


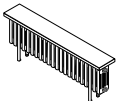
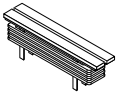


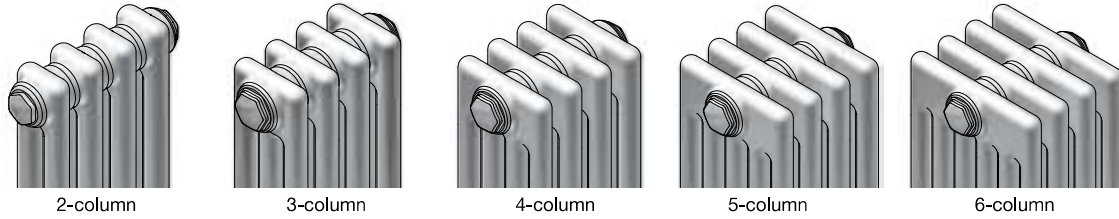


	Overview of models	Product description	List prices	Special versions	Connections	Fixings	Technical data	Installation points
<b>Zehnder Charleston</b>								
 <ul style="list-style-type: none"> <li>■ Classic tubular radiator</li> <li>■ Element length 46 mm</li> <li>■ Flexible connection options</li> </ul>	6	8	10	57	59	62	68	79
<b>Zehnder Charleston Clinic</b>								
 <ul style="list-style-type: none"> <li>■ Element length 65 mm</li> <li>■ Larger element spacings</li> <li>■ Particularly easy to clean</li> </ul>	7	8	31	57	59	65	73	79
<b>Zehnder Charleston Retrofit</b>								
 <ul style="list-style-type: none"> <li>■ Suitable for connections of old DIN standard radiators</li> <li>■ Retrofitting without changing the connection pipework</li> <li>■ Optimum flexible heat output</li> </ul>	6	9	52	57	78	62	78	79
<b>Zehnder Charleston Bench</b>								
 <ul style="list-style-type: none"> <li>■ Can be used as a bench or shelf</li> <li>■ Lengths according to requirements</li> <li>■ For unfinished and finished floors</li> </ul>	82	83	84	87	85	-	84	-
<b>Zehnder Radiator Bench</b>								
 <ul style="list-style-type: none"> <li>■ Dual function as bench and radiator</li> <li>■ Different seat heights</li> <li>■ Traversable right or left</li> </ul>	88	89	90	93	93	-	92	-

# Zehnder Charleston, Zehnder Charleston Retrofit



## Zehnder Charleston



Height <sup>1)</sup> mm	Depth mm				
	62	100	136	173	210
190	2019	3019	4019	5019	6019
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

<sup>1)</sup>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.

## Zehnder Charleston Retrofit

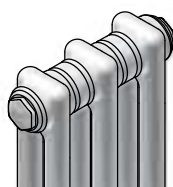
Height <sup>1)</sup> mm	Depth mm				
	62	100	136	173	210
266	-	-	-	-	6027
366	-	3037	4037	5037	6037
408	2041	-	-	-	-
416	-	3042	4042	-	6042
458	2046	-	-	-	-
558	2056	-	-	-	-
566	-	3057	4057	5057	6057
658	2066	-	-	-	-
666	-	3067	4067	5067	6067
958	2096	-	-	-	-
966	-	3097	4097	5097	6097
1066	-	3107	4107	5107	6107

Other retrofit models with customised connection dimensions are possible on request.

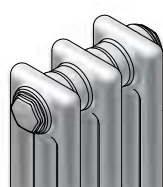
# Zehnder Charleston Clinic



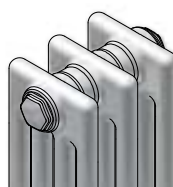
## Zehnder Charleston Clinic



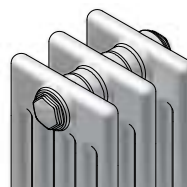
2-column



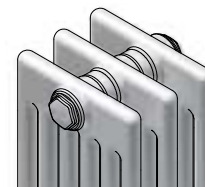
3-column



4-column



5-column



6-column

Height <sup>1)</sup> mm	Depth mm				
	62	100	136	173	210
190	K2019	K3019	K4019	K5019	K6019
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

<sup>1)</sup>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 and Zehnder Charleston Retrofit** (also see price tables from page 10 onwards)

Model	Height mm							
	190	260 - 600	> 600 - 750	> 750 - 900	> 900 - 1000	> 1000 - 2000	> 2000 - 2500	> 2500 - 3000
2-, 3-column	60	64	64	64	64	22	22	22
4-column	60	64	64	64	60	22	22	22
5-column	60	64	64	50	50	22	22	17
6-column	60	64	55	46	42	22	17	14

**Zehnder Charleston Clinic** (also see price tables from page 31 onwards)

Model	Height mm		
	190 - 1000	> 1000 - 2500	> 2500 - 3000
2-5-column	44	16	16
6-column	44	16	14

# Zehnder Charleston



Zehnder Charleston



Zehnder Charleston Clinic



Completto version

## Product description

Zehnder Charleston – the original tube radiator.

The current product family includes the standard version as well as the particularly easy-to-clean version Zehnder Charleston Clinic; also the problem-solver for refurbishments and simple retrofitting, Zehnder Charleston Retrofit, and two variants that come as a bench and bathroom 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, with handrail, 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
- Successful connection with Zehnder Vario
- 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
- 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 Retrofit



Old DIN radiator



Zehnder Charleston Retrofit

The table contains an allocation of suitable models of Zehnder Charleston Retrofit for DIN and cast radiators requiring replacement. There is no need to modify the existing pipework spacings.

1. The connection centres of Zehnder Charleston Retrofit match those of the radiators to be replaced.
2. The connections are generally at the front 3/8", 1/2", 3/4" or 1" (1" or 3- to 6-column)
3. The thermal outputs of the new models are slightly above those of the radiators to be replaced.
4. The depths of the radiators are less than those of the old radiators, in some cases the same size.
5. The length per section is different from the old dimensions, therefore the old brackets must be replaced in most instances.

### Old models of steel tube radiator DIN 4722 (from 1938)

Element length 45 mm

### Non-standard old models of steel tube radiator (from 1961)

Element length 50 mm

Old model	Connection centre mm	Height mm	Depth mm	Thermal output*** 90/70/20 °C	New model Charleston	Old model	Connection centre mm	Height mm	Depth mm	Thermal output*** 90/70/20 °C	New model Charleston
200/200	200	290	200	59	6027	200/250	200	300	250	74	6027
300/100	300	390	100	42	3037	350/70	350	430	70	41	2041
300/150	300	390	150	67	4037	**350/110	350	450	110	52	3042
300/200	300	390	200	83	5037	350/160	350	450	160	72	4042
300/250	300	390	250	98	6037	350/220	350	450	220	94	6042
500/100	500	590	100	67	3057	*)400/72	400	480	72	40	2046
500/150	500	590	150	97	4057	*)500/72	500	580	72	49	2056
500/200	500	590	200	122	5057	500/110	500	600	110	69	3057
500/250	500	590	250	148	6057	500/160	500	600	160	94	4057
600/100	600	690	100	76	3067	500/220	500	600	220	123	6057
600/150	600	690	150	109	4067	*)600/72	600	680	72	57	2066
600/200	600	690	200	140	5067	*)900/72	900	980	72	86	2096
600/250	600	690	250	169	6067	900/110	900	1000	110	117	3097
1000/100	1000	1090	100	116	3107	900/160	900	1000	160	155	4097
1000/150	1000	1090	150	167	4107	900/160	900	1000	160	155	5097
1000/200	1000	1090	200	213	5107	900/220	900	1000	220	196	6097
1000/250	1000	1090	250	258	6107						

\*) These models, so-called "narrow column", are not covered by DIN 4722. Element lengths 40 mm or less.

\*\*\*) This model is not covered by DIN 4722.

\*\*\*) Thermal output to DIN EN 442, converted to 90/70/20 °C

# Zehnder Charleston



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		190									
Model		2019		3019		4019		5019		6019	
Depth	mm	62		100		136		173		210	
Exponent	n	1,26		1,27		1,26		1,25		1,27	
Max. number of elements		60		60		60		60		60	
Price/element	€	15,05		16,09		18,21		22,55		26,09	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	58	60,20	81	64,36	114	72,84	140	90,20	166	104,36
5	230	73	75,25	101	80,45	142	91,05	175	112,75	208	130,45
6	276	87	90,30	121	96,54	171	109,26	210	135,30	249	156,54
7	322	102	105,35	141	112,63	199	127,47	245	157,85	291	182,63
8	368	116	120,40	161	128,72	228	145,68	280	180,40	332	208,72
9	414	131	135,45	181	144,81	256	163,89	315	202,95	374	234,81
10	460	145	150,50	201	160,90	284	182,10	350	225,50	415	260,90
11	506	160	165,55	222	176,99	313	200,31	385	248,05	457	286,99
12	552	174	180,60	242	193,08	341	218,52	420	270,60	498	313,08
13	598	189	195,65	262	209,17	370	236,73	455	293,15	540	339,17
14	644	203	210,70	282	225,26	398	254,94	490	315,70	581	365,26
15	690	218	225,75	302	241,35	426	273,15	525	338,25	623	391,35
16	736	232	240,80	322	257,44	455	291,36	560	360,80	664	417,44
17	782	247	255,85	342	273,53	483	309,57	595	383,35	706	443,53
18	828	261	270,90	362	289,62	512	327,78	630	405,90	747	469,62
19	874	276	285,95	382	305,71	540	345,99	665	428,45	789	495,71
20	920	290	301,00	402	321,80	568	364,20	700	451,00	830	521,80
21	966	305	316,05	423	337,89	597	382,41	735	473,55	872	547,89
22	1012	319	331,10	443	353,98	625	400,62	770	496,10	913	573,98
23	1058	334	346,15	463	370,07	654	418,83	805	518,65	955	600,07
24	1104	348	361,20	483	386,16	682	437,04	840	541,20	996	626,16
25	1150	363	376,25	503	402,25	710	455,25	875	563,75	1038	652,25
26	1196	377	391,30	523	418,34	739	473,46	910	586,30	1079	678,34
27	1242	392	406,35	543	434,43	767	491,67	945	608,85	1121	704,43
28	1288	406	421,40	563	450,52	796	509,88	980	631,40	1162	730,52
29	1334	421	436,45	583	466,61	824	528,09	1015	653,95	1204	756,61
30	1380	435	451,50	603	482,70	852	546,30	1050	676,50	1245	782,70
31	1426	450	466,55	624	498,79	881	564,51	1085	699,05	1287	808,79
32	1472	464	481,60	644	514,88	909	582,72	1120	721,60	1328	834,88
33	1518	479	496,65	664	530,97	938	600,93	1155	744,15	1370	860,97
34	1564	493	511,70	684	547,06	966	619,14	1190	766,70	1411	887,06
35	1610	508	526,75	704	563,15	994	637,35	1225	789,25	1453	913,15
36	1656	522	541,80	724	579,24	1023	655,56	1260	811,80	1494	939,24
37	1702	537	556,85	744	595,33	1051	673,77	1295	834,35	1536	965,33
38	1748	551	571,90	764	611,42	1080	691,98	1330	856,90	1577	991,42
39	1794	566	586,95	784	627,51	1108	710,19	1365	879,45	1619	1017,51
40	1840	580	602,00	804	643,60	1136	728,40	1400	902,00	1660	1043,60

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	15,49		16,68		18,57		22,64		26,37	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	85	61,96	112	66,72	146	74,28	181	90,56	214	105,48
5	230	106	77,45	140	83,40	183	92,85	226	113,20	268	131,85
6	276	127	92,94	168	100,08	219	111,42	271	135,84	321	158,22
7	322	148	108,43	196	116,76	256	129,99	316	158,48	375	184,59
8	368	169	123,92	224	133,44	292	148,56	361	181,12	428	210,96
9	414	190	139,41	252	150,12	329	167,13	406	203,76	482	237,33
10	460	211	154,90	279	166,80	365	185,70	451	226,40	535	263,70
11	506	233	170,39	307	183,48	402	204,27	497	249,04	589	290,07
12	552	254	185,88	335	200,16	438	222,84	542	271,68	642	316,44
13	598	275	201,37	363	216,84	475	241,41	587	294,32	696	342,81
14	644	296	216,86	391	233,52	511	259,98	632	316,96	749	369,18
15	690	317	232,35	419	250,20	548	278,55	677	339,60	803	395,55
16	736	338	247,84	447	266,88	584	297,12	722	362,24	856	421,92
17	782	359	263,33	475	283,56	621	315,69	767	384,88	910	448,29
18	828	380	278,82	503	300,24	657	334,26	812	407,52	963	474,66
19	874	401	294,31	531	316,92	694	352,83	857	430,16	1017	501,03
20	920	422	309,80	558	333,60	730	371,40	902	452,80	1070	527,40
21	966	444	325,29	586	350,28	767	389,97	948	475,44	1124	553,77
22	1012	465	340,78	614	366,96	803	408,54	993	498,08	1177	580,14
23	1058	486	356,27	642	383,64	840	427,11	1038	520,72	1231	606,51
24	1104	507	371,76	670	400,32	876	445,68	1083	543,36	1284	632,88
25	1150	528	387,25	698	417,00	913	464,25	1128	566,00	1338	659,25
26	1196	549	402,74	726	433,68	949	482,82	1173	588,64	1391	685,62
27	1242	570	418,23	754	450,36	986	501,39	1218	611,28	1445	711,99
28	1288	591	433,72	782	467,04	1022	519,96	1263	633,92	1498	738,36
29	1334	612	449,21	810	483,72	1059	538,53	1308	656,56	1552	764,73
30	1380	633	464,70	837	500,40	1095	557,10	1353	679,20	1605	791,10
31	1426	655	480,19	865	517,08	1132	575,67	1399	701,84	1659	817,47
32	1472	676	495,68	893	533,76	1168	594,24	1444	724,48	1712	843,84
33	1518	697	511,17	921	550,44	1205	612,81	1489	747,12	1766	870,21
34	1564	718	526,66	949	567,12	1241	631,38	1534	769,76	1819	896,58
35	1610	739	542,15	977	583,80	1278	649,95	1579	792,40	1873	922,95
36	1656	760	557,64	1005	600,48	1314	668,52	1624	815,04	1926	949,32
37	1702	781	573,13	1033	617,16	1351	687,09	1669	837,68	1980	975,69
38	1748	802	588,62	1061	633,84	1387	705,66	1714	860,32	2033	1002,06
39	1794	823	604,11	1089	650,52	1424	724,23	1759	882,96	2087	1028,43
40	1840	844	619,60	1116	667,20	1460	742,80	1804	905,60	2140	1054,80

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	15,76		17,10		18,98		22,67		26,40	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	95	63,04	128	68,40	168	75,92	207	90,68	246	105,60
5	230	118	78,80	160	85,50	210	94,90	259	113,35	307	132,00
6	276	142	94,56	192	102,60	252	113,88	311	136,02	368	158,40
7	322	166	110,32	224	119,70	294	132,86	362	158,69	430	184,80
8	368	189	126,08	256	136,80	336	151,84	414	181,36	491	211,20
9	414	213	141,84	288	153,90	378	170,82	466	204,03	552	237,60
10	460	236	157,60	320	171,00	419	189,80	517	226,70	613	264,00
11	506	260	173,36	352	188,10	461	208,78	569	249,37	675	290,40
12	552	284	189,12	384	205,20	503	227,76	621	272,04	736	316,80
13	598	307	204,88	416	222,30	545	246,74	673	294,71	797	343,20
14	644	331	220,64	448	239,40	587	265,72	724	317,38	859	369,60
15	690	354	236,40	480	256,50	629	284,70	776	340,05	920	396,00
16	736	378	252,16	512	273,60	671	303,68	828	362,72	981	422,40
17	782	402	267,92	544	290,70	713	322,66	879	385,39	1043	448,80
18	828	425	283,68	576	307,80	755	341,64	931	408,06	1104	475,20
19	874	449	299,44	608	324,90	797	360,62	983	430,73	1165	501,60
20	920	472	315,20	640	342,00	838	379,60	1034	453,40	1226	528,00
21	966	496	330,96	672	359,10	880	398,58	1086	476,07	1288	554,40
22	1012	520	346,72	704	376,20	922	417,56	1138	498,74	1349	580,80
23	1058	543	362,48	736	393,30	964	436,54	1190	521,41	1410	607,20
24	1104	567	378,24	768	410,40	1006	455,52	1241	544,08	1472	633,60
25	1150	590	394,00	800	427,50	1048	474,50	1293	566,75	1533	660,00
26	1196	614	409,76	832	444,60	1090	493,48	1345	589,42	1594	686,40
27	1242	638	425,52	864	461,70	1132	512,46	1396	612,09	1656	712,80
28	1288	661	441,28	896	478,80	1174	531,44	1448	634,76	1717	739,20
29	1334	685	457,04	928	495,90	1216	550,42	1500	657,43	1778	765,60
30	1380	708	472,80	960	513,00	1257	569,40	1551	680,10	1839	792,00
31	1426	732	488,56	992	530,10	1299	588,38	1603	702,77	1901	818,40
32	1472	756	504,32	1024	547,20	1341	607,36	1655	725,44	1962	844,80
33	1518	779	520,08	1056	564,30	1383	626,34	1707	748,11	2023	871,20
34	1564	803	535,84	1088	581,40	1425	645,32	1758	770,78	2085	897,60
35	1610	826	551,60	1120	598,50	1467	664,30	1810	793,45	2146	924,00
36	1656	850	567,36	1152	615,60	1509	683,28	1862	816,12	2207	950,40
37	1702	874	583,12	1184	632,70	1551	702,26	1913	838,79	2269	976,80
38	1748	897	598,88	1216	649,80	1593	721,24	1965	861,46	2330	1003,20
39	1794	921	614,64	1248	666,90	1635	740,22	2017	884,13	2391	1029,60
40	1840	944	630,40	1280	684,00	1676	759,20	2068	906,80	2452	1056,00

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	16,04		17,57		19,63		23,17		27,23	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	110	64,16	148	70,28	194	78,52	240	92,68	284	108,92
5	230	138	80,20	185	87,85	243	98,15	300	115,85	355	136,15
6	276	165	96,24	222	105,42	291	117,78	360	139,02	426	163,38
7	322	193	112,28	259	122,99	340	137,41	420	162,19	497	190,61
8	368	220	128,32	296	140,56	388	157,04	480	185,36	568	217,84
9	414	248	144,36	333	158,13	437	176,67	540	208,53	639	245,07
10	460	275	160,40	370	175,70	485	196,30	599	231,70	710	272,30
11	506	303	176,44	407	193,27	534	215,93	659	254,87	781	299,53
12	552	330	192,48	444	210,84	582	235,56	719	278,04	852	326,76
13	598	358	208,52	481	228,41	631	255,19	779	301,21	923	353,99
14	644	385	224,56	518	245,98	679	274,82	839	324,38	994	381,22
15	690	413	240,60	555	263,55	728	294,45	899	347,55	1065	408,45
16	736	440	256,64	592	281,12	776	314,08	959	370,72	1136	435,68
17	782	468	272,68	629	298,69	825	333,71	1019	393,89	1207	462,91
18	828	495	288,72	666	316,26	873	353,34	1079	417,06	1278	490,14
19	874	523	304,76	703	333,83	922	372,97	1139	440,23	1349	517,37
20	920	550	320,80	740	351,40	970	392,60	1198	463,40	1420	544,60
21	966	578	336,84	777	368,97	1019	412,23	1258	486,57	1491	571,83
22	1012	605	352,88	814	386,54	1067	431,86	1318	509,74	1562	599,06
23	1058	633	368,92	851	404,11	1116	451,49	1378	532,91	1633	626,29
24	1104	660	384,96	888	421,68	1164	471,12	1438	556,08	1704	653,52
25	1150	688	401,00	925	439,25	1213	490,75	1498	579,25	1775	680,75
26	1196	715	417,04	962	456,82	1261	510,38	1558	602,42	1846	707,98
27	1242	743	433,08	999	474,39	1310	530,01	1618	625,59	1917	735,21
28	1288	770	449,12	1036	491,96	1358	549,64	1678	648,76	1988	762,44
29	1334	798	465,16	1073	509,53	1407	569,27	1738	671,93	2059	789,67
30	1380	825	481,20	1110	527,10	1455	588,90	1797	695,10	2130	816,90
31	1426	853	497,24	1147	544,67	1504	608,53	1857	718,27	2201	844,13
32	1472	880	513,28	1184	562,24	1552	628,16	1917	741,44	2272	871,36
33	1518	908	529,32	1221	579,81	1601	647,79	1977	764,61	2343	898,59
34	1564	935	545,36	1258	597,38	1649	667,42	2037	787,78	2414	925,82
35	1610	963	561,40	1295	614,95	1698	687,05	2097	810,95	2485	953,05
36	1656	990	577,44	1332	632,52	1746	706,68	2157	834,12	2556	980,28
37	1702	1018	593,48	1369	650,09	1795	726,31	2217	857,29	2627	1007,51
38	1748	1045	609,52	1406	667,66	1843	745,94	2277	880,46	2698	1034,74
39	1794	1073	625,56	1443	685,23	1892	765,57	2337	903,63	2769	1061,97
40	1840	1100	641,60	1480	702,80	1940	785,20	2396	926,80	2840	1089,20

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	16,36		18,11		19,99		23,65		28,05	
Length		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$	
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	125	65,44	168	72,44	220	79,96	272	94,60	322	112,20
5	230	156	81,80	210	90,55	275	99,95	340	118,25	403	140,25
6	276	188	98,16	252	108,66	330	119,94	408	141,90	483	168,30
7	322	219	114,52	294	126,77	385	139,93	476	165,55	564	196,35
8	368	250	130,88	336	144,88	440	159,92	544	189,20	644	224,40
9	414	281	147,24	378	162,99	495	179,91	612	212,85	725	252,45
10	460	312	163,60	419	181,10	549	199,90	679	236,50	805	280,50
11	506	344	179,96	461	199,21	604	219,89	747	260,15	886	308,55
12	552	375	196,32	503	217,32	659	239,88	815	283,80	966	336,60
13	598	406	212,68	545	235,43	714	259,87	883	307,45	1047	364,65
14	644	437	229,04	587	253,54	769	279,86	951	331,10	1127	392,70
15	690	468	245,40	629	271,65	824	299,85	1019	354,75	1208	420,75
16	736	500	261,76	671	289,76	879	319,84	1087	378,40	1288	448,80
17	782	531	278,12	713	307,87	934	339,83	1155	402,05	1369	476,85
18	828	562	294,48	755	325,98	989	359,82	1223	425,70	1449	504,90
19	874	593	310,84	797	344,09	1044	379,81	1291	449,35	1530	532,95
20	920	624	327,20	838	362,20	1098	399,80	1358	473,00	1610	561,00
21	966	656	343,56	880	380,31	1153	419,79	1426	496,65	1691	589,05
22	1012	687	359,92	922	398,42	1208	439,78	1494	520,30	1771	617,10
23	1058	718	376,28	964	416,53	1263	459,77	1562	543,95	1852	645,15
24	1104	749	392,64	1006	434,64	1318	479,76	1630	567,60	1932	673,20
25	1150	780	409,00	1048	452,75	1373	499,75	1698	591,25	2013	701,25
26	1196	812	425,36	1090	470,86	1428	519,74	1766	614,90	2093	729,30
27	1242	843	441,72	1132	488,97	1483	539,73	1834	638,55	2174	757,35
28	1288	874	458,08	1174	507,08	1538	559,72	1902	662,20	2254	785,40
29	1334	905	474,44	1216	525,19	1593	579,71	1970	685,85	2335	813,45
30	1380	936	490,80	1257	543,30	1647	599,70	2038	709,50	2415	841,50
31	1426	968	507,16	1299	561,41	1702	619,69	2105	733,15	2496	869,55
32	1472	999	523,52	1341	579,52	1757	639,68	2173	756,80	2576	897,60
33	1518	1030	539,88	1383	597,63	1812	659,67	2241	780,45	2657	925,65
34	1564	1061	556,24	1425	615,74	1867	679,66	2309	804,10	2737	953,70
35	1610	1092	572,60	1467	633,85	1922	699,65	2377	827,75	2818	981,75
36	1656	1124	588,96	1509	651,96	1977	719,64	2445	851,40	2898	1009,80
37	1702	1155	605,32	1551	670,07	2032	739,63	2513	875,05	2979	1037,85
38	1748	1186	621,68	1593	688,18	2087	759,62	2581	898,70	3059	1065,90
39	1794	1217	638,04	1635	706,29	2142	779,61	2649	922,35	3140	1093,95
40	1840	1248	654,40	1676	724,40	2196	799,60	2716	946,00	3220	1122,00

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	16,68		18,72		20,77		24,85		29,03	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	140	66,72	188	74,88	246	83,08	304	99,40	360	116,12
5	230	175	83,40	234	93,60	307	103,85	379	124,25	449	145,15
6	276	210	100,08	281	112,32	368	124,62	455	149,10	539	174,18
7	322	245	116,76	328	131,04	430	145,39	531	173,95	629	203,21
8	368	280	133,44	375	149,76	491	166,16	607	198,80	719	232,24
9	414	315	150,12	422	168,48	552	186,93	683	223,65	809	261,27
10	460	349	166,80	468	187,20	613	207,70	758	248,50	898	290,30
11	506	384	183,48	515	205,92	675	228,47	834	273,35	988	319,33
12	552	419	200,16	562	224,64	736	249,24	910	298,20	1078	348,36
13	598	454	216,84	609	243,36	797	270,01	986	323,05	1168	377,39
14	644	489	233,52	656	262,08	859	290,78	1062	347,90	1258	406,42
15	690	524	250,20	702	280,80	920	311,55	1137	372,75	1347	435,45
16	736	559	266,88	749	299,52	981	332,32	1213	397,60	1437	464,48
17	782	594	283,56	796	318,24	1043	353,09	1289	422,45	1527	493,51
18	828	629	300,24	843	336,96	1104	373,86	1365	447,30	1617	522,54
19	874	664	316,92	890	355,68	1165	394,63	1441	472,15	1707	551,57
20	920	698	333,60	936	374,40	1226	415,40	1516	497,00	1796	580,60
21	966	733	350,28	983	393,12	1288	436,17	1592	521,85	1886	609,63
22	1012	768	366,96	1030	411,84	1349	456,94	1668	546,70	1976	638,66
23	1058	803	383,64	1077	430,56	1410	477,71	1744	571,55	2066	667,69
24	1104	838	400,32	1124	449,28	1472	498,48	1820	596,40	2156	696,72
25	1150	873	417,00	1170	468,00	1533	519,25	1895	621,25	2245	725,75
26	1196	908	433,68	1217	486,72	1594	540,02	1971	646,10	2335	754,78
27	1242	943	450,36	1264	505,44	1656	560,79	2047	670,95	2425	783,81
28	1288	978	467,04	1311	524,16	1717	581,56	2123	695,80	2515	812,84
29	1334	1013	483,72	1358	542,88	1778	602,33	2199	720,65	2605	841,87
30	1380	1047	500,40	1404	561,60	1839	623,10	2274	745,50	2694	870,90
31	1426	1082	517,08	1451	580,32	1901	643,87	2350	770,35	2784	899,93
32	1472	1117	533,76	1498	599,04	1962	664,64	2426	795,20	2874	928,96
33	1518	1152	550,44	1545	617,76	2023	685,41	2502	820,05	2964	957,99
34	1564	1187	567,12	1592	636,48	2085	706,18	2578	844,90	3054	987,02
35	1610	1222	583,80	1638	655,20	2146	726,95	2653	869,75	3143	1016,05
36	1656	1257	600,48	1685	673,92	2207	747,72	2729	894,60	3233	1045,08
37	1702	1292	617,16	1732	692,64	2269	768,49	2805	919,45	3323	1074,11
38	1748	1327	633,84	1779	711,36	2330	789,26	2881	944,30	3413	1103,14
39	1794	1362	650,52	1826	730,08	2391	810,03	2957	969,15	3503	1132,17
40	1840	1396	667,20	1872	748,80	2452	830,80	3032	994,00	3592	1161,20

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	17,08		19,22		21,54		25,30		29,78	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	154	68,32	207	76,88	271	86,16	334	101,20	396	119,12
5	230	192	85,40	258	96,10	338	107,70	418	126,50	495	148,90
6	276	231	102,48	310	115,32	406	129,24	501	151,80	594	178,68
7	322	269	119,56	362	134,54	474	150,78	585	177,10	693	208,46
8	368	308	136,64	413	153,76	541	172,32	668	202,40	792	238,24
9	414	346	153,72	465	172,98	609	193,86	752	227,70	891	268,02
10	460	384	170,80	516	192,20	676	215,40	835	253,00	990	297,80
11	506	423	187,88	568	211,42	744	236,94	919	278,30	1089	327,58
12	552	461	204,96	620	230,64	812	258,48	1002	303,60	1188	357,36
13	598	500	222,04	671	249,86	879	280,02	1086	328,90	1287	387,14
14	644	538	239,12	723	269,08	947	301,56	1169	354,20	1386	416,92
15	690	576	256,20	774	288,30	1014	323,10	1253	379,50	1485	446,70
16	736	615	273,28	826	307,52	1082	344,64	1336	404,80	1584	476,48
17	782	653	290,36	878	326,74	1150	366,18	1420	430,10	1683	506,26
18	828	692	307,44	929	345,96	1217	387,72	1503	455,40	1782	536,04
19	874	730	324,52	981	365,18	1285	409,26	1587	480,70	1881	565,82
20	920	768	341,60	1032	384,40	1352	430,80	1670	506,00	1980	595,60
21	966	807	358,68	1084	403,62	1420	452,34	1754	531,30	2079	625,38
22	1012	845	375,76	1136	422,84	1488	473,88	1837	556,60	2178	655,16
23	1058	884	392,84	1187	442,06	1555	495,42	1921	581,90	2277	684,94
24	1104	922	409,92	1239	461,28	1623	516,96	2004	607,20	2376	714,72
25	1150	960	427,00	1290	480,50	1690	538,50	2088	632,50	2475	744,50
26	1196	999	444,08	1342	499,72	1758	560,04	2171	657,80	2574	774,28
27	1242	1037	461,16	1394	518,94	1826	581,58	2255	683,10	2673	804,06
28	1288	1076	478,24	1445	538,16	1893	603,12	2338	708,40	2772	833,84
29	1334	1114	495,32	1497	557,38	1961	624,66	2422	733,70	2871	863,62
30	1380	1152	512,40	1548	576,60	2028	646,20	2505	759,00	2970	893,40
31	1426	1191	529,48	1600	595,82	2096	667,74	2589	784,30	3069	923,18
32	1472	1229	546,56	1652	615,04	2164	689,28	2672	809,60	3168	952,96
33	1518	1268	563,64	1703	634,26	2231	710,82	2756	834,90	3267	982,74
34	1564	1306	580,72	1755	653,48	2299	732,36	2839	860,20	3366	1012,52
35	1610	1344	597,80	1806	672,70	2366	753,90	2923	885,50	3465	1042,30
36	1656	1383	614,88	1858	691,92	2434	775,44	3006	910,80	3564	1072,08
37	1702	1421	631,96	1910	711,14	2502	796,98	3090	936,10	3663	1101,86
38	1748	1460	649,04	1961	730,36	2569	818,52	3173	961,40	3762	1131,64
39	1794	1498	666,12	2013	749,58	2637	840,06	3257	986,70	3861	1161,42
40	1840	1536	683,20	2064	768,80	2704	861,60	3340	1012,00	3960	1191,20

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	17,47		19,74		22,35		26,23		31,17	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	168	69,88	226	78,96	295	89,40	364	104,92	432	124,68
5	230	210	87,35	282	98,70	369	111,75	456	131,15	540	155,85
6	276	252	104,82	338	118,44	443	134,10	547	157,38	648	187,02
7	322	294	122,29	395	138,18	516	156,45	638	183,61	756	218,19
8	368	336	139,76	451	157,92	590	178,80	729	209,84	864	249,36
9	414	378	157,23	507	177,66	664	201,15	820	236,07	972	280,53
10	460	419	174,70	563	197,40	737	223,50	911	262,30	1080	311,70
11	506	461	192,17	620	217,14	811	245,85	1002	288,53	1188	342,87
12	552	503	209,64	676	236,88	885	268,20	1093	314,76	1296	374,04
13	598	545	227,11	732	256,62	959	290,55	1184	340,99	1404	405,21
14	644	587	244,58	789	276,36	1032	312,90	1275	367,22	1512	436,38
15	690	629	262,05	845	296,10	1106	335,25	1367	393,45	1620	467,55
16	736	671	279,52	901	315,84	1180	357,60	1458	419,68	1728	498,72
17	782	713	296,99	958	335,58	1253	379,95	1549	445,91	1836	529,89
18	828	755	314,46	1014	355,32	1327	402,30	1640	472,14	1944	561,06
19	874	797	331,93	1070	375,06	1401	424,65	1731	498,37	2052	592,23
20	920	838	349,40	1126	394,80	1474	447,00	1822	524,60	2160	623,40
21	966	880	366,87	1183	414,54	1548	469,35	1913	550,83	2268	654,57
22	1012	922	384,34	1239	434,28	1622	491,70	2004	577,06	2376	685,74
23	1058	964	401,81	1295	454,02	1696	514,05	2095	603,29	2484	716,91
24	1104	1006	419,28	1352	473,76	1769	536,40	2186	629,52	2592	748,08
25	1150	1048	436,75	1408	493,50	1843	558,75	2278	655,75	2700	779,25
26	1196	1090	454,22	1464	513,24	1917	581,10	2369	681,98	2808	810,42
27	1242	1132	471,69	1521	532,98	1990	603,45	2460	708,21	2916	841,59
28	1288	1174	489,16	1577	552,72	2064	625,80	2551	734,44	3024	872,76
29	1334	1216	506,63	1633	572,46	2138	648,15	2642	760,67	3132	903,93
30	1380	1257	524,10	1689	592,20	2211	670,50	2733	786,90	3240	935,10
31	1426	1299	541,57	1746	611,94	2285	692,85	2824	813,13	3348	966,27
32	1472	1341	559,04	1802	631,68	2359	715,20	2915	839,36	3456	997,44
33	1518	1383	576,51	1858	651,42	2433	737,55	3006	865,59	3564	1028,61
34	1564	1425	593,98	1915	671,16	2506	759,90	3097	891,82	3672	1059,78
35	1610	1467	611,45	1971	690,90	2580	782,25	3189	918,05	3780	1090,95
36	1656	1509	628,92	2027	710,64	2654	804,60	3280	944,28	3888	1122,12
37	1702	1551	646,39	2084	730,38	2727	826,95	3371	970,51	3996	1153,29
38	1748	1593	663,86	2140	750,12	2801	849,30	3462	996,74	4104	1184,46
39	1794	1635	681,33	2196	769,86	2875	871,65	3553	1022,97	4212	1215,63
40	1840	1676	698,80	2252	789,60	2948	894,00	3644	1049,20	4320	1246,80

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	17,83		20,29		23,34		27,42		32,34	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	182	71,32	244	81,16	320	93,36	395	109,68	468	129,36
5	230	227	89,15	305	101,45	399	116,70	493	137,10	585	161,70
6	276	272	106,98	366	121,74	479	140,04	592	164,52	702	194,04
7	322	318	124,81	427	142,03	559	163,38	691	191,94	819	226,38
8	368	363	142,64	488	162,32	639	186,72	789	219,36	936	258,72
9	414	408	160,47	549	182,61	719	210,06	888	246,78	1053	291,06
10	460	453	178,30	609	202,90	798	233,40	986	274,20	1170	323,40
11	506	499	196,13	670	223,19	878	256,74	1085	301,62	1287	355,74
12	552	544	213,96	731	243,48	958	280,08	1184	329,04	1404	388,08
13	598	589	231,79	792	263,77	1038	303,42	1282	356,46	1521	420,42
14	644	635	249,62	853	284,06	1118	326,76	1381	383,88	1638	452,76
15	690	680	267,45	914	304,35	1197	350,10	1479	411,30	1755	485,10
16	736	725	285,28	975	324,64	1277	373,44	1578	438,72	1872	517,44
17	782	771	303,11	1036	344,93	1357	396,78	1677	466,14	1989	549,78
18	828	816	320,94	1097	365,22	1437	420,12	1775	493,56	2106	582,12
19	874	861	338,77	1158	385,51	1517	443,46	1874	520,98	2223	614,46
20	920	906	356,60	1218	405,80	1596	466,80	1972	548,40	2340	646,80
21	966	952	374,43	1279	426,09	1676	490,14	2071	575,82	2457	679,14
22	1012	997	392,26	1340	446,38	1756	513,48	2170	603,24	2574	711,48
23	1058	1042	410,09	1401	466,67	1836	536,82	2268	630,66	2691	743,82
24	1104	1088	427,92	1462	486,96	1916	560,16	2367	658,08	2808	776,16
25	1150	1133	445,75	1523	507,25	1995	583,50	2465	685,50	2925	808,50
26	1196	1178	463,58	1584	527,54	2075	606,84	2564	712,92	3042	840,84
27	1242	1224	481,41	1645	547,83	2155	630,18	2663	740,34	3159	873,18
28	1288	1269	499,24	1706	568,12	2235	653,52	2761	767,76	3276	905,52
29	1334	1314	517,07	1767	588,41	2315	676,86	2860	795,18	3393	937,86
30	1380	1359	534,90	1827	608,70	2394	700,20	2958	822,60	3510	970,20
31	1426	1405	552,73	1888	628,99	2474	723,54	3057	850,02	3627	1002,54
32	1472	1450	570,56	1949	649,28	2554	746,88	3156	877,44	3744	1034,88
33	1518	1495	588,39	2010	669,57	2634	770,22	3254	904,86	3861	1067,22
34	1564	1541	606,22	2071	689,86	2714	793,56	3353	932,28	3978	1099,56
35	1610	1586	624,05	2132	710,15	2793	816,90	3451	959,70	4095	1131,90
36	1656	1631	641,88	2193	730,44	2873	840,24	3550	987,12	4212	1164,24
37	1702	1677	659,71	2254	750,73	2953	863,58	3649	1014,54	4329	1196,58
38	1748	1722	677,54	2315	771,02	3033	886,92	3747	1041,96	4446	1228,92
39	1794	1767	695,37	2376	791,31	3113	910,26	3846	1069,38	4563	1261,26
40	1840	1812	713,20	2436	811,60	3192	933,60	3944	1096,80	4680	1293,60

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	18,98		21,97		26,40		31,44		36,85	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	220	75,92	298	87,88	390	105,60	480	125,76	572	147,40
5	230	275	94,90	372	109,85	487	132,00	600	157,20	715	184,25
6	276	330	113,88	446	131,82	585	158,40	720	188,64	858	221,10
7	322	385	132,86	521	153,79	682	184,80	840	220,08	1001	257,95
8	368	440	151,84	595	175,76	780	211,20	960	251,52	1144	294,80
9	414	495	170,82	669	197,73	877	237,60	1080	282,96	1287	331,65
10	460	550	189,80	743	219,70	974	264,00	1200	314,40	1430	368,50
11	506	605	208,78	818	241,67	1072	290,40	1320	345,84	1573	405,35
12	552	660	227,76	892	263,64	1169	316,80	1440	377,28	1716	442,20
13	598	715	246,74	966	285,61	1267	343,20	1560	408,72	1859	479,05
14	644	770	265,72	1041	307,58	1364	369,60	1680	440,16	2002	515,90
15	690	825	284,70	1115	329,55	1461	396,00	1800	471,60	2145	552,75
16	736	880	303,68	1189	351,52	1559	422,40	1920	503,04	2288	589,60
17	782	935	322,66	1264	373,49	1656	448,80	2040	534,48	2431	626,45
18	828	990	341,64	1338	395,46	1754	475,20	2160	565,92	2574	663,30
19	874	1045	360,62	1412	417,43	1851	501,60	2280	597,36	2717	700,15
20	920	1100	379,60	1486	439,40	1948	528,00	2400	628,80	2860	737,00
21	966	1155	398,58	1561	461,37	2046	554,40	2520	660,24	3003	773,85
22	1012	1210	417,56	1635	483,34	2143	580,80	2640	691,68	3146	810,70
23	1058	1265	436,54	1709	505,31	2241	607,20	2760	723,12	3289	847,55
24	1104	1320	455,52	1784	527,28	2338	633,60	2880	754,56	3432	884,40
25	1150	1375	474,50	1858	549,25	2435	660,00	3000	786,00	3575	921,25
26	1196	1430	493,48	1932	571,22	2533	686,40	3120	817,44	3718	958,10
27	1242	1485	512,46	2007	593,19	2630	712,80	3240	848,88	3861	994,95
28	1288	1540	531,44	2081	615,16	2728	739,20	3360	880,32	4004	1031,80
29	1334	1595	550,42	2155	637,13	2825	765,60	3480	911,76	4147	1068,65
30	1380	1650	569,40	2229	659,10	2922	792,00	3600	943,20	4290	1105,50
31	1426	1705	588,38	2304	681,07	3020	818,40	3720	974,64	4433	1142,35
32	1472	1760	607,36	2378	703,04	3117	844,80	3840	1006,08	4576	1179,20
33	1518	1815	626,34	2452	725,01	3215	871,20	3960	1037,52	4719	1216,05
34	1564	1870	645,32	2527	746,98	3312	897,60	4080	1068,96	4862	1252,90
35	1610	1925	664,30	2601	768,95	3409	924,00	4200	1100,40	5005	1289,75
36	1656	1980	683,28	2675	790,92	3507	950,40	4320	1131,84	5148	1326,60
37	1702	2035	702,26	2750	812,89	3604	976,80	4440	1163,28	5291	1363,45
38	1748	2090	721,24	2824	834,86	3702	1003,20	4560	1194,72	5434	1400,30
39	1794	2145	740,22	2898	856,83	3799	1029,60	4680	1226,16	5577	1437,15
40	1840	2200	759,20	2972	878,80	3896	1056,00	4800	1257,60	5720	1474,00

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	20,06		23,64		30,28		35,79		41,45	
Length		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$	
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	256	<b>80,24</b>	348	<b>94,56</b>	456	<b>121,12</b>	564	<b>143,16</b>	668	<b>165,80</b>
5	230	320	<b>100,30</b>	435	<b>118,20</b>	570	<b>151,40</b>	705	<b>178,95</b>	835	<b>207,25</b>
6	276	384	<b>120,36</b>	522	<b>141,84</b>	684	<b>181,68</b>	846	<b>214,74</b>	1002	<b>248,70</b>
7	322	448	<b>140,42</b>	609	<b>165,48</b>	798	<b>211,96</b>	987	<b>250,53</b>	1169	<b>290,15</b>
8	368	512	<b>160,48</b>	696	<b>189,12</b>	912	<b>242,24</b>	1128	<b>286,32</b>	1336	<b>331,60</b>
9	414	576	<b>180,54</b>	783	<b>212,76</b>	1026	<b>272,52</b>	1269	<b>322,11</b>	1503	<b>373,05</b>
10	460	639	<b>200,60</b>	870	<b>236,40</b>	1140	<b>302,80</b>	1410	<b>357,90</b>	1670	<b>414,50</b>
11	506	703	<b>220,66</b>	957	<b>260,04</b>	1254	<b>333,08</b>	1551	<b>393,69</b>	1837	<b>455,95</b>
12	552	767	<b>240,72</b>	1044	<b>283,68</b>	1368	<b>363,36</b>	1692	<b>429,48</b>	2004	<b>497,40</b>
13	598	831	<b>260,78</b>	1131	<b>307,32</b>	1482	<b>393,64</b>	1833	<b>465,27</b>	2171	<b>538,85</b>
14	644	895	<b>280,84</b>	1218	<b>330,96</b>	1596	<b>423,92</b>	1974	<b>501,06</b>	2338	<b>580,30</b>
15	690	959	<b>300,90</b>	1305	<b>354,60</b>	1710	<b>454,20</b>	2115	<b>536,85</b>	2505	<b>621,75</b>
16	736	1023	<b>320,96</b>	1392	<b>378,24</b>	1824	<b>484,48</b>	2256	<b>572,64</b>	2672	<b>663,20</b>
17	782	1087	<b>341,02</b>	1479	<b>401,88</b>	1938	<b>514,76</b>	2397	<b>608,43</b>	2839	<b>704,65</b>
18	828	1151	<b>361,08</b>	1566	<b>425,52</b>	2052	<b>545,04</b>	2538	<b>644,22</b>	3006	<b>746,10</b>
19	874	1215	<b>381,14</b>	1653	<b>449,16</b>	2166	<b>575,32</b>	2679	<b>680,01</b>	3173	<b>787,55</b>
20	920	1278	<b>401,20</b>	1740	<b>472,80</b>	2280	<b>605,60</b>	2820	<b>715,80</b>	3340	<b>829,00</b>
21	966	1342	<b>421,26</b>	1827	<b>496,44</b>	2394	<b>635,88</b>	2961	<b>751,59</b>	3507	<b>870,45</b>
22	1012	1406	<b>441,32</b>	1914	<b>520,08</b>	2508	<b>666,16</b>	3102	<b>787,38</b>	3674	<b>911,90</b>
23	1058	1470	<b>461,38</b>	2001	<b>543,72</b>	2622	<b>696,44</b>	3243	<b>823,17</b>	3841	<b>953,35</b>
24	1104	1534	<b>481,44</b>	2088	<b>567,36</b>	2736	<b>726,72</b>	3384	<b>858,96</b>	4008	<b>994,80</b>
25	1150	1598	<b>501,50</b>	2175	<b>591,00</b>	2850	<b>757,00</b>	3525	<b>894,75</b>	4175	<b>1036,25</b>
26	1196	1662	<b>521,56</b>	2262	<b>614,64</b>	2964	<b>787,28</b>	3666	<b>930,54</b>	4342	<b>1077,70</b>
27	1242	1726	<b>541,62</b>	2349	<b>638,28</b>	3078	<b>817,56</b>	3807	<b>966,33</b>	4509	<b>1119,15</b>
28	1288	1790	<b>561,68</b>	2436	<b>661,92</b>	3192	<b>847,84</b>	3948	<b>1002,12</b>	4676	<b>1160,60</b>
29	1334	1854	<b>581,74</b>	2523	<b>685,56</b>	3306	<b>878,12</b>	4089	<b>1037,91</b>	4843	<b>1202,05</b>
30	1380	1917	<b>601,80</b>	2610	<b>709,20</b>	3420	<b>908,40</b>	4230	<b>1073,70</b>	5010	<b>1243,50</b>
31	1426	1981	<b>621,86</b>	2697	<b>732,84</b>	3534	<b>938,68</b>	4371	<b>1109,49</b>	5177	<b>1284,95</b>
32	1472	2045	<b>641,92</b>	2784	<b>756,48</b>	3648	<b>968,96</b>	4512	<b>1145,28</b>	5344	<b>1326,40</b>
33	1518	2109	<b>661,98</b>	2871	<b>780,12</b>	3762	<b>999,24</b>	4653	<b>1181,07</b>	5511	<b>1367,85</b>
34	1564	2173	<b>682,04</b>	2958	<b>803,76</b>	3876	<b>1029,52</b>	4794	<b>1216,86</b>	5678	<b>1409,30</b>
35	1610	2237	<b>702,10</b>	3045	<b>827,40</b>	3990	<b>1059,80</b>	4935	<b>1252,65</b>	5845	<b>1450,75</b>
36	1656	2301	<b>722,16</b>	3132	<b>851,04</b>	4104	<b>1090,08</b>	5076	<b>1288,44</b>	6012	<b>1492,20</b>
37	1702	2365	<b>742,22</b>	3219	<b>874,68</b>	4218	<b>1120,36</b>	5217	<b>1324,23</b>	6179	<b>1533,65</b>
38	1748	2429	<b>762,28</b>	3306	<b>898,32</b>	4332	<b>1150,64</b>	5358	<b>1360,02</b>	6346	<b>1575,10</b>
39	1794	2493	<b>782,34</b>	3393	<b>921,96</b>	4446	<b>1180,92</b>	5499	<b>1395,81</b>	6513	<b>1616,55</b>
40	1840	2556	<b>802,40</b>	3480	<b>945,60</b>	4560	<b>1211,20</b>	5640	<b>1431,60</b>	6680	<b>1658,00</b>

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	20,77		24,68		32,74		38,16		44,69	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	278	83,08	381	98,72	500	130,96	616	152,64	732	178,76
5	230	348	103,85	476	123,40	625	163,70	770	190,80	915	223,45
6	276	417	124,62	571	148,08	750	196,44	924	228,96	1098	268,14
7	322	487	145,39	666	172,76	875	229,18	1078	267,12	1281	312,83
8	368	556	166,16	761	197,44	1000	261,92	1232	305,28	1464	357,52
9	414	626	186,93	856	222,12	1125	294,66	1386	343,44	1647	402,21
10	460	695	207,70	951	246,80	1250	327,40	1540	381,60	1830	446,90
11	506	765	228,47	1047	271,48	1375	360,14	1694	419,76	2013	491,59
12	552	834	249,24	1142	296,16	1500	392,88	1848	457,92	2196	536,28
13	598	904	270,01	1237	320,84	1625	425,62	2002	496,08	2379	580,97
14	644	973	290,78	1332	345,52	1750	458,36	2156	534,24	2562	625,66
15	690	1043	311,55	1427	370,20	1875	491,10	2310	572,40	2745	670,35
16	736	1112	332,32	1522	394,88	2000	523,84	2464	610,56	2928	715,04
17	782	1182	353,09	1617	419,56	2125	556,58	2618	648,72	3111	759,73
18	828	1251	373,86	1712	444,24	2250	589,32	2772	686,88	3294	804,42
19	874	1321	394,63	1807	468,92	2375	622,06	2926	725,04	3477	849,11
20	920	1390	415,40	1902	493,60	2500	654,80	3080	763,20	3660	893,80
21	966	1460	436,17	1998	518,28	2625	687,54	3234	801,36	3843	938,49
22	1012	1529	456,94	2093	542,96	2750	720,28	3388	839,52	4026	983,18
23	1058	1599	477,71	2188	567,64	2875	753,02	3542	877,68	4209	1027,87
24	1104	1668	498,48	2283	592,32	3000	785,76	3696	915,84	4392	1072,56
25	1150	1738	519,25	2378	617,00	3125	818,50	3850	954,00	4575	1117,25
26	1196	1807	540,02	2473	641,68	3250	851,24	4004	992,16	4758	1161,94
27	1242	1877	560,79	2568	666,36	3375	883,98	4158	1030,32	4941	1206,63
28	1288	1946	581,56	2663	691,04	3500	916,72	4312	1068,48	5124	1251,32
29	1334	2016	602,33	2758	715,72	3625	949,46	4466	1106,64	5307	1296,01
30	1380	2085	623,10	2853	740,40	3750	982,20	4620	1144,80	5490	1340,70
31	1426	2155	643,87	2949	765,08	3875	1014,94	4774	1182,96	5673	1385,39
32	1472	2224	664,64	3044	789,76	4000	1047,68	4928	1221,12	5856	1430,08
33	1518	2294	685,41	3139	814,44	4125	1080,42	5082	1259,28	6039	1474,77
34	1564	2363	706,18	3234	839,12	4250	1113,16	5236	1297,44	6222	1519,46
35	1610	2433	726,95	3329	863,80	4375	1145,90	5390	1335,60	6405	1564,15
36	1656	2502	747,72	3424	888,48	4500	1178,64	5544	1373,76	6588	1608,84
37	1702	2572	768,49	3519	913,16	4625	1211,38	5698	1411,92	6771	1653,53
38	1748	2641	789,26	3614	937,84	4750	1244,12	5852	1450,08	6954	1698,22
39	1794	2711	810,03	3709	962,52	4875	1276,86	6006	1488,24	7137	1742,91
40	1840	2780	830,80	3804	987,20	5000	1309,60	6160	1526,40	7320	1787,60

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	21,54		27,87		36,31		44,30		52,69	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	299	86,16	412	111,48	540	145,24	668	177,20	792	210,76
5	230	374	107,70	515	139,35	675	181,55	835	221,50	990	263,45
6	276	449	129,24	618	167,22	810	217,86	1002	265,80	1188	316,14
7	322	523	150,78	721	195,09	945	254,17	1169	310,10	1386	368,83
8	368	598	172,32	824	222,96	1080	290,48	1336	354,40	1584	421,52
9	414	673	193,86	927	250,83	1215	326,79	1503	398,70	1782	474,21
10	460	747	215,40	1030	278,70	1350	363,10	1670	443,00	1980	526,90
11	506	822	236,94	1133	306,57	1485	399,41	1837	487,30	2178	579,59
12	552	897	258,48	1236	334,44	1620	435,72	2004	531,60	2376	632,28
13	598	972	280,02	1339	362,31	1755	472,03	2171	575,90	2574	684,97
14	644	1046	301,56	1442	390,18	1890	508,34	2338	620,20	2772	737,66
15	690	1121	323,10	1545	418,05	2025	544,65	2505	664,50	2970	790,35
16	736	1196	344,64	1648	445,92	2160	580,96	2672	708,80	3168	843,04
17	782	1270	366,18	1751	473,79	2295	617,27	2839	753,10	3366	895,73
18	828	1345	387,72	1854	501,66	2430	653,58	3006	797,40	3564	948,42
19	874	1420	409,26	1957	529,53	2565	689,89	3173	841,70	3762	1001,11
20	920	1494	430,80	2060	557,40	2700	726,20	3340	886,00	3960	1053,80
21	966	1569	452,34	2163	585,27	2835	762,51	3507	930,30	4158	1106,49
22	1012	1644	473,88	2266	613,14	2970	798,82	3674	974,60	4356	1159,18
23	1058	1719	495,42	2369	641,01	3105	835,13	3841	1018,90	4554	1211,87
24	1104	1793	516,96	2472	668,88	3240	871,44	4008	1063,20	4752	1264,56
25	1150	1868	538,50	2575	696,75	3375	907,75	4175	1107,50	4950	1317,25
26	1196	1943	560,04	2678	724,62	3510	944,06	4342	1151,80	5148	1369,94
27	1242	2017	581,58	2781	752,49	3645	980,37	4509	1196,10	5346	1422,63
28	1288	2092	603,12	2884	780,36	3780	1016,68	4676	1240,40	5544	1475,32
29	1334	2167	624,66	2987	808,23	3915	1052,99	4843	1284,70	5742	1528,01
30	1380	2241	646,20	3090	836,10	4050	1089,30	5010	1329,00	5940	1580,70
31	1426	2316	667,74	3193	863,97	4185	1125,61	5177	1373,30	6138	1633,39
32	1472	2391	689,28	3296	891,84	4320	1161,92	5344	1417,60	6336	1686,08
33	1518	2466	710,82	3399	919,71	4455	1198,23	5511	1461,90	6534	1738,77
34	1564	2540	732,36	3502	947,58	4590	1234,54	5678	1506,20	6732	1791,46
35	1610	2615	753,90	3605	975,45	4725	1270,85	5845	1550,50	6930	1844,15
36	1656	2690	775,44	3708	1003,32	4860	1307,16	6012	1594,80	7128	1896,84
37	1702	2764	796,98	3811	1031,19	4995	1343,47	6179	1639,10	7326	1949,53
38	1748	2839	818,52	3914	1059,06	5130	1379,78	6346	1683,40	7524	2002,22
39	1794	2914	840,06	4017	1086,93	5265	1416,09	6513	1727,70	7722	2054,91
40	1840	2988	861,60	4120	1114,80	5400	1452,40	6680	1772,00	7920	2107,60

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	23,17		32,55		40,99		51,26		59,73	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	331	92,68	460	130,20	588	163,96	716	205,04	840	238,92
5	230	414	115,85	575	162,75	735	204,95	895	256,30	1050	298,65
6	276	497	139,02	690	195,30	882	245,94	1074	307,56	1260	358,38
7	322	579	162,19	805	227,85	1029	286,93	1253	358,82	1470	418,11
8	368	662	185,36	920	260,40	1176	327,92	1432	410,08	1680	477,84
9	414	745	208,53	1035	292,95	1323	368,91	1611	461,34	1890	537,57
10	460	827	231,70	1150	325,50	1470	409,90	1790	512,60	2100	597,30
11	506	910	254,87	1265	358,05	1617	450,89	1969	563,86	2310	657,03
12	552	993	278,04	1380	390,60	1764	491,88	2148	615,12	2520	716,76
13	598	1076	301,21	1495	423,15	1911	532,87	2327	666,38	2730	776,49
14	644	1158	324,38	1610	455,70	2058	573,86	2506	717,64	2940	836,22
15	690	1241	347,55	1725	488,25	2205	614,85	2685	768,90	3150	895,95
16	736	1324	370,72	1840	520,80	2352	655,84	2864	820,16	3360	955,68
17	782	1406	393,89	1955	553,35	2499	696,83	3043	871,42	3570	1015,41
18	828	1489	417,06	2070	585,90	2646	737,82	3222	922,68	3780	1075,14
19	874	1572	440,23	2185	618,45	2793	778,81	3401	973,94	3990	1134,87
20	920	1654	463,40	2300	651,00	2940	819,80	3580	1025,20	4200	1194,60
21	966	1737	486,57	2415	683,55	3087	860,79	3759	1076,46	4410	1254,33
22	1012	1820	509,74	2530	716,10	3234	901,78	3938	1127,72	4620	1314,06
23	1058	1903	532,91	2645	748,65	3381	942,77	4117	1178,98	4830	1373,79
24	1104	1985	556,08	2760	781,20	3528	983,76	4296	1230,24	5040	1433,52
25	1150	2068	579,25	2875	813,75	3675	1024,75	4475	1281,50	5250	1493,25
26	1196	2151	602,42	2990	846,30	3822	1065,74	4654	1332,76	5460	1552,98
27	1242	2233	625,59	3105	878,85	3969	1106,73	4833	1384,02	5670	1612,71
28	1288	2316	648,76	3220	911,40	4116	1147,72	5012	1435,28	5880	1672,44
29	1334	2399	671,93	3335	943,95	4263	1188,71	5191	1486,54	6090	1732,17
30	1380	2481	695,10	3450	976,50	4410	1229,70	5370	1537,80	6300	1791,90
31	1426	2564	718,27	3565	1009,05	4557	1270,69	5549	1589,06	6510	1851,63
32	1472	2647	741,44	3680	1041,60	4704	1311,68	5728	1640,32	6720	1911,36
33	1518	2730	764,61	3795	1074,15	4851	1352,67	5907	1691,58	6930	1971,09
34	1564	2812	787,78	3910	1106,70	4998	1393,66	6086	1742,84	7140	2030,82
35	1610	2895	810,95	4025	1139,25	5145	1434,65	6265	1794,10	7350	2090,55
36	1656	2978	834,12	4140	1171,80	5292	1475,64	6444	1845,36	7560	2150,28
37	1702	3060	857,29	4255	1204,35	5439	1516,63	6623	1896,62	7770	2210,01
38	1748	3143	880,46	4370	1236,90	5586	1557,62	6802	1947,88	7980	2269,74
39	1794	3226	903,63	4485	1269,45	5733	1598,61	6981	1999,14	8190	2329,47
40	1840	3308	926,80	4600	1302,00	5880	1639,60	7160	2050,40	8400	2389,20

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		1500											
mm													
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	€	29,49		42,14		55,08		68,83		82,01			
Length		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price	
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€
4	184	416	117,96	560	168,56	720	220,32	876	275,32	1024	328,04		
5	230	520	147,45	700	210,70	900	275,40	1095	344,15	1280	410,05		
6	276	624	176,94	840	252,84	1080	330,48	1314	412,98	1536	492,06		
7	322	728	206,43	980	294,98	1260	385,56	1533	481,81	1792	574,07		
8	368	832	235,92	1120	337,12	1440	440,64	1752	550,64	2048	656,08		
9	414	936	265,41	1260	379,26	1620	495,72	1971	619,47	2304	738,09		
10	460	1040	294,90	1400	421,40	1800	550,80	2190	688,30	2560	820,10		
11	506	1144	324,39	1540	463,54	1980	605,88	2409	757,13	2816	902,11		
12	552	1248	353,88	1680	505,68	2160	660,96	2628	825,96	3072	984,12		
13	598	1352	383,37	1820	547,82	2340	716,04	2847	894,79	3328	1066,13		
14	644	1456	412,86	1960	589,96	2520	771,12	3066	963,62	3584	1148,14		
15	690	1560	442,35	2100	632,10	2700	826,20	3285	1032,45	3840	1230,15		
16	736	1664	471,84	2240	674,24	2880	881,28	3504	1101,28	4096	1312,16		
17	782	1768	501,33	2380	716,38	3060	936,36	3723	1170,11	4352	1394,17		
18	828	1872	530,82	2520	758,52	3240	991,44	3942	1238,94	4608	1476,18		
19	874	1976	560,31	2660	800,66	3420	1046,52	4161	1307,77	4864	1558,19		
20	920	2080	589,80	2800	842,80	3600	1101,60	4380	1376,60	5120	1640,20		
21	966	2184	619,29	2940	884,94	3780	1156,68	4599	1445,43	5376	1722,21		
22	1012	2288	648,78	3080	927,08	3960	1211,76	4818	1514,26	5632	1804,22		
23	1058	2392	678,27	3220	969,22	4140	1266,84	5037	1583,09	5888	1886,23		
24	1104	2496	707,76	3360	1011,36	4320	1321,92	5256	1651,92	6144	1968,24		
25	1150	2600	737,25	3500	1053,50	4500	1377,00	5475	1720,75	6400	2050,25		
26	1196	2704	766,74	3640	1095,64	4680	1432,08	5694	1789,58	6656	2132,26		
27	1242	2808	796,23	3780	1137,78	4860	1487,16	5913	1858,41	6912	2214,27		
28	1288	2912	825,72	3920	1179,92	5040	1542,24	6132	1927,24	7168	2296,28		
29	1334	3016	855,21	4060	1222,06	5220	1597,32	6351	1996,07	7424	2378,29		
30	1380	3120	884,70	4200	1264,20	5400	1652,40	6570	2064,90	7680	2460,30		
31	1426	3224	914,19	4340	1306,34	5580	1707,48	6789	2133,73	7936	2542,31		
32	1472	3328	943,68	4480	1348,48	5760	1762,56	7008	2202,56	8192	2624,32		
33	1518	3432	973,17	4620	1390,62	5940	1817,64	7227	2271,39	8448	2706,33		
34	1564	3536	1002,66	4760	1432,76	6120	1872,72	7446	2340,22	8704	2788,34		
35	1610	3640	1032,15	4900	1474,90	6300	1927,80	7665	2409,05	8960	2870,35		
36	1656	3744	1061,64	5040	1517,04	6480	1982,88	7884	2477,88	9216	2952,36		
37	1702	3848	1091,13	5180	1559,18	6660	2037,96	8103	2546,71	9472	3034,37		
38	1748	3952	1120,62	5320	1601,32	6840	2093,04	8322	2615,54	9728	3116,38		
39	1794	4056	1150,11	5460	1643,46	7020	2148,12	8541	2684,37	9984	3198,39		
40	1840	4160	1179,60	5600	1685,60	7200	2203,20	8760	2753,20	10240	3280,40		

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	34,86		52,02		66,13		81,18		96,40			
Length		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price	
Elements	mm	W	€	W	€	W	€	W	€	W	€		
4	184	496	139,44	664	208,08	852	264,52	1036	324,72	1212	385,60		
5	230	620	174,30	830	260,10	1065	330,65	1295	405,90	1515	482,00		
6	276	744	209,16	996	312,12	1278	396,78	1554	487,08	1818	578,40		
7	322	868	244,02	1162	364,14	1491	462,91	1813	568,26	2121	674,80		
8	368	992	278,88	1328	416,16	1704	529,04	2072	649,44	2424	771,20		
9	414	1116	313,74	1494	468,18	1917	595,17	2331	730,62	2727	867,60		
10	460	1240	348,60	1660	520,20	2130	661,30	2590	811,80	3030	964,00		
11	506	1364	383,46	1826	572,22	2343	727,43	2849	892,98	3333	1060,40		
12	552	1488	418,32	1992	624,24	2556	793,56	3108	974,16	3636	1156,80		
13	598	1612	453,18	2158	676,26	2769	859,69	3367	1055,34	3939	1253,20		
14	644	1736	488,04	2324	728,28	2982	925,82	3626	1136,52	4242	1349,60		
15	690	1860	522,90	2490	780,30	3195	991,95	3885	1217,70	4545	1446,00		
16	736	1984	557,76	2656	832,32	3408	1058,08	4144	1298,88	4848	1542,40		
17	782	2108	592,62	2822	884,34	3621	1124,21	4403	1380,06	5151	1638,80		
18	828	2232	627,48	2988	936,36	3834	1190,34	4662	1461,24	5454	1735,20		
19	874	2356	662,34	3154	988,38	4047	1256,47	4921	1542,42	5757	1831,60		
20	920	2480	697,20	3320	1040,40	4260	1322,60	5180	1623,60	6060	1928,00		
21	966	2604	732,06	3486	1092,42	4473	1388,73	5439	1704,78	6363	2024,40		
22	1012	2728	766,92	3652	1144,44	4686	1454,86	5698	1785,96	6666	2120,80		
23	1058	2852	801,78	3818	1196,46	4899	1520,99	5957	1867,14	6969	2217,20		
24	1104	2976	836,64	3984	1248,48	5112	1587,12	6216	1948,32	7272	2313,60		
25	1150	3100	871,50	4150	1300,50	5325	1653,25	6475	2029,50	7575	2410,00		
26	1196	3224	906,36	4316	1352,52	5538	1719,38	6734	2110,68	7878	2506,40		
27	1242	3348	941,22	4482	1404,54	5751	1785,51	6993	2191,86	8181	2602,80		
28	1288	3472	976,08	4648	1456,56	5964	1851,64	7252	2273,04	8484	2699,20		
29	1334	3596	1010,94	4814	1508,58	6177	1917,77	7511	2354,22	8787	2795,60		
30	1380	3720	1045,80	4980	1560,60	6390	1983,90	7770	2435,40	9090	2892,00		
31	1426	3844	1080,66	5146	1612,62	6603	2050,03	8029	2516,58	9393	2988,40		
32	1472	3968	1115,52	5312	1664,64	6816	2116,16	8288	2597,76	9696	3084,80		
33	1518	4092	1150,38	5478	1716,66	7029	2182,29	8547	2678,94	9999	3181,20		
34	1564	4216	1185,24	5644	1768,68	7242	2248,42	8806	2760,12	10302	3277,60		
35	1610	4340	1220,10	5810	1820,70	7455	2314,55	9065	2841,30	10605	3374,00		
36	1656	4464	1254,96	5976	1872,72	7668	2380,68	9324	2922,48	10908	3470,40		
37	1702	4588	1289,82	6142	1924,74	7881	2446,81	9583	3003,66	11211	3566,80		
38	1748	4712	1324,68	6308	1976,76	8094	2512,94	9842	3084,84	11514	3663,20		
39	1794	4836	1359,54	6474	2028,78	8307	2579,07	10101	3166,02	11817	3759,60		
40	1840	4960	1394,40	6640	2080,80	8520	2645,20	10360	3247,20	12120	3856,00		

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		2000									
mm											
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	€	39,38		56,25		73,89		90,58		107,29	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	552	157,52	732	225,00	936	295,56	1140	362,32	1336	429,16
5	230	690	196,90	915	281,25	1170	369,45	1425	452,90	1670	536,45
6	276	828	236,28	1098	337,50	1404	443,34	1710	543,48	2004	643,74
7	322	966	275,66	1281	393,75	1638	517,23	1995	634,06	2338	751,03
8	368	1104	315,04	1464	450,00	1872	591,12	2280	724,64	2672	858,32
9	414	1242	354,42	1647	506,25	2106	665,01	2565	815,22	3006	965,61
10	460	1380	393,80	1830	562,50	2340	738,90	2850	905,80	3340	1072,90
11	506	1518	433,18	2013	618,75	2574	812,79	3135	996,38	3674	1180,19
12	552	1656	472,56	2196	675,00	2808	886,68	3420	1086,96	4008	1287,48
13	598	1794	511,94	2379	731,25	3042	960,57	3705	1177,54	4342	1394,77
14	644	1932	551,32	2562	787,50	3276	1034,46	3990	1268,12	4676	1502,06
15	690	2070	590,70	2745	843,75	3510	1108,35	4275	1358,70	5010	1609,35
16	736	2208	630,08	2928	900,00	3744	1182,24	4560	1449,28	5344	1716,64
17	782	2346	669,46	3111	956,25	3978	1256,13	4845	1539,86	5678	1823,93
18	828	2484	708,84	3294	1012,50	4212	1330,02	5130	1630,44	6012	1931,22
19	874	2622	748,22	3477	1068,75	4446	1403,91	5415	1721,02	6346	2038,51
20	920	2760	787,60	3660	1125,00	4680	1477,80	5700	1811,60	6680	2145,80
21	966	2898	826,98	3843	1181,25	4914	1551,69	5985	1902,18	7014	2253,09
22	1012	3036	866,36	4026	1237,50	5148	1625,58	6270	1992,76	7348	2360,38
23	1058	3174	905,74	4209	1293,75	5382	1699,47	6555	2083,34	7682	2467,67
24	1104	3312	945,12	4392	1350,00	5616	1773,36	6840	2173,92	8016	2574,96
25	1150	3450	984,50	4575	1406,25	5850	1847,25	7125	2264,50	8350	2682,25
26	1196	3588	1023,88	4758	1462,50	6084	1921,14	7410	2355,08	8684	2789,54
27	1242	3726	1063,26	4941	1518,75	6318	1995,03	7695	2445,66	9018	2896,83
28	1288	3864	1102,64	5124	1575,00	6552	2068,92	7980	2536,24	9352	3004,12
29	1334	4002	1142,02	5307	1631,25	6786	2142,81	8265	2626,82	9686	3111,41
30	1380	4140	1181,40	5490	1687,50	7020	2216,70	8550	2717,40	10020	3218,70
31	1426	4278	1220,78	5673	1743,75	7254	2290,59	8835	2807,98	10354	3325,99
32	1472	4416	1260,16	5856	1800,00	7488	2364,48	9120	2898,56	10688	3433,28
33	1518	4554	1299,54	6039	1856,25	7722	2438,37	9405	2989,14	11022	3540,57
34	1564	4692	1338,92	6222	1912,50	7956	2512,26	9690	3079,72	11356	3647,86
35	1610	4830	1378,30	6405	1968,75	8190	2586,15	9975	3170,30	11690	3755,15
36	1656	4968	1417,68	6588	2025,00	8424	2660,04	10260	3260,88	12024	3862,44
37	1702	5106	1457,06	6771	2081,25	8658	2733,93	10545	3351,46	12358	3969,73
38	1748	5244	1496,44	6954	2137,50	8892	2807,82	10830	3442,04	12692	4077,02
39	1794	5382	1535,82	7137	2193,75	9126	2881,71	11115	3532,62	13026	4184,31
40	1840	5520	1575,20	7320	2250,00	9360	2955,60	11400	3623,20	13360	4291,60

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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

$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		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	€	43,68		63,30		82,19		100,65		119,47	
Elements	Length	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
	mm	W	€	W	€	W	€	W	€	W	€
4	184	604	174,72	800	253,20	1024	328,76	1248	402,60	1460	477,88
5	230	755	218,40	1000	316,50	1280	410,95	1560	503,25	1825	597,35
6	276	906	262,08	1200	379,80	1536	493,14	1872	603,90	2190	716,82
7	322	1057	305,76	1400	443,10	1792	575,33	2184	704,55	2555	836,29
8	368	1208	349,44	1600	506,40	2048	657,52	2496	805,20	2920	955,76
9	414	1359	393,12	1800	569,70	2304	739,71	2808	905,85	3285	1075,23
10	460	1510	436,80	2000	633,00	2560	821,90	3120	1006,50	3650	1194,70
11	506	1661	480,48	2200	696,30	2816	904,09	3432	1107,15	4015	1314,17
12	552	1812	524,16	2400	759,60	3072	986,28	3744	1207,80	4380	1433,64
13	598	1963	567,84	2600	822,90	3328	1068,47	4056	1308,45	4745	1553,11
14	644	2114	611,52	2800	886,20	3584	1150,66	4368	1409,10	5110	1672,58
15	690	2265	655,20	3000	949,50	3840	1232,85	4680	1509,75	5475	1792,05
16	736	2416	698,88	3200	1012,80	4096	1315,04	4992	1610,40	5840	1911,52
17	782	2567	742,56	3400	1076,10	4352	1397,23	5304	1711,05	6205	2030,99
18	828	2718	786,24	3600	1139,40	4608	1479,42	5616	1811,70	6570	2150,46
19	874	2869	829,92	3800	1202,70	4864	1561,61	5928	1912,35	6935	2269,93
20	920	3020	873,60	4000	1266,00	5120	1643,80	6240	2013,00	7300	2389,40
21	966	3171	917,28	4200	1329,30	5376	1725,99	6552	2113,65	7665	2508,87
22	1012	3322	960,96	4400	1392,60	5632	1808,18	6864	2214,30	8030	2628,34
23	1058	3473	1004,64	4600	1455,90	5888	1890,37	7176	2314,95	8395	2747,81
24	1104	3624	1048,32	4800	1519,20	6144	1972,56	7488	2415,60	8760	2867,28
25	1150	3775	1092,00	5000	1582,50	6400	2054,75	7800	2516,25	9125	2986,75
26	1196	3926	1135,68	5200	1645,80	6656	2136,94	8112	2616,90	9490	3106,22
27	1242	4077	1179,36	5400	1709,10	6912	2219,13	8424	2717,55	9855	3225,69
28	1288	4228	1223,04	5600	1772,40	7168	2301,32	8736	2818,20	10220	3345,16
29	1334	4379	1266,72	5800	1835,70	7424	2383,51	9048	2918,85	10585	3464,63
30	1380	4530	1310,40	6000	1899,00	7680	2465,70	9360	3019,50	10950	3584,10
31	1426	4681	1354,08	6200	1962,30	7936	2547,89	9672	3120,15	11315	3703,57
32	1472	4832	1397,76	6400	2025,60	8192	2630,08	9984	3220,80	11680	3823,04
33	1518	4983	1441,44	6600	2088,90	8448	2712,27	10296	3321,45	12045	3942,51
34	1564	5134	1485,12	6800	2152,20	8704	2794,46	10608	3422,10	12410	4061,98
35	1610	5285	1528,80	7000	2215,50	8960	2876,65	10920	3522,75	12775	4181,45
36	1656	5436	1572,48	7200	2278,80	9216	2958,84	11232	3623,40	13140	4300,92
37	1702	5587	1616,16	7400	2342,10	9472	3041,03	11544	3724,05	13505	4420,39
38	1748	5738	1659,84	7600	2405,40	9728	3123,22	11856	3824,70	13870	4539,86
39	1794	5889	1703,52	7800	2468,70	9984	3205,41	12168	3925,35	14235	4659,33
40	1840	6040	1747,20	8000	2532,00	10240	3287,60	12480	4026,00	14600	4778,80

Surcharge for Completo, valve at top, connections V001/V002 €: 148,10

Surcharge for Completo, valve at top, connections V007/V008 €: 196,80

Surcharge for Completo, valve at bottom, connections V003/V004 €: 209,48

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



$\Phi_s$  = Standard thermal output according to EN 442 ( $\Delta T$  50K: 75/65/20 °C)

Height		2500									
mm											
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	€	48,78		71,61		92,20		112,62		134,21	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€
4	184	684	195,12	900	286,44	1156	368,80	1408	450,48	1648	536,84
5	230	855	243,90	1125	358,05	1445	461,00	1760	563,10	2060	671,05
6	276	1026	292,68	1350	429,66	1734	553,20	2112	675,72	2472	805,26
7	322	1197	341,46	1575	501,27	2023	645,40	2464	788,34	2884	939,47
8	368	1368	390,24	1800	572,88	2312	737,60	2816	900,96	3296	1073,68
9	414	1539	439,02	2025	644,49	2601	829,80	3168	1013,58	3708	1207,89
10	460	1710	487,80	2250	716,10	2890	922,00	3520	1126,20	4120	1342,10
11	506	1881	536,58	2475	787,71	3179	1014,20	3872	1238,82	4532	1476,31
12	552	2052	585,36	2700	859,32	3468	1106,40	4224	1351,44	4944	1610,52
13	598	2223	634,14	2925	930,93	3757	1198,60	4576	1464,06	5356	1744,73
14	644	2394	682,92	3150	1002,54	4046	1290,80	4928	1576,68	5768	1878,94
15	690	2565	731,70	3375	1074,15	4335	1383,00	5280	1689,30	6180	2013,15
16	736	2736	780,48	3600	1145,76	4624	1475,20	5632	1801,92	6592	2147,36
17	782	2907	829,26	3825	1217,37	4913	1567,40	5984	1914,54	7004	2281,57
18	828	3078	878,04	4050	1288,98	5202	1659,60	6336	2027,16	7416	2415,78
19	874	3249	926,82	4275	1360,59	5491	1751,80	6688	2139,78	7828	2549,99
20	920	3420	975,60	4500	1432,20	5780	1844,00	7040	2252,40	8240	2684,20
21	966	3591	1024,38	4725	1503,81	6069	1936,20	7392	2365,02	8652	2818,41
22	1012	3762	1073,16	4950	1575,42	6358	2028,40	7744	2477,64	9064	2952,62
23	1058	3933	1121,94	5175	1647,03	6647	2120,60	8096	2590,26	9476	3086,83
24	1104	4104	1170,72	5400	1718,64	6936	2212,80	8448	2702,88	9888	3221,04
25	1150	4275	1219,50	5625	1790,25	7225	2305,00	8800	2815,50	10300	3355,25
26	1196	4446	1268,28	5850	1861,86	7514	2397,20	9152	2928,12	10712	3489,46
27	1242	4617	1317,06	6075	1933,47	7803	2489,40	9504	3040,74	11124	3623,67
28	1288	4788	1365,84	6300	2005,08	8092	2581,60	9856	3153,36	11536	3757,88
29	1334	4959	1414,62	6525	2076,69	8381	2673,80	10208	3265,98	11948	3892,09
30	1380	5130	1463,40	6750	2148,30	8670	2766,00	10560	3378,60	12360	4026,30
31	1426	5301	1512,18	6975	2219,91	8959	2858,20	10912	3491,22	12772	4160,51
32	1472	5472	1560,96	7200	2291,52	9248	2950,40	11264	3603,84	13184	4294,72
33	1518	5643	1609,74	7425	2363,13	9537	3042,60	11616	3716,46	13596	4428,93
34	1564	5814	1658,52	7650	2434,74	9826	3134,80	11968	3829,08	14008	4563,14
35	1610	5985	1707,30	7875	2506,35	10115	3227,00	12320	3941,70	14420	4697,35
36	1656	6156	1756,08	8100	2577,96	10404	3319,20	12672	4054,32	14832	4831,56
37	1702	6327	1804,86	8325	2649,57	10693	3411,40	13024	4166,94	15244	4965,77
38	1748	6498	1853,64	8550	2721,18	10982	3503,60	13376	4279,56	15656	5099,98
39	1794	6669	1902,42	8775	2792,79	11271	3595,80	13728	4392,18	16068	5234,19
40	1840	6840	1951,20	9000	2864,40	11560	3688,00	14080	4504,80	16480	5368,40

Surcharge for Completto, valve at top, connections V001/V002 €: 148,10

Surcharge for Completto, valve at top, connections V007/V008 €: 196,80

Surcharge for Completto, valve at bottom, connections V003/V004 €: 209,48

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