



Zehnder Radiavector

Prices and Technology 2023 - Sales International

always the best climate



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.

INNOVATION OVER 5 GENERATIONS



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

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 – whether at home or in commercial or public buildings – not only warmer, but also more attractive. They combine iconic design with outstanding comfort experience.



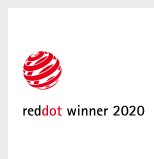
Heating and cooling ceiling
The ceiling is the perfect place to supply a room with convenient heating and cooling. Energy-efficient climate via radiant panels work perfectly with our suite of solutions from office to manufacturing spaces.



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.


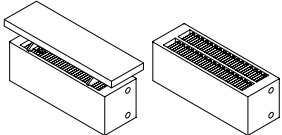
BEST QUALITY CERTIFICATES

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




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.

Convectors and trench heaters	Zehnder Radiavector			5
Accessories	Zehnder fixing kits Zehnder valves			33
General	Keyword list Pressure loss graph, conversion table Zehnder comfortable indoor ventilation			50

Zehnder Radiavector

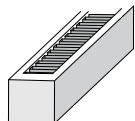


	Overview of models	Product description	List prices	Special versions	Connections	Series version	Fixings	Bench accessories	Technical data	Installation points
Zehnder Radiavector										
 <ul style="list-style-type: none"> ■ Compact construction ■ Low height ■ Special shapes 	6	7	8	12	13	16	17	20	22	23

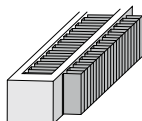
Zehnder Radiavector



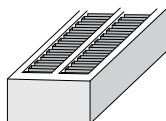
Zehnder Radiavector



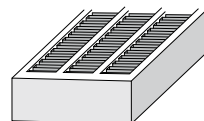
2-tube



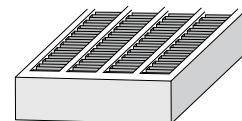
2-tube with additional fin



3-tube



4-tube



5-tube

Height mm	Depth mm				
	73	104	134	195	256
70	ZRV211	ZRV221	ZRV321	ZRV431	ZRV541
140	ZRV212	ZRV222	ZRV322	ZRV432	ZRV542
210	ZRV213	ZRV223	ZRV323	ZRV433	ZRV543
280	ZRV214	ZRV224	ZRV324	ZRV434	ZRV544

Zehnder Radiavector



Zehnder Radiavector



Zehnder Radiavector Bench



Zehnder Radiavector with block feet

Product description

The Zehnder Radiavector is the classic convector. Its closed, linear shape gives it an almost timeless appearance, allowing it to be integrated into a wide range of building styles.

Convectors are always used where a lot of heat has to be produced in the smallest of spaces. They are also frequently required when the high airflow of the convector is especially needed to compensate for the cold air that falls in front of floor to ceiling windows, to avoid the formation of condensation or simply to bring the indoor air to the right temperature quickly.

A special feature of the Zehnder Radiavector is the harmonious design combination with the Zehnder Radiapanel. Everywhere that more height or more radiation is required, with the right look in terms of height.

Grilles can also be used with the Zehnder Radiavector, with a choice of three options. Even though this reduces the thermal output slightly, this is not what matters with the Zehnder Radiavector. Ultimately, safety comes first.

The maxim that colours can significantly influence the design also applies to the Zehnder Radiavector – in many colours of the Zehnder colour chart and even in other colour tones on request.

Technical data

- Flat tubes 70 x 11 mm
- Operating pressure max. 6 bar
- Operating temperature max. 110 °C
- Priming and powder coating
- Thermal output tested to EN 442, with CE marking

Customisation options

- Grille in three designs
- Integrated thermal radiation shield for energy-saving installation
- Different fixings
- Various connection options
- Integrated valve
- Can be installed in the floor duct
- Solutions for corner applications available
- Solutions for benches

Advantages

- Compact construction
- High thermal output
- Sealed unit
- Low heights for glass fronts

Scope of delivery for standard version

- Primed and painted in RAL 9016
- Connections 4 x ½" female thread at front, for opposite end connections
- 1 blanking plug ½", directional air vent ½", nickel-plated
- Packaging in cardboard and film, with edge protection

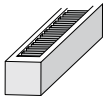
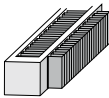
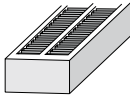
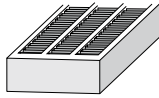
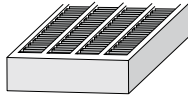
Scope of delivery for Completto version

- Primed and painted in RAL 9016
- Valve unit integrated on side, with valve insert AV 6, max. flow rate 250 kg/h
- Connections 2 x ½" female thread from bottom, 50 mm
- 1 x ½" connection for directional air vent
- Packaging in cardboard and film, with edge protection

Zehnder Radiavector



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

Height	mm	70									
											
Model		ZRV211	ZRV221	ZRV321	ZRV431	ZRV541					
Depth	mm	73	104	134	195	256					
Exponent	n	1,29	1,30	1,29	1,29	1,29					
Basic price	€	269,70	306,36	353,14	418,55	482,53					
Price/metre	€	120,84	161,80	196,70	290,08	354,33					
Length	mm	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
		Watt	€	Watt	€	Watt	€	Watt	€	Watt	€
400	134	318,04	174	371,08	231	431,82	323	534,58	411	624,26	
500	168	330,12	218	387,26	289	451,49	404	563,59	514	659,70	
600	201	342,20	261	403,44	347	471,16	485	592,60	617	695,13	
700	235	354,29	305	419,62	405	490,83	566	621,61	720	730,56	
800	268	366,37	348	435,80	462	510,50	647	650,61	822	765,99	
900	302	378,46	392	451,98	520	530,17	728	679,62	925	801,43	
1000	336	390,54	435	468,16	578	549,84	809	708,63	1028	836,86	
1100	369	402,62	479	484,34	636	569,51	889	737,64	1131	872,29	
1200	403	414,71	523	500,52	693	589,18	970	766,65	1234	907,73	
1300	436	426,79	566	516,70	751	608,85	1051	795,65	1336	943,16	
1400	470	438,88	610	532,88	809	628,52	1132	824,66	1439	978,59	
1500	503	450,96	653	549,06	867	648,19	1213	853,67	1542	1.014,03	
1600	537	463,04	697	565,24	925	667,86	1294	882,68	1645	1.049,46	
1700	570	475,13	740	581,42	982	687,53	1375	911,69	1748	1.084,89	
1800	604	487,21	784	597,60	1040	707,20	1455	940,69	1850	1.120,32	
1900	637	499,30	827	613,78	1098	726,87	1536	969,70	1953	1.155,76	
2000	671	511,38	871	629,96	1156	746,54	1617	998,71	2056	1.191,19	
2200	738	535,55	958	662,32	1271	785,88	1779	1.056,73	2262	1.262,06	
2400	805	559,72	1045	694,68	1387	825,22	1941	1.114,74	2467	1.332,92	
2600	872	583,88	1132	727,04	1503	864,56	2102	1.172,76	2673	1.403,79	
2800	939	608,05	1219	759,40	1618	903,90	2264	1.230,77	2879	1.474,65	
3000	1007	632,22	1306	791,76	1734	943,24	2426	1.288,79	3084	1.545,52	
3200	1074	656,39	1393	824,12	1849	982,58	2587	1.346,81	3290	1.616,39	
3400	1141	680,56	1481	856,48	1965	1.021,92	2749	1.404,82	3495	1.687,25	
3600	1208	704,72	1568	888,84	2080	1.061,26	2911	1.462,84	3701	1.758,12	
3800	1275	728,89	1655	921,20	2196	1.100,60	3073	1.520,85	3907	1.828,98	
4000	1342	753,06	1742	953,56	2312	1.139,94	3234	1.578,87	4112	1.899,85	
4200	1409	777,23	1829	985,92	2427	1.179,28	3396	1.636,89	4318	1.970,72	
4400	1476	801,40	1916	1.018,28	2543	1.218,62	3558	1.694,90	4523	2.041,58	
4600	1543	825,56	2003	1.050,64	2658	1.257,96	3719	1.752,92	4729	2.112,45	
4800	1610	849,73	2090	1.083,00	2774	1.297,30	3881	1.810,93	4935	2.183,31	
5000	1678	873,90	2177	1.115,36	2890	1.336,64	4043	1.868,95	5140	2.254,18	
5200	1745	898,07	2264	1.147,72	3005	1.375,98	4205	1.926,97	5346	2.325,05	
5400	1812	922,24	2351	1.180,08	3121	1.415,32	4366	1.984,98	5551	2.395,91	
5600	1879	946,40	2438	1.212,44	3236	1.454,66	4528	2.043,00	5757	2.466,78	
5800	1946	970,57	2526	1.244,80	3352	1.494,00	4690	2.101,01	5963	2.537,64	
6000	2013	994,74	2613	1.277,16	3467	1.533,34	4851	2.159,03	6168	2.608,51	

Surcharge for Completo, connections V013/V014, see page 15

Warning: Weight over 100 kg

Special colours: All RAL colours available in the Zehnder colour chart; other colours available on request. Surcharge category 1 = 20%, category 2 = 30%
For grille, see "Special versions", page 12

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 Radiavector

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

Height	mm	140									
Model		ZRV212	ZRV222	ZRV322	ZRV432	ZRV542					
Depth	mm	73	104	134	195	256					
Exponent	n	1,30	1,30	1,30	1,30	1,30					
Basic price	€	291,80	325,44	382,50	463,62	519,71					
Price/metre	€	202,76	332,23	396,26	571,56	813,22					
Length	mm	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
		Watt	€	Watt	€	Watt	€	Watt	€	Watt	€
400	210	372,90	277	458,33	361	541,00	505	692,24	642	845,00	
500	262	393,18	346	491,56	451	580,63	632	749,40	803	926,32	
600	314	413,46	416	524,78	542	620,26	758	806,56	964	1.007,64	
700	367	433,73	485	558,00	632	659,88	884	863,71	1124	1.088,96	
800	419	454,01	554	591,22	722	699,51	1010	920,87	1285	1.170,29	
900	472	474,28	623	624,45	812	739,13	1137	978,02	1445	1.251,61	
1000	524	494,56	693	657,67	903	778,76	1263	1.035,18	1606	1.332,93	
1100	577	514,84	762	690,89	993	818,39	1389	1.092,34	1767	1.414,25	
1200	629	535,11	831	724,12	1083	858,01	1516	1.149,49	1927	1.495,57	
1300	681	555,39	900	757,34	1174	897,64	1642	1.206,65	2088	1.576,90	
1400	734	575,66	970	790,56	1264	937,26	1768	1.263,80	2248	1.658,22	
1500	786	595,94	1039	823,79	1354	976,89	1895	1.320,96	2409	1.739,54	
1600	839	616,22	1108	857,01	1444	1.016,52	2021	1.378,12	2569	1.820,86	
1700	891	636,49	1178	890,23	1535	1.056,14	2147	1.435,27	2730	1.902,18	
1800	943	656,77	1247	923,45	1625	1.095,77	2274	1.492,43	2891	1.983,51	
1900	996	677,04	1316	956,68	1715	1.135,39	2400	1.549,58	3051	2.064,83	
2000	1048	697,32	1385	989,90	1806	1.175,02	2526	1.606,74	3212	2.146,15	
2200	1153	737,87	1524	1.056,35	1986	1.254,27	2779	1.721,05	3533	2.308,79	
2400	1258	778,42	1662	1.122,79	2167	1.333,52	3031	1.835,36	3854	2.471,44	
2600	1363	818,98	1801	1.189,24	2347	1.412,78	3284	1.949,68	4175	2.634,08	
2800	1468	859,53	1940	1.255,68	2528	1.492,03	3537	2.063,99	4497	2.796,73	
3000	1572	900,08	2078	1.322,13	2708	1.571,28	3789	2.178,30	4818	2.959,37	
3200	1677	940,63	2217	1.388,58	2889	1.650,53	4042	2.292,61	5139	3.122,01	
3400	1782	981,18	2355	1.455,02	3069	1.729,78	4294	2.406,92	5460	3.284,66	
3600	1887	1.021,74	2494	1.521,47	3250	1.809,04	4547	2.521,24	5781	3.447,30	
3800	1992	1.062,29	2632	1.587,91	3430	1.888,29	4800	2.635,55	6102	3.609,95	
4000	2096	1.102,84	2771	1.654,36	3611	1.967,54	5052	2.749,86	6424	3.772,59	
4200	2201	1.143,39	2909	1.720,81	3792	2.046,79	5305	2.864,17	6745	3.935,23	
4400	2306	1.183,94	3048	1.787,25	3972	2.126,04	5557	2.978,48	7066	4.097,88	
4600	2411	1.224,50	3186	1.853,70	4153	2.205,30	5810	3.092,80	7387	4.260,52	
4800	2516	1.265,05	3325	1.920,14	4333	2.284,55	6063	3.207,11	7708	4.423,17	
5000	2621	1.305,60	3463	1.986,59	4514	2.363,80	6315	3.321,42	8030	4.585,81	
5200	2725	1.346,15	3602	2.053,04	4694	2.443,05	6568	3.435,73	8351	4.748,45	
5400	2830	1.386,70	3741	2.119,48	4875	2.522,30	6821	3.550,04	8672	4.911,10	
5600	2935	1.427,26	3879	2.185,93	5055	2.601,56	7073	3.664,36	8993	5.073,74	
5800	3040	1.467,81	4018	2.252,37	5236	2.680,81	7326	3.778,67	9314	5.236,39	
6000	3145	1.508,36	4156	2.318,82	5417	2.760,06	7578	3.892,98	9635	5.399,03	

Surcharge for Completo, connections V013/V014, see page 15

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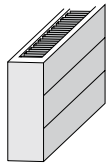
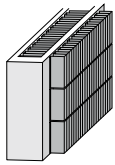
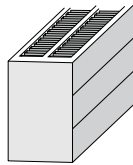
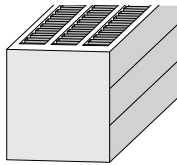
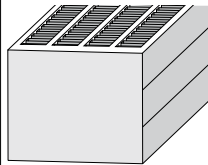
For grille, see "Special versions", page 12

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 Radiavector



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

Height	mm	210									
											
Model		ZRV213	ZRV223	ZRV323	ZRV433	ZRV543					
Depth	mm	73	104	134	195	256					
Exponent	n	1,30	1,29	1,30	1,30	1,30					
Basic price	€	334,59	378,67	469,20	612,45	776,11					
Price/metre	€	254,46	373,14	441,78	675,75	939,58					
Length	mm	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
		Watt	€	Watt	€	Watt	€	Watt	€	Watt	€
400	273	436,37	360	527,93	470	645,91	658	882,75	837	1.151,94	
500	341	461,82	450	565,24	588	690,09	823	950,33	1046	1.245,90	
600	410	487,27	540	602,55	706	734,27	987	1.017,90	1255	1.339,86	
700	478	512,71	630	639,87	823	778,45	1152	1.085,48	1464	1.433,82	
800	546	538,16	720	677,18	941	822,62	1316	1.153,05	1674	1.527,77	
900	614	563,60	810	714,50	1058	866,80	1481	1.220,63	1883	1.621,73	
1000	683	589,05	900	751,81	1176	910,98	1645	1.288,20	2092	1.715,69	
1100	751	614,50	990	789,12	1294	955,16	1810	1.355,78	2301	1.809,65	
1200	819	639,94	1080	826,44	1411	999,34	1974	1.423,35	2510	1.903,61	
1300	888	665,39	1170	863,75	1529	1.043,51	2139	1.490,93	2720	1.997,56	
1400	956	690,83	1260	901,07	1646	1.087,69	2304	1.558,50	2929	2.091,52	
1500	1024	716,28	1350	938,38	1764	1.131,87	2468	1.626,08	3138	2.185,48	
1600	1092	741,73	1440	975,69	1882	1.176,05	2633	1.693,65	3347	2.279,44	
1700	1161	767,17	1530	1.013,01	1999	1.220,23	2797	1.761,23	3556	2.373,40	
1800	1229	792,62	1620	1.050,32	2117	1.264,40	2962	1.828,80	3766	2.467,35	
1900	1297	818,06	1710	1.087,64	2234	1.308,58	3126	1.896,38	3975	2.561,31	
2000	1366	843,51	1800	1.124,95	2352	1.352,76	3291	1.963,95	4184	2.655,27	
2200	1502	894,40	1980	1.199,58	2587	1.441,12	3620	2.099,10	4602	2.843,19	
2400	1639	945,29	2160	1.274,21	2822	1.529,47	3949	2.234,25	5021	3.031,10	
2600	1775	996,19	2340	1.348,83	3058	1.617,83	4278	2.369,40	5439	3.219,02	
2800	1912	1.047,08	2520	1.423,46	3293	1.706,18	4607	2.504,55	5858	3.406,93	
3000	2048	1.097,97	2700	1.498,09	3528	1.794,54	4936	2.639,70	6276	3.594,85	
3200	2185	1.148,86	2881	1.572,72	3763	1.882,90	5265	2.774,85	6694	3.782,77	
3400	2321	1.199,75	3061	1.647,35	3998	1.971,25	5594	2.910,00	7113	3.970,68	
3600	2458	1.250,65	3241	1.721,97	4234	2.059,61	5923	3.045,15	7531	4.158,60	
3800	2594	1.301,54	3421	1.796,60	4469	2.147,96	6252	3.180,30	7950	4.346,51	
4000	2731	1.352,43	3601	1.871,23	4704	2.236,32	6581	3.315,45	8368	4.534,43	
4200	2868	1.403,32	3781	1.945,86	4939	2.324,68	6911	3.450,60	8786	4.722,35	
4400	3004	1.454,21	3961	2.020,49	5174	2.413,03	7240	3.585,75	9205	4.910,26	
4600	3141	1.505,11	4141	2.095,11	5410	2.501,39	7569	3.720,90	9623	5.098,18	
4800	3277	1.556,00	4321	2.169,74	5645	2.589,74	7898	3.856,05	10042	5.286,09	
5000	3414	1.606,89	4501	2.244,37	5880	2.678,10	8227	3.991,20	10460	5.474,01	
5200	3550	1.657,78	4681	2.319,00	6115	2.766,46	8556	4.126,35	10878	5.661,93	
5400	3687	1.708,67	4861	2.393,63	6350	2.854,81	8885	4.261,50	11297	5.849,84	
5600	3823	1.759,57	5041	2.468,25	6586	2.943,17	9214	4.396,65	11715	6.037,76	
5800	3960	1.810,46	5221	2.542,88	6821	3.031,52	9543	4.531,80	12134	6.225,67	
6000	4097	1.861,35	5401	2.617,51	7056	3.119,88	9872	4.666,95	12552	6.413,59	

Surcharge for Completo, connections V013/V014, see page 15

Warning: Weight over 100 kg

Special colours: All RAL colours available in the Zehnder colour chart; other colours available on request. Surcharge category 1 = 20%, category 2 = 30%

For grille, see "Special versions", page 12

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 Radiavector

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

Height	mm	280									
Model		ZRV214	ZRV224	ZRV324	ZRV434	ZRV544					
Depth	mm	73	104	134	195	256					
Exponent	n	1,30	1,29	1,30	1,30	1,30					
Basic price	€	453,29	438,59	480,48	632,63	781,34					
Price/metre	€	339,87	465,12	603,08	889,99	1.223,18					
Length	mm	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price	Φ_s	Price
		Watt	€	Watt	€	Watt	€	Watt	€	Watt	€
400	330	589,24	431	624,64	569	721,71	796	988,63	1012	1.270,61	
500	413	623,23	538	671,15	711	782,02	995	1.077,63	1265	1.392,93	
600	495	657,21	646	717,66	853	842,33	1194	1.166,62	1518	1.515,25	
700	578	691,20	754	764,17	996	902,64	1393	1.255,62	1771	1.637,57	
800	661	725,19	861	810,69	1138	962,94	1592	1.344,62	2024	1.759,88	
900	743	759,17	969	857,20	1280	1.023,25	1791	1.433,62	2277	1.882,20	
1000	826	793,16	1077	903,71	1422	1.083,56	1990	1.522,62	2530	2.004,52	
1100	908	827,15	1184	950,22	1564	1.143,87	2189	1.611,62	2783	2.126,84	
1200	991	861,13	1292	996,73	1707	1.204,18	2388	1.700,62	3036	2.249,16	
1300	1073	895,12	1400	1.043,25	1849	1.264,48	2587	1.789,62	3289	2.371,47	
1400	1156	929,11	1508	1.089,76	1991	1.324,79	2786	1.878,62	3542	2.493,79	
1500	1239	963,10	1615	1.136,27	2133	1.385,10	2985	1.967,62	3795	2.616,11	
1600	1321	997,08	1723	1.182,78	2275	1.445,41	3184	2.056,61	4048	2.738,43	
1700	1404	1.031,07	1831	1.229,29	2418	1.505,72	3383	2.145,61	4301	2.860,75	
1800	1486	1.065,06	1938	1.275,81	2560	1.566,02	3582	2.234,61	4554	2.983,06	
1900	1569	1.099,04	2046	1.322,32	2702	1.626,33	3781	2.323,61	4807	3.105,38	
2000	1651	1.133,03	2154	1.368,83	2844	1.686,64	3980	2.412,61	5060	3.227,70	
2200	1816	1.201,00	2369	1.461,85	3129	1.807,26	4378	2.590,61	5566	3.472,34	
2400	1982	1.268,98	2584	1.554,88	3413	1.927,87	4776	2.768,61	6072	3.716,97	
2600	2147	1.336,95	2800	1.647,90	3698	2.048,49	5173	2.946,60	6578	3.961,61	
2800	2312	1.404,93	3015	1.740,93	3982	2.169,10	5571	3.124,60	7084	4.206,24	
3000	2477	1.472,90	3230	1.833,95	4267	2.289,72	5969	3.302,60	7590	4.450,88	
3200	2642	1.540,87	3446	1.926,97	4551	2.410,34	6367	3.480,60	8096	4.695,52	
3400	2807	1.608,85	3661	2.020,00	4835	2.530,95	6765	3.658,60	8602	4.940,15	
3600	2972	1.676,82	3877	2.113,02	5120	2.651,57	7163	3.836,59	9108	5.184,79	
3800	3138	1.744,80	4092	2.206,05	5404	2.772,18	7561	4.014,59	9614	5.429,42	
4000	3303	1.812,77	4307	2.299,07	5689	2.892,80	7959	4.192,59	10120	5.674,06	
4200	3468	1.880,74	4523	2.392,09	5973	3.013,42	8357	4.370,59	10626	5.918,70	
4400	3633	1.948,72	4738	2.485,12	6258	3.134,03	8755	4.548,59	11132	6.163,33	
4600	3798	2.016,69	4953	2.578,14	6542	3.254,65	9153	4.726,58	11638	6.407,97	
4800	3963	2.084,67	5169	2.671,17	6826	3.375,26	9551	4.904,58	12144	6.652,60	
5000	4128	2.152,64	5384	2.764,19	7111	3.495,88	9949	5.082,58	12650	6.897,24	
5200	4294	2.220,61	5599	2.857,21	7395	3.616,50	10347	5.260,58	13156	7.141,88	
5400	4459	2.288,59	5815	2.950,24	7680	3.737,11	10745	5.438,58	13662	7.386,51	
5600	4624	2.356,56	6030	3.043,26	7964	3.857,73	11143	5.616,57	14168	7.631,15	
5800	4789	2.424,54	6246	3.136,29	8249	3.978,34	11541	5.794,57	14673	7.875,78	
6000	4954	2.492,51	6461	3.229,31	8533	4.098,96	11939	5.972,57	15179	8.120,42	

Surcharge for Completo, connections V013/V014, see page 15






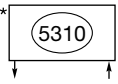
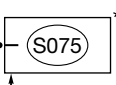
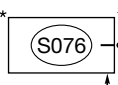
Warning: Weight over 100 kg

Special colours: All RAL colours available in the Zehnder colour chart; other colours available on request. Surcharge category 1 = 20%, category 2 = 30%

For grille, see "Special versions", page 12

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 Radiavector

		Price €								
Intermediate lengths calculated to next-largest catalogue length		+ 10% surcharge								
Special shape: angled or curved		On request								
Lugs (only for models without thermal radiation shield, for details, see p. 114)	per unit	13,14								
Grille – fixed with retaining springs all grilles are delivered with retaining springs (standard); grilles are also available as welded-on versions at no additional cost ¹⁾ (price per meter)										
Grille A  <table border="1" data-bbox="507 611 751 739"> <thead> <tr> <th>Grille</th> <th>Max. grille length*</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>3000</td> </tr> <tr> <td>B</td> <td>1500</td> </tr> <tr> <td>C</td> <td>2000</td> </tr> </tbody> </table> <p>* longer grilles are delivered in several parts or welded on</p>		Grille	Max. grille length*	A	3000	B	1500	C	2000	for type ZRV211 - 214 36,10 for type ZRV321 - 324 72,22 for type ZRV431 - 434 108,32 for type ZRV541 - 544 144,41
Grille	Max. grille length*									
A	3000									
B	1500									
C	2000									
Grille B 		for type ZRV211 - 214 43,32 for type ZRV321 - 324 86,66 for type ZRV431 - 434 129,97 for type ZRV541 - 544 173,29								
Grille C 										
High pressure version 10 bar - types ZRV		12% surcharge								
Block feet (only for finished floors, not possible for models ZRV211 - 214 + ZRV221 - 224) For hidden connections from below, same side (behind each other) or opposite end; additional central supports, symmetrically distributed:										
Height of radiator	70 to 280 mm:	3rd foot starting at length 2000 mm 4th foot starting at length 4000 mm	187,52 per foot							
Height of radiator	Model ZRV54x:	3rd foot starting at length 1100 mm 4th foot starting at length 2000 mm 5th foot starting at length 4000 mm								
		  For dimensions see connections on next page	61,54							
		  Dimensions available on request	61,54							
		¹⁾ Connections are behind one another over the depth of the radiator								
With Completto connection (Arrangement of block feet subject to variation)			On request							
Basis for calculating the surcharge is the standard finish version										
Bench frame			See page 20							

¹⁾ Cannot be combined with security clips

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 2-tube with external valve (unless indicated otherwise in the order, the connections are on the side facing the wall as standard)		
<p>opposite end</p> <p>S001 suitable for connection types: 1670/7210 and 2670/6210</p> <p>Same side</p>	<p>No surcharge</p>	
<p>from bottom to bottom</p> <p>Attention: For Completto, see p. 19</p>	<p>61,54</p>	
Connection 2-tube with external valve and block feet (price per foot, see "Special versions")		
<p>opposite-end connection</p>	<p>61,54</p>	

When an order is placed without indication of the connection type, 4 x 1/2" (S001) are delivered. Possible connections: 1670/7210 and 2670/6210.

- H = Height
- L = Length
- T = Depth
- N = Connection centre
- N₁ = Connection size (for high pressure version on request)
- * = Venting
- = Internal installations

Dimensions in mm

Connection size Ø	3/8"	1/2"	3/4"
N ₁	25	25	25
N ₁ for height 70 mm	16	18	-

¹⁾ Dimension from rear edge of radiator to centre connection for models ZRV221 - 224 + 31 mm

²⁾ Dimension for thermostat cut-out

Zehnder Radiavector



Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Connection 2-tube with external valve (unless indicated otherwise in the order, the connections are on the side facing the wall as standard)		
from bottom to bottom on side, connections next to each other 	209,11	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> <p>ZRV211 - 224</p> </div> <div style="text-align: center;"> <p>ZRV321 - 544</p> </div> </div> <p style="text-align: center;">For height 70 mm, pipe and profile fins are visible. A grille is recommended.</p>
from bottom to bottom on side, connections behind one another 	61,54	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> <p>ZRV321 - 324</p> </div> <div style="text-align: center;"> <p>ZRV431 - 544</p> </div> </div>
from bottom to bottom, central 50 mm 	192,00	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> <p>ZRV211 - 544</p> </div> <div style="text-align: center;"> <p>ZRV221 - 224</p> </div> </div> <div style="margin-top: 10px;"> </div> <p style="text-align: center;">For height 70 mm, pipe and profile fins are visible. A grille is recommended.</p>

When an order is placed without indication of the connection type, 4 x 1/2" (S001) are delivered. Possible connections: 1670/7210 and 2670/6210.

- H = Height
- L = Length
- T = Depth
- * = Venting
- = Internal installations

Dimensions in mm

¹⁾ Dimension from rear edge of radiator to centre connection for models ZRV221 - 224 + 31 mm

Zehnder Radiavector

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
Completo connection with integrated valve¹⁾ (max. recommended flow rate 250 kg/h)		
50 mm connection on side 	219,05	
opposite-end connection 	219,05	
central connection, 50 mm 	219,05	

For height 70 mm, pipe and profile fins are visible. A grille is recommended.

When an order is placed without indication of the connection type, 4 x 1/2" (S001) are delivered. Possible connections: 1670/7210 and 2670/6210.

- H = Height
- L = Length
- T = Depth
- * = Venting
- = Internal installations

Dimensions in mm

- 1) Pressure loss graph, see page 53
- 2) Dimension from rear edge of radiator to centre connection for models ZRV221 - 224 + 31 mm
- 3) Applies to Zehnder thermostat LH2

Zehnder Radiavector



Series version

Models	Opposite end connection, flow on left	Opposite end connection, flow on right
Height 70 mm Zeta value $3 \times 2 = 6$ (100% water quantity) ¹⁾		
Height 140–280 mm Zeta value 2 (100% water quantity) Plus $4 \times 2 = 8$ (50% water quantity)		
Models	Same-side connection, flow on left	Same-side connection, flow on right
Height 70 mm	Not possible	Not possible
Height 140 mm Zeta value $5 \times 2 = 10$ (100% water quantity)		
Height 210, 280 mm Zeta value $5 \times 2 = 10$ (100% water quantity)		

* Venting, Δ drainage, *** = Baffle 100% tight

¹⁾ Only possible with connection diameter 1/2"

Attention:

Surcharges for series version with baffle on request.

Zehnder Radiavectors can be installed in series according to the sketches shown above. The radiators are delivered individually, the connections are to be installed on site. Not more than 3 Zehnder Radiavectors of 6000 mm in length each should be installed in series. The recommended dimension for link pipes is 3/4".

Zehnder Radiavectors must be installed in accordance with the arrangement shown here. When placing an order, please indicate the required arrangement.

Inlet and outlet resistance zeta value $\zeta = 2,0$ per Zehnder Radiavector for connection dimensions 3/8" to 3/4" and water velocities of up to 1 m/sec. Internal resistance can be neglected for all models up to 6000 mm in length. In the series version, the zeta value for inlet and outlet must be taken into consideration for each Zehnder Radiavector.

Example:


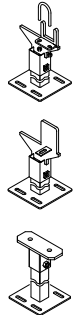

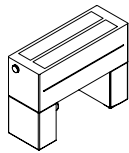
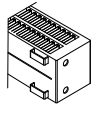
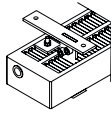
Installation in series type 10, 11, 12:

1 inlet and outlet zeta 2,0 with 100% water quantity plus 4 outlets and inlets zeta 2,0 with 50% water quantity.

Installation in series type 19, 20, 21:

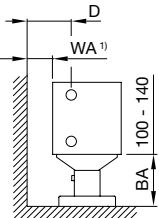
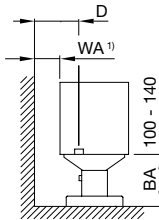
1 plus 4 inlets and outlets = 5 x zeta 2,0 with 100% water quantity.

Zehnder Radiavector

Description	Sketch / Height of console	Connection	Grille type	Model	
				ZRV211-214 ZRV221-224	ZRV3..-ZRV5..
Foot bracket	H = 100 - 140 mm 	Central connection	Standard	FMORV 14M	
		3370/5510		FMORV 14S	FMORV 14M
		Other connections		FMORV 14	FMORV 14M
		All connections	Welded	FMORV 14S	
	H _{max} = 460 mm 	Central connection	Standard	FMORV 45M	
		3370/5510		FMORV 45S	FMORV 45M
		Other connections		FMORV 45	FMORV 45M
		All connections	Welded	FMORV 45S	
Wall bracket		Central connection	Standard	WMORV M	
		3370/5510		WMORV S	WMORV M
		Other connections		WMORV	WMORV M
		All connections	Welded	WMORV S	
Block feet	140 mm (fix) 	Depending on model see page 12	Standard / Welded	-	see page 13 f.
Welded lugs				Details on page 25	
Church bench bracket				On request	

Drawings are exemplary. Details and order numbers for specific models, please see chapter „Accessories“. It is recommended to always order radiator with specific bracket.

Recommended for installation situations with normal or increased requirements.¹⁾

Description	Sketch Side view	Application	Quantity of foot brackets	Model	Article no. ²⁾	€/pc		
						White	White Colour	
Foot bracket FMORV 14		All models (without centre connections)						
		L = 400-2000 L > 2000-4000 L > 4000-6000	2 x FMORV 14 3 x FMORV 14 4 x FMORV 14	ZRV211, 221	169121	47,93	54,43	
				ZRV212, 222	169131	47,93	54,43	
				ZRV213, 223	169141	47,93	54,43	
				ZRV214, 224	169151	47,93	54,43	
				ZRV321	169241	47,93	54,43	
				ZRV322	169251	47,93	54,43	
				ZRV323	169261	47,93	54,43	
				ZRV324	169271	47,93	54,43	
				ZRV431	169281	47,93	54,43	
				ZRV432	169291	47,93	54,43	
		ZRV433	169301	47,93	54,43			
		ZRV434	169311	47,93	54,43			
		Distance D (with WA = 50): ZRV 86 mm ZRV221 - 224 117 mm	L = 400-1000 L > 1000-2000 L > 2000-4000 L > 4000-6000	2 x FMORV 14 3 x FMORV 14 4 x FMORV 14 5 x FMORV 14	ZRV541	169321	47,93	54,43
ZRV542	169331				47,93	54,43		
ZRV543	169341				47,93	54,43		
ZRV544	169351				47,93	54,43		
Foot bracket FMORV 14M		Models with centre connections and connections 3370/5510						
		L = 400-2000 L > 2000-4000 L > 4000-6000	2 x FMORV 14M 3 x FMORV 14M 4 x FMORV 14M	ZRV211, 221	169361	47,93	54,43	
				ZRV212, 222	169371	47,93	54,43	
				ZRV213, 223	169381	47,93	54,43	
				ZRV214, 224	169391	47,93	54,43	
				ZRV321	169401	47,93	54,43	
				ZRV322	169411	47,93	54,43	
				ZRV323	169421	47,93	54,43	
				ZRV324	169431	47,93	54,43	
				ZRV431	169441	47,93	54,43	
				ZRV432	169451	47,93	54,43	
		ZRV433	169461	47,93	54,43			
		ZRV434	169471	47,93	54,43			
		Distance D (with WA = 50): ZRV 86 mm ZRV221 - 224 117 mm	L = 400-1000 L > 1000-2000 L > 2000-4000 L > 4000-6000	2 x FMORV 14M 3 x FMORV 14M 4 x FMORV 14M 5 x FMORV 14M	ZRV541	169481	47,93	54,43
ZRV542	169491				47,93	54,43		
ZRV543	169501				47,93	54,43		
ZRV544	169511				47,93	54,43		

¹⁾ Notes on load requirements, safety and installation conditions in the keyword list, and additionally comply with the following note:**Note:**

Security clips (galvanised) are delivered as a locking device with each bracket. The security clips are hooked onto the fins and therefore cannot be combined with welded-on grilles.

²⁾ The article no. in colour is produced by replacing the end digit 1 by the end digit 9.

L = Length of radiator in mm

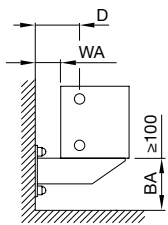
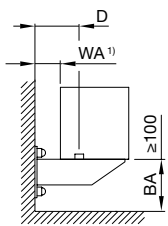
D = Distance from wall to middle of rear connection = return (if flow/return different) for WA = 50 mm, applicable for front connection

WA = Distance from wall to back of radiator, recommended clearance in front of walls 50 mm, in front of windows 100 mm (with thermal radiation shield)

BA = Distance to floor must be at least 100 mm.

Zehnder Radiavector

Recommended for installation situations with normal or increased requirements.¹⁾

Description	Sketch Side view	Application	Quantity of wall brackets	Model	Article no. ²⁾				
					White	White	Colour		
Wall bracket WMORV	 <p>Distance D: ZRV 86 mm ZRV221 - 224 86 mm</p>	All models (without centre connections or 3370/5510)							
		L = 400-2000 L > 2000-4000 L > 4000-6000	2 x WMORV 3 x WMORV 4 x WMORV	ZRV211, 221 ZRV212, 222 ZRV213, 223 ZRV214, 224	949081 949091 949101 949111	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25		
				ZRV321 ZRV322 ZRV323 ZRV324	949161 949171 949181 949191	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25		
				ZRV431 ZRV432 ZRV433 ZRV434	949201 949211 949221 949231	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25		
				ZRV541 ZRV542 ZRV543 ZRV544	949281 949291 949301 949311	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25		
		Wall bracket WMORV M	 <p>Distance D: ZRV 86 mm ZRV221 - 224 86 mm</p>	Models with centre connections and connections 3370/5510					
				L = 400-2000 L > 2000-4000 L > 4000-6000	2 x WMORV M 3 x WMORV M 4 x WMORV M	ZRV211, 221 ZRV212, 222 ZRV213, 223 ZRV214, 224	949401 949411 949421 949431	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25
						ZRV321 ZRV322 ZRV323 ZRV324	949481 949491 949501 949511	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25
						ZRV431 ZRV432 ZRV433 ZRV434	949521 949531 949541 949551	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25
						ZRV541 ZRV542 ZRV543 ZRV544	949601 949611 949621 949631	44,63 44,63 44,63 44,63	51,25 51,25 51,25 51,25

¹⁾ Notes on load requirements, safety and installation conditions in the keyword list, and additionally comply with the following note:**Note:**

Security clips (galvanised) are delivered as a locking device with each bracket. The security clips are hooked onto the fins and therefore cannot be combined with welded-on grilles.

²⁾ The article no. in colour is produced by replacing the end digit 1 by the end digit 9.

L = Length of radiator in mm

D = Distance from wall to middle of rear connection = return (if flow/return different), applicable for front connection

WA = 50 mm (models 221-224 WA = 18 mm)

BA = Distance to floor must be at least 100 mm.

Zehnder Radiavector



Recommended for installation situations with normal or increased requirements.¹⁾

Description	Sketch Side view	Application	Bench frame quantity	Model ²⁾	Article no. ³⁾ White	€/pc							
						White	Colour						
Bench frame	<table border="1" style="margin-top: 10px;"> <tr> <th>H</th> <th>H₁</th> </tr> <tr> <td>70</td> <td>65</td> </tr> <tr> <td>140-280</td> <td>135</td> </tr> </table>	H	H ₁	70	65	140-280	135	L = 400-2000 L > 2000-2600 L > 2600-4000 L > 4000-5300 L > 5300-6000	2 x 3 x 4 x 6 x 6 x	ZRV321 ZRV322 ZRV323 ZRV324 ZRV431 ZRV432 ZRV433 ZRV434	949761 949771 949781 949791 949801 949811 949821 949831	42,03 42,03 42,03 42,03 42,03 42,03 42,03 42,03	51,25 51,25 51,25 51,25 51,25 51,25 51,25 51,25
		H	H ₁										
		70	65										
		140-280	135										
		L = 400-1000 L > 1000-2000 L > 2000-4000 L > 4000-5300 L > 5300-6000	2 x 2 x 4 x 6 x 6 x	ZRV541 ZRV542 ZRV543 ZRV544	949841 949851 949861 949871	42,03 42,03 42,03 42,03	51,25 51,25 51,25 51,25						

The seat is to be ordered on site depending on the installation situation.

¹⁾ Notes on load requirements, safety and installation conditions in the keyword list, and additionally comply with the following note:

Note:
 1. Depending on the installation situation and accessibility, it may be necessary to have a locking device/security clip.

²⁾ Restriction for models with centre connections: Heights of 70 mm cannot be combined with bench frames; the bench frames can only be secured to a limited extent with heights of 140–280 mm.

³⁾ The article no. in colour is produced by replacing the end digit 1 by the end digit 9.

Seat installation

ZRV321	ZRV431	ZRV541

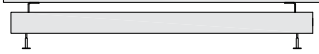
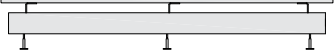
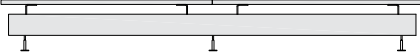
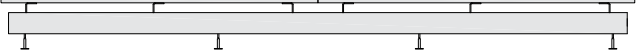


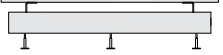



Note:
 Bench frames cannot be combined with grilles.
 Security clips for fixing the fins are delivered as a locking device with each bench frame.

H = Height of radiator in mm
 H₁ = Insertion depth of bench frame in radiator in mm

Dimensions in mm

Zehnder Radiavector

Recommended for a number of brackets and bench frames and for installations with normal or increased requirements.¹⁾

Radiator length	Quantity of brackets	Quantity of bench frames	Front view sketch
ZRV321-324, ZRV431-434			
L = 400-2000	2 x	2 x	
L > 2000-2600	3 x	3 x	
L > 2600-4000	3 x	4 x	
L > 4000-5300	4 x	6 x	
L > 5300-6000	4 x	6 x	
ZRV541-544			
L = 400-1000	2 x	2 x	
L > 1000-2000	3 x	2 x	
L > 2000-4000	4 x	4 x	
L > 4000-5300	5 x	6 x	
L > 5300-6000	5 x	6 x	

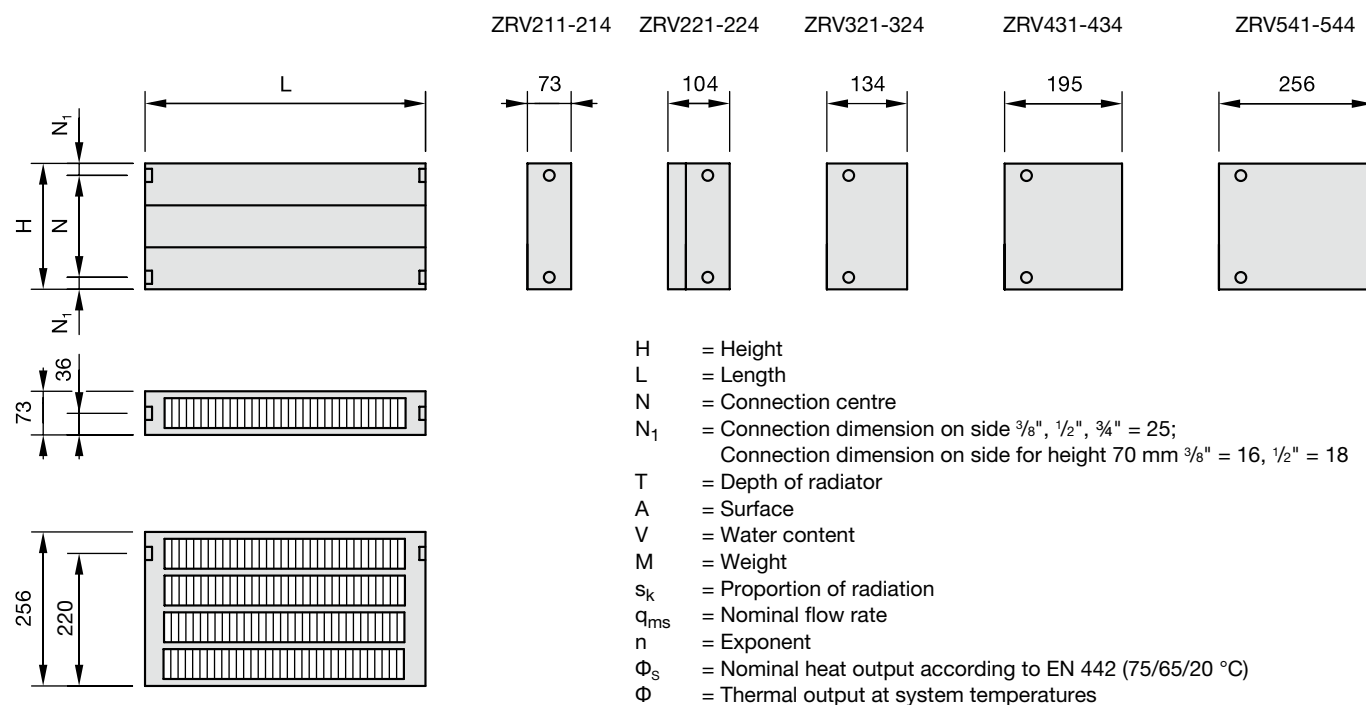
The seat is to be ordered on site depending on the installation situation.

¹⁾ Notes on load requirements, safety and installation conditions in the keyword list.

Zehnder Radiavector



All models



Dimensions in mm

Technical data for length 1000 mm												
Model	H	N	T	A	V	M	S _k	q _{ms}	Exp, n	Φ _s =ΔT 50 K EN 442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m ²	dm ³	kg	%	kg/h				
ZRV211	70	35	73	1,08	1,2	6,0	20	29	1,29	336	270	173
ZRV212	140	90	73	2,18	2,3	12,3	20	45	1,30	524	420	268
ZRV213	210	160	73	3,28	3,5	18,5	20	59	1,30	683	548	349
ZRV214	280	230	73	4,39	4,7	24,7	20	71	1,30	826	663	422
ZRV221	70	35	104	1,61	1,2	7,0	20	37	1,30	435	349	222
ZRV222	140	90	104	3,29	2,3	14,3	20	60	1,30	693	556	354
ZRV223	210	160	104	4,96	3,5	21,6	20	77	1,29	900	723	462
ZRV224	280	230	104	6,64	4,7	28,9	20	93	1,29	1077	865	553
ZRV321	70	35	134	2,00	1,8	9,6	10	50	1,29	578	464	297
ZRV322	140	90	134	4,07	3,7	19,6	10	78	1,30	903	724	461
ZRV323	210	160	134	6,13	5,5	29,6	10	101	1,30	1176	943	601
ZRV324	280	230	134	8,19	7,4	39,6	10	122	1,30	1422	1141	726
ZRV431	70	35	195	2,92	2,5	13,3	10	70	1,29	809	649	413
ZRV432	140	90	195	5,94	5,0	27,1	10	109	1,30	1263	1013	645
ZRV433	210	160	195	8,97	7,6	40,9	10	141	1,30	1645	1319	840
ZRV434	280	230	195	11,98	10,1	54,6	10	171	1,30	1990	1596	1016
ZRV541	70	35	256	3,84	3,2	17,0	10	88	1,29	1028	825	525
ZRV542	140	90	256	7,82	6,4	34,6	10	138	1,30	1606	1288	820
ZRV543	210	160	256	11,80	9,6	52,1	10	180	1,30	2092	1678	1069
ZRV544	280	230	256	15,78	12,8	69,7	10	218	1,30	2530	2029	1292

Zehnder Radiavector



Recommended for installation situations with normal or increased requirements.¹⁾

Dimensions for the location of the fixing pieces

Models	FMORV	
<p>Note:</p> <p>Preassembly of the brackets is not recommended, as the position of the fins cannot be indicated with mm precision in advance.</p>	<p>View from below</p>	<p>Front view</p> <p>ZRV2xx-ZRV4xx: 400–2000 mm ZRV5xx: 400–1000 mm</p> <p>ZRV2xx-ZRV4xx: > 2000–4000 mm ZRV5xx: > 1000–2000 mm</p> <p>ZRV2xx-ZRV4xx: > 4000–6000 mm ZRV5xx: > 2000–4000 mm</p> <p>ZRV5xx: > 4000–6000 mm</p>
WMORV		
<p>H = Height in mm T = Depth in mm</p>	<p>Rear view</p>	<p>Front view</p> <p>ZRV2xx-ZRV4xx: 400–2000 mm ZRV5xx: 400–1000 mm</p> <p>ZRV2xx-ZRV4xx: > 2000–4000 mm ZRV5xx: > 1000–2000 mm</p> <p>ZRV2xx-ZRV4xx: > 4000–6000 mm ZRV5xx: > 2000–4000 mm</p> <p>ZRV5xx: > 4000–6000 mm</p>

¹⁾ Notes on load requirements, safety and installation conditions in the keyword list.

²⁾ The setting back of the bracket from the outer edge can only be done approximately, based on the above information. This can also be reduced for side connections.

Zehnder Radiavector



Recommended for installation situations with normal or increased requirements.¹⁾

Dimensions for the location of the fixing pieces

Models	FMORV (centre connections)	
<p>Note:</p> <p>Preassembly of the brackets is not recommended, as the position of the fins cannot be indicated with mm precision in advance.</p>	<p>View from below</p>	<p>Front view</p> <p>ZRV2xx-ZRV4xx: 400–2000 mm ZRV5xx: 400–1000 mm</p> <p>ZRV2xx-ZRV4xx: > 2000–4000 mm ZRV5xx: > 1000–2000 mm</p> <p>$\frac{L}{2} \pm 100 \text{ mm}^3$</p> <p>ZRV2xx-ZRV4xx: > 4000–6000 mm ZRV5xx: > 2000–4000 mm</p> <p>$\frac{1}{3}$ $\frac{1}{3}$</p> <p>ZRV5xx: > 4000–6000 mm</p> <p>$\frac{L}{2} \pm 100 \text{ mm}^3$</p> <p>$\frac{1}{4}$ $\frac{1}{4}$</p>
<p>H = Height in mm T = Depth in mm</p>	<p>Rear view</p>	<p>Front view</p> <p>ZRV2xx-ZRV4xx: 400–2000 mm ZRV5xx: 400–1000 mm</p> <p>ZRV2xx-ZRV4xx: > 2000–4000 mm ZRV5xx: > 1000–2000 mm</p> <p>$\frac{L}{2} \pm 100 \text{ mm}^3$</p> <p>ZRV2xx-ZRV4xx: > 4000–6000 mm ZRV5xx: > 2000–4000 mm</p> <p>$\frac{1}{3}$ $\frac{1}{3}$</p> <p>ZRV5xx: > 4000–6000 mm</p> <p>$\frac{L}{2} \pm 100 \text{ mm}^3$</p> <p>$\frac{1}{4}$ $\frac{1}{4}$</p>

¹⁾ Notes on load requirements, safety and installation conditions in the keyword list.

²⁾ The setting back of the bracket from the outer edge can only be done approximately, based on the above information.

This can also be reduced for side connections.

³⁾ Due to centre connections: move the bracket 100 mm to the right or left.

Zehnder Radiavector

Lugs

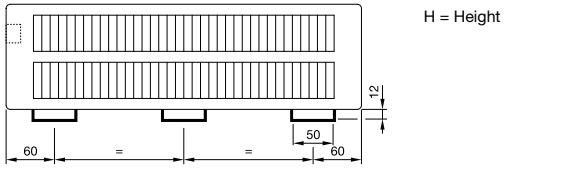
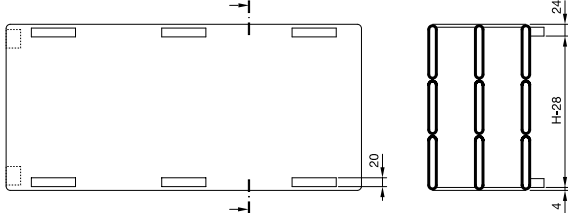
Zehnder Radiavectors are delivered in the standard version without lugs for assembly with wall brackets WMORV or foot brackets FMORV. On request, the Zehnder Radiavectors without thermal radiation shield can also be delivered with lugs for installation using suitable wall brackets, see “Special versions”. For brackets, see section on “Accessories”.

No. of lugs top/ bottom per	Zehnder Radiavectors ZRV	
		212, 322, 213, 323, 214, 324
Length L		
2	to 1600	to 1200
3	1700 to 3200	1300 to 2400
4	3300 to 4800	2500 to 3600
5	4900 to 6000	3700 to 4800
6	-	4900 to 6000

Dimensions in mm

Lugs are offset on the 70 mm height models (details on request)

For ZRV without additional fins

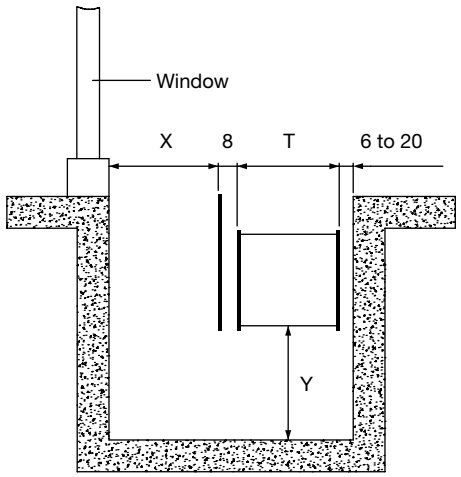


H = Height

Installation in floor ducts

X = Y = Min. depth T

Reduced output for open installation in floor ducts approx. 20%.
A grille with a free cross section of at least 70% across the floor duct will reduce the heat emission by approximately 35%.

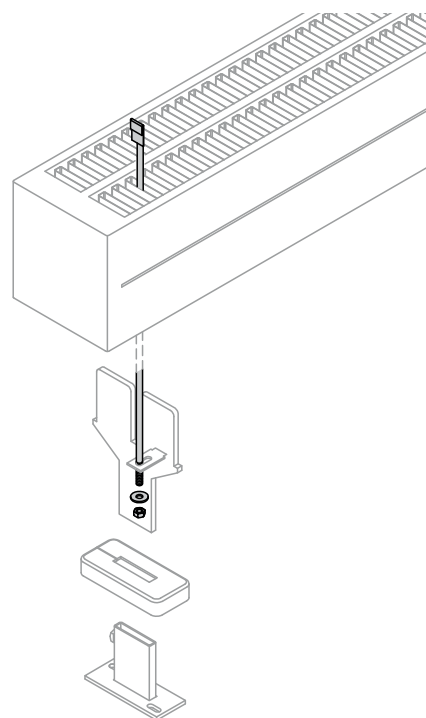
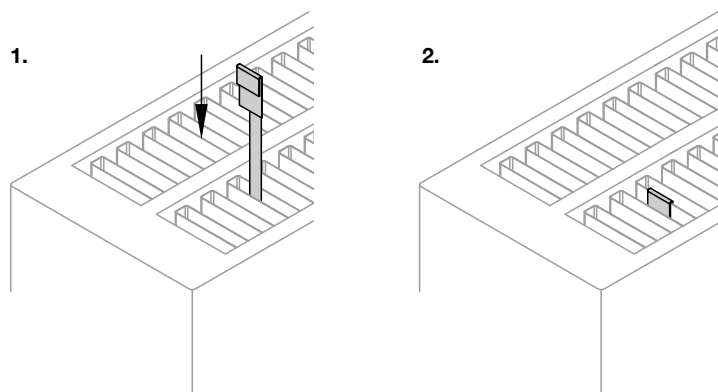


Zehnder Radiavector



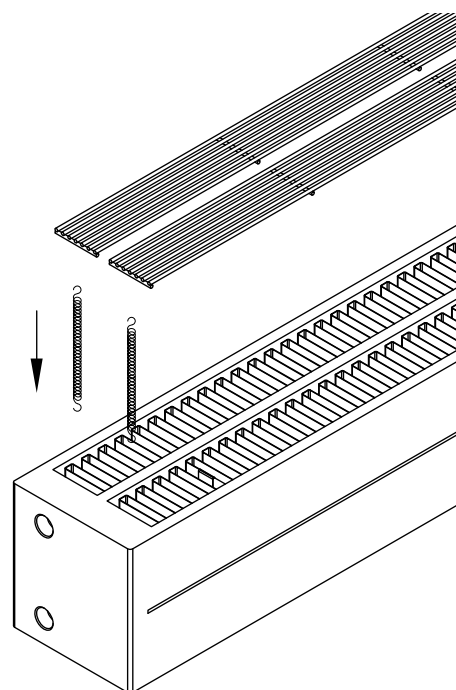
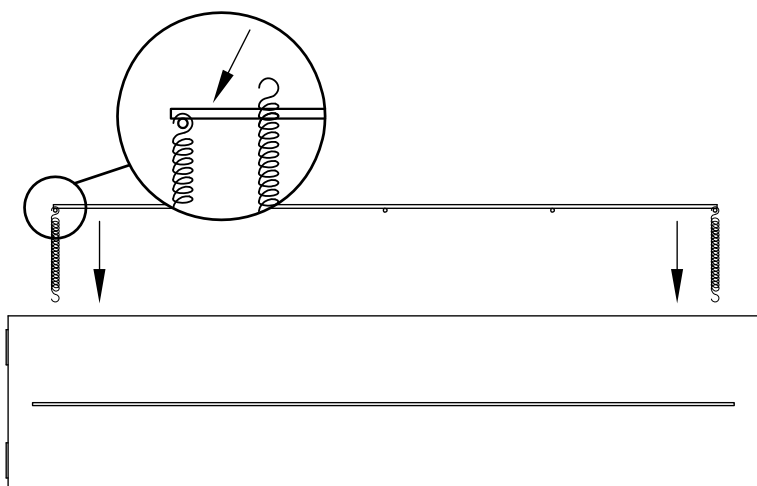
Security clip

For the Zehnder Radiavector, the security clip (galvanised) is delivered as a locking device with each bracket. The security clips are hooked onto the fins and therefore cannot be combined with welded-on grilles. Each of the four radiator heights has a compatible security clip which is fixed to the upper part of the bracket using the fixing material supplied.

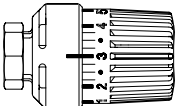


Retaining spring

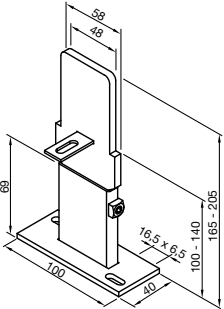
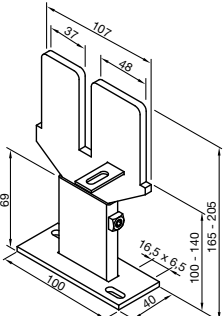
Galvanised retaining springs are delivered with Radiavectors with a standard grille. These springs are for decentralised fixing of the grille on the radiator. The retaining spring is hooked onto the grille and the bottom of the fins and cannot be removed without tools.



Other accessories

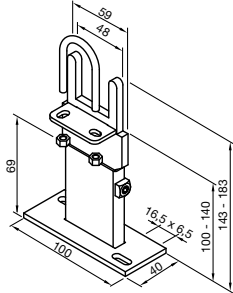
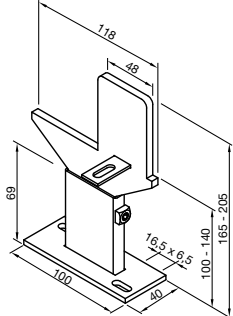
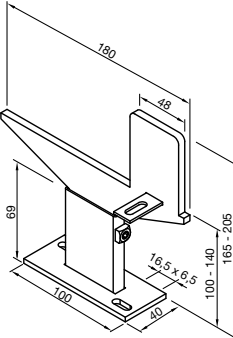
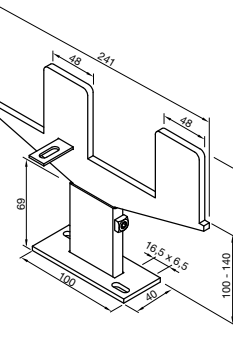
	Fixing Kits	Thermostats	Miscellaneous	Valves
Zehnder other accessories				
	30	41	42	43

Zehnder Radiavector: Individual brackets for floor mounting (for models without centre connections)

Description		Version	Article no.	Price €	Application
Foot bracket FMORV 14 With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV211-214 ZRV221-224		RAL 9016 ZRV211, 221 ZRV212, 222 ZRV213, 223 ZRV214, 224 Special finish ZRV211, 221 ZRV212, 222 ZRV213, 223 ZRV214, 224	169121 169131 169141 169151 169129 169139 169149 169159	47,93 47,93 47,93 47,93 54,43 54,43 54,43 54,43	Zehnder Radiavector (all models without centre connections or connections 3370/5510)
Foot bracket FMORV 14 With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV321-324		RAL 9016 ZRV321 ZRV322 ZRV323 ZRV324 Special finish ZRV321 ZRV322 ZRV323 ZRV324	169241 169251 169261 169271 169249 169259 169269 169279	47,93 47,93 47,93 47,93 54,43 54,43 54,43 54,43	

¹⁾ Covers: white cover for RAL 9016 radiator surface; grey cover for RAL 7024; black cover for RAL 9005; light grey cover for all other surfaces

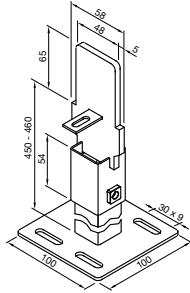
Zehnder Radiavector: Individual brackets for floor mounting (for models with centre connections and connections 3370/5510)

Description		Version	Article no.	Price €	Application
Foot bracket FMORV 14M With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV211-214 ZRV221-224		RAL 9016			
		ZRV211, 221	169361	47,93	Zehnder Radiavector (all models with centre connections and connections 3370/5510)
		ZRV212, 222	169371	47,93	
		ZRV213, 223	169381	47,93	
		ZRV214, 224	169391	47,93	
		Special finish			
		ZRV211, 221	169369	54,43	
		ZRV212, 222	169379	54,43	
		ZRV213, 223	169389	54,43	
		ZRV214, 224	169399	54,43	
Foot bracket FMORV 14M With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV321-324		RAL 9016			
		ZRV321	169401	47,93	
		ZRV322	169411	47,93	
		ZRV323	169421	47,93	
		ZRV324	169431	47,93	
		Special finish			
		ZRV321	169409	54,43	
		ZRV322	169419	54,43	
		ZRV323	169429	54,43	
		ZRV324	169439	54,43	
Foot bracket FMORV 14M With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV431-434		RAL 9016			
		ZRV431	169441	47,93	
		ZRV432	169451	47,93	
		ZRV433	169461	47,93	
		ZRV434	169471	47,93	
		Special finish			
		ZRV431	169449	54,43	
		ZRV432	169459	54,43	
		ZRV433	169469	54,43	
		ZRV434	169479	54,43	
Foot bracket FMORV 14M With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV541-544		RAL 9016			
		ZRV541	169481	47,93	
		ZRV542	169491	47,93	
		ZRV543	169501	47,93	
		ZRV544	169511	47,93	
		Special finish			
		ZRV541	169489	54,43	
		ZRV542	169499	54,43	
		ZRV543	169509	54,43	
		ZRV544	169519	54,43	

¹⁾ Covers: white cover for RAL 9016 radiator surface; grey cover for RAL 7024; black cover for RAL 9005; light grey cover for all other surfaces

Zehnder Radiavector: Individual brackets for floor mounting (for models without centre connections)

Description	Version	Article no.	Price €	Application	
Foot bracket FMORV 45 With footplate for tightening, security clip and standard cover ¹⁾ For Radiavector models: ZRV211-214 ZRV221-224	RAL 9016	ZRV211, 221	169521	74,22	Zehnder Radiavector (all models without centre connections or connections 3370/5510)
		ZRV212, 222	169531	74,22	
		ZRV213, 223	169541	74,22	
		ZRV214, 224	169551	74,22	
	Special finish	ZRV211, 221	169529	87,35	
		ZRV212, 222	169539	87,35	
		ZRV213, 223	169549	87,35	
		ZRV214, 224	169559	87,35	



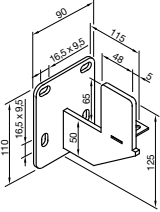
¹⁾ Covers: white cover for RAL 9016 radiator surface; grey cover for RAL 7024; black cover for RAL 9005; light grey cover for all other surfaces

Zehnder Radiavector: Individual brackets for floor mounting (for models with centre connections)

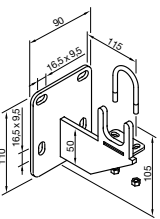
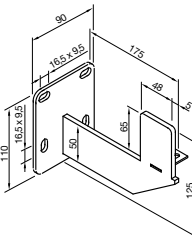
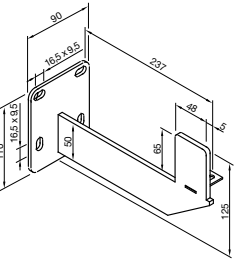
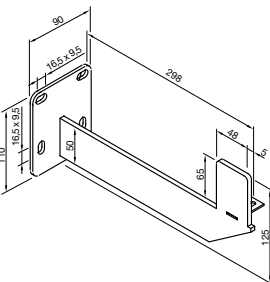
Description		Version	Article no.	Price €	Application
<p>Foot bracket FMORV 45M</p> <p>With footplate for tightening, security clip and standard cover¹⁾</p> <p>For Radiavector models: ZRV211-214 ZRV221-224</p>		<p>RAL 9016 ZRV211, 221 ZRV212, 222 ZRV213, 223 ZRV214, 224</p> <p>Special finish ZRV211, 221 ZRV212, 222 ZRV213, 223 ZRV214, 224</p>	<p>169761 169771 169781 169791</p> <p>169769 169779 169789 169799</p>	<p>74,22 74,22 74,22 74,22</p> <p>87,35 87,35 87,35 87,35</p>	<p>Zehnder Radiavector (all models with centre connections)</p>
<p>Foot bracket FMORV 45M</p> <p>With footplate for tightening, security clip and standard cover¹⁾</p> <p>For Radiavector models: ZRV321-324</p>		<p>RAL 9016 ZRV321 ZRV322 ZRV323 ZRV324</p> <p>Special finish ZRV321 ZRV322 ZRV323 ZRV324</p>	<p>169801 169811 169821 169831</p> <p>169809 169819 169829 169839</p>	<p>74,22 74,22 74,22 74,22</p> <p>87,35 87,35 87,35 87,35</p>	
<p>Foot bracket FMORV 45M</p> <p>With footplate for tightening, security clip and standard cover¹⁾</p> <p>For Radiavector models: ZRV431-434</p>		<p>RAL 9016 ZRV431 ZRV432 ZRV433 ZRV434</p> <p>Special finish ZRV431 ZRV432 ZRV433 ZRV434</p>	<p>169841 169851 169861 169871</p> <p>169849 169859 169869 169879</p>	<p>74,22 74,22 74,22 74,22</p> <p>87,35 87,35 87,35 87,35</p>	
<p>Foot bracket FMORV 45M</p> <p>With footplate for tightening, security clip and standard cover¹⁾</p> <p>For Radiavector models: ZRV541-544</p>		<p>RAL 9016 ZRV541 ZRV542 ZRV543 ZRV544</p> <p>Special finish ZRV541 ZRV542 ZRV543 ZRV544</p>	<p>169881 169891 169901 169911</p> <p>169889 169899 169909 169919</p>	<p>74,22 74,22 74,22 74,22</p> <p>87,35 87,35 87,35 87,35</p>	

¹⁾ Covers: white cover for RAL 9016 radiator surface; grey cover for RAL 7024; black cover for RAL 9005; light grey cover for all other surfaces

Zehnder Radiavector: Individual brackets for wall mounting (for models without centre connections)

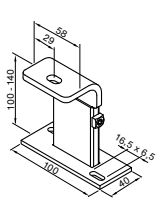
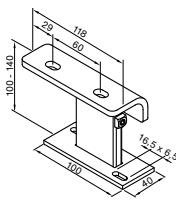
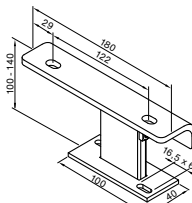
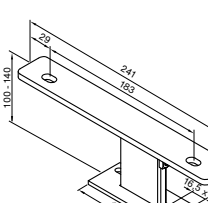
Description		Version	Article no.	Price €	Application
Wall bracket WMORV Wall bracket for tightening (not adjustable) and security clip. For Radiavector models: ZRV211-214 ZRV221-224		RAL 9016			
		ZRV211, 221	949081	44,63	Zehnder Radiavector (all models without centre connections or connections 3370/5510)
		ZRV212, 222	949091	44,63	
		ZRV213, 223	949101	44,63	
		ZRV214, 224	949111	44,63	
		Special finish			
		ZRV211, 221	949089	51,25	
		ZRV212, 222	949099	51,25	
		ZRV213, 223	949109	51,25	
		ZRV214, 224	949119	51,25	

Zehnder Radiavector: Individual brackets for wall mounting (for models with centre connections)

Description		Version	Article no.	Price €	Application
Wall bracket WMORV M Wall bracket for tightening (not adjustable) and security clip. For Radiavector models: ZRV211-214 ZRV221-224		RAL 9016			Zehnder Radiavector (all models with centre connections)
		ZRV211, 221	949401	44,63	
		ZRV212, 222	949411	44,63	
		ZRV213, 223	949421	44,63	
		ZRV214, 224	949431	44,63	
		Special finish			
ZRV211, 221	949409	51,25			
ZRV212, 222	949419	51,25			
ZRV213, 223	949429	51,25			
ZRV214, 224	949439	51,25			
Wall bracket WMORV M Wall bracket for tightening (not adjustable) and security clip. For Radiavector models: ZRV321-324		RAL 9016			
		ZRV321	949481	44,63	
		ZRV322	949491	44,63	
		ZRV323	949501	44,63	
		ZRV324	949511	44,63	
		Special finish			
ZRV321	949489	51,25			
ZRV322	949499	51,25			
ZRV323	949509	51,25			
ZRV324	949519	51,25			
Wall bracket WMORV M Wall bracket for tightening (not adjustable) and security clip. For Radiavector models: ZRV431-434		RAL 9016			
		ZRV431	949521	44,63	
		ZRV432	949531	44,63	
		ZRV433	949541	44,63	
		ZRV434	949551	44,63	
		Special finish			
ZRV431	949529	51,25			
ZRV432	949539	51,25			
ZRV433	949549	51,25			
ZRV434	949559	51,25			
Wall bracket WMORV M Wall bracket for tightening (not adjustable) and security clip. For Radiavector models: ZRV541-544		RAL 9016			
		ZRV541	949601	44,63	
		ZRV542	949611	44,63	
		ZRV543	949621	44,63	
		ZRV544	949631	44,63	
		Special finish			
ZRV541	949609	51,25			
ZRV542	949619	51,25			
ZRV543	949629	51,25			
ZRV544	949639	51,25			

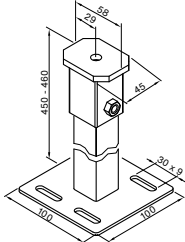
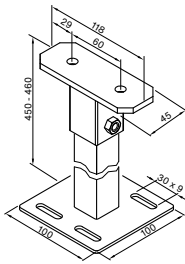
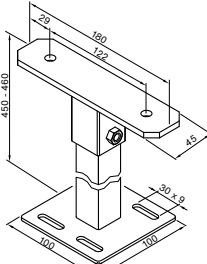
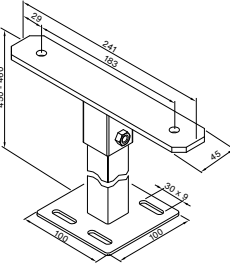
Zehnder Radiavector: Individual brackets for wall mounting

(for radiators with welded-on grille, for reorder only, matching only for radiators with factory-made, bottom side welded-on threaded plate)

Description		Version	Article no.	Price €	Application
Foot bracket FMORV 14S Foot bracket for tightening. For Radiavector models: ZRV211-214 ZRV221-224		RAL 9016 Top Bottom Special finish Top Bottom	767411 767401 767419 767409	on request	Zehnder Radiavector (with welded-on grille or connections 3370/5510)
Foot bracket FMORV 14S Foot bracket for tightening. For Radiavector models: ZRV321-324		RAL 9016 Top Bottom Special finish Top Bottom	767421 767401 767429 767409	on request	Zehnder Radiavector (with welded-on grille or models ZRV211 with connections 3370/5510)
Foot bracket FMORV 14S Foot bracket for tightening. For Radiavector models: ZRV431-434		RAL 9016 Top Bottom Special finish Top Bottom	767431 767401 767439 767409		
Foot bracket FMORV 14S Foot bracket for tightening. For Radiavector models: ZRV541-544		RAL 9016 Top Bottom Special finish Top Bottom	767441 767401 767449 767409		

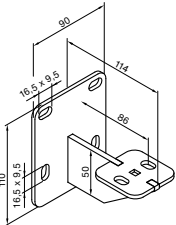
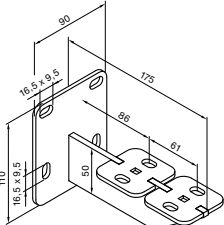
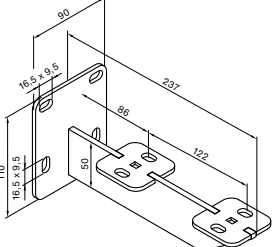
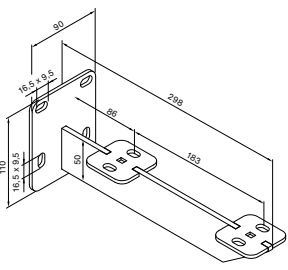
Zehnder Radiavector: Individual brackets for wall mounting

(for radiators with welded-on grille, for reorder only, matching only for radiators with factory-made, bottom side welded-on threaded plate)

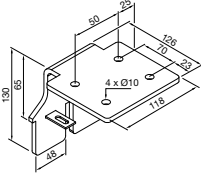
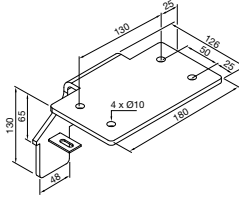
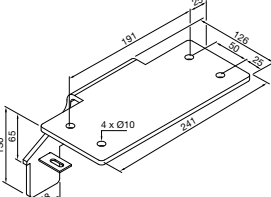
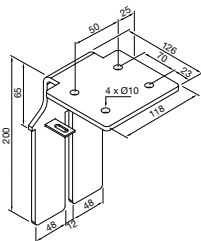
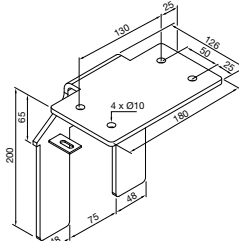
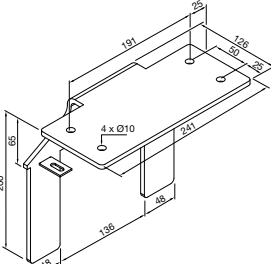
Description		Version	Article no.	Price €	Application
<p>Foot bracket FMORV 45S Foot bracket for tightening.</p> <p>For Radiavector models: ZRV211-214 ZRV221-224</p>		<p>RAL 9016 Top Bottom</p> <p>Special finish Top Bottom</p>	<p>767471 767461</p> <p>767479 767469</p>	<p>on request</p>	<p>Zehnder Radiavector (with welded-on grille or connections 3370/5510)</p>
<p>Foot bracket FMORV 45S Foot bracket for tightening.</p> <p>For Radiavector models: ZRV321-324 ZRV211/1-214/1</p>		<p>RAL 9016 Top Bottom</p> <p>Special finish Top Bottom</p>	<p>767481 767461</p> <p>767489 767469</p>	<p>on request</p>	<p>Zehnder Radiavector (with welded-on grille or models ZRV211 with connections 3370/5510)</p>
<p>Foot bracket FMORV 45S Foot bracket for tightening.</p> <p>For Radiavector models: ZRV431-434 ZRV321/1-324/1</p>		<p>RAL 9016 Top Bottom</p> <p>Special finish Top Bottom</p>	<p>767491 767461</p> <p>767499 767469</p>		
<p>Foot bracket FMORV 45S Foot bracket for tightening.</p> <p>For Radiavector models: ZRV541-544 ZRV431/1-434/1</p>		<p>RAL 9016 Top Bottom</p> <p>Special finish Top Bottom</p>	<p>767501 767461</p> <p>767509 767469</p>		

Zehnder Radiavector: Individual brackets for wall mounting

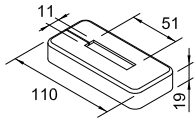
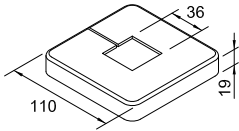
(for radiators with welded-on grille, for reorder only, matching only for radiators with factory-made, bottom side welded-on threaded plate)

Description		Version	Article no.	Price €	Application
Wall bracket WMORV S Bracket for tightening. For Radiavector models: ZRV211-214 ZRV221-224		RAL 9016 Special finish	948261 948269	on request	Zehnder Radiavector (with welded-on grille or connections 3370/5510)
Wall bracket WMORV S Bracket for tightening. For Radiavector models: ZRV321-324		RAL 9016 Special finish	948271 948279	on request	Zehnder Radiavector (with welded-on grille or models ZRV211 with connections 3370/5510)
Wall bracket WMORV S Bracket for tightening. For Radiavector models: ZRV431-434		RAL 9016 Special finish	948281 948289		
Wall bracket WMORV S Bracket for tightening. For Radiavector models: ZRV541-544		RAL 9016 Special finish	948291 948299		

Zehnder Radiavector: Bench frame





Description		Version	Article no.	Price €	Application
Bench frame For height 70 mm incl. security clip For Radiavector models: ZRV321		RAL 9016 ZRV321	949761	42,03	Zehnder Radiavector
		Special finish ZRV321	949769	51,25	
Bench frame For height 70 mm incl. security clip For Radiavector models: ZRV431		RAL 9016 ZRV431	949801	42,03	
		Special finish ZRV431	949809	51,25	
Bench frame For height 70 mm incl. security clip For Radiavector models: ZRV541		RAL 9016 ZRV541	949841	42,03	
		Special finish ZRV541	949849	51,25	
Bench frame For heights 140, 210, 280 mm incl. security clip For Radiavector models: ZRV322-324		RAL 9016 ZRV322	949771	42,03	
		ZRV323	949781	42,03	
		ZRV324	949791	42,03	
		Special finish ZRV322	949779	51,25	
		ZRV323	949789	51,25	
		ZRV324	949799	51,25	
Bench frame For heights 140, 210, 280 mm incl. security clip For Radiavector models: ZRV432-434		RAL 9016 ZRV432	949811	42,03	
		ZRV433	949821	42,03	
		ZRV434	949831	42,03	
		Special finish ZRV432	949819	51,25	
		ZRV433	949829	51,25	
		ZRV434	949839	51,25	
Bench frame For heights 140, 210, 280 mm incl. security clip For Radiavector models: ZRV542-544		RAL 9016 ZRV542	949851	42,03	
		ZRV543	949861	42,03	
		ZRV544	949871	42,03	
		Special finish ZRV542	949859	51,25	
		ZRV543	949869	51,25	
		ZRV544	949879	51,25	

Zehnder Radiavector: Miscellaneous

Description		Version	Article no.	Price €	Application
Standard cover¹⁾ For footplate 50 x 110 mm Suitable for brackets FMORV14(M)		Plastic: - White - Light grey - Dark grey - Black	970071 970099 970079 970089	8,34 8,34 8,34 8,34	Zehnder Radiavector
Cover for FMORV45(M)¹⁾ For square tube 30 x 30 mm and footplate 110 x 110 mm		Plastic: - White - Light grey - Dark grey - Black	970031 970059 970039 970049	8,34 8,34 8,34 8,34	Zehnder Radiavector

¹⁾ Covers: white cover for RAL 9016 radiator surface; grey cover for RAL 7024; black cover for RAL 9005; light grey cover for all other surfaces

Thermostats


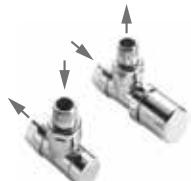

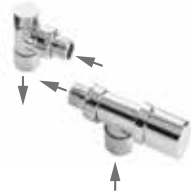

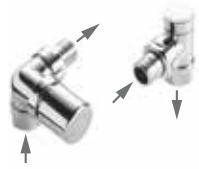
Description		Version	Article number	Price €	Application
Zehnder thermostat "LH2" Thermostat with integrated fluid sensor, tested according to EN 215. Can be restricted and locked to individual reference value of 7 to 28 °C. Version with zero setting and threaded connection for thermostat M 30 x 1,5		White Chrome	819140 819148	35,02 60,35	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	35,02 53,36	
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	38,09 53,47 53,47	
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 Special finish	841271 841278 853720 841279	64,11 64,11 131,65 73,79	

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

Miscellaneous

Description	Version	Article number	Price €	Application
Adaptor nipple From 1/2" female thread to 3/4" external thread for screwing with O-ring seal	No illustration	837110	9,01	For all radiators
Directional air vent, nickel-plated, self-sealing	1/4"	816010	4,17	For all radiators
	3/8"	816020	4,17	
	1/2"	816030	4,17	
	3/8"	816040	4,17	
Directional air vent, chrome-plated, self-sealing Suitable for max. operating pressure of 18 bar	1/2"	816070	7,09	
Blanking plug, nickel-plated, self-sealing	1/2"	974020	2,39	For all radiators
Blanking plug, chrome-plated Suitable for operating pressure up to max. 18 bar	1/2"	974058	6,28	
Angle adapter for thermostat M 30 x 1,5	White	819500	13,92	For all radiators with threaded connection M 30 x 1,5 mm
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	30,75 30,75 30,75 30,75	
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	26,18 26,18 26,18	

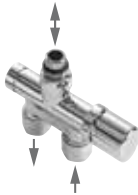
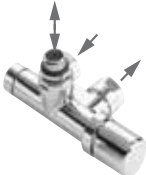
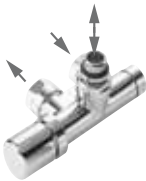




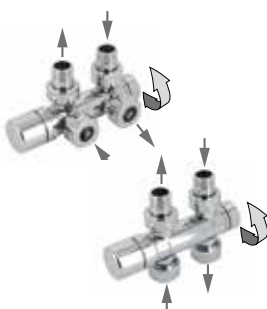
Zehnder Design Line Valve

Description		Version	Article number	Price €	Application
Valve set type A Angled flow and lockshield, thermostatic 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		Chrome	838888	76,44	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	119,66 119,66	
Valve set type C Straight 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	838941 838948	119,66 119,66	
Valve set type D Reverse flow and angled 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	838951 838958	125,37 125,37	
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	133,41 133,41	
Valve set type I Angled-angled flow head to the right, manual handwheel, thermostatic 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	133,41 133,41	

→ Direction of flow

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.

All valves respectively connection fittings are delivered with handwheels as protection caps (thermostatic heads to be ordered separately) and union nuts as transition to the tube (matching adaptors and connection sets are to be ordered separately!) --> see page 46

Description		Version	Article number	Price €	Application
Valve type J Single entry/monotube valve vertical, straight, with by-pass, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, turnable for manual handwheel to the left or right, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body and dip tube, without adaptors for pipes		White Chrome	839001 839008	132,50 132,50	For all radiators with 1/2" female thread
Valve type K Single entry/monotube valve vertical, angled, with by-pass, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel to the right, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body and dip tube, without adaptors for pipes		White Chrome	839011 839018	129,26 129,26	
Valve type M Single entry/monotube valve vertical, angled, with by-pass, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel to the left, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body and dip tube, without adaptors for pipes		White Chrome	839021 839028	129,26 129,26	
Valve type N Single entry/monotube valve horizontal, straight, with by-pass, thermostatic insert M 30 x 1,5 mm with pre-setting 1-7, manual handwheel to the top, including 2 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body and dip tube, without adaptors for pipes		White Chrome	839031 839038	173,82 173,82	
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 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839041 839048	132,50 132,50	
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 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839051 839058	132,50 132,50	
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 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839101 839108	132,50 132,50	
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 pcs 3/4" Eurocone nuts Ø 16,8 mm in finish of valve body, without adaptors for pipes		White Chrome	839171 839178	242,19 242,19	

Zehnder Design Line Coloured Valves





Description	Version	Article nr.	Price €	Application
<p>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</p>	Special finish	841279	73,79	For all radiators with ½" female thread, in colour of radiator
<p>Valve set type B Angled flow and lockshield, 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. 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.</p>	Special finish			
	Valve set with manual handwheel	838899	119,66	
	Valve set including Design Line thermostat	839439	193,45	
<p>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 ¾" 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.</p>	Special finish			
	Valve set with manual handwheel	839049	132,50	
	Valve set including Design Line thermostat	839409	206,29	
<p>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 ¾" 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.</p>	Special finish			
	Valve set with manual handwheel	839059	132,50	
	Valve set including Design Line thermostat	839419	206,29	
<p>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 ¾" 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.</p>	Special finish			
	Valve set with manual handwheel	839109	132,50	
	Valve set including Design Line thermostat	839429	206,29	

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	24,23 24,23	Adaptor for screw fittings with ½" external thread
Adaptors, 2 pcs Multilayer Ø 14 mm	Brass	842160	11,41	
Adaptors, 2 pcs Multilayer 16 x 2,0 mm	Brass	842060	11,41	Matching to Zehnder Design Line valves and union nuts (2 x ¾" Eurocone Ø 16,8 mm) which are in the scope of delivery
Adaptors, 2 pcs PEX 12 x 1,0 mm	Brass	842070	11,41	
Adaptors, 2 pcs Multilayer Ø 16 x 2,25 mm	Brass	842170	11,41	
Adaptors, 2 pcs Copper Ø 10 mm	Brass	842080	7,13	
Copper Ø 12 mm	Brass	842090	7,13	
Copper Ø 14 mm	Brass	842100	7,13	
Copper Ø 15 mm	Brass	842110	7,13	
Copper Ø 16 mm	Brass	842120	7,13	
Nuts Ø 18 mm - ¾" Eurocone + adaptors copper Ø 18 mm 2 pcs	Chrome / Brass	842140	35,63	
Nuts Ø 20,8 mm - ¾" Eurocone + adaptors multilayer Ø 20 x 2 mm 2 pcs	Chrome / Brass	842150	35,63	
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	39,90	

Zehnder Design Line Accessories

Description		Version	Article number	Price €	Application
Sleeving kit L = 70 mm L = 160 mm		Chrome Chrome	853738 853668	24,23 31,33	For radiator installation
Collar Ø45 mm for Ø ½" for Ø 10 mm for Ø 12 mm for Ø 14 mm for Ø 15 mm for Ø 16 mm for Ø 18 mm		White Chrome White Chrome White Chrome White Chrome White Chrome White Chrome	816241 816248 816251 816258 816261 816268 816271 816278 816281 816288 816291 816298 816301 816308	2,85 7,13 2,85 7,13 2,85 7,13 2,85 7,13 2,85 7,13	For existing connections

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.

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.



The following parameters, which allow the CE mark to be shown, can be found in the respective product section:

- Model designation
- Max. operating pressure
- Nominal heat output

Product/product family	CE - Year
Zehnder Radiavector	CE - 18

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 1/2". 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. 33 common colours make up Zehnder colour category 1, with an additional charge of 20%, 12 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. 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 radiators and EcoDesign guidelines

The electric guidelines define fixed units consisting of a corpus, a filling medium (heat transfer liquid), a heating insert and a matching control device. This unit is the base for a function test and it may not be modified.

The heat transfer liquid is frost proof up to -20 °C, if there are no further restrictions listed in the standard scope of delivery for the corresponding radiator.

Electric radiators are subject to the EcoDesign guidelines. Aim of this guideline is the reduction of environmental impacts of relevant energy consumption production taking the product lifecycle into consideration. The fulfillment of the guideline is rated according a specific points system. Different functions are e.g. stand-by mode ≤ 05 W weekly program or open-window detection contribute in fulfilling the minimum requirements. The electrical radiators in this price-list match the EcoDesign guidelines.

Please note:

- The electrical installations need to be accordance with local guidelines.
- For fixed installations (without plug) a switch needs to be installed. (All poles of the power supply with min 3m contact distance.)
- The filling capacity may not be altered.
- The electric heating element and connection cable may only be opened and replaced by the manufacturer.
- When installing an electrical radiator, a qualified electrician is the competent person to contact.
- Follow the user manual precisely.

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

Keyword list

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.

Fins

To increase the convective thermal output, convection fins are used.

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

Product/product family	Maximum dimension galvanised
Zehnder Radiavector	-

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".

Grille

Grilles can be ordered for various radiators. Detailed information is given alongside the relevant products. See keyword "Reduced output".

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.

Product/product family	Hygiene
Zehnder Radiavector	-

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 radiators in lengths above the set maximum number of elements are supplied in sub-blocks and must be joined together on site.

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 following table shows 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%.

For some radiators, similar conditions can be reached through additional installations, even at lower water flows as shown in the following table. More information is available on request.

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".

Product/product family	Standard version [bar]	High pressure version [bar]
Zehnder Radiavector	5	10

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 $\frac{3}{8}$ " to $\frac{1}{4}$ " 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: FCA 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.

Product/product family	$q_{m \text{ min}}$ in % of $q_{m \text{ s}}$
Zehnder Radiavector	30%

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.

The requirement for thermal radiation shields previously anchored in the Federal Heat Insulation Ordinance (WVO) is also fulfilled as a result of this.

The installation of thermal radiation shields in front of external glazing is also expedient in times of the Energy Saving Ordinance (EnEV) and is recommended especially with low overall heat transfer resistance on the part of the windows.

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.

Safety

See "Statutory Accident Insurer".

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.

Special finish

See "Finish" and "Colours".

Special versions

Product/product family	angled	bevelled	curved	Galvanised
Zehnder Radiavector	-	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.

Keyword list

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 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	$t_1 = 75 \text{ °C}$
Return temperature	$t_2 = 65 \text{ °C}$
Mean water temperature	$t_m = 70 \text{ °C}$
Room temperature	$t_r = 20 \text{ °C}$
Excess temperature ($t_m - t_r$)	$\Delta T = 50 \text{ K}$

Thermal outputs Φ (different ΔT than 50 K)

For all excess temperatures other than $\Delta T_n = 50 \text{ K}$, 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 55.

These can be used to directly read off the f_1 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

1. Example of Zehnder Radiavector:

Model ZRV433, length 1500 mm

$\Phi_s = 2468 \text{ W}$, exponent $n = 1,30$

$t_1 = 70 \text{ °C}$, $t_2 = 50 \text{ °C}$, $t_r = 22 \text{ °C}$

Determine the f_1 factor from the table on page 56.

$$\phi = 2437 \text{ W} \times 0,672 = \underline{\underline{1638 \text{ W}}}$$

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.

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 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 shall be sixty (60) months from date of delivery to Buyer. Excluded are electrical radiators, electrical and electronic components. The warranty period for these products is twenty-four (24) months.

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 seepage of oxygen into the system.

Wetrooms

See "Surface protection"

Keyword list

Legend

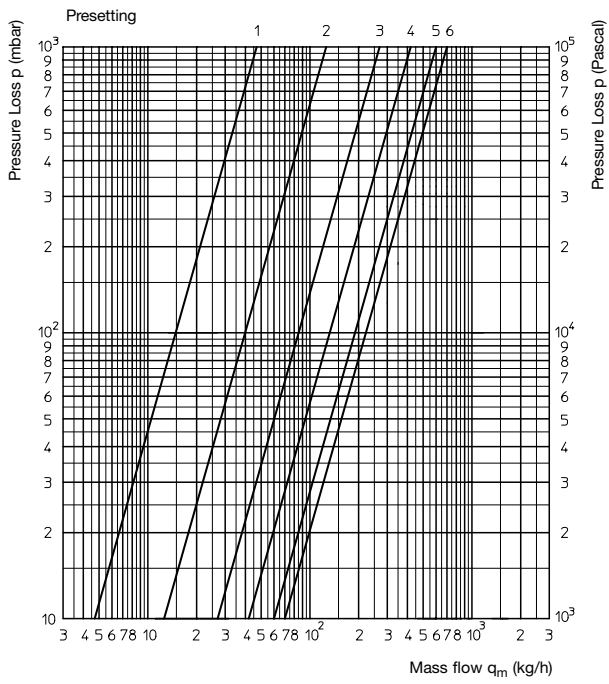
Icon	Unit	Description
H	mm	Height
L	mm	Length
T	mm	Depth
H Lam.	mm	Height of fins
N	mm	Boss spacing
A	m ²	Surface
V	dm ³	Water content
M	kg	Empty weight
N _s	-	Number of elements
t ₁	°C	Flow temperature
t ₂	°C	Return temperature
t _r	°C	Room air temperature
t _m	°C	Mean water temperature (t ₁ +t ₂)/2
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 diagram valves

Valve insert AV6, A (Oventrop) – with integrated valve: Zehnder Radiavector



Presetting	1	2	3	4	5	6
kv-value	0,047	0,126	0,269	0,417	0,6	0,7

Conversion table, f_1 factor

		t_2		75					70					65					60					55				
		t_1	t_r	n	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
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	0,966	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	1,017	1,018	1,019		
	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	0,967	0,966	0,964	0,963		
	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	0,985		
	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: $\Phi = \Phi_s \cdot f_1$

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

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
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Conversion table, f_1 factor

t_1	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
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
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
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	0,811	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
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
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
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
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
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	0,447	0,433	0,418	0,405	0,391
	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	0,334	0,319	0,304	0,291	0,278
	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	0,284	0,270	0,257	0,244	0,231	0,218
	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	0,255	0,241					

Zehnder comfortable indoor ventilation

Functional principle



1. Fresh air is fed into the system via an external wall vent. The fresh outdoor air can optionally flow through the Zehnder ComfoFond-L sub-soil heat exchanger, which uses geothermal energy to pre-temper the outdoor air.

2. The Zehnder ComfoAir ventilation unit recovers up to 95% of the energy from the extract air and returns it to the fresh air. This can be humidified, dehumidified and pre-tempered using optional components.

3. The Zehnder ComfoFresh air distribution system channels fresh air at the right temperature to individual rooms as needed and vents the extract air to the outside. The air volume can be individually adjusted for each room.

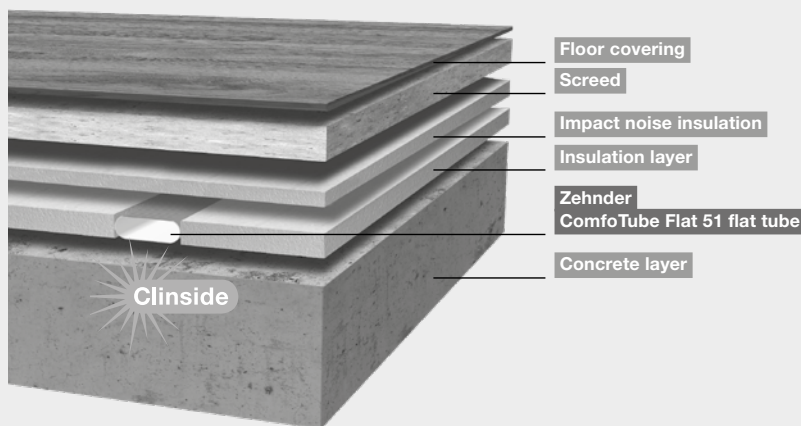


Zehnder comfortable indoor ventilation

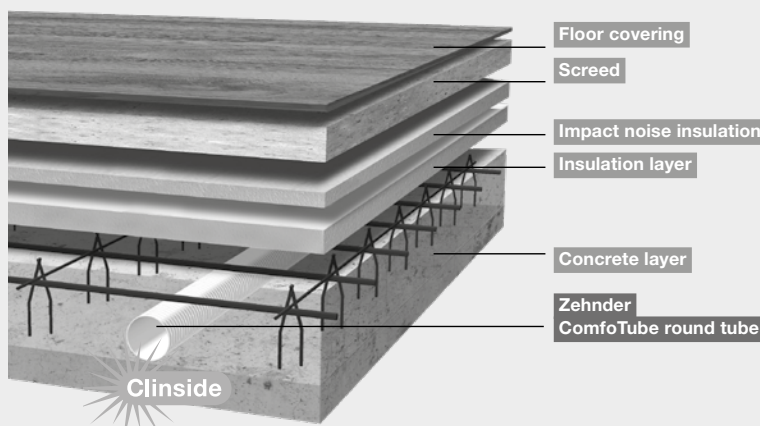
Air distribution system – effective and hygienic

There are two versions of air distribution systems available: Zehnder OnFloor and InFloor. In both cases, the volume of air is regulated as required. They are characterised by the ease with which they can be integrated into the building and their rapid installation. In the case of Zehnder OnFloor, fresh air flows through flat, oval ducts with an internal coating, which are installed in the insulation layer of the unfinished floor. Zehnder InFloor functions on the same principle, only the round tubes are laid in the unfinished floor. Both versions Zehnder InFloor and OnFloor can be combined and thus offer maximum versatility.

The air distribution system with flat tube for cover, wall and floor (Zehnder OnFloor)

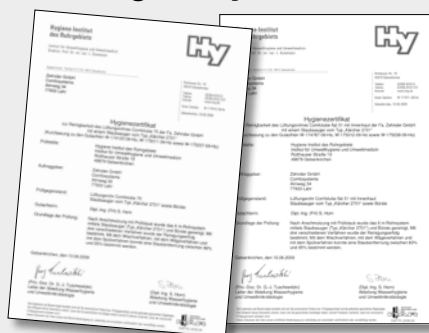


The air distribution system with round tube for cover, wall and floor (Zehnder InFloor)

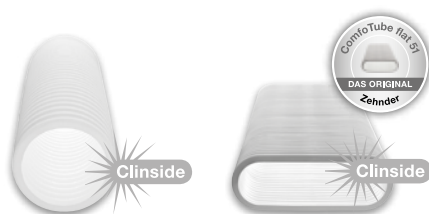


- Easy to install, flexible pipes
- High-quality food grade plastic (HDPE)
- Clinside smooth inner skin for clean tubes
- Centrally and peripherally adjustable airflow rates
- Low pressure loss
- Easy to clean

Tested cleaning ability



Certificates issued by a recognised hygiene institute.



Clean thanks to Clinside: The smooth inner skin prevents the build-up of dust. Cleaning is easy.

Zehnder comfortable indoor ventilation

Advantages

- Optimum oxygen and draught-free air supply promote your health
- Hypo-allergenic
- Filtering out pollutants
- Retention of the property's value by preventing mould from developing in the building's basic structure
- Energy saving through heat recovery
- Protects against outside noise



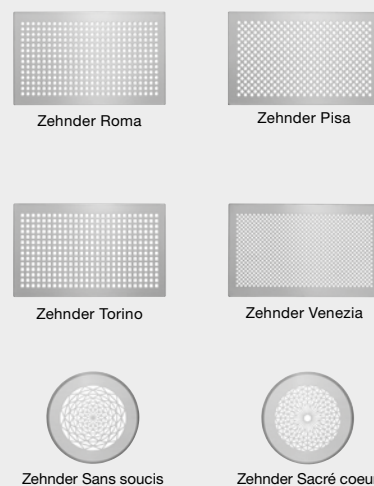
Zehnder ComfoAir ventilation units

- For use in demanding residential and commercial buildings
- Up to 95% heat recovery by cross-counterflow heat exchanger
- Fans with extremely efficient EC motors
- 100% automatic bypass
- Option: Electric pre-heater or enthalpy exchanger



Zehnder designer grilles

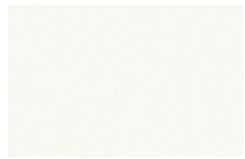
- Elegant and discreet
- For every interior
- Surface-mounted and flush-mounted version
- Available in white or stainless steel
- Suitable for displacement ventilation



Warm colours

zehnder

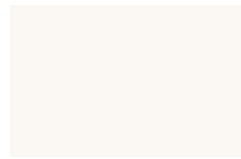
Colour category 1: CORE



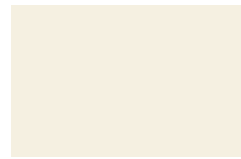
White Quartz ¹⁾
0521



Pure White ²⁾
RAL 9010 / 9010



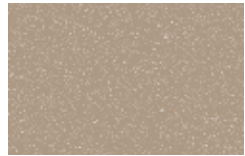
Edelweiss
0067



Cream
RAL 9001 / 9001



Telegrey 4
RAL 7047 / 7247



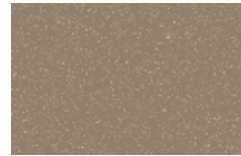
Beige Quartz
0523



Golden Sand
0258



Yellow Grey
RAL 7034 / 7234



Pearl Beige
RAL 1035 / 1235



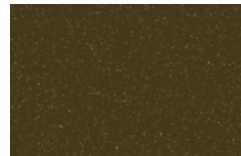
Beach Gold
0272



Concrete Grey
0265



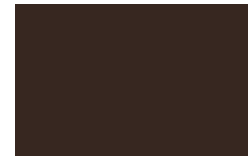
Beige Grey
0267



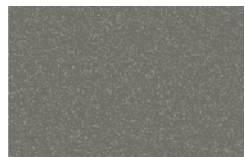
Bronze
0276



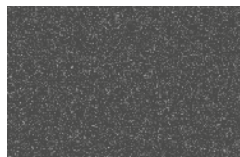
Brown Quartz
0529



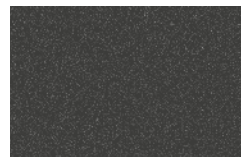
Dark Brown
0270



Grey Aluminium
9007



Anthracite
0346



Umbra Grey
RAL 7022 / 7222

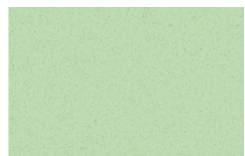


Volcanic
0336



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 %

¹⁾ 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.

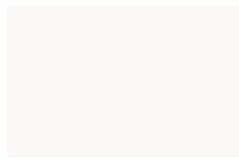
¹⁾ Not for Zehnder Nova, Nova Neo and Excelsior

²⁾ Standard colour for Fare Tech & Alura Tech, therefore Traffic White RAL 9016 with surcharge 20 % on category 1

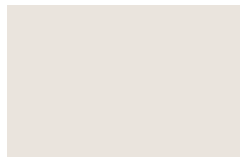
³⁾ Only for Zehnder Charleston and Zehnder Metropolitan

Cool colours

Colour category 1: CORE



White Matt
0556



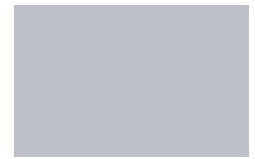
Light Beige
0253



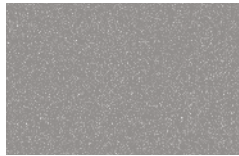
Light Grey
0262



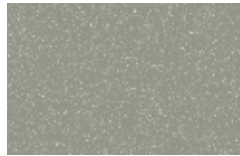
White Aluminium
9006



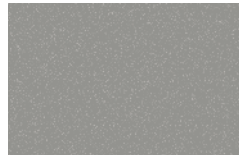
Light Jeans
0264



Titane
0335



Inox Look
0332



Telegrey 2
RAL 7046 / 7246



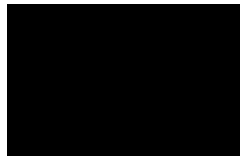
Blue Grey
RAL 7031 / 7231



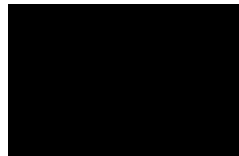
Anthracite Grey
RAL 7016 / 7016



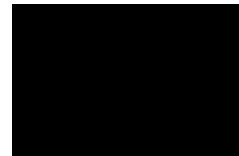
Black Quartz
0550



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

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 (ED) 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.

