**856,32**	1248	**954,84**
13	826	541	**647,53**	727	**723,58**	940	**835,90**	1149	**927,68**	1352	**1034,41**
14	891	582	**697,34**	783	**779,24**	1012	**900,20**	1238	**999,04**	1456	**1113,98**
15	956	624	**747,15**	839	**834,90**	1085	**964,50**	1326	**1070,40**	1560	**1193,55**
16	1021	666	**796,96**	894	**890,56**	1157	**1028,80**	1414	**1141,76**	1664	**1273,12**
17	1086	707	**846,77**	950	**946,22**	1229	**1093,10**	1503	**1213,12**	1768	**1352,69**
18	1151	749	**896,58**	1006	**1001,88**	1301	**1157,40**	1591	**1284,48**	1872	**1432,26**
19	1216	790	**946,39**	1062	**1057,54**	1374	**1221,70**	1680	**1355,84**	1976	**1511,83**
20	1281	832	**996,20**	1118	**1113,20**	1446	**1286,00**	1768	**1427,20**	2080	**1591,40**
21	1346	874	**1046,01**	1174	**1168,86**	1518	**1350,30**	1856	**1498,56**	2184	**1670,97**
22	1411	915	**1095,82**	1230	**1224,52**	1591	**1414,60**	1945	**1569,92**	2288	**1750,54**
23	1476	957	**1145,63**	1286	**1280,18**	1663	**1478,90**	2033	**1641,28**	2392	**1830,11**
24	1541	998	**1195,44**	1342	**1335,84**	1735	**1543,20**	2122	**1712,64**	2496	**1909,68**
25	1606	1040	**1245,25**	1398	**1391,50**	1808	**1607,50**	2210	**1784,00**	2600	**1989,25**
26	1671	1082	**1295,06**	1453	**1447,16**	1880	**1671,80**	2298	**1855,36**	2704	**2068,82**
27	1736	1123	**1344,87**	1509	**1502,82**	1952	**1736,10**	2387	**1926,72**	2808	**2148,39**
28	1801	1165	**1394,68**	1565	**1558,48**	2024	**1800,40**	2475	**1998,08**	2912	**2227,96**
29	1866	1206	**1444,49**	1621	**1614,14**	2097	**1864,70**	2564	**2069,44**	3016	**2307,53**
30	1931	1248	**1494,30**	1677	**1669,80**	2169	**1929,00**	2652	**2140,80**	3120	**2387,10**
31	1996	1290	**1544,11**	1733	**1725,46**	2241	**1993,30**	2740	**2212,16**	3224	**2466,67**
32	2061	1331	**1593,92**	1789	**1781,12**	2314	**2057,60**	2829	**2283,52**	3328	**2546,24**
33	2126	1373	**1643,73**	1845	**1836,78**	2386	**2121,90**	2917	**2354,88**	3432	**2625,81**
34	2191	1414	**1693,54**	1901	**1892,44**	2458	**2186,20**	3006	**2426,24**	3536	**2705,38**
35	2256	1456	**1743,35**	1957	**1948,10**	2531	**2250,50**	3094	**2497,60**	3640	**2784,95**
36	2321	1498	**1793,16**	2012	**2003,76**	2603	**2314,80**	3182	**2568,96**	3744	**2864,52**
37	2386	1539	**1842,97**	2068	**2059,42**	2675	**2379,10**	3271	**2640,32**	3848	**2944,09**
38	2451	1581	**1892,78**	2124	**2115,08**	2747	**2443,40**	3359	**2711,68**	3952	**3023,66**
39	2516	1622	**1942,59**	2180	**2170,74**	2820	**2507,70**	3448	**2783,04**	4056	**3103,23**
40	2581	1664	**1992,40**	2236	**2226,40**	2892	**2572,00**	3536	**2854,40**	4160	**3182,80**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

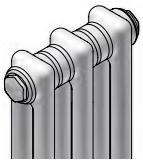
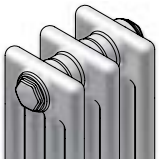
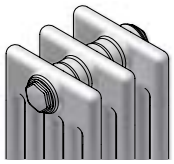
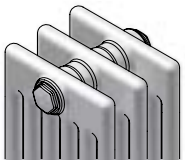
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	550				
					
Model	**K2055**	**K3055**	**K4055**	**K5055**	**K6055**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,29	1,28	1,27	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**50,60**	**56,64**	**65,65**	**72,74**	**81,52**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	181	**202,40**	244	**226,56**	315	**262,60**	386	**290,96**	452	**326,08**
5	306	226	**253,00**	305	**283,20**	394	**328,25**	482	**363,70**	565	**407,60**
6	371	271	**303,60**	366	**339,84**	473	**393,90**	578	**436,44**	678	**489,12**
7	436	316	**354,20**	427	**396,48**	552	**459,55**	675	**509,18**	791	**570,64**
8	501	362	**404,80**	488	**453,12**	630	**525,20**	771	**581,92**	904	**652,16**
9	566	407	**455,40**	549	**509,76**	709	**590,85**	868	**654,66**	1017	**733,68**
10	631	452	**506,00**	610	**566,40**	788	**656,50**	964	**727,40**	1130	**815,20**
11	696	497	**556,60**	671	**623,04**	867	**722,15**	1060	**800,14**	1243	**896,72**
12	761	542	**607,20**	732	**679,68**	946	**787,80**	1157	**872,88**	1356	**978,24**
13	826	588	**657,80**	793	**736,32**	1024	**853,45**	1253	**945,62**	1469	**1059,76**
14	891	633	**708,40**	854	**792,96**	1103	**919,10**	1350	**1018,36**	1582	**1141,28**
15	956	678	**759,00**	915	**849,60**	1182	**984,75**	1446	**1091,10**	1695	**1222,80**
16	1021	723	**809,60**	976	**906,24**	1261	**1050,40**	1542	**1163,84**	1808	**1304,32**
17	1086	768	**860,20**	1037	**962,88**	1340	**1116,05**	1639	**1236,58**	1921	**1385,84**
18	1151	814	**910,80**	1098	**1019,52**	1418	**1181,70**	1735	**1309,32**	2034	**1467,36**
19	1216	859	**961,40**	1159	**1076,16**	1497	**1247,35**	1832	**1382,06**	2147	**1548,88**
20	1281	904	**1012,00**	1220	**1132,80**	1576	**1313,00**	1928	**1454,80**	2260	**1630,40**
21	1346	949	**1062,60**	1281	**1189,44**	1655	**1378,65**	2024	**1527,54**	2373	**1711,92**
22	1411	994	**1113,20**	1342	**1246,08**	1734	**1444,30**	2121	**1600,28**	2486	**1793,44**
23	1476	1040	**1163,80**	1403	**1302,72**	1812	**1509,95**	2217	**1673,02**	2599	**1874,96**
24	1541	1085	**1214,40**	1464	**1359,36**	1891	**1575,60**	2314	**1745,76**	2712	**1956,48**
25	1606	1130	**1265,00**	1525	**1416,00**	1970	**1641,25**	2410	**1818,50**	2825	**2038,00**
26	1671	1175	**1315,60**	1586	**1472,64**	2049	**1706,90**	2506	**1891,24**	2938	**2119,52**
27	1736	1220	**1366,20**	1647	**1529,28**	2128	**1772,55**	2603	**1963,98**	3051	**2201,04**
28	1801	1266	**1416,80**	1708	**1585,92**	2206	**1838,20**	2699	**2036,72**	3164	**2282,56**
29	1866	1311	**1467,40**	1769	**1642,56**	2285	**1903,85**	2796	**2109,46**	3277	**2364,08**
30	1931	1356	**1518,00**	1830	**1699,20**	2364	**1969,50**	2892	**2182,20**	3390	**2445,60**
31	1996	1401	**1568,60**	1891	**1755,84**	2443	**2035,15**	2988	**2254,94**	3503	**2527,12**
32	2061	1446	**1619,20**	1952	**1812,48**	2522	**2100,80**	3085	**2327,68**	3616	**2608,64**
33	2126	1492	**1669,80**	2013	**1869,12**	2600	**2166,45**	3181	**2400,42**	3729	**2690,16**
34	2191	1537	**1720,40**	2074	**1925,76**	2679	**2232,10**	3278	**2473,16**	3842	**2771,68**
35	2256	1582	**1771,00**	2135	**1982,40**	2758	**2297,75**	3374	**2545,90**	3955	**2853,20**
36	2321	1627	**1821,60**	2196	**2039,04**	2837	**2363,40**	3470	**2618,64**	4068	**2934,72**
37	2386	1672	**1872,20**	2257	**2095,68**	2916	**2429,05**	3567	**2691,38**	4181	**3016,24**
38	2451	1718	**1922,80**	2318	**2152,32**	2994	**2494,70**	3663	**2764,12**	4294	**3097,76**
39	2516	1763	**1973,40**	2379	**2208,96**	3073	**2560,35**	3760	**2836,86**	4407	**3179,28**
40	2581	1808	**2024,00**	2440	**2265,60**	3152	**2626,00**	3856	**2909,60**	4520	**3260,80**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

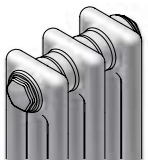
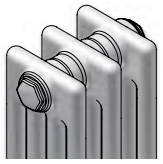
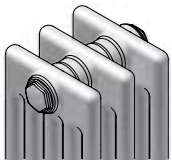
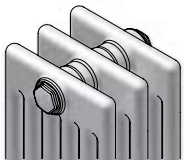
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	600				
					
Model	**K2060**	**K3060**	**K4060**	**K5060**	**K6060**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,29	1,28	1,27	1,29
Max. number of elements	44	44	44	44	44
Price/element €	**51,14**	**58,00**	**67,04**	**74,31**	**83,30**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	195	**204,56**	264	**232,00**	342	**268,16**	416	**297,24**	492	**333,20**
5	306	244	**255,70**	330	**290,00**	427	**335,20**	520	**371,55**	615	**416,50**
6	371	293	**306,84**	396	**348,00**	512	**402,24**	624	**445,86**	738	**499,80**
7	436	342	**357,98**	462	**406,00**	598	**469,28**	728	**520,17**	861	**583,10**
8	501	390	**409,12**	528	**464,00**	683	**536,32**	832	**594,48**	984	**666,40**
9	566	439	**460,26**	594	**522,00**	769	**603,36**	936	**668,79**	1107	**749,70**
10	631	488	**511,40**	660	**580,00**	854	**670,40**	1040	**743,10**	1230	**833,00**
11	696	537	**562,54**	726	**638,00**	939	**737,44**	1144	**817,41**	1353	**916,30**
12	761	586	**613,68**	792	**696,00**	1025	**804,48**	1248	**891,72**	1476	**999,60**
13	826	634	**664,82**	858	**754,00**	1110	**871,52**	1352	**966,03**	1599	**1082,90**
14	891	683	**715,96**	924	**812,00**	1196	**938,56**	1456	**1040,34**	1722	**1166,20**
15	956	732	**767,10**	990	**870,00**	1281	**1005,60**	1560	**1114,65**	1845	**1249,50**
16	1021	781	**818,24**	1056	**928,00**	1366	**1072,64**	1664	**1188,96**	1968	**1332,80**
17	1086	830	**869,38**	1122	**986,00**	1452	**1139,68**	1768	**1263,27**	2091	**1416,10**
18	1151	878	**920,52**	1188	**1044,00**	1537	**1206,72**	1872	**1337,58**	2214	**1499,40**
19	1216	927	**971,66**	1254	**1102,00**	1623	**1273,76**	1976	**1411,89**	2337	**1582,70**
20	1281	976	**1022,80**	1320	**1160,00**	1708	**1340,80**	2080	**1486,20**	2460	**1666,00**
21	1346	1025	**1073,94**	1386	**1218,00**	1793	**1407,84**	2184	**1560,51**	2583	**1749,30**
22	1411	1074	**1125,08**	1452	**1276,00**	1879	**1474,88**	2288	**1634,82**	2706	**1832,60**
23	1476	1122	**1176,22**	1518	**1334,00**	1964	**1541,92**	2392	**1709,13**	2829	**1915,90**
24	1541	1171	**1227,36**	1584	**1392,00**	2050	**1608,96**	2496	**1783,44**	2952	**1999,20**
25	1606	1220	**1278,50**	1650	**1450,00**	2135	**1676,00**	2600	**1857,75**	3075	**2082,50**
26	1671	1269	**1329,64**	1716	**1508,00**	2220	**1743,04**	2704	**1932,06**	3198	**2165,80**
27	1736	1318	**1380,78**	1782	**1566,00**	2306	**1810,08**	2808	**2006,37**	3321	**2249,10**
28	1801	1366	**1431,92**	1848	**1624,00**	2391	**1877,12**	2912	**2080,68**	3444	**2332,40**
29	1866	1415	**1483,06**	1914	**1682,00**	2477	**1944,16**	3016	**2154,99**	3567	**2415,70**
30	1931	1464	**1534,20**	1980	**1740,00**	2562	**2011,20**	3120	**2229,30**	3690	**2499,00**
31	1996	1513	**1585,34**	2046	**1798,00**	2647	**2078,24**	3224	**2303,61**	3813	**2582,30**
32	2061	1562	**1636,48**	2112	**1856,00**	2733	**2145,28**	3328	**2377,92**	3936	**2665,60**
33	2126	1610	**1687,62**	2178	**1914,00**	2818	**2212,32**	3432	**2452,23**	4059	**2748,90**
34	2191	1659	**1738,76**	2244	**1972,00**	2904	**2279,36**	3536	**2526,54**	4182	**2832,20**
35	2256	1708	**1789,90**	2310	**2030,00**	2989	**2346,40**	3640	**2600,85**	4305	**2915,50**
36	2321	1757	**1841,04**	2376	**2088,00**	3074	**2413,44**	3744	**2675,16**	4428	**2998,80**
37	2386	1806	**1892,18**	2442	**2146,00**	3160	**2480,48**	3848	**2749,47**	4551	**3082,10**
38	2451	1854	**1943,32**	2508	**2204,00**	3245	**2547,52**	3952	**2823,78**	4674	**3165,40**
39	2516	1903	**1994,46**	2574	**2262,00**	3331	**2614,56**	4056	**2898,09**	4797	**3248,70**
40	2581	1952	**2045,60**	2640	**2320,00**	3416	**2681,60**	4160	**2972,40**	4920	**3332,00**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

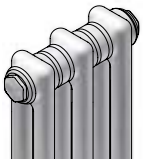
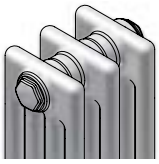
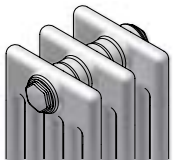
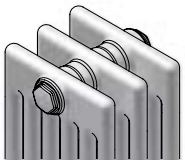
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	750				
					
Model	**K2075**	**K3075**	**K4075**	**K5075**	**K6075**
Depth mm	62	100	136	173	210
Exponent n	1,29	1,30	1,29	1,28	1,30
Max. number of elements	44	44	44	44	44
Price/element €	**53,92**	**61,36**	**71,74**	**80,73**	**90,33**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	237	**215,68**	324	**245,44**	420	**286,96**	512	**322,92**	604	**361,32**
5	306	296	**269,60**	406	**306,80**	525	**358,70**	640	**403,65**	755	**451,65**
6	371	355	**323,52**	487	**368,16**	630	**430,44**	768	**484,38**	906	**541,98**
7	436	414	**377,44**	568	**429,52**	735	**502,18**	896	**565,11**	1057	**632,31**
8	501	474	**431,36**	649	**490,88**	840	**573,92**	1024	**645,84**	1208	**722,64**
9	566	533	**485,28**	730	**552,24**	945	**645,66**	1152	**726,57**	1359	**812,97**
10	631	592	**539,20**	811	**613,60**	1050	**717,40**	1280	**807,30**	1510	**903,30**
11	696	651	**593,12**	892	**674,96**	1155	**789,14**	1408	**888,03**	1661	**993,63**
12	761	710	**647,04**	973	**736,32**	1260	**860,88**	1536	**968,76**	1812	**1083,96**
13	826	770	**700,96**	1054	**797,68**	1365	**932,62**	1664	**1049,49**	1963	**1174,29**
14	891	829	**754,88**	1135	**859,04**	1470	**1004,36**	1792	**1130,22**	2114	**1264,62**
15	956	888	**808,80**	1217	**920,40**	1575	**1076,10**	1920	**1210,95**	2265	**1354,95**
16	1021	947	**862,72**	1298	**981,76**	1680	**1147,84**	2048	**1291,68**	2416	**1445,28**
17	1086	1006	**916,64**	1379	**1043,12**	1785	**1219,58**	2176	**1372,41**	2567	**1535,61**
18	1151	1066	**970,56**	1460	**1104,48**	1890	**1291,32**	2304	**1453,14**	2718	**1625,94**
19	1216	1125	**1024,48**	1541	**1165,84**	1995	**1363,06**	2432	**1533,87**	2869	**1716,27**
20	1281	1184	**1078,40**	1622	**1227,20**	2100	**1434,80**	2560	**1614,60**	3020	**1806,60**
21	1346	1243	**1132,32**	1703	**1288,56**	2205	**1506,54**	2688	**1695,33**	3171	**1896,93**
22	1411	1302	**1186,24**	1784	**1349,92**	2310	**1578,28**	2816	**1776,06**	3322	**1987,26**
23	1476	1362	**1240,16**	1865	**1411,28**	2415	**1650,02**	2944	**1856,79**	3473	**2077,59**
24	1541	1421	**1294,08**	1946	**1472,64**	2520	**1721,76**	3072	**1937,52**	3624	**2167,92**
25	1606	1480	**1348,00**	2028	**1534,00**	2625	**1793,50**	3200	**2018,25**	3775	**2258,25**
26	1671	1539	**1401,92**	2109	**1595,36**	2730	**1865,24**	3328	**2098,98**	3926	**2348,58**
27	1736	1598	**1455,84**	2190	**1656,72**	2835	**1936,98**	3456	**2179,71**	4077	**2438,91**
28	1801	1658	**1509,76**	2271	**1718,08**	2940	**2008,72**	3584	**2260,44**	4228	**2529,24**
29	1866	1717	**1563,68**	2352	**1779,44**	3045	**2080,46**	3712	**2341,17**	4379	**2619,57**
30	1931	1776	**1617,60**	2433	**1840,80**	3150	**2152,20**	3840	**2421,90**	4530	**2709,90**
31	1996	1835	**1671,52**	2514	**1902,16**	3255	**2223,94**	3968	**2502,63**	4681	**2800,23**
32	2061	1894	**1725,44**	2595	**1963,52**	3360	**2295,68**	4096	**2583,36**	4832	**2890,56**
33	2126	1954	**1779,36**	2676	**2024,88**	3465	**2367,42**	4224	**2664,09**	4983	**2980,89**
34	2191	2013	**1833,28**	2757	**2086,24**	3570	**2439,16**	4352	**2744,82**	5134	**3071,22**
35	2256	2072	**1887,20**	2839	**2147,60**	3675	**2510,90**	4480	**2825,55**	5285	**3161,55**
36	2321	2131	**1941,12**	2920	**2208,96**	3780	**2582,64**	4608	**2906,28**	5436	**3251,88**
37	2386	2190	**1995,04**	3001	**2270,32**	3885	**2654,38**	4736	**2987,01**	5587	**3342,21**
38	2451	2250	**2048,96**	3082	**2331,68**	3990	**2726,12**	4864	**3067,74**	5738	**3432,54**
39	2516	2309	**2102,88**	3163	**2393,04**	4095	**2797,86**	4992	**3148,47**	5889	**3522,87**
40	2581	2368	**2156,80**	3244	**2454,40**	4200	**2869,60**	5120	**3229,20**	6040	**3613,20**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

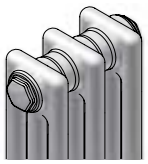
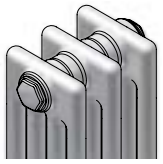
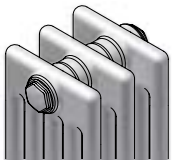
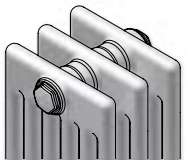
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	900				
					
Model	**K2090**	**K3090**	**K4090**	**K5090**	**K6090**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,31	1,30	1,29	1,30
Max. number of elements	44	44	44	44	44
Price/element €	**73,89**	**85,05**	**101,01**	**112,06**	**126,11**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	278	**295,56**	385	**340,20**	500	**404,04**	608	**448,24**	716	**504,44**
5	306	347	**369,45**	482	**425,25**	625	**505,05**	760	**560,30**	895	**630,55**
6	371	416	**443,34**	578	**510,30**	750	**606,06**	912	**672,36**	1074	**756,66**
7	436	486	**517,23**	674	**595,35**	875	**707,07**	1064	**784,42**	1253	**882,77**
8	501	555	**591,12**	770	**680,40**	1000	**808,08**	1216	**896,48**	1432	**1008,88**
9	566	625	**665,01**	867	**765,45**	1125	**909,09**	1368	**1008,54**	1611	**1134,99**
10	631	694	**738,90**	963	**850,50**	1250	**1010,10**	1520	**1120,60**	1790	**1261,10**
11	696	763	**812,79**	1059	**935,55**	1375	**1111,11**	1672	**1232,66**	1969	**1387,21**
12	761	833	**886,68**	1156	**1020,60**	1500	**1212,12**	1824	**1344,72**	2148	**1513,32**
13	826	902	**960,57**	1252	**1105,65**	1625	**1313,13**	1976	**1456,78**	2327	**1639,43**
14	891	972	**1034,46**	1348	**1190,70**	1750	**1414,14**	2128	**1568,84**	2506	**1765,54**
15	956	1041	**1108,35**	1445	**1275,75**	1875	**1515,15**	2280	**1680,90**	2685	**1891,65**
16	1021	1110	**1182,24**	1541	**1360,80**	2000	**1616,16**	2432	**1792,96**	2864	**2017,76**
17	1086	1180	**1256,13**	1637	**1445,85**	2125	**1717,17**	2584	**1905,02**	3043	**2143,87**
18	1151	1249	**1330,02**	1733	**1530,90**	2250	**1818,18**	2736	**2017,08**	3222	**2269,98**
19	1216	1319	**1403,91**	1830	**1615,95**	2375	**1919,19**	2888	**2129,14**	3401	**2396,09**
20	1281	1388	**1477,80**	1926	**1701,00**	2500	**2020,20**	3040	**2241,20**	3580	**2522,20**
21	1346	1457	**1551,69**	2022	**1786,05**	2625	**2121,21**	3192	**2353,26**	3759	**2648,31**
22	1411	1527	**1625,58**	2119	**1871,10**	2750	**2222,22**	3344	**2465,32**	3938	**2774,42**
23	1476	1596	**1699,47**	2215	**1956,15**	2875	**2323,23**	3496	**2577,38**	4117	**2900,53**
24	1541	1666	**1773,36**	2311	**2041,20**	3000	**2424,24**	3648	**2689,44**	4296	**3026,64**
25	1606	1735	**1847,25**	2408	**2126,25**	3125	**2525,25**	3800	**2801,50**	4475	**3152,75**
26	1671	1804	**1921,14**	2504	**2211,30**	3250	**2626,26**	3952	**2913,56**	4654	**3278,86**
27	1736	1874	**1995,03**	2600	**2296,35**	3375	**2727,27**	4104	**3025,62**	4833	**3404,97**
28	1801	1943	**2068,92**	2696	**2381,40**	3500	**2828,28**	4256	**3137,68**	5012	**3531,08**
29	1866	2013	**2142,81**	2793	**2466,45**	3625	**2929,29**	4408	**3249,74**	5191	**3657,19**
30	1931	2082	**2216,70**	2889	**2551,50**	3750	**3030,30**	4560	**3361,80**	5370	**3783,30**
31	1996	2151	**2290,59**	2985	**2636,55**	3875	**3131,31**	4712	**3473,86**	5549	**3909,41**
32	2061	2221	**2364,48**	3082	**2721,60**	4000	**3232,32**	4864	**3585,92**	5728	**4035,52**
33	2126	2290	**2438,37**	3178	**2806,65**	4125	**3333,33**	5016	**3697,98**	5907	**4161,63**
34	2191	2360	**2512,26**	3274	**2891,70**	4250	**3434,34**	5168	**3810,04**	6086	**4287,74**
35	2256	2429	**2586,15**	3371	**2976,75**	4375	**3535,35**	5320	**3922,10**	6265	**4413,85**
36	2321	2498	**2660,04**	3467	**3061,80**	4500	**3636,36**	5472	**4034,16**	6444	**4539,96**
37	2386	2568	**2733,93**	3563	**3146,85**	4625	**3737,37**	5624	**4146,22**	6623	**4666,07**
38	2451	2637	**2807,82**	3659	**3231,90**	4750	**3838,38**	5776	**4258,28**	6802	**4792,18**
39	2516	2707	**2881,71**	3756	**3316,95**	4875	**3939,39**	5928	**4370,34**	6981	**4918,29**
40	2581	2776	**2955,60**	3852	**3402,00**	5000	**4040,40**	6080	**4482,40**	7160	**5044,40**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

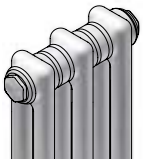
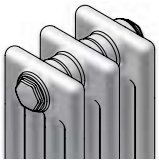
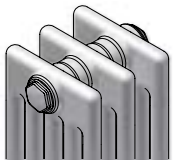
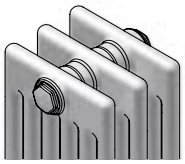
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1000				
					
Model	**K2100**	**K3100**	**K4100**	**K5100**	**K6100**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,32	1,31	1,30	1,30
Max. number of elements	16	16	16	16	16
Price/element €	**75,09**	**87,75**	**104,68**	**116,06**	**131,07**

Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	241	304	**300,36**	428	**351,00**	552	**418,72**	672	**464,24**	792	**524,28**
5	306	380	**375,45**	535	**438,75**	690	**523,40**	840	**580,30**	990	**655,35**
6	371	456	**450,54**	642	**526,50**	828	**628,08**	1008	**696,36**	1188	**786,42**
7	436	532	**525,63**	749	**614,25**	966	**732,76**	1176	**812,42**	1386	**917,49**
8	501	608	**600,72**	856	**702,00**	1104	**837,44**	1344	**928,48**	1584	**1048,56**
9	566	684	**675,81**	963	**789,75**	1242	**942,12**	1512	**1044,54**	1782	**1179,63**
10	631	760	**750,90**	1070	**877,50**	1380	**1046,80**	1680	**1160,60**	1980	**1310,70**
11	696	836	**825,99**	1177	**965,25**	1518	**1151,48**	1848	**1276,66**	2178	**1441,77**
12	761	912	**901,08**	1284	**1053,00**	1656	**1256,16**	2016	**1392,72**	2376	**1572,84**
13	826	988	**976,17**	1391	**1140,75**	1794	**1360,84**	2184	**1508,78**	2574	**1703,91**
14	891	1064	**1051,26**	1498	**1228,50**	1932	**1465,52**	2352	**1624,84**	2772	**1834,98**
15	956	1140	**1126,35**	1605	**1316,25**	2070	**1570,20**	2520	**1740,90**	2970	**1966,05**
16	1021	1216	**1201,44**	1712	**1404,00**	2208	**1674,88**	2688	**1856,96**	3168	**2097,12**
17	1086	1292	**1276,53**	1819	**1491,75**	2346	**1779,56**	2856	**1973,02**	3366	**2228,19**
18	1151	1368	**1351,62**	1926	**1579,50**	2484	**1884,24**	3024	**2089,08**	3564	**2359,26**
19	1216	1444	**1426,71**	2033	**1667,25**	2622	**1988,92**	3192	**2205,14**	3762	**2490,33**
20	1281	1520	**1501,80**	2140	**1755,00**	2760	**2093,60**	3360	**2321,20**	3960	**2621,40**
21	1346	1596	**1576,89**	2247	**1842,75**	2898	**2198,28**	3528	**2437,26**	4158	**2752,47**
22	1411	1672	**1651,98**	2354	**1930,50**	3036	**2302,96**	3696	**2553,32**	4356	**2883,54**
23	1476	1748	**1727,07**	2461	**2018,25**	3174	**2407,64**	3864	**2669,38**	4554	**3014,61**
24	1541	1824	**1802,16**	2568	**2106,00**	3312	**2512,32**	4032	**2785,44**	4752	**3145,68**
25	1606	1900	**1877,25**	2675	**2193,75**	3450	**2617,00**	4200	**2901,50**	4950	**3276,75**
26	1671	1976	**1952,34**	2782	**2281,50**	3588	**2721,68**	4368	**3017,56**	5148	**3407,82**
27	1736	2052	**2027,43**	2889	**2369,25**	3726	**2826,36**	4536	**3133,62**	5346	**3538,89**
28	1801	2128	**2102,52**	2996	**2457,00**	3864	**2931,04**	4704	**3249,68**	5544	**3669,96**
29	1866	2204	**2177,61**	3103	**2544,75**	4002	**3035,72**	4872	**3365,74**	5742	**3801,03**
30	1931	2280	**2252,70**	3210	**2632,50**	4140	**3140,40**	5040	**3481,80**	5940	**3932,10**
31	1996	2356	**2327,79**	3317	**2720,25**	4278	**3245,08**	5208	**3597,86**	6138	**4063,17**
32	2061	2432	**2402,88**	3424	**2808,00**	4416	**3349,76**	5376	**3713,92**	6336	**4194,24**
33	2126	2508	**2477,97**	3531	**2895,75**	4554	**3454,44**	5544	**3829,98**	6534	**4325,31**
34	2191	2584	**2553,06**	3638	**2983,50**	4692	**3559,12**	5712	**3946,04**	6732	**4456,38**
35	2256	2660	**2628,15**	3745	**3071,25**	4830	**3663,80**	5880	**4062,10**	6930	**4587,45**
36	2321	2736	**2703,24**	3852	**3159,00**	4968	**3768,48**	6048	**4178,16**	7128	**4718,52**
37	2386	2812	**2778,33**	3959	**3246,75**	5106	**3873,16**	6216	**4294,22**	7326	**4849,59**
38	2451	2888	**2853,42**	4066	**3334,50**	5244	**3977,84**	6384	**4410,28**	7524	**4980,66**
39	2516	2964	**2928,51**	4173	**3422,25**	5382	**4082,52**	6552	**4526,34**	7722	**5111,73**
40	2581	3040	**3003,60**	4280	**3510,00**	5520	**4187,20**	6720	**4642,40**	7920	**5242,80**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

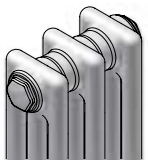
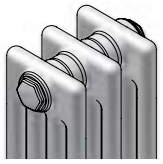
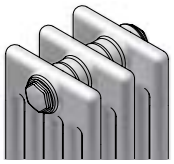
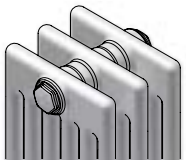
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1100				
					
Model	**K2110**	**K3110**	**K4110**	**K5110**	**K6110**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,32	1,32	1,31	1,30
Max. number of elements	16	16	16	16	16
Price/element €	**77,83**	**92,66**	**110,10**	**125,14**	**143,11**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	330	**311,32**	468	**370,64**	604	**440,40**	740	**500,56**	868	**572,44**
5	306	413	**389,15**	585	**463,30**	755	**550,50**	925	**625,70**	1085	**715,55**
6	371	496	**466,98**	702	**555,96**	906	**660,60**	1110	**750,84**	1302	**858,66**
7	436	578	**544,81**	819	**648,62**	1057	**770,70**	1295	**875,98**	1519	**1001,77**
8	501	661	**622,64**	936	**741,28**	1208	**880,80**	1480	**1001,12**	1736	**1144,88**
9	566	743	**700,47**	1053	**833,94**	1359	**990,90**	1665	**1126,26**	1953	**1287,99**
10	631	826	**778,30**	1170	**926,60**	1510	**1101,00**	1850	**1251,40**	2170	**1431,10**
11	696	909	**856,13**	1287	**1019,26**	1661	**1211,10**	2035	**1376,54**	2387	**1574,21**
12	761	991	**933,96**	1404	**1111,92**	1812	**1321,20**	2220	**1501,68**	2604	**1717,32**
13	826	1074	**1011,79**	1521	**1204,58**	1963	**1431,30**	2405	**1626,82**	2821	**1860,43**
14	891	1156	**1089,62**	1638	**1297,24**	2114	**1541,40**	2590	**1751,96**	3038	**2003,54**
15	956	1239	**1167,45**	1755	**1389,90**	2265	**1651,50**	2775	**1877,10**	3255	**2146,65**
16	1021	1322	**1245,28**	1872	**1482,56**	2416	**1761,60**	2960	**2002,24**	3472	**2289,76**
17	1086	1404	**1323,11**	1989	**1575,22**	2567	**1871,70**	3145	**2127,38**	3689	**2432,87**
18	1151	1487	**1400,94**	2106	**1667,88**	2718	**1981,80**	3330	**2252,52**	3906	**2575,98**
19	1216	1569	**1478,77**	2223	**1760,54**	2869	**2091,90**	3515	**2377,66**	4123	**2719,09**
20	1281	1652	**1556,60**	2340	**1853,20**	3020	**2202,00**	3700	**2502,80**	4340	**2862,20**
21	1346	1735	**1634,43**	2457	**1945,86**	3171	**2312,10**	3885	**2627,94**	4557	**3005,31**
22	1411	1817	**1712,26**	2574	**2038,52**	3322	**2422,20**	4070	**2753,08**	4774	**3148,42**
23	1476	1900	**1790,09**	2691	**2131,18**	3473	**2532,30**	4255	**2878,22**	4991	**3291,53**
24	1541	1982	**1867,92**	2808	**2223,84**	3624	**2642,40**	4440	**3003,36**	5208	**3434,64**
25	1606	2065	**1945,75**	2925	**2316,50**	3775	**2752,50**	4625	**3128,50**	5425	**3577,75**
26	1671	2148	**2023,58**	3042	**2409,16**	3926	**2862,60**	4810	**3253,64**	5642	**3720,86**
27	1736	2230	**2101,41**	3159	**2501,82**	4077	**2972,70**	4995	**3378,78**	5859	**3863,97**
28	1801	2313	**2179,24**	3276	**2594,48**	4228	**3082,80**	5180	**3503,92**	6076	**4007,08**
29	1866	2395	**2257,07**	3393	**2687,14**	4379	**3192,90**	5365	**3629,06**	6293	**4150,19**
30	1931	2478	**2334,90**	3510	**2779,80**	4530	**3303,00**	5550	**3754,20**	6510	**4293,30**
31	1996	2561	**2412,73**	3627	**2872,46**	4681	**3413,10**	5735	**3879,34**	6727	**4436,41**
32	2061	2643	**2490,56**	3744	**2965,12**	4832	**3523,20**	5920	**4004,48**	6944	**4579,52**
33	2126	2726	**2568,39**	3861	**3057,78**	4983	**3633,30**	6105	**4129,62**	7161	**4722,63**
34	2191	2808	**2646,22**	3978	**3150,44**	5134	**3743,40**	6290	**4254,76**	7378	**4865,74**
35	2256	2891	**2724,05**	4095	**3243,10**	5285	**3853,50**	6475	**4379,90**	7595	**5008,85**
36	2321	2974	**2801,88**	4212	**3335,76**	5436	**3963,60**	6660	**4505,04**	7812	**5151,96**
37	2386	3056	**2879,71**	4329	**3428,42**	5587	**4073,70**	6845	**4630,18**	8029	**5295,07**
38	2451	3139	**2957,54**	4446	**3521,08**	5738	**4183,80**	7030	**4755,32**	8246	**5438,18**
39	2516	3221	**3035,37**	4563	**3613,74**	5889	**4293,90**	7215	**4880,46**	8463	**5581,29**
40	2581	3304	**3113,20**	4680	**3706,40**	6040	**4404,00**	7400	**5005,60**	8680	**5724,40**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

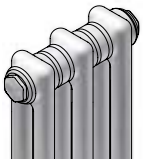
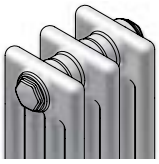
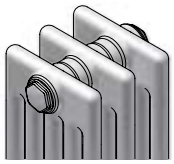
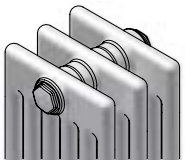
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1200				
					
Model	**K2120**	**K3120**	**K4120**	**K5120**	**K6120**
Depth mm	62	100	136	173	210
Exponent n	1,30	1,33	1,32	1,31	1,30
Max. number of elements	16	16	16	16	16
Price/element €	**80,54**	**99,85**	**117,31**	**135,51**	**153,50**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	364	**322,16**	508	**399,40**	660	**469,24**	804	**542,04**	944	**614,00**
5	306	456	**402,70**	635	**499,25**	825	**586,55**	1005	**677,55**	1180	**767,50**
6	371	547	**483,24**	762	**599,10**	990	**703,86**	1206	**813,06**	1416	**921,00**
7	436	638	**563,78**	889	**698,95**	1155	**821,17**	1407	**948,57**	1652	**1074,50**
8	501	729	**644,32**	1016	**798,80**	1320	**938,48**	1608	**1084,08**	1888	**1228,00**
9	566	820	**724,86**	1143	**898,65**	1485	**1055,79**	1809	**1219,59**	2124	**1381,50**
10	631	911	**805,40**	1270	**998,50**	1650	**1173,10**	2010	**1355,10**	2360	**1535,00**
11	696	1002	**885,94**	1397	**1098,35**	1815	**1290,41**	2211	**1490,61**	2596	**1688,50**
12	761	1093	**966,48**	1524	**1198,20**	1980	**1407,72**	2412	**1626,12**	2832	**1842,00**
13	826	1184	**1047,02**	1651	**1298,05**	2145	**1525,03**	2613	**1761,63**	3068	**1995,50**
14	891	1275	**1127,56**	1778	**1397,90**	2310	**1642,34**	2814	**1897,14**	3304	**2149,00**
15	956	1367	**1208,10**	1905	**1497,75**	2475	**1759,65**	3015	**2032,65**	3540	**2302,50**
16	1021	1458	**1288,64**	2032	**1597,60**	2640	**1876,96**	3216	**2168,16**	3776	**2456,00**
17	1086	1549	**1369,18**	2159	**1697,45**	2805	**1994,27**	3417	**2303,67**	4012	**2609,50**
18	1151	1640	**1449,72**	2286	**1797,30**	2970	**2111,58**	3618	**2439,18**	4248	**2763,00**
19	1216	1731	**1530,26**	2413	**1897,15**	3135	**2228,89**	3819	**2574,69**	4484	**2916,50**
20	1281	1822	**1610,80**	2540	**1997,00**	3300	**2346,20**	4020	**2710,20**	4720	**3070,00**
21	1346	1913	**1691,34**	2667	**2096,85**	3465	**2463,51**	4221	**2845,71**	4956	**3223,50**
22	1411	2004	**1771,88**	2794	**2196,70**	3630	**2580,82**	4422	**2981,22**	5192	**3377,00**
23	1476	2095	**1852,42**	2921	**2296,55**	3795	**2698,13**	4623	**3116,73**	5428	**3530,50**
24	1541	2186	**1932,96**	3048	**2396,40**	3960	**2815,44**	4824	**3252,24**	5664	**3684,00**
25	1606	2278	**2013,50**	3175	**2496,25**	4125	**2932,75**	5025	**3387,75**	5900	**3837,50**
26	1671	2369	**2094,04**	3302	**2596,10**	4290	**3050,06**	5226	**3523,26**	6136	**3991,00**
27	1736	2460	**2174,58**	3429	**2695,95**	4455	**3167,37**	5427	**3658,77**	6372	**4144,50**
28	1801	2551	**2255,12**	3556	**2795,80**	4620	**3284,68**	5628	**3794,28**	6608	**4298,00**
29	1866	2642	**2335,66**	3683	**2895,65**	4785	**3401,99**	5829	**3929,79**	6844	**4451,50**
30	1931	2733	**2416,20**	3810	**2995,50**	4950	**3519,30**	6030	**4065,30**	7080	**4605,00**
31	1996	2824	**2496,74**	3937	**3095,35**	5115	**3636,61**	6231	**4200,81**	7316	**4758,50**
32	2061	2915	**2577,28**	4064	**3195,20**	5280	**3753,92**	6432	**4336,32**	7552	**4912,00**
33	2126	3006	**2657,82**	4191	**3295,05**	5445	**3871,23**	6633	**4471,83**	7788	**5065,50**
34	2191	3097	**2738,36**	4318	**3394,90**	5610	**3988,54**	6834	**4607,34**	8024	**5219,00**
35	2256	3189	**2818,90**	4445	**3494,75**	5775	**4105,85**	7035	**4742,85**	8260	**5372,50**
36	2321	3280	**2899,44**	4572	**3594,60**	5940	**4223,16**	7236	**4878,36**	8496	**5526,00**
37	2386	3371	**2979,98**	4699	**3694,45**	6105	**4340,47**	7437	**5013,87**	8732	**5679,50**
38	2451	3462	**3060,52**	4826	**3794,30**	6270	**4457,78**	7638	**5149,38**	8968	**5833,00**
39	2516	3553	**3141,06**	4953	**3894,15**	6435	**4575,09**	7839	**5284,89**	9204	**5986,50**
40	2581	3644	**3221,60**	5080	**3994,00**	6600	**4692,40**	8040	**5420,40**	9440	**6140,00**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

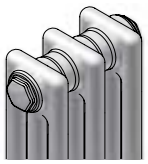
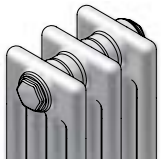
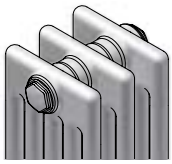
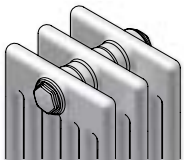
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1500				
					
Model	**K2150**	**K3150**	**K4150**	**K5150**	**K6150**
Depth mm	62	100	136	173	210
Exponent n	1,33	1,33	1,31	1,30	1,31
Max. number of elements	16	16	16	16	16
Price/element €	**90,15**	**114,41**	**138,79**	**162,42**	**187,10**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	460	**360,60**	632	**457,64**	816	**555,16**	996	**649,68**	1172	**748,40**
5	306	575	**450,75**	790	**572,05**	1020	**693,95**	1245	**812,10**	1465	**935,50**
6	371	690	**540,90**	948	**686,46**	1224	**832,74**	1494	**974,52**	1758	**1122,60**
7	436	805	**631,05**	1106	**800,87**	1428	**971,53**	1743	**1136,94**	2051	**1309,70**
8	501	920	**721,20**	1264	**915,28**	1632	**1110,32**	1992	**1299,36**	2344	**1496,80**
9	566	1035	**811,35**	1422	**1029,69**	1836	**1249,11**	2241	**1461,78**	2637	**1683,90**
10	631	1150	**901,50**	1580	**1144,10**	2040	**1387,90**	2490	**1624,20**	2930	**1871,00**
11	696	1265	**991,65**	1738	**1258,51**	2244	**1526,69**	2739	**1786,62**	3223	**2058,10**
12	761	1380	**1081,80**	1896	**1372,92**	2448	**1665,48**	2988	**1949,04**	3516	**2245,20**
13	826	1495	**1171,95**	2054	**1487,33**	2652	**1804,27**	3237	**2111,46**	3809	**2432,30**
14	891	1610	**1262,10**	2212	**1601,74**	2856	**1943,06**	3486	**2273,88**	4102	**2619,40**
15	956	1725	**1352,25**	2370	**1716,15**	3060	**2081,85**	3735	**2436,30**	4395	**2806,50**
16	1021	1840	**1442,40**	2528	**1830,56**	3264	**2220,64**	3984	**2598,72**	4688	**2993,60**
17	1086	1955	**1532,55**	2686	**1944,97**	3468	**2359,43**	4233	**2761,14**	4981	**3180,70**
18	1151	2070	**1622,70**	2844	**2059,38**	3672	**2498,22**	4482	**2923,56**	5274	**3367,80**
19	1216	2185	**1712,85**	3002	**2173,79**	3876	**2637,01**	4731	**3085,98**	5567	**3554,90**
20	1281	2300	**1803,00**	3160	**2288,20**	4080	**2775,80**	4980	**3248,40**	5860	**3742,00**
21	1346	2415	**1893,15**	3318	**2402,61**	4284	**2914,59**	5229	**3410,82**	6153	**3929,10**
22	1411	2530	**1983,30**	3476	**2517,02**	4488	**3053,38**	5478	**3573,24**	6446	**4116,20**
23	1476	2645	**2073,45**	3634	**2631,43**	4692	**3192,17**	5727	**3735,66**	6739	**4303,30**
24	1541	2760	**2163,60**	3792	**2745,84**	4896	**3330,96**	5976	**3898,08**	7032	**4490,40**
25	1606	2875	**2253,75**	3950	**2860,25**	5100	**3469,75**	6225	**4060,50**	7325	**4677,50**
26	1671	2990	**2343,90**	4108	**2974,66**	5304	**3608,54**	6474	**4222,92**	7618	**4864,60**
27	1736	3105	**2434,05**	4266	**3089,07**	5508	**3747,33**	6723	**4385,34**	7911	**5051,70**
28	1801	3220	**2524,20**	4424	**3203,48**	5712	**3886,12**	6972	**4547,76**	8204	**5238,80**
29	1866	3335	**2614,35**	4582	**3317,89**	5916	**4024,91**	7221	**4710,18**	8497	**5425,90**
30	1931	3450	**2704,50**	4740	**3432,30**	6120	**4163,70**	7470	**4872,60**	8790	**5613,00**
31	1996	3565	**2794,65**	4898	**3546,71**	6324	**4302,49**	7719	**5035,02**	9083	**5800,10**
32	2061	3680	**2884,80**	5056	**3661,12**	6528	**4441,28**	7968	**5197,44**	9376	**5987,20**
33	2126	3795	**2974,95**	5214	**3775,53**	6732	**4580,07**	8217	**5359,86**	9669	**6174,30**
34	2191	3910	**3065,10**	5372	**3889,94**	6936	**4718,86**	8466	**5522,28**	9962	**6361,40**
35	2256	4025	**3155,25**	5530	**4004,35**	7140	**4857,65**	8715	**5684,70**	10255	**6548,50**
36	2321	4140	**3245,40**	5688	**4118,76**	7344	**4996,44**	8964	**5847,12**	10548	**6735,60**
37	2386	4255	**3335,55**	5846	**4233,17**	7548	**5135,23**	9213	**6009,54**	10841	**6922,70**
38	2451	4370	**3425,70**	6004	**4347,58**	7752	**5274,02**	9462	**6171,96**	11134	**7109,80**
39	2516	4485	**3515,85**	6162	**4461,99**	7956	**5412,81**	9711	**6334,38**	11427	**7296,90**
40	2581	4600	**3606,00**	6320	**4576,40**	8160	**5551,60**	9960	**6496,80**	11720	**7484,00**

Surcharge for Completto, valve at top, connections V001/V002 €:	**188,72**
Surcharge for Completto, valve at top, connections V007/V008 €:	**250,77**
Surcharge for Completto, valve at bottom, connections V003/V004 €:	**266,94**

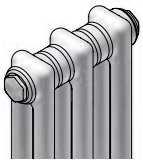
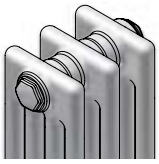
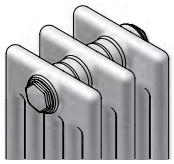
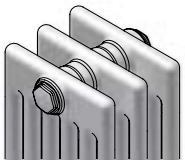
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1800				
					
Model	**K2180**	**K3180**	**K4180**	**K5180**	**K6180**
Depth mm	62	100	136	173	210
Exponent n	1,35	1,34	1,31	1,29	1,32
Max. number of elements	16	16	16	16	16
Price/element €	**98,32**	**129,45**	**155,58**	**181,95**	**210,27**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	556	**393,28**	756	**517,80**	976	**622,32**	1188	**727,80**	1396	**841,08**
5	306	695	**491,60**	945	**647,25**	1220	**777,90**	1485	**909,75**	1745	**1051,35**
6	371	834	**589,92**	1134	**776,70**	1464	**933,48**	1782	**1091,70**	2094	**1261,62**
7	436	973	**688,24**	1323	**906,15**	1708	**1089,06**	2079	**1273,65**	2443	**1471,89**
8	501	1112	**786,56**	1512	**1035,60**	1952	**1244,64**	2376	**1455,60**	2792	**1682,16**
9	566	1251	**884,88**	1701	**1165,05**	2196	**1400,22**	2673	**1637,55**	3141	**1892,43**
10	631	1390	**983,20**	1890	**1294,50**	2440	**1555,80**	2970	**1819,50**	3490	**2102,70**
11	696	1529	**1081,52**	2079	**1423,95**	2684	**1711,38**	3267	**2001,45**	3839	**2312,97**
12	761	1668	**1179,84**	2268	**1553,40**	2928	**1866,96**	3564	**2183,40**	4188	**2523,24**
13	826	1807	**1278,16**	2457	**1682,85**	3172	**2022,54**	3861	**2365,35**	4537	**2733,51**
14	891	1946	**1376,48**	2646	**1812,30**	3416	**2178,12**	4158	**2547,30**	4886	**2943,78**
15	956	2085	**1474,80**	2835	**1941,75**	3660	**2333,70**	4455	**2729,25**	5235	**3154,05**
16	1021	2224	**1573,12**	3024	**2071,20**	3904	**2489,28**	4752	**2911,20**	5584	**3364,32**
17	1086	2363	**1671,44**	3213	**2200,65**	4148	**2644,86**	5049	**3093,15**	5933	**3574,59**
18	1151	2502	**1769,76**	3402	**2330,10**	4392	**2800,44**	5346	**3275,10**	6282	**3784,86**
19	1216	2641	**1868,08**	3591	**2459,55**	4636	**2956,02**	5643	**3457,05**	6631	**3995,13**
20	1281	2780	**1966,40**	3780	**2589,00**	4880	**3111,60**	5940	**3639,00**	6980	**4205,40**
21	1346	2919	**2064,72**	3969	**2718,45**	5124	**3267,18**	6237	**3820,95**	7329	**4415,67**
22	1411	3058	**2163,04**	4158	**2847,90**	5368	**3422,76**	6534	**4002,90**	7678	**4625,94**
23	1476	3197	**2261,36**	4347	**2977,35**	5612	**3578,34**	6831	**4184,85**	8027	**4836,21**
24	1541	3336	**2359,68**	4536	**3106,80**	5856	**3733,92**	7128	**4366,80**	8376	**5046,48**
25	1606	3475	**2458,00**	4725	**3236,25**	6100	**3889,50**	7425	**4548,75**	8725	**5256,75**
26	1671	3614	**2556,32**	4914	**3365,70**	6344	**4045,08**	7722	**4730,70**	9074	**5467,02**
27	1736	3753	**2654,64**	5103	**3495,15**	6588	**4200,66**	8019	**4912,65**	9423	**5677,29**
28	1801	3892	**2752,96**	5292	**3624,60**	6832	**4356,24**	8316	**5094,60**	9772	**5887,56**
29	1866	4031	**2851,28**	5481	**3754,05**	7076	**4511,82**	8613	**5276,55**	10121	**6097,83**
30	1931	4170	**2949,60**	5670	**3883,50**	7320	**4667,40**	8910	**5458,50**	10470	**6308,10**
31	1996	4309	**3047,92**	5859	**4012,95**	7564	**4822,98**	9207	**5640,45**	10819	**6518,37**
32	2061	4448	**3146,24**	6048	**4142,40**	7808	**4978,56**	9504	**5822,40**	11168	**6728,64**
33	2126	4587	**3244,56**	6237	**4271,85**	8052	**5134,14**	9801	**6004,35**	11517	**6938,91**
34	2191	4726	**3342,88**	6426	**4401,30**	8296	**5289,72**	10098	**6186,30**	11866	**7149,18**
35	2256	4865	**3441,20**	6615	**4530,75**	8540	**5445,30**	10395	**6368,25**	12215	**7359,45**
36	2321	5004	**3539,52**	6804	**4660,20**	8784	**5600,88**	10692	**6550,20**	12564	**7569,72**
37	2386	5143	**3637,84**	6993	**4789,65**	9028	**5756,46**	10989	**6732,15**	12913	**7779,99**
38	2451	5282	**3736,16**	7182	**4919,10**	9272	**5912,04**	11286	**6914,10**	13262	**7990,26**
39	2516	5421	**3834,48**	7371	**5048,55**	9516	**6067,62**	11583	**7096,05**	13611	**8200,53**
40	2581	5560	**3932,80**	7560	**5178,00**	9760	**6223,20**	11880	**7278,00**	13960	**8410,80**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

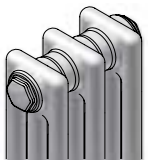
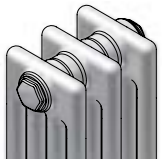
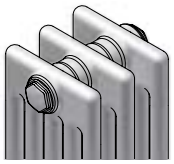
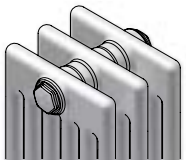
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2000				
					
Model	**K2200**	**K3200**	**K4200**	**K5200**	**K6200**
Depth mm	62	100	136	173	210
Exponent n	1,34	1,33	1,32	1,31	1,31
Max. number of elements	16	16	16	16	16
Price/element €	**105,20**	**136,41**	**167,40**	**196,29**	**226,83**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	624	**420,80**	836	**545,64**	1080	**669,60**	1320	**785,16**	1548	**907,32**
5	306	780	**526,00**	1045	**682,05**	1350	**837,00**	1650	**981,45**	1935	**1134,15**
6	371	936	**631,20**	1254	**818,46**	1620	**1004,40**	1980	**1177,74**	2322	**1360,98**
7	436	1092	**736,40**	1463	**954,87**	1890	**1171,80**	2310	**1374,03**	2709	**1587,81**
8	501	1248	**841,60**	1672	**1091,28**	2160	**1339,20**	2640	**1570,32**	3096	**1814,64**
9	566	1404	**946,80**	1881	**1227,69**	2430	**1506,60**	2970	**1766,61**	3483	**2041,47**
10	631	1560	**1052,00**	2090	**1364,10**	2700	**1674,00**	3300	**1962,90**	3870	**2268,30**
11	696	1716	**1157,20**	2299	**1500,51**	2970	**1841,40**	3630	**2159,19**	4257	**2495,13**
12	761	1872	**1262,40**	2508	**1636,92**	3240	**2008,80**	3960	**2355,48**	4644	**2721,96**
13	826	2028	**1367,60**	2717	**1773,33**	3510	**2176,20**	4290	**2551,77**	5031	**2948,79**
14	891	2184	**1472,80**	2926	**1909,74**	3780	**2343,60**	4620	**2748,06**	5418	**3175,62**
15	956	2340	**1578,00**	3135	**2046,15**	4050	**2511,00**	4950	**2944,35**	5805	**3402,45**
16	1021	2496	**1683,20**	3344	**2182,56**	4320	**2678,40**	5280	**3140,64**	6192	**3629,28**
17	1086	2652	**1788,40**	3553	**2318,97**	4590	**2845,80**	5610	**3336,93**	6579	**3856,11**
18	1151	2808	**1893,60**	3762	**2455,38**	4860	**3013,20**	5940	**3533,22**	6966	**4082,94**
19	1216	2964	**1998,80**	3971	**2591,79**	5130	**3180,60**	6270	**3729,51**	7353	**4309,77**
20	1281	3120	**2104,00**	4180	**2728,20**	5400	**3348,00**	6600	**3925,80**	7740	**4536,60**
21	1346	3276	**2209,20**	4389	**2864,61**	5670	**3515,40**	6930	**4122,09**	8127	**4763,43**
22	1411	3432	**2314,40**	4598	**3001,02**	5940	**3682,80**	7260	**4318,38**	8514	**4990,26**
23	1476	3588	**2419,60**	4807	**3137,43**	6210	**3850,20**	7590	**4514,67**	8901	**5217,09**
24	1541	3744	**2524,80**	5016	**3273,84**	6480	**4017,60**	7920	**4710,96**	9288	**5443,92**
25	1606	3900	**2630,00**	5225	**3410,25**	6750	**4185,00**	8250	**4907,25**	9675	**5670,75**
26	1671	4056	**2735,20**	5434	**3546,66**	7020	**4352,40**	8580	**5103,54**	10062	**5897,58**
27	1736	4212	**2840,40**	5643	**3683,07**	7290	**4519,80**	8910	**5299,83**	10449	**6124,41**
28	1801	4368	**2945,60**	5852	**3819,48**	7560	**4687,20**	9240	**5496,12**	10836	**6351,24**
29	1866	4524	**3050,80**	6061	**3955,89**	7830	**4854,60**	9570	**5692,41**	11223	**6578,07**
30	1931	4680	**3156,00**	6270	**4092,30**	8100	**5022,00**	9900	**5888,70**	11610	**6804,90**
31	1996	4836	**3261,20**	6479	**4228,71**	8370	**5189,40**	10230	**6084,99**	11997	**7031,73**
32	2061	4992	**3366,40**	6688	**4365,12**	8640	**5356,80**	10560	**6281,28**	12384	**7258,56**
33	2126	5148	**3471,60**	6897	**4501,53**	8910	**5524,20**	10890	**6477,57**	12771	**7485,39**
34	2191	5304	**3576,80**	7106	**4637,94**	9180	**5691,60**	11220	**6673,86**	13158	**7712,22**
35	2256	5460	**3682,00**	7315	**4774,35**	9450	**5859,00**	11550	**6870,15**	13545	**7939,05**
36	2321	5616	**3787,20**	7524	**4910,76**	9720	**6026,40**	11880	**7066,44**	13932	**8165,88**
37	2386	5772	**3892,40**	7733	**5047,17**	9990	**6193,80**	12210	**7262,73**	14319	**8392,71**
38	2451	5928	**3997,60**	7942	**5183,58**	10260	**6361,20**	12540	**7459,02**	14706	**8619,54**
39	2516	6084	**4102,80**	8151	**5319,99**	10530	**6528,60**	12870	**7655,31**	15093	**8846,37**
40	2581	6240	**4208,00**	8360	**5456,40**	10800	**6696,00**	13200	**7851,60**	15480	**9073,20**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

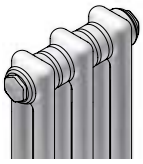
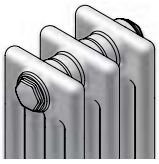
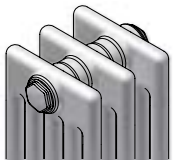
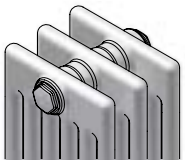
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2200				
					
Model	**K2220**	**K3220**	**K4220**	**K5220**	**K6220**
Depth mm	62	100	136	173	210
Exponent n	1,34	1,33	1,32	1,31	1,31
Max. number of elements	16	16	16	16	16
Price/element €	**111,04**	**145,31**	**178,49**	**209,59**	**243,23**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	688	**444,16**	916	**581,24**	1184	**713,96**	1448	**838,36**	1700	**972,92**
5	306	860	**555,20**	1145	**726,55**	1480	**892,45**	1810	**1047,95**	2125	**1216,15**
6	371	1032	**666,24**	1374	**871,86**	1776	**1070,94**	2172	**1257,54**	2550	**1459,38**
7	436	1204	**777,28**	1603	**1017,17**	2072	**1249,43**	2534	**1467,13**	2975	**1702,61**
8	501	1376	**888,32**	1832	**1162,48**	2368	**1427,92**	2896	**1676,72**	3400	**1945,84**
9	566	1548	**999,36**	2061	**1307,79**	2664	**1606,41**	3258	**1886,31**	3825	**2189,07**
10	631	1720	**1110,40**	2290	**1453,10**	2960	**1784,90**	3620	**2095,90**	4250	**2432,30**
11	696	1892	**1221,44**	2519	**1598,41**	3256	**1963,39**	3982	**2305,49**	4675	**2675,53**
12	761	2064	**1332,48**	2748	**1743,72**	3552	**2141,88**	4344	**2515,08**	5100	**2918,76**
13	826	2236	**1443,52**	2977	**1889,03**	3848	**2320,37**	4706	**2724,67**	5525	**3161,99**
14	891	2408	**1554,56**	3206	**2034,34**	4144	**2498,86**	5068	**2934,26**	5950	**3405,22**
15	956	2580	**1665,60**	3435	**2179,65**	4440	**2677,35**	5430	**3143,85**	6375	**3648,45**
16	1021	2752	**1776,64**	3664	**2324,96**	4736	**2855,84**	5792	**3353,44**	6800	**3891,68**
17	1086	2924	**1887,68**	3893	**2470,27**	5032	**3034,33**	6154	**3563,03**	7225	**4134,91**
18	1151	3096	**1998,72**	4122	**2615,58**	5328	**3212,82**	6516	**3772,62**	7650	**4378,14**
19	1216	3268	**2109,76**	4351	**2760,89**	5624	**3391,31**	6878	**3982,21**	8075	**4621,37**
20	1281	3440	**2220,80**	4580	**2906,20**	5920	**3569,80**	7240	**4191,80**	8500	**4864,60**
21	1346	3612	**2331,84**	4809	**3051,51**	6216	**3748,29**	7602	**4401,39**	8925	**5107,83**
22	1411	3784	**2442,88**	5038	**3196,82**	6512	**3926,78**	7964	**4610,98**	9350	**5351,06**
23	1476	3956	**2553,92**	5267	**3342,13**	6808	**4105,27**	8326	**4820,57**	9775	**5594,29**
24	1541	4128	**2664,96**	5496	**3487,44**	7104	**4283,76**	8688	**5030,16**	10200	**5837,52**
25	1606	4300	**2776,00**	5725	**3632,75**	7400	**4462,25**	9050	**5239,75**	10625	**6080,75**
26	1671	4472	**2887,04**	5954	**3778,06**	7696	**4640,74**	9412	**5449,34**	11050	**6323,98**
27	1736	4644	**2998,08**	6183	**3923,37**	7992	**4819,23**	9774	**5658,93**	11475	**6567,21**
28	1801	4816	**3109,12**	6412	**4068,68**	8288	**4997,72**	10136	**5868,52**	11900	**6810,44**
29	1866	4988	**3220,16**	6641	**4213,99**	8584	**5176,21**	10498	**6078,11**	12325	**7053,67**
30	1931	5160	**3331,20**	6870	**4359,30**	8880	**5354,70**	10860	**6287,70**	12750	**7296,90**
31	1996	5332	**3442,24**	7099	**4504,61**	9176	**5533,19**	11222	**6497,29**	13175	**7540,13**
32	2061	5504	**3553,28**	7328	**4649,92**	9472	**5711,68**	11584	**6706,88**	13600	**7783,36**
33	2126	5676	**3664,32**	7557	**4795,23**	9768	**5890,17**	11946	**6916,47**	14025	**8026,59**
34	2191	5848	**3775,36**	7786	**4940,54**	10064	**6068,66**	12308	**7126,06**	14450	**8269,82**
35	2256	6020	**3886,40**	8015	**5085,85**	10360	**6247,15**	12670	**7335,65**	14875	**8513,05**
36	2321	6192	**3997,44**	8244	**5231,16**	10656	**6425,64**	13032	**7545,24**	15300	**8756,28**
37	2386	6364	**4108,48**	8473	**5376,47**	10952	**6604,13**	13394	**7754,83**	15725	**8999,51**
38	2451	6536	**4219,52**	8702	**5521,78**	11248	**6782,62**	13756	**7964,42**	16150	**9242,74**
39	2516	6708	**4330,56**	8931	**5667,09**	11544	**6961,11**	14118	**8174,01**	16575	**9485,97**
40	2581	6880	**4441,60**	9160	**5812,40**	11840	**7139,60**	14480	**8383,60**	17000	**9729,20**

Surcharge for Completto, valve at top, connections V001/V002 €: 188,72

Surcharge for Completto, valve at top, connections V007/V008 €: 250,77

Surcharge for Completto, valve at bottom, connections V003/V004 €: 266,94

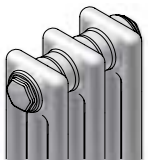
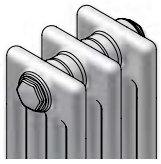
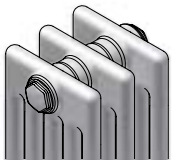
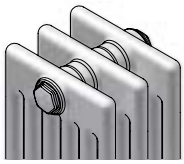
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2500				
					
Model	**K2250**	**K3250**	**K4250**	**K5250**	**K6250**
Depth mm	62	100	136	173	210
Exponent n	1,33	1,33	1,32	1,31	1,30
Max. number of elements	16	16	16	16	16
Price/element €	**119,52**	**159,33**	**195,19**	**229,82**	**267,90**

Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	241	780	**478,08**	1040	**637,32**	1340	**780,76**	1640	**919,28**	1924	**1071,60**
5	306	975	**597,60**	1300	**796,65**	1675	**975,95**	2050	**1149,10**	2405	**1339,50**
6	371	1170	**717,12**	1560	**955,98**	2010	**1171,14**	2460	**1378,92**	2886	**1607,40**
7	436	1365	**836,64**	1820	**1115,31**	2345	**1366,33**	2870	**1608,74**	3367	**1875,30**
8	501	1560	**956,16**	2080	**1274,64**	2680	**1561,52**	3280	**1838,56**	3848	**2143,20**
9	566	1755	**1075,68**	2340	**1433,97**	3015	**1756,71**	3690	**2068,38**	4329	**2411,10**
10	631	1950	**1195,20**	2600	**1593,30**	3350	**1951,90**	4100	**2298,20**	4810	**2679,00**
11	696	2145	**1314,72**	2860	**1752,63**	3685	**2147,09**	4510	**2528,02**	5291	**2946,90**
12	761	2340	**1434,24**	3120	**1911,96**	4020	**2342,28**	4920	**2757,84**	5772	**3214,80**
13	826	2535	**1553,76**	3380	**2071,29**	4355	**2537,47**	5330	**2987,66**	6253	**3482,70**
14	891	2730	**1673,28**	3640	**2230,62**	4690	**2732,66**	5740	**3217,48**	6734	**3750,60**
15	956	2925	**1792,80**	3900	**2389,95**	5025	**2927,85**	6150	**3447,30**	7215	**4018,50**
16	1021	3120	**1912,32**	4160	**2549,28**	5360	**3123,04**	6560	**3677,12**	7696	**4286,40**
17	1086	3315	**2031,84**	4420	**2708,61**	5695	**3318,23**	6970	**3906,94**	8177	**4554,30**
18	1151	3510	**2151,36**	4680	**2867,94**	6030	**3513,42**	7380	**4136,76**	8658	**4822,20**
19	1216	3705	**2270,88**	4940	**3027,27**	6365	**3708,61**	7790	**4366,58**	9139	**5090,10**
20	1281	3900	**2390,40**	5200	**3186,60**	6700	**3903,80**	8200	**4596,40**	9620	**5358,00**
21	1346	4095	**2509,92**	5460	**3345,93**	7035	**4098,99**	8610	**4826,22**	10101	**5625,90**
22	1411	4290	**2629,44**	5720	**3505,26**	7370	**4294,18**	9020	**5056,04**	10582	**5893,80**
23	1476	4485	**2748,96**	5980	**3664,59**	7705	**4489,37**	9430	**5285,86**	11063	**6161,70**
24	1541	4680	**2868,48**	6240	**3823,92**	8040	**4684,56**	9840	**5515,68**	11544	**6429,60**
25	1606	4875	**2988,00**	6500	**3983,25**	8375	**4879,75**	10250	**5745,50**	12025	**6697,50**
26	1671	5070	**3107,52**	6760	**4142,58**	8710	**5074,94**	10660	**5975,32**	12506	**6965,40**
27	1736	5265	**3227,04**	7020	**4301,91**	9045	**5270,13**	11070	**6205,14**	12987	**7233,30**
28	1801	5460	**3346,56**	7280	**4461,24**	9380	**5465,32**	11480	**6434,96**	13468	**7501,20**
29	1866	5655	**3466,08**	7540	**4620,57**	9715	**5660,51**	11890	**6664,78**	13949	**7769,10**
30	1931	5850	**3585,60**	7800	**4779,90**	10050	**5855,70**	12300	**6894,60**	14430	**8037,00**
31	1996	6045	**3705,12**	8060	**4939,23**	10385	**6050,89**	12710	**7124,42**	14911	**8304,90**
32	2061	6240	**3824,64**	8320	**5098,56**	10720	**6246,08**	13120	**7354,24**	15392	**8572,80**
33	2126	6435	**3944,16**	8580	**5257,89**	11055	**6441,27**	13530	**7584,06**	15873	**8840,70**
34	2191	6630	**4063,68**	8840	**5417,22**	11390	**6636,46**	13940	**7813,88**	16354	**9108,60**
35	2256	6825	**4183,20**	9100	**5576,55**	11725	**6831,65**	14350	**8043,70**	16835	**9376,50**
36	2321	7020	**4302,72**	9360	**5735,88**	12060	**7026,84**	14760	**8273,52**	17316	**9644,40**
37	2386	7215	**4422,24**	9620	**5895,21**	12395	**7222,03**	15170	**8503,34**	17797	**9912,30**
38	2451	7410	**4541,76**	9880	**6054,54**	12730	**7417,22**	15580	**8733,16**	18278	**10180,20**
39	2516	7605	**4661,28**	10140	**6213,87**	13065	**7612,41**	15990	**8962,98**	18759	**10448,10**
40	2581	7800	**4780,80**	10400	**6373,20**	13400	**7807,60**	16400	**9192,80**	19240	**10716,00**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

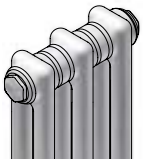
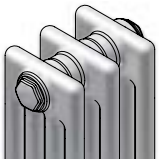
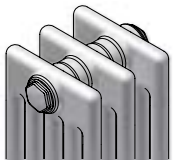
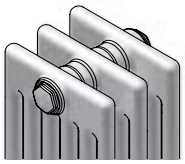
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	2800				
					
Model	**K2280**	**K3280**	**K4280**	**K5280**	**K6280**
Depth mm	62	100	136	173	210
Exponent n	1,32	1,33	1,32	1,31	1,30
Max. number of elements	16	16	16	16	14
Price/element €	**129,84**	**172,71**	**214,98**	**250,55**	**294,83**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	876	**519,36**	1160	**690,84**	1500	**859,92**	1832	**1002,20**	2148	**1179,32**
5	306	1095	**649,20**	1450	**863,55**	1875	**1074,90**	2290	**1252,75**	2685	**1474,15**
6	371	1314	**779,04**	1740	**1036,26**	2250	**1289,88**	2748	**1503,30**	3222	**1768,98**
7	436	1533	**908,88**	2030	**1208,97**	2625	**1504,86**	3206	**1753,85**	3759	**2063,81**
8	501	1752	**1038,72**	2320	**1381,68**	3000	**1719,84**	3664	**2004,40**	4296	**2358,64**
9	566	1971	**1168,56**	2610	**1554,39**	3375	**1934,82**	4122	**2254,95**	4833	**2653,47**
10	631	2190	**1298,40**	2900	**1727,10**	3750	**2149,80**	4580	**2505,50**	5370	**2948,30**
11	696	2409	**1428,24**	3190	**1899,81**	4125	**2364,78**	5038	**2756,05**	5907	**3243,13**
12	761	2628	**1558,08**	3480	**2072,52**	4500	**2579,76**	5496	**3006,60**	6444	**3537,96**
13	826	2847	**1687,92**	3770	**2245,23**	4875	**2794,74**	5954	**3257,15**	6981	**3832,79**
14	891	3066	**1817,76**	4060	**2417,94**	5250	**3009,72**	6412	**3507,70**	7518	**4127,62**
15	956	3285	**1947,60**	4350	**2590,65**	5625	**3224,70**	6870	**3758,25**	8055	**4422,45**
16	1021	3504	**2077,44**	4640	**2763,36**	6000	**3439,68**	7328	**4008,80**	8592	**4717,28**
17	1086	3723	**2207,28**	4930	**2936,07**	6375	**3654,66**	7786	**4259,35**	9129	**5012,11**
18	1151	3942	**2337,12**	5220	**3108,78**	6750	**3869,64**	8244	**4509,90**	9666	**5306,94**
19	1216	4161	**2466,96**	5510	**3281,49**	7125	**4084,62**	8702	**4760,45**	10203	**5601,77**
20	1281	4380	**2596,80**	5800	**3454,20**	7500	**4299,60**	9160	**5011,00**	10740	**5896,60**
21	1346	4599	**2726,64**	6090	**3626,91**	7875	**4514,58**	9618	**5261,55**	11277	**6191,43**
22	1411	4818	**2856,48**	6380	**3799,62**	8250	**4729,56**	10076	**5512,10**	11814	**6486,26**
23	1476	5037	**2986,32**	6670	**3972,33**	8625	**4944,54**	10534	**5762,65**	12351	**6781,09**
24	1541	5256	**3116,16**	6960	**4145,04**	9000	**5159,52**	10992	**6013,20**	12888	**7075,92**
25	1606	5475	**3246,00**	7250	**4317,75**	9375	**5374,50**	11450	**6263,75**	13425	**7370,75**
26	1671	5694	**3375,84**	7540	**4490,46**	9750	**5589,48**	11908	**6514,30**	13962	**7665,58**
27	1736	5913	**3505,68**	7830	**4663,17**	10125	**5804,46**	12366	**6764,85**	14499	**7960,41**
28	1801	6132	**3635,52**	8120	**4835,88**	10500	**6019,44**	12824	**7015,40**	15036	**8255,24**
29	1866	6351	**3765,36**	8410	**5008,59**	10875	**6234,42**	13282	**7265,95**	15573	**8550,07**
30	1931	6570	**3895,20**	8700	**5181,30**	11250	**6449,40**	13740	**7516,50**	16110	**8844,90**
31	1996	6789	**4025,04**	8990	**5354,01**	11625	**6664,38**	14198	**7767,05**	16647	**9139,73**
32	2061	7008	**4154,88**	9280	**5526,72**	12000	**6879,36**	14656	**8017,60**	17184	**9434,56**
33	2126	7227	**4284,72**	9570	**5699,43**	12375	**7094,34**	15114	**8268,15**	17721	**9729,39**
34	2191	7446	**4414,56**	9860	**5872,14**	12750	**7309,32**	15572	**8518,70**	18258	**10024,22**
35	2256	7665	**4544,40**	10150	**6044,85**	13125	**7524,30**	16030	**8769,25**	18795	**10319,05**
36	2321	7884	**4674,24**	10440	**6217,56**	13500	**7739,28**	16488	**9019,80**	19332	**10613,88**
37	2386	8103	**4804,08**	10730	**6390,27**	13875	**7954,26**	16946	**9270,35**	19869	**10908,71**
38	2451	8322	**4933,92**	11020	**6562,98**	14250	**8169,24**	17404	**9520,90**	20406	**11203,54**
39	2516	8541	**5063,76**	11310	**6735,69**	14625	**8384,22**	17862	**9771,45**	20943	**11498,37**
40	2581	8760	**5193,60**	11600	**6908,40**	15000	**8599,20**	18320	**10022,00**	21480	**11793,20**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

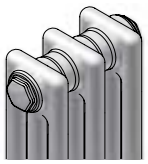
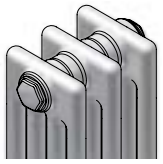
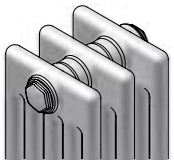
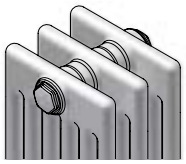
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	3000				
					
Model	**K2300**	**K3300**	**K4300**	**K5300**	**K6300**
Depth mm	62	100	136	173	210
Exponent n	1,32	1,33	1,32	1,31	1,30
Max. number of elements	16	16	16	16	14
Price/element €	**135,02**	**182,81**	**226,11**	**264,16**	**309,63**

Length		Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	241	940	**540,08**	1244	**731,24**	1604	**904,44**	1960	**1056,64**	2300	**1238,52**
5	306	1175	**675,10**	1555	**914,05**	2005	**1130,55**	2450	**1320,80**	2875	**1548,15**
6	371	1410	**810,12**	1866	**1096,86**	2406	**1356,66**	2940	**1584,96**	3450	**1857,78**
7	436	1645	**945,14**	2177	**1279,67**	2807	**1582,77**	3430	**1849,12**	4025	**2167,41**
8	501	1880	**1080,16**	2488	**1462,48**	3208	**1808,88**	3920	**2113,28**	4600	**2477,04**
9	566	2115	**1215,18**	2799	**1645,29**	3609	**2034,99**	4410	**2377,44**	5175	**2786,67**
10	631	2350	**1350,20**	3110	**1828,10**	4010	**2261,10**	4900	**2641,60**	5750	**3096,30**
11	696	2585	**1485,22**	3421	**2010,91**	4411	**2487,21**	5390	**2905,76**	6325	**3405,93**
12	761	2820	**1620,24**	3732	**2193,72**	4812	**2713,32**	5880	**3169,92**	6900	**3715,56**
13	826	3055	**1755,26**	4043	**2376,53**	5213	**2939,43**	6370	**3434,08**	7475	**4025,19**
14	891	3290	**1890,28**	4354	**2559,34**	5614	**3165,54**	6860	**3698,24**	8050	**4334,82**
15	956	3525	**2025,30**	4665	**2742,15**	6015	**3391,65**	7350	**3962,40**	8625	**4644,45**
16	1021	3760	**2160,32**	4976	**2924,96**	6416	**3617,76**	7840	**4226,56**	9200	**4954,08**
17	1086	3995	**2295,34**	5287	**3107,77**	6817	**3843,87**	8330	**4490,72**	9775	**5263,71**
18	1151	4230	**2430,36**	5598	**3290,58**	7218	**4069,98**	8820	**4754,88**	10350	**5573,34**
19	1216	4465	**2565,38**	5909	**3473,39**	7619	**4296,09**	9310	**5019,04**	10925	**5882,97**
20	1281	4700	**2700,40**	6220	**3656,20**	8020	**4522,20**	9800	**5283,20**	11500	**6192,60**
21	1346	4935	**2835,42**	6531	**3839,01**	8421	**4748,31**	10290	**5547,36**	12075	**6502,23**
22	1411	5170	**2970,44**	6842	**4021,82**	8822	**4974,42**	10780	**5811,52**	12650	**6811,86**
23	1476	5405	**3105,46**	7153	**4204,63**	9223	**5200,53**	11270	**6075,68**	13225	**7121,49**
24	1541	5640	**3240,48**	7464	**4387,44**	9624	**5426,64**	11760	**6339,84**	13800	**7431,12**
25	1606	5875	**3375,50**	7775	**4570,25**	10025	**5652,75**	12250	**6604,00**	14375	**7740,75**
26	1671	6110	**3510,52**	8086	**4753,06**	10426	**5878,86**	12740	**6868,16**	14950	**8050,38**
27	1736	6345	**3645,54**	8397	**4935,87**	10827	**6104,97**	13230	**7132,32**	15525	**8360,01**
28	1801	6580	**3780,56**	8708	**5118,68**	11228	**6331,08**	13720	**7396,48**	16100	**8669,64**
29	1866	6815	**3915,58**	9019	**5301,49**	11629	**6557,19**	14210	**7660,64**	16675	**8979,27**
30	1931	7050	**4050,60**	9330	**5484,30**	12030	**6783,30**	14700	**7924,80**	17250	**9288,90**
31	1996	7285	**4185,62**	9641	**5667,11**	12431	**7009,41**	15190	**8188,96**	17825	**9598,53**
32	2061	7520	**4320,64**	9952	**5849,92**	12832	**7235,52**	15680	**8453,12**	18400	**9908,16**
33	2126	7755	**4455,66**	10263	**6032,73**	13233	**7461,63**	16170	**8717,28**	18975	**10217,79**
34	2191	7990	**4590,68**	10574	**6215,54**	13634	**7687,74**	16660	**8981,44**	19550	**10527,42**
35	2256	8225	**4725,70**	10885	**6398,35**	14035	**7913,85**	17150	**9245,60**	20125	**10837,05**
36	2321	8460	**4860,72**	11196	**6581,16**	14436	**8139,96**	17640	**9509,76**	20700	**11146,68**
37	2386	8695	**4995,74**	11507	**6763,97**	14837	**8366,07**	18130	**9773,92**	21275	**11456,31**
38	2451	8930	**5130,76**	11818	**6946,78**	15238	**8592,18**	18620	**10038,08**	21850	**11765,94**
39	2516	9165	**5265,78**	12129	**7129,59**	15639	**8818,29**	19110	**10302,24**	22425	**12075,57**
40	2581	9400	**5400,80**	12440	**7312,40**	16040	**9044,40**	19600	**10566,40**	23000	**12385,20**

Surcharge for Completto, valve at top, connections V001/V002 €: **188,72**

Surcharge for Completto, valve at top, connections V007/V008 €: **250,77**

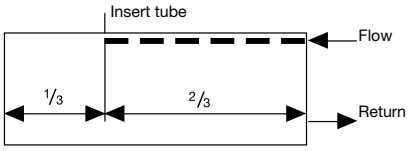
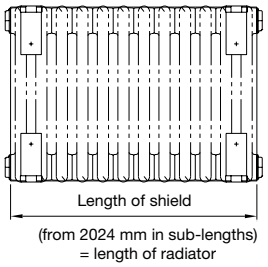
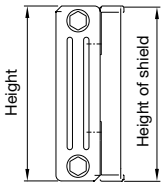
Surcharge for Completto, valve at bottom, connections V003/V004 €: **266,94**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Clinic

		Price €
High pressure version max. 18 bar (not for Completto version) - with welded plugs - with welded plugs and tied rod - for radiators comprising several blocks additionally per welded joint	 2- to 3-column 4- to 6-column (at top and bottom)	 **215,71 per RAD** **317,69 per RAD** **108,00**
Operating temperature 120 °C		**On request**
Further connections		**On request**
Insert tube for Zehnder Charleston radiators with same-side connections, a flow insert tube is factory-installed in ²/₃ of the radiator length from the following element numbers or lengths, in order to guarantee the thermal outputs shown in the catalogue. 2-column from 87 elements = length 5636 mm 3-column from 85 elements = length 5506 mm 4-column from 81 elements = length 5246 mm 5-column from 71 elements = length 4596 mm 6-column from 55 elements = length 3556 mm  		**239,79 per RAD**
Intermediate heights calculated on next-higher catalogue height		**On request**
Angled or curved design (see page 43)		**On request**
Radiator designs over height 3000 mm		**On request**
Welded lugs, price per lug		**33,42**
Galvanising (see also explanations on galvanising in section "General") Galvanising with subsequent standard finish (RAL 9016) maximum dimensions: 3000 x 850 x 450 mm		**On request**
Completto version with valve inserts for clip seal (Danfoss thermostat) instead of M 30 x 1,5 threaded connection		**No surcharge**
Completto Q-Tech Charleston Completto Q-Tech is built in factory-made, for an automatic hydraulic balancing of pressure differences that can occure when, e.g. connecting or turning off system parts. By the integrated diaphragm-sensed flow-control in the valve insert, the differential pressure is constantly kept above the pre-setting and standard cross section value. Therefore it is possible to quickly and easily do the hydraulic balancing of new and old systems or unknown pipe networks. The pre-setting of the needed flow for the customer needs on site, is achieved by turning the regulation ring with the pre-setting key which is integrated in the scope of delivery. Large flows of 10 to 170 l/h and very big differential pressure (max. 1,5 bar). The Q-Tech valve cannot be retrofitted with AV6, AV9 or other valves.		**123,20** (Surcharge on the corresponding price for Completto connection, see page 45)
Thermal radiation shield for heights from 260 mm to 750 mm and a maximum length of the thermal radiation shield of up to 2024 mm; for large lengths, the thermal radiation shields are supplied in 2 or more pieces. The thermal radiation shield consists of special 6 mm safety glass with thermal coating, rounded corners, finely polished edges, including holders for on-site attachment to the last row of columns. Bracket painted with powder-coating in the colour of the radiator.   		

Number of elements Zehnder Charleston Clinic	Number of shields	Number of brackets
5 to 21	1	4
22 to 31	1	6
32 to 42	2	8
43 to 61	2	12
62 to 84	3	18
85 to 92	3	18

Basic price per reflective cover plate	**189,17**
Price per metre, thermal radiation shield:	
H = 260 - 450 mm	**91,70**
H = 500 - 750 mm	**139,65**
H = Height of shield	

Basis for calculating the surcharge is the standard finish

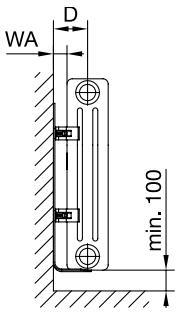
Zehnder Charleston Clinic

Connections for Zehnder Charleston Clinic see chapter Zehnder Charleston page 43 ff.

Zehnder Charleston Clinic
with EasyFix

Fixing details for accessory set SMB

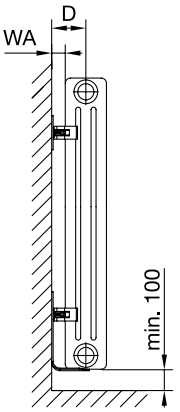
Set SMB 30-75



Distance D:

2-column	66 mm
3-column	85 mm
4-column	103 mm
5-column	122 mm
6-column	140 mm

Set SMB 2T [2]



Distance D:

2-column	66 mm
3-column	85 mm
4-column	103 mm
5-column	122 mm
6-column	140 mm

Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no.[3] Set White	€/Set White	€/Set Colour
		H = 300-369					
		All models					
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB30 3 x SMB30 4 x SMB30 5 x SMB30	173521 173621 173721 173821	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 370-484					
		All models					
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB40 3 x SMB40 4 x SMB40 5 x SMB40	173531 173631 173731 173831	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 485-679					
		All models					
		L = 4-16 el. L = 17-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB50 3 x SMB50 4 x SMB50 5 x SMB50	173541 173641 173741 173841	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 680-1000					
		All models					
		L = 4-14 el. L = 15-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB75 3 x SMB75 4 x SMB75 5 x SMB75	173551 173651 173751 173851	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		H = 1001-1500					
		2- to 4-column					
		L = 4-14 el. L = 15-27 el. L = 28-40 el. L = 41-55 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T 5 x SMB2T	173511 173611 173711 173811	**21,58** **32,41** **43,20** **53,98**	**32,42** **48,62** **64,80** **81,03**
		5- to 6-column					
		L = 4-10 el. L = 11-20 el. L = 21-30 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	**21,58** **32,41** **43,20**	**32,42** **48,62** **64,80**
		H = 1501-2200					
		2- to 4-column					
		L = 4-11 el. L = 12-21 el. L = 22-31 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	**21,58** **32,41** **43,20**	**32,42** **48,62** **64,80**
		5- to 6-column					
		L = 4-8 el. L = 9-15 el. L = 16-22 el.	35	2 x SMB2T 3 x SMB2T 4 x SMB2T	173511 173611 173711	**21,58** **32,41** **43,20**	**32,42** **48,62** **64,80**

H = Height of radiator in mm
L = Length of radiator in elements
D = Dimension from wall to middle of connection
WA = Wall clearance

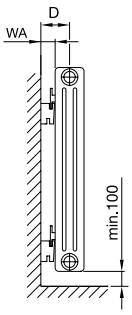
[2] Further allocations of the bracket SMB 2T for heights from 245 mm and up to 3000 mm on request.
[3] The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston Clinic

Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no.[3] set White	€/Set White	€/Set Colour

Accessory sets CVD, BKE

Set CVD



Distance D:

2-column	57 mm
3-column	76 mm
4-column	94 mm
5-column	112 mm
6-column	131 mm

All models

Height 260 - 1500 mm with retaining spring

L = 4-15 el.	24	4 x BHK + CVD 0	775421	**39,63**	**75,04**
L = 16-30 el.		6 x BHK + CVD 0	775621	**58,42**	**111,56**
L = 31-44 el.		8 x BHK + CVD 0	775821	**77,28**	**148,09**

2- to 5-column

Height 1501 - 2200 mm with retaining spring

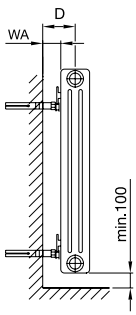
L = 4-15 el.	24	4 x BHK + CVD 0	775421	**39,63**	**75,04**
L = 16-23 el.		6 x BHK + CVD 0	775621	**58,42**	**111,56**
L = 24-30 el.		8 x BHK + CVD 0	775821	**77,28**	**148,09**
L = 31-36 el.		10 x BHK + CVD 0	775921	**96,09**	**184,61**

6-column

Height 1501 - 2200 mm with retaining spring

L = 4-7 el.	24	4 x BHK + CVD 0	775421	**39,63**	**75,04**
L = 8-15 el.		6 x BHK + CVD 0	775621	**58,42**	**111,56**
L = 16-23 el.		8 x BHK + CVD 0	775821	**77,28**	**148,09**
L = 24-30 el.		10 x BHK + CVD 0	775921	**96,09**	**184,61**
L = 31-36 el.		12 x BHK + CVD 0	-	**-**	**-**

Set BKE [2]



Distance D:

2-column	77 mm
3-column	96 mm
4-column	114 mm
5-column	133 mm
6-column	151 mm

All models

Height 260 - 1500 mm with retaining spring

L = 4-15 el.	46	4 x BHK+BKE160	775461	**52,82**	**73,54**
L = 16-30 el.		6 x BHK+BKE160	775661	**75,73**	**106,65**
L = 31-44 el.		8 x BHK+BKE160	775861	**98,76**	**139,79**

2- to 5-column

Height 1501 - 2200 mm with retaining spring

L = 4-15 el.	46	4 x BHK+BKE160	775461	**52,82**	**73,54**
L = 16-23 el.		6 x BHK+BKE160	775661	**75,73**	**106,65**
L = 24-30 el.		8 x BHK+BKE160	775861	**98,76**	**139,79**
L = 31-36 el.		10 x BHK+BKE160	775961	**121,59**	**172,91**

6-column

Height 1501 - 2200 mm with retaining spring

L = 4-7 el.	46	4 x BHK+BKE160	775461	**52,82**	**73,54**
L = 8-15 el.		6 x BHK+BKE160	775661	**75,73**	**106,65**
L = 16-23 el.		8 x BHK+BKE160	775861	**98,76**	**139,79**
L = 24-30 el.		10 x BHK+BKE160	775961	**121,59**	**172,91**
L = 31-36 el.		12 x BHK+BKE160	-	**-**	**-**

H = Height of radiator in elements D = Dimension from wall to middle of connection WA = Wall clearance

[2] Average distances are given for D and WA for set BKE, as bracket installation depth is variable.
[3] The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.

Zehnder Charleston Clinic

Illustration	Description	Model			
		Application	Amount + type of brackets	Article no. Piece	**Price/piece €**
For other fixing options using accessories, see page 148 onwards.					
Wall bracket AK [3]	For adjustable wall clearance, short and long version possible, standard: Short, RAL 9016, for details see "Accessories"	**All models**			
		Height 260 - 1500 mm			
		L = 4-15 el. L = 16-30 el. L = 31-44 el.	4 x BHK + AK 1 6 x BHK + AK 1 8 x BHK + AK 1	Bracket BHK: 775011 Bracket AK 1: 796011	**7,11** **11,96**
		2- to 5-column			
		Height 1501 - 2200 mm			
		L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	4 x BHK + AK 1 6 x BHK + AK 1 8 x BHK + AK 1 10 x BHK + AK 1	Bracket BHK: 775011 Bracket AK 1: 796011	**7,11** **11,96**
T-bracket AKK	For mounting, for adjustable wall clearance, combination with bracket TKK is recommended, standard: RAL 9016. For details, see "Accessories"	**All models**			
		Height 260 - 600 mm			
		L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	2 x AKK 3 x AKK 4 x AKK 5 x AKK	By length	**8,65 - 13,77**
Free-standing floor support STF	For mounting on unfinished or finished floor, different lengths possible, standard: RAL 9016. For details, see "Accessories"	**All models**			
		Height H: 260 to < 600 mm [2]			
		L = 4-15 el. L = 16-23 el. L = 24-30 el. L = 31-36 el.	2 x STF2K / STF3K 3 x STF2K / STF3K 4 x STF2K / STF3K 5 x STF2K / STF3K	By height	STF2K: **36,26 / 40,80** STF3K: **36,42 / 41,01**

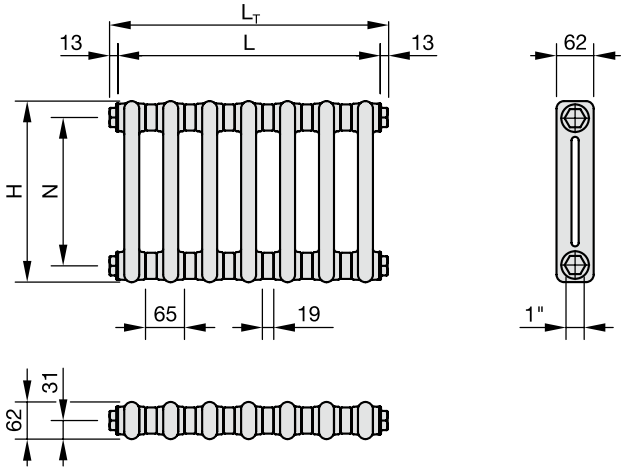
L = Length of radiator in sections

[2] Provided from a height of 600 mm for requirements class 2 additional brackets

[3] An on-site locking device may be required depending on the installation and connection situation and net weight of the radiator

Zehnder Charleston Clinic

Model 2-column Clinic



H = Height
L = Length = elements x 65 mm - 19 mm
L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
N = Boss spacing = H - 58 mm
T = Depth
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

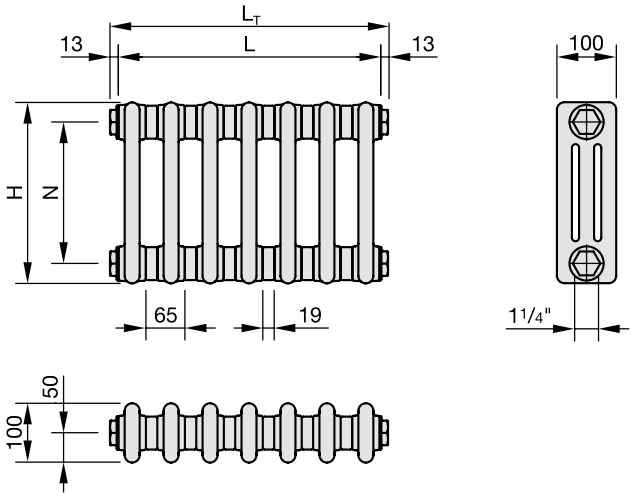
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m^2	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K2026	260	202	62	0,04	0,4	0,47	25	2,1	1,30	23,9	19,2	12,2
K2030	292	234	62	0,05	0,4	0,51	25	2,3	1,29	26,5	21,3	13,6
K2035	342	284	62	0,06	0,4	0,58	24	2,5	1,29	30,4	24,4	15,6
K2040	392	334	62	0,07	0,5	0,62	25	2,8	1,29	34,2	27,5	17,6
K2045	442	384	62	0,07	0,5	0,69	24	3,0	1,29	37,9	30,5	19,5
K2050	492	434	62	0,08	0,6	0,75	23	3,3	1,29	41,6	33,4	21,4
K2055	542	484	62	0,09	0,6	0,82	23	3,6	1,29	45,2	36,3	23,2
K2060	592	534	62	0,10	0,6	0,88	23	3,9	1,29	48,8	39,2	25,1
K2075	742	684	62	0,12	0,8	1,08	22	4,8	1,29	59,2	47,6	30,4
K2090	892	834	62	0,14	0,9	1,28	22	5,8	1,30	69,4	55,7	35,4
K2100	992	934	62	0,16	1,0	1,41	22	6,4	1,30	76,0	61,0	38,8
K2110	1092	1034	62	0,18	1,0	1,54	22	7,1	1,30	82,6	66,3	42,2
K2120	1192	1134	62	0,19	1,1	1,67	22	7,8	1,30	91,1	73,1	46,5
K2150	1492	1434	62	0,24	1,3	2,07	23	9,9	1,33	115,0	91,8	57,8
K2180	1792	1734	62	0,29	1,6	2,46	23	12,1	1,35	139,0	110,5	69,2
K2200	1992	1934	62	0,32	1,8	2,72	23	13,5	1,34	156,0	124,3	78,1
K2220	2192	2134	62	0,35	1,9	2,98	23	14,9	1,34	172,0	137,0	86,1
K2250	2492	2434	62	0,40	2,2	3,38	23	16,8	1,33	195,0	155,6	98,1
K2280	2792	2734	62	0,45	2,4	3,77	23	18,8	1,32	219,0	175,1	110,7
K2300	2992	2934	62	0,48	2,6	4,03	23	20,2	1,32	235,0	187,9	118,8

Zehnder Charleston Clinic

Model 3-column Clinic



H = Height
L = Length = elements x 65 mm - 19 mm
L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
N = Boss spacing = H - 66 mm
T = Depth
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

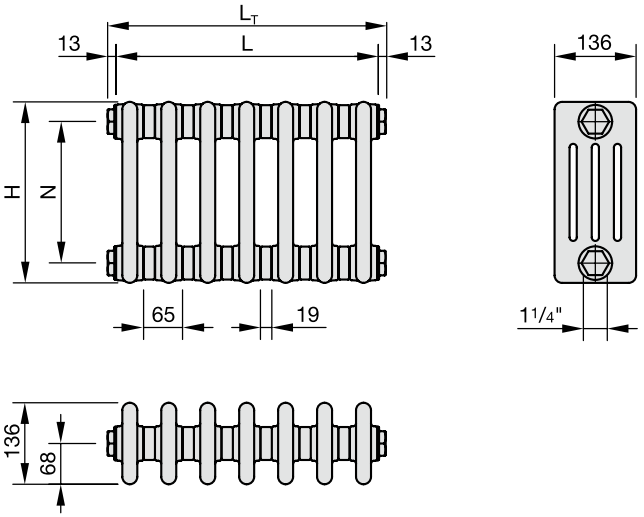
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m^2	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	$\Phi_s=\Delta T$ 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K3026	260	194	100	0,06	0,6	0,63	21	2,7	1,27	31,2	25,2	16,2
K3030	300	234	100	0,07	0,6	0,71	20	3,1	1,27	35,4	28,5	18,4
K3035	350	284	100	0,08	0,7	0,80	20	3,5	1,28	40,6	32,7	21,0
K3040	400	334	100	0,10	0,7	0,91	19	4,0	1,28	45,7	36,8	23,6
K3045	450	384	100	0,11	0,8	1,01	19	4,4	1,28	50,8	40,9	26,2
K3050	500	434	100	0,12	0,9	1,10	18	4,8	1,28	55,9	45,0	28,8
K3055	550	484	100	0,13	0,9	1,20	18	5,3	1,29	61,0	49,0	31,3
K3060	600	534	100	0,14	1,0	1,30	18	5,7	1,29	66,0	53,0	33,9
K3075	750	684	100	0,18	1,2	1,59	18	6,9	1,30	81,1	65,0	41,4
K3090	900	834	100	0,21	1,3	1,89	18	8,2	1,31	96,3	77,1	48,9
K3100	1000	934	100	0,24	1,5	2,08	18	9,0	1,32	107,0	85,5	54,1
K3110	1100	1034	100	0,26	1,6	2,28	18	9,8	1,32	117,0	93,5	59,1
K3120	1200	1134	100	0,29	1,7	2,48	18	10,8	1,33	127,0	101,3	63,9
K3150	1500	1434	100	0,36	2,0	3,06	18	13,7	1,33	158,0	126,1	79,5
K3180	1800	1734	100	0,43	2,4	3,65	18	16,5	1,34	189,0	150,6	94,6
K3200	2000	1934	100	0,47	2,6	4,04	18	18,4	1,33	209,0	166,8	105,1
K3220	2200	2134	100	0,52	2,9	4,44	18	20,2	1,33	229,0	182,7	115,2
K3250	2500	2434	100	0,56	3,3	5,02	18	22,7	1,33	260,0	207,5	130,8
K3280	2800	2734	100	0,66	3,7	5,61	18	24,9	1,33	290,0	231,4	145,8
K3300	3000	2934	100	0,71	4,0	6,00	18	26,7	1,33	311,0	248,2	156,4

Zehnder Charleston Clinic

Model 4-column Clinic



H = Height
L = Length = elements x 65 mm - 19 mm
L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
N = Boss spacing = H - 66 mm
T = Depth
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

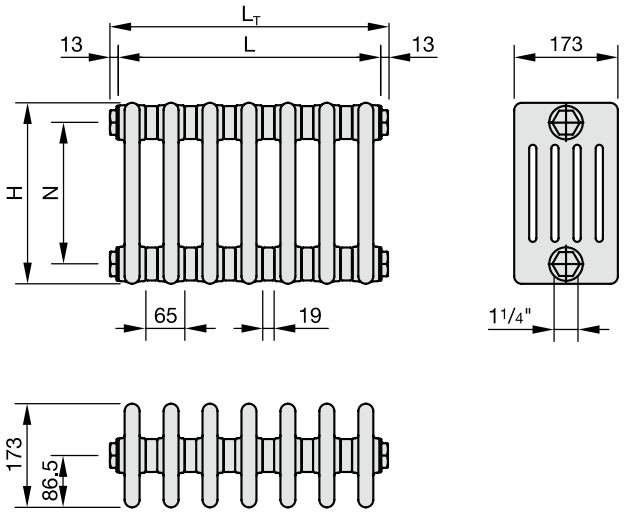
Dimensions in mm

Technical specifications per element

Model	H	N	T	A	V	M	s_k	q_{ms}	Exp.	Φ_s=ΔT 50 K EN442	Φ 70/55/20 °C	Φ 55/45/20 °C
	mm	mm	mm	m^2	dm^3	kg	%	kg/h	n	Watt	Watt	Watt
K4026	260	194	136	0,09	0,7	0,85	18	3,4	1,26	40,4	32,6	21,1
K4030	300	234	136	0,10	0,8	0,95	18	3,9	1,26	45,8	37,0	23,9
K4035	350	284	136	0,11	0,9	1,08	17	4,5	1,26	52,5	42,4	27,4
K4040	400	334	136	0,13	0,9	1,23	16	5,1	1,27	59,2	47,7	30,7
K4045	450	384	136	0,15	1,0	1,36	16	5,7	1,27	65,7	53,0	34,1
K4050	500	434	136	0,16	1,1	1,49	16	6,2	1,27	72,3	58,3	37,5
K4055	550	484	136	0,18	1,2	1,62	16	6,8	1,28	78,8	63,4	40,7
K4060	600	534	136	0,19	1,3	1,75	15	7,4	1,28	85,4	68,7	44,1
K4075	750	684	136	0,24	1,5	2,13	15	9,1	1,29	105,0	84,4	53,9
K4090	900	834	136	0,29	1,8	2,52	15	10,8	1,30	125,0	100,3	63,8
K4100	1000	934	136	0,32	1,9	2,78	15	11,9	1,31	138,0	110,5	70,1
K4110	1100	1034	136	0,35	2,1	3,03	15	13,0	1,32	151,0	120,7	76,3
K4120	1200	1134	136	0,38	2,2	3,29	15	14,1	1,32	165,0	131,9	83,4
K4150	1500	1434	136	0,47	2,7	4,06	15	17,4	1,31	204,0	163,4	103,7
K4180	1800	1734	136	0,57	3,1	4,83	15	20,6	1,31	244,0	195,4	124,0
K4200	2000	1934	136	0,63	3,4	5,35	15	22,9	1,32	270,0	215,8	136,5
K4220	2200	2134	136	0,70	3,7	5,86	15	25,0	1,32	296,0	236,6	149,6
K4250	2500	2434	136	0,79	4,3	6,64	15	28,4	1,32	335,0	267,8	169,3
K4280	2800	2734	136	0,87	4,9	7,41	15	32,2	1,32	375,0	299,8	189,6
K4300	3000	2934	136	0,95	5,4	7,92	15	34,5	1,32	401,0	320,6	202,7

Zehnder Charleston Clinic

Model 5-column Clinic



H = Height
L = Length = elements x 65 mm - 19 mm
L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
N = Boss spacing = H - 66 mm
T = Depth
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

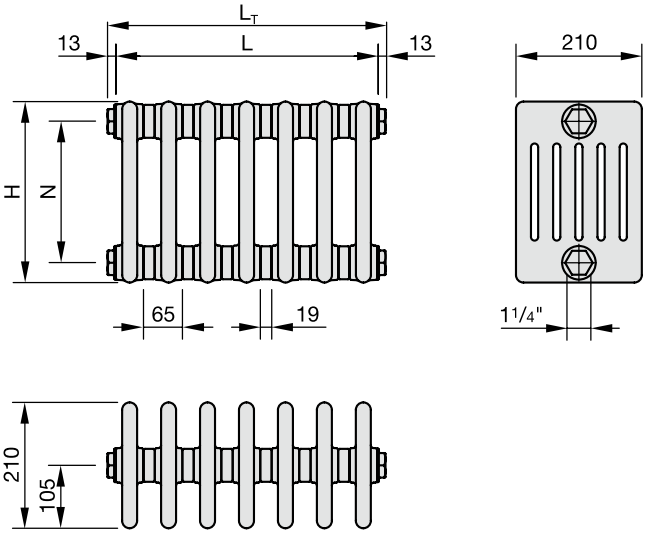
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	A m^2	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K5026	260	194	173	0,11	0,9	0,95	17	4,2	1,25	49,4	40,0	25,9
K5030	300	234	173	0,12	1,0	1,08	16	4,8	1,25	56,0	45,3	29,4
K5035	350	284	173	0,14	1,1	1,25	15	5,5	1,25	64,2	51,9	33,6
K5040	400	334	173	0,16	1,2	1,58	15	6,2	1,26	72,3	58,4	37,7
K5045	450	384	173	0,18	1,3	1,74	14	6,9	1,26	80,4	64,9	41,9
K5050	500	434	173	0,20	1,4	1,91	14	7,7	1,26	88,4	71,4	46,1
K5055	550	484	173	0,22	1,5	2,07	14	8,4	1,27	96,4	77,7	50,0
K5060	600	534	173	0,24	1,6	2,23	13	9,1	1,27	104,0	83,8	54,0
K5075	750	684	173	0,30	1,9	2,72	13	11,2	1,28	128,0	103,0	66,1
K5090	900	834	173	0,36	2,2	3,21	13	13,2	1,29	152,0	122,1	78,0
K5100	1000	934	173	0,40	2,4	3,54	13	14,6	1,30	168,0	134,8	85,8
K5110	1100	1034	173	0,44	2,6	3,87	13	16,0	1,31	185,0	148,1	94,0
K5120	1200	1134	173	0,48	2,8	4,19	13	17,4	1,31	201,0	160,9	102,1
K5150	1500	1434	173	0,59	3,3	5,17	13	21,2	1,30	249,0	199,7	127,2
K5180	1800	1734	173	0,71	3,9	6,15	13	25,2	1,29	297,0	238,6	152,5
K5200	2000	1934	173	0,79	4,3	6,81	13	27,8	1,31	330,0	264,2	167,7
K5220	2200	2134	173	0,87	4,7	7,46	13	30,5	1,31	362,0	289,9	183,9
K5250	2500	2434	173	0,99	5,4	8,44	13	34,7	1,31	410,0	328,3	208,3
K5280	2800	2734	173	1,11	6,1	9,42	13	39,4	1,31	458,0	366,7	232,7
K5300	3000	2934	173	1,19	6,6	10,08	13	42,1	1,31	490,0	392,4	249,0

Zehnder Charleston Clinic

Model 6-column Clinic



H = Height
L = Length = elements x 65 mm - 19 mm
L_T = Total length = elements x 65 mm - 19 mm + 2 x 13 mm
N = Boss spacing = H - 66 mm
T = Depth
A = Surface
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

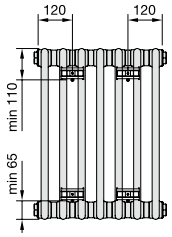
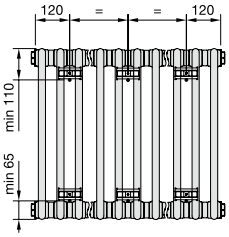
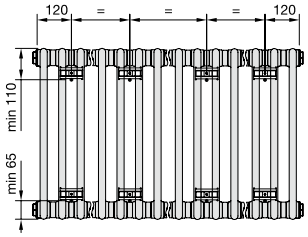
Dimensions in mm

Technical specifications per element

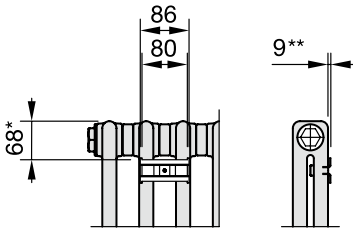
Model	H mm	N mm	T mm	A m^2	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
K6026	260	194	210	0,13	1,0	1,33	18	5,0	1,28	58,1	46,8	30,0
K6030	300	234	210	0,15	1,1	1,49	15	5,7	1,29	65,9	52,9	33,8
K6035	350	284	210	0,17	1,3	1,69	14	6,6	1,29	75,5	60,7	38,8
K6040	400	334	210	0,19	1,4	1,87	14	7,4	1,29	85,1	68,4	43,7
K6045	450	384	210	0,22	1,5	2,06	13	8,3	1,29	94,6	76,0	48,6
K6050	500	434	210	0,24	1,6	2,26	13	9,1	1,29	104,0	83,6	53,4
K6055	550	484	210	0,26	1,8	2,46	12	10,0	1,29	113,0	90,8	58,0
K6060	600	534	210	0,29	1,9	2,65	12	10,8	1,29	123,0	98,8	63,2
K6075	750	684	210	0,36	2,2	3,25	12	13,2	1,30	151,0	121,1	77,1
K6090	900	834	210	0,43	2,6	3,84	12	15,7	1,30	179,0	143,6	91,4
K6100	1000	934	210	0,48	2,8	4,23	12	17,3	1,30	198,0	158,8	101,1
K6110	1100	1034	210	0,52	3,1	4,62	12	18,9	1,30	217,0	174,1	110,8
K6120	1200	1134	210	0,57	3,3	5,02	12	20,5	1,30	236,0	189,3	120,5
K6150	1500	1434	210	0,71	4,0	6,20	12	25,2	1,31	293,0	234,6	148,9
K6180	1800	1734	210	0,85	4,8	7,38	12	30,0	1,32	349,0	279,0	176,4
K6200	2000	1934	210	0,95	5,2	8,17	12	33,2	1,31	387,0	309,9	196,7
K6220	2200	2134	210	1,04	5,7	8,96	12	36,4	1,31	425,0	340,3	216,0
K6250	2500	2434	210	1,19	6,4	10,14	12	41,4	1,30	481,0	385,8	245,7
K6280	2800	2734	210	1,34	7,1	11,32	12	46,2	1,30	537,0	430,7	274,3
K6300	3000	2934	210	1,42	7,6	12,11	12	49,4	1,30	575,0	461,2	293,7

Zehnder Charleston Clinic

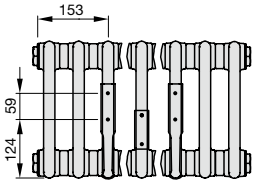
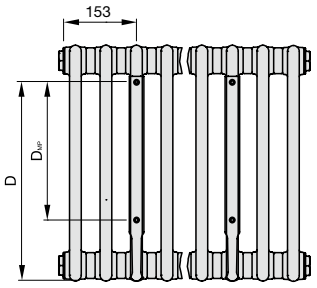
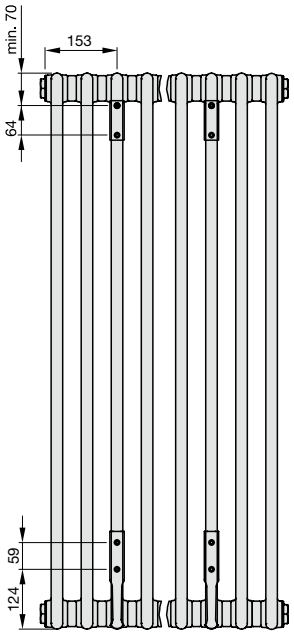
Dimensions for the bores when using CVD brackets (upper drill hole)[1)]

Number of fixings	2 axes / 4 brackets	3 axes / 6 brackets	4 axes / 8 brackets
		 If there is an odd number of sections then the middle axis is offset by 23 mm.	

Detail of suspension



Dimensions for the bores when using EasyFix brackets[1)]

	SMB 2T H = 245-299 mm	SMB 30-75 H = 300-1000 mm	SMB 2T H = 1001-3000 mm
			

H	D_{MP}	D
300 - 369	134	241
370 - 484	204	309
485 - 679	309	414
680 - 1000	518	623

[1)] For connection type 3370/5510 and V001-V004, the bracket must be offset inwards by one element

- • = Position of drill hole
- L = Length
- H = Height
- * = Smallest possible dimension
- ** = Front edge of bracket to radiator
- D = Dimension from bottom edge of radiator to upper drill hole
- D_{MP} = Spacing of drill holes

Dimensions in mm

For the recommended number of brackets, see page 85 onwards.

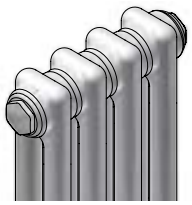
Notes

Zehnder Charleston Retrofit

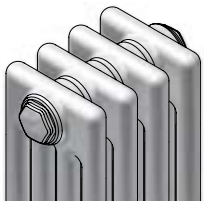
		Overview of models	Product description	List prices	Fixings	Technical data
Zehnder Charleston Retrofit						
	■ Suitable for connections of old DIN standard, aluminium and cast radiators ■ Retrofitting without changing the connection pipework ■ Optimum flexible heat output	94	95	96	110	111

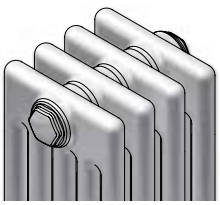
Zehnder Charleston Retrofit

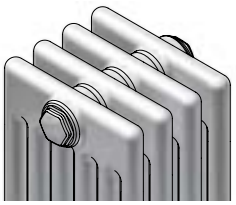
Zehnder Charleston Retrofit


2-column

3-column


4-column


5-column


6-column

Height mm	Depth mm				
	62	100	136	173	210
266	-	-	-	-	6027
366	-	3037	4037	5037	6037
408	2041	-	-	-	-
416	-	3042	4042	-	6042
458	2046	-	-	-	-
558	2056	-	-	-	-
566	-	3057	4057	5057	6057
588	2059	-	-	-	-
596	-	3059	4059	-	-
628	2063	-	-	-	-
636	-	3064	4064	-	-
658	2066	-	-	-	-
666	-	3067	4067	5067	6067
677	2068	-	-	-	-
685	-	3069	4069	5069	6069
758	2076	-	-	-	-
766	-	3077	4077	5077	6077
788	2079	-	-	-	-
796	-	3079	4079	-	-
858	2086	-	-	-	-
866	-	3087	4087	5087	6087
877	2088	-	-	-	-
885	-	3089	4089	5089	6089
928	2093	-	-	-	-
936	-	3094	4094	-	-
958	2096	-	-	-	-
966	-	3097	4097	5097	6097
1066	-	3107	4107	5107	6107
1658	2166	-	-	-	-
1666	-	3167	4167	-	-
1858	2186	-	-	-	-
1866	-	3187	4187	-	-
2058	2206	-	-	-	-
2066	-	3207	4207	-	-

[1] The values shown here are the so-called nominal height; the exact height varies by a few mm for 2-column radiators and for some of the 3-column radiators as well, see "Technical specifications".

Maximum radiator lengths on piece (per block)

Zehnder Charleston Retrofit (also see price tables from page 96 onwards)

Model	Height mm						
	260 - 600	> 600 - 750	> 750 - 900	> 900 - 1000	> 1000 - 2000	> 2000 - 2500	> 2500 - 3000
2-, 3-column	64	64	64	64	22	22	22
4-column	64	64	64	60	22	22	22
5-column	64	64	50	50	22	22	17
6-column	64	55	46	42	22	17	14

Zehnder Charleston Retrofit

Old radiator

Radiator surface: Technoline

Product description

The original tubular radiator, specifically for renovations. Flexible installation for renovation projects as retrofit models are available for existing pipework, thus it is not necessary to adjust the piping. Suitable for connection to old steel tube radiators, cast iron radiators or aluminium radiators.
The element construction gives Zehnder Charleston Retrofit its transparent appearance and timeless elegance. The tubular radiator provides comfortable radiant heat and transforms the living space into an oasis of relaxation. The Zehnder Charleston Retrofit models make installation easy, especially for renovation projects: retrofit models are available for existing connections. Available in almost any colour and finish from the Zehnder colour chart.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Customisation options

- Special colours and antibacterial coating
- Galvanised and painted
- High pressure version up to max. 18 bar
- Operating temperature at 120 °C on request

Advantages

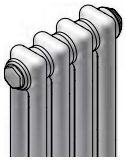
- Flexible installation on existing pipework means time savings
- Residue-free laser welding technology LaZer made
- Classic elegance
- Radiant heat with feel-good factor
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front
- Connection S001: 1 blanking plug ½", directional air vent ½"
- Complete packaging in stretch film and carton

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	408		458		558		588		628	
											
Model		**2041**		**2046**		**2056**		**2059**		**2063**	
Depth	mm	62		62		62		62		62	
Exponent	n	1,26		1,26		1,25		1,25		1,24	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**29,78**		**30,55**		**31,90**		**32,53**		**33,27**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	130	**119,12**	144	**122,20**	172	**127,60**	180	**130,12**	191	**133,08**
5	230	162	**148,90**	180	**152,75**	215	**159,50**	225	**162,65**	239	**166,35**
6	276	194	**178,68**	216	**183,30**	258	**191,40**	270	**195,18**	286	**199,62**
7	322	227	**208,46**	252	**213,85**	301	**223,30**	315	**227,71**	334	**232,89**
8	368	259	**238,24**	288	**244,40**	344	**255,20**	360	**260,24**	382	**266,16**
9	414	292	**268,02**	324	**274,95**	387	**287,10**	405	**292,77**	429	**299,43**
10	460	324	**297,80**	360	**305,50**	430	**319,00**	450	**325,30**	477	**332,70**
11	506	356	**327,58**	396	**336,05**	473	**350,90**	495	**357,83**	525	**365,97**
12	552	389	**357,36**	432	**366,60**	516	**382,80**	540	**390,36**	572	**399,24**
13	598	421	**387,14**	468	**397,15**	559	**414,70**	585	**422,89**	620	**432,51**
14	644	454	**416,92**	504	**427,70**	602	**446,60**	630	**455,42**	668	**465,78**
15	690	486	**446,70**	540	**458,25**	645	**478,50**	675	**487,95**	716	**499,05**
16	736	518	**476,48**	576	**488,80**	688	**510,40**	720	**520,48**	763	**532,32**
17	782	551	**506,26**	612	**519,35**	731	**542,30**	765	**553,01**	811	**565,59**
18	828	583	**536,04**	648	**549,90**	774	**574,20**	810	**585,54**	859	**598,86**
19	874	616	**565,82**	684	**580,45**	817	**606,10**	855	**618,07**	906	**632,13**
20	920	648	**595,60**	720	**611,00**	860	**638,00**	900	**650,60**	954	**665,40**
21	966	680	**625,38**	756	**641,55**	903	**669,90**	945	**683,13**	1002	**698,67**
22	1012	713	**655,16**	792	**672,10**	946	**701,80**	990	**715,66**	1049	**731,94**
23	1058	745	**684,94**	828	**702,65**	989	**733,70**	1035	**748,19**	1097	**765,21**
24	1104	778	**714,72**	864	**733,20**	1032	**765,60**	1080	**780,72**	1145	**798,48**
25	1150	810	**744,50**	900	**763,75**	1075	**797,50**	1125	**813,25**	1193	**831,75**
26	1196	842	**774,28**	936	**794,30**	1118	**829,40**	1170	**845,78**	1240	**865,02**
27	1242	875	**804,06**	972	**824,85**	1161	**861,30**	1215	**878,31**	1288	**898,29**
28	1288	907	**833,84**	1008	**855,40**	1204	**893,20**	1260	**910,84**	1336	**931,56**
29	1334	940	**863,62**	1044	**885,95**	1247	**925,10**	1305	**943,37**	1383	**964,83**
30	1380	972	**893,40**	1080	**916,50**	1290	**957,00**	1350	**975,90**	1431	**998,10**
31	1426	1004	**923,18**	1116	**947,05**	1333	**988,90**	1395	**1008,43**	1479	**1031,37**
32	1472	1037	**952,96**	1152	**977,60**	1376	**1020,80**	1440	**1040,96**	1526	**1064,64**
33	1518	1069	**982,74**	1188	**1008,15**	1419	**1052,70**	1485	**1073,49**	1574	**1097,91**
34	1564	1102	**1012,52**	1224	**1038,70**	1462	**1084,60**	1530	**1106,02**	1622	**1131,18**
35	1610	1134	**1042,30**	1260	**1069,25**	1505	**1116,50**	1575	**1138,55**	1670	**1164,45**
36	1656	1166	**1072,08**	1296	**1099,80**	1548	**1148,40**	1620	**1171,08**	1717	**1197,72**
37	1702	1199	**1101,86**	1332	**1130,35**	1591	**1180,30**	1665	**1203,61**	1765	**1230,99**
38	1748	1231	**1131,64**	1368	**1160,90**	1634	**1212,20**	1710	**1236,14**	1813	**1264,26**
39	1794	1264	**1161,42**	1404	**1191,45**	1677	**1244,10**	1755	**1268,67**	1860	**1297,53**
40	1840	1296	**1191,20**	1440	**1222,00**	1720	**1276,00**	1800	**1301,20**	1908	**1330,80**

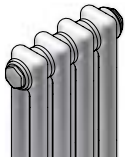
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	658		677		758		788		858	
											
Model		**2066**		**2068**		**2076**		**2079**		**2086**	
Depth	mm	62		62		62		62		62	
Exponent	n	1,24		1,24		1,24		1,23		1,23	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**33,88**		**34,52**		**35,11**		**35,43**		**35,81**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	199	**135,52**	204	**138,08**	224	**140,44**	231	**141,72**	248	**143,24**
5	230	249	**169,40**	255	**172,60**	280	**175,55**	289	**177,15**	310	**179,05**
6	276	298	**203,28**	305	**207,12**	336	**210,66**	347	**212,58**	372	**214,86**
7	322	348	**237,16**	356	**241,64**	392	**245,77**	405	**248,01**	434	**250,67**
8	368	398	**271,04**	407	**276,16**	448	**280,88**	462	**283,44**	496	**286,48**
9	414	447	**304,92**	458	**310,68**	504	**315,99**	520	**318,87**	558	**322,29**
10	460	497	**338,80**	509	**345,20**	560	**351,10**	578	**354,30**	620	**358,10**
11	506	547	**372,68**	560	**379,72**	616	**386,21**	636	**389,73**	682	**393,91**
12	552	596	**406,56**	611	**414,24**	672	**421,32**	694	**425,16**	744	**429,72**
13	598	646	**440,44**	662	**448,76**	728	**456,43**	751	**460,59**	806	**465,53**
14	644	696	**474,32**	713	**483,28**	784	**491,54**	809	**496,02**	868	**501,34**
15	690	746	**508,20**	764	**517,80**	840	**526,65**	867	**531,45**	930	**537,15**
16	736	795	**542,08**	814	**552,32**	896	**561,76**	925	**566,88**	992	**572,96**
17	782	845	**575,96**	865	**586,84**	952	**596,87**	983	**602,31**	1054	**608,77**
18	828	895	**609,84**	916	**621,36**	1008	**631,98**	1040	**637,74**	1116	**644,58**
19	874	944	**643,72**	967	**655,88**	1064	**667,09**	1098	**673,17**	1178	**680,39**
20	920	994	**677,60**	1018	**690,40**	1120	**702,20**	1156	**708,60**	1240	**716,20**
21	966	1044	**711,48**	1069	**724,92**	1176	**737,31**	1214	**744,03**	1302	**752,01**
22	1012	1093	**745,36**	1120	**759,44**	1232	**772,42**	1272	**779,46**	1364	**787,82**
23	1058	1143	**779,24**	1171	**793,96**	1288	**807,53**	1329	**814,89**	1426	**823,63**
24	1104	1193	**813,12**	1222	**828,48**	1344	**842,64**	1387	**850,32**	1488	**859,44**
25	1150	1243	**847,00**	1273	**863,00**	1400	**877,75**	1445	**885,75**	1550	**895,25**
26	1196	1292	**880,88**	1323	**897,52**	1456	**912,86**	1503	**921,18**	1612	**931,06**
27	1242	1342	**914,76**	1374	**932,04**	1512	**947,97**	1561	**956,61**	1674	**966,87**
28	1288	1392	**948,64**	1425	**966,56**	1568	**983,08**	1618	**992,04**	1736	**1002,68**
29	1334	1441	**982,52**	1476	**1001,08**	1624	**1018,19**	1676	**1027,47**	1798	**1038,49**
30	1380	1491	**1016,40**	1527	**1035,60**	1680	**1053,30**	1734	**1062,90**	1860	**1074,30**
31	1426	1541	**1050,28**	1578	**1070,12**	1736	**1088,41**	1792	**1098,33**	1922	**1110,11**
32	1472	1590	**1084,16**	1629	**1104,64**	1792	**1123,52**	1850	**1133,76**	1984	**1145,92**
33	1518	1640	**1118,04**	1680	**1139,16**	1848	**1158,63**	1907	**1169,19**	2046	**1181,73**
34	1564	1690	**1151,92**	1731	**1173,68**	1904	**1193,74**	1965	**1204,62**	2108	**1217,54**
35	1610	1740	**1185,80**	1782	**1208,20**	1960	**1228,85**	2023	**1240,05**	2170	**1253,35**
36	1656	1789	**1219,68**	1832	**1242,72**	2016	**1263,96**	2081	**1275,48**	2232	**1289,16**
37	1702	1839	**1253,56**	1883	**1277,24**	2072	**1299,07**	2139	**1310,91**	2294	**1324,97**
38	1748	1889	**1287,44**	1934	**1311,76**	2128	**1334,18**	2196	**1346,34**	2356	**1360,78**
39	1794	1938	**1321,32**	1985	**1346,28**	2184	**1369,29**	2254	**1381,77**	2418	**1396,59**
40	1840	1988	**1355,20**	2036	**1380,80**	2240	**1404,40**	2312	**1417,20**	2480	**1432,40**

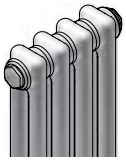
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	877		928		958		1658		1858	
										
Model	**2088**		**2093**		**2096**		**2166**		**2186**	
Depth mm	62		62		62		62		62	
Exponent n	1,23		1,22		1,22		1,29		1,29	
Max. number of elements	64		64		64		22		22	
Price/element €	**36,32**		**36,87**		**37,10**		**43,96**		**46,64**	
Length	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4 184	252	**145,28**	264	**147,48**	270	**148,40**	460	**175,84**	516	**186,56**
5 230	316	**181,60**	330	**184,35**	338	**185,50**	575	**219,80**	645	**233,20**
6 276	379	**217,92**	396	**221,22**	406	**222,60**	690	**263,76**	774	**279,84**
7 322	442	**254,24**	462	**258,09**	473	**259,70**	805	**307,72**	903	**326,48**
8 368	505	**290,56**	528	**294,96**	541	**296,80**	920	**351,68**	1032	**373,12**
9 414	568	**326,88**	594	**331,83**	608	**333,90**	1035	**395,64**	1161	**419,76**
10 460	631	**363,20**	660	**368,70**	676	**371,00**	1150	**439,60**	1290	**466,40**
11 506	694	**399,52**	726	**405,57**	744	**408,10**	1265	**483,56**	1419	**513,04**
12 552	757	**435,84**	792	**442,44**	811	**445,20**	1380	**527,52**	1548	**559,68**
13 598	820	**472,16**	858	**479,31**	879	**482,30**	1495	**571,48**	1677	**606,32**
14 644	883	**508,48**	924	**516,18**	946	**519,40**	1610	**615,44**	1806	**652,96**
15 690	947	**544,80**	990	**553,05**	1014	**556,50**	1725	**659,40**	1935	**699,60**
16 736	1010	**581,12**	1056	**589,92**	1082	**593,60**	1840	**703,36**	2064	**746,24**
17 782	1073	**617,44**	1122	**626,79**	1149	**630,70**	1955	**747,32**	2193	**792,88**
18 828	1136	**653,76**	1188	**663,66**	1217	**667,80**	2070	**791,28**	2322	**839,52**
19 874	1199	**690,08**	1254	**700,53**	1284	**704,90**	2185	**835,24**	2451	**886,16**
20 920	1262	**726,40**	1320	**737,40**	1352	**742,00**	2300	**879,20**	2580	**932,80**
21 966	1325	**762,72**	1386	**774,27**	1420	**779,10**	2415	**923,16**	2709	**979,44**
22 1012	1388	**799,04**	1452	**811,14**	1487	**816,20**	2530	**967,12**	2838	**1026,08**
23 1058	1451	**835,36**	1518	**848,01**	1555	**853,30**	2645	**1011,08**	2967	**1072,72**
24 1104	1514	**871,68**	1584	**884,88**	1622	**890,40**	2760	**1055,04**	3096	**1119,36**
25 1150	1578	**908,00**	1650	**921,75**	1690	**927,50**	2875	**1099,00**	3225	**1166,00**
26 1196	1641	**944,32**	1716	**958,62**	1758	**964,60**	2990	**1142,96**	3354	**1212,64**
27 1242	1704	**980,64**	1782	**995,49**	1825	**1001,70**	3105	**1186,92**	3483	**1259,28**
28 1288	1767	**1016,96**	1848	**1032,36**	1893	**1038,80**	3220	**1230,88**	3612	**1305,92**
29 1334	1830	**1053,28**	1914	**1069,23**	1960	**1075,90**	3335	**1274,84**	3741	**1352,56**
30 1380	1893	**1089,60**	1980	**1106,10**	2028	**1113,00**	3450	**1318,80**	3870	**1399,20**
31 1426	1956	**1125,92**	2046	**1142,97**	2096	**1150,10**	3565	**1362,76**	3999	**1445,84**
32 1472	2019	**1162,24**	2112	**1179,84**	2163	**1187,20**	3680	**1406,72**	4128	**1492,48**
33 1518	2082	**1198,56**	2178	**1216,71**	2231	**1224,30**	3795	**1450,68**	4257	**1539,12**
34 1564	2145	**1234,88**	2244	**1253,58**	2298	**1261,40**	3910	**1494,64**	4386	**1585,76**
35 1610	2209	**1271,20**	2310	**1290,45**	2366	**1298,50**	4025	**1538,60**	4515	**1632,40**
36 1656	2272	**1307,52**	2376	**1327,32**	2434	**1335,60**	4140	**1582,56**	4644	**1679,04**
37 1702	2335	**1343,84**	2442	**1364,19**	2501	**1372,70**	4255	**1626,52**	4773	**1725,68**
38 1748	2398	**1380,16**	2508	**1401,06**	2569	**1409,80**	4370	**1670,48**	4902	**1772,32**
39 1794	2461	**1416,48**	2574	**1437,93**	2636	**1446,90**	4485	**1714,44**	5031	**1818,96**
40 1840	2524	**1452,80**	2640	**1474,80**	2704	**1484,00**	4600	**1758,40**	5160	**1865,60**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	2058		366		416		566		596	
Model		**2206**		**3037**		**3042**		**3057**		**3059**	
Depth	mm	62		100		100		100		100	
Exponent	n	1,28		1,28		1,28		1,27		1,27	
Max. number of elements		22		64		64		64		64	
Price/element	**€**	**50,85**		**32,39**		**33,41**		**36,29**		**37,08**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	568	**203,40**	154	**129,56**	174	**133,64**	231	**145,16**	242	**148,32**
5	230	710	**254,25**	193	**161,95**	218	**167,05**	289	**181,45**	303	**185,40**
6	276	852	**305,10**	232	**194,34**	261	**200,46**	347	**217,74**	363	**222,48**
7	322	994	**355,95**	270	**226,73**	305	**233,87**	405	**254,03**	424	**259,56**
8	368	1136	**406,80**	309	**259,12**	348	**267,28**	462	**290,32**	484	**296,64**
9	414	1278	**457,65**	347	**291,51**	392	**300,69**	520	**326,61**	545	**333,72**
10	460	1420	**508,50**	386	**323,90**	435	**334,10**	578	**362,90**	605	**370,80**
11	506	1562	**559,35**	425	**356,29**	479	**367,51**	636	**399,19**	666	**407,88**
12	552	1704	**610,20**	463	**388,68**	522	**400,92**	694	**435,48**	726	**444,96**
13	598	1846	**661,05**	502	**421,07**	566	**434,33**	751	**471,77**	787	**482,04**
14	644	1988	**711,90**	540	**453,46**	609	**467,74**	809	**508,06**	847	**519,12**
15	690	2130	**762,75**	579	**485,85**	653	**501,15**	867	**544,35**	908	**556,20**
16	736	2272	**813,60**	618	**518,24**	696	**534,56**	925	**580,64**	968	**593,28**
17	782	2414	**864,45**	656	**550,63**	740	**567,97**	983	**616,93**	1029	**630,36**
18	828	2556	**915,30**	695	**583,02**	783	**601,38**	1040	**653,22**	1089	**667,44**
19	874	2698	**966,15**	733	**615,41**	827	**634,79**	1098	**689,51**	1150	**704,52**
20	920	2840	**1017,00**	772	**647,80**	870	**668,20**	1156	**725,80**	1210	**741,60**
21	966	2982	**1067,85**	811	**680,19**	914	**701,61**	1214	**762,09**	1271	**778,68**
22	1012	3124	**1118,70**	849	**712,58**	957	**735,02**	1272	**798,38**	1331	**815,76**
23	1058	3266	**1169,55**	888	**744,97**	1001	**768,43**	1329	**834,67**	1392	**852,84**
24	1104	3408	**1220,40**	926	**777,36**	1044	**801,84**	1387	**870,96**	1452	**889,92**
25	1150	3550	**1271,25**	965	**809,75**	1088	**835,25**	1445	**907,25**	1513	**927,00**
26	1196	3692	**1322,10**	1004	**842,14**	1131	**868,66**	1503	**943,54**	1573	**964,08**
27	1242	3834	**1372,95**	1042	**874,53**	1175	**902,07**	1561	**979,83**	1634	**1001,16**
28	1288	3976	**1423,80**	1081	**906,92**	1218	**935,48**	1618	**1016,12**	1694	**1038,24**
29	1334	4118	**1474,65**	1119	**939,31**	1262	**968,89**	1676	**1052,41**	1755	**1075,32**
30	1380	4260	**1525,50**	1158	**971,70**	1305	**1002,30**	1734	**1088,70**	1815	**1112,40**
31	1426	4402	**1576,35**	1197	**1004,09**	1349	**1035,71**	1792	**1124,99**	1876	**1149,48**
32	1472	4544	**1627,20**	1235	**1036,48**	1392	**1069,12**	1850	**1161,28**	1936	**1186,56**
33	1518	4686	**1678,05**	1274	**1068,87**	1436	**1102,53**	1907	**1197,57**	1997	**1223,64**
34	1564	4828	**1728,90**	1312	**1101,26**	1479	**1135,94**	1965	**1233,86**	2057	**1260,72**
35	1610	4970	**1779,75**	1351	**1133,65**	1523	**1169,35**	2023	**1270,15**	2118	**1297,80**
36	1656	5112	**1830,60**	1390	**1166,04**	1566	**1202,76**	2081	**1306,44**	2178	**1334,88**
37	1702	5254	**1881,45**	1428	**1198,43**	1610	**1236,17**	2139	**1342,73**	2239	**1371,96**
38	1748	5396	**1932,30**	1467	**1230,82**	1653	**1269,58**	2196	**1379,02**	2299	**1409,04**
39	1794	5538	**1983,15**	1505	**1263,21**	1697	**1302,99**	2254	**1415,31**	2360	**1446,12**
40	1840	5680	**2034,00**	1544	**1295,60**	1740	**1336,40**	2312	**1451,60**	2420	**1483,20**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	636		666		685		766		796	
Model		**3064**		**3067**		**3069**		**3077**		**3079**	
Depth	mm	100		100		100		100		100	
Exponent	n	1,27		1,26		1,26		1,26		1,26	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**38,29**		**39,23**		**39,76**		**40,78**		**42,18**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	257	**153,16**	268	**156,92**	274	**159,04**	303	**163,12**	310	**168,72**
5	230	321	**191,45**	335	**196,15**	343	**198,80**	379	**203,90**	387	**210,90**
6	276	385	**229,74**	401	**235,38**	412	**238,56**	454	**244,68**	464	**253,08**
7	322	449	**268,03**	468	**274,61**	480	**278,32**	530	**285,46**	542	**295,26**
8	368	514	**306,32**	535	**313,84**	549	**318,08**	606	**326,24**	619	**337,44**
9	414	578	**344,61**	602	**353,07**	617	**357,84**	681	**367,02**	697	**379,62**
10	460	642	**382,90**	669	**392,30**	686	**397,60**	757	**407,80**	774	**421,80**
11	506	706	**421,19**	736	**431,53**	755	**437,36**	833	**448,58**	851	**463,98**
12	552	770	**459,48**	803	**470,76**	823	**477,12**	908	**489,36**	929	**506,16**
13	598	835	**497,77**	870	**509,99**	892	**516,88**	984	**530,14**	1006	**548,34**
14	644	899	**536,06**	937	**549,22**	960	**556,64**	1060	**570,92**	1084	**590,52**
15	690	963	**574,35**	1004	**588,45**	1029	**596,40**	1136	**611,70**	1161	**632,70**
16	736	1027	**612,64**	1070	**627,68**	1098	**636,16**	1211	**652,48**	1238	**674,88**
17	782	1091	**650,93**	1137	**666,91**	1166	**675,92**	1287	**693,26**	1316	**717,06**
18	828	1156	**689,22**	1204	**706,14**	1235	**715,68**	1363	**734,04**	1393	**759,24**
19	874	1220	**727,51**	1271	**745,37**	1303	**755,44**	1438	**774,82**	1471	**801,42**
20	920	1284	**765,80**	1338	**784,60**	1372	**795,20**	1514	**815,60**	1548	**843,60**
21	966	1348	**804,09**	1405	**823,83**	1441	**834,96**	1590	**856,38**	1625	**885,78**
22	1012	1412	**842,38**	1472	**863,06**	1509	**874,72**	1665	**897,16**	1703	**927,96**
23	1058	1477	**880,67**	1539	**902,29**	1578	**914,48**	1741	**937,94**	1780	**970,14**
24	1104	1541	**918,96**	1606	**941,52**	1646	**954,24**	1817	**978,72**	1858	**1012,32**
25	1150	1605	**957,25**	1673	**980,75**	1715	**994,00**	1893	**1019,50**	1935	**1054,50**
26	1196	1669	**995,54**	1739	**1019,98**	1784	**1033,76**	1968	**1060,28**	2012	**1096,68**
27	1242	1733	**1033,83**	1806	**1059,21**	1852	**1073,52**	2044	**1101,06**	2090	**1138,86**
28	1288	1798	**1072,12**	1873	**1098,44**	1921	**1113,28**	2120	**1141,84**	2167	**1181,04**
29	1334	1862	**1110,41**	1940	**1137,67**	1989	**1153,04**	2195	**1182,62**	2245	**1223,22**
30	1380	1926	**1148,70**	2007	**1176,90**	2058	**1192,80**	2271	**1223,40**	2322	**1265,40**
31	1426	1990	**1186,99**	2074	**1216,13**	2127	**1232,56**	2347	**1264,18**	2399	**1307,58**
32	1472	2054	**1225,28**	2141	**1255,36**	2195	**1272,32**	2422	**1304,96**	2477	**1349,76**
33	1518	2119	**1263,57**	2208	**1294,59**	2264	**1312,08**	2498	**1345,74**	2554	**1391,94**
34	1564	2183	**1301,86**	2275	**1333,82**	2332	**1351,84**	2574	**1386,52**	2632	**1434,12**
35	1610	2247	**1340,15**	2342	**1373,05**	2401	**1391,60**	2650	**1427,30**	2709	**1476,30**
36	1656	2311	**1378,44**	2408	**1412,28**	2470	**1431,36**	2725	**1468,08**	2786	**1518,48**
37	1702	2375	**1416,73**	2475	**1451,51**	2538	**1471,12**	2801	**1508,86**	2864	**1560,66**
38	1748	2440	**1455,02**	2542	**1490,74**	2607	**1510,88**	2877	**1549,64**	2941	**1602,84**
39	1794	2504	**1493,31**	2609	**1529,97**	2675	**1550,64**	2952	**1590,42**	3019	**1645,02**
40	1840	2568	**1531,60**	2676	**1569,20**	2744	**1590,40**	3028	**1631,20**	3096	**1687,20**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	866		885		936		966		1066	
Model		**3087**		**3089**		**3094**		**3097**		**3107**	
Depth	mm	100		100		100		100		100	
Exponent	n	1,26		1,26		1,25		1,25		1,25	
Max. number of elements		64		64		64		64		22	
Price/element	**€**	**42,68**		**43,20**		**43,71**		**44,16**		**49,81**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	337	**170,72**	343	**172,80**	360	**174,84**	370	**176,64**	400	**199,24**
5	230	421	**213,40**	429	**216,00**	450	**218,55**	462	**220,80**	500	**249,05**
6	276	505	**256,08**	515	**259,20**	540	**262,26**	554	**264,96**	600	**298,86**
7	322	589	**298,76**	601	**302,40**	630	**305,97**	647	**309,12**	700	**348,67**
8	368	674	**341,44**	686	**345,60**	720	**349,68**	739	**353,28**	800	**398,48**
9	414	758	**384,12**	772	**388,80**	810	**393,39**	832	**397,44**	900	**448,29**
10	460	842	**426,80**	858	**432,00**	900	**437,10**	924	**441,60**	1000	**498,10**
11	506	926	**469,48**	944	**475,20**	990	**480,81**	1016	**485,76**	1100	**547,91**
12	552	1010	**512,16**	1030	**518,40**	1080	**524,52**	1109	**529,92**	1200	**597,72**
13	598	1095	**554,84**	1115	**561,60**	1170	**568,23**	1201	**574,08**	1300	**647,53**
14	644	1179	**597,52**	1201	**604,80**	1260	**611,94**	1294	**618,24**	1400	**697,34**
15	690	1263	**640,20**	1287	**648,00**	1350	**655,65**	1386	**662,40**	1500	**747,15**
16	736	1347	**682,88**	1373	**691,20**	1440	**699,36**	1478	**706,56**	1600	**796,96**
17	782	1431	**725,56**	1459	**734,40**	1530	**743,07**	1571	**750,72**	1700	**846,77**
18	828	1516	**768,24**	1544	**777,60**	1620	**786,78**	1663	**794,88**	1800	**896,58**
19	874	1600	**810,92**	1630	**820,80**	1710	**830,49**	1756	**839,04**	1900	**946,39**
20	920	1684	**853,60**	1716	**864,00**	1800	**874,20**	1848	**883,20**	2000	**996,20**
21	966	1768	**896,28**	1802	**907,20**	1890	**917,91**	1940	**927,36**	2100	**1046,01**
22	1012	1852	**938,96**	1888	**950,40**	1980	**961,62**	2033	**971,52**	2200	**1095,82**
23	1058	1937	**981,64**	1973	**993,60**	2070	**1005,33**	2125	**1015,68**	2300	**1145,63**
24	1104	2021	**1024,32**	2059	**1036,80**	2160	**1049,04**	2218	**1059,84**	2400	**1195,44**
25	1150	2105	**1067,00**	2145	**1080,00**	2250	**1092,75**	2310	**1104,00**	2500	**1245,25**
26	1196	2189	**1109,68**	2231	**1123,20**	2340	**1136,46**	2402	**1148,16**	2600	**1295,06**
27	1242	2273	**1152,36**	2317	**1166,40**	2430	**1180,17**	2495	**1192,32**	2700	**1344,87**
28	1288	2358	**1195,04**	2402	**1209,60**	2520	**1223,88**	2587	**1236,48**	2800	**1394,68**
29	1334	2442	**1237,72**	2488	**1252,80**	2610	**1267,59**	2680	**1280,64**	2900	**1444,49**
30	1380	2526	**1280,40**	2574	**1296,00**	2700	**1311,30**	2772	**1324,80**	3000	**1494,30**
31	1426	2610	**1323,08**	2660	**1339,20**	2790	**1355,01**	2864	**1368,96**	3100	**1544,11**
32	1472	2694	**1365,76**	2746	**1382,40**	2880	**1398,72**	2957	**1413,12**	3200	**1593,92**
33	1518	2779	**1408,44**	2831	**1425,60**	2970	**1442,43**	3049	**1457,28**	3300	**1643,73**
34	1564	2863	**1451,12**	2917	**1468,80**	3060	**1486,14**	3142	**1501,44**	3400	**1693,54**
35	1610	2947	**1493,80**	3003	**1512,00**	3150	**1529,85**	3234	**1545,60**	3500	**1743,35**
36	1656	3031	**1536,48**	3089	**1555,20**	3240	**1573,56**	3326	**1589,76**	3600	**1793,16**
37	1702	3115	**1579,16**	3175	**1598,40**	3330	**1617,27**	3419	**1633,92**	3700	**1842,97**
38	1748	3200	**1621,84**	3260	**1641,60**	3420	**1660,98**	3511	**1678,08**	3800	**1892,78**
39	1794	3284	**1664,52**	3346	**1684,80**	3510	**1704,69**	3604	**1722,24**	3900	**1942,59**
40	1840	3368	**1707,20**	3432	**1728,00**	3600	**1748,40**	3696	**1766,40**	4000	**1992,40**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	1666		1866		2066		366		416	
Model	**3167**		**3187**		**3207**		**4037**		**4042**	
Depth mm	100		100		100		136		136	
Exponent n	1,31		1,32		1,32		1,28		1,28	
Max. number of elements	22		22		22		64		64	
Price/element €	**63,20**		**69,71**		**75,94**		**35,71**		**37,10**	
Length	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4 184	616	**252,80**	684	**278,84**	752	**303,76**	202	**142,84**	228	**148,40**
5 230	770	**316,00**	855	**348,55**	940	**379,70**	253	**178,55**	285	**185,50**
6 276	924	**379,20**	1026	**418,26**	1128	**455,64**	304	**214,26**	342	**222,60**
7 322	1078	**442,40**	1197	**487,97**	1316	**531,58**	354	**249,97**	399	**259,70**
8 368	1232	**505,60**	1368	**557,68**	1504	**607,52**	405	**285,68**	456	**296,80**
9 414	1386	**568,80**	1539	**627,39**	1692	**683,46**	455	**321,39**	513	**333,90**
10 460	1540	**632,00**	1710	**697,10**	1880	**759,40**	506	**357,10**	570	**371,00**
11 506	1694	**695,20**	1881	**766,81**	2068	**835,34**	557	**392,81**	627	**408,10**
12 552	1848	**758,40**	2052	**836,52**	2256	**911,28**	607	**428,52**	684	**445,20**
13 598	2002	**821,60**	2223	**906,23**	2444	**987,22**	658	**464,23**	741	**482,30**
14 644	2156	**884,80**	2394	**975,94**	2632	**1063,16**	708	**499,94**	798	**519,40**
15 690	2310	**948,00**	2565	**1045,65**	2820	**1139,10**	759	**535,65**	855	**556,50**
16 736	2464	**1011,20**	2736	**1115,36**	3008	**1215,04**	810	**571,36**	912	**593,60**
17 782	2618	**1074,40**	2907	**1185,07**	3196	**1290,98**	860	**607,07**	969	**630,70**
18 828	2772	**1137,60**	3078	**1254,78**	3384	**1366,92**	911	**642,78**	1026	**667,80**
19 874	2926	**1200,80**	3249	**1324,49**	3572	**1442,86**	961	**678,49**	1083	**704,90**
20 920	3080	**1264,00**	3420	**1394,20**	3760	**1518,80**	1012	**714,20**	1140	**742,00**
21 966	3234	**1327,20**	3591	**1463,91**	3948	**1594,74**	1063	**749,91**	1197	**779,10**
22 1012	3388	**1390,40**	3762	**1533,62**	4136	**1670,68**	1113	**785,62**	1254	**816,20**
23 1058	3542	**1453,60**	3933	**1603,33**	4324	**1746,62**	1164	**821,33**	1311	**853,30**
24 1104	3696	**1516,80**	4104	**1673,04**	4512	**1822,56**	1214	**857,04**	1368	**890,40**
25 1150	3850	**1580,00**	4275	**1742,75**	4700	**1898,50**	1265	**892,75**	1425	**927,50**
26 1196	4004	**1643,20**	4446	**1812,46**	4888	**1974,44**	1316	**928,46**	1482	**964,60**
27 1242	4158	**1706,40**	4617	**1882,17**	5076	**2050,38**	1366	**964,17**	1539	**1001,70**
28 1288	4312	**1769,60**	4788	**1951,88**	5264	**2126,32**	1417	**999,88**	1596	**1038,80**
29 1334	4466	**1832,80**	4959	**2021,59**	5452	**2202,26**	1467	**1035,59**	1653	**1075,90**
30 1380	4620	**1896,00**	5130	**2091,30**	5640	**2278,20**	1518	**1071,30**	1710	**1113,00**
31 1426	4774	**1959,20**	5301	**2161,01**	5828	**2354,14**	1569	**1107,01**	1767	**1150,10**
32 1472	4928	**2022,40**	5472	**2230,72**	6016	**2430,08**	1619	**1142,72**	1824	**1187,20**
33 1518	5082	**2085,60**	5643	**2300,43**	6204	**2506,02**	1670	**1178,43**	1881	**1224,30**
34 1564	5236	**2148,80**	5814	**2370,14**	6392	**2581,96**	1720	**1214,14**	1938	**1261,40**
35 1610	5390	**2212,00**	5985	**2439,85**	6580	**2657,90**	1771	**1249,85**	1995	**1298,50**
36 1656	5544	**2275,20**	6156	**2509,56**	6768	**2733,84**	1822	**1285,56**	2052	**1335,60**
37 1702	5698	**2338,40**	6327	**2579,27**	6956	**2809,78**	1872	**1321,27**	2109	**1372,70**
38 1748	5852	**2401,60**	6498	**2648,98**	7144	**2885,72**	1923	**1356,98**	2166	**1409,80**
39 1794	6006	**2464,80**	6669	**2718,69**	7332	**2961,66**	1973	**1392,69**	2223	**1446,90**
40 1840	6160	**2528,00**	6840	**2788,40**	7520	**3037,60**	2024	**1428,40**	2280	**1484,00**

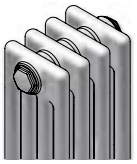
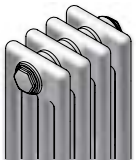
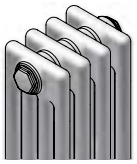
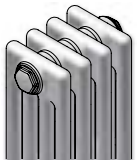
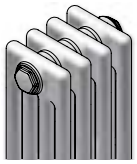
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	566		596		636		666		685	
											
Model		**4057**		**4059**		**4064**		**4067**		**4069**	
Depth	mm	136		136		136		136		136	
Exponent	n	1,27		1,27		1,27		1,26		1,26	
Max. number of elements		64		64		64		64		64	
Price/element	**€**	**41,74**		**44,21**		**46,14**		**47,18**		**48,68**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	303	**166,96**	317	**176,84**	336	**184,56**	350	**188,72**	360	**194,72**
5	230	379	**208,70**	397	**221,05**	421	**230,70**	438	**235,90**	450	**243,40**
6	276	454	**250,44**	476	**265,26**	505	**276,84**	526	**283,08**	539	**292,08**
7	322	530	**292,18**	555	**309,47**	589	**322,98**	613	**330,26**	629	**340,76**
8	368	606	**333,92**	634	**353,68**	673	**369,12**	701	**377,44**	719	**389,44**
9	414	681	**375,66**	714	**397,89**	757	**415,26**	788	**424,62**	809	**438,12**
10	460	757	**417,40**	793	**442,10**	841	**461,40**	876	**471,80**	899	**486,80**
11	506	833	**459,14**	872	**486,31**	925	**507,54**	964	**518,98**	989	**535,48**
12	552	908	**500,88**	952	**530,52**	1009	**553,68**	1051	**566,16**	1079	**584,16**
13	598	984	**542,62**	1031	**574,73**	1093	**599,82**	1139	**613,34**	1169	**632,84**
14	644	1060	**584,36**	1110	**618,94**	1177	**645,96**	1226	**660,52**	1259	**681,52**
15	690	1136	**626,10**	1190	**663,15**	1262	**692,10**	1314	**707,70**	1349	**730,20**
16	736	1211	**667,84**	1269	**707,36**	1346	**738,24**	1402	**754,88**	1438	**778,88**
17	782	1287	**709,58**	1348	**751,57**	1430	**784,38**	1489	**802,06**	1528	**827,56**
18	828	1363	**751,32**	1427	**795,78**	1514	**830,52**	1577	**849,24**	1618	**876,24**
19	874	1438	**793,06**	1507	**839,99**	1598	**876,66**	1664	**896,42**	1708	**924,92**
20	920	1514	**834,80**	1586	**884,20**	1682	**922,80**	1752	**943,60**	1798	**973,60**
21	966	1590	**876,54**	1665	**928,41**	1766	**968,94**	1840	**990,78**	1888	**1022,28**
22	1012	1665	**918,28**	1745	**972,62**	1850	**1015,08**	1927	**1037,96**	1978	**1070,96**
23	1058	1741	**960,02**	1824	**1016,83**	1934	**1061,22**	2015	**1085,14**	2068	**1119,64**
24	1104	1817	**1001,76**	1903	**1061,04**	2018	**1107,36**	2102	**1132,32**	2158	**1168,32**
25	1150	1893	**1043,50**	1983	**1105,25**	2103	**1153,50**	2190	**1179,50**	2248	**1217,00**
26	1196	1968	**1085,24**	2062	**1149,46**	2187	**1199,64**	2278	**1226,68**	2337	**1265,68**
27	1242	2044	**1126,98**	2141	**1193,67**	2271	**1245,78**	2365	**1273,86**	2427	**1314,36**
28	1288	2120	**1168,72**	2220	**1237,88**	2355	**1291,92**	2453	**1321,04**	2517	**1363,04**
29	1334	2195	**1210,46**	2300	**1282,09**	2439	**1338,06**	2540	**1368,22**	2607	**1411,72**
30	1380	2271	**1252,20**	2379	**1326,30**	2523	**1384,20**	2628	**1415,40**	2697	**1460,40**
31	1426	2347	**1293,94**	2458	**1370,51**	2607	**1430,34**	2716	**1462,58**	2787	**1509,08**
32	1472	2422	**1335,68**	2538	**1414,72**	2691	**1476,48**	2803	**1509,76**	2877	**1557,76**
33	1518	2498	**1377,42**	2617	**1458,93**	2775	**1522,62**	2891	**1556,94**	2967	**1606,44**
34	1564	2574	**1419,16**	2696	**1503,14**	2859	**1568,76**	2978	**1604,12**	3057	**1655,12**
35	1610	2650	**1460,90**	2776	**1547,35**	2944	**1614,90**	3066	**1651,30**	3147	**1703,80**
36	1656	2725	**1502,64**	2855	**1591,56**	3028	**1661,04**	3154	**1698,48**	3236	**1752,48**
37	1702	2801	**1544,38**	2934	**1635,77**	3112	**1707,18**	3241	**1745,66**	3326	**1801,16**
38	1748	2877	**1586,12**	3013	**1679,98**	3196	**1753,32**	3329	**1792,84**	3416	**1849,84**
39	1794	2952	**1627,86**	3093	**1724,19**	3280	**1799,46**	3416	**1840,02**	3506	**1898,52**
40	1840	3028	**1669,60**	3172	**1768,40**	3364	**1845,60**	3504	**1887,20**	3596	**1947,20**

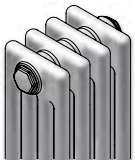
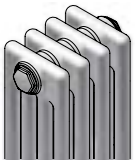
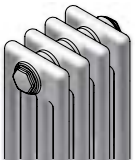
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	766		796		866		885		936	
										
Model	**4077**		**4079**		**4087**		**4089**		**4094**	
Depth mm	136		136		136		136		136	
Exponent n	1,26		1,26		1,26		1,26		1,25	
Max. number of elements	64		64		64		64		64	
Price/element €	**49,57**		**50,46**		**53,65**		**54,91**		**56,32**	
Length	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4 184	397	**198,28**	412	**201,84**	444	**214,60**	448	**219,64**	472	**225,28**
5 230	496	**247,85**	515	**252,30**	555	**268,25**	560	**274,55**	590	**281,60**
6 276	595	**297,42**	618	**302,76**	666	**321,90**	672	**329,46**	708	**337,92**
7 322	694	**346,99**	721	**353,22**	777	**375,55**	784	**384,37**	826	**394,24**
8 368	794	**396,56**	824	**403,68**	888	**429,20**	896	**439,28**	944	**450,56**
9 414	893	**446,13**	927	**454,14**	999	**482,85**	1008	**494,19**	1062	**506,88**
10 460	992	**495,70**	1030	**504,60**	1110	**536,50**	1120	**549,10**	1180	**563,20**
11 506	1091	**545,27**	1133	**555,06**	1221	**590,15**	1232	**604,01**	1298	**619,52**
12 552	1190	**594,84**	1236	**605,52**	1332	**643,80**	1344	**658,92**	1416	**675,84**
13 598	1290	**644,41**	1339	**655,98**	1443	**697,45**	1456	**713,83**	1534	**732,16**
14 644	1389	**693,98**	1442	**706,44**	1554	**751,10**	1568	**768,74**	1652	**788,48**
15 690	1488	**743,55**	1545	**756,90**	1665	**804,75**	1680	**823,65**	1770	**844,80**
16 736	1587	**793,12**	1648	**807,36**	1776	**858,40**	1792	**878,56**	1888	**901,12**
17 782	1686	**842,69**	1751	**857,82**	1887	**912,05**	1904	**933,47**	2006	**957,44**
18 828	1786	**892,26**	1854	**908,28**	1998	**965,70**	2016	**988,38**	2124	**1013,76**
19 874	1885	**941,83**	1957	**958,74**	2109	**1019,35**	2128	**1043,29**	2242	**1070,08**
20 920	1984	**991,40**	2060	**1009,20**	2220	**1073,00**	2240	**1098,20**	2360	**1126,40**
21 966	2083	**1040,97**	2163	**1059,66**	2331	**1126,65**	2352	**1153,11**	2478	**1182,72**
22 1012	2182	**1090,54**	2266	**1110,12**	2442	**1180,30**	2464	**1208,02**	2596	**1239,04**
23 1058	2282	**1140,11**	2369	**1160,58**	2553	**1233,95**	2576	**1262,93**	2714	**1295,36**
24 1104	2381	**1189,68**	2472	**1211,04**	2664	**1287,60**	2688	**1317,84**	2832	**1351,68**
25 1150	2480	**1239,25**	2575	**1261,50**	2775	**1341,25**	2800	**1372,75**	2950	**1408,00**
26 1196	2579	**1288,82**	2678	**1311,96**	2886	**1394,90**	2912	**1427,66**	3068	**1464,32**
27 1242	2678	**1338,39**	2781	**1362,42**	2997	**1448,55**	3024	**1482,57**	3186	**1520,64**
28 1288	2778	**1387,96**	2884	**1412,88**	3108	**1502,20**	3136	**1537,48**	3304	**1576,96**
29 1334	2877	**1437,53**	2987	**1463,34**	3219	**1555,85**	3248	**1592,39**	3422	**1633,28**
30 1380	2976	**1487,10**	3090	**1513,80**	3330	**1609,50**	3360	**1647,30**	3540	**1689,60**
31 1426	3075	**1536,67**	3193	**1564,26**	3441	**1663,15**	3472	**1702,21**	3658	**1745,92**
32 1472	3174	**1586,24**	3296	**1614,72**	3552	**1716,80**	3584	**1757,12**	3776	**1802,24**
33 1518	3274	**1635,81**	3399	**1665,18**	3663	**1770,45**	3696	**1812,03**	3894	**1858,56**
34 1564	3373	**1685,38**	3502	**1715,64**	3774	**1824,10**	3808	**1866,94**	4012	**1914,88**
35 1610	3472	**1734,95**	3605	**1766,10**	3885	**1877,75**	3920	**1921,85**	4130	**1971,20**
36 1656	3571	**1784,52**	3708	**1816,56**	3996	**1931,40**	4032	**1976,76**	4248	**2027,52**
37 1702	3670	**1834,09**	3811	**1867,02**	4107	**1985,05**	4144	**2031,67**	4366	**2083,84**
38 1748	3770	**1883,66**	3914	**1917,48**	4218	**2038,70**	4256	**2086,58**	4484	**2140,16**
39 1794	3869	**1933,23**	4017	**1967,94**	4329	**2092,35**	4368	**2141,49**	4602	**2196,48**
40 1840	3968	**1982,80**	4120	**2018,40**	4440	**2146,00**	4480	**2196,40**	4720	**2252,80**

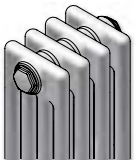
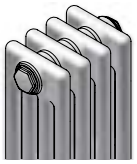
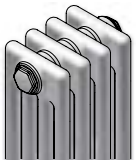
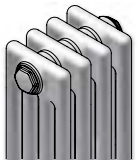
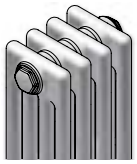
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	966		1066		1666		1866		2066	
											
Model		**4097**		**4107**		**4167**		**4187**		**4207**	
Depth	mm	136		136		136		136		136	
Exponent	n	1,25		1,25		1,31		1,32		1,32	
Max. number of elements		60		22		22		22		22	
Price/element	**€**	**58,49**		**64,81**		**75,31**		**87,28**		**96,33**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	484	**233,96**	528	**259,24**	792	**301,24**	880	**349,12**	968	**385,32**
5	230	605	**292,45**	660	**324,05**	990	**376,55**	1100	**436,40**	1210	**481,65**
6	276	726	**350,94**	792	**388,86**	1188	**451,86**	1320	**523,68**	1452	**577,98**
7	322	847	**409,43**	924	**453,67**	1386	**527,17**	1540	**610,96**	1694	**674,31**
8	368	968	**467,92**	1056	**518,48**	1584	**602,48**	1760	**698,24**	1936	**770,64**
9	414	1089	**526,41**	1188	**583,29**	1782	**677,79**	1980	**785,52**	2178	**866,97**
10	460	1210	**584,90**	1320	**648,10**	1980	**753,10**	2200	**872,80**	2420	**963,30**
11	506	1331	**643,39**	1452	**712,91**	2178	**828,41**	2420	**960,08**	2662	**1059,63**
12	552	1452	**701,88**	1584	**777,72**	2376	**903,72**	2640	**1047,36**	2904	**1155,96**
13	598	1573	**760,37**	1716	**842,53**	2574	**979,03**	2860	**1134,64**	3146	**1252,29**
14	644	1694	**818,86**	1848	**907,34**	2772	**1054,34**	3080	**1221,92**	3388	**1348,62**
15	690	1815	**877,35**	1980	**972,15**	2970	**1129,65**	3300	**1309,20**	3630	**1444,95**
16	736	1936	**935,84**	2112	**1036,96**	3168	**1204,96**	3520	**1396,48**	3872	**1541,28**
17	782	2057	**994,33**	2244	**1101,77**	3366	**1280,27**	3740	**1483,76**	4114	**1637,61**
18	828	2178	**1052,82**	2376	**1166,58**	3564	**1355,58**	3960	**1571,04**	4356	**1733,94**
19	874	2299	**1111,31**	2508	**1231,39**	3762	**1430,89**	4180	**1658,32**	4598	**1830,27**
20	920	2420	**1169,80**	2640	**1296,20**	3960	**1506,20**	4400	**1745,60**	4840	**1926,60**
21	966	2541	**1228,29**	2772	**1361,01**	4158	**1581,51**	4620	**1832,88**	5082	**2022,93**
22	1012	2662	**1286,78**	2904	**1425,82**	4356	**1656,82**	4840	**1920,16**	5324	**2119,26**
23	1058	2783	**1345,27**	3036	**1490,63**	4554	**1732,13**	5060	**2007,44**	5566	**2215,59**
24	1104	2904	**1403,76**	3168	**1555,44**	4752	**1807,44**	5280	**2094,72**	5808	**2311,92**
25	1150	3025	**1462,25**	3300	**1620,25**	4950	**1882,75**	5500	**2182,00**	6050	**2408,25**
26	1196	3146	**1520,74**	3432	**1685,06**	5148	**1958,06**	5720	**2269,28**	6292	**2504,58**
27	1242	3267	**1579,23**	3564	**1749,87**	5346	**2033,37**	5940	**2356,56**	6534	**2600,91**
28	1288	3388	**1637,72**	3696	**1814,68**	5544	**2108,68**	6160	**2443,84**	6776	**2697,24**
29	1334	3509	**1696,21**	3828	**1879,49**	5742	**2183,99**	6380	**2531,12**	7018	**2793,57**
30	1380	3630	**1754,70**	3960	**1944,30**	5940	**2259,30**	6600	**2618,40**	7260	**2889,90**
31	1426	3751	**1813,19**	4092	**2009,11**	6138	**2334,61**	6820	**2705,68**	7502	**2986,23**
32	1472	3872	**1871,68**	4224	**2073,92**	6336	**2409,92**	7040	**2792,96**	7744	**3082,56**
33	1518	3993	**1930,17**	4356	**2138,73**	6534	**2485,23**	7260	**2880,24**	7986	**3178,89**
34	1564	4114	**1988,66**	4488	**2203,54**	6732	**2560,54**	7480	**2967,52**	8228	**3275,22**
35	1610	4235	**2047,15**	4620	**2268,35**	6930	**2635,85**	7700	**3054,80**	8470	**3371,55**
36	1656	4356	**2105,64**	4752	**2333,16**	7128	**2711,16**	7920	**3142,08**	8712	**3467,88**
37	1702	4477	**2164,13**	4884	**2397,97**	7326	**2786,47**	8140	**3229,36**	8954	**3564,21**
38	1748	4598	**2222,62**	5016	**2462,78**	7524	**2861,78**	8360	**3316,64**	9196	**3660,54**
39	1794	4719	**2281,11**	5148	**2527,59**	7722	**2937,09**	8580	**3403,92**	9438	**3756,87**
40	1840	4840	**2339,60**	5280	**2592,40**	7920	**3012,40**	8800	**3491,20**	9680	**3853,20**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	366		566		666		685		766	
Model		**5037**		**5057**		**5067**		**5069**		**5077**	
Depth	mm	173		173		173		173		173	
Exponent	n	1,28		1,27		1,26		1,26		1,26	
Max. number of elements		64		64		64		64		50	
Price/element	**€**	**42,28**		**48,98**		**56,17**		**61,05**		**61,93**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	250	**169,12**	374	**195,92**	432	**224,68**	444	**244,20**	492	**247,72**
5	230	313	**211,40**	468	**244,90**	540	**280,85**	555	**305,25**	615	**309,65**
6	276	375	**253,68**	561	**293,88**	648	**337,02**	666	**366,30**	738	**371,58**
7	322	438	**295,96**	655	**342,86**	756	**393,19**	777	**427,35**	861	**433,51**
8	368	500	**338,24**	748	**391,84**	864	**449,36**	888	**488,40**	984	**495,44**
9	414	563	**380,52**	842	**440,82**	972	**505,53**	999	**549,45**	1107	**557,37**
10	460	625	**422,80**	935	**489,80**	1080	**561,70**	1110	**610,50**	1230	**619,30**
11	506	688	**465,08**	1029	**538,78**	1188	**617,87**	1221	**671,55**	1353	**681,23**
12	552	750	**507,36**	1122	**587,76**	1296	**674,04**	1332	**732,60**	1476	**743,16**
13	598	813	**549,64**	1216	**636,74**	1404	**730,21**	1443	**793,65**	1599	**805,09**
14	644	875	**591,92**	1309	**685,72**	1512	**786,38**	1554	**854,70**	1722	**867,02**
15	690	938	**634,20**	1403	**734,70**	1620	**842,55**	1665	**915,75**	1845	**928,95**
16	736	1000	**676,48**	1496	**783,68**	1728	**898,72**	1776	**976,80**	1968	**990,88**
17	782	1063	**718,76**	1590	**832,66**	1836	**954,89**	1887	**1037,85**	2091	**1052,81**
18	828	1125	**761,04**	1683	**881,64**	1944	**1011,06**	1998	**1098,90**	2214	**1114,74**
19	874	1188	**803,32**	1777	**930,62**	2052	**1067,23**	2109	**1159,95**	2337	**1176,67**
20	920	1250	**845,60**	1870	**979,60**	2160	**1123,40**	2220	**1221,00**	2460	**1238,60**
21	966	1313	**887,88**	1964	**1028,58**	2268	**1179,57**	2331	**1282,05**	2583	**1300,53**
22	1012	1375	**930,16**	2057	**1077,56**	2376	**1235,74**	2442	**1343,10**	2706	**1362,46**
23	1058	1438	**972,44**	2151	**1126,54**	2484	**1291,91**	2553	**1404,15**	2829	**1424,39**
24	1104	1500	**1014,72**	2244	**1175,52**	2592	**1348,08**	2664	**1465,20**	2952	**1486,32**
25	1150	1563	**1057,00**	2338	**1224,50**	2700	**1404,25**	2775	**1526,25**	3075	**1548,25**
26	1196	1625	**1099,28**	2431	**1273,48**	2808	**1460,42**	2886	**1587,30**	3198	**1610,18**
27	1242	1688	**1141,56**	2525	**1322,46**	2916	**1516,59**	2997	**1648,35**	3321	**1672,11**
28	1288	1750	**1183,84**	2618	**1371,44**	3024	**1572,76**	3108	**1709,40**	3444	**1734,04**
29	1334	1813	**1226,12**	2712	**1420,42**	3132	**1628,93**	3219	**1770,45**	3567	**1795,97**
30	1380	1875	**1268,40**	2805	**1469,40**	3240	**1685,10**	3330	**1831,50**	3690	**1857,90**
31	1426	1938	**1310,68**	2899	**1518,38**	3348	**1741,27**	3441	**1892,55**	3813	**1919,83**
32	1472	2000	**1352,96**	2992	**1567,36**	3456	**1797,44**	3552	**1953,60**	3936	**1981,76**
33	1518	2063	**1395,24**	3086	**1616,34**	3564	**1853,61**	3663	**2014,65**	4059	**2043,69**
34	1564	2125	**1437,52**	3179	**1665,32**	3672	**1909,78**	3774	**2075,70**	4182	**2105,62**
35	1610	2188	**1479,80**	3273	**1714,30**	3780	**1965,95**	3885	**2136,75**	4305	**2167,55**
36	1656	2250	**1522,08**	3366	**1763,28**	3888	**2022,12**	3996	**2197,80**	4428	**2229,48**
37	1702	2313	**1564,36**	3460	**1812,26**	3996	**2078,29**	4107	**2258,85**	4551	**2291,41**
38	1748	2375	**1606,64**	3553	**1861,24**	4104	**2134,46**	4218	**2319,90**	4674	**2353,34**
39	1794	2438	**1648,92**	3647	**1910,22**	4212	**2190,63**	4329	**2380,95**	4797	**2415,27**
40	1840	2500	**1691,20**	3740	**1959,20**	4320	**2246,80**	4440	**2442,00**	4920	**2477,20**

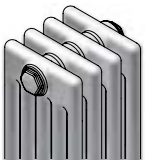
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height	mm	866		885		966		1066		266	
											
Model		**5087**		**5089**		**5097**		**5107**		**6027**	
Depth	mm	173		173		173		173		210	
Exponent	n	1,26		1,26		1,25		1,25		1,28	
Max. number of elements		50		50		50		22		64	
Price/element	**€**	**63,59**		**65,12**		**68,21**		**79,19**		**47,18**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	544	**254,36**	556	**260,48**	600	**272,84**	648	**316,76**	219	**188,72**
5	230	680	**317,95**	695	**325,60**	750	**341,05**	810	**395,95**	274	**235,90**
6	276	816	**381,54**	834	**390,72**	900	**409,26**	972	**475,14**	328	**283,08**
7	322	952	**445,13**	973	**455,84**	1050	**477,47**	1134	**554,33**	383	**330,26**
8	368	1088	**508,72**	1112	**520,96**	1200	**545,68**	1296	**633,52**	438	**377,44**
9	414	1224	**572,31**	1251	**586,08**	1350	**613,89**	1458	**712,71**	492	**424,62**
10	460	1360	**635,90**	1390	**651,20**	1500	**682,10**	1620	**791,90**	547	**471,80**
11	506	1496	**699,49**	1529	**716,32**	1650	**750,31**	1782	**871,09**	602	**518,98**
12	552	1632	**763,08**	1668	**781,44**	1800	**818,52**	1944	**950,28**	656	**566,16**
13	598	1768	**826,67**	1807	**846,56**	1950	**886,73**	2106	**1029,47**	711	**613,34**
14	644	1904	**890,26**	1946	**911,68**	2100	**954,94**	2268	**1108,66**	766	**660,52**
15	690	2040	**953,85**	2085	**976,80**	2250	**1023,15**	2430	**1187,85**	821	**707,70**
16	736	2176	**1017,44**	2224	**1041,92**	2400	**1091,36**	2592	**1267,04**	875	**754,88**
17	782	2312	**1081,03**	2363	**1107,04**	2550	**1159,57**	2754	**1346,23**	930	**802,06**
18	828	2448	**1144,62**	2502	**1172,16**	2700	**1227,78**	2916	**1425,42**	985	**849,24**
19	874	2584	**1208,21**	2641	**1237,28**	2850	**1295,99**	3078	**1504,61**	1039	**896,42**
20	920	2720	**1271,80**	2780	**1302,40**	3000	**1364,20**	3240	**1583,80**	1094	**943,60**
21	966	2856	**1335,39**	2919	**1367,52**	3150	**1432,41**	3402	**1662,99**	1149	**990,78**
22	1012	2992	**1398,98**	3058	**1432,64**	3300	**1500,62**	3564	**1742,18**	1203	**1037,96**
23	1058	3128	**1462,57**	3197	**1497,76**	3450	**1568,83**	3726	**1821,37**	1258	**1085,14**
24	1104	3264	**1526,16**	3336	**1562,88**	3600	**1637,04**	3888	**1900,56**	1313	**1132,32**
25	1150	3400	**1589,75**	3475	**1628,00**	3750	**1705,25**	4050	**1979,75**	1368	**1179,50**
26	1196	3536	**1653,34**	3614	**1693,12**	3900	**1773,46**	4212	**2058,94**	1422	**1226,68**
27	1242	3672	**1716,93**	3753	**1758,24**	4050	**1841,67**	4374	**2138,13**	1477	**1273,86**
28	1288	3808	**1780,52**	3892	**1823,36**	4200	**1909,88**	4536	**2217,32**	1532	**1321,04**
29	1334	3944	**1844,11**	4031	**1888,48**	4350	**1978,09**	4698	**2296,51**	1586	**1368,22**
30	1380	4080	**1907,70**	4170	**1953,60**	4500	**2046,30**	4860	**2375,70**	1641	**1415,40**
31	1426	4216	**1971,29**	4309	**2018,72**	4650	**2114,51**	5022	**2454,89**	1696	**1462,58**
32	1472	4352	**2034,88**	4448	**2083,84**	4800	**2182,72**	5184	**2534,08**	1750	**1509,76**
33	1518	4488	**2098,47**	4587	**2148,96**	4950	**2250,93**	5346	**2613,27**	1805	**1556,94**
34	1564	4624	**2162,06**	4726	**2214,08**	5100	**2319,14**	5508	**2692,46**	1860	**1604,12**
35	1610	4760	**2225,65**	4865	**2279,20**	5250	**2387,35**	5670	**2771,65**	1915	**1651,30**
36	1656	4896	**2289,24**	5004	**2344,32**	5400	**2455,56**	5832	**2850,84**	1969	**1698,48**
37	1702	5032	**2352,83**	5143	**2409,44**	5550	**2523,77**	5994	**2930,03**	2024	**1745,66**
38	1748	5168	**2416,42**	5282	**2474,56**	5700	**2591,98**	6156	**3009,22**	2079	**1792,84**
39	1794	5304	**2480,01**	5421	**2539,68**	5850	**2660,19**	6318	**3088,41**	2133	**1840,02**
40	1840	5440	**2543,60**	5560	**2604,80**	6000	**2728,40**	6480	**3167,60**	2188	**1887,20**

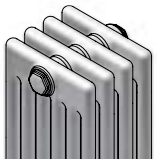
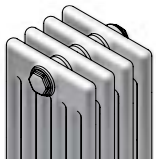
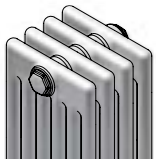
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

Height mm	366		416		566		666		685	
										
Model	**6037**		**6042**		**6057**		**6067**		**6069**	
Depth mm	210		210		210		210		210	
Exponent n	1,28		1,28		1,27		1,26		1,26	
Max. number of elements	64		64		64		55		55	
Price/element €	**50,10**		**51,86**		**57,79**		**65,89**		**69,33**	
Length	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4 184	296	**200,40**	334	**207,44**	444	**231,16**	512	**263,56**	528	**277,32**
5 230	370	**250,50**	418	**259,30**	555	**288,95**	640	**329,45**	660	**346,65**
6 276	444	**300,60**	501	**311,16**	666	**346,74**	768	**395,34**	792	**415,98**
7 322	518	**350,70**	585	**363,02**	777	**404,53**	896	**461,23**	924	**485,31**
8 368	592	**400,80**	668	**414,88**	888	**462,32**	1024	**527,12**	1056	**554,64**
9 414	666	**450,90**	752	**466,74**	999	**520,11**	1152	**593,01**	1188	**623,97**
10 460	740	**501,00**	835	**518,60**	1110	**577,90**	1280	**658,90**	1320	**693,30**
11 506	814	**551,10**	919	**570,46**	1221	**635,69**	1408	**724,79**	1452	**762,63**
12 552	888	**601,20**	1002	**622,32**	1332	**693,48**	1536	**790,68**	1584	**831,96**
13 598	962	**651,30**	1086	**674,18**	1443	**751,27**	1664	**856,57**	1716	**901,29**
14 644	1036	**701,40**	1169	**726,04**	1554	**809,06**	1792	**922,46**	1848	**970,62**
15 690	1110	**751,50**	1253	**777,90**	1665	**866,85**	1920	**988,35**	1980	**1039,95**
16 736	1184	**801,60**	1336	**829,76**	1776	**924,64**	2048	**1054,24**	2112	**1109,28**
17 782	1258	**851,70**	1420	**881,62**	1887	**982,43**	2176	**1120,13**	2244	**1178,61**
18 828	1332	**901,80**	1503	**933,48**	1998	**1040,22**	2304	**1186,02**	2376	**1247,94**
19 874	1406	**951,90**	1587	**985,34**	2109	**1098,01**	2432	**1251,91**	2508	**1317,27**
20 920	1480	**1002,00**	1670	**1037,20**	2220	**1155,80**	2560	**1317,80**	2640	**1386,60**
21 966	1554	**1052,10**	1754	**1089,06**	2331	**1213,59**	2688	**1383,69**	2772	**1455,93**
22 1012	1628	**1102,20**	1837	**1140,92**	2442	**1271,38**	2816	**1449,58**	2904	**1525,26**
23 1058	1702	**1152,30**	1921	**1192,78**	2553	**1329,17**	2944	**1515,47**	3036	**1594,59**
24 1104	1776	**1202,40**	2004	**1244,64**	2664	**1386,96**	3072	**1581,36**	3168	**1663,92**
25 1150	1850	**1252,50**	2088	**1296,50**	2775	**1444,75**	3200	**1647,25**	3300	**1733,25**
26 1196	1924	**1302,60**	2171	**1348,36**	2886	**1502,54**	3328	**1713,14**	3432	**1802,58**
27 1242	1998	**1352,70**	2255	**1400,22**	2997	**1560,33**	3456	**1779,03**	3564	**1871,91**
28 1288	2072	**1402,80**	2338	**1452,08**	3108	**1618,12**	3584	**1844,92**	3696	**1941,24**
29 1334	2146	**1452,90**	2422	**1503,94**	3219	**1675,91**	3712	**1910,81**	3828	**2010,57**
30 1380	2220	**1503,00**	2505	**1555,80**	3330	**1733,70**	3840	**1976,70**	3960	**2079,90**
31 1426	2294	**1553,10**	2589	**1607,66**	3441	**1791,49**	3968	**2042,59**	4092	**2149,23**
32 1472	2368	**1603,20**	2672	**1659,52**	3552	**1849,28**	4096	**2108,48**	4224	**2218,56**
33 1518	2442	**1653,30**	2756	**1711,38**	3663	**1907,07**	4224	**2174,37**	4356	**2287,89**
34 1564	2516	**1703,40**	2839	**1763,24**	3774	**1964,86**	4352	**2240,26**	4488	**2357,22**
35 1610	2590	**1753,50**	2923	**1815,10**	3885	**2022,65**	4480	**2306,15**	4620	**2426,55**
36 1656	2664	**1803,60**	3006	**1866,96**	3996	**2080,44**	4608	**2372,04**	4752	**2495,88**
37 1702	2738	**1853,70**	3090	**1918,82**	4107	**2138,23**	4736	**2437,93**	4884	**2565,21**
38 1748	2812	**1903,80**	3173	**1970,68**	4218	**2196,02**	4864	**2503,82**	5016	**2634,54**
39 1794	2886	**1953,90**	3257	**2022,54**	4329	**2253,81**	4992	**2569,71**	5148	**2703,87**
40 1840	2960	**2004,00**	3340	**2074,40**	4440	**2311,60**	5120	**2635,60**	5280	**2773,20**

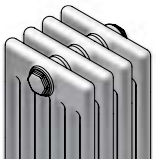
Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

Φ_s = Standard thermal output according to EN 442 (ΔT 50K: 75/65/20 °C)

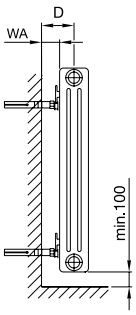
Height	mm	766		866		885		966		1066	
											
Model		**6077**		**6087**		**6089**		**6097**		**6107**	
Depth	mm	210		210		210		210		210	
Exponent	n	1,26		1,26		1,26		1,25		1,25	
Max. number of elements		46		46		46		42		22	
Price/element	**€**	**73,52**		**76,85**		**78,36**		**79,85**		**94,13**	
Length		Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**	Φ_s	**Price**
Elements	mm	W	**€**	W	**€**	W	**€**	W	**€**	W	**€**
4	184	588	**294,08**	648	**307,40**	660	**313,44**	708	**319,40**	772	**376,52**
5	230	735	**367,60**	810	**384,25**	825	**391,80**	885	**399,25**	965	**470,65**
6	276	882	**441,12**	972	**461,10**	990	**470,16**	1062	**479,10**	1158	**564,78**
7	322	1029	**514,64**	1134	**537,95**	1155	**548,52**	1239	**558,95**	1351	**658,91**
8	368	1176	**588,16**	1296	**614,80**	1320	**626,88**	1416	**638,80**	1544	**753,04**
9	414	1323	**661,68**	1458	**691,65**	1485	**705,24**	1593	**718,65**	1737	**847,17**
10	460	1470	**735,20**	1620	**768,50**	1650	**783,60**	1770	**798,50**	1930	**941,30**
11	506	1617	**808,72**	1782	**845,35**	1815	**861,96**	1947	**878,35**	2123	**1035,43**
12	552	1764	**882,24**	1944	**922,20**	1980	**940,32**	2124	**958,20**	2316	**1129,56**
13	598	1911	**955,76**	2106	**999,05**	2145	**1018,68**	2301	**1038,05**	2509	**1223,69**
14	644	2058	**1029,28**	2268	**1075,90**	2310	**1097,04**	2478	**1117,90**	2702	**1317,82**
15	690	2205	**1102,80**	2430	**1152,75**	2475	**1175,40**	2655	**1197,75**	2895	**1411,95**
16	736	2352	**1176,32**	2592	**1229,60**	2640	**1253,76**	2832	**1277,60**	3088	**1506,08**
17	782	2499	**1249,84**	2754	**1306,45**	2805	**1332,12**	3009	**1357,45**	3281	**1600,21**
18	828	2646	**1323,36**	2916	**1383,30**	2970	**1410,48**	3186	**1437,30**	3474	**1694,34**
19	874	2793	**1396,88**	3078	**1460,15**	3135	**1488,84**	3363	**1517,15**	3667	**1788,47**
20	920	2940	**1470,40**	3240	**1537,00**	3300	**1567,20**	3540	**1597,00**	3860	**1882,60**
21	966	3087	**1543,92**	3402	**1613,85**	3465	**1645,56**	3717	**1676,85**	4053	**1976,73**
22	1012	3234	**1617,44**	3564	**1690,70**	3630	**1723,92**	3894	**1756,70**	4246	**2070,86**
23	1058	3381	**1690,96**	3726	**1767,55**	3795	**1802,28**	4071	**1836,55**	4439	**2164,99**
24	1104	3528	**1764,48**	3888	**1844,40**	3960	**1880,64**	4248	**1916,40**	4632	**2259,12**
25	1150	3675	**1838,00**	4050	**1921,25**	4125	**1959,00**	4425	**1996,25**	4825	**2353,25**
26	1196	3822	**1911,52**	4212	**1998,10**	4290	**2037,36**	4602	**2076,10**	5018	**2447,38**
27	1242	3969	**1985,04**	4374	**2074,95**	4455	**2115,72**	4779	**2155,95**	5211	**2541,51**
28	1288	4116	**2058,56**	4536	**2151,80**	4620	**2194,08**	4956	**2235,80**	5404	**2635,64**
29	1334	4263	**2132,08**	4698	**2228,65**	4785	**2272,44**	5133	**2315,65**	5597	**2729,77**
30	1380	4410	**2205,60**	4860	**2305,50**	4950	**2350,80**	5310	**2395,50**	5790	**2823,90**
31	1426	4557	**2279,12**	5022	**2382,35**	5115	**2429,16**	5487	**2475,35**	5983	**2918,03**
32	1472	4704	**2352,64**	5184	**2459,20**	5280	**2507,52**	5664	**2555,20**	6176	**3012,16**
33	1518	4851	**2426,16**	5346	**2536,05**	5445	**2585,88**	5841	**2635,05**	6369	**3106,29**
34	1564	4998	**2499,68**	5508	**2612,90**	5610	**2664,24**	6018	**2714,90**	6562	**3200,42**
35	1610	5145	**2573,20**	5670	**2689,75**	5775	**2742,60**	6195	**2794,75**	6755	**3294,55**
36	1656	5292	**2646,72**	5832	**2766,60**	5940	**2820,96**	6372	**2874,60**	6948	**3388,68**
37	1702	5439	**2720,24**	5994	**2843,45**	6105	**2899,32**	6549	**2954,45**	7141	**3482,81**
38	1748	5586	**2793,76**	6156	**2920,30**	6270	**2977,68**	6726	**3034,30**	7334	**3576,94**
39	1794	5733	**2867,28**	6318	**2997,15**	6435	**3056,04**	6903	**3114,15**	7527	**3671,07**
40	1840	5880	**2940,80**	6480	**3074,00**	6600	**3134,40**	7080	**3194,00**	7720	**3765,20**

Warning: Weight over 100 kg

Surcharge for special colours, category 1 = 20%, category 2 = 30%

Factor f_1 for converting the thermal output to operating temperatures 70/55/20 °C = 0,80, to 70/50/20 °C = 0,73, to 55/45/20 °C = 0,51

Zehnder Charleston Retrofit

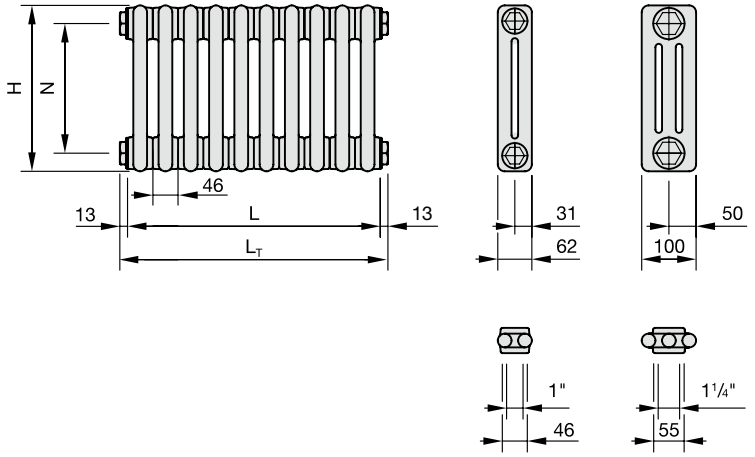
Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no.[1] Set white	€/Set White	Colour
Fixing details for accessory set BKE							
Set BKE[2]	 Distance D: 2-column 77 mm 3-column 96 mm 4-column 114 mm 5-column 133 mm 6-column 151 mm	**All models**					
		Height 260 - 1000 mm		with retaining spring			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	46	4 x BH + BKE160 6 x BH + BKE160 8 x BH + BKE160	774461 774661 774861	**35,00** **49,01** **63,03**	**55,16** **79,09** **102,99**
		Height 1001 - 1500 mm		with retaining spring			
		L = 4-20 el. L = 21-40 el. L = 41-60 el.	46	4 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160	774461 774861 774961	**35,00** **63,03** **77,03**	**55,16** **102,99** **126,91**
		2- to 5-column					
		Height 1501 - 2200 mm		with retaining spring			
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	46	4 x BH + BKE160 6 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160	774461 774661 774861 774961	**35,00** **49,01** **63,03** **77,03**	**55,16** **79,09** **102,99** **126,91**
		6-column					
		Height 1501 - 2200 mm		with retaining spring			
		L = 4-10 el. L = 11-20 el. L = 21-30 el. L = 31-40 el.	46	4 x BH + BKE160 8 x BH + BKE160 10 x BH + BKE160 14 x BH + BKE160	774461 774861 774961 -	**35,00** **63,03** **77,03** **-**	**55,16** **102,99** **126,91** **-**

L = Length of radiator in mm D = Dimension from wall to middle of connection WA = Wall clearance

[1] The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.
[2] Average distances are given for D and WA for set BKE, as bracket installation depth is variable.

Zehnder Charleston Retrofit

Retrofit models 2- to 6-column



H = Height
L = Length = elements x 46 mm
L_T = Total length = elements x 46 mm + 2 x 13 mm
N = Boss spacing
T = Depth
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

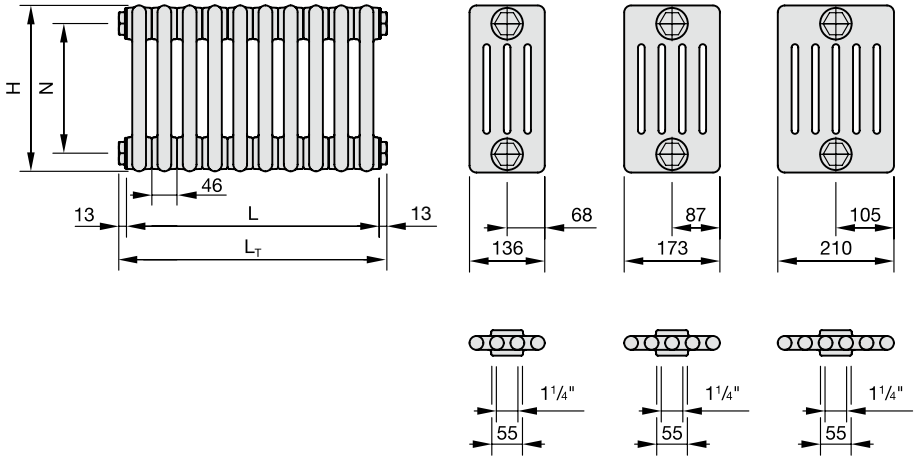
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
2041	408	350	62	0,40	0,65	24	3,0	1,26	32,4	26,3	17,1
2046	458	400	62	0,50	0,72	24	3,0	1,26	36,0	29,2	19,0
2056	558	500	62	0,60	0,86	23	4,0	1,25	43,0	34,8	22,5
2059	588	530	62	0,60	0,90	23	3,9	1,25	45,0	36,4	23,8
2063	628	570	62	0,70	0,95	22	4,0	1,24	47,7	38,7	25,3
2066	658	600	62	0,70	0,99	22	4,0	1,24	49,7	40,2	26,0
2068	677	619	62	0,65	1,11	23	4,4	1,24	50,9	41,3	27,0
2076	758	700	62	0,70	1,19	22	4,8	1,24	56,0	45,4	29,7
2079	788	730	62	0,71	1,22	22	4,9	1,23	57,8	46,9	30,8
2086	858	800	62	0,75	1,34	22	5,2	1,23	62,0	50,3	33,1
2088	877	819	62	0,80	1,40	22	5,4	1,23	63,1	51,2	33,7
2093	928	870	62	0,80	1,33	22	5,7	1,22	66,0	53,7	35,4
2096	958	900	62	0,90	1,40	22	6,0	1,22	67,6	54,7	35,4
2166	1658	1600	62	1,40	2,22	23	10,0	1,29	115,0	92,4	59,5
2186	1858	1800	62	1,50	2,60	23	11,1	1,29	129,0	103,7	66,7
2206	2058	2000	62	1,70	2,90	23	12,3	1,28	142,0	114,3	73,8
3037	366	300	100	0,60	0,89	19	3,0	1,28	38,6	31,2	20,2
3042	416	350	100	0,70	0,99	19	4,0	1,28	43,5	35,2	22,8
3057	566	500	100	0,90	1,31	18	5,0	1,27	57,8	46,7	30,1
3059	596	530	100	0,90	1,37	18	5,2	1,27	60,5	48,8	31,6
3064	636	570	100	1,00	1,45	18	5,4	1,27	64,2	51,8	33,6
3067	666	600	100	1,00	1,52	18	6,0	1,26	66,9	54,0	34,9
3069	685	619	100	0,97	1,68	18	5,9	1,26	68,6	55,4	36,0
3077	766	700	100	1,15	1,76	18	6,5	1,26	75,7	61,1	39,8
3079	796	730	100	1,15	1,80	18	6,7	1,26	77,4	62,5	40,7
3087	866	800	100	1,19	1,98	18	7,3	1,26	84,2	68,0	44,2
3089	885	819	100	1,21	2,12	18	7,5	1,26	85,8	69,3	45,1
3094	936	870	100	1,30	2,05	18	7,8	1,25	90,0	72,8	47,5
3097	966	900	100	1,30	2,15	18	8,0	1,25	92,4	74,5	47,9
3107	1066	1000	100	1,50	2,36	18	9,0	1,25	100,0	80,6	51,9
3167	1666	1600	100	2,00	3,30	18	13,4	1,31	154,0	123,3	78,9
3187	1866	1800	100	2,40	3,95	18	15,0	1,32	171,0	136,7	87,1
3207	2066	2000	100	2,60	4,35	18	16,3	1,32	188,0	150,3	95,8

Zehnder Charleston Retrofit

Retrofit models 2- to 6-column



H = Height
L = Length = elements x 46 mm
L_T = Total length = elements x 46 mm + 2 x 13 mm
N = Boss spacing
T = Depth
V = Water content
M = Weight
s_k = Proportion of radiation
q_{ms} = Nominal flow rate
n = Exponent
Φ_s = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

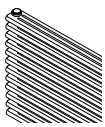
Dimensions in mm

Technical specifications per element

Model	H mm	N mm	T mm	V dm^3	M kg	s_k %	q_{ms} kg/h	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
4037	366	300	136	0,80	1,14	16	4,0	1,28	50,6	40,9	26,5
4042	416	350	136	0,90	1,28	16	5,0	1,28	57,0	46,0	29,7
4057	566	500	136	1,10	1,69	15	6,0	1,27	75,7	61,0	39,3
4059	596	530	136	1,20	1,78	15	6,8	1,27	79,3	63,9	41,5
4064	636	570	136	1,20	1,82	15	7,2	1,27	84,1	67,8	44,0
4067	666	600	136	1,30	1,96	15	7,0	1,26	87,6	70,6	45,4
4069	685	619	136	1,27	2,02	15	7,7	1,26	89,9	72,6	47,2
4077	766	700	136	1,45	2,24	15	8,6	1,26	99,2	80,1	52,1
4079	796	730	136	1,45	2,30	15	8,8	1,26	103,0	83,2	54,1
4087	866	800	136	1,56	2,51	15	9,3	1,26	111,0	89,7	58,3
4089	885	819	136	1,59	2,56	15	9,5	1,26	112,0	90,5	58,8
4094	936	870	136	1,70	2,70	15	10,1	1,25	118,0	95,5	62,3
4097	966	900	136	1,70	2,79	15	10,0	1,25	121,0	97,4	62,4
4107	1066	1000	136	1,90	3,06	15	11,0	1,25	132,0	106,1	67,8
4167	1666	1600	136	2,10	4,40	15	17,1	1,31	198,0	158,6	101,4
4187	1866	1800	136	3,10	5,12	15	18,8	1,32	220,0	175,9	112,1
4207	2066	2000	136	3,40	5,62	15	20,8	1,32	242,0	193,5	123,3
5037	366	300	173	1,00	1,49	15	5,0	1,28	62,5	50,5	32,6
5057	566	500	173	1,40	2,17	14	8,0	1,27	93,5	75,4	48,5
5067	666	600	173	1,60	2,52	13	9,0	1,26	108,0	86,9	55,7
5069	685	619	173	1,70	2,90	13	9,5	1,26	111,0	89,7	58,3
5077	766	700	173	1,85	2,99	13	10,6	1,26	123,0	99,3	64,6
5087	866	800	173	2,00	3,36	13	11,8	1,26	136,0	109,8	71,5
5089	885	819	173	2,10	3,60	13	12,0	1,26	139,0	112,3	73,0
5097	966	900	173	2,10	3,54	13	13,0	1,25	150,0	120,3	76,6
5107	1066	1000	173	2,30	3,88	13	14,0	1,25	162,0	129,9	82,7
6027	266	200	210	1,10	1,44	16	5,0	1,28	54,7	44,1	28,4
6037	366	300	210	1,10	1,80	14	6,0	1,28	74,0	59,8	38,6
6042	416	350	210	1,30	2,01	13	7,0	1,28	83,5	67,3	43,3
6057	566	500	210	1,70	2,62	12	9,0	1,27	111,0	89,3	57,3
6067	666	600	210	1,90	3,02	12	11,0	1,26	128,0	102,7	65,4
6069	685	619	210	2,00	3,30	12	11,4	1,26	132,0	106,6	69,3
6077	766	700	210	2,15	3,61	12	12,6	1,26	147,0	118,7	77,2
6087	866	800	210	2,40	4,05	12	13,9	1,26	162,0	130,8	85,1
6089	885	819	210	2,50	4,20	12	14,2	1,26	165,0	133,3	86,7
6097	966	900	210	2,60	4,25	12	15,0	1,25	177,0	141,7	89,9
6107	1066	1000	210	2,80	4,65	12	16,0	1,25	193,0	154,3	97,6

Notes

Zehnder Charleston Turned

	Overview of models	Product description	List prices	Connections	Technical data
Zehnder Charleston Turned					
 ■ Classic tubular radiator rotated by 90° ■ Element height 46 mm ■ Welded-on lugs	116	117	118	119	118

Zehnder Charleston Turned

Zehnder Charleston Turned

2-column

3-column

Height mm	Length [1] mm	Depth mm	
		62	100
302	1500	T2150/6	T3150/6
	1800	T2180/6	T3180/6
394	1500	T2150/8	T3150/8
	1800	T2180/8	T3180/8
486	1500	T2150/10	T3150/10
	1800	T2180/10	T3180/10
578	1500	T2150/12	T3150/12
	1800	T2180/12	T3180/12

[1] The values shown here are the so-called nominal length; the exact length for 2-column radiators is 8 mm lower; see page 118.

Zehnder Charleston Turned

Zehnder Charleston Turned

Product description

Zehnder Charleston Turned, the original steel tubular radiator with a new look, boasts a fresh design and great performance. The orientation, rotated by 90°, lends the classic radiator a new dimension and gives Zehnder Charleston Turned an exceptionally slim design. Due to its outstanding performance, the steel tubular radiator turns large living spaces into an oasis of well-being. Available in almost any colour and finish from the Zehnder colour chart.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Height of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Maximum operating temperature 110 °C

Advantages

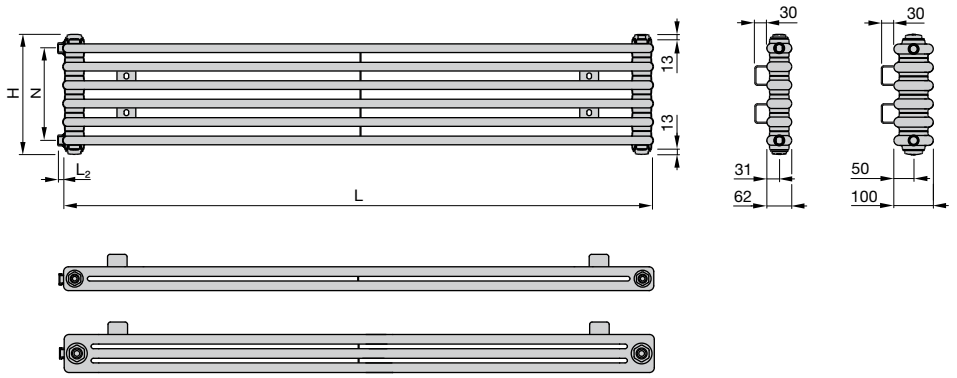
- Innovative design due to its orientation rotated by 90°
- Significantly higher thermal output due to the optimal waterflow properties of the horizontal tubes
- Easy installation via welded-on lugs in the same colour as the radiator (provided ex factory)
- Lasting attractive looks with no tube deformation due to a welded-on centre brace in the same colour as the radiator (provided ex factory)
- Wide range of applications due to various connection options
- High level of thermal output ideal for old buildings with a high heat load
- Available with special Zehnder TopCare surface coating for preventing the reproduction and spread of microorganisms
- Residue-free laser welding technology “LaZer made” guarantees maximum quality, high-end design and reliable operation of the heating system

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 3 x ½" female thread
- Directional air vent ½"
- Welded-on lugs and centre brace
- Complete packaging in stretch film and carton

Zehnder Charleston Turned

Horizontal models



H = Height
N = Connection centre
T = Depth of radiator
A = Surface
V = Water content
M = Weight
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

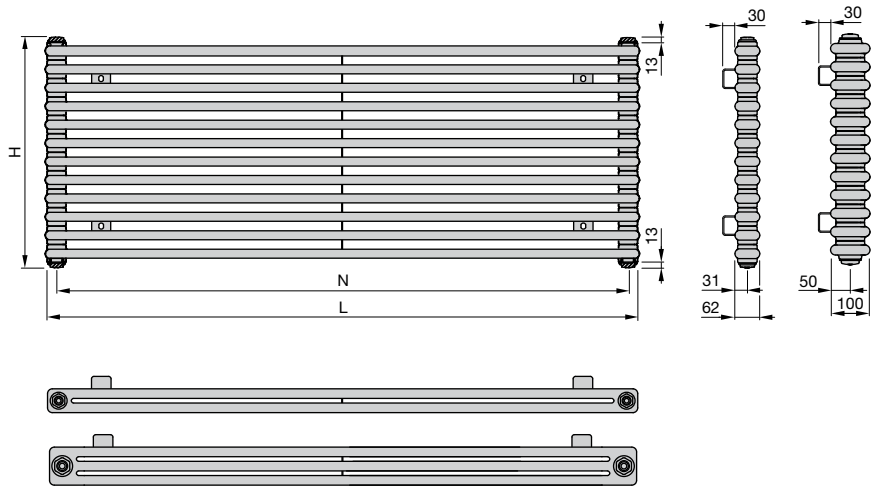
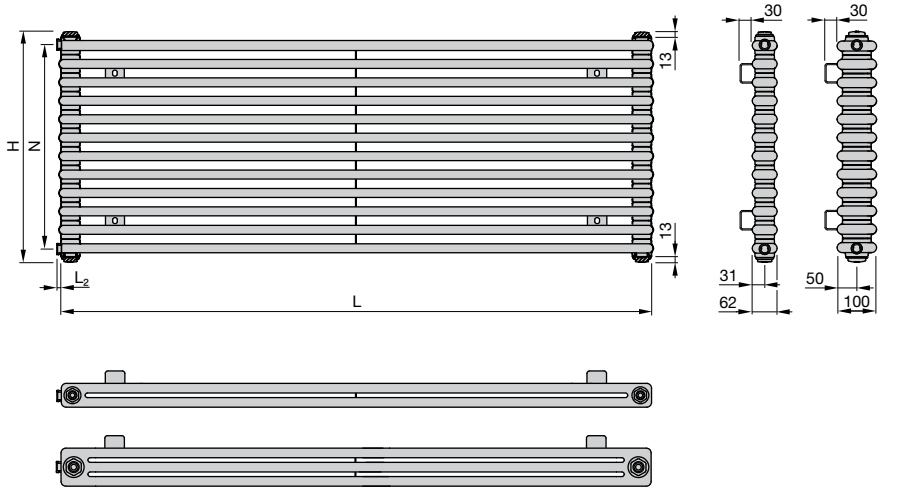
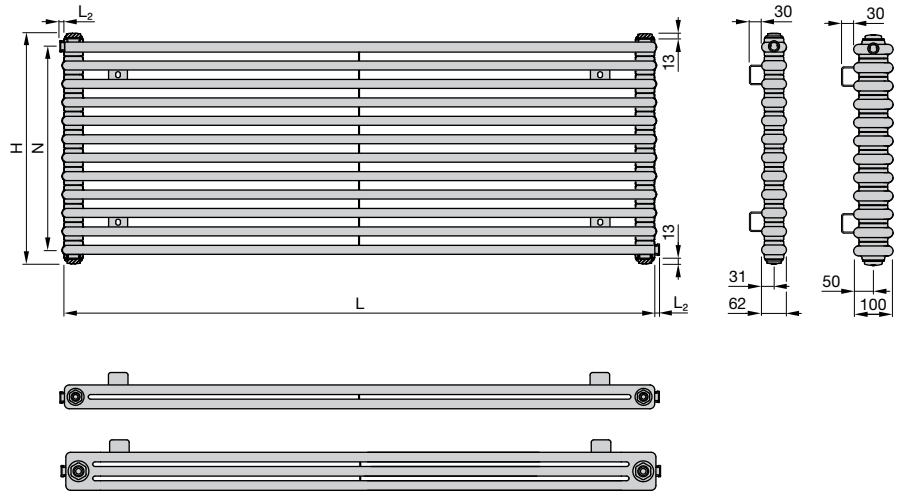
Dimensions in mm

Prices and technical specifications per radiator

Model	**Price**[1] **RAL 9016**	H	N Bottom connection	N Side connection	L	T	T incl. lugs [2]	A	V	M	Exp.	Φ_s=ΔT 50 K EN442	Φ 70/55/20 °C	Φ 55/45/20 °C
	€	mm	mm	mm	mm	mm	mm	m^2	dm^3	kg	n	Watt	Watt	Watt
T2150/6	**474,03**	302	1434	234	1492	62	92	1,42	7,8	12,73	1,23	759	616	402
T2150/8	**549,21**	394	1434	326	1492	62	92	1,89	10,4	16,97	1,25	975	789	512
T2150/10	**624,38**	486	1434	418	1492	62	92	2,36	13,0	21,21	1,26	1195	965	622
T2150/12	**699,58**	578	1434	510	1492	62	92	2,83	15,6	25,45	1,23	1420	1152	751
T2180/6	**514,81**	302	1734	234	1792	62	92	1,70	9,0	15,16	1,22	924	751	491
T2180/8	**604,01**	394	1734	326	1792	62	92	2,26	12,0	20,22	1,24	1187	962	626
T2180/10	**693,22**	486	1734	418	1792	62	92	2,83	15,0	25,27	1,25	1454	1176	761
T2180/12	**781,13**	578	1734	510	1792	62	92	3,40	18,0	30,32	1,26	1729	1397	902
T3150/6	**570,88**	302	1434	234	1500	100	130	2,11	12,0	19,66	1,23	1032	837	546
T3150/8	**677,91**	394	1434	326	1500	100	130	2,82	16,0	26,22	1,25	1318	1067	691
T3150/10	**784,94**	486	1434	418	1500	100	130	3,52	20,0	32,77	1,26	1598	1290	831
T3150/12	**893,26**	578	1434	510	1500	100	130	4,22	24,0	39,32	1,26	1871	1510	974
T3180/6	**646,05**	302	1734	234	1800	100	130	2,53	14,4	23,45	1,25	1255	1016	659
T3180/8	**778,58**	394	1734	326	1800	100	130	3,38	19,2	31,27	1,27	1604	1294	833
T3180/10	**911,11**	486	1734	418	1800	100	130	4,22	24,0	39,09	1,29	1944	1563	999
T3180/12	**1043,64**	578	1734	510	1800	100	130	5,06	28,8	46,91	1,26	2276	1838	1186

[1] Surcharge for special colour, category 1 = 20%; category 2 = 30%
[2] Wall distance of the welded-on lugs: 30 mm

Zehnder Charleston Turned

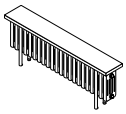
Connection type	Price €	Dimensional drawings: front view, side view and top view (bottom)
Connection 2-tube with external valve		
bottom connection 3580 * 5390 *	**No additional charge**	
same-side 1280 * 7690 *	**112,13**	
opposite side 1680 * 7290 *	**94,30**	

H = Height
L = Length
N = Boss spacing

* = Venting
L_2 = Excess length thread,
1280/7690 = 5 mm;
1680/7290 = 15 mm

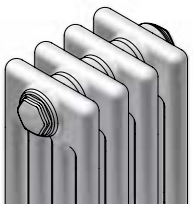
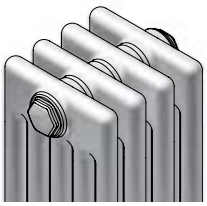
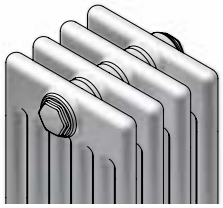
Dimensions in mm

Zehnder Charleston Bench

	Overview of models	Product description	List prices	Special versions	Connections	Technical data
Zehnder Charleston Bench						
 ■ Can be used as a bench or shelf ■ Lengths according to requirements ■ For unfinished and finished floors	122	123	124	126	125	124

Zehnder Charleston Bench

Zehnder Charleston Bench

Bench height total [1] mm	Length mm	4-column	5-column	6-column
430	1012	**CB 4026-22**	**CB 5026-22**	**CB 6026-22**
	1242	**CB 4026-27**	**CB 5026-27**	**CB 6026-27**
	1426	**CB 4026-31**	**CB 5026-31**	**CB 6026-31**
	1610	**CB 4026-35**	**CB 5026-35**	**CB 6026-35**
	1748	**CB 4026-38**	**CB 5026-38**	**CB 6026-38**
	2024	**CB 4026-44**	**CB 5026-44**	**CB 6026-44**
	2300	**CB 4026-50**	**CB 5026-50**	**CB 6026-50**

[1] Dimension applies from finished floor.

Zehnder Charleston Bench

zehnder
Made in Germany

Zehnder Charleston Bench

Product description

Zehnder Charleston Bench is the version of a heated bench with vertical tube guide. This radiator is part of the product family of Zehnder Charleston and can additionally be used as seating in either private or public spaces.
The radiator can be installed on unfinished or finished floors, the connection is provided from the floor as standard, the seat (see example in figure) added on site depending on the installation situation. The aspects of hygienic suitability (certificate) and cleanability also naturally apply to Zehnder Charleston Bench.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Maximum operating pressure 10 bar
- Operating temperature max. 110 °C

Customisation options

- Choice of connection types, including integrated valve
- Special colours and antibacterial coating
- Galvanised and painted
- Energy-saving thermal radiation shield for installation in front of windows
- Special shapes: angled or curved
- High pressure version up to max. 18 bar

Advantages

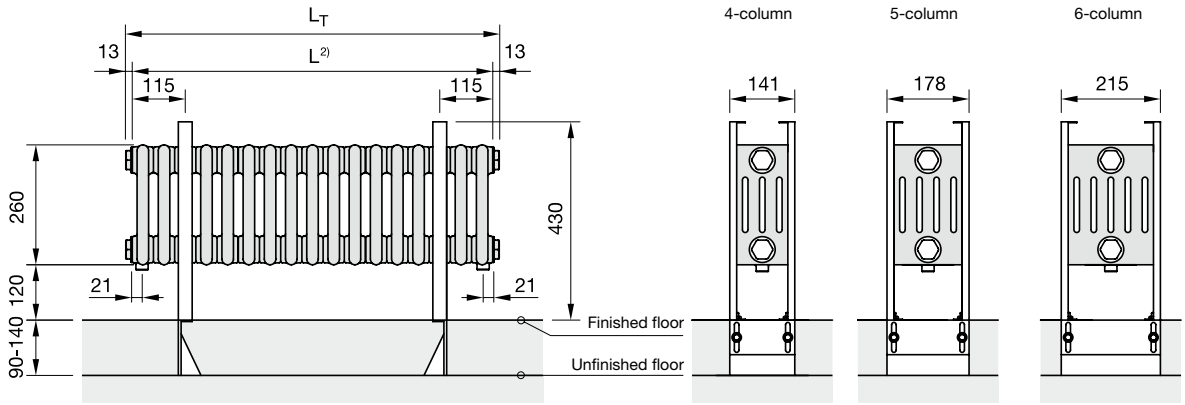
- Residue-free laser welding technology LaZer made
- Combination of bench and radiator
- Classic elegance
- Accident-safe
- Cleaning with Zehnder lambswool cleaning brush
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 2 x ½" female thread from bottom
- 1 x ½" connection for directional air vent
- Bench brackets (without seat)
- Complete packaging in stretch film and cardboard

Zehnder Charleston Bench

Model 4- to 6-column



L = Length
L_T = Total length = elements x 46 mm + 2 x 13 mm
T = Depth of radiator
V = Water content
M = Weight

q_{ms} = Nominal flow rate
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

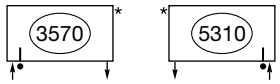
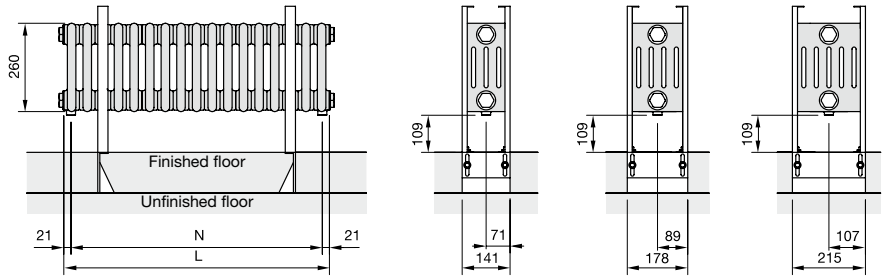
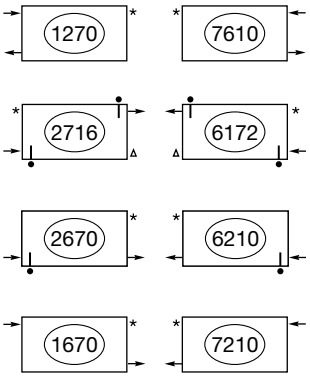
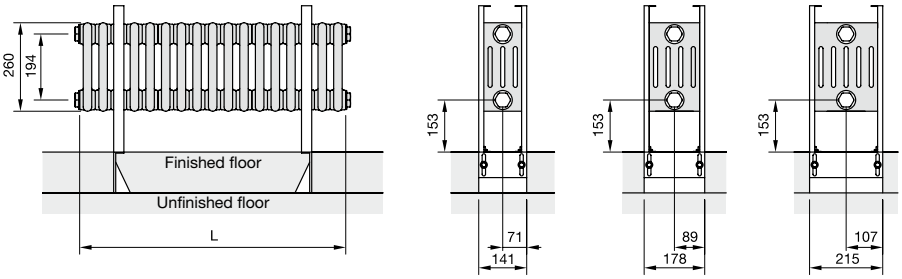
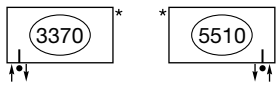
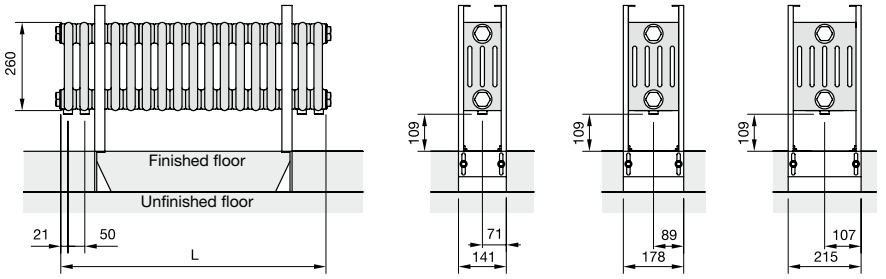
Dimensions in mm

Prices and technical specifications

Model	**Price**[1] **RAL 9016 €**	$L^{2)}$ mm	T mm	V dm^3	M kg	q_{ms} kg/h	Exp. n	$\Phi_S=\Delta T$ 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
CB4026-22	**1012,75**	1012	141	13,6	20,9	69,0	1,25	804	650	421
CB4026-27	**1289,61**	1242	141	16,7	26,5	84,8	1,25	986	798	517
CB4026-31	**1405,12**	1426	141	19,2	29,6	97,3	1,25	1132	916	593
CB4026-35	**1520,68**	1610	141	21,7	32,7	109,9	1,25	1278	1034	670
CB4026-38	**1739,73**	1748	141	23,6	36,7	119,3	1,25	1388	1123	728
CB4026-44	**1912,97**	2024	141	27,3	41,3	138,1	1,25	1607	1300	842
CB4026-50	**2086,26**	2300	141	31,0	46,0	156,9	1,25	1826	1477	957
CB5026-22	**1151,15**	1012	178	16,5	23,7	85,3	1,25	993	803	521
CB5026-27	**1459,40**	1242	178	20,3	30,1	104,7	1,25	1218	985	638
CB5026-31	**1600,10**	1426	178	23,3	33,6	120,2	1,25	1399	1132	733
CB5026-35	**1740,76**	1610	178	26,3	37,1	135,8	1,25	1579	1277	828
CB5026-38	**1978,67**	1748	178	28,5	41,7	147,4	1,25	1715	1387	899
CB5026-44	**2189,68**	2024	178	33,0	46,9	170,6	1,25	1986	1607	1041
CB5026-50	**2400,66**	2300	178	37,5	52,2	193,9	1,25	2256	1825	1183
CB6026-22	**1278,52**	1012	215	19,4	32,6	101,2	1,27	1177	949	611
CB6026-27	**1615,75**	1242	215	23,8	41,1	124,2	1,27	1445	1165	750
CB6026-31	**1779,59**	1426	215	27,3	46,1	142,6	1,27	1659	1337	861
CB6026-35	**1943,44**	1610	215	30,8	51,1	161,0	1,27	1873	1510	972
CB6026-38	**2198,75**	1748	215	33,4	57,1	174,8	1,27	2033	1639	1055
CB6026-44	**2444,52**	2024	215	38,7	64,6	202,4	1,27	2354	1898	1221
CB6026-50	**2690,28**	2300	215	44,0	72,2	230,0	1,27	2675	2156	1388

[1] Total price, including accessories, surcharge for special finish, colour category 1 = 20%, colour category 2 = 30%, cover on side.
[2] Number of bench brackets depending on length: 2 x brackets for L = 1012
3 x brackets for L = 1242 - 1610
4 x brackets for L = 1748 - 2300

Zehnder Charleston Bench

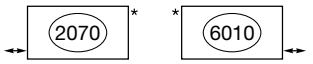
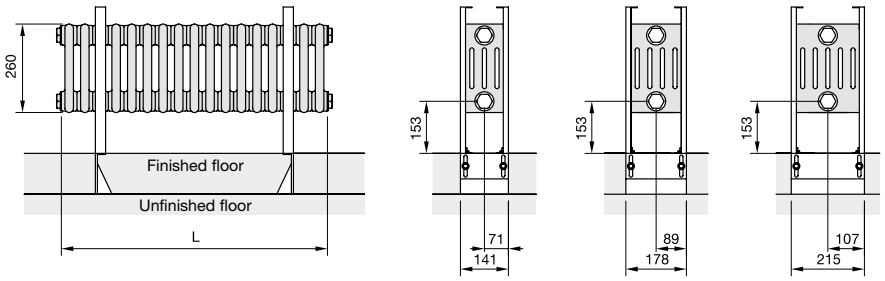
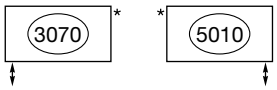
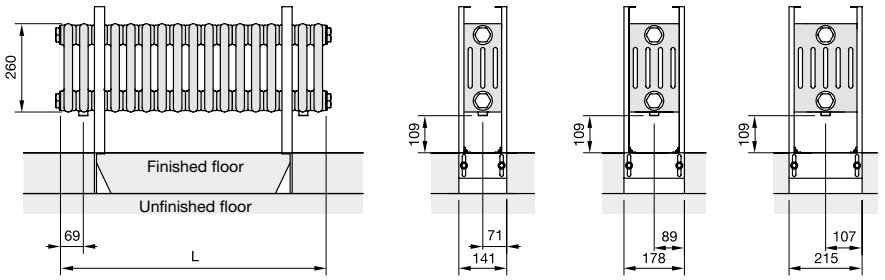
Connection type	Price €	Dimensional drawings: Front view and side views
Connection 2-tube with external valve		
standard connection from bottom[1)] 	**No surcharge**	
same or opposite end 	**No surcharge**	
from bottom to bottom, on side, 50 mm 	**No surcharge**	

[1)] When ordered without specification of the connection type, the standard connection from bottom to bottom will be supplied, suitable for connection 3570/5310.

N = Boss spacing
L = Length
* = Venting
Δ = Draining
• = Internal installations

Dimensions in mm

Zehnder Charleston Bench

Connection type	Price €	Dimensional drawings: Front view and side views
Connection 1-tube with external valve - See note on the single-pipe system in the keyword list		
for horizontal baffle plate [2] 	**No surcharge**	
for vertical baffle plate [2] 	**No surcharge**	

[2] Specify valve unit when placing order

		Price €
High pressure version max. 18 bar (not for Completto connection)	with welded-on plug: 2- to 3-column with welded-on plug + tied rod: 4 to 6-column	**215,71 / RAD** **317,69 / RAD**
Angled or curved design		**On request**
Intermediate lengths		**On request**
Galvanising with subsequent standard finish (RAL 9016) (see also explanations on galvanising in section “General”)		**On request**
Version with thermal radiation shield (→ section Zehnder Charleston)		**On request**
Completto connection with integrated valve (prices without thermostat) details and further Completto connections, see page 45 onwards.		**188,72**

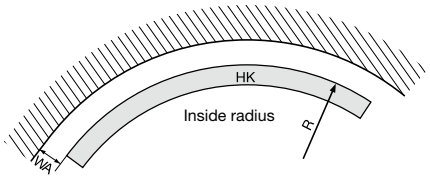
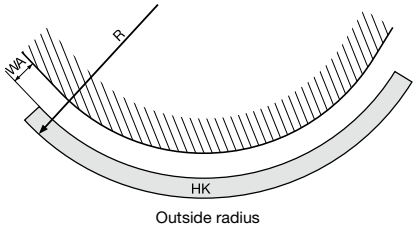
Basis for calculating the surcharge is the standard finish

L = Length
* = Venting
Δ = Draining

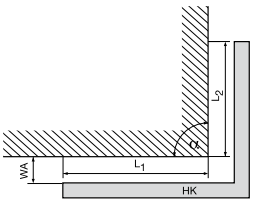
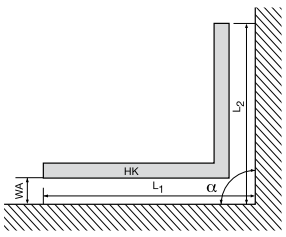
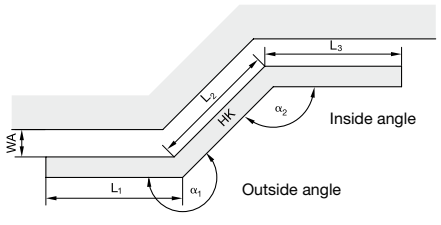
Dimensions in mm

Zehnder Charleston Bench

Curved version

Version	Sketch/template	Prices €
Curved Zehnder Charleston Bench radiators are available with the following minimum outside curve radii: 4-column: 750 mm 5-column: 900 mm 6-column: 1000 mm When making a price enquiry, please include a sketch with the dimensions radius R, length and wall clearance in mm.		**On request**
		**On request**

Angled version

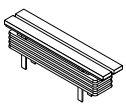
Version	Sketch/template	Prices €
Zehnder Charleston Bench angled, available from 90° to 179°. When making a price inquiry, please provide the following dimensions: L_1, L_2, L_3, wall clearance WA in mm and angle α_1, α_2 in degrees.		**On request**
		**On request**
		**On request**

When placing an order for curved and angled radiators, please enclose sketch or template.

HK = Radiator
WA = Wall clearance
R = Radius
α_1, α_2 = Angles (°)
L_1, L_2, L_3 = Lengths

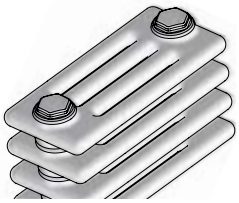
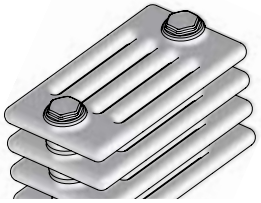
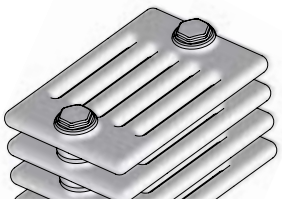
Dimensions in mm

Zehnder Radiator Bench

	Overview of models	Product description	List prices	Special versions	Connections	Technical data
Zehnder Radiator Bench						
 ■ Dual function as bench and radiator ■ Different seat heights ■ Transversable right or left	130	131	132	135	135	132

Zehnder Radiator Bench

Zehnder Radiator Bench

Bench height total [1] mm	Length mm	4-column	5-column	6-column
479	1200	**B4120/4**	**B5120/4**	**B6120/4**
	1500	**B4150/4**	**B5150/4**	**B6150/4**
	1800	**B4180/4**	**B5180/4**	**B6180/4**
	2000	**B4200/4**	**B5200/4**	**B6200/4**
	2500	**B4250/4**	**B5250/4**	**B6250/4**
	3000	**B4300/4**	**B5300/4**	**B6300/4**
525	1200	**B4120/5**	**B5120/5**	**B6120/5**
	1500	**B4150/5**	**B5150/5**	**B6150/5**
	1800	**B4180/5**	**B5180/5**	**B6180/5**
	2000	**B4200/5**	**B5200/5**	**B6200/5**
	2500	**B4250/5**	**B5250/5**	**B6250/5**
	3000	**B4300/5**	**B5300/5**	**B6300/5**
571	1200	**B4120/6**	**B5120/6**	**B6120/6**
	1500	**B4150/6**	**B5150/6**	**B6150/6**
	1800	**B4180/6**	**B5180/6**	**B6180/6**
	2000	**B4200/6**	**B5200/6**	**B6200/6**
	2500	**B4250/6**	**B5250/6**	**B6250/6**
	3000	**B4300/6**	**B5300/6**	**B6300/6**
617	1200	**B4120/7**	**B5120/7**	**B6120/7**
	1500	**B4150/7**	**B5150/7**	**B6150/7**
	1800	**B4180/7**	**B5180/7**	**B6180/7**
	2000	**B4200/7**	**B5200/7**	**B6200/7**
	2500	**B4250/7**	**B5250/7**	**B6250/7**
	3000	**B4300/7**	**B5300/7**	**B6300/7**
663	1200	**B4120/8**	**B5120/8**	**B6120/8**
	1500	**B4150/8**	**B5150/8**	**B6150/8**
	1800	**B4180/8**	**B5180/8**	**B6180/8**
	2000	**B4200/8**	**B5200/8**	**B6200/8**
	2500	**B4250/8**	**B5250/8**	**B6250/8**
	3000	**B4300/8**	**B5300/8**	**B6300/8**

[1] Dimensions apply from unfinished floor.

Zehnder Radiator Bench

Zehnder Radiator Bench

Product description

The sections of the heated bench are arranged horizontally above each other in Zehnder Radiator Bench. With the additional use as a seat or shelf, Zehnder Radiator Bench offers a different look from the normal upright tubes.
Different heights also result in different seat heights. The radiator is installed on the unfinished floor, the connection is provided from the floor as standard, the seat (see example above) is added on site depending on the installation situation.
The aspects of hygienic suitability (certificate), cleanability also naturally apply to Zehnder Radiator Bench.

Technical specifications

- Steel round tubes Ø 25 mm
- Header in sheet steel
- Length of the individual element 46 mm
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442; with CE marking
- Operating pressure max. 10 bar
- Operating temperature max. 110 °C

Customisation options

- Choice of connection types
- Special colours and antibacterial coating
- Galvanised and painted
- High pressure version up to max. 18 bar

Advantages

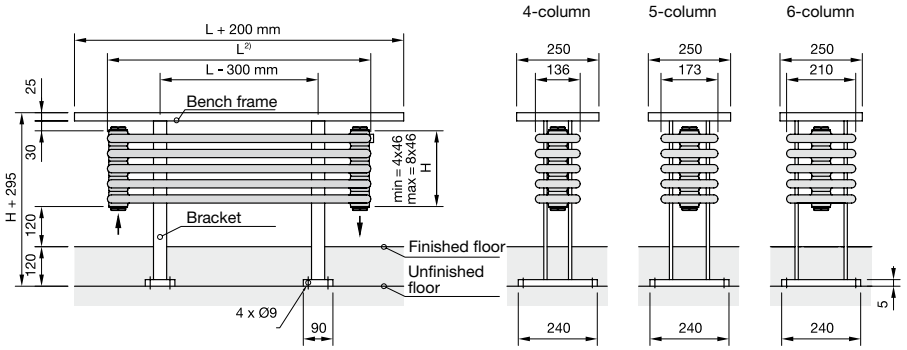
- Residue-free laser welding technology LaZer made
- Combination of bench and radiator
- Classic elegance
- Accident-safe
- Easy cleaning with Zehnder lambswool cleaning brush
- Energy-efficient for use in low temperature heating systems

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 2 x ½" female thread from bottom
- 1 x ½" connection for directional air vent
- Bench frame with brackets (without seat)
- Complete packaging in stretch film and cardboard

Zehnder Radiator Bench

Model Radiator Bench



H = Height
L = Length
T = Depth of radiator
V = Water content
M = Weight
q_{ms} = Nominal water flow
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

Dimensions in mm

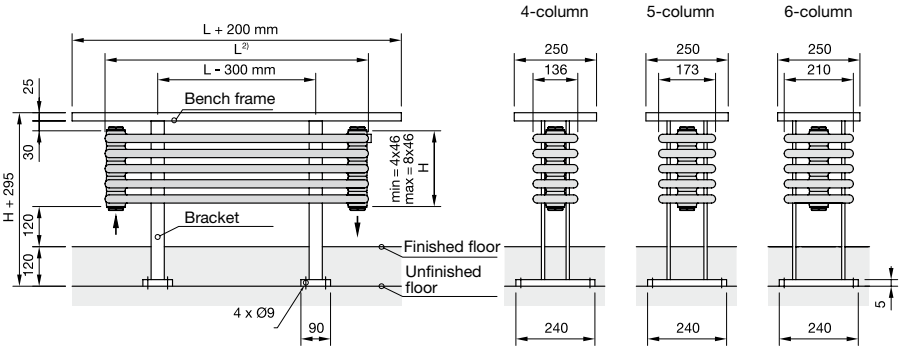
Prices and technical specifications

Model	**Price**[1] **RAL 9016 €**	H mm	L[2] mm	T mm	V dm^3	M kg	q_{ms} kg/h	Exp. n	Φ_S=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
B4120/4	**884,99**	184	1200	136	8,4	23,3	64,0	1,25	744	602	390
B4150/4	**995,29**	184	1500	136	10,3	30,1	80,0	1,25	930	752	487
B4180/4	**1087,69**	184	1800	136	12,2	34,0	96,0	1,25	1116	903	585
B4200/4	**1157,90**	184	2000	136	13,5	36,7	107,0	1,25	1240	1003	650
B4250/4	**1436,78**	184	2500	136	16,9	43,4	138,0	1,25	1550	1254	812
B4300/4	**1607,91**	184	3000	136	19,9	49,7	160,0	1,25	1859	1504	974
B5120/4	**948,80**	184	1200	173	10,3	27,0	79,0	1,25	917	742	481
B5150/4	**1080,72**	184	1500	173	12,7	34,6	99,0	1,25	1146	927	601
B5180/4	**1181,20**	184	1800	173	15,1	39,4	118,0	1,25	1375	1112	721
B5200/4	**1261,64**	184	2000	173	16,7	42,7	131,0	1,25	1528	1236	801
B5250/4	**1563,78**	184	2500	173	20,7	50,7	164,0	1,25	1910	1545	1001
B5300/4	**1748,77**	184	3000	173	24,7	58,4	197,0	1,25	2292	1854	1201
B6120/4	**1001,35**	184	1200	210	12,3	30,4	93,0	1,25	1085	878	569
B6150/4	**1162,57**	184	1500	210	15,2	38,9	117,0	1,25	1357	1098	711
B6180/4	**1275,93**	184	1800	210	18,1	44,5	140,0	1,25	1628	1317	853
B6200/4	**1365,46**	184	2000	210	20,0	48,3	155,0	1,25	1809	1463	948
B6250/4	**1697,81**	184	2500	210	24,8	57,7	194,0	1,25	2261	1829	1185
B6300/4	**1913,07**	184	3000	210	29,6	66,7	233,0	1,25	2713	2195	1422
B4120/5	**975,96**	230	1200	136	10,5	26,7	75,0	1,26	875	707	456
B4150/5	**1108,16**	230	1500	136	12,9	34,4	94,0	1,26	1093	883	570
B4180/5	**1217,68**	230	1800	136	15,3	39,1	113,0	1,26	1312	1060	684
B4200/5	**1300,00**	230	2000	136	16,9	42,3	125,0	1,26	1458	1177	760
B4250/5	**1607,32**	230	2500	136	20,9	50,2	157,0	1,26	1822	1471	950
B4300/5	**1809,96**	230	3000	136	24,9	57,8	188,0	1,26	2187	1766	1140
B5120/5	**1055,71**	230	1200	173	12,9	31,3	93,0	1,26	1078	871	562
B5150/5	**1215,01**	230	1500	173	15,9	40,0	116,0	1,26	1348	1089	703
B5180/5	**1334,62**	230	1800	173	18,9	45,8	139,0	1,26	1618	1307	844
B5200/5	**1429,67**	230	2000	173	20,9	49,7	155,0	1,26	1797	1451	937
B5250/5	**1766,02**	230	2500	173	25,9	59,4	193,0	1,26	2247	1815	1172
B5300/5	**1986,03**	230	3000	173	30,9	68,7	232,0	1,26	2696	2177	1406
B6120/5	**1121,44**	230	1200	210	15,4	35,5	110,0	1,26	1276	1030	665
B6150/5	**1317,31**	230	1500	210	19,0	45,3	137,0	1,26	1596	1289	832
B6180/5	**1453,08**	230	1800	210	22,6	52,1	165,0	1,26	1915	1546	999
B6200/5	**1559,48**	230	2000	210	25,0	56,7	183,0	1,26	2127	1718	1109
B6250/5	**1933,63**	230	2500	210	31,0	68,0	229,0	1,26	2659	2147	1387
B6300/5	**2191,43**	230	3000	210	37,0	79,0	274,0	1,26	3191	2577	1664

[1] Total price, including accessories (without seat), surcharge for special finish, colour category 1 = 20%, colour category 2 = 30%
[2] Number of bench brackets depending on length: 2 x brackets for L = 1200
3 x brackets for L = 1500 - 3000

Zehnder Radiator Bench

Model Radiator Bench



H = Height
L = Length
T = Depth of radiator
V = Water content
M = Weight
q_{ms} = Nominal water flow
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

Dimensions in mm

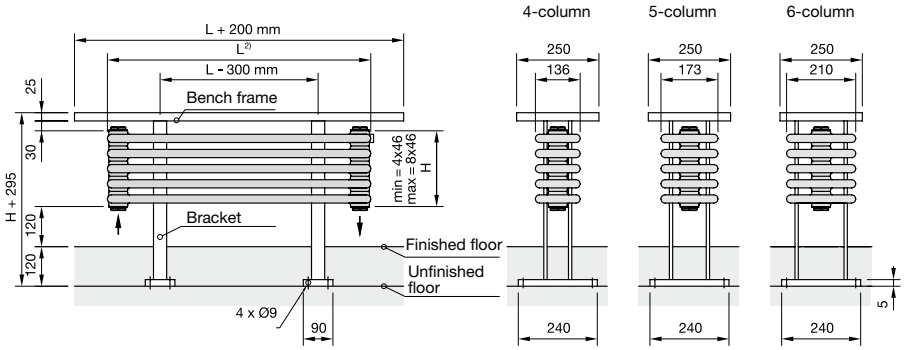
Prices and technical specifications

Model	**Price**[1] **RAL 9016** **€**	H mm	L[2] mm	T mm	V dm^3	M kg	q_{ms} kg/h	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
B4120/6	**1067,37**	276	1200	136	12,5	30,1	86,0	1,26	1001	808	522
B4150/6	**1221,44**	276	1500	136	15,4	38,6	108,0	1,26	1251	1010	652
B4180/6	**1348,18**	276	1800	136	18,3	44,1	129,0	1,26	1502	1213	783
B4200/6	**1442,50**	276	2000	136	20,2	47,8	143,0	1,26	1668	1347	870
B4250/6	**1778,30**	276	2500	136	25,0	57,1	179,0	1,26	2085	1684	1087
B4300/6	**2012,43**	276	3000	136	29,8	65,9	215,0	1,26	2503	2021	1305
B5120/6	**1163,01**	276	1200	173	15,4	35,6	106,0	1,26	1234	997	643
B5150/6	**1349,74**	276	1500	173	19,0	45,4	133,0	1,26	1543	1246	805
B5180/6	**1488,49**	276	1800	173	22,6	52,2	159,0	1,26	1851	1495	965
B5200/6	**1598,16**	276	2000	173	25,0	56,7	177,0	1,26	2057	1661	1073
B5250/6	**1968,74**	276	2500	173	31,0	68,0	221,0	1,26	2571	2076	1341
B5300/6	**2223,77**	276	3000	173	37,0	79,0	265,0	1,26	3085	2491	1609
B6120/6	**1241,90**	276	1200	210	18,5	40,7	126,0	1,26	1461	1180	762
B6150/6	**1472,38**	276	1500	210	22,8	51,7	157,0	1,26	1826	1475	952
B6180/6	**1630,62**	276	1800	210	27,1	59,7	188,0	1,26	2191	1769	1142
B6200/6	**1753,93**	276	2000	210	30,0	65,0	209,0	1,26	2434	1966	1269
B6250/6	**2169,85**	276	2500	210	37,2	78,4	262,0	1,26	3043	2457	1587
B6300/6	**2470,23**	276	3000	210	44,4	91,3	314,0	1,26	3652	2949	1904
B4120/7	**1158,66**	322	1200	136	14,6	33,6	97,0	1,26	1124	908	586
B4150/7	**1334,69**	322	1500	136	18,0	42,9	121,0	1,26	1405	1135	733
B4180/7	**1478,49**	322	1800	136	21,4	49,2	145,0	1,26	1686	1362	879
B4200/7	**1584,86**	322	2000	136	23,6	53,5	161,0	1,26	1873	1513	977
B4250/7	**1949,17**	322	2500	136	29,2	64,0	201,0	1,26	2342	1891	1221
B4300/7	**2214,78**	322	3000	136	34,8	74,1	242,0	1,26	2810	2269	1465
B5120/7	**1270,24**	322	1200	173	18,0	40,0	119,0	1,26	1386	1119	723
B5150/7	**1484,29**	322	1500	173	22,2	50,9	149,0	1,26	1732	1399	903
B5180/7	**1642,18**	322	1800	173	26,4	58,6	179,0	1,26	2078	1678	1084
B5200/7	**1766,48**	322	2000	173	29,2	63,8	199,0	1,26	2309	1865	1204
B5250/7	**2171,33**	322	2500	173	36,2	76,8	248,0	1,26	2887	2331	1505
B5300/7	**2461,31**	322	3000	173	43,2	89,3	298,0	1,26	3464	2797	1806
B6120/7	**1362,29**	322	1200	210	21,6	45,8	141,0	1,26	1640	1324	855
B6150/7	**1627,40**	322	1500	210	26,6	58,2	176,0	1,26	2050	1655	1069
B6180/7	**1808,02**	322	1800	210	31,6	67,3	212,0	1,26	2460	1987	1283
B6200/7	**1948,21**	322	2000	210	35,0	73,5	235,0	1,26	2733	2207	1425
B6250/7	**2405,90**	322	2500	210	43,4	88,8	294,0	1,26	3417	2759	1782
B6300/7	**2748,82**	322	3000	210	51,8	103,7	353,0	1,26	4100	3311	2138

[1] Total price, including accessories (without seat), surcharge for special finish, colour category 1 = 20%, colour category 2 = 30%
[2] Number of bench brackets depending on length: 2 x brackets for L = 1200
3 x brackets for L = 1500 - 3000

Zehnder Radiator Bench

Model Radiator Bench



H = Height
L = Length
T = Depth of radiator
V = Water content
M = Weight
q_{ms} = Nominal water flow
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20 °C)
Φ = Thermal output at system temperatures

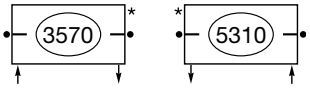
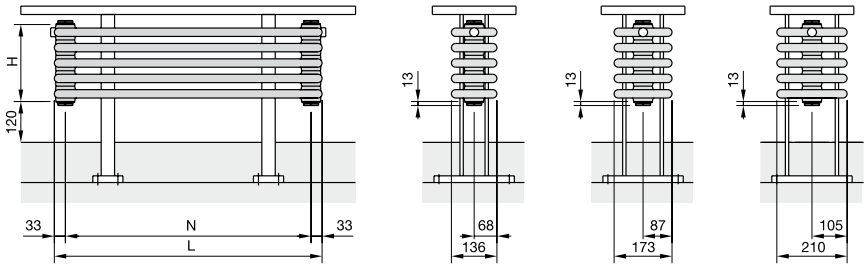
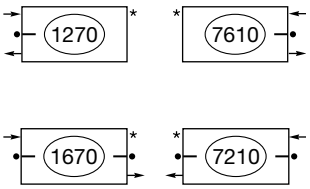
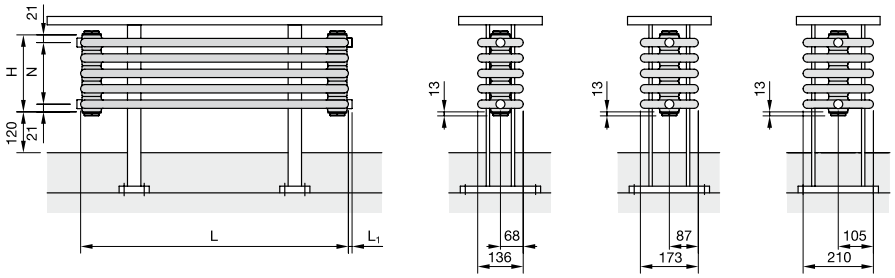
Dimensions in mm

Prices and technical specifications

Model	**Price**[1] **RAL 9016 €**	H mm	L[2] mm	T mm	V dm³	M kg	q_{ms} kg/h	Exp. n	Φ_S=ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
B4120/8	**1249,61**	368	1200	136	16,7	37,0	107,0	1,27	1245	1004	646
B4150/8	**1447,53**	368	1500	136	20,6	47,3	134,0	1,27	1556	1254	807
B4180/8	**1608,55**	368	1800	136	24,4	54,4	160,0	1,27	1867	1505	969
B4200/8	**1726,97**	368	2000	136	27,0	59,1	178,0	1,27	2074	1672	1076
B4250/8	**2119,67**	368	2500	136	33,4	70,9	223,0	1,27	2593	2090	1345
B4300/8	**2416,76**	368	3000	136	39,8	82,3	267,0	1,27	3111	2508	1614
B5120/8	**1377,14**	368	1200	173	20,6	44,3	132,0	1,27	1534	1237	796
B5150/8	**1618,50**	368	1500	173	25,4	56,3	165,0	1,27	1918	1546	995
B5180/8	**1795,56**	368	1800	173	30,2	65,0	198,0	1,27	2301	1855	1194
B5200/8	**1934,49**	368	2000	173	33,4	70,9	220,0	1,27	2557	2061	1326
B5250/8	**2373,64**	368	2500	173	41,4	85,5	275,0	1,27	3196	2577	1658
B5300/8	**2698,56**	368	3000	173	49,4	99,7	330,0	1,27	3836	3093	1990
B6120/8	**1482,31**	368	1200	210	24,6	51,0	156,0	1,27	1816	1464	942
B6150/8	**1782,12**	368	1500	210	30,4	64,7	195,0	1,27	2270	1830	1178
B6180/8	**1985,09**	368	1800	210	36,2	75,0	234,0	1,27	2724	2196	1413
B6200/8	**2142,21**	368	2000	210	40,0	82,0	260,0	1,27	3027	2440	1570
B6250/8	**2641,69**	368	2500	210	49,6	99,2	325,0	1,27	3783	3050	1962
B6300/8	**3027,18**	368	3000	210	59,2	116,1	390,0	1,27	4540	3660	2355

[1] Total price, including accessories (without seat), surcharge for special finish, colour category 1 = 20%, colour category 2 = 30%
[2] Number of bench brackets depending on length: 2 x brackets for L = 1200
3 x brackets for L = 1500 - 3000

Zehnder Radiator Bench

Connection type	Price €	Dimensional drawings: Front view and side views
Connection 2-tube with external valve		
from bottom to bottom [1] 	**No surcharge**	
same or opposite end 	**No surcharge**	

[1] When placing an order without specification of the connection, the standard connection (3570/5310) from bottom to bottom with 3 x ½" will be delivered.

Special versions		Price €
High-pressure version max. 18 bar with welded plugs: with welded plugs + tied rod:	 2 to 3-column 4- to 6-column	 **215,71 / RAD** **317,69 / RAD**
Special versions, single-tube connection		**On request**
Galvanising with subsequent standard finish (RAL 9016) (see also explanations on galvanising in section “General”)		**On request**

Basis for calculating the surcharge is the standard finish

H = Height
L = Length
R = Radius
* = Venting
N = Boss spacing
L_1 = Connection length at side
• = Internal installations

Dimensions in mm

Connection size Ø	⅜"	½"	¾"
L_1 (mm)	12	12	15

Zehnder Charleston

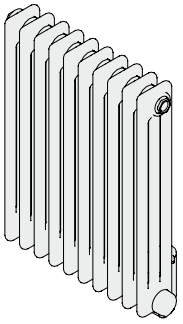
Electric operation

	Overview of models	Product description	Prices / technical specifications	Installation points
Zehnder Charleston				
■ Classic tubular radiator as electric version ■ Oil-filled steel elements ■ Radio remote control	138	139	140	141

Zehnder Charleston

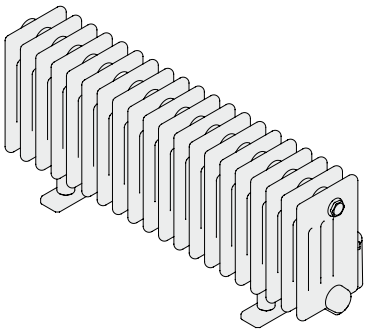
Electric operation

Wall version



Length [1] mm	Height mm
	600
502	NZ-060-053/GF
594	NZ-060-062/GF
732	NZ-060-076/GF
870	NZ-060-089/GF
1008	NZ-060-103/GF
1284	NZ-060-131/GF

Plinth version



Length [1] mm	Height mm [2]
	300
962	NZ-030-100/GF

[1] Total length incl. immersion heater
[2] Without foot

Zehnder Charleston

Electric operation

Product description

Electric Zehnder Charleston is an oil filled multi-coloumn radiator available in 6 sizes ideal for installation in loft conversions.
The complementary Zehnder Charleston Electric Plinth low level model is perfectly suited to conservatories and in front of low-level windows. Radiator with powder coating, in colour RAL 9016 as standard or in special colour.

Advantages

- Energy-efficient and comfortable heating via innovative “open window detection”
- High energy efficiency due to compliance with the European Ecodesign Directive saves energy costs
- Low energy consumption of only 0,5 W in stand-by mode for increased energy efficiency
- User-friendly remote control device allows simple operation
- Comfortable operation as needed by customisable daily and weekly programme
- Timer function for on-demand operation
- Increased safety due to parental control

Technical specifications

- Oil-filled multi-column electric radiator
- Vertical steel round tubes Ø 25 mm, 3 and 5 columns versions available
- Connection cable without plug, appliance class II
- With integrated electric heating element and remote control
- Protection class IP44
- Supply voltage: 230 V
- Fixing: model NZ 060-XXX/GF delivered ready to install with 2 wall brackets in colour of radiator. Model NZ 030-100/GF delivered ready to install with 2 feet in colour of radiator.

Standard scope of delivery:

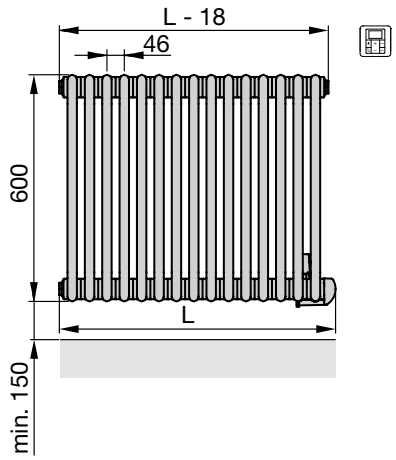
- Primed and painted in RAL 9016
- Remote control device in white
- Connecting cable 1,20 m without plug
- Mounting accessories
- Packaging

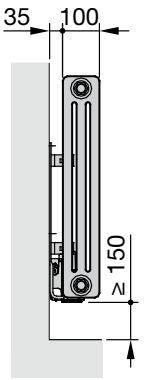
Control unit radio remote-controlled Model 2

Zehnder Charleston

Electric operation

Wall version





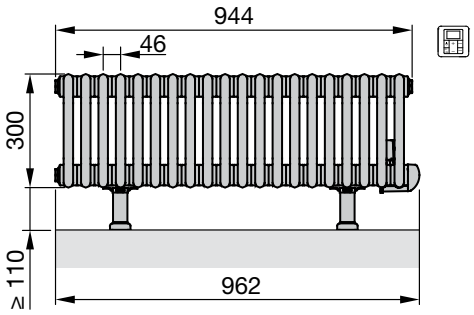
H = Height
L = Length including immersion heater

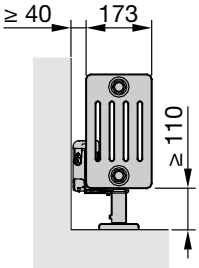
Dimensions in mm

Prices and technical specifications per radiator

Model	**Price 2) RAL 9016 €**	H mm	L 1) mm	Elements	T mm	M kg	Output Electric heating element Watt
NZ-060-053/GF	**884,15**	600	502	10	100	27	500
NZ-060-062/GF	**957,54**	600	594	12	100	30	750
NZ-060-076/GF	**1069,64**	600	732	15	100	41	1000
NZ-060-089/GF	**1182,96**	600	870	18	100	47	1250
NZ-060-103/GF	**1297,09**	600	1008	21	100	58	1500
NZ-060-131/GF	**1544,77**	600	1284	27	100	70	2000

Plinth version





H = Height
L = Length including immersion heater

Dimensions in mm

Prices and technical specifications per radiator

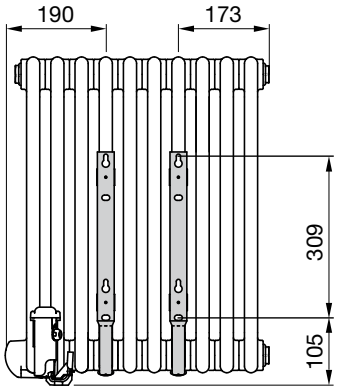
Model	**Price 2) RAL 9016 €**	H 3) mm	L 1) mm	Elements	T mm	M kg	Output Electric heating element Watt
NZ-030-100/GF	**1524,04**	300	962	20	173	42,4	1000

1) Total length incl. immersion heater
2) Surcharge for special colour, category 1 = 20%; category 2 = 30%, not available in Technoline
3) Without foot

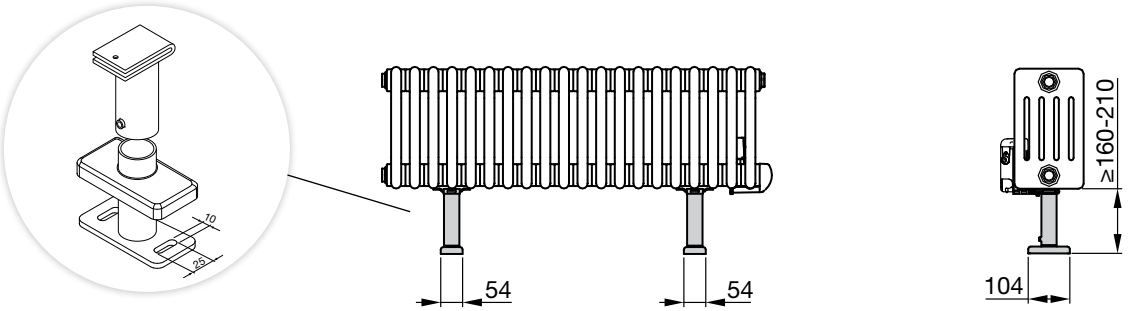
Zehnder Charleston

Electric operation

Dimensions for Wall version

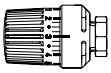


Dimensions for Plinth version



Dimensions in mm, plinth incl. cover

Accessories

	Mounting Sets	Valves	Rail	Miscellaneous
Zehnder accessories				
	144	153	159	159

Individual brackets for wall mounting

Zehnder SMB bracket available only in connection with Zehnder Charleston.

Description		Version	Article number	**Price €**	Application
Set Charleston SMB 2T For height 260 - 299 mm and height 1001 - 3000 mm Wall bracket for fast and simple installation, painted to order. Wall clearance to rear edge of radiator 35 mm. Max. load per axis = 100 kg Completely pre-assembled bracket comprising: - Bars, one or two-piece - Attenuator cover - Base with attenuator		RAL 9016 2 x SMB 2T 3 x SMB 2T 4 x SMB 2T 5 x SMB 2T Special finish 2 x SMB 2T 3 x SMB 2T 4 x SMB 2T 5 x SMB 2T	 173511 173611 173711 173811 173519 173619 173719 173819	 **21,58** **32,41** **43,20** **53,98** **32,42** **48,62** **64,80** **81,03**	Zehnder Charleston, Zehnder Charleston Clinic
Set Charleston SMB 30 For height 300 - 369 mm		RAL 9016 2 x SMB 30 3 x SMB 30 4 x SMB 30 5 x SMB 30 Special finish 2 x SMB 30 3 x SMB 30 4 x SMB 30 5 x SMB 30	 173521 173621 173721 173821 173529 173629 173729 173829	 **21,58** **32,41** **43,20** **53,98** **32,42** **48,62** **64,80** **81,03**	
Set Charleston SMB 40 For height 370 - 484 mm		RAL 9016 2 x SMB 40 3 x SMB 40 4 x SMB 40 5 x SMB 40 Special finish 2 x SMB 40 3 x SMB 40 4 x SMB 40 5 x SMB 40	 173531 173631 173731 173831 173539 173639 173739 173839	 **21,58** **32,41** **43,20** **53,98** **32,42** **48,62** **64,80** **81,03**	
Set Charleston SMB 50 For height 485 - 679 mm		RAL 9016 2 x SMB 50 3 x SMB 50 4 x SMB 50 5 x SMB 50 Special finish 2 x SMB 50 3 x SMB 50 4 x SMB 50 5 x SMB 50	 173541 173641 173741 173841 173549 173649 173749 173849	 **21,58** **32,41** **43,20** **53,98** **32,42** **48,62** **64,80** **81,03**	also for Zehnder Charleston electric operation
Set Charleston SMB 75 For height 680 - 1000 mm		RAL 9016 2 x SMB 75 3 x SMB 75 4 x SMB 75 5 x SMB 75 Special finish 2 x SMB 75 3 x SMB 75 4 x SMB 75 5 x SMB 75	 173551 173651 173751 173851 173559 173659 173759 173859	 **21,58** **32,41** **43,20** **53,98** **32,42** **48,62** **64,80** **81,03**	
Set Charleston SMB 2 2 clamp brackets as wall holders in connection with foot brackets		RAL 9016 Special finish	173401 173409	**16,48** **23,35**	Zehnder Charleston, Zehnder Charleston Clinic

Screws and anchors are not included in the scope of delivery.

Individual sets for wall and floor mounting

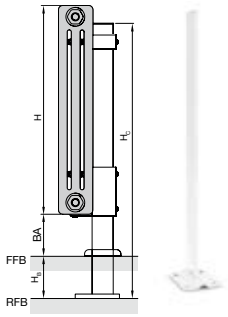
Description		Version	Article number	Price €	Application
Set CVD for Charleston Fixing set, consisting of: - Bracket CVD 0 - Support BH - Attenuator - Locking mechanism		RAL 9016 4 x CVD 0 / BH 6 x CVD 0 / BH 8 x CVD 0 / BH 10 x CVD 0 / BH Special finish 4 x CVD 0 / BH 6 x CVD 0 / BH 8 x CVD 0 / BH 10 x CVD 0 / BH	 774401 774601 774801 774901 774409 774609 774809 774909	 **21,80** **31,72** **41,64** **51,57** **57,37** **85,07** **112,78** **140,49**	Zehnder Charleston
Set CVD for Charleston Clinic Fixing set, consisting of: - Bracket CVD 0 - Support BHK - Attenuator - Locking mechanism		RAL 9016 4 x CVD 0 / BHK 6 x CVD 0 / BHK 8 x CVD 0 / BHK 10 x CVD 0 / BHK Special finish 4 x CVD 0 / BHK 6 x CVD 0 / BHK 8 x CVD 0 / BHK 10 x CVD 0 / BHK	 775421 775621 775821 775921 775429 775629 775829 775929	 **39,63** **58,42** **77,28** **96,09** **75,04** **111,56** **148,09** **184,61**	Zehnder Charleston Clinic
Set BKE for Charleston Wall hole Ø 18 mm, bracket length 160 mm. Depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm. Fixing set, consisting of: - Build-in bracket BKE - Support BH (white) - Incl. 2 retaining springs BSF1		Galvanised/RAL 9016 4 x BKE / BH 6 x BKE / BH 8 x BKE / BH 10 x BKE / BH Special finish 4 x BKE / BH 6 x BKE / BH 8 x BKE / BH 10 x BKE / BH	 774461 774661 774861 774961 774469 774669 774869 774969	 **35,00** **49,01** **63,06** **77,03** **55,16** **79,07** **102,99** **126,91**	Zehnder Charleston
Set BKE for Charleston Clinic Wall hole Ø 18 mm, bracket length 160 mm. Depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm. Fixing set, consisting of: - Build-in bracket BKE - Support BHK (white) - Incl. 2 retaining springs BSF1		Galvanised/RAL 9016 4 x BKE / BHK 6 x BKE / BHK 8 x BKE / BHK 10 x BKE / BHK Special finish 4 x BKE / BHK 6 x BKE / BHK 8 x BKE / BHK 10 x BKE / BHK	 775461 775661 775861 775961 775469 775669 775869 775969	 **52,82** **75,73** **98,67** **121,59** **73,54** **106,65** **139,79** **172,91**	Zehnder Charleston Clinic
Set support for TSK In connection with wall brackets to guard against movement, meets high requirements according to VDI 6036, available in two different lengths: TSK130 = length 130 mm (for 2-column), TSK160 = length 160 mm (for 3-6-column or larger wall clearances)		RAL 9016 2 x TSK130 2 x TSK160 Special finish 2 x TSK130 2 x TSK160	 774701 774721 774709 774729	 **7,85** **8,10** **11,76** **12,14**	Zehnder Charleston
Set support for TSKC In connection with wall brackets to guard against movement, meets high requirements according to VDI 6036, available in two different lengths: TSKC130 = length 130 mm (for 2-column), TSKC160 = length 160 mm (for 3-6-column or larger wall clearances)		RAL 9016 2 x TSKC130 2 x TSKC160 Special finish 2 x TSKC130 2 x TSKC160	 774711 774731 774719 774739	 **7,85** **8,11** **11,76** **12,14**	Zehnder Charleston Clinic

Screws and anchors are not included in the scope of delivery. Only some accessories in special finishes available as a set, see individual brackets.

Zehnder HDS floor bracket

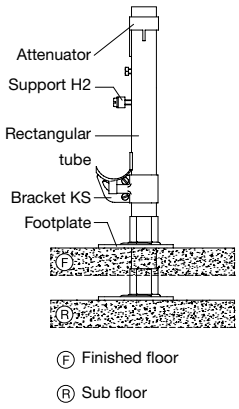
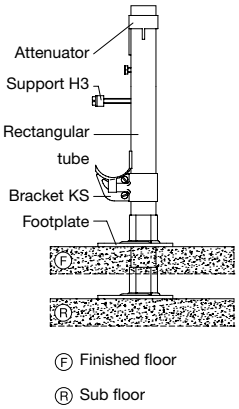
NEW!

zehnder

Description	Height H_C mm	Article number	**Price €**	Application
Free-standing floor bracket HDS reinforced floor bracket for heavy requirements (e. g. schools) on finished and unfinished floors, available in RAL 9016 or special finish. 				
Floor bracket rectangular tube 60 x 10 mm and welded-on footplate in standard colour RAL 9016 or special finish. BA = ground clearance HB = floor structure height HB + BA = max. 300 mm HC = console height H = radiator height, 260 - 600 mm Dimensions in mm  **Recommended console height H_C** Installation location / H_C 2-column / H_C 3- to 6-column Finished floor (FFB) / = H + BA - max. 72 mm / = H + BA - max. 80 mm Unfinished floor (RFB) / = H + H_B + BA - max. 72 mm / = H + H_B + BA - max. 80 mm	370 mm 420 mm 470 mm 520 mm 570 mm 620 mm 670 mm 720 mm 770 mm 820 mm	722201 722211 722221 722231 722241 722251 722261 722271 722281 722291	**45,24** **45,24** **45,24** **45,24** **45,24** **45,24** **45,24** **45,24** **49,17** **49,17**	
Clamp bracket set in standard colour RAL 9016 or special finish, consisting of: 1x bottom clamp bracket with attenuator 1x top clamp bracket 1x plastic plug, white, for standpipe 2x plastic cover, white, for brackets 		722321 722331 722341	**49,17** **49,17** **49,17**	2-column 3- and 5-column 4- and 6-column
Plastic cover for HDS footplate 137 x 15 mm, white, suitable for retrofitting 		722301	**16,23**	for installation on finished floor
Plastic cover for HDS standpipe 90 x 41 mm, white, suitable for retrofitting 		722311	**14,76**	for installation on unfinished floor

[1] The article number of the item in special finish is created by replacing the end digit 1 by the end digit 9 (not available for plastic covers)
Surcharge for special finishing: 50 % on the price of RAL 9016

Individual brackets for floor mounting

Description		Version	Article number	**Price €**	Application
Foot bracket set HFK incl. cover H = 140 - 170[1] mm		RAL 9016 2 x HFK 3 x HFK Special finish 2 x HFK 3 x HFK	 754551 754561 754559 754569	 **97,50** **130,27** **143,84** **215,75**	Zehnder Charleston
Foot bracket set HFK incl. cover H = 170 - 350 mm		RAL 9016 2 x HFK 3 x HFK Special finish 2 x HFK 3 x HFK	 754431 754441 754439 754449	 **114,19** **171,30** **149,43** **224,16**	Zehnder Charleston
Free-standing floor bracket STF 2 for tightening With bracket, without bench frame, RAL 9016 **Comprising:** - Attenuator, plastic - Support H2, plastic - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic **Can be combined with:** - **Cover AD1** for footplate - **Cover AR** for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension* 360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm	 719011 719021 719031 719041 719051 719061 719071 719081 719091 719101 719111 719121 719131 719141 719151 719161 719171	 **38,90** **38,90** **38,90** **38,90** **38,90** **38,90** **43,44** **43,44** **43,44** **43,44** **43,44** **43,44** **43,44** **43,44** **43,44** **43,44** **43,44**	Zehnder Charleston (2-column), up to H < 600 mm [2]
Free-standing floor bracket STF 3 for tightening With bracket, without bench frame, RAL 9016 **Comprising:** - Attenuator, plastic - Support H3, plastic - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic **Can be combined with:** - **Cover AD1** for footplate - **Cover AR** for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension* 360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm	 721011 721021 721031 721041 721051 721061 721071 721081 721091 721101 721111 721121 721131 721141 721151 721161 721171	 **37,77** **37,77** **37,77** **37,77** **37,77** **37,77** **42,31** **42,31** **42,31** **42,31** **42,31** **42,31** **42,31** **42,31** **42,31** **42,31** **42,31**	Zehnder Charleston 3 to 6-column, up to H < 600 mm [2]

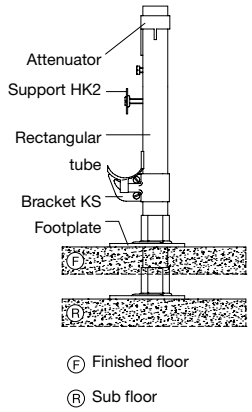
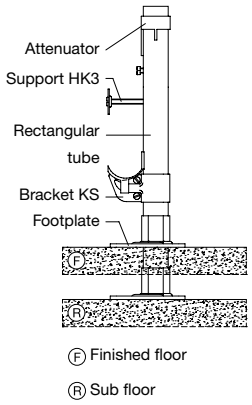
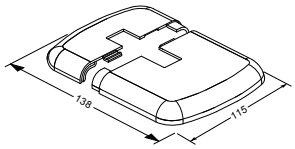
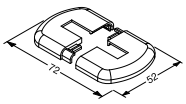
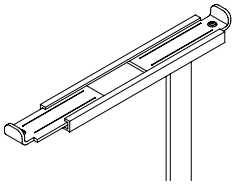
Screws and anchors are not included in the scope of delivery. Surcharge for custom-made colour: 50% surcharge on price of RAL 9016

[1] Cut the round tubes to length by 5 mm each at the building site to reduce the minimum height to 130 mm.

[2] Provide additional bracket from a height of 600 mm for the requirements class 2.

H = Total height of bracket

Individual floor brackets for floor mounting

Description		Version	Article number	Price €	Application
Floor brackets STF 2 K for tightening With bracket, without bench frame, RAL 9016 **Comprising:** - Attenuator, plastic - Support HK2 - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic **Can be combined with:** - **Cover AD1** for footplate - **Cover AR** for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension* 360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm	 605011 605021 605031 605041 605051 605061 605071 605081 605091 605101 605111 605121 605131 605141 605151 605161 605171	 **36,26** **36,26** **36,26** **36,26** **36,26** **36,26** **40,80** **40,80** **40,80** **40,80** **40,80** **40,80** **40,80** **40,80** **40,80** **40,80** **40,80**	Zehnder Charleston Clinic (2-column), up to H < 600 mm [1]
Floor bracket STF 3 K for tightening With bracket, without bench frame, RAL 9016 **Comprising:** - Attenuator, plastic - Support HK3 - Rectangular tube - Bracket KS - Footplate - Sealing cap, plastic **Can be combined with:** - **Cover AD1** for footplate - **Cover AR** for rectangular tube * The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.		Dimension* 360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm	 609011 609021 609031 609041 609051 609061 609071 609081 609091 609101 609111 609121 609131 609141 609151 609161 609171	 **36,42** **36,42** **36,42** **36,42** **36,42** **36,42** **41,01** **41,01** **41,01** **41,01** **41,01** **41,01** **41,01** **41,01** **41,01** **41,01** **41,01**	Zehnder Charleston Clinic 3 to 6-column, up to H < 600 mm [1]
Plastic cover, AD1 For footplate Not included in price of STF, suitable for retrofitting		Plastic, white	703000	**13,06**	Floor brackets STF
Cover AR For rectangular tube Not included in price of STF.		Plastic, white	704000	**3,39**	Floor brackets STF
Bench frame for floor bracket STF		Galvanised	713002	**24,89**	Floor brackets STF

Screws and anchors are not included in the scope of delivery
Surcharge for custom-made colour: 50% surcharge on price of RAL 9016
[1] Provide additional bracket from a height of 600 mm for the requirements class 2.

Individual supports for floor mounting

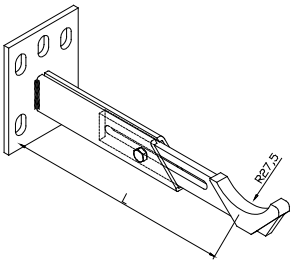
Description		Version	Article number	**Price €**	Application
Welded foot bracket for Charleston Height-adjustable, for mounting on unfinished or finished floor. Number of brackets = fixing axes on radiator incl. cover		In colour of radiator 120 - 170 mm 170 - 350 mm	 1100013810 1100013870	 **110,83** **110,83**	Zehnder Charleston [2] max. height 600 mm
Welded foot bracket for Charleston Height: fix 150 mm for mounting on unfinished or finished floor. Number of brackets = fixing axes on radiator Cover separately		In colour of radiator 150mm	-	**120,25**	Zehnder Charleston [2] max. height 600 mm
Traditional welded feet for Charleston H = 100 mm, for mounting on finished floors Number of brackets = fixing axes on radiator		In colour of radiator	-	**48,98**	Zehnder Charleston 3-6 column Free-standing installation up to and including a height of 600 mm (requirements classes 1 and 2)
Foot bracket HFK For tightening with bracket, painted, without cover H = 140 - 170[1] mm		RAL 9016 Special finish	754411 754419	**42,62** **55,76**	Zehnder Charleston [2]
Foot bracket HFK For tightening with bracket, painted, without cover H = 170 - 350 mm, can be shortened on site		RAL 9016 Special finish	754421 754429	**47,48** **60,72**	
Cover for foot bracket Charleston, welded (height adjustable) and foot bracket HFK Diameter 106 mm for round tube bracket Ø 25 mm		Plastic, white Special finish	753031 753039	**12,45** **16,14**	Zehnder Charleston
Cover for foot bracket Charleston, welded fix 150 mm Diameter 106 mm for round tube bracket Ø 30 mm		Plastic, white Special finish	753041 753049	**12,45** **16,14**	Zehnder Charleston

Screws and anchors are not included in the scope of delivery

[1] Cut the round tubes to length by 5 mm each at the building site to reduce the minimum height to 130 mm.

[2] Provide additional bracket from a height of 600 mm for requirements class 2, request a separate allocation for requirements class 3 (e.g. school)

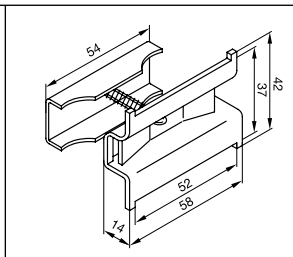
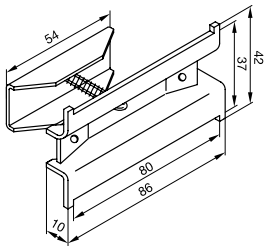
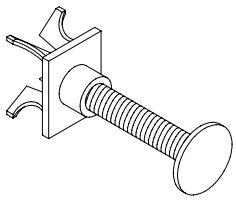
Individual brackets for wall mounting

Description		Version	Article number	**Price €**	Application
T bracket AKK for tightening With white attenuator 2-column, L = 68-91 mm 3-6 column, L = 95-139 mm 2-column, L = 68-91 mm 3-6 column, L = 95-139 mm Wall distance WA for modified bracket allocation (mm): Compatible supports HA/HAK + TKK		RAL 9016 RAL 9016 Special finish Special finish	796101 796111 796109 796119	**8,65** **9,48** **12,95** **13,77**	Zehnder Charleston Zehnder Charleston Clinic
Support TKK For tightening, white plastic/galvanised To be used with bracket AKK, L = 150 mm			784100 784120	**3,29** **3,36**	Zehnder Charleston Zehnder Charleston Clinic

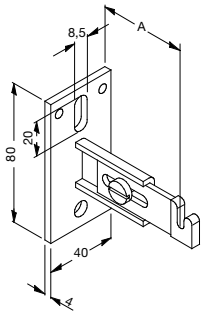
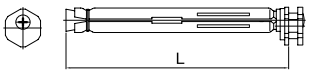
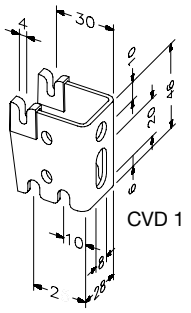
RAL 9016	796101	796111
Special finish	796109	796119
2-column	37-60	64-108
3-column	18-41	45-89
4-column	0-26	27-71
5-column	-	8,5-52,5
6-column	-	0-34

Screws and anchors are not included in the scope of delivery

Support, spacers, etc.

Description		Version	Article number	**Price €**	Application
Support BH Clamp bracket for tightening instead of welded lugs; variable positioning		RAL 9016 Special finish	774001 774009	**2,65** **7,11**	Zehnder Charleston (not Clinic version)
Support BHK Clamp bracket for tightening instead of welded lugs; variable positioning		RAL 9016 Special finish	775011 775019	**7,11** **11,52**	Zehnder Charleston Clinic
Spacer DS Adjustable for wall clearance 15-60 mm		Plastic, white	780000	**2,20**	Zehnder Charleston Zehnder Charleston Clinic
Retaining spring for CVD For wall brackets CVD 0, CVD 1 and CVD 2 with support BH/BHK or lugs with height 20 mm. Price valid for 2 retaining springs		Spring steel	948012	**1,95**	Zehnder Charleston

Individual brackets for wall mounting

Description		Version	Article number	Price €	Application
Wall bracket AK 1 [1)] With attenuator. Clearance A 40 - 55 mm Compatible supports BH/BHK		RAL 9016 Special finish	796011 796019	**11,96** **20,83**	For all radiators with suspension brackets or plates
Wall bracket AK 2 [1)] With attenuator. Clearance A 60 - 80 mm Compatible supports BH/BHK		RAL 9016 Special finish	796021 796029	**12,38** **21,26**	For all radiators with suspension brackets or plates
Build-in bracket BKE [1)] Wall hole Ø 18 mm. Depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm. Can be combined with retaining spring BFS 1 for Zehnder Charleston with support BH/BHK.		Galvanised L = 100 mm L = 130 mm L = 160 mm L = 200 mm L = 240 mm	 766012 766022 766032 766042 766052	 **3,97** **4,17** **4,35** **5,18** **6,39**	For all radiators with suspension brackets or plates
Security clip BFS 1 For drilling templates BKE with support BH/BHK		Spring steel	777010	**3,51**	Zehnder Charleston
Wall bracket CVD 0 [1)] With attenuator, clearances 10/15 mm		RAL 9016 Special finish	795031 795039	**2,30** **6,76**	For all radiators with suspension brackets or plates
Wall bracket CVD 1 [1)] With attenuator, clearances 25/30 mm		RAL 9016 Special finish	795041 795049	**2,30** **6,76**	For all radiators with suspension brackets or plates
Wall bracket CVD 2 [1)] With attenuator, clearances 30/45/50 mm		RAL 9016 Special finish	795051 795059	**5,02** **9,43**	For all radiators with suspension brackets or plates
Retaining spring for CVD For wall brackets CVD 0, CVD 1 and CVD 2 with support BH/BHK or lugs with height 20 mm. Price valid for 2 retaining springs		Spring steel	948012	**1,95**	Zehnder Charleston

[1)] An on-site locking device may be required depending on the installation and connection situation and the net weight of the radiator. In this case, retaining springs (suitable for the relevant product) or an on-site locking device must be provided.

Valves, return screw connections, thermostats

Description		Version	Article number	**Price €**	Application
Adaptor nippel From ½" female thread to ¾" external thread for screwing with O-ring seal			837110	**7,86**	For all radiators
Directional air vent, nickel-plated, self-sealing		¼" ⅜" ½" ⅛"	816010 816020 816030 816040	**3,65** **3,65** **3,65** **3,65**	
Directional air vent, chrome-plated, self-sealing Suitable for max. operating pressure of 18 bar		½"	816070	**6,18**	
Zehnder thermostat "LH2" Thermostat with integrated fluid sensor, tested according to EN 215. Can be restricted and locked to individual reference value of 7 to 28 °C. Version with zero setting and threaded connection for thermostat M 30 x 1,5		White Chrome	819140 819148	**30,59** **52,71**	For all radiators with threaded connection M 30 x 1,5 mm
Zehnder thermostat "DH" Thermostat with integrated expansion material sensor, reference value range 7 to 28 °C. Version with zero setting		White Chrome	819050 819058	**30,59** **46,61**	
Zehnder thermostat "SH" Elegant thermostat with integrated fluid sensor, tested according to EN 215, reference value range 7 to 28 °C. Version with zero setting. Thermostat threaded connection M 30 x 1,5 with coupling nut in chrome.		White Chrome Stainless steel	819080 819088 819082	**33,27** **46,70** **46,70**	
Zehnder thermostat „Design Line" Thermostat with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 ° C, connection for thermostat M 30 x 1,5		White Chrome Stainless steel optic Copper Bronze [1] Special finish	841271 841278 853720 853850 853860 841279	**56,00** **80,90** **145,60** **150,00** **150,00** **56,00**	
Thermostatic head M 30 x 1.5 mm		White Chrome	853931 853938	**31,54** **56,77**	
Blanking plug, nickel-plated, self-sealing		½"	974020	**2,08**	For all radiators
Blanking plug, chrome-plated Suitable for operating pressure up to max. 18 bar		½"	974058	**5,48**	
Angle adapter for thermostat M 30 x 1,5		White	819500	**12,16**	For all radiators with threaded connection M 30 x 1,5 mm

All fittings etc. suitable for operating temperature max. 110 °C and operating pressure max. 10 bar, unless indicated otherwise.

[1] Suitable for connection fitting and valve body in brass.

Zehnder Design Line valves

Description		Version	Article number	Price €	Application
Valve set type A Angled flow and lockshield, themostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		Chrom	838888	**66,78**	For all radiators with ½" female thread
Valve set type B Angled flow and lockshield, manual handwheel thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838891 838898	**104,53** **104,53**	
Valve set type C Straight flow and lockshield, manual handwheel themostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838941 838948	**104,53** **104,53**	
Valve set type D Reverse flow and angled lockshield, manual handwheel themostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838951 838958	**109,51** **109,51**	
Valve set type G Angled-angled flow head to the left, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel, lockshield angled, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838981 838988	**116,55** **116,55**	
Ventilset Typ I Angled-angled flow head to the right, manual handwheel, themostatic insert M 30 x 1,5 mm with pre-setting 1-7, lockshield angled, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	838991 838998	**116,55** **116,55**	

Zehnder Design Line valves

Description		Version	Article number	**Price €**	Application
Valve type O 50 mm straight, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, turnable for manual handwheel to the left or right, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839041 839048	**115,73** **115,73**	For all radiators with ½" female thread
Valve type P 50 mm angled, with by-pass, to the right thermostatic insert M 30 x 1,5 mm, with pre-setting 1-7 and by-pass, manual handwheel, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839051 839058	**115,73** **115,73**	
Valve type Q 50 mm angled, with by-pass, to the left thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, manual handwheel, including 2 pcs ¾" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839101 839108	**115,73** **115,73**	
Valve type U 50 mm swiveling design valve straight or angled, with by-pass, thermostatic insert M 30 x 1.5 mm with pre-setting 1-7, manual handwheel to the left or to the right, including 2 pc ¾" Eurocone nuts Ø 16.8 mm in finish of valve body, without adaptors for pipes		chrome white	839178 839171	**211,55** **211,55**	

Zehnder Design Line Coloured Valves

NEW!

Description		Version	Article nr.	Price €	Application
Zehnder thermostat "Design Line" Thermostat with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5		Special finish	841279	**56,00**	For all radiators with ½" female thread, in colour of radiator
Valve set type B Angled flow and lockshield, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish Valve set with manual handwheel Valve set including Design Line thermostat	838899 839439	**104,53** **160,53**	
Valve type O 50 mm straight, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, turnable to the left or right, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish Valve set with manual handwheel Valve set including Design Line thermostat	839049 839409	**115,74** **171,74**	
Valve type P 50 mm angled, with by-pass, to the right thermostatic insert M 30 x 1,5 mm, with pre-setting 1-7 and by-pass, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish Valve set with manual handwheel Valve set including Design Line thermostat	839059 839419	**115,74** **171,74**	
Valve type Q 50 mm angled, with by-pass, to the left thermostatic insert M 30 x 1,5 mm with pre-setting 1-7 and by-pass, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes. Thermostat Design Line with integrated fluid sensor. Can be restricted and locked to individual reference value of 6,5 - 28 °C, connection for thermostat M 30 x 1,5.		Special finish Valve set with manual handwheel Valve set including Design Line thermostat	839109 839429	**115,74** **171,74**	

All valves etc. suitable for operating temperature max. 110 °C and operating pressure max. 10 bar, if not indicated differently.
For further information, please see information in the keyword list.

Zehnder Design Line Accessories

Description		Version	Article number	Price €	Application
Nut ½", 2 pcs Fe - ¾" Eurocone		White Chrome	842001 842008	**21,17** **21,17**	Adapter for screw fittings with ½" external thread
Adaptors, 2 pcs Multilayer 16 x 2,0 mm		Brass	842060	**9,96**	
Adaptors, 2 pcs PEX 12 x 1,0 mm		Brass	842070	**9,96**	
Adaptors, 2 pcs Copper Ø 10 mm Copper Ø 12 mm Copper Ø 14 mm Copper Ø 15 mm Copper Ø 16 mm		Brass	 842080 842090 842100 842110 842120	 **6,23** **6,23** **6,23** **6,23** **6,23**	Matching to Zehnder Design Line valves and union nuts (2 x ¾" Eurocone, Ø 16,8 mm) which are included in the scope of delivery
Nuts Ø 18 mm - ¾" Eurocone **+ adaptors** copper Ø 18 mm **2 pcs**		Chrome / brass	842140	**31,12**	
Nuts Ø 20,8 mm - ¾" Eurocone **+ adaptors** multilayer Ø 20 x 2 mm **2 pcs**		Chrome / brass	842150	**31,12**	
Adaptors, 2 pcs Multilayer Ø 14 mm		Brass	842160	**9,96**	
Adaptors, 2 pcs Multilayer Ø 16 x 2,25 mm		Brass	842170	**9,96**	
Universal Adaptor set (without nuts ¾" Eurocone - Ø 16,8 mm) - 2 pcs Alu/Pex multilayer 16 x 2.0 mm - 2 pcs PEX 12 x 1 mm - 2 pcs CU 12 mm - 2 pcs CU 14 mm - 2 pcs CU 15 mm		Brass	842180	**34,85**	

Zehnder Design Line Accessories

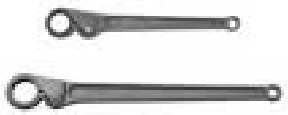
Description		Version	Article number	Price €	Application
Sleeving kit					
L = 70 mm		Chrome	853738	**21,17**	For radiator installation
L = 160 mm		Chrome	853668	**27,37**	
Collar Ø45 mm					
for Ø ½"		White Chrome	816241 816248	**2,49** **6,23**	For existing connections
for Ø 10 mm		White Chrome	816251 816258	**2,49** **6,23**	
for Ø 12 mm		White Chrome	816261 816268	**2,49** **6,23**	
for Ø 14 mm		White Chrome	816271 816278	**2,49** **6,23**	
for Ø 15 mm		White Chrome	816281 816288	**2,49** **6,23**	
for Ø 16 mm		White Chrome	816291 816298	**2,49** **6,23**	
for Ø 18 mm		White Chrome	816301 816308	**2,49** **6,23**	

Rail, Miscellaneous

Description		Version	Article number	Price €	Application
Towel rail Charleston with anti-crash device Depth 45 mm Rail to be shortened on site, attachments and towel bar in chrome. Length 366 mm (at least 9 elements) Length 918 mm (at least 20 elements)		Chrome Length 366 mm Length 918 mm	 966018 966028	 **174,77** **187,96**	Zehnder Charleston Zehnder Charleston Clinic
Connection plugs for 2-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread 1" x ⅛" right 1" x ¼" right 1" x ⅜" right 1" x ½" right 1" x ¾" right Left-hand thread 1" x ⅛" left 1" x ¼" left 1" x ⅜" left 1" x ½" left 1" x ¾" left	 908101 908201 908301 908401 908501 909101 909201 909301 909401 909501	 **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38**	Zehnder Charleston All versions
Connection plugs for 3 to 6-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread ⅝" x ⅛" right ⅝" x ¼" right ⅝" x ⅜" right ⅝" x ½" right ⅝" x ¾" right ⅝" x 1" right Left-hand thread ⅝" x ⅛" left ⅝" x ¼" left ⅝" x ⅜" left ⅝" x ½" left ⅝" x ¾" left ⅝" x 1" left	 908111 908211 908311 908411 908511 908611 909111 909211 909311 909411 909511 909611	 **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38** **7,38**	
Clip-in baffle		1" ⅝"	911110 911120	**2,88** **2,88**	
Blind plugs for 2-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread 1" Left-hand thread 1"	 906001 907001	 **6,94** **6,94**	
Blind plugs for 3 to 6-column radiators For hard marsonite seal Plug painted RAL 9016 Right-hand thread as standard on flow side of the radiator		Right-hand thread ⅝" right Left-hand thread ⅝" left	 906011 907011	 **6,94** **6,94**	
Blind plugs With soft seal, RAL 9016		Right-hand thread 1" ⅝" Left-hand thread 1" ⅝"	 906021 906031 907021 907031	 **5,98** **5,98** **5,98** **5,98**	

All fittings, plugs, etc. suitable for max. operating temperature of 110 °C and max. operating pressure of 10 bar, unless noted otherwise.

Miscellaneous

Description		Version	Article number	Price €	Application
Connection plugs With soft seal, RAL 9016 Connection ½"		Right-hand thread 1" 5/4" Left-hand thread 1" 5/4"	 908421 908431 909421 909431	 **5,98** **5,98** **5,98** **5,98**	Zehnder Charleston Zehnder Charleston Clinic
Plug key Steel		1" 5/4"	901010 901020	**349,03** **440,85**	
Plug key For painted plugs with soft seal		Plastic	901030	**10,16**	Zehnder Charleston
Fitting		2-column 1" 3 to 6-column 5/4"	911020 911030	**2,19** **2,45**	Zehnder Charleston Zehnder Charleston Clinic
1 set coupling tools 2-column 1" 3 to 6-column 5/4" 2-column 1" 3 to 6-column 5/4"		Dimensions 750 mm 750 mm 1250 mm 1250 mm	 903020 903030 905020 905030	 **414,84** **586,74** **502,35** **730,08**	
Seals Hard marsonite seal 0,75 mm		2-column 1" 3 to 6-column 5/4"	915020 915030	**1,10** **1,10**	
Soft seal, plastic white Joint seal, only seals on unpainted sealing surfaces Approved fastening torques: Boss size / Plugs Lens seal / Joint joint seal 1" / 30 - 35 Nm / 45 - 55 Nm 5/4" / 50 - 70 Nm / 70 - 80 Nm		For 1" boss For 5/4" boss	915021 915031	**1,22** **1,22**	Zehnder Charleston
Lambswool cleaning brush			601020 601030	**47,00** **47,00**	Zehnder Charleston Zehnder Charleston Clinic Charleston electric operation
Lacquer aerosol Original paint, air-drying For improving the surface finish, 150 ml RAL 9001 (Cream White) RAL 9002 (Grey White) RAL 9010 (Pure White) RAL 9016 (Traffic White)		Colour: RAL 9001 RAL 9002 RAL 9010 RAL 9016	 977020 977050 977080 977090	 **26,86** **26,86** **26,86** **26,86**	
Lacquer pens Original paint, air-drying For repairing minor damage RAL 9010 (Pure White) RAL 9016 (Traffic White)		Colour: RAL 9010 RAL 9016 On request	 675020 675130 675000	 **22,87** **22,87** **22,87**	

Notes

Keyword list

Accessories
A wide range of accessories are available for various additional uses, such as hanging up towels. For more information, see the section on “Accessories”.

Accessory set
To make accessories simple to choose, accessory sets are offered for each radiator. Detailed information is provided in the relevant section.

Antimicrobial coating
Especially for use in hygienically sensitive areas. This coating is based on the well-known bacteria-inhibiting and killing effect of silver ions embedded in the painted surface and offers safe and reliable long-term protection against the growth and spread of micro-organisms on radiator surfaces. This coating is completely safe for people and animals to touch. It has scientifically proven properties and is primarily offered for Zehnder Charleston Clinic.

Baffle
To avoid reduced output, e.g. with a riding connection, internal installations, e.g. baffles, deflector plates, guide plates, are required. Detailed information is available on request.

Advantages
See “Product description”.

Brackets
Appropriate brackets are offered as an accessory set for the respective radiators. Detailed information is given alongside the relevant products and in the “Accessories” section.
Also see notes under “Fixings”.

CE marking
The CE marking on Zehnder radiators shows that they are manufactured in accordance with the prevailing European standard EN 442 and that the product has been subjected to the prescribed conformity evaluation procedure.

CE

Product/product family	CE - Year
Zehnder Charleston	CE - 05
Zehnder Charleston Clinic	CE - 05
Zehnder Charleston Retrofit	CE - 05
Zehnder Charleston Turned	CE - 18
Zehnder Charleston Bench	CE - 05
Zehnder Radiator Bench	CE - 05
Zehnder Charleston electric version	CE - 17

Clear Lacquer Version (Technoline)
See “Colours”

Connections
Each Zehnder radiator is supplied complete with connections. Unless stated otherwise, all connections are female threads. Unless a different dimension is specified, the supplied connections are ½”. Orders without a connection type number will always be delivered with the respective standard connection. Plastic plugs inserted to protect the thread must be removed and replaced with an directional air vent / draining valve or blind plug.

Conversion
Factor for converting the nominal heat output to thermal outputs at other system temperatures, see “Thermal output”.

Corrosion protection
See “Finish” and “Surface protection”.

Colours
Zehnder radiators are available in almost every colour conceivable. From all possible colours, the Zehnder colour chart shows a selection of colours from various colour systems, such as RAL colours, sanitary colours or colours from the NCS-S system.
The standard paint for the entire Zehnder radiator programme is the colour RAL 9016, Traffic White.
17 common colours make up Zehnder colour category 1, with an additional charge of 20%, 30 others colour make up category 2, with an additional charge of 30% on the standard finish. All other paintable colours are available for a surcharge on request. Another coating option is the clear lacquer version for Zehnder Charleston (Technoline), which falls in category 2. This essentially concerns one unique colour for each radiator. For this reason, different surface structures and visual colour differences can also occur at a later point in time. These colour deviations are not a fault and are therefore not subject to claims under warranty as described in our General Sales and Delivery Conditions.
Structural paints (structured paint surface) are possible on Zehnder radiators and also fall under category 2.
The Zehnder colour chart is printed on the inside of the rear catalogue cover.
For more information, see “Finish”.

Description
The description for a product contains all the information needed to create a specification or tender. The text-block structure simplifies the composition of all necessary features according to on-site requirements.

Dimensions
The dimensions indicated in the documentation are correct at the time of printing. Subject to change without notice.

Electric operation and Ecodesign Directive
Electric radiators are fixed units that comprise the actual radiator body, a filling medium (heat transfer fluid), a heating element and associated controls. This unit is subject to a special function test and must not be changed. The heat transfer fluid is frost-proof up to -20°C. The electric radiators are subject to the Ecodesign Directive. The aim of this Directive is to reduce the environmental effects of products that consume energy, with the entire product life-cycle taken into account. A points system is used to evaluate the extent to which the Directive has been fulfilled. Various functions, such as standby power consumption ≤ 0,5 W, weekly programme and open window detection, help to fulfil the minimum legal requirements (that is, they help to achieve the minimum number of points). Devices that meet the minimum requirements and are thus compliant with the Ecodesign Directive.

Please note:
- The electrical installation must comply with local regulations.
- In stationary installation (without plug), a switch must be installed (all-phase isolation from the mains with min. 3 mm contact spacing).
- For electric-only radiators, the defined filling quantity must not be changed.
- The electric heating element must only be opened and the mains cable only replaced by the manufacturer.
- When using radiators with electric heating elements, the qualified electrician is the competent partner for the protective measures to be taken.
- Follow the operating instructions.

Keyword list

Environment
The certification of our environmental management system to DIN EN ISO 14 001 by an independent institution obliges us to make continuous improvements to our environmental services through reducing or avoiding environmental burdens and waste, encouraging the utilisation and protection of resources as well as observing all environmental laws and regulations applicable to us.

Finish
Ready-painted radiators in this price list have a two-coat finish (to DIN 55900, Part 1 and 2, comprising primer and top coat). The top coat is a powder coating. The high-quality Zehnder powder coating produces an especially smooth and extremely durable surface. Further information on the applications and limits of radiators is contained in information sheet number 7 of the BDH (Bundesindustrieverband Deutschland, Haus-, Energie- und Umwelttechnik e.V.).
Please always use the original RAL, NCS colour samples or original colour charts of the sanitary manufacturers for exact colour matching. For technical production reasons, minor colour deviations are possible in paints on steel surfaces, also when taking the prevailing lighting conditions into account. Deviations can also occur when comparing painted steel surfaces (radiators) with ceramic products.

The colours shown here (see inside of rear cover) are not binding for printing reasons. Radiators in metallic colours, e.g. RAL 9006, RAL 9007 and Anthracite are unique products and visual differences may appear in the colour, depending on the radiator.

Fixings
To ensure that radiators are fitted safely, the weight of the radiator and other aspects must be considered when choosing the right quality and quantity of fixings. Additional loads and foreseeable misuse of a radiator must be considered or ruled out by planning and implementation in line with the known building use. The installation situation and accessibility are just as important criteria as wall material, bracket shape, location of the suspension points, locking device, add-on elements and the like.
Detailed information on the required number of fixing axes in accordance with VDI 6036 requirements class 2 is given for the respective products in the section on “Installation accessories”. Recommendations for additional requirements classes on request. See also the key word VDI 6036.

Flow connection
This concerns the connection on the radiator through which the hot water flows into the radiator.

Galvanising
Only ½” connections or larger are possible. Curved or angled radiators cannot be galvanised. Galvanisation creates structures on the surface. These are caused by the technological process and therefore are not a fault. We cannot guarantee a clean, smooth surface. Galvanised radiators are generally delivered with a top coat. For explanation, see “Surface protection”.
Maximum dimension galvanised: 3000 x 850 x 450 mm

Ground clearance
A reduction in the distance between the radiator and the floor can result in reduced output. For more information, see “Reduced output”.

Guide plate
See “Baffle”.

High pressure
Even with suitable radiators and accessory parts, pressure loads up to a maximum of 18 bar are only permitted if pressure surges can be excluded.

Hydraulic balancing
By hydraulic balancing the various system resistances are set so that the radiators are supplied with the necessary quantity of water at all operational points, in order to achieve the desired thermal output.

Hygiene version
Numerous Zehnder radiators are suitable for use in hygienically sensitive areas. Hygiene certificates can be requested for this. The keyword “Antimicrobial coating” is also of interest for the topic of hygiene.

Immersion tube
Some types of connection require the installation of an immersion tube to achieve optimal heat distribution.

Inlet and outlet resistance
The resistance coefficient (zeta value) is used to calculate the pressure loss. For more information, see “Pressure loss”.

Installation in series
The installation in series of radiators refers to the series connection of several radiators. Detailed information is given alongside the relevant products.

Joining
Zehnder Charleston radiators in lengths above the set maximum number of elements are supplied in sub-blocks and must be joined together on site. For detailed information, see section on “Zehnder Charleston”.

Lance valve
The lances must be shortened or extended, depending on the radiator and connection types. Detailed information is available on request. See keyword “Single-tube systems”.

Length restrictions
Avoiding damage during transport significantly increases the cost of packaging, which must be charged for accordingly.

Made to measure
Zehnder radiators can be customised (e.g. angled, curved, with welded brackets). Special shapes require templates to be made from solid materials (cardboard, packing paper) in order to guarantee quick and trouble-free processing. The support of the area manager can be used for a small charge.
Where necessary, the customer will receive a scale drawing of the version to be installed and final pricing for inspection and approval, after which the order will be manufactured. The order cannot be cancelled once placed.

Minimum water flow
If the flow of water through a radiator is heavily reduced, the heat output can fall far below the calculated or indicated value. For this reason, a minimum water flow should always be ensured.
The approximate minimum water flows $q_{m\ min}$ in % of the nominal flow rate q_{ms} which does not cause the thermal output to deviate from the standard characteristic curve by more than 5% is 17%.

Operating pressure
The maximum permissible operating pressure of a radiator depends on its geometry, the material used and the finish. The permissible operating pressure varies according to the product, see table:
Suitable fittings, plugs and directional air vents must be ensured in connection with high pressure applications in excess of 10 bar. See “High pressure”.

Keyword list

Product/product family	Standard version [bar]	High pressure version [bar]
Zehnder Charleston	10	18
Zehnder Charleston Clinic	10	18
Zehnder Charleston Retrofit	10	18
Zehnder Charleston Turned	10	-
Zehnder Charleston Bench	10	18
Zehnder Radiator Bench	10	18

Operating temperature
The coating of Zehnder radiators can be used for central heating systems up to 110 °C. It is suitable for use in district heating, low temperature and condensing systems.

Packaging
The packaging of Zehnder radiators serves as protection against damage during transport and on building sites. It must be removed before starting the system for the first time in order to avoid any damage caused by condensation.

Pressure loss
The pressure loss is determined using a zeta value of 2,5 per radiator for connection sizes from ⅜" to ¾" and a flow velocity of 1 m/sec. The inherent resistance of a radiator can be ignored. In special cases (e.g. where an integrated valve is fitted), information on pressure losses is provided.

Prices
Terms of delivery for quoted prices are: FQA Lahr. All prices are gross prices. Where prices are not stated or only shown with the proviso 'current list price', the valid list prices will be calculated on the day of delivery. Also see General Sales and Delivery Conditions.

Quality check
Zehnder Group Deutschland GmbH is certified to DIN ISO 9001 and is therefore subject to stringent quality controls carried out by independent institutions in the areas of Design/Development, Production, Assembly and Customer Service.

Reduced output
The thermal output can be affected depending on where the radiator is installed. The standard thermal output is measured in an unobstructed setting with a ground clearance of 110 mm and a wall clearance of 50 mm. Any reduction in these clearances, as well as installation in alcoves and the application of covers and grilles can, depending on the model, lead to a reduction in thermal output. In the case of grilles, this reduction can differ between 5 and 12%, depending on the radiator.

Reflective cover plates
The disadvantage of installing a radiator in front of external glazing is that heat is lost directly through the glass. The back of a radiator emits heat in the form of thermal radiation in the same way as the front. For wall mounted radiators, the thermal radiation is reflected or absorbed by the wall, whereas this long-wave radiation radiates almost unimpeded through the pane of glass when radiators are installed in front of windows, even at greater distances.
In order to avoid this unnecessary loss of heat and energy, radiators are available with a reflective cover plate fitted to the side of the radiator facing the window.

Returns
Radiators and accessories cannot be returned.

Return connection
This concerns the connection on the radiator through which the hot water leaves the radiator and passes along the return line to the heat generator.

Scope of delivery
The scope of delivery for the standard version of a radiator can be found in the respective product description.

Seal
In the case of sealed connections and plugs, it may be necessary to tighten up the connection and blind plugs depending on the water quality, e.g. in a remote heating connection, after testing the pressure or heating the system for the first time. The sealing materials supplied or used by Zehnder are intended for use in closed heating systems.

Single-tube system
We recommend using single-tube valves with an adjustable bypass or a ballast system (riser), i.e. with an adjustable water volume over the radiator. Essentially, a reduced output of at least 25% must be considered when using single-tube lance valves. Function is often guaranteed only for certain models and up to specific lengths. Maximum lengths and an indication of how the radiators function with various makes of valve is available on request.

Standard thermal output
The standard thermal output of a radiator is determined in an independent, certified test laboratory according to standard EN 442 at the standard operating temperatures of 75/65/20 °C. The conversion of the thermal output to other system temperatures is done on the basis of the standard thermal output according to EN 12831.
For easy dimensioning, additional outputs for frequently used temperatures are shown alongside the standard thermal output:
- 70/55/20 °C
- 55/45/20 °C

Standard colour/finish
The standard colour for Zehnder radiators is RAL 9016. For more information, see "Painting".

Storage
Zehnder radiators must be stored for the long-term or temporarily in dry and chemical-free rooms.

Structural finish
See "Finish".

Surface protection
We recommend that installation areas affected by damp or chemicals are only fitted with radiators that are galvanised and then given a powder coating. A polyzinc coating with subsequent powder-coating increases the corrosion protection of the radiator, depending on the surface geometry. Possible applications are available on request. (see also "Galvanising")

System temperatures
These are the temperatures at which the hot water heating system is operated (flow, return and room temperature).

Technical specifications
The dimensions indicated in the documentation are correct at the time of printing. We reserve the right to make amendments that improve the product.

Technoline
See "Colours"

Test pressure
Each radiator is checked for leaks by subjecting it to 1,3 times its rated maximum operating pressure before delivery. For orders that

Keyword list

do not indicate the required operating pressure, the radiator will be delivered with the operating pressure of the standard version.

Thermal output Φ
The thermal output of a radiator model is given by the standard characteristic curve:

$$\Phi = K_M \cdot \Delta T^n$$

EN 442 defines the test procedure and the measurement method in identically arranged test laboratories. A single, pan-European measuring method therefore replaces the previous measurements that varied from country to country.

The output given under the following conditions in accordance with EN 442 applies as the nominal heat output Φ_s:

Flow temperature	t_1	= 75 °C
Return temperature	t_2	= 65 °C
Mean water temperature	t_m	= 70 °C
Room temperature	t_r	= 20 °C
Excess temperature (t_m - t_r)	ΔT	= 50 K

Thermal outputs Φ (different ΔT than 50 K)

For all excess temperatures other than ΔT_n = 50 K, the thermal output is calculated in accordance with the formulae

$$\Phi = \Phi_s \times f_1 \text{ or } \Phi = \Phi_s \times \left(\frac{\Delta T}{\Delta T_n}\right)^n$$

ΔT is to be calculated logarithmically as follows:

$$\Delta T = \frac{(t_1 - t_r) - (t_2 - t_r)}{\ln\left(\frac{t_1 - t_r}{t_2 - t_r}\right)} = \frac{t_1 - t_2}{\ln\left(\frac{t_1 - t_r}{t_2 - t_r}\right)}$$

The excess temperature ΔT_n under standard conditions (75/65/20 °C) is, as a logarithmic excess temperature

$$\Delta T_n = \frac{75 - 65}{\ln\left(\frac{75 - 20}{65 - 20}\right)} = 49{,}83 \text{ K}$$

The entire calculation process can be avoided by using the tables on page 170.

These can be used to directly read off the f1 factor for known system temperatures (t_1, t_2, t_r) and radiator exponents. For other system temperatures, f_1 must be determined mathematically according to the specified formulae.

Examples for the dimensioning of radiators

Example of Zehnder Charleston:
Model 3050 (3-column) - 20 elements
Φ_s = 1032 W, exponent n = 1,25
t_1 = 60 °C, t_2 = 40 °C, t_r = 20 °C

Determining **ΔT:**

$$\Delta T = \frac{(60 - 40)}{\ln\left(\frac{60 - 20}{40 - 20}\right)} = \frac{20}{0{,}693} = 28{,}85 \text{ K}$$

$$\phi = 1032 \text{ W} \times \left(\frac{28{,}85}{49{,}83}\right)^{1{,}25} = 1032 \text{ W} \times 0{,}579^{1{,}25} = 1032 \text{ W} \times 0{,}505 = \underline{\underline{521 \text{ W}}}$$

Tolerances
Industry standard tolerances and tolerances based on production technology are subject to change for all indicated dimensions and fall within the tolerances defined in EN 442. The maximum tolerance must be considered during pre-assembly of the pipework or fixing materials. We reserve the right to make technical amendments during the validity of the documentation as part of product improvement.

TopCare
See keyword “Antimicrobial surface”.

VDI 6036
Application of the directive VDI 6036 assists all participants in the process to make a comprehensive and comparable assessment of the installation situation. As an accepted rule of technology, this directive and the resulting assessment can also be drawn on for regulation purposes in the event of damages. Directive VDI 6036 classifies applications for radiator fastenings into various requirements classes with different loads. Additional loads for various intensities of misuse can be added to the net weight and water content of the radiator as required. Zehnder issues standard assignment recommendations for requirements classes 1 and 2, and for stable wall constructions (e.g. concrete) for selected fixing pieces - unless otherwise marked. Assignment recommendations for requirements class 3 and for special custom applications (requirements class 4) on request.

Example applications from VDI 6036:

Requirements class 2 (normal and increased requirements):
owner-occupied homes, rented flats, kindergartens, hospitals, retirement and nursing homes, office buildings, doctors’ surgeries/ lawyers offices, retail outlets.

Requirements class 3 (high-level requirements):
schools, sports facilities, youth centres, meeting places, railway stations, barracks

Requirements class 4 (very high-level requirements or special burdens):
prisons, psychiatric institutions, special agreements

Wall clearance
This is the distance between the wall and the back of the radiator. For more information, see “Reduced output”.

Warranty
The warranty period for the products shown in this price list is two years. Additional information is provided in the General Sales and Delivery Conditions.

Water quality
Operating conditions and water quality according to VDI 2035 must be maintained.
Claims under guarantee will be rejected if substances (e.g. chemicals, antifreeze, etc.) are added to the heating water which have an aggressive effect on the sealing material. In case of non compliance, no liability can be accepted in accordance with point 8 of our General Sales and Delivery Conditions for sealing material, nor for any resulting defects and consequences. Claims under guarantee in accordance with point 8 of our General Sales and Delivery Conditions will also be rendered invalid in case of:
- Operation with steam,
- Periodical or long-term draining of the system,
- Excessive sludge in the radiators and
- Occasional or constant of oxygen into the system.

Wetrooms
See “Surface protection”

Keyword list

Legend

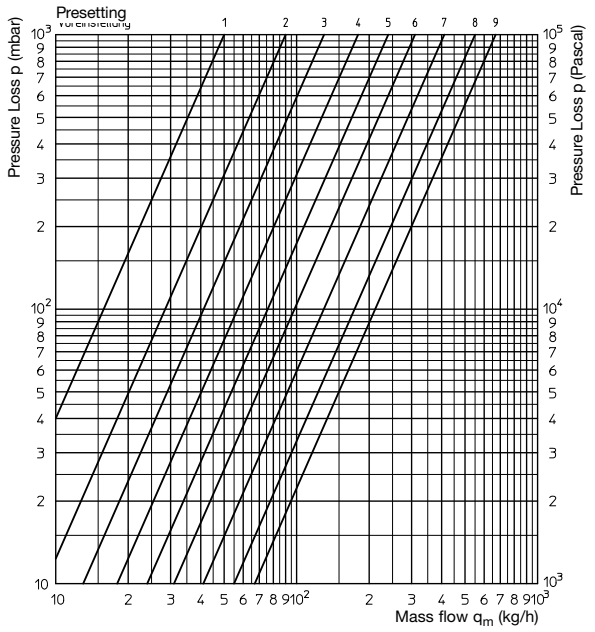
Icon	Unit	Description
H	mm	Height
L	mm	Length
T	mm	Depth
H Lam.	mm	Height of fins
N	mm	Boss spacing
A	m^2	Surface
V	dm^3	Water content
M	kg	Empty weight
N_S	-	Number of elements
t_1	°C	Flow temperature
t_2	°C	Return temperature
t_r	°C	Room air temperature
t_m	°C	Mean water temperature $(t_1+t_2)/2$
ΔT	K	Excess temperature $t_m - t_r$
Φ	W=(J/s)	Thermal output
$Φ_S$	W	Nominal heat output
$Φ_L$	W	Nominal heat output of the module
C_p	J/(kg K)	Specific heat capacity
n	-	Radiator indicator, exponent
S_k	%	Proportion of radiation
C_K	-	Conversion factor to $Φ_S$
q_m	kg/h/(kg/s)	Water flow
q_{ms}	kg/h/(kg/s)	Nominal flow rate
v	m/s	Velocity
Δp	kPa	Pressure loss, pressure drop
ζ	-	Resistance coefficient
ln	-	Natural logarithm

Physical unit

°C	Degrees, Celsius
K	Kelvin, unit for temperature difference
m	Metres
mm	Millimetres
m/s	Metres/second, flow rate
Pa	Pascal, 1 Pa = 0,102 mmWS
mmWS	mm water column
W	Watt, unit of power 1 W = 0,6 kilocalories/hour old unit of power, 1 kcal/h = 1,163 W
c	Specific heat capacity of water = 1 kcal/kg K = 4,187 kJ/kg K
kJ	Kilojoule, 1 kJ = 0,239 kcal

Pressure loss graph

Valve insert AV 9 (Oventrop)



Presetting	1	2	3	4	5	6	7	8	9
kv-value	0,05	0,09	0,14	0,20	0,26	0,32	0,43	0,57[1)]	0,67[2)]

[1)] Charleston Completto 0,54
[2)] Charleston Completto 0,63

Conversion table, f_1 factor

t_1	t_r \ t_2 / n	75					70					65					60					55				
		1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,27	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40
90	10	1,562	1,591	1,621	1,651	1,682	1,491	1,516	1,542	1,568	1,594	1,419	1,449	1,462	1,483	1,505	1,346	1,363	1,380	1,397	1,414	1,270	1,283	1,296	1,309	1,322
	15	1,432	1,454	1,476	1,498	1,521	1,363	1,380	1,398	1,416	1,435	1,291	1,311	1,319	1,333	1,347	1,218	1,228	1,238	1,248	1,259	1,142	1,149	1,155	1,162	1,168
	18	1,356	1,373	1,390	1,408	1,426	1,286	1,300	1,313	1,327	1,341	1,215	1,229	1,235	1,245	1,255	1,142	1,148	1,155	1,161	1,168	1,066	1,069	1,072	1,075	1,078
	20	1,305	1,319	1,334	1,349	1,364	1,236	1,247	1,258	1,269	1,280	1,165	1,175	1,180	1,187	1,195	1,092	1,096	1,100	1,104	1,108	1,016	1,017	1,017	1,018	1,019
	22	1,254	1,266	1,278	1,290	1,303	1,185	1,194	1,202	1,211	1,220	1,115	1,122	1,125	1,130	1,135	1,042	1,043	1,045	1,047	1,049	0,966	0,964	0,963	0,962	0,960
	24	1,204	1,214	1,223	1,233	1,242	1,136	1,142	1,148	1,154	1,160	1,065	1,069	1,071	1,073	1,076	0,992	0,992	0,991	0,991	0,991	0,916	0,913	0,909	0,906	0,903
85	10	1,501	1,526	1,552	1,579	1,606	1,432	1,454	1,476	1,498	1,521	1,363	1,387	1,398	1,416	1,435	1,291	1,305	1,319	1,333	1,347	1,218	1,228	1,238	1,248	1,259
	15	1,372	1,391	1,409	1,428	1,447	1,305	1,319	1,334	1,349	1,364	1,236	1,251	1,258	1,269	1,280	1,165	1,172	1,180	1,187	1,195	1,092	1,096	1,100	1,104	1,108
	18	1,296	1,311	1,325	1,339	1,354	1,229	1,240	1,251	1,261	1,272	1,160	1,171	1,175	1,182	1,190	1,090	1,094	1,098	1,102	1,105	1,017	1,017	1,018	1,019	1,020
	20	1,246	1,258	1,269	1,281	1,293	1,179	1,187	1,196	1,204	1,212	1,111	1,118	1,121	1,125	1,130	1,040	1,042	1,044	1,045	1,047	0,967	0,966	0,964	0,963	0,962
	22	1,196	1,205	1,214	1,223	1,233	1,130	1,135	1,141	1,147	1,153	1,061	1,065	1,067	1,069	1,072	0,991	0,991	0,990	0,990	0,989	0,918	0,915	0,911	0,908	0,905
	24	1,147	1,153	1,160	1,166	1,173	1,080	1,084	1,087	1,091	1,094	1,012	1,013	1,013	1,014	1,014	0,942	0,940	0,937	0,935	0,933	0,869	0,864	0,859	0,854	0,849
80	10	1,439	1,461	1,483	1,505	1,528	1,372	1,391	1,409	1,428	1,447	1,305	1,325	1,334	1,349	1,364	1,236	1,247	1,258	1,269	1,280	1,165	1,172	1,180	1,187	1,195
	15	1,312	1,326	1,342	1,357	1,372	1,246	1,258	1,269	1,281	1,293	1,179	1,191	1,196	1,204	1,212	1,111	1,116	1,121	1,125	1,130	1,040	1,042	1,044	1,045	1,047
	18	1,236	1,247	1,258	1,270	1,281	1,171	1,179	1,187	1,195	1,203	1,105	1,111	1,114	1,119	1,124	1,037	1,038	1,040	1,041	1,043	0,966	0,965	0,964	0,962	0,961
	20	1,187	1,195	1,204	1,212	1,221	1,122	1,127	1,133	1,138	1,144	1,056	1,059	1,061	1,063	1,066	0,988	0,987	0,987	0,986	0,986	0,918	0,914	0,911	0,908	0,904
	22	1,137	1,143	1,149	1,156	1,162	1,073	1,076	1,079	1,082	1,086	1,007	1,008	1,008	1,008	1,008	0,939	0,937	0,934	0,932	0,930	0,869	0,864	0,859	0,854	0,849
	24	1,088	1,092	1,096	1,100	1,103	1,024	1,025	1,026	1,027	1,028	0,959	0,956	0,955	0,954	0,952	0,891	0,887	0,883	0,878	0,874	0,821	0,814	0,808	0,801	0,794
75	10						1,312	1,326	1,342	1,357	1,372	1,246	1,262	1,269	1,281	1,293	1,179	1,187	1,196	1,204	1,212	1,111	1,116	1,121	1,125	1,130
	15						1,187	1,195	1,204	1,212	1,221	1,122	1,130	1,133	1,138	1,144	1,056	1,058	1,061	1,063	1,066	0,988	0,987	0,987	0,986	0,986
	18						1,113	1,118	1,122	1,127	1,133	1,049	1,051	1,053	1,055	1,057	0,983	0,982	0,981	0,981	0,980	0,915	0,912	0,908	0,905	0,902
	20						1,064	1,066	1,069	1,072	1,075	1,000	1,000	1,000	1,000	1,000	0,935	0,932	0,929	0,927	0,924	0,867	0,862	0,857	0,852	0,847
	22						1,015	1,016	1,016	1,017	1,018	0,952	0,949	0,948	0,946	0,944	0,887	0,882	0,878	0,874	0,869	0,820	0,813	0,806	0,799	0,793
	24						0,967	0,966	0,964	0,963	0,962	0,904	0,899	0,897	0,893	0,889	0,839	0,833	0,827	0,821	0,815	0,772	0,764	0,756	0,748	0,740
70	10											1,187	1,198	1,204	1,212	1,221	1,122	1,127	1,133	1,138	1,144	1,056	1,058	1,061	1,063	1,066
	15											1,064	1,068	1,069	1,072	1,075	1,000	1,000	1,000	1,000	1,000	0,935	0,932	0,929	0,927	0,924
	18											0,991	0,991	0,990	0,990	0,990	0,928	0,925	0,922	0,919	0,917	0,863	0,858	0,853	0,847	0,842
	20											0,943	0,940	0,939	0,936	0,934	0,880	0,876	0,871	0,867	0,862	0,816	0,809	0,802	0,795	0,789
	22											0,896	0,890	0,887	0,883	0,879	0,833	0,827	0,821	0,815	0,808	0,769	0,761	0,752	0,744	0,736
	24											0,848	0,840	0,837	0,831	0,826	0,787	0,779	0,771	0,763	0,756	0,723	0,713	0,703	0,694	0,684
65	10																1,064	1,066	1,069	1,072	1,075	1,000	1,000	1,000	1,000	1,000
	15																0,943	0,941	0,939	0,936	0,934	0,880	0,876	0,871	0,867	0,862
	18																0,872	0,867	0,862	0,857	0,852	0,810	0,803	0,796	0,789	0,782
	20																0,825	0,818	0,812	0,805	0,799	0,763	0,755	0,746	0,738	0,730
	22																0,779	0,770	0,762	0,755	0,747	0,717	0,707	0,698	0,688	0,679
	24																0,733	0,723	0,714	0,705	0,696	0,672	0,661	0,650	0,639	0,629
60	10																					0,943	0,941	0,939	0,936	0,934
	15																					0,825	0,818	0,812	0,805	0,799
	18																					0,755	0,747	0,738	0,729	0,721
	20																					0,710	0,700	0,690	0,680	0,670
	22																					0,664	0,653	0,642	0,631	0,621
	24																					0,620	0,607	0,595	0,584	0,572

Conversion factor f_1 for converting the standard thermal output to EN 442 at 75/65/20 °C for other system temperatures: $\Phi = \Phi_s \cdot f_1$

$$f_1 = \left[\frac{(t_1 - t_2)}{\ln\left(\frac{t_1 - t_r}{t_2 - t_r}\right) \cdot 49{,}83\ \mathrm{K}} \right]^n$$

The radiator exponent depends on the model and type of radiator and can therefore be found in the table containing the technical specifications for the respective radiator. For exponents other than those given, the correction factor can be interpolated or precisely calculated according to the above formulae. An exponent of 1,3 can be used for the approximate calculation.

System temperatures not shown must be mathematically determined using the formulae given, or can be made available on request.

For more information about thermal outputs, see keyword list.

Legend

Icon	Unit	Description
t_1	°C	Flow temperature
t_2	°C	Return temperature
t_r	°C	Room air temperature
Φ	W = (J / s)	Thermal output
Φ_s	W	Nominal heat output
n	-	Radiator indicator, exponent
ln	-	Natural logarithm

Physical unit

K	Kelvin, unit for temperature difference

Conversion table, f_1 factor

t_1	t_r \ t_2 n	50					45					40					35					30				
		1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40	1,20	1,25	1,30	1,35	1,40
90	10	1,193	1,201	1,210	1,219	1,228	1,112	1,117	1,122	1,127	1,132	1,028	1,029	1,030	1,031	1,032	0,939	0,937	0,934	0,932	0,929	0,844	0,839	0,833	0,827	0,821
	15	1,064	1,067	1,070	1,073	1,075	0,983	0,982	0,981	0,981	0,980	0,897	0,893	0,889	0,885	0,881	0,805	0,798	0,791	0,784	0,777	0,706	0,696	0,686	0,676	0,666
	18	0,988	0,987	0,987	0,986	0,986	0,906	0,902	0,898	0,894	0,891	0,819	0,812	0,805	0,798	0,792	0,725	0,715	0,706	0,696	0,687	0,621	0,608	0,596	0,585	0,573
	20	0,937	0,935	0,932	0,930	0,927	0,854	0,849	0,843	0,838	0,832	0,766	0,758	0,749	0,741	0,733	0,670	0,659	0,648	0,638	0,627	0,562	0,549	0,536	0,523	0,511
	22	0,887	0,882	0,878	0,874	0,869	0,803	0,796	0,789	0,781	0,774	0,714	0,704	0,694	0,684	0,675	0,615	0,603	0,591	0,579	0,567	0,502	0,487	0,473	0,460	0,447
	24	0,836	0,830	0,824	0,818	0,812	0,752	0,743	0,734	0,726	0,717	0,661	0,650	0,638	0,628	0,617	0,559	0,546	0,533	0,520	0,507	0,438	0,423	0,408	0,395	0,381
85	10	1,142	1,149	1,155	1,162	1,168	1,064	1,067	1,070	1,073	1,075	0,983	0,982	0,981	0,981	0,980	0,897	0,893	0,889	0,885	0,881	0,805	0,798	0,791	0,784	0,777
	15	1,016	1,017	1,017	1,018	1,019	0,937	0,935	0,932	0,930	0,927	0,854	0,849	0,843	0,838	0,832	0,766	0,758	0,749	0,741	0,733	0,670	0,659	0,648	0,638	0,627
	18	0,941	0,939	0,936	0,934	0,931	0,862	0,856	0,851	0,846	0,840	0,778	0,770	0,761	0,754	0,746	0,687	0,677	0,666	0,656	0,646	0,587	0,574	0,562	0,550	0,537
	20	0,891	0,887	0,883	0,878	0,874	0,811	0,804	0,797	0,790	0,784	0,726	0,717	0,707	0,698	0,689	0,634	0,622	0,611	0,599	0,588	0,531	0,517	0,503	0,490	0,477
	22	0,842	0,836	0,830	0,824	0,818	0,761	0,753	0,744	0,736	0,727	0,675	0,664	0,653	0,643	0,632	0,581	0,568	0,555	0,543	0,530	0,472	0,457	0,443	0,430	0,416
	24	0,792	0,785	0,777	0,770	0,762	0,711	0,701	0,691	0,682	0,672	0,624	0,612	0,600	0,588	0,577	0,526	0,512	0,499	0,486	0,473	0,410	0,395	0,381	0,367	0,354
80	10	1,092	1,096	1,100	1,104	1,108	1,016	1,017	1,017	1,018	1,019	0,937	0,935	0,932	0,930	0,927	0,854	0,849	0,843	0,838	0,832	0,766	0,758	0,749	0,741	0,733
	15	0,967	0,966	0,964	0,963	0,962	0,891	0,887	0,883	0,878	0,874	0,811	0,804	0,797	0,790	0,784	0,726	0,717	0,707	0,698	0,689	0,634	0,622	0,611	0,599	0,588
	18	0,893	0,889	0,885	0,881	0,877	0,817	0,810	0,803	0,797	0,790	0,736	0,727	0,718	0,709	0,700	0,649	0,638	0,627	0,615	0,604	0,554	0,540	0,527	0,514	0,502
	20	0,844	0,839	0,833	0,827	0,821	0,768	0,759	0,751	0,743	0,735	0,686	0,676	0,665	0,655	0,644	0,598	0,585	0,573	0,561	0,549	0,499	0,484	0,471	0,457	0,444
	22	0,796	0,788	0,781	0,773	0,766	0,719	0,709	0,699	0,690	0,680	0,636	0,624	0,613	0,601	0,590	0,546	0,532	0,519	0,506	0,494	0,442	0,427	0,413	0,399	0,386
	24	0,748	0,739	0,730	0,721	0,712	0,670	0,659	0,648	0,637	0,627	0,586	0,573	0,561	0,548	0,536	0,493	0,479	0,465	0,452	0,438	0,383	0,368	0,353	0,340	0,326
75	10	1,040	1,042	1,044	1,045	1,047	0,967	0,966	0,964	0,963	0,962	0,891	0,887	0,883	0,878	0,874	0,811	0,804	0,797	0,790	0,784	0,726	0,717	0,707	0,698	0,689
	15	0,918	0,914	0,911	0,908	0,904	0,844	0,839	0,833	0,827	0,821	0,768	0,759	0,751	0,743	0,735	0,686	0,676	0,665	0,655	0,644	0,598	0,585	0,573	0,561	0,549
	18	0,845	0,839	0,833	0,827	0,822	0,772	0,763	0,755	0,747	0,739	0,694	0,684	0,673	0,663	0,653	0,611	0,599	0,587	0,575	0,563	0,520	0,506	0,492	0,479	0,466
	20	0,797	0,789	0,782	0,775	0,767	0,723	0,714	0,704	0,695	0,685	0,645	0,634	0,622	0,611	0,600	0,561	0,548	0,535	0,522	0,510	0,467	0,452	0,438	0,424	0,411
	22	0,749	0,740	0,732	0,723	0,714	0,676	0,665	0,654	0,643	0,633	0,597	0,584	0,572	0,560	0,548	0,511	0,497	0,483	0,470	0,457	0,412	0,397	0,383	0,369	0,355
	24	0,702	0,692	0,682	0,672	0,662	0,628	0,616	0,604	0,592	0,581	0,548	0,535	0,521	0,508	0,496	0,460	0,445	0,431	0,417	0,404	0,355	0,340	0,326	0,312	0,299
70	10	0,988	0,987	0,987	0,986	0,986	0,918	0,914	0,911	0,908	0,904	0,844	0,839	0,833	0,827	0,821	0,768	0,759	0,751	0,743	0,735	0,686	0,676	0,665	0,655	0,644
	15	0,867	0,862	0,857	0,852	0,847	0,797	0,789	0,782	0,775	0,767	0,723	0,714	0,704	0,695	0,685	0,645	0,634	0,622	0,611	0,600	0,561	0,548	0,535	0,522	0,510
	18	0,796	0,788	0,781	0,773	0,766	0,726	0,716	0,707	0,697	0,688	0,652	0,640	0,629	0,618	0,607	0,572	0,559	0,546	0,534	0,522	0,485	0,471	0,457	0,443	0,430
	20	0,749	0,740	0,731	0,722	0,713	0,678	0,668	0,657	0,646	0,636	0,604	0,592	0,579	0,567	0,555	0,524	0,510	0,496	0,483	0,470	0,434	0,419	0,405	0,391	0,378
	22	0,702	0,692	0,682	0,672	0,662	0,632	0,620	0,608	0,596	0,585	0,557	0,543	0,530	0,517	0,505	0,475	0,460	0,446	0,433	0,420	0,382	0,367	0,352	0,338	0,325
	24	0,656	0,644	0,633	0,622	0,611	0,585	0,572	0,560	0,547	0,535	0,509	0,495	0,482	0,468	0,455	0,426	0,411	0,397	0,383	0,369	0,327	0,312	0,298	0,284	0,272
65	10	0,935	0,932	0,929	0,927	0,924	0,867	0,862	0,857	0,852	0,847	0,797	0,789	0,782	0,775	0,767	0,723	0,714	0,704	0,695	0,685	0,645	0,634	0,622	0,611	0,600
	15	0,816	0,809	0,802	0,795	0,789	0,749	0,740	0,731	0,722	0,713	0,678	0,668	0,657	0,646	0,636	0,604	0,592	0,579	0,567	0,555	0,524	0,510	0,496	0,483	0,470
	18	0,746	0,737	0,728	0,719	0,710	0,679	0,668	0,657	0,647	0,636	0,608	0,596	0,584	0,572	0,560	0,533	0,519	0,506	0,493	0,480	0,450	0,436	0,421	0,408	0,394
	20	0,699	0,689	0,679	0,669	0,659	0,633	0,621	0,609	0,597	0,586	0,562	0,549	0,536	0,523	0,511	0,486	0,472	0,458	0,444	0,431	0,401	0,386	0,372	0,358	0,344
	22	0,654	0,642	0,631	0,620	0,609	0,587	0,574	0,561	0,549	0,537	0,516	0,502	0,488	0,475	0,462	0,439	0,424	0,410	0,396	0,382	0,351	0,336	0,321	0,308	0,295
	24	0,608	0,596	0,584	0,572	0,560	0,542	0,528	0,515	0,502	0,489	0,470	0,456	0,441	0,428	0,415	0,391	0,376	0,362	0,348	0,335	0,299	0,284	0,270	0,257	0,244
60	10	0,880	0,876	0,871	0,867	0,862	0,816	0,809	0,802	0,795	0,789	0,749	0,740	0,731	0,722	0,713	0,678	0,668	0,657	0,646	0,636	0,604	0,592	0,579	0,567	0,555
	15	0,763	0,755	0,746	0,738	0,730	0,699	0,689	0,679	0,669	0,659	0,633	0,621	0,609	0,597	0,586	0,562	0,549	0,536	0,523	0,511	0,486	0,472	0,458	0,444	0,431
	18	0,694	0,684	0,674	0,664	0,654	0,631	0,619	0,607	0,596	0,584	0,564	0,551	0,538	0,525	0,513	0,493	0,479	0,465	0,451	0,438	0,415	0,400	0,386	0,372	0,358
	20	0,649	0,638	0,626	0,615	0,604	0,586	0,573	0,560	0,548	0,536	0,519	0,505	0,492	0,478	0,465	0,447	0,433	0,418	0,405	0,391	0,368	0,353	0,338	0,324	0,311
	22	0,604	0,592	0,579	0,567	0,556	0,541	0,528	0,514	0,501	0,489	0,474	0,460	0,446	0,432	0,419	0,402	0,387	0,372	0,359	0,345	0,319	0,305	0,290	0,277	0,264
	24	0,560	0,546	0,533	0,521	0,508	0,497	0,483	0,469	0,455	0,442	0,430	0,415	0,401	0,387	0,374	0,356	0,341	0,327	0,313	0,300	0,270	0,256	0,242	0,229	0,217
55	10	0,825	0,818	0,812	0,805	0,799	0,763	0,755	0,746	0,738	0,730	0,699	0,689	0,679	0,669	0,659	0,633	0,621	0,609	0,597	0,586	0,562	0,549	0,536	0,523	0,511
	15	0,710	0,700	0,690	0,680	0,670	0,649	0,638	0,626	0,615	0,604	0,586	0,573	0,560	0,548	0,536	0,519	0,505	0,492	0,478	0,465	0,447	0,433	0,418	0,405	0,391
	18	0,642	0,630	0,619	0,607	0,596	0,582	0,569	0,556	0,544	0,532	0,519	0,505	0,491	0,478	0,465	0,452	0,437	0,423	0,409	0,396	0,379	0,364	0,350	0,336	0,322
	20	0,597	0,585	0,572	0,560	0,548	0,538	0,524	0,511	0,498	0,485	0,475	0,461	0,447	0,433	0,420	0,408	0,393	0,379	0,365	0,351	0,334	0,319	0,304	0,291	0,278
	22	0,553	0,540	0,527	0,514	0,501	0,494	0,480	0,466	0,453	0,440	0,432	0,417	0,403	0,389	0,375	0,364	0,349	0,335	0,321	0,308	0,288	0,273	0,259	0,246	0,234
	24	0,510	0,496	0,482	0,469	0,456	0,451	0,437	0,422	0,409	0,395	0,389	0,374	0,359	0,346	0,332	0,320	0,306	0,291	0,278	0,265	0,241	0,227	0,214	0,202	0,190
50	10						0,710	0,700	0,690	0,680	0,670	0,649	0,638	0,626	0,615	0,604	0,586	0,573	0,560	0,548	0,536	0,519	0,505	0,492	0,478	0,465
	15						0,597	0,585	0,572	0,560	0,548	0,538	0,524	0,511	0,498	0,485	0,475	0,461	0,447	0,433	0,420	0,408	0,393	0,379	0,365	0,351
	18						0,532	0,518	0,504	0,491	0,478	0,473	0,458	0,444	0,430	0,417	0,410	0,395	0,381	0,367	0,354	0,342	0,327	0,313	0,299	0,286
	20						0,488	0,474	0,460	0,447	0,433	0,430	0,415	0,401	0,387	0,374	0,368	0,353	0,338	0,324	0,311	0,299	0,284	0,270	0,257	0,244
	22						0,446	0,431	0,417	0,403	0,390	0,388	0,373	0,358	0,345	0,331	0,325	0,311	0,296	0,283	0,270	0,255	0,241	0,228	0,215	0,203
	24						0,404	0,389	0,375	0,361	0,347	0,346	0,331	0,317	0,303	0,290	0,284	0,269	0,255	0,242	0,230	0,211	0,198	0,186	0,174	0,163
45	10											0,597	0,585	0,572	0,560	0,548	0,538	0,524	0,511	0,498	0,485	0,475	0,461	0,447	0,433	0,420
	15											0,488	0,474	0,460	0,447	0,433	0,430	0,415	0,401	0,387	0,374	0,368	0,353	0,338	0,324	0,311
	18											0,425	0,410	0,396	0,382	0,368	0,367	0,352	0,338	0,324	0,311	0,304	0,290	0,276	0,262	0,250
	20											0,383	0,368	0,354	0,340	0,327	0,326	0,311	0,297	0,283	0,270	0,263	0,249	0,235	0,223	0,210
	22											0,342	0,327	0,313	0,299	0,286	0,285	0,271	0,257	0,244	0,232	0,222	0,208	0,196	0,184	0,173
	24											0,302	0,288	0,274	0,260	0,248	0,246	0,232	0,218	0,206	0,194	0,181	0,168	0,157	0,146	0,136
40	10																0,488	0,474	0,460	0,447	0,433	0,430	0,415	0,401	0,387	0,374
	15																0,383	0,368	0,354	0,340	0,327	0,326	0,311	0,297	0,283	0,270
	18																0,322	0,307	0,293	0,280	0,267	0,265	0,251	0,238	0,225	0,213
	20																0,283	0,268	0,254	0,241	0,229	0,226	0,212	0,200	0,188	0,176
	22																0,244	0,230	0,217	0,204	0,193	0,187	0,175	0,163	0,152	0,142
	24																0,206	0,193	0,180	0,169	0,158	0,149	0,138	0,127	0,117	0,108

Zehnder Charleston packaging to order

Delivered as ordered

A barcode-based logistics system ensures reliable, punctual delivery. Sturdy, fully cardboard packaging prevents any kind of damage during transport and storage. An extra stretch film covering protects Zehnder Charleston during and after installation, and is only removed when you move in.

Zehnder Charleston radiators are always safely protected with stretch film and cardboard packaging:

- When in transit
- When in storage
- Until the end of the construction phase

Reliability

- Short delivery times: 8 - 10 working days
- Express programme: 4 - 5 working days
- Fast, reliable warehouse administration
- Normally on-time delivery

Zehnder Charleston label

- Important information such as the name of the building site, floor, room, radiator model, connection type
- Logistics optimised through use of barcodes

Zehnder Charleston label

Benefits on the building site

Zehnder Charleston is laid on the original Zehnder box before installation on the building site.

The standard accessories ordered with the radiator are enclosed.

Stretch film remains in place during installation and protects the radiator until you move in.

Original packaging serves as additional protection of Zehnder Charleston during the entire building phase, until you are ready to move in.

Warm colours

Colour category 1: CORE

White Quartz [1)]
0521

Pure White [2)]
RAL 9010 / 9010

Edelweiss
0067

Cream
RAL 9001 / 9001

Telegrey 4
RAL 7047 / 7247

Beige Quartz
0523

Champagne
0258

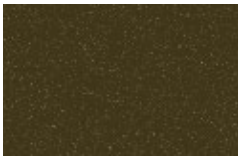
Yellow Grey
RAL 7034 / 7234

Pearl Beige
RAL 1035 / 1235

Beach Gold
0272

Concrete Grey
0265

Beige Grey
0267



Bronze
0276

Brown Quartz
0529

Dark Brown
0270

Grey Aluminium
9007

Anthracite
0346

Umbra Grey
RAL 7022 / 7222

Volcanic
0336

Surcharge for colour category 1: 20 %

Colour category 2: TREND

Pastel Green
RAL 6019 / 6219

Reseda Green
RAL 6011 / 6211

Cement Grey
RAL 7033 / 7233

Olive Green
RAL 6003 / 6203

Terracotta Faded
0299

Terracotta
0292

Ruby Red
RAL 3003 / 3003

Surcharge for colour category 2: 30 %

Unlike to the colour standard (here RAL tone) the Zehnder no. also includes the features matt respectively glossy. Therefore the RAL standard and Zehnder no. differ in many colours. Please note that the prices always relate to the given finishes matt or glossy, deviating finishes will be calculated like colours outside of the colour cart. These colours are finished with a gloss finish; all other colours are matt-finished.

1) Not for Zehnder Nova, Nova Neo and Excelsior
2) Standard colour for Fare Tech & Alura Tech, therefore Traffic White RAL 9016 with surcharge 20 % of categorie 1
3) Only for Zehnder Charleston and Zehnder Metropolitan
4) Only for Zehnder Charleston - surcharge as category 2

Cool colours

Colour category 1: CORE

White Matt
0556

Light Beige
0253

Light Grey
0262

White Aluminium
9006

Light Jeans
0264

Titane
0335

Inox Look
0332

Telegrey 2
RAL 7046 / 7246

Blue Grey
RAL 7031 / 7231

Anthracite Grey
RAL 7016 / 7016

Black Quartz
0550

Black Matt
0557

Traffic Black
RAL 9017 / 9217

Jet Black
RAL 9005 / 9005

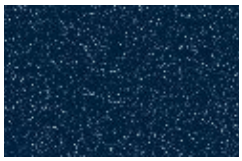
Surcharge for colour category 1: 20 %

Colour category 2: TREND

Pastel Blue
RAL 5024 / 5224

Pigeon Blue
RAL 5014 / 5214

Gentian Blue
RAL 5010 / 5210



Sapphire Blue
RAL 5003 / 5203

Blue Night
0289

Surcharge for colour category 2: 30 %

STANDARD

Traffic White
RAL 9016 / 9016

ANTIMICROBIAL SURFACE

TopCare [4]
RAL 9016 / 9316

FINISHES

Technoline (Clear) [3]
0325

Chrome (Surface)
0008

Stainless steel brushed
9517

Some colours/surfaces are only available for selected products. Please also see the notes on the respective product pages. For Special surfaces of the Studio Collection, please see the respective product chapters. Special colours on request. Due to different manufacturing techniques of the original colours, deviations can occur in colour and polish.
RAL and NCS are designations from the manufacturer. The respective colour code (EDI) is set at the 9th and 10th places in the article no.

Other special finishes in the RAL, RAL-D, NCS-S, Sanitary, DB colour systems are available as required, surcharges on request.

Zehnder
World of Colours

Z-SI-V0122-RAD-PRL-Charleston, en, subject to change without notice

Zehnder Baltics OÜ · Rannamõisa tee 38d · 13516 Tallinn · Estonia
T +370 64 647 119 · karolis.barstys@zehndergroup.com · www.zehnder.lt