

# Zehnder Nova

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

**1<sup>st</sup>**

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.



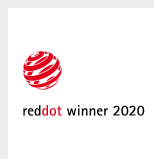
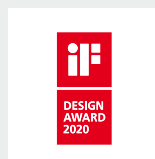
**Heating and cooling ceiling**  
The ceiling is the perfect place to supply a room with convenient heating and cooling. Energy-efficient climate via radiant panels work perfectly with our suite of solutions from office to manufacturing spaces.



**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.


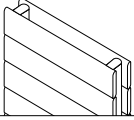


**General Sales and Delivery Conditions:**

Our General Sales and Delivery Conditions apply. You can find these under "Legal notice" on our homepage at [www.international.zehnder-systems.com](http://www.international.zehnder-systems.com).





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Heating panels	Zehnder Nova			5
Accessories	Zehnder fixing kits			
	Zehnder rails and hooks			70
	Zehnder valves			
General	Keyword list			
	Pressure loss graph, conversion table			82
	Zehnder comfortable indoor ventilation			

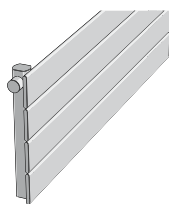
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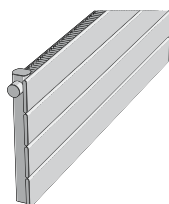


	Overview of models	Product description	List prices	Special versions	Connections	Fixings	Pressure losses	Technical specifications	Installation points
<b>Zehnder Nova - horizontal models</b>									
 <ul style="list-style-type: none"> <li>■ Horizontal profile tubes</li> <li>■ A wide range of models</li> <li>■ Short response times</li> </ul>	6	8	9	37	39	48	53	54	65
<b>Zehnder Nova - vertical models</b>									
 <ul style="list-style-type: none"> <li>■ Vertical profile tubes</li> <li>■ Modern design</li> <li>■ Small depth</li> </ul>	7	8	27	37	42	51	53	60	66

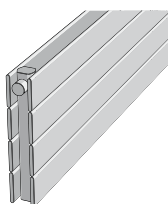
**Zehnder Nova Horizontal**



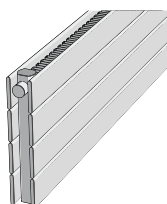
NH



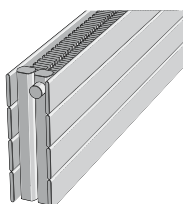
NHL



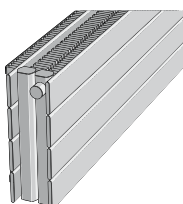
NHH



NHLH



NHLLH



NHLLHL

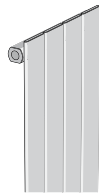
Height <sup>1)</sup> mm	Depth mm					
	45	45/60	53	53	92	128
70	NH07	NHL07/07	NHH07	NHLH07/07	NHLLH07/07	NHLLHL07/07
140	NH14	NHL14/14	NHH14	NHLH14/14	NHLLH14/14	NHLLHL14/14
210	NH21	NHL21/21	NHH21	NHLH21/21	NHLLH21/21	NHLLHL21/21
280	NH28	NHL28/28	NHH28	NHLH28/28	NHLLH28/28	NHLLHL28/28
350	NH35	NHL35/35	NHH35	NHLH35/35	NHLLH35/35	NHLLHL35/35
420	NH42	NHL42/42	NHH42	NHLH42/42	NHLLH42/42	NHLLHL42/42
490	NH49	NHL49/49	NHH49	NHLH49/49	NHLLH49/49	NHLLHL49/49
560	NH56	NHL56/56	NHH56	NHLH56/56	NHLLH56/56	NHLLHL56/56
630	NH63	NHL63/56	NHH63	NHLH63/56	NHLLH63/56	NHLLHL63/56
700	NH70	NHL70/56	NHH70	NHLH70/56	NHLLH70/56	NHLLHL70/56
770	NH77	NHL77/56	NHH77		NHLLH77/56	NHLLHL77/56
840	NH84	NHL84/56	NHH84		NHLLH84/56	NHLLHL84/56
910	NH91					
980	NH98					
1050	NH105					
1120	NH112					
1190	NH119					
1260	NH126					
1330	NH133					
1400	NH140					
1470	NH147					
1540	NH154					
1610	NH161					
1680	NH168					

All horizontal models from a height of 140 mm with additional fins can also be ordered with a reduced fin height.

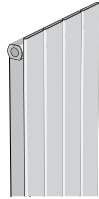
<sup>1)</sup>The values specified here are the so-called nominal height; the exact height varies by a few millimetres, see "Technical specifications".

# Zehnder Nova

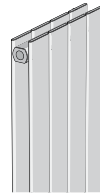
## Zehnder Nova Vertical



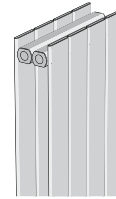
NV



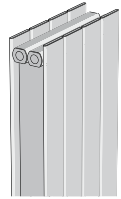
NVL



NVV



NVV-4SR



NVLV

Height mm	Depth mm				
	45	58	53	92	110
600	NV60	NVL60	NVV60	NVV60-4SR	NVLV60
800	NV80	NVL80	NVV80	NVV80-4SR	NVLV80
1000	NV100	NV100	NVV100	NVV100-4SR	NVLV100
1200	NV120	NVL120	NVV120	NVV120-4SR	NVLV120
1400	NV140	NVL140	NVV140	NVV140-4SR	NVLV140
1600	NV160	NVL160	NVV160	NVV160-4SR	NVLV160
1800	NV180	NVL180	NVV180	NVV180-4SR	NVLV180
2000	NV200	NVL200	NVV200	NVV200-4SR	NVLV200
2200	NV220	NVL220	NVV220	NVV220-4SR	NVLV220
2400	NV240	NVL240	NVV240	NVV240-4SR	NVLV240
2600	NV260	-	NVV260	NVV260-4SR	-
2800	NV280	-	NVV280	NVV280-4SR	-
3000	NV300	-	NVV300	NVV300-4SR	-

NVL, NVLV: With side cover as standard, intermediate heights on request.  
 Heights greater than 3000 mm possible for models NV, NVV and NVV-4SR, on request.

# Zehnder Nova



Zehnder Nova (horizontal)



Zehnder Nova (vertical)



Valve at front

## Product description

Zehnder Nova is a heating panel with a modern look and the latest technology. The benefits of a radiator made from individual tubes come together elegantly with the look of a flat radiator. In Zehnder Nova, this is done without visible welds and roundings, while straight tubing with 1 mm spacing in a horizontal or vertical direction forms the basic structure. The targeted channelling of water within the radiator enables a variety of connection options with assured thermal output, including solutions with integrated valves at a user-friendly level on the side or front.

The large model range allows the desired radiator to be adapted to every application.

Depending on where they are used, heating panels with fins need grilles. That's no problem for Zehnder Nova. A grille that causes hardly any reduction in performance is available for all horizontal models and side covers for all vertical ones.

Colour plays a decisive role, especially with large radiators such as a heating panel. To allow this effect to develop, Zehnder Nova is available in all colours of the Zehnder colour chart and in other colours on request.

## Technical specifications

- Flat tubes 70 x 8 mm
- Maximum operating pressure 4,5 bar
- Maximum operating temperature 110 °C
- Priming and powder coating to DIN 55900
- Thermal output tested to EN 442, with CE marking

## Customisation options

- Grille in two designs
- Various connection options
- Integrated valve at side or in the front
- Ultra-fine control with integrated valve

## Advantages

- Wide range of models
- Modern look
- Low water content
- Quick response time
- Special solutions

## Scope of delivery for standard version

- Primed and painted in RAL 9016
- Horizontal models: Connections 3 x 1/2" female thread on front for same-end connection and directional air vent
- Vertical models: Connections 4 x 1/2" front
- With welded lugs
- Vertical models NVL and NVLV with side cover
- Packaging in film and cardboard

## Scope of delivery for Completo version

- Primed and painted in RAL 9016
- Valve unit integrated on side or at front, with valve insert AV 9, max. flow rate 250 kg/h
- Connections 2 x 1/2" female thread at bottom with 50 mm spacing
- Connection for venting 1 x 1/2"
- Vertical models with side covers
- With welded lugs
- Packaging in film and cardboard

# Zehnder Nova

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

Height		70											
Model		NH07		NHL07/07		NHH07		NHLH07/07		NHLLH07/07		NHLHL07/07	
Depth	mm	45		45		53		53		92		128	
Height of fins	mm	-		55		-		55		55		55	
Exponent	n	1,22		1,22		1,23		1,24		1,21		1,20	
<b>Basic price</b>	<b>€</b>	<b>81,42</b>		<b>155,97</b>		<b>114,54</b>		<b>197,38</b>		<b>358,16</b>		<b>370,34</b>	
<b>Price/metre</b>	<b>€</b>	<b>42,67</b>		<b>82,37</b>		<b>87,68</b>		<b>157,90</b>		<b>167,19</b>		<b>173,49</b>	
Length mm	$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		
	W	€	W	€	W	€	W	€	W	€	W	€	
500	53	102,76	97	197,16	90	158,38	132	276,33	188	441,76	226	457,09	
600	63	107,02	117	205,39	108	167,15	158	292,12	226	458,47	272	474,43	
700	74	111,29	136	213,63	126	175,92	185	307,91	264	475,19	317	491,78	
800	84	115,56	156	221,87	144	184,68	211	323,70	301	491,91	362	509,13	
900	95	119,82	175	230,10	162	193,45	237	339,49	339	508,63	407	526,48	
1000	105	124,09	194	238,34	179	202,22	263	355,28	376	525,35	452	543,83	
1100	116	128,36	214	246,58	197	210,99	290	371,07	414	542,07	498	561,18	
1200	126	132,62	233	254,81	215	219,76	316	386,86	452	558,79	543	578,53	
1300	137	136,89	253	263,05	233	228,52	342	402,65	489	575,51	588	595,88	
1400	147	141,16	272	271,29	251	237,29	369	418,44	527	592,23	633	613,23	
1500	158	145,43	291	279,53	269	246,06	395	434,23	564	608,95	678	630,58	
1600	168	149,69	311	287,76	287	254,83	421	450,02	602	625,66	724	647,92	
1700	179	153,96	330	296,00	305	263,60	448	465,81	640	642,38	769	665,27	
1800	189	158,23	350	304,24	323	272,36	474	481,60	677	659,10	814	682,62	
1900	200	162,49	369	312,47	341	281,13	500	497,39	715	675,82	859	699,97	
2000	210	166,76	388	320,71	358	289,90	526	513,18	752	692,54	904	717,32	
2200	232	175,29	427	337,18	394	307,44	579	544,76	828	725,98	995	752,02	
2400	252	183,83	466	353,66	430	324,97	632	576,34	903	759,42	1085	786,72	
2600	273	192,36	505	370,13	466	342,51	684	607,92	978	792,85	1176	821,41	
2800	294	200,90	544	386,61	502	360,04	737	639,50	1053	826,29	1266	856,11	
3000	315	209,43	582	403,08	537	377,58	789	671,08	1128	859,73	1356	890,81	
3200	336	217,96	621	419,55	573	395,12	842	702,66	1204	893,17	1447	925,51	
3400	357	226,50	660	436,03	609	412,65	895	734,24	1279	926,61	1537	960,21	
3600	378	235,03	699	452,50	645	430,19	947	765,82	1354	960,04	1628	994,90	
3800	399	243,57	738	468,98	681	447,72	1000	797,40	1429	993,48	1718	1.029,60	
4000	420	252,10	776	485,45	716	465,26	1052	828,98	1504	1.026,92	1808	1.064,30	
4200	441	260,63	815	501,92	752	482,80	1105	860,56	1580	1.060,36	1899	1.099,00	
4400	463	269,17	854	518,40	788	500,33	1158	892,14	1655	1.093,80	1989	1.133,70	
4600	483	277,70	893	534,87	824	517,87	1210	923,72	1730	1.127,23	2080	1.168,39	
4800	504	286,24	932	551,35	860	535,40	1263	955,30	1805	1.160,67	2170	1.203,09	
5000	525	294,77	970	567,82	895	552,94	1315	986,88	1880	1.194,11	2260	1.237,79	
5200	546	303,30	1009	584,29	931	570,48	1368	1.018,46	1956	1.227,55	2351	1.272,49	
5400	567	311,84	1048	600,77	967	588,01	1421	1.050,04	2031	1.260,99	2441	1.307,19	
5600	588	320,37	1087	617,24	1003	605,55	1473	1.081,62	2106	1.294,42	2532	1.341,88	
5800	609	328,91	1126	633,72	1039	623,08	1526	1.113,20	2181	1.327,86	2622	1.376,58	
6000	630	337,44	1164	650,19	1074	640,62	1578	1.144,78	2256	1.361,30	2712	1.411,28	

**Surcharge for Completo, valve at top, connections V013/V014 €:** 181,73

**Surcharge for "Breakthrough", valve at top, connections V513/V514 €:** 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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



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

Height		141											
Model		NH14		NHL14/14		NHH14		NHLH14/14		NHLLH14/14		NHLLHL14/14	
Depth	mm	45		45		53		53		92		128	
Height of fins	mm	-		125		-		125		125		125	
Exponent	n	1,23		1,23		1,24		1,25		1,23		1,23	
Basic price	€	101,87		175,45		155,96		246,09		399,66		419,15	
Price/metre	€	68,23		115,94		138,92		218,32		236,81		249,56	
Length mm	$\Phi_s$ W	Price		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$	
		€	W	€	W	€	W	€	W	€	W	€	
500	91	135,99	170	233,42	152	225,42	221	355,25	315	518,07	382	543,93	
600	110	142,81	204	245,01	182	239,31	266	377,08	378	541,75	458	568,89	
700	128	149,63	238	256,61	213	253,20	310	398,91	441	565,43	535	593,84	
800	146	156,45	272	268,20	243	267,10	354	420,75	504	589,11	611	618,80	
900	164	163,28	306	279,80	273	280,99	398	442,58	567	612,79	687	643,75	
1000	182	170,10	339	291,39	303	294,88	442	464,41	630	636,47	763	668,71	
1100	201	176,92	373	302,98	334	308,77	487	486,24	693	660,15	840	693,67	
1200	219	183,75	407	314,58	364	322,66	531	508,07	756	683,83	916	718,62	
1300	237	190,57	441	326,17	394	336,56	575	529,91	819	707,51	992	743,58	
1400	255	197,39	475	337,77	425	350,45	619	551,74	882	731,19	1069	768,53	
1500	273	204,22	509	349,36	455	364,34	663	573,57	945	754,88	1145	793,49	
1600	292	211,04	543	360,95	485	378,23	708	595,40	1008	778,56	1221	818,45	
1700	310	217,86	577	372,55	516	392,12	752	617,23	1071	802,24	1298	843,40	
1800	328	224,68	611	384,14	546	406,02	796	639,07	1134	825,92	1374	868,36	
1900	346	231,51	645	395,74	576	419,91	840	660,90	1197	849,60	1450	893,31	
2000	364	238,33	678	407,33	606	433,80	884	682,73	1260	873,28	1526	918,27	
2200	401	251,98	746	430,52	667	461,58	973	726,39	1386	920,64	1679	968,18	
2400	437	265,62	814	453,71	728	489,37	1061	770,06	1512	968,00	1832	1.018,09	
2600	474	279,27	882	476,89	788	517,15	1150	813,72	1638	1.015,37	1984	1.068,01	
2800	510	292,91	950	500,08	849	544,94	1238	857,39	1764	1.062,73	2137	1.117,92	
3000	546	306,56	1017	523,27	909	572,72	1326	901,05	1890	1.110,09	2289	1.167,83	
3200	583	320,21	1085	546,46	970	600,50	1415	944,71	2016	1.157,45	2442	1.217,74	
3400	619	333,85	1153	569,65	1031	628,29	1503	988,38	2142	1.204,81	2595	1.267,65	
3600	656	347,50	1221	592,83	1091	656,07	1592	1.032,04	2268	1.252,18	2747	1.317,57	
3800	692	361,14	1289	616,02	1152	683,86	1680	1.075,71	2394	1.299,54	2900	1.367,48	
4000	728	374,79	1356	639,21	1212	711,64	1768	1.119,37	2520	1.346,90	3052	1.417,39	
4200	765	388,44	1424	662,40	1273	739,42	1857	1.163,03	2646	1.394,26	3205	1.467,30	
4400	801	402,08	1492	685,59	1334	767,21	1945	1.206,70	2772	1.441,62	3358	1.517,21	
4600	838	415,73	1560	708,77	1394	794,99	2034	1.250,36	2898	1.488,99	3510	1.567,13	
4800	874	429,37	1628	731,96	1455	822,78	2122	1.294,03	3024	1.536,35	3663	1.617,04	
5000	910	443,02	1695	755,15	1515	850,56	2210	1.337,69	3150	1.583,71	3815	1.666,95	
5200	947	456,67	1763	778,34	1576	878,34	2299	1.381,35	3276	1.631,07	3968	1.716,86	
5400	983	470,31	1831	801,53	1637	906,13	2387	1.425,02	3402	1.678,43	4121	1.766,77	
5600	1020	483,96	1899	824,71	1697	933,91	2476	1.468,68	3528	1.725,80	4273	1.816,69	
5800	1056	497,60	1967	847,90	1758	961,70	2564	1.512,35	3654	1.773,16	4426	1.866,60	
6000	1092	511,25	2034	871,09	1818	989,48	2652	1.556,01	3780	1.820,52	4578	1.916,51	

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height		212												
mm														
Model		NH21		NHL21/21		NHH21		NHLH21/21		NHLH21/21		NHLH21/21		
Depth	mm	45		45		53		53		92		128		
Height of fins	mm	-		195		-		195		195		195		
Exponent	n	1,23		1,25		1,24		1,27		1,25		1,25		
Basic price	€	122,32		194,93		197,38		294,82		441,02		467,80		
Price/metre	€	93,81		149,62		190,10		278,76		306,51		325,55		
Length mm	$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$	
	W	Price €	W	Price €	W	Price €	W	Price €	W	Price €	W	Price €	W	Price €
500	127	169,23	228	269,74	208	292,43	298	434,20	429	594,28	519	630,58		
600	153	178,61	274	284,70	249	311,44	357	462,08	515	624,93	623	663,13		
700	178	187,99	320	299,66	291	330,45	417	489,95	600	655,58	726	695,69		
800	204	197,37	365	314,63	332	349,46	476	517,83	686	686,23	830	728,24		
900	229	206,75	411	329,59	374	368,47	536	545,70	772	716,88	934	760,80		
1000	254	216,13	456	344,55	415	387,48	595	573,58	857	747,53	1037	793,35		
1100	280	225,51	502	359,51	457	406,49	655	601,46	943	778,18	1141	825,91		
1200	305	234,89	548	374,47	498	425,50	714	629,33	1029	808,83	1245	858,46		
1300	331	244,27	593	389,44	540	444,51	774	657,21	1115	839,48	1349	891,02		
1400	356	253,65	639	404,40	581	463,52	833	685,08	1200	870,13	1452	923,57		
1500	381	263,04	684	419,36	623	482,53	893	712,96	1286	900,79	1556	956,13		
1600	407	272,42	730	434,32	664	501,54	952	740,84	1372	931,44	1660	988,68		
1700	432	281,80	776	449,28	706	520,55	1012	768,71	1457	962,09	1763	1.021,24		
1800	458	291,18	821	464,25	747	539,56	1071	796,59	1543	992,74	1867	1.053,79		
1900	483	300,56	867	479,21	789	558,57	1131	824,46	1629	1.023,39	1971	1.086,35		
2000	508	309,94	912	494,17	830	577,58	1190	852,34	1714	1.054,04	2074	1.118,90		
2200	559	328,70	1004	524,09	914	615,60	1309	908,09	1886	1.115,34	2282	1.184,01		
2400	610	347,46	1095	554,02	996	653,62	1428	963,84	2057	1.176,64	2489	1.249,12		
2600	661	366,23	1186	583,94	1079	691,64	1547	1.019,60	2229	1.237,95	2697	1.314,23		
2800	712	384,99	1277	613,87	1162	729,66	1666	1.075,35	2400	1.299,25	2904	1.379,34		
3000	762	403,75	1368	643,79	1245	767,68	1785	1.131,10	2571	1.360,55	3111	1.444,45		
3200	813	422,51	1460	673,71	1328	805,70	1904	1.186,85	2743	1.421,85	3319	1.509,56		
3400	864	441,27	1551	703,64	1411	843,72	2023	1.242,60	2914	1.483,15	3526	1.574,67		
3600	915	460,04	1642	733,56	1494	881,74	2142	1.298,36	3086	1.544,46	3734	1.639,78		
3800	966	478,80	1733	763,49	1577	919,76	2261	1.354,11	3257	1.605,76	3941	1.704,89		
4000	1016	497,56	1824	793,41	1660	957,78	2380	1.409,86	3428	1.667,06	4148	1.770,00		
4200	1067	516,32	1916	823,33	1743	995,80	2499	1.465,61	3600	1.728,36	4356	1.835,11		
4400	1118	535,08	2007	853,26	1827	1.033,82	2618	1.521,36	3771	1.789,66	4563	1.900,22		
4600	1169	553,85	2098	883,18	1909	1.071,84	2737	1.577,12	3943	1.850,97	4771	1.965,33		
4800	1220	572,61	2189	913,11	1992	1.109,86	2856	1.632,87	4114	1.912,27	4978	2.030,44		
5000	1270	591,37	2280	943,03	2075	1.147,88	2975	1.688,62	4285	1.973,57	5185	2.095,55		
5200	1321	610,13	2372	972,95	2158	1.185,90	3094	1.744,37	4457	2.034,87	5393	2.160,66		
5400	1372	628,89	2463	1.002,88	2241	1.223,92	3213	1.800,12	4628	2.096,17	5600	2.225,77		
5600	1423	647,66	2554	1.032,80	2324	1.261,94	3332	1.855,88	4800	2.157,48	5808	2.290,88		
5800	1474	666,42	2645	1.062,73	2407	1.299,96	3451	1.911,63	4971	2.218,78	6015	2.355,99		
6000	1524	685,18	2736	1.092,65	2490	1.337,98	3570	1.967,38	5142	2.280,08	6222	2.421,10		

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height		283											
Model		NH28		NHL28/28		NHH28		NHLH28/28		NHLLH28/28		NHLLHL28/28	
Depth	mm	45		45		53		53		92		128	
Height of fins	mm	-		265		-		265		265		265	
Exponent	n	1,24		1,26		1,25		1,29		1,28		1,28	
Basic price	€	142,77		214,45		238,84		343,57		482,51		516,55	
Price/metre	€	119,41		183,25		241,22		339,17		376,24		401,60	
Length mm	$\Phi_s$ W	Price		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$	
		€	W	€	W	€	W	€	W	€	W	€	
500	162	202,48	273	306,08	261	359,45	365	513,16	531	670,63	641	717,35	
600	194	214,42	327	324,40	314	383,57	438	547,07	638	708,25	769	757,51	
700	227	226,36	382	342,73	366	407,69	511	580,99	744	745,88	897	797,67	
800	259	238,30	436	361,05	418	431,82	584	614,91	850	783,50	1025	837,83	
900	291	250,24	491	379,38	470	455,94	657	648,82	956	821,13	1153	877,99	
1000	323	262,18	545	397,70	522	480,06	730	682,74	1062	858,75	1281	918,15	
1100	356	274,12	600	416,03	575	504,18	804	716,66	1169	896,37	1410	958,31	
1200	388	286,06	654	434,35	627	528,30	876	750,57	1275	934,00	1538	998,47	
1300	420	298,00	709	452,68	679	552,43	949	784,49	1381	971,62	1666	1.038,63	
1400	453	309,94	763	471,00	731	576,55	1022	818,41	1487	1.009,25	1794	1.078,79	
1500	485	321,89	818	489,33	783	600,67	1095	852,33	1593	1.046,87	1922	1.118,95	
1600	517	333,83	872	507,65	836	624,79	1168	886,24	1700	1.084,49	2050	1.159,11	
1700	550	345,77	927	525,98	888	648,91	1241	920,16	1806	1.122,12	2178	1.199,27	
1800	582	357,71	981	544,30	940	673,04	1314	954,08	1912	1.159,74	2306	1.239,43	
1900	614	369,65	1036	562,63	992	697,16	1387	987,99	2018	1.197,37	2434	1.279,59	
2000	646	381,59	1090	580,95	1044	721,28	1460	1.021,91	2124	1.234,99	2562	1.319,75	
2200	711	405,47	1199	617,60	1149	769,52	1607	1.089,74	2337	1.310,24	2819	1.400,07	
2400	776	429,35	1308	654,25	1253	817,77	1752	1.157,58	2549	1.385,49	3075	1.480,39	
2600	840	453,24	1417	690,90	1358	866,01	1898	1.225,41	2762	1.460,73	3331	1.560,71	
2800	905	477,12	1526	727,55	1462	914,26	2044	1.293,25	2974	1.535,98	3587	1.641,03	
3000	969	501,00	1635	764,20	1566	962,50	2190	1.361,08	3186	1.611,23	3843	1.721,35	
3200	1034	524,88	1744	800,85	1671	1.010,74	2336	1.428,91	3399	1.686,48	4100	1.801,67	
3400	1099	548,76	1853	837,50	1775	1.058,99	2482	1.496,75	3611	1.761,73	4356	1.881,99	
3600	1163	572,65	1962	874,15	1880	1.107,23	2628	1.564,58	3824	1.836,97	4612	1.962,31	
3800	1228	596,53	2071	910,80	1984	1.155,48	2774	1.632,42	4036	1.912,22	4868	2.042,63	
4000	1292	620,41	2180	947,45	2088	1.203,72	2920	1.700,25	4248	1.987,47	5124	2.122,95	
4200	1357	644,29	2289	984,10	2193	1.251,96	3066	1.768,08	4461	2.062,72	5381	2.203,27	
4400	1422	668,17	2398	1.020,75	2297	1.300,21	3213	1.835,92	4673	2.137,97	5637	2.283,59	
4600	1486	692,06	2507	1.057,40	2402	1.348,45	3358	1.903,75	4886	2.213,21	5893	2.363,91	
4800	1551	715,94	2616	1.094,05	2506	1.396,70	3504	1.971,59	5098	2.288,46	6149	2.444,23	
5000	1615	739,82	2725	1.130,70	2610	1.444,94	3650	2.039,42	5310	2.363,71	6405	2.524,55	
5200	1680	763,70	2834	1.167,35	2715	1.493,18	3796	2.107,25	5523	2.438,96	6662	2.604,87	
5400	1745	787,58	2943	1.204,00	2819	1.541,43	3943	2.175,09	5735	2.514,21	6918	2.685,19	
5600	1809	811,47	3052	1.240,65	2924	1.589,67	4088	2.242,92	5948	2.589,45	7174	2.765,51	
5800	1874	835,35	3161	1.277,30	3028	1.637,92	4234	2.310,76	6160	2.664,70	7430	2.845,83	
6000	1938	859,23	3270	1.313,95	3132	1.686,16	4380	2.378,59	6372	2.739,95	7686	2.926,15	

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height		354											
mm													
Model		NH35		NHL35/21		NHL35/35		NHH35		NHLH35/21		NHLH35/35	
Depth	mm	45		60		60		53		53		53	
Height of fins	mm	-		195		330		-		195		330	
Exponent	n	1,24		1,25		1,27		1,25		1,28		1,30	
<b>Basic price</b>	€	<b>163,27</b>		<b>233,95</b>		<b>233,95</b>		<b>280,20</b>		<b>392,28</b>		<b>392,28</b>	
<b>Price/metre</b>	€	<b>145,00</b>		<b>198,37</b>		<b>216,85</b>		<b>292,40</b>		<b>381,12</b>		<b>399,66</b>	
Length mm	$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		
	W	Price €	W	Price €	W	Price €	W	Price €	W	Price €	W	Price €	
500	196	235,77	303	333,14	355	342,38	313	426,40	387	582,84	425	592,11	
600	235	250,27	364	352,97	426	364,06	376	455,64	464	620,95	510	632,08	
700	274	264,77	425	372,81	497	385,75	439	484,88	542	659,06	595	672,04	
800	313	279,27	485	392,65	568	407,43	501	514,12	619	697,18	680	712,01	
900	352	293,77	546	412,48	639	429,12	564	543,36	696	735,29	765	751,97	
1000	391	308,27	606	432,32	710	450,80	626	572,60	773	773,40	850	791,94	
1100	431	322,77	667	452,16	782	472,49	689	601,84	851	811,51	936	831,91	
1200	470	337,27	728	471,99	852	494,17	752	631,08	928	849,62	1020	871,87	
1300	509	351,77	788	491,83	923	515,86	814	660,32	1005	887,74	1105	911,84	
1400	548	366,27	849	511,67	994	537,54	877	689,56	1083	925,85	1190	951,80	
1500	587	380,77	909	531,51	1065	559,23	939	718,80	1160	963,96	1275	991,77	
1600	626	395,27	970	551,34	1136	580,91	1002	748,04	1237	1.002,07	1360	1.031,74	
1700	665	409,77	1031	571,18	1207	602,60	1065	777,28	1315	1.040,18	1445	1.071,70	
1800	704	424,27	1091	591,02	1278	624,28	1127	806,52	1392	1.078,30	1530	1.111,67	
1900	743	438,77	1152	610,85	1349	645,97	1190	835,76	1469	1.116,41	1615	1.151,63	
2000	782	453,27	1212	630,69	1420	667,65	1252	865,00	1546	1.154,52	1700	1.191,60	
2200	861	482,27	1334	670,36	1563	711,02	1378	923,48	1701	1.230,74	1871	1.271,53	
2400	939	511,27	1455	710,04	1704	754,39	1503	981,96	1856	1.306,97	2040	1.351,46	
2600	1017	540,27	1576	749,71	1846	797,76	1628	1.040,44	2010	1.383,19	2210	1.431,40	
2800	1095	569,27	1697	789,39	1988	841,13	1753	1.098,92	2165	1.459,42	2380	1.511,33	
3000	1173	598,27	1818	829,06	2130	884,50	1878	1.157,40	2319	1.535,64	2550	1.591,26	
3200	1252	627,27	1940	868,73	2272	927,87	2004	1.215,88	2474	1.611,86	2720	1.671,19	
3400	1330	656,27	2061	908,41	2414	971,24	2129	1.274,36	2629	1.688,09	2890	1.751,12	
3600	1408	685,27	2182	948,08	2556	1.014,61	2254	1.332,84	2783	1.764,31	3060	1.831,06	
3800	1486	714,27	2303	987,76	2698	1.057,98	2379	1.391,32	2938	1.840,54	3230	1.910,99	
4000	1564	743,27	2424	1.027,43	2840	1.101,35	2504	1.449,80	3092	1.916,76	3400	1.990,92	
4200	1643	772,27	2546	1.067,10	2982	1.144,72	2630	1.508,28	3247	1.992,98	3570	2.070,85	
4400	1721	801,27	2667	1.106,78	3125	1.188,09	2755	1.566,76	3402	2.069,21	3741	2.150,78	
4600	1799	830,27	2788	1.146,45	3266	1.231,46	2880	1.625,24	3556	2.145,43	3910	2.230,72	
4800	1877	859,27	2909	1.186,13	3408	1.274,83	3005	1.683,72	3711	2.221,66	4080	2.310,65	
5000	1955	888,27	3030	1.225,80	3550	1.318,20	3130	1.742,20	3865	2.297,88	4250	2.390,58	
5200	2034	917,27	3152	1.265,47	3692	1.361,57	3256	1.800,68	4020	2.374,10	4420	2.470,51	
5400	2112	946,27	3273	1.305,15	3835	1.404,94	3381	1.859,16	4175	2.450,33	4590	2.550,44	
5600	2190	975,27	3394	1.344,82	3976	1.448,31	3506	1.917,64	4329	2.526,55	4760	2.630,38	
5800	2268	1.004,27	3515	1.384,50	4118	1.491,68	3631	1.976,12	4484	2.602,78	4930	2.710,31	
6000	2346	1.033,27	3636	1.424,17	4260	1.535,05	3756	2.034,60	4638	2.679,00	5100	2.790,24	

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height	mm	354				425						
Model		NHLLH35/21	NHLLH35/35	NHLLHL35/21	NHLLHL35/35	NH42	NHL42/21					
Depth	mm	92	92	128	128	45	60					
Height of fins	mm	195	330	195	330	-	195					
Exponent	n	1,27	1,30	1,27	1,30	1,25	1,26					
Basic price	€	523,89	523,89	565,31	565,31	183,72	253,42					
Price/metre	€	408,92	445,94	422,99	477,58	170,53	222,71					
Length mm	mm	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	
		W	€	W	€	W	€	W	€	W	€	
500	531	728,35	625	746,86	612	776,81	752	804,10	230	268,99	337	364,78
600	638	769,24	750	791,45	735	819,10	903	851,86	276	286,04	404	387,05
700	744	810,13	875	836,05	857	861,40	1053	899,62	322	303,09	472	409,32
800	850	851,03	1000	880,64	980	903,70	1204	947,37	368	320,14	539	431,59
900	956	891,92	1125	925,24	1102	946,00	1354	995,13	414	337,20	606	453,86
1000	1062	932,81	1250	969,83	1224	988,30	1504	1.042,89	459	354,25	673	476,13
1100	1169	973,70	1375	1.014,42	1347	1.030,60	1655	1.090,65	505	371,30	741	498,40
1200	1275	1.014,59	1500	1.059,02	1469	1.072,90	1805	1.138,41	551	388,36	808	520,67
1300	1381	1.055,49	1625	1.103,61	1592	1.115,20	1956	1.186,16	597	405,41	875	542,94
1400	1487	1.096,38	1750	1.148,21	1714	1.157,50	2106	1.233,92	643	422,46	943	565,21
1500	1593	1.137,27	1875	1.192,80	1836	1.199,80	2256	1.281,68	689	439,52	1010	587,49
1600	1700	1.178,16	2000	1.237,39	1959	1.242,09	2407	1.329,44	735	456,57	1077	609,76
1700	1806	1.219,05	2125	1.281,99	2081	1.284,39	2557	1.377,20	781	473,62	1145	632,03
1800	1912	1.259,95	2250	1.326,58	2204	1.326,69	2708	1.424,95	827	490,67	1212	654,30
1900	2018	1.300,84	2375	1.371,18	2326	1.368,99	2858	1.472,71	873	507,73	1279	676,57
2000	2124	1.341,73	2500	1.415,77	2448	1.411,29	3008	1.520,47	918	524,78	1346	698,84
2200	2337	1.423,51	2750	1.504,96	2693	1.495,89	3309	1.615,99	1010	558,89	1481	743,38
2400	2549	1.505,30	3000	1.594,15	2938	1.580,49	3610	1.711,50	1102	592,99	1616	787,92
2600	2762	1.587,08	3250	1.683,33	3183	1.665,08	3911	1.807,02	1194	627,10	1750	832,47
2800	2974	1.668,87	3500	1.772,52	3428	1.749,68	4212	1.902,53	1286	661,20	1885	877,01
3000	3186	1.750,65	3750	1.861,71	3672	1.834,28	4512	1.998,05	1377	695,31	2019	921,55
3200	3399	1.832,43	4000	1.950,90	3917	1.918,88	4813	2.093,57	1469	729,42	2154	966,09
3400	3611	1.914,22	4250	2.040,09	4162	2.003,48	5114	2.189,08	1561	763,52	2289	1.010,63
3600	3824	1.996,00	4500	2.129,27	4407	2.088,07	5415	2.284,60	1653	797,63	2423	1.055,18
3800	4036	2.077,79	4750	2.218,46	4652	2.172,67	5716	2.380,11	1745	831,73	2558	1.099,72
4000	4248	2.159,57	5000	2.307,65	4896	2.257,27	6016	2.475,63	1836	865,84	2692	1.144,26
4200	4461	2.241,35	5250	2.396,84	5141	2.341,87	6317	2.571,15	1928	899,95	2827	1.188,80
4400	4673	2.323,14	5500	2.486,03	5386	2.426,47	6618	2.666,66	2020	934,05	2962	1.233,34
4600	4886	2.404,92	5750	2.575,21	5631	2.511,06	6919	2.762,18	2112	968,16	3096	1.277,89
4800	5098	2.486,71	6000	2.664,40	5876	2.595,66	7220	2.857,69	2204	1.002,26	3231	1.322,43
5000	5310	2.568,49	6250	2.753,59	6120	2.680,26	7520	2.953,21	2295	1.036,37	3365	1.366,97
5200	5523	2.650,27	6500	2.842,78	6365	2.764,86	7821	3.048,73	2387	1.070,48	3500	1.411,51
5400	5735	2.732,06	6750	2.931,97	6610	2.849,46	8122	3.144,24	2479	1.104,58	3635	1.456,05
5600	5948	2.813,84	7000	3.021,15	6855	2.934,05	8423	3.239,76	2571	1.138,69	3769	1.500,60
5800	6160	2.895,63	7250	3.110,34	7100	3.018,65	8724	3.335,27	2663	1.172,79	3904	1.545,14
6000	6372	2.977,41	7500	3.199,53	7344	3.103,25	9024	3.430,79	2754	1.206,90	4038	1.589,68

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height mm		425											
Model		NHL42/42	NHH42	NHLH42/21	NHLH42/42	NHLLH42/21	NHLLH42/42						
Depth	mm	60	53	53	53	92	92						
Height of fins	mm	400	-	195	400	195	400						
Exponent	n	1,27	1,26	1,28	1,32	1,28	1,31						
Basic price	€	253,42	321,60	441,02	441,02	565,31	565,31						
Price/metre	€	250,52	343,57	432,22	460,05	460,05	515,57						
Length mm	Φ		Price		Φ		Price		Φ		Price		
	W	€	W	€	W	€	W	€	W	€	W	€	
500	407	378,68	365	493,39	433	657,13	481	671,05	585	795,34	712	823,10	
600	489	403,73	438	527,74	519	700,35	578	717,05	702	841,34	855	874,65	
700	570	428,78	511	562,10	606	743,57	674	763,06	819	887,35	997	926,21	
800	652	453,84	584	596,46	692	786,80	770	809,06	936	933,35	1140	977,77	
900	733	478,89	657	630,81	779	830,02	866	855,07	1053	979,36	1282	1.029,32	
1000	814	503,94	729	665,17	865	873,24	962	901,07	1170	1.025,36	1424	1.080,88	
1100	896	528,99	802	699,53	952	916,46	1059	947,08	1287	1.071,37	1567	1.132,44	
1200	977	554,04	875	733,88	1038	959,68	1155	993,08	1404	1.117,37	1709	1.183,99	
1300	1059	579,10	948	768,24	1125	1.002,91	1251	1.039,09	1521	1.163,38	1852	1.235,55	
1400	1140	604,15	1021	802,60	1211	1.046,13	1347	1.085,09	1638	1.209,38	1994	1.287,11	
1500	1221	629,20	1094	836,96	1298	1.089,35	1443	1.131,10	1755	1.255,39	2136	1.338,67	
1600	1303	654,25	1167	871,31	1384	1.132,57	1540	1.177,10	1872	1.301,39	2279	1.390,22	
1700	1384	679,30	1240	905,67	1471	1.175,79	1636	1.223,11	1989	1.347,40	2421	1.441,78	
1800	1466	704,36	1313	940,03	1557	1.219,02	1732	1.269,11	2106	1.393,40	2564	1.493,34	
1900	1547	729,41	1386	974,38	1644	1.262,24	1828	1.315,12	2223	1.439,41	2706	1.544,89	
2000	1628	754,46	1458	1.008,74	1730	1.305,46	1924	1.361,12	2340	1.485,41	2848	1.596,45	
2200	1791	804,56	1604	1.077,45	1904	1.391,90	2117	1.453,13	2574	1.577,42	3133	1.699,56	
2400	1954	854,67	1750	1.146,17	2076	1.478,35	2309	1.545,14	2808	1.669,43	3418	1.802,68	
2600	2117	904,77	1896	1.214,88	2249	1.564,79	2502	1.637,15	3042	1.761,44	3703	1.905,79	
2800	2280	954,88	2042	1.283,60	2422	1.651,24	2694	1.729,16	3276	1.853,45	3988	2.008,91	
3000	2442	1.004,98	2187	1.352,31	2595	1.737,68	2886	1.821,17	3510	1.945,46	4272	2.112,02	
3200	2605	1.055,08	2333	1.421,02	2768	1.824,12	3079	1.913,18	3744	2.037,47	4557	2.215,13	
3400	2768	1.105,19	2479	1.489,74	2941	1.910,57	3271	2.005,19	3978	2.129,48	4842	2.318,25	
3600	2931	1.155,29	2625	1.558,45	3114	1.997,01	3464	2.097,20	4212	2.221,49	5127	2.421,36	
3800	3094	1.205,40	2771	1.627,17	3287	2.083,46	3656	2.189,21	4446	2.313,50	5412	2.524,48	
4000	3256	1.255,50	2916	1.695,88	3460	2.169,90	3848	2.281,22	4680	2.405,51	5696	2.627,59	
4200	3419	1.305,60	3062	1.764,59	3633	2.256,34	4041	2.373,23	4914	2.497,52	5981	2.730,70	
4400	3582	1.355,71	3208	1.833,31	3807	2.342,79	4233	2.465,24	5148	2.589,53	6266	2.833,82	
4600	3745	1.405,81	3354	1.902,02	3979	2.429,23	4426	2.557,25	5382	2.681,54	6551	2.936,93	
4800	3908	1.455,92	3500	1.970,74	4152	2.515,68	4618	2.649,26	5616	2.773,55	6836	3.040,05	
5000	4070	1.506,02	3645	2.039,45	4325	2.602,12	4810	2.741,27	5850	2.865,56	7120	3.143,16	
5200	4233	1.556,12	3791	2.108,16	4498	2.688,56	5003	2.833,28	6084	2.957,57	7405	3.246,27	
5400	4396	1.606,23	3937	2.176,88	4671	2.775,01	5195	2.925,29	6318	3.049,58	7690	3.349,39	
5600	4559	1.656,33	4083	2.245,59	4844	2.861,45	5388	3.017,30	6552	3.141,59	7975	3.452,50	
5800	4722	1.706,44	4229	2.314,31	5017	2.947,90	5580	3.109,31	6786	3.233,60	8260	3.555,62	
6000	4884	1.756,54	4374	2.383,02	5190	3.034,34	5772	3.201,32	7020	3.325,61	8544	3.658,73	

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height	mm	425				496							
Model		NHLHL42/21	NHLHL42/42	NH49	NHL49/28	NHL49/49	NHH49						
Depth	mm	128	128	45	60	60	53						
Height of fins	mm	195	400	-	265	471	-						
Exponent	n	1,27	1,31	1,25	1,26	1,28	1,26						
Basic price	€	614,09	614,09	204,20	272,95	272,95	363,04						
Price/metre	€	471,76	553,63	196,10	356,35	284,10	394,75						
Length mm	$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price		
		€	€		€	€		€	€				
500	667	849,97	856	890,91	264	302,25	395	401,13	459	415,00	416	560,42	
600	800	897,15	1027	946,27	317	321,86	474	426,76	551	443,41	500	599,89	
700	934	944,32	1198	1.001,63	369	341,47	553	452,40	642	471,82	583	639,37	
800	1067	991,50	1369	1.056,99	422	361,08	632	478,03	734	500,23	666	678,84	
900	1200	1.038,67	1540	1.112,36	475	380,69	711	503,67	826	528,64	749	718,32	
1000	1333	1.085,85	1711	1.167,72	527	400,30	789	529,30	917	557,05	832	757,79	
1100	1467	1.133,03	1883	1.223,08	580	419,91	868	554,94	1009	585,46	916	797,27	
1200	1600	1.180,20	2054	1.278,45	633	439,52	947	580,57	1101	613,87	999	836,74	
1300	1733	1.227,38	2225	1.333,81	686	459,13	1026	606,21	1193	642,28	1082	876,22	
1400	1867	1.274,55	2396	1.389,17	738	478,74	1105	631,84	1284	670,69	1165	915,69	
1500	2000	1.321,73	2567	1.444,54	791	498,35	1184	657,48	1376	699,10	1248	955,17	
1600	2133	1.368,91	2738	1.499,90	844	517,96	1263	683,11	1468	727,51	1332	994,64	
1700	2267	1.416,08	2909	1.555,26	896	537,57	1342	708,75	1559	755,92	1415	1.034,12	
1800	2400	1.463,26	3080	1.610,62	949	557,18	1421	734,38	1651	784,33	1498	1.073,59	
1900	2533	1.510,43	3251	1.665,99	1002	576,79	1500	760,02	1743	812,74	1581	1.113,07	
2000	2666	1.557,61	3422	1.721,35	1054	596,40	1578	785,65	1834	841,15	1664	1.152,54	
2200	2933	1.651,96	3765	1.832,08	1160	635,62	1736	836,92	2018	897,97	1831	1.231,49	
2400	3200	1.746,31	4107	1.942,80	1265	674,84	1894	888,19	2201	954,79	1997	1.310,44	
2600	3466	1.840,67	4449	2.053,53	1371	714,06	2052	939,46	2385	1.011,61	2164	1.389,39	
2800	3733	1.935,02	4791	2.164,25	1476	753,28	2210	990,73	2568	1.068,43	2330	1.468,34	
3000	3999	2.029,37	5133	2.274,98	1581	792,50	2367	1.042,00	2751	1.125,25	2496	1.547,29	
3200	4266	2.123,72	5476	2.385,71	1687	831,72	2525	1.093,27	2935	1.182,07	2663	1.626,24	
3400	4533	2.218,07	5818	2.496,43	1792	870,94	2683	1.144,54	3118	1.238,89	2829	1.705,19	
3600	4799	2.312,43	6160	2.607,16	1898	910,16	2841	1.195,81	3302	1.295,71	2996	1.784,14	
3800	5066	2.406,78	6502	2.717,88	2003	949,38	2999	1.247,08	3485	1.352,53	3162	1.863,09	
4000	5332	2.501,13	6844	2.828,61	2108	988,60	3156	1.298,35	3668	1.409,35	3328	1.942,04	
4200	5599	2.595,48	7187	2.939,34	2214	1.027,82	3314	1.349,62	3852	1.466,17	3495	2.020,99	
4400	5866	2.689,83	7529	3.050,06	2319	1.067,04	3472	1.400,89	4035	1.522,99	3661	2.099,94	
4600	6132	2.784,19	7871	3.160,79	2425	1.106,26	3630	1.452,16	4219	1.579,81	3828	2.178,89	
4800	6399	2.878,54	8213	3.271,51	2530	1.145,48	3788	1.503,43	4402	1.636,63	3994	2.257,84	
5000	6665	2.972,89	8555	3.382,24	2635	1.184,70	3945	1.554,70	4585	1.693,45	4160	2.336,79	
5200	6932	3.067,24	8898	3.492,97	2741	1.223,92	4103	1.605,97	4769	1.750,27	4327	2.415,74	
5400	7199	3.161,59	9240	3.603,69	2846	1.263,14	4261	1.657,24	4952	1.807,09	4493	2.494,69	
5600	7465	3.255,95	9582	3.714,42	2952	1.302,36	4419	1.708,51	5136	1.863,91	4660	2.573,64	
5800	7732	3.350,30	9924	3.825,14	3057	1.341,58	4577	1.759,78	5319	1.920,73	4826	2.652,59	
6000	7998	3.444,65	10266	3.935,87	3162	1.380,80	4734	1.811,05	5502	1.977,55	4992	2.731,54	

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height		496														
Model		NHLH49/28		NHLH49/49		NHLLH49/28		NHLLH49/49		NHLLHL49/28		NHLLHL49/49				
Depth	mm	53		53		92		92		128		128				
Height of fins	mm	265		471		265		471		265		471				
Exponent	n	1,30		1,33		1,29		1,33		1,29		1,33				
Basic price	€	489,84		489,84		606,72		606,72		662,74		662,74				
Price/metre	€	492,70		520,47		529,75		585,26		547,77		629,65				
Length mm	$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price	
	W	€	W	€	W	€	W	€	W	€	W	€	W	€		
500	495	736,19	536	750,08	685	871,60	795	899,35	792	936,63	955	977,57				
600	594	785,46	644	802,12	822	924,57	954	957,88	950	991,40	1146	1.040,53				
700	693	834,73	751	854,17	959	977,55	1113	1.016,40	1109	1.046,18	1337	1.103,50				
800	792	884,00	858	906,22	1096	1.030,52	1272	1.074,93	1267	1.100,96	1528	1.166,46				
900	891	933,27	965	958,26	1233	1.083,50	1431	1.133,45	1425	1.155,73	1719	1.229,43				
1000	989	982,54	1072	1.010,31	1370	1.136,47	1590	1.191,98	1583	1.210,51	1910	1.292,39				
1100	1088	1.031,81	1180	1.062,36	1508	1.189,45	1750	1.250,51	1742	1.265,29	2101	1.355,36				
1200	1187	1.081,08	1287	1.114,40	1644	1.242,42	1908	1.309,03	1900	1.320,06	2292	1.418,32				
1300	1286	1.130,35	1394	1.166,45	1781	1.295,40	2067	1.367,56	2058	1.374,84	2483	1.481,29				
1400	1385	1.179,62	1501	1.218,50	1918	1.348,37	2226	1.426,08	2217	1.429,62	2674	1.544,25				
1500	1484	1.228,89	1608	1.270,55	2055	1.401,35	2385	1.484,61	2375	1.484,40	2865	1.607,22				
1600	1583	1.278,16	1716	1.322,59	2192	1.454,32	2544	1.543,14	2533	1.539,17	3056	1.670,18				
1700	1682	1.327,43	1823	1.374,64	2329	1.507,30	2703	1.601,66	2692	1.593,95	3247	1.733,15				
1800	1781	1.376,70	1930	1.426,69	2466	1.560,27	2862	1.660,19	2850	1.648,73	3438	1.796,11				
1900	1880	1.425,97	2037	1.478,73	2603	1.613,25	3021	1.718,71	3008	1.703,50	3629	1.859,08				
2000	1978	1.475,24	2144	1.530,78	2740	1.666,22	3180	1.777,24	3166	1.758,28	3820	1.922,04				
2200	2176	1.573,78	2359	1.634,87	3015	1.772,17	3499	1.894,29	3483	1.867,83	4202	2.047,97				
2400	2374	1.672,32	2573	1.738,97	3288	1.878,12	3816	2.011,34	3800	1.977,39	4584	2.173,90				
2600	2572	1.770,86	2788	1.843,06	3562	1.984,07	4134	2.128,40	4116	2.086,94	4966	2.299,83				
2800	2770	1.869,40	3002	1.947,16	3836	2.090,02	4452	2.245,45	4433	2.196,50	5348	2.425,76				
3000	2967	1.967,94	3216	2.051,25	4110	2.195,97	4770	2.362,50	4749	2.306,05	5730	2.551,69				
3200	3165	2.066,48	3431	2.155,34	4384	2.301,92	5088	2.479,55	5066	2.415,60	6112	2.677,62				
3400	3363	2.165,02	3645	2.259,44	4658	2.407,87	5406	2.596,60	5383	2.525,16	6494	2.803,55				
3600	3561	2.263,56	3860	2.363,53	4932	2.513,82	5724	2.713,66	5699	2.634,71	6876	2.929,48				
3800	3759	2.362,10	4074	2.467,63	5206	2.619,77	6042	2.830,71	6016	2.744,27	7258	3.055,41				
4000	3956	2.460,64	4288	2.571,72	5480	2.725,72	6360	2.947,76	6332	2.853,82	7640	3.181,34				
4200	4154	2.559,18	4503	2.675,81	5754	2.831,67	6678	3.064,81	6649	2.963,37	8022	3.307,27				
4400	4352	2.657,72	4717	2.779,91	6029	2.937,62	6997	3.181,86	6966	3.072,93	8404	3.433,20				
4600	4550	2.756,26	4932	2.884,00	6302	3.043,57	7314	3.298,92	7282	3.182,48	8786	3.559,13				
4800	4748	2.854,80	5146	2.988,10	6576	3.149,52	7632	3.415,97	7599	3.292,04	9168	3.685,06				
5000	4945	2.953,34	5360	3.092,19	6850	3.255,47	7950	3.533,02	7915	3.401,59	9550	3.810,99				
5200	5143	3.051,88	5575	3.196,28	7124	3.361,42	8268	3.650,07	8232	3.511,14	9932	3.936,92				
5400	5341	3.150,42	5789	3.300,38	7399	3.467,37	8586	3.767,12	8549	3.620,70	10314	4.062,85				
5600	5539	3.248,96	6004	3.404,47	7672	3.573,32	8904	3.884,18	8865	3.730,25	10696	4.188,78				
5800	5737	3.347,50	6218	3.508,57	7946	3.679,27	9222	4.001,23	9182	3.839,81	11078	4.314,71				
6000	5934	3.446,04	6432	3.612,66	8220	3.785,22	9540	4.118,28	9498	3.949,36	11460	4.440,64				

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height		567													
mm															
Model		NH56		NHL56/28		NHL56/56		NHH56		NHLH56/28		NHLH56/56			
Depth	mm	45		60		60		53		53		53			
Height of fins	mm	-		265		541		-		265		541			
Exponent	n	1,26		1,27		1,29		1,27		1,30		1,34			
Basic price	€	224,66		292,40		292,40		404,52		538,51		538,51			
Price/metre	€	221,74		280,71		317,79		445,94		543,81		580,90			
Length mm	$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price	
		€	€		€	€		€	€		€	€			
500	298	335,53		429	432,76	512	451,30	468	627,49	541	810,42	593	828,96		
600	358	357,70		515	460,83	615	483,07	561	672,08	649	864,80	711	887,05		
700	418	379,88		600	488,90	717	514,85	655	716,68	757	919,18	830	945,14		
800	477	402,05		686	516,97	820	546,63	748	761,27	865	973,56	948	1.003,23		
900	537	424,23		772	545,04	922	578,41	842	805,87	973	1.027,94	1067	1.061,32		
1000	596	446,40		857	573,11	1024	610,19	935	850,46	1081	1.082,32	1185	1.119,41		
1100	656	468,57		943	601,18	1127	641,97	1029	895,05	1190	1.136,70	1304	1.177,50		
1200	716	490,75		1029	629,25	1229	673,75	1122	939,65	1298	1.191,08	1422	1.235,59		
1300	775	512,92		1115	657,32	1332	705,53	1216	984,24	1406	1.245,46	1541	1.293,68		
1400	835	535,10		1200	685,39	1434	737,31	1309	1.028,84	1514	1.299,84	1659	1.351,77		
1500	894	557,27		1286	713,47	1536	769,09	1403	1.073,43	1622	1.354,23	1778	1.409,86		
1600	954	579,44		1372	741,54	1639	800,86	1496	1.118,02	1730	1.408,61	1896	1.467,95		
1700	1014	601,62		1457	769,61	1741	832,64	1590	1.162,62	1838	1.462,99	2015	1.526,04		
1800	1073	623,79		1543	797,68	1844	864,42	1683	1.207,21	1946	1.517,37	2133	1.584,13		
1900	1133	645,97		1629	825,75	1946	896,20	1777	1.251,81	2054	1.571,75	2252	1.642,22		
2000	1192	668,14		1714	853,82	2048	927,98	1870	1.296,40	2162	1.626,13	2370	1.700,31		
2200	1312	712,49		1886	909,96	2253	991,54	2057	1.385,59	2379	1.734,89	2607	1.816,49		
2400	1431	756,84		2057	966,10	2458	1.055,10	2244	1.474,78	2595	1.843,65	2844	1.932,67		
2600	1550	801,18		2229	1.022,25	2663	1.118,65	2431	1.563,96	2811	1.952,42	3081	2.048,85		
2800	1669	845,53		2400	1.078,39	2868	1.182,21	2618	1.653,15	3027	2.061,18	3318	2.165,03		
3000	1788	889,88		2571	1.134,53	3072	1.245,77	2805	1.742,34	3243	2.169,94	3555	2.281,21		
3200	1908	934,23		2743	1.190,67	3277	1.309,33	2992	1.831,53	3460	2.278,70	3792	2.397,39		
3400	2027	978,58		2914	1.246,81	3482	1.372,89	3179	1.920,72	3676	2.387,46	4029	2.513,57		
3600	2146	1.022,92		3086	1.302,96	3687	1.436,44	3366	2.009,90	3892	2.496,23	4266	2.629,75		
3800	2265	1.067,27		3257	1.359,10	3892	1.500,00	3553	2.099,09	4108	2.604,99	4503	2.745,93		
4000	2384	1.111,62		3428	1.415,24	4096	1.563,56	3740	2.188,28	4324	2.713,75	4740	2.862,11		
4200	2504	1.155,97		3600	1.471,38	4301	1.627,12	3927	2.277,47	4541	2.822,51	4977	2.978,29		
4400	2623	1.200,32		3771	1.527,52	4506	1.690,68	4114	2.366,66	4757	2.931,27	5214	3.094,47		
4600	2742	1.244,66		3943	1.583,67	4711	1.754,23	4301	2.455,84	4973	3.040,04	5451	3.210,65		
4800	2861	1.289,01		4114	1.639,81	4916	1.817,79	4488	2.545,03	5189	3.148,80	5688	3.326,83		
5000	2980	1.333,36		4285	1.695,95	5120	1.881,35	4675	2.634,22	5405	3.257,56	5925	3.443,01		
5200	3100	1.377,71		4457	1.752,09	5325	1.944,91	4862	2.723,41	5622	3.366,32	6162	3.559,19		
5400	3219	1.422,06		4628	1.808,23	5530	2.008,47	5049	2.812,60	5838	3.475,08	6399	3.675,37		
5600	3338	1.466,40		4800	1.864,38	5735	2.072,02	5236	2.901,78	6054	3.583,85	6636	3.791,55		
5800	3457	1.510,75		4971	1.920,52	5940	2.135,58	5423	2.990,97	6270	3.692,61	6873	3.907,73		
6000	3576	1.555,10		5142	1.976,66	6144	2.199,14	5610	3.080,16	6486	3.801,37	7110	4.023,91		

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova



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

Height	mm	567						638					
Model		NHLLH56/28	NHLLH56/56	NHLLHL56/28	NHLLHL56/56	NH63	NHL63/28						
Depth	mm	92	92	128	128	45	60						
Height of fins	mm	265	541	265	541	-	265						
Exponent	n	1,29	1,34	1,29	1,35	1,26	1,27						
Basic price	€	<b>648,16</b>	<b>648,16</b>	<b>711,56</b>	<b>711,56</b>	<b>245,14</b>	<b>311,87</b>						
Price/metre	€	<b>580,90</b>	<b>654,98</b>	<b>596,48</b>	<b>705,67</b>	<b>247,33</b>	<b>305,08</b>						
Length	mm	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
		W	€	W	€	W	€	W	€	W	€	W	€
500	740	<b>938,61</b>	875	<b>975,65</b>	851	<b>1.009,80</b>	1055	<b>1.064,40</b>	333	<b>368,81</b>	464	<b>464,41</b>	
600	888	<b>996,70</b>	1050	<b>1.041,15</b>	1022	<b>1.069,45</b>	1266	<b>1.134,96</b>	399	<b>393,54</b>	557	<b>494,92</b>	
700	1036	<b>1.054,79</b>	1225	<b>1.106,65</b>	1192	<b>1.129,10</b>	1477	<b>1.205,53</b>	466	<b>418,27</b>	649	<b>525,43</b>	
800	1184	<b>1.112,88</b>	1400	<b>1.172,14</b>	1362	<b>1.188,74</b>	1688	<b>1.276,10</b>	532	<b>443,00</b>	742	<b>555,93</b>	
900	1332	<b>1.170,97</b>	1575	<b>1.237,64</b>	1532	<b>1.248,39</b>	1899	<b>1.346,66</b>	599	<b>467,74</b>	835	<b>586,44</b>	
1000	1480	<b>1.229,06</b>	1750	<b>1.303,14</b>	1702	<b>1.308,04</b>	2109	<b>1.417,23</b>	665	<b>492,47</b>	927	<b>616,95</b>	
1100	1629	<b>1.287,15</b>	1926	<b>1.368,64</b>	1873	<b>1.367,69</b>	2320	<b>1.487,80</b>	732	<b>517,20</b>	1020	<b>647,46</b>	
1200	1776	<b>1.345,24</b>	2100	<b>1.434,14</b>	2043	<b>1.427,34</b>	2531	<b>1.558,36</b>	798	<b>541,94</b>	1113	<b>677,97</b>	
1300	1924	<b>1.403,33</b>	2275	<b>1.499,63</b>	2213	<b>1.486,98</b>	2742	<b>1.628,93</b>	865	<b>566,67</b>	1206	<b>708,47</b>	
1400	2072	<b>1.461,42</b>	2450	<b>1.565,13</b>	2383	<b>1.546,63</b>	2953	<b>1.699,50</b>	931	<b>591,40</b>	1298	<b>738,98</b>	
1500	2220	<b>1.519,51</b>	2625	<b>1.630,63</b>	2553	<b>1.606,28</b>	3164	<b>1.770,07</b>	998	<b>616,14</b>	1391	<b>769,49</b>	
1600	2368	<b>1.577,60</b>	2800	<b>1.696,13</b>	2724	<b>1.665,93</b>	3375	<b>1.840,63</b>	1064	<b>640,87</b>	1484	<b>800,00</b>	
1700	2516	<b>1.635,69</b>	2975	<b>1.761,63</b>	2894	<b>1.725,58</b>	3586	<b>1.911,20</b>	1131	<b>665,60</b>	1576	<b>830,51</b>	
1800	2664	<b>1.693,78</b>	3150	<b>1.827,12</b>	3064	<b>1.785,22</b>	3797	<b>1.981,77</b>	1197	<b>690,33</b>	1669	<b>861,01</b>	
1900	2812	<b>1.751,87</b>	3325	<b>1.892,62</b>	3234	<b>1.844,87</b>	4008	<b>2.052,33</b>	1264	<b>715,07</b>	1762	<b>891,52</b>	
2000	2960	<b>1.809,96</b>	3500	<b>1.958,12</b>	3404	<b>1.904,52</b>	4218	<b>2.122,90</b>	1330	<b>739,80</b>	1854	<b>922,03</b>	
2200	3257	<b>1.926,14</b>	3851	<b>2.089,12</b>	3745	<b>2.023,82</b>	4640	<b>2.264,03</b>	1463	<b>789,27</b>	2040	<b>983,05</b>	
2400	3552	<b>2.042,32</b>	4200	<b>2.220,11</b>	4085	<b>2.143,11</b>	5062	<b>2.405,17</b>	1596	<b>838,73</b>	2225	<b>1.044,06</b>	
2600	3848	<b>2.158,50</b>	4550	<b>2.351,11</b>	4426	<b>2.262,41</b>	5484	<b>2.546,30</b>	1729	<b>888,20</b>	2411	<b>1.105,08</b>	
2800	4144	<b>2.274,68</b>	4900	<b>2.482,10</b>	4766	<b>2.381,70</b>	5906	<b>2.687,44</b>	1862	<b>937,66</b>	2596	<b>1.166,09</b>	
3000	4440	<b>2.390,86</b>	5250	<b>2.613,10</b>	5106	<b>2.501,00</b>	6327	<b>2.828,57</b>	1995	<b>987,13</b>	2781	<b>1.227,11</b>	
3200	4736	<b>2.507,04</b>	5600	<b>2.744,10</b>	5447	<b>2.620,30</b>	6749	<b>2.969,70</b>	2128	<b>1.036,60</b>	2967	<b>1.288,13</b>	
3400	5032	<b>2.623,22</b>	5950	<b>2.875,09</b>	5787	<b>2.739,59</b>	7171	<b>3.110,84</b>	2261	<b>1.086,06</b>	3152	<b>1.349,14</b>	
3600	5328	<b>2.739,40</b>	6300	<b>3.006,09</b>	6128	<b>2.858,89</b>	7593	<b>3.251,97</b>	2394	<b>1.135,53</b>	3338	<b>1.410,16</b>	
3800	5624	<b>2.855,58</b>	6650	<b>3.137,08</b>	6468	<b>2.978,18</b>	8015	<b>3.393,11</b>	2527	<b>1.184,99</b>	3523	<b>1.471,17</b>	
4000	5920	<b>2.971,76</b>	7000	<b>3.268,08</b>	6808	<b>3.097,48</b>	8436	<b>3.534,24</b>	2660	<b>1.234,46</b>	3708	<b>1.532,19</b>	
4200	6216	<b>3.087,94</b>	7350	<b>3.399,08</b>	7149	<b>3.216,78</b>	8858	<b>3.675,37</b>	2793	<b>1.283,93</b>	3894	<b>1.593,21</b>	
4400	6513	<b>3.204,12</b>	7701	<b>3.530,07</b>	7489	<b>3.336,07</b>	9280	<b>3.816,51</b>	2926	<b>1.333,39</b>	4079	<b>1.654,22</b>	
4600	6808	<b>3.320,30</b>	8050	<b>3.661,07</b>	7830	<b>3.455,37</b>	9702	<b>3.957,64</b>	3059	<b>1.382,86</b>	4265	<b>1.715,24</b>	
4800	7104	<b>3.436,48</b>	8400	<b>3.792,06</b>	8170	<b>3.574,66</b>	10124	<b>4.098,78</b>	3192	<b>1.432,32</b>	4450	<b>1.776,25</b>	
5000	7400	<b>3.552,66</b>	8750	<b>3.923,06</b>	8510	<b>3.693,96</b>	10545	<b>4.239,91</b>	3325	<b>1.481,79</b>	4635	<b>1.837,27</b>	
5200	7696	<b>3.668,84</b>	9100	<b>4.054,06</b>	8851	<b>3.813,26</b>	10967	<b>4.381,04</b>	3458	<b>1.531,26</b>	4821	<b>1.898,29</b>	
5400	7993	<b>3.785,02</b>	9450	<b>4.185,05</b>	9191	<b>3.932,55</b>	11389	<b>4.522,18</b>	3591	<b>1.580,72</b>	5006	<b>1.959,30</b>	
5600	8288	<b>3.901,20</b>	9800	<b>4.316,05</b>	9532	<b>4.051,85</b>	11811	<b>4.663,31</b>	3724	<b>1.630,19</b>	5192	<b>2.020,32</b>	
5800	8584	<b>4.017,38</b>	10150	<b>4.447,04</b>	9872	<b>4.171,14</b>	12233	<b>4.804,45</b>	3857	<b>1.679,65</b>	5377	<b>2.081,33</b>	
6000	8880	<b>4.133,56</b>	10500	<b>4.578,04</b>	10212	<b>4.290,44</b>	12654	<b>4.945,58</b>	3990	<b>1.729,12</b>	5562	<b>2.142,35</b>	

Surcharge for Completo, valve at top, connections V013/V014 €: **181,73**

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: **221,19**

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height		638											
Model		NHL63/56		NHH63		NHLH63/28		NHLH63/56		NHLLH63/28		NHLLH63/56	
Depth	mm	60		53		53		53		92		92	
Height of fins	mm	541		-		265		541		265		541	
Exponent	n	1,29		1,27		1,30		1,34		1,30		1,34	
Basic price	€	311,87		445,94		587,22		587,22		689,60		689,60	
Price/metre	€	342,17		497,09		595,05		632,09		632,09		706,16	
Length mm	$\Phi_s$ W	Price		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$	
		€	W	€	W	€	W	€	W	€	W	€	
500	543	482,96	520	694,49	589	884,75	633	903,27	795	1.005,65	922	1.042,68	
600	652	517,17	624	744,19	707	944,25	759	966,47	954	1.068,85	1106	1.113,30	
700	761	551,39	728	793,90	824	1.003,76	886	1.029,68	1113	1.132,06	1291	1.183,91	
800	869	585,61	832	843,61	942	1.063,26	1012	1.092,89	1272	1.195,27	1475	1.254,53	
900	978	619,82	936	893,32	1060	1.122,77	1139	1.156,10	1431	1.258,48	1659	1.325,14	
1000	1086	654,04	1040	943,03	1177	1.182,27	1265	1.219,31	1590	1.321,69	1843	1.395,76	
1100	1195	688,26	1144	992,74	1295	1.241,78	1392	1.282,52	1750	1.384,90	2028	1.466,38	
1200	1304	722,47	1248	1.042,45	1413	1.301,28	1518	1.345,73	1908	1.448,11	2212	1.536,99	
1300	1412	756,69	1352	1.092,16	1531	1.360,79	1645	1.408,94	2067	1.511,32	2396	1.607,61	
1400	1521	790,91	1456	1.141,87	1648	1.420,29	1771	1.472,15	2226	1.574,53	2581	1.678,22	
1500	1629	825,13	1560	1.191,58	1766	1.479,80	1898	1.535,36	2385	1.637,74	2765	1.748,84	
1600	1738	859,34	1664	1.241,28	1884	1.539,30	2024	1.598,56	2544	1.700,94	2949	1.819,46	
1700	1847	893,56	1768	1.290,99	2001	1.598,81	2151	1.661,77	2703	1.764,15	3134	1.890,07	
1800	1955	927,78	1872	1.340,70	2119	1.658,31	2277	1.724,98	2862	1.827,36	3318	1.960,69	
1900	2064	961,99	1976	1.390,41	2237	1.717,82	2404	1.788,19	3021	1.890,57	3502	2.031,30	
2000	2172	996,21	2080	1.440,12	2354	1.777,32	2530	1.851,40	3180	1.953,78	3686	2.101,92	
2200	2390	1.064,64	2288	1.539,54	2590	1.896,33	2783	1.977,82	3499	2.080,20	4055	2.243,15	
2400	2607	1.133,08	2496	1.638,96	2825	2.015,34	3036	2.104,24	3816	2.206,62	4424	2.384,38	
2600	2824	1.201,51	2704	1.738,37	3061	2.134,35	3289	2.230,65	4134	2.333,03	4792	2.525,62	
2800	3041	1.269,95	2912	1.837,79	3296	2.253,36	3542	2.357,07	4452	2.459,45	5161	2.666,85	
3000	3258	1.338,38	3120	1.937,21	3531	2.372,37	3795	2.483,49	4770	2.585,87	5529	2.808,08	
3200	3476	1.406,81	3328	2.036,63	3767	2.491,38	4048	2.609,91	5088	2.712,29	5898	2.949,31	
3400	3693	1.475,25	3536	2.136,05	4002	2.610,39	4301	2.736,33	5406	2.838,71	6267	3.090,54	
3600	3910	1.543,68	3744	2.235,46	4238	2.729,40	4554	2.862,74	5724	2.965,12	6635	3.231,78	
3800	4127	1.612,12	3952	2.334,88	4473	2.848,41	4807	2.989,16	6042	3.091,54	7004	3.373,01	
4000	4344	1.680,55	4160	2.434,30	4708	2.967,42	5060	3.115,58	6360	3.217,96	7372	3.514,24	
4200	4562	1.748,98	4368	2.533,72	4944	3.086,43	5313	3.242,00	6678	3.344,38	7741	3.655,47	
4400	4779	1.817,42	4576	2.633,14	5179	3.205,44	5566	3.368,42	6997	3.470,80	8110	3.796,70	
4600	4996	1.885,85	4784	2.732,55	5415	3.324,45	5819	3.494,83	7314	3.597,21	8478	3.937,94	
4800	5213	1.954,29	4992	2.831,97	5650	3.443,46	6072	3.621,25	7632	3.723,63	8847	4.079,17	
5000	5430	2.022,72	5200	2.931,39	5885	3.562,47	6325	3.747,67	7950	3.850,05	9215	4.220,40	
5200	5648	2.091,15	5408	3.030,81	6121	3.681,48	6578	3.874,09	8268	3.976,47	9584	4.361,63	
5400	5865	2.159,59	5616	3.130,23	6356	3.800,49	6831	4.000,51	8586	4.102,89	9953	4.502,86	
5600	6082	2.228,02	5824	3.229,64	6592	3.919,50	7084	4.126,92	8904	4.229,30	10321	4.644,10	
5800	6299	2.296,46	6032	3.329,06	6827	4.038,51	7337	4.253,34	9222	4.355,72	10690	4.785,33	
6000	6516	2.364,89	6240	3.428,48	7062	4.157,52	7590	4.379,76	9540	4.482,14	11058	4.926,56	

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height	mm	638				709						
Model		NHLLHL63/28	NHLLHL63/56	NH70	NHL70/28	NHL70/56	NHL70/56	NHL70/56	NHL70/56	NHL70/56	NHL70/56	NHL70/56
Depth	mm	128	128	45	60	60	60	60	60	60	60	53
Height of fins	mm	265	541	-	265	541	541	541	541	541	541	-
Exponent	n	1,29	1,35	1,27	1,27	1,29	1,29	1,29	1,29	1,29	1,29	1,28
Basic price	€	760,25	760,25	265,60	331,43	331,43	331,43	331,43	331,43	331,43	331,43	487,37
Price/metre	€	645,21	754,39	272,95	329,38	366,47	366,47	366,47	366,47	366,47	366,47	548,22
Length mm	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
	W	€	W	€	W	€	W	€	W	€	W	€
500	912	1.082,86	1100	1.137,45	368	402,08	498	496,12	575	514,67	573	761,48
600	1094	1.147,38	1320	1.212,88	442	429,37	598	529,06	690	551,31	688	816,30
700	1277	1.211,90	1540	1.288,32	516	456,67	698	562,00	805	587,96	803	871,12
800	1459	1.276,42	1760	1.363,76	589	483,96	797	594,93	920	624,61	917	925,95
900	1641	1.340,94	1980	1.439,20	663	511,26	897	627,87	1035	661,25	1032	980,77
1000	1823	1.405,46	2200	1.514,64	736	538,55	996	660,81	1149	697,90	1146	1.035,59
1100	2006	1.469,98	2420	1.590,08	810	565,85	1096	693,75	1264	734,55	1261	1.090,41
1200	2188	1.534,50	2640	1.665,52	884	593,14	1196	726,69	1379	771,19	1376	1.145,23
1300	2370	1.599,02	2860	1.740,96	957	620,44	1295	759,62	1494	807,84	1490	1.200,06
1400	2553	1.663,54	3080	1.816,40	1031	647,73	1395	792,56	1609	844,49	1605	1.254,88
1500	2735	1.728,07	3300	1.891,84	1104	675,03	1494	825,50	1724	881,14	1719	1.309,70
1600	2917	1.792,59	3520	1.967,27	1178	702,32	1594	858,44	1839	917,78	1834	1.364,52
1700	3100	1.857,11	3740	2.042,71	1252	729,62	1694	891,38	1954	954,43	1949	1.419,34
1800	3282	1.921,63	3960	2.118,15	1325	756,91	1793	924,31	2069	991,08	2063	1.474,17
1900	3464	1.986,15	4180	2.193,59	1399	784,21	1893	957,25	2184	1.027,72	2178	1.528,99
2000	3646	2.050,67	4400	2.269,03	1472	811,50	1992	990,19	2298	1.064,37	2292	1.583,81
2200	4011	2.179,71	4840	2.419,91	1620	866,09	2192	1.056,07	2528	1.137,66	2522	1.693,45
2400	4376	2.308,75	5280	2.570,79	1767	920,68	2391	1.121,94	2758	1.210,96	2751	1.803,10
2600	4740	2.437,80	5720	2.721,66	1914	975,27	2590	1.187,82	2988	1.284,25	2980	1.912,74
2800	5105	2.566,84	6160	2.872,54	2061	1.029,86	2789	1.253,69	3218	1.357,55	3209	2.022,39
3000	5469	2.695,88	6600	3.023,42	2208	1.084,45	2988	1.319,57	3447	1.430,84	3438	2.132,03
3200	5834	2.824,92	7040	3.174,30	2356	1.139,04	3188	1.385,45	3677	1.504,13	3668	2.241,67
3400	6199	2.953,96	7480	3.325,18	2503	1.193,63	3387	1.451,32	3907	1.577,43	3897	2.351,32
3600	6563	3.083,01	7920	3.476,05	2650	1.248,22	3586	1.517,20	4137	1.650,72	4126	2.460,96
3800	6928	3.212,05	8360	3.626,93	2797	1.302,81	3785	1.583,07	4367	1.724,02	4355	2.570,61
4000	7292	3.341,09	8800	3.777,81	2944	1.357,40	3984	1.648,95	4596	1.797,31	4584	2.680,25
4200	7657	3.470,13	9240	3.928,69	3092	1.411,99	4184	1.714,83	4826	1.870,60	4814	2.789,89
4400	8022	3.599,17	9680	4.079,57	3239	1.466,58	4383	1.780,70	5056	1.943,90	5043	2.899,54
4600	8386	3.728,22	10120	4.230,44	3386	1.521,17	4582	1.846,58	5286	2.017,19	5272	3.009,18
4800	8751	3.857,26	10560	4.381,32	3533	1.575,76	4781	1.912,45	5516	2.090,49	5501	3.118,83
5000	9115	3.986,30	11000	4.532,20	3680	1.630,35	4980	1.978,33	5745	2.163,78	5730	3.228,47
5200	9480	4.115,34	11440	4.683,08	3828	1.684,94	5180	2.044,21	5975	2.237,07	5960	3.338,11
5400	9845	4.244,38	11880	4.833,96	3975	1.739,53	5379	2.110,08	6205	2.310,37	6189	3.447,76
5600	10209	4.373,43	12320	4.984,83	4122	1.794,12	5578	2.175,96	6435	2.383,66	6418	3.557,40
5800	10574	4.502,47	12760	5.135,71	4269	1.848,71	5777	2.241,83	6665	2.456,96	6647	3.667,05
6000	10938	4.631,51	13200	5.286,59	4416	1.903,30	5976	2.307,71	6894	2.530,25	6876	3.776,69

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height		709											
mm													
Model		NHLH70/28		NHLH70/56		NHLLH70/28		NHLLH70/56		NHLLHL70/28		NHLLHL70/56	
Depth	mm	53		53		92		92		128		128	
Height of fins	mm	265		541		265		541		265		541	
Exponent	n	1,30		1,33		1,30		1,34		1,30		1,35	
Basic price	€	635,97		635,97		731,00		731,00		808,99		808,99	
Price/metre	€	646,23		683,27		683,27		757,31		693,97		803,10	
Length mm	$\Phi_s$ W	Price		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$	
		€	W	€	W	€	W	€	W	€	W	€	
500	638	959,09	672	977,61	850	1.072,64	968	1.109,66	971	1.155,98	1146	1.210,54	
600	765	1.023,71	807	1.045,93	1020	1.140,96	1162	1.185,39	1166	1.225,37	1375	1.290,85	
700	893	1.088,33	941	1.114,26	1190	1.209,29	1356	1.261,12	1360	1.294,77	1604	1.371,16	
800	1020	1.152,95	1076	1.182,59	1360	1.277,62	1549	1.336,85	1554	1.364,17	1833	1.451,47	
900	1148	1.217,58	1210	1.250,91	1530	1.345,94	1743	1.412,58	1748	1.433,56	2062	1.531,78	
1000	1275	1.282,20	1344	1.319,24	1699	1.414,27	1936	1.488,31	1942	1.502,96	2291	1.612,09	
1100	1403	1.346,82	1479	1.387,57	1869	1.482,60	2130	1.564,04	2137	1.572,36	2521	1.692,40	
1200	1530	1.411,45	1613	1.455,89	2039	1.550,92	2324	1.639,77	2331	1.641,75	2750	1.772,71	
1300	1658	1.476,07	1748	1.524,22	2209	1.619,25	2517	1.715,50	2525	1.711,15	2979	1.853,02	
1400	1785	1.540,69	1882	1.592,55	2379	1.687,58	2711	1.791,23	2719	1.780,55	3208	1.933,33	
1500	1913	1.605,32	2016	1.660,88	2549	1.755,91	2904	1.866,97	2913	1.849,95	3437	2.013,64	
1600	2040	1.669,94	2151	1.729,20	2719	1.824,23	3098	1.942,70	3108	1.919,34	3666	2.093,95	
1700	2168	1.734,56	2285	1.797,53	2889	1.892,56	3292	2.018,43	3302	1.988,74	3895	2.174,26	
1800	2295	1.799,18	2420	1.865,86	3059	1.960,89	3485	2.094,16	3496	2.058,14	4124	2.254,57	
1900	2423	1.863,81	2554	1.934,18	3229	2.029,21	3679	2.169,89	3690	2.127,53	4353	2.334,88	
2000	2550	1.928,43	2688	2.002,51	3398	2.097,54	3872	2.245,62	3884	2.196,93	4582	2.415,19	
2200	2805	2.057,68	2957	2.139,16	3738	2.234,19	4260	2.397,08	4273	2.335,72	5041	2.575,81	
2400	3060	2.186,92	3226	2.275,82	4078	2.370,85	4647	2.548,54	4661	2.474,52	5499	2.736,43	
2600	3315	2.316,17	3495	2.412,47	4418	2.507,50	5034	2.700,01	5050	2.613,31	5957	2.897,05	
2800	3570	2.445,41	3764	2.549,13	4758	2.644,16	5421	2.851,47	5438	2.752,11	6415	3.057,67	
3000	3825	2.574,66	4032	2.685,78	5097	2.780,81	5808	3.002,93	5826	2.890,90	6873	3.218,29	
3200	4080	2.703,91	4301	2.822,43	5437	2.917,46	6196	3.154,39	6215	3.029,69	7332	3.378,91	
3400	4335	2.833,15	4570	2.959,09	5777	3.054,12	6583	3.305,85	6603	3.168,49	7790	3.539,53	
3600	4590	2.962,40	4839	3.095,74	6117	3.190,77	6970	3.457,32	6992	3.307,28	8248	3.700,15	
3800	4845	3.091,64	5108	3.232,40	6457	3.327,43	7357	3.608,78	7380	3.446,08	8706	3.860,77	
4000	5100	3.220,89	5376	3.369,05	6796	3.464,08	7744	3.760,24	7768	3.584,87	9164	4.021,39	
4200	5355	3.350,14	5645	3.505,70	7136	3.600,73	8132	3.911,70	8157	3.723,66	9623	4.182,01	
4400	5610	3.479,38	5914	3.642,36	7476	3.737,39	8519	4.063,16	8545	3.862,46	10081	4.342,63	
4600	5865	3.608,63	6183	3.779,01	7816	3.874,04	8906	4.214,63	8934	4.001,25	10539	4.503,25	
4800	6120	3.737,87	6452	3.915,67	8156	4.010,70	9293	4.366,09	9322	4.140,05	10997	4.663,87	
5000	6375	3.867,12	6720	4.052,32	8495	4.147,35	9680	4.517,55	9710	4.278,84	11455	4.824,49	
5200	6630	3.996,37	6989	4.188,97	8835	4.284,00	10068	4.669,01	10099	4.417,63	11914	4.985,11	
5400	6885	4.125,61	7258	4.325,63	9175	4.420,66	10455	4.820,47	10487	4.556,43	12372	5.145,73	
5600	7140	4.254,86	7527	4.462,28	9515	4.557,31	10842	4.971,94	10876	4.695,22	12830	5.306,35	
5800	7395	4.384,10	7796	4.598,94	9855	4.693,97	11229	5.123,40	11264	4.834,02	13288	5.466,97	
6000	7650	4.513,35	8064	4.735,59	10194	4.830,62	11616	5.274,86	11652	4.972,81	13746	5.627,59	

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height	mm	780											
Model		NH77	NHL77/28	NHL77/56	NHH77	NHLLH77/28	NHLLH77/56						
Depth	mm	45	60	60	53	92	92						
Height of fins	mm	-	265	541	-	265	541						
Exponent	n	1,27	1,27	1,29	1,28	1,30	1,34						
Basic price	€	286,06	350,87	350,87	638,39	772,43	772,43						
Price/metre	€	298,50	353,80	390,85	599,39	734,42	808,50						
Length mm	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	
	W	€	W	€	W	€	W	€	W	€	W	€	
500	404	435,31	533	527,77	606	546,30	627	938,09	902	1.139,64	1015	1.176,68	
600	485	465,16	639	563,15	728	585,38	752	998,02	1083	1.213,08	1218	1.257,53	
700	566	495,01	746	598,53	849	624,47	877	1.057,96	1263	1.286,52	1421	1.338,38	
800	646	524,86	852	633,91	970	663,55	1002	1.117,90	1444	1.359,97	1624	1.419,23	
900	727	554,71	959	669,29	1091	702,64	1128	1.177,84	1624	1.433,41	1827	1.500,08	
1000	808	584,56	1065	704,67	1212	741,72	1253	1.237,78	1804	1.506,85	2029	1.580,93	
1100	889	614,41	1172	740,05	1334	780,81	1378	1.297,72	1985	1.580,29	2232	1.661,78	
1200	970	644,26	1278	775,43	1455	819,89	1504	1.357,66	2165	1.653,73	2435	1.742,63	
1300	1050	674,11	1385	810,81	1576	858,98	1629	1.417,60	2346	1.727,18	2638	1.823,48	
1400	1131	703,96	1491	846,19	1697	898,06	1754	1.477,54	2526	1.800,62	2841	1.904,33	
1500	1212	733,81	1598	881,57	1818	937,15	1880	1.537,48	2706	1.874,06	3044	1.985,18	
1600	1293	763,66	1704	916,95	1940	976,23	2005	1.597,41	2887	1.947,50	3247	2.066,03	
1700	1374	793,51	1811	952,33	2061	1.015,32	2130	1.657,35	3067	2.020,94	3450	2.146,88	
1800	1454	823,36	1917	987,71	2182	1.054,40	2255	1.717,29	3248	2.094,39	3653	2.227,73	
1900	1535	853,21	2024	1.023,09	2303	1.093,49	2381	1.777,23	3428	2.167,83	3856	2.308,58	
2000	1616	883,06	2130	1.058,47	2424	1.132,57	2506	1.837,17	3608	2.241,27	4058	2.389,43	
2200	1778	942,76	2343	1.129,23	2667	1.210,74	2757	1.957,05	3969	2.388,15	4464	2.551,13	
2400	1939	1.002,46	2556	1.199,99	2909	1.288,91	3007	2.076,93	4330	2.535,04	4870	2.712,83	
2600	2101	1.062,16	2769	1.270,75	3152	1.367,08	3258	2.196,80	4691	2.681,92	5276	2.874,53	
2800	2262	1.121,86	2982	1.341,51	3394	1.445,25	3508	2.316,68	5052	2.828,81	5682	3.036,23	
3000	2424	1.181,56	3195	1.412,27	3636	1.523,42	3759	2.436,56	5412	2.975,69	6087	3.197,93	
3200	2586	1.241,26	3408	1.483,03	3879	1.601,59	4010	2.556,44	5773	3.122,57	6493	3.359,63	
3400	2747	1.300,96	3621	1.553,79	4121	1.679,76	4260	2.676,32	6134	3.269,46	6899	3.521,33	
3600	2909	1.360,66	3834	1.624,55	4364	1.757,93	4511	2.796,19	6495	3.416,34	7305	3.683,03	
3800	3070	1.420,36	4047	1.695,31	4606	1.836,10	4761	2.916,07	6856	3.563,23	7711	3.844,73	
4000	3232	1.480,06	4260	1.766,07	4848	1.914,27	5012	3.035,95	7216	3.710,11	8116	4.006,43	
4200	3394	1.539,76	4473	1.836,83	5091	1.992,44	5263	3.155,83	7577	3.856,99	8522	4.168,13	
4400	3555	1.599,46	4686	1.907,59	5333	2.070,61	5513	3.275,71	7938	4.003,88	8928	4.329,83	
4600	3717	1.659,16	4899	1.978,35	5576	2.148,78	5764	3.395,58	8299	4.150,76	9334	4.491,53	
4800	3878	1.718,86	5112	2.049,11	5818	2.226,95	6014	3.515,46	8660	4.297,65	9740	4.653,23	
5000	4040	1.778,56	5325	2.119,87	6060	2.305,12	6265	3.635,34	9020	4.444,53	10145	4.814,93	
5200	4202	1.838,26	5538	2.190,63	6303	2.383,29	6516	3.755,22	9381	4.591,41	10551	4.976,63	
5400	4363	1.897,96	5751	2.261,39	6545	2.461,46	6766	3.875,10	9742	4.738,30	10957	5.138,33	
5600	4525	1.957,66	5964	2.332,15	6788	2.539,63	7017	3.994,97	10103	4.885,18	11363	5.300,03	
5800	4686	2.017,36	6177	2.402,91	7030	2.617,80	7267	4.114,85	10464	5.032,07	11769	5.461,73	
6000	4848	2.077,06	6390	2.473,67	7272	2.695,97	7518	4.234,73	10824	5.178,95	12174	5.623,43	

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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



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

Height	mm	780				851							
Model		NHLLHL77/28	NHLLHL77/56	NH84	NHL84/28	NHL84/56	NHH84						
Depth	mm	128	128	45	60	60	53						
Height of fins	mm	265	541	-	265	541	-						
Exponent	n	1,30	1,35	1,28	1,27	1,29	1,29						
Basic price	€	857,75	857,75	306,51	370,34	370,34	667,64						
Price/metre	€	742,71	851,90	324,08	378,16	415,23	650,62						
Length mm	$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price		$\Phi_s$ W	Price		
		€	€		€	€		€	€				
500	1028	1.229,11	1191	1.283,70	441	468,55	566	559,42	637	577,96	681	992,95	
600	1233	1.303,38	1430	1.368,89	530	500,96	680	597,24	765	619,48	817	1.058,01	
700	1439	1.377,65	1668	1.454,08	618	533,37	793	635,05	892	661,00	953	1.123,07	
800	1644	1.451,92	1906	1.539,27	706	565,77	906	672,87	1020	702,52	1090	1.188,14	
900	1850	1.526,19	2144	1.624,46	794	598,18	1019	710,68	1147	744,05	1226	1.253,20	
1000	2055	1.600,46	2382	1.709,65	882	630,59	1132	748,50	1274	785,57	1362	1.318,26	
1100	2261	1.674,73	2621	1.794,84	971	663,00	1246	786,32	1402	827,09	1498	1.383,32	
1200	2466	1.749,00	2859	1.880,03	1059	695,41	1359	824,13	1529	868,62	1634	1.448,38	
1300	2672	1.823,27	3097	1.965,22	1147	727,81	1472	861,95	1657	910,14	1771	1.513,45	
1400	2877	1.897,54	3335	2.050,41	1235	760,22	1585	899,76	1784	951,66	1907	1.578,51	
1500	3083	1.971,82	3573	2.135,60	1323	792,63	1698	937,58	1911	993,19	2043	1.643,57	
1600	3288	2.046,09	3812	2.220,79	1412	825,04	1812	975,40	2039	1.034,71	2179	1.708,63	
1700	3494	2.120,36	4050	2.305,98	1500	857,45	1925	1.013,21	2166	1.076,23	2315	1.773,69	
1800	3699	2.194,63	4288	2.391,17	1588	889,85	2038	1.051,03	2294	1.117,75	2452	1.838,76	
1900	3905	2.268,90	4526	2.476,36	1676	922,26	2151	1.088,84	2421	1.159,28	2588	1.903,82	
2000	4110	2.343,17	4764	2.561,55	1764	954,67	2264	1.126,66	2548	1.200,80	2724	1.968,88	
2200	4521	2.491,71	5241	2.731,93	1941	1.019,49	2491	1.202,29	2803	1.283,85	2996	2.099,00	
2400	4932	2.640,25	5717	2.902,31	2117	1.084,30	2717	1.277,92	3058	1.366,89	3269	2.229,13	
2600	5343	2.788,80	6194	3.072,69	2294	1.149,12	2944	1.353,56	3313	1.449,94	3541	2.359,25	
2800	5754	2.937,34	6670	3.243,07	2470	1.213,93	3170	1.429,19	3568	1.532,98	3814	2.489,38	
3000	6165	3.085,88	7146	3.413,45	2646	1.278,75	3396	1.504,82	3822	1.616,03	4086	2.619,50	
3200	6576	3.234,42	7623	3.583,83	2823	1.343,57	3623	1.580,45	4077	1.699,08	4358	2.749,62	
3400	6987	3.382,96	8099	3.754,21	2999	1.408,38	3849	1.656,08	4332	1.782,12	4631	2.879,75	
3600	7398	3.531,51	8576	3.924,59	3176	1.473,20	4076	1.731,72	4587	1.865,17	4903	3.009,87	
3800	7809	3.680,05	9052	4.094,97	3352	1.538,01	4302	1.807,35	4842	1.948,21	5176	3.140,00	
4000	8220	3.828,59	9528	4.265,35	3528	1.602,83	4528	1.882,98	5096	2.031,26	5448	3.270,12	
4200	8631	3.977,13	10005	4.435,73	3705	1.667,65	4755	1.958,61	5351	2.114,31	5720	3.400,24	
4400	9042	4.125,67	10481	4.606,11	3881	1.732,46	4981	2.034,24	5606	2.197,35	5993	3.530,37	
4600	9453	4.274,22	10958	4.776,49	4058	1.797,28	5208	2.109,88	5861	2.280,40	6265	3.660,49	
4800	9864	4.422,76	11434	4.946,87	4234	1.862,09	5434	2.185,51	6116	2.363,44	6538	3.790,62	
5000	10275	4.571,30	11910	5.117,25	4410	1.926,91	5660	2.261,14	6370	2.446,49	6810	3.920,74	
5200	10686	4.719,84	12387	5.287,63	4587	1.991,73	5887	2.336,77	6625	2.529,54	7082	4.050,86	
5400	11097	4.868,38	12863	5.458,01	4763	2.056,54	6113	2.412,40	6880	2.612,58	7355	4.180,99	
5600	11508	5.016,93	13340	5.628,39	4940	2.121,36	6340	2.488,04	7135	2.695,63	7627	4.311,11	
5800	11919	5.165,47	13816	5.798,77	5116	2.186,17	6566	2.563,67	7390	2.778,67	7900	4.441,24	
6000	12330	5.314,01	14292	5.969,15	5292	2.250,99	6792	2.639,30	7644	2.861,72	8172	4.571,36	

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height	mm	851				922		993				
Model		NHLLH84/28	NHLLH84/56	NHLLHL84/28	NHLLHL84/56	NH91	NH98					
Depth	mm	92	92	128	128	45	45					
Height of fins	mm	265	541	265	541	-	-					
Exponent	n	1,31	1,34	1,31	1,35	1,28	1,28					
<b>Basic price</b>	€	<b>813,87</b>	<b>813,87</b>	<b>906,48</b>	<b>906,48</b>	<b>326,98</b>	<b>347,47</b>					
<b>Price/metre</b>	€	<b>785,59</b>	<b>859,65</b>	<b>791,45</b>	<b>900,55</b>	<b>349,68</b>	<b>375,22</b>					
Length mm	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price		
	W	€	W	€	W	€	W	€	W	€		
500	952	1.206,67	1061	1.243,70	1079	1.302,21	1237	1.356,76	479	501,82	512	535,08
600	1143	1.285,22	1274	1.329,66	1295	1.381,35	1484	1.446,81	575	536,79	614	572,60
700	1333	1.363,78	1486	1.415,63	1511	1.460,50	1732	1.536,87	670	571,76	717	610,12
800	1524	1.442,34	1698	1.501,59	1727	1.539,64	1979	1.626,92	766	606,72	819	647,65
900	1714	1.520,90	1910	1.587,56	1943	1.618,79	2226	1.716,98	862	641,69	922	685,17
1000	1904	1.599,46	2122	1.673,52	2158	1.697,93	2473	1.807,03	957	676,66	1024	722,69
1100	2095	1.678,02	2335	1.759,49	2374	1.777,08	2721	1.897,09	1053	711,63	1126	760,21
1200	2285	1.756,58	2547	1.845,45	2590	1.856,22	2968	1.987,14	1149	746,60	1229	797,73
1300	2476	1.835,14	2759	1.931,42	2806	1.935,37	3215	2.077,20	1245	781,56	1331	835,26
1400	2666	1.913,70	2971	2.017,38	3022	2.014,51	3463	2.167,25	1340	816,53	1434	872,78
1500	2856	1.992,26	3183	2.103,35	3237	2.093,66	3710	2.257,31	1436	851,50	1536	910,30
1600	3047	2.070,81	3396	2.189,31	3453	2.172,80	3957	2.347,36	1532	886,47	1638	947,82
1700	3237	2.149,37	3608	2.275,28	3669	2.251,95	4205	2.437,42	1627	921,44	1741	985,34
1800	3428	2.227,93	3820	2.361,24	3885	2.331,09	4452	2.527,47	1723	956,40	1843	1.022,87
1900	3618	2.306,49	4032	2.447,21	4101	2.410,24	4699	2.617,53	1819	991,37	1946	1.060,39
2000	3808	2.385,05	4244	2.533,17	4316	2.489,38	4946	2.707,58	1914	1.026,34	2048	1.097,91
2200	4189	2.542,17	4669	2.705,10	4748	2.647,67	5441	2.887,69	2106	1.096,28	2253	1.172,95
2400	4570	2.699,29	5093	2.877,03	5180	2.805,96	5936	3.067,80	2297	1.166,21	2458	1.248,00
2600	4951	2.856,40	5518	3.048,96	5611	2.964,25	6430	3.247,91	2489	1.236,15	2662	1.323,04
2800	5332	3.013,52	5942	3.220,89	6043	3.122,54	6925	3.428,02	2680	1.306,08	2867	1.398,09
3000	5712	3.170,64	6366	3.392,82	6474	3.280,83	7419	3.608,13	2871	1.376,02	3072	1.473,13
3200	6093	3.327,76	6791	3.564,75	6906	3.439,12	7914	3.788,24	3063	1.445,96	3277	1.548,17
3400	6474	3.484,88	7215	3.736,68	7338	3.597,41	8409	3.968,35	3254	1.515,89	3482	1.623,22
3600	6855	3.641,99	7640	3.908,61	7769	3.755,70	8903	4.148,46	3446	1.585,83	3686	1.698,26
3800	7236	3.799,11	8064	4.080,54	8201	3.913,99	9398	4.328,57	3637	1.655,76	3891	1.773,31
4000	7616	3.956,23	8488	4.252,47	8632	4.072,28	9892	4.508,68	3828	1.725,70	4096	1.848,35
4200	7997	4.113,35	8913	4.424,40	9064	4.230,57	10387	4.688,79	4020	1.795,64	4301	1.923,39
4400	8378	4.270,47	9337	4.596,33	9496	4.388,86	10882	4.868,90	4211	1.865,57	4506	1.998,44
4600	8759	4.427,58	9762	4.768,26	9927	4.547,15	11376	5.049,01	4403	1.935,51	4710	2.073,48
4800	9140	4.584,70	10186	4.940,19	10359	4.705,44	11871	5.229,12	4594	2.005,44	4915	2.148,53
5000	9520	4.741,82	10610	5.112,12	10790	4.863,73	12365	5.409,23	4785	2.075,38	5120	2.223,57
5200	9901	4.898,94	11035	5.284,05	11222	5.022,02	12860	5.589,34	4977	2.145,32	5325	2.298,61
5400	10282	5.056,06	11459	5.455,98	11654	5.180,31	13355	5.769,45	5168	2.215,25	5530	2.373,66
5600	10663	5.213,17	11884	5.627,91	12085	5.338,60	13849	5.949,56	5360	2.285,19	5734	2.448,70
5800	11044	5.370,29	12308	5.799,84	12517	5.496,89	14344	6.129,67	5551	2.355,12	5939	2.523,75
6000	11424	5.527,41	12732	5.971,77	12948	5.655,18	14838	6.309,78	5742	2.425,06	6144	2.598,79

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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

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

Height	mm	1064	1135	1206	1277	1348	1419					
Model		NH105	NH112	NH119	NH126	NH133	NH140					
Depth	mm	45	45	45	45	45	45					
Height of fins	mm	-	-	-	-	-	-					
Exponent	n	1,28	1,28	1,28	1,28	1,29	1,29					
Basic price	€	367,95	388,43	408,92	429,34	449,79	470,26					
Price/metre	€	400,80	426,43	452,02	477,58	503,20	528,76					
Length mm	$\Phi_s$ W	Price		$\Phi_s$		Price		$\Phi_s$		Price		
		€	W	€	W	€	W	€	W	€		
500	545	568,35	577	601,65	609	634,93	641	668,13	674	701,39	707	734,64
600	653	608,43	692	644,29	731	680,13	769	715,89	808	751,71	849	787,52
700	762	648,51	807	686,93	853	725,33	897	763,65	943	802,03	990	840,39
800	871	688,59	922	729,57	974	770,54	1026	811,40	1078	852,35	1132	893,27
900	980	728,67	1038	772,22	1096	815,74	1154	859,16	1212	902,67	1273	946,14
1000	1089	768,75	1153	814,86	1218	860,94	1282	906,92	1347	952,99	1414	999,02
1100	1198	808,83	1268	857,50	1340	906,14	1410	954,68	1482	1.003,31	1556	1.051,90
1200	1307	848,91	1384	900,15	1462	951,34	1538	1.002,44	1616	1.053,63	1697	1.104,77
1300	1416	888,99	1499	942,79	1583	996,55	1667	1.050,19	1751	1.103,95	1839	1.157,65
1400	1525	929,07	1614	985,43	1705	1.041,75	1795	1.097,95	1886	1.154,27	1980	1.210,52
1500	1634	969,15	1730	1.028,08	1827	1.086,95	1923	1.145,71	2021	1.204,59	2121	1.263,40
1600	1742	1.009,23	1845	1.070,72	1949	1.132,15	2051	1.193,47	2155	1.254,91	2263	1.316,28
1700	1851	1.049,31	1960	1.113,36	2071	1.177,35	2179	1.241,23	2290	1.305,23	2404	1.369,15
1800	1960	1.089,39	2075	1.156,00	2192	1.222,56	2308	1.288,98	2425	1.355,55	2546	1.422,03
1900	2069	1.129,47	2191	1.198,65	2314	1.267,76	2436	1.336,74	2559	1.405,87	2687	1.474,90
2000	2178	1.169,55	2306	1.241,29	2436	1.312,96	2564	1.384,50	2694	1.456,19	2828	1.527,78
2200	2396	1.249,71	2537	1.326,58	2680	1.403,36	2820	1.480,02	2963	1.556,83	3111	1.633,53
2400	2614	1.329,87	2767	1.411,86	2923	1.493,77	3077	1.575,53	3233	1.657,47	3394	1.739,28
2600	2831	1.410,03	2998	1.497,15	3167	1.584,17	3333	1.671,05	3502	1.758,11	3677	1.845,04
2800	3049	1.490,19	3228	1.582,43	3410	1.674,58	3590	1.766,56	3772	1.858,75	3960	1.950,79
3000	3267	1.570,35	3459	1.667,72	3654	1.764,98	3846	1.862,08	4041	1.959,39	4242	2.056,54
3200	3485	1.650,51	3690	1.753,01	3898	1.855,38	4102	1.957,60	4310	2.060,03	4525	2.162,29
3400	3703	1.730,67	3920	1.838,29	4141	1.945,79	4359	2.053,11	4580	2.160,67	4808	2.268,04
3600	3920	1.810,83	4151	1.923,58	4385	2.036,19	4615	2.148,63	4849	2.261,31	5091	2.373,80
3800	4138	1.890,99	4381	2.008,86	4628	2.126,60	4872	2.244,14	5119	2.361,95	5374	2.479,55
4000	4356	1.971,15	4612	2.094,15	4872	2.217,00	5128	2.339,66	5388	2.462,59	5656	2.585,30
4200	4574	2.051,31	4843	2.179,44	5116	2.307,40	5384	2.435,18	5657	2.563,23	5939	2.691,05
4400	4792	2.131,47	5073	2.264,72	5359	2.397,81	5641	2.530,69	5927	2.663,87	6222	2.796,80
4600	5009	2.211,63	5304	2.350,01	5603	2.488,21	5897	2.626,21	6196	2.764,51	6505	2.902,56
4800	5227	2.291,79	5534	2.435,29	5846	2.578,62	6154	2.721,72	6466	2.865,15	6788	3.008,31
5000	5445	2.371,95	5765	2.520,58	6090	2.669,02	6410	2.817,24	6735	2.965,79	7070	3.114,06
5200	5663	2.452,11	5996	2.605,87	6334	2.759,42	6666	2.912,76	7004	3.066,43	7353	3.219,81
5400	5881	2.532,27	6226	2.691,15	6577	2.849,83	6923	3.008,27	7274	3.167,07	7636	3.325,56
5600	6098	2.612,43	6457	2.776,44	6821	2.940,23	7179	3.103,79	7543	3.267,71	7919	3.431,32
5800	6316	2.692,59	6687	2.861,72	7064	3.030,64	7436	3.199,30	7813	3.368,35	8202	3.537,07
6000	6534	2.772,75	6918	2.947,01	7308	3.121,04	7692	3.294,82	8082	3.468,99	8484	3.642,82

Surcharge for Completto, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For grille or strip, see "Special versions" on page 37

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 Nova

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

Height		mm		600								800	
Model		NV60		NVL60		NVV60		NVV60-4SR		NVLV60		NV80	
Depth	mm	45		58		53		92		110		45	
Exponent	n	1,27		1,28		1,32		1,28		1,28		1,27	
Basic price	€	71,16		224,15		95,06		330,93		562,38		74,60	
Price/metre	€	514,83		501,07		1.036,49		844,43		865,62		590,35	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€
2	141	92	143,75			134	241,21	158	449,99			120	157,84
3	212	138	180,30	213	330,38	201	314,80	237	509,95	288	745,89	180	199,75
4	283	184	216,86	284	365,95	268	388,39	316	569,90	384	807,35	240	241,67
5	354	230	253,41	355	401,53	335	461,98	395	629,86	481	868,81	300	283,58
6	425	276	289,96	426	437,10	402	535,57	474	689,81	577	930,27	360	325,50
7	496	322	326,52	497	472,68	469	609,16	553	749,77	673	991,73	420	367,41
8	567	368	363,07	568	508,26	536	682,75	632	809,72	769	1.053,19	480	409,33
9	638	414	399,62	639	543,83	603	756,34	711	869,68	865	1.114,65	540	451,24
10	709	460	436,17	710	579,41	670	829,93	790	929,63	961	1.176,10	600	493,16
11	780	506	472,73	781	614,98	737	903,52	869	989,59	1057	1.237,56	660	535,07
12	851	552	509,28	852	650,56	804	977,11	948	1.049,54	1153	1.299,02	720	576,99
13	922	598	545,83	923	686,14	871	1.050,70	1027	1.109,49	1249	1.360,48	780	618,90
14	993	644	582,39	994	721,71	938	1.124,29	1106	1.169,45	1345	1.421,94	840	660,82
15	1064	690	618,94	1065	757,29			1185	1.229,40	1442	1.483,40	900	702,73
16	1135	736	655,49	1136	792,86			1264	1.289,36	1538	1.544,86	960	744,65
17	1206	782	692,04	1207	828,44			1343	1.349,31	1634	1.606,32	1020	786,56
18	1277	828	728,60	1278	864,02			1422	1.409,27	1730	1.667,78	1080	828,48
19	1348	874	765,15	1349	899,59			1501	1.469,22	1826	1.729,24	1140	870,39
20	1419	920	801,70	1420	935,17			1580	1.529,18	1922	1.790,69	1200	912,31
21	1490	966	838,26	1491	970,74			1659	1.589,13	2018	1.852,15	1260	954,22
22	1561	1012	874,81	1562	1.006,32			1738	1.649,09	2114	1.913,61	1320	996,14
23	1632	1058	911,36	1633	1.041,90			1817	1.709,04	2210	1.975,07	1380	1.038,05
24	1703	1104	947,92	1704	1.077,47			1896	1.768,99	2306	2.036,53	1440	1.079,97

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova



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

Height		mm		800						1000			
Model		NVL80		NVV80		NVV80-4SR		NVLV80		NV100		NVL100	
Depth	mm	58		53		92		110		45		58	
Exponent	n	1,28		1,32		1,29		1,30		1,28		1,29	
Basic price	€	253,42		102,31		338,20		598,39		77,93		282,64	
Price/metre	€	576,58		1.187,51		989,68		1.015,31		665,81		652,14	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€
2	141	176	<b>334,72</b>			200	<b>477,74</b>	240	<b>741,55</b>			210	<b>374,59</b>
3	212	264	<b>375,65</b>	261	<b>354,06</b>	300	<b>548,01</b>	360	<b>813,64</b>	222	<b>219,08</b>	315	<b>420,89</b>
4	283	352	<b>416,59</b>	348	<b>438,38</b>	400	<b>618,28</b>	480	<b>885,72</b>	296	<b>266,35</b>	420	<b>467,20</b>
5	354	440	<b>457,53</b>	435	<b>522,69</b>	500	<b>688,55</b>	600	<b>957,81</b>	370	<b>313,63</b>	525	<b>513,50</b>
6	425	528	<b>498,47</b>	522	<b>607,00</b>	600	<b>758,81</b>	720	<b>1.029,90</b>	444	<b>360,90</b>	630	<b>559,80</b>
7	496	616	<b>539,40</b>	609	<b>691,31</b>	700	<b>829,08</b>	840	<b>1.101,98</b>	518	<b>408,17</b>	735	<b>606,10</b>
8	567	704	<b>580,34</b>	696	<b>775,63</b>	800	<b>899,35</b>	960	<b>1.174,07</b>	592	<b>455,44</b>	840	<b>652,40</b>
9	638	792	<b>621,28</b>	783	<b>859,94</b>	900	<b>969,62</b>	1080	<b>1.246,16</b>	666	<b>502,72</b>	945	<b>698,71</b>
10	709	880	<b>662,22</b>	870	<b>944,25</b>	1000	<b>1.039,88</b>	1200	<b>1.318,24</b>	740	<b>549,99</b>	1050	<b>745,01</b>
11	780	968	<b>703,15</b>	957	<b>1.028,57</b>	1100	<b>1.110,15</b>	1320	<b>1.390,33</b>	814	<b>597,26</b>	1155	<b>791,31</b>
12	851	1056	<b>744,09</b>	1044	<b>1.112,88</b>	1200	<b>1.180,42</b>	1440	<b>1.462,42</b>	888	<b>644,53</b>	1260	<b>837,61</b>
13	922	1144	<b>785,03</b>	1131	<b>1.197,19</b>	1300	<b>1.250,68</b>	1560	<b>1.534,51</b>	962	<b>691,81</b>	1365	<b>883,91</b>
14	993	1232	<b>825,96</b>	1218	<b>1.281,51</b>	1400	<b>1.320,95</b>	1680	<b>1.606,59</b>	1036	<b>739,08</b>	1470	<b>930,22</b>
15	1064	1320	<b>866,90</b>			1500	<b>1.391,22</b>	1800	<b>1.678,68</b>	1110	<b>786,35</b>	1575	<b>976,52</b>
16	1135	1408	<b>907,84</b>			1600	<b>1.461,49</b>	1920	<b>1.750,77</b>	1184	<b>833,62</b>	1680	<b>1.022,82</b>
17	1206	1496	<b>948,78</b>			1700	<b>1.531,75</b>	2040	<b>1.822,85</b>	1258	<b>880,90</b>	1785	<b>1.069,12</b>
18	1277	1584	<b>989,71</b>			1800	<b>1.602,02</b>	2160	<b>1.894,94</b>	1332	<b>928,17</b>	1890	<b>1.115,42</b>
19	1348	1672	<b>1.030,65</b>			1900	<b>1.672,29</b>	2280	<b>1.967,03</b>	1406	<b>975,44</b>	1995	<b>1.161,72</b>
20	1419	1760	<b>1.071,59</b>			2000	<b>1.742,56</b>	2400	<b>2.039,11</b>	1480	<b>1.022,71</b>	2100	<b>1.208,03</b>
21	1490	1848	<b>1.112,52</b>			2100	<b>1.812,82</b>	2520	<b>2.111,20</b>	1554	<b>1.069,99</b>	2205	<b>1.254,33</b>
22	1561	1936	<b>1.153,46</b>			2200	<b>1.883,09</b>	2640	<b>2.183,29</b>	1628	<b>1.117,26</b>	2310	<b>1.300,63</b>
23	1632	2024	<b>1.194,40</b>			2300	<b>1.953,36</b>	2760	<b>2.255,38</b>	1702	<b>1.164,53</b>	2415	<b>1.346,93</b>
24	1703	2112	<b>1.235,34</b>			2400	<b>2.023,63</b>	2880	<b>2.327,46</b>	1776	<b>1.211,80</b>	2520	<b>1.393,23</b>

Surcharge for Completo, valve at top, connections V013/V014 €: **181,73**

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: **221,19**

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova

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

Height		mm		1000						1200					
Model		NVV100		NVV100-4SR		NVLV100		NV120		NVL120		NVV120			
Depth	mm	53		92		110		45		58		53			
Exponent	n	1,32		1,29		1,32		1,30		1,29		1,32			
Basic price	€	109,65		345,32		634,45		81,42		311,87		116,93			
Price/metre	€	1.338,47		1.138,27		1.167,51		741,31		727,61		1.489,55			
Length		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price			
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€		
2	141	214	298,37	242	505,82			176	185,94			254	326,96		
3	212	321	393,41	363	586,63	432	881,96	264	238,58	363	466,12	381	432,71		
4	283	428	488,44	484	667,45	576	964,86	352	291,21	484	517,78	508	538,47		
5	354	535	583,47	605	748,27	720	1.047,75	440	343,84	605	569,44	635	644,23		
6	425	642	678,50	726	829,08	864	1.130,64	528	396,48	726	621,10	762	749,99		
7	496	749	773,53	847	909,90	1008	1.213,53	616	449,11	847	672,76	889	855,75		
8	567	856	868,56	968	990,72	1152	1.296,43	704	501,74	968	724,42	1016	961,50		
9	638	963	963,59	1089	1.071,54	1296	1.379,32	792	554,38	1089	776,09	1143	1.067,26		
10	709	1070	1.058,63	1210	1.152,35	1440	1.462,21	880	607,01	1210	827,75	1270	1.173,02		
11	780	1177	1.153,66	1331	1.233,17	1584	1.545,11	968	659,64	1331	879,41	1397	1.278,78		
12	851	1284	1.248,69	1452	1.313,99	1728	1.628,00	1056	712,27	1452	931,07	1524	1.384,54		
13	922	1391	1.343,72	1573	1.394,80	1872	1.710,89	1144	764,91	1573	982,73	1651	1.490,30		
14	993	1498	1.438,75	1694	1.475,62	2016	1.793,79	1232	817,54	1694	1.034,39	1778	1.596,05		
15	1064			1815	1.556,44	2160	1.876,68	1320	870,17	1815	1.086,05				
16	1135			1936	1.637,26	2304	1.959,57	1408	922,81	1936	1.137,71				
17	1206			2057	1.718,07	2448	2.042,47	1496	975,44	2057	1.189,37				
18	1277			2178	1.798,89	2592	2.125,36	1584	1.028,07	2178	1.241,03				
19	1348			2299	1.879,71	2736	2.208,25	1672	1.080,71	2299	1.292,69				
20	1419			2420	1.960,53	2880	2.291,15	1760	1.133,34	2420	1.344,35				
21	1490			2541	2.041,34	3024	2.374,04	1848	1.185,97	2541	1.396,01				
22	1561			2662	2.122,16	3168	2.456,93	1936	1.238,60	2662	1.447,67				
23	1632			2783	2.202,98	3312	2.539,83	2024	1.291,24	2783	1.499,33				
24	1703			2904	2.283,79	3456	2.622,72	2112	1.343,87	2904	1.550,99				

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova



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

Height		mm		1200				1400							
Model		NVV120-4SR		NVLV120		NV140		NVL140		NVV140		NVV140-4SR			
Depth		mm		92		110		45		58		92			
Exponent		n		1,30		1,34		1,29		1,30		1,32			
Basic price		€		352,42		670,55		84,83		341,13		359,56			
Price/metre		€		1.285,32		1.317,98		816,83		803,09		1.433,40			
Length		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price			
Elements		mm		W		€		W		€		W			
2	141	282	533,65			202	200,00			294	355,64	326	561,67		
3	212	423	624,91	507	949,96	303	258,00	411	511,39	441	472,11	489	663,44		
4	283	564	716,17	676	1.043,54	404	315,99	548	568,40	588	588,59	652	765,21		
5	354	705	807,42	845	1.137,11	505	373,99	685	625,42	735	705,07	815	866,98		
6	425	846	898,68	1014	1.230,69	606	431,98	822	682,44	882	821,55	978	968,76		
7	496	987	989,94	1183	1.324,27	707	489,98	959	739,46	1029	938,03	1141	1.070,53		
8	567	1128	1.081,20	1352	1.417,84	808	547,97	1096	796,48	1176	1.054,51	1304	1.172,30		
9	638	1269	1.172,45	1521	1.511,42	909	605,97	1233	853,50	1323	1.170,98	1467	1.274,07		
10	709	1410	1.263,71	1690	1.605,00	1010	663,96	1370	910,52	1470	1.287,46	1630	1.375,84		
11	780	1551	1.354,97	1859	1.698,57	1111	721,96	1507	967,54	1617	1.403,94	1793	1.477,61		
12	851	1692	1.446,23	2028	1.792,15	1212	779,95	1644	1.024,56	1764	1.520,42	1956	1.579,38		
13	922	1833	1.537,49	2197	1.885,73	1313	837,95	1781	1.081,58	1911	1.636,90	2119	1.681,15		
14	993	1974	1.628,74	2366	1.979,30	1414	895,94	1918	1.138,60	2058	1.753,38	2282	1.782,93		
15	1064	2115	1.720,00	2535	2.072,88	1515	953,94	2055	1.195,62			2445	1.884,70		
16	1135	2256	1.811,26	2704	2.166,46	1616	1.011,93	2192	1.252,64			2608	1.986,47		
17	1206	2397	1.902,52	2873	2.260,03	1717	1.069,93	2329	1.309,66			2771	2.088,24		
18	1277	2538	1.993,77	3042	2.353,61	1818	1.127,92	2466	1.366,68			2934	2.190,01		
19	1348	2679	2.085,03	3211	2.447,19	1919	1.185,92	2603	1.423,70			3097	2.291,78		
20	1419	2820	2.176,29	3380	2.540,76	2020	1.243,91	2740	1.480,71			3260	2.393,55		
21	1490	2961	2.267,55	3549	2.634,34	2121	1.301,91	2877	1.537,73			3423	2.495,33		
22	1561	3102	2.358,80	3718	2.727,92	2222	1.359,90	3014	1.594,75			3586	2.597,10		
23	1632	3243	2.450,06	3887	2.821,49	2323	1.417,90	3151	1.651,77			3749	2.698,87		
24	1703	3384	2.541,32	4056	2.915,07	2424	1.475,89	3288	1.708,79			3912	2.800,64		

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova

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

Height		mm		1400		1600									
Model		NVLV140		NV160		NVL160		NVV160		NVV160-4SR		NVLV160			
Depth	mm	110		45		58		53		92		110			
Exponent	n	1,36		1,29		1,30		1,32		1,31		1,37			
Basic price	€	706,63		88,20		370,34		131,56		366,71		742,66			
Price/metre	€	1.470,21		892,34		878,63		1.791,53		1.580,50		1.620,72			
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price		
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€		
2	141			232	<b>214,02</b>			332	<b>384,17</b>	368	<b>589,56</b>				
3	212	585	<b>1.018,31</b>	348	<b>277,38</b>	459	<b>556,61</b>	498	<b>511,36</b>	552	<b>701,78</b>	666	<b>1.086,25</b>		
4	283	780	<b>1.122,70</b>	464	<b>340,73</b>	612	<b>618,99</b>	664	<b>638,56</b>	736	<b>813,99</b>	888	<b>1.201,32</b>		
5	354	975	<b>1.227,08</b>	580	<b>404,09</b>	765	<b>681,38</b>	830	<b>765,76</b>	920	<b>926,21</b>	1110	<b>1.316,39</b>		
6	425	1170	<b>1.331,47</b>	696	<b>467,44</b>	918	<b>743,76</b>	996	<b>892,96</b>	1104	<b>1.038,42</b>	1332	<b>1.431,47</b>		
7	496	1365	<b>1.435,85</b>	812	<b>530,80</b>	1071	<b>806,14</b>	1162	<b>1.020,16</b>	1288	<b>1.150,64</b>	1554	<b>1.546,54</b>		
8	567	1560	<b>1.540,24</b>	928	<b>594,16</b>	1224	<b>868,52</b>	1328	<b>1.147,36</b>	1472	<b>1.262,85</b>	1776	<b>1.661,61</b>		
9	638	1755	<b>1.644,62</b>	1044	<b>657,51</b>	1377	<b>930,91</b>	1494	<b>1.274,56</b>	1656	<b>1.375,07</b>	1998	<b>1.776,68</b>		
10	709	1950	<b>1.749,01</b>	1160	<b>720,87</b>	1530	<b>993,29</b>	1660	<b>1.401,75</b>	1840	<b>1.487,28</b>	2220	<b>1.891,75</b>		
11	780	2145	<b>1.853,39</b>	1276	<b>784,23</b>	1683	<b>1.055,67</b>	1826	<b>1.528,95</b>	2024	<b>1.599,50</b>	2442	<b>2.006,82</b>		
12	851	2340	<b>1.957,78</b>	1392	<b>847,58</b>	1836	<b>1.118,05</b>	1992	<b>1.656,15</b>	2208	<b>1.711,72</b>	2664	<b>2.121,89</b>		
13	922	2535	<b>2.062,16</b>	1508	<b>910,94</b>	1989	<b>1.180,44</b>	2158	<b>1.783,35</b>	2392	<b>1.823,93</b>	2886	<b>2.236,96</b>		
14	993	2730	<b>2.166,55</b>	1624	<b>974,29</b>	2142	<b>1.242,82</b>	2324	<b>1.910,55</b>	2576	<b>1.936,15</b>	3108	<b>2.352,03</b>		
15	1064	2925	<b>2.270,93</b>	1740	<b>1.037,65</b>	2295	<b>1.305,20</b>			2760	<b>2.048,36</b>	3330	<b>2.467,11</b>		
16	1135	3120	<b>2.375,32</b>	1856	<b>1.101,01</b>	2448	<b>1.367,59</b>			2944	<b>2.160,58</b>	3552	<b>2.582,18</b>		
17	1206	3315	<b>2.479,70</b>	1972	<b>1.164,36</b>	2601	<b>1.429,97</b>			3128	<b>2.272,79</b>	3774	<b>2.697,25</b>		
18	1277	3510	<b>2.584,09</b>	2088	<b>1.227,72</b>	2754	<b>1.492,35</b>			3312	<b>2.385,01</b>	3996	<b>2.812,32</b>		
19	1348	3705	<b>2.688,47</b>	2204	<b>1.291,07</b>	2907	<b>1.554,73</b>			3496	<b>2.497,22</b>	4218	<b>2.927,39</b>		
20	1419	3900	<b>2.792,86</b>	2320	<b>1.354,43</b>	3060	<b>1.617,12</b>			3680	<b>2.609,44</b>	4440	<b>3.042,46</b>		
21	1490	4095	<b>2.897,24</b>	2436	<b>1.417,79</b>	3213	<b>1.679,50</b>			3864	<b>2.721,66</b>	4662	<b>3.157,53</b>		
22	1561	4290	<b>3.001,63</b>	2552	<b>1.481,14</b>	3366	<b>1.741,88</b>			4048	<b>2.833,87</b>	4884	<b>3.272,60</b>		
23	1632	4485	<b>3.106,01</b>	2668	<b>1.544,50</b>	3519	<b>1.804,26</b>			4232	<b>2.946,09</b>	5106	<b>3.387,68</b>		
24	1703	4680	<b>3.210,40</b>	2784	<b>1.607,86</b>	3672	<b>1.866,65</b>			4416	<b>3.058,30</b>	5328	<b>3.502,75</b>		

Surcharge for Completo, valve at top, connections V013/V014 €: **181,73**

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: **221,19**

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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

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

Height		1800										2000	
Model		NV180		NVL180		NVV180		NVV180-4SR		NVLV180		NV200	
Depth	mm	45		58		53		92		110		45	
Exponent	n	1,30		1,31		1,32		1,32		1,40		1,30	
Basic price	€	91,63		399,66		138,92		373,92		778,67		95,06	
Price/metre	€	967,90		954,13		1.942,59		1.729,09		1.772,96		1.043,37	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€
2	141	260	228,10			370	412,83	410	617,72			290	242,18
3	212	390	296,82	507	601,94	555	550,75	615	740,49	753	1.154,54	435	316,25
4	283	520	365,55	676	669,68	740	688,67	820	863,25	1004	1.280,42	580	390,33
5	354	650	434,27	845	737,42	925	826,60	1025	986,02	1255	1.406,30	725	464,41
6	425	780	502,99	1014	805,17	1110	964,52	1230	1.108,78	1506	1.532,18	870	538,49
7	496	910	571,71	1183	872,91	1295	1.102,44	1435	1.231,55	1757	1.658,06	1015	612,57
8	567	1040	640,43	1352	940,65	1480	1.240,37	1640	1.354,31	2008	1.783,94	1160	686,65
9	638	1170	709,15	1521	1.008,39	1665	1.378,29	1845	1.477,08	2259	1.909,82	1305	760,73
10	709	1300	777,87	1690	1.076,14	1850	1.516,22	2050	1.599,84	2510	2.035,70	1450	834,81
11	780	1430	846,59	1859	1.143,88	2035	1.654,14	2255	1.722,61	2761	2.161,58	1595	908,89
12	851	1560	915,31	2028	1.211,62	2220	1.792,06	2460	1.845,38	3012	2.287,46	1740	982,97
13	922	1690	984,03	2197	1.279,37	2405	1.929,99	2665	1.968,14	3263	2.413,34	1885	1.057,05
14	993	1820	1.052,75	2366	1.347,11	2590	2.067,91	2870	2.090,91	3514	2.539,22	2030	1.131,13
15	1064	1950	1.121,48	2535	1.414,85			3075	2.213,67	3765	2.665,10	2175	1.205,21
16	1135	2080	1.190,20	2704	1.482,60			3280	2.336,44	4016	2.790,98	2320	1.279,28
17	1206	2210	1.258,92	2873	1.550,34			3485	2.459,20	4267	2.916,86	2465	1.353,36
18	1277	2340	1.327,64	3042	1.618,08			3690	2.581,97	4518	3.042,74	2610	1.427,44
19	1348	2470	1.396,36	3211	1.685,83			3895	2.704,73	4769	3.168,62	2755	1.501,52
20	1419	2600	1.465,08	3380	1.753,57			4100	2.827,50	5020	3.294,50	2900	1.575,60
21	1490	2730	1.533,80	3549	1.821,31			4305	2.950,26	5271	3.420,38	3045	1.649,68
22	1561	2860	1.602,52	3718	1.889,06			4510	3.073,03	5522	3.546,26	3190	1.723,76
23	1632	2990	1.671,24	3887	1.956,80			4715	3.195,79	5773	3.672,14	3335	1.797,84
24	1703	3120	1.739,96	4056	2.024,54			4920	3.318,56	6024	3.798,02	3480	1.871,92

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova

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

Height		mm		2000						2200			
Model		NVL200		NVV200		NVV200-4SR		NVLV200		NV220		NVL220	
Depth	mm	58		53		92		110		45		58	
Exponent	n	1,31		1,32		1,32		1,42		1,32		1,32	
Basic price	€	428,92		146,16		381,10		814,79		98,44		458,11	
Price/metre	€	1.029,64		2.093,60		1.875,67		1.923,44		1.118,85		1.105,13	
Length		$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price	$\Phi_s$	Price
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€
2	141			408	441,36	454	645,57			320	256,20		
3	212	555	647,20	612	590,00	681	778,74	819	1.222,56	480	335,64	603	692,40
4	283	740	720,31	816	738,65	908	911,91	1092	1.359,12	640	415,07	804	770,86
5	354	925	793,41	1020	887,29	1135	1.045,09	1365	1.495,69	800	494,51	1005	849,33
6	425	1110	866,52	1224	1.035,94	1362	1.178,26	1638	1.632,25	960	573,95	1206	927,79
7	496	1295	939,62	1428	1.184,59	1589	1.311,43	1911	1.768,82	1120	653,39	1407	1.006,25
8	567	1480	1.012,73	1632	1.333,23	1816	1.444,60	2184	1.905,38	1280	732,83	1608	1.084,72
9	638	1665	1.085,83	1836	1.481,88	2043	1.577,78	2457	2.041,94	1440	812,27	1809	1.163,18
10	709	1850	1.158,93	2040	1.630,52	2270	1.710,95	2730	2.178,51	1600	891,10	2010	1.241,65
11	780	2035	1.232,04	2244	1.779,17	2497	1.844,12	3003	2.315,07	1760	971,14	2211	1.320,11
12	851	2220	1.305,14	2448	1.927,81	2724	1.977,30	3276	2.451,64	1920	1.050,58	2412	1.398,58
13	922	2405	1.378,25	2652	2.076,46	2951	2.110,47	3549	2.588,20	2080	1.130,02	2613	1.477,04
14	993	2590	1.451,35	2856	2.225,10	3178	2.243,64	3822	2.724,77	2240	1.209,46	2814	1.555,50
15	1064	2775	1.524,46			3405	2.376,81	4095	2.861,33	2400	1.288,90	3015	1.633,97
16	1135	2960	1.597,56			3632	2.509,99	4368	2.997,89	2560	1.368,33	3216	1.712,43
17	1206	3145	1.670,67			3859	2.643,16	4641	3.134,46	2720	1.447,77	3417	1.790,90
18	1277	3330	1.743,77			4086	2.776,33	4914	3.271,02	2880	1.527,21	3618	1.869,36
19	1348	3515	1.816,87			4313	2.909,50	5187	3.407,59	3040	1.606,65	3819	1.947,83
20	1419	3700	1.889,98			4540	3.042,68	5460	3.544,15	3200	1.686,09	4020	2.026,29
21	1490	3885	1.963,08			4767	3.175,85	5733	3.680,72	3360	1.765,53	4221	2.104,75
22	1561	4070	2.036,19			4994	3.309,02	6006	3.817,28	3520	1.844,96	4422	2.183,22
23	1632	4255	2.109,29			5221	3.442,19	6279	3.953,84	3680	1.924,40	4623	2.261,68
24	1703	4440	2.182,40			5448	3.575,37	6552	4.090,41	3840	2.003,84	4824	2.340,15

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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

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

Height		2200						2400					
mm													
Model		NVV220		NVV220-4SR		NVLV220		NV240		NVL240		NVV240	
Depth		mm		53		92		110		45		58	
Exponent		n		1,32		1,33		1,43		1,31		1,32	
Basic price		€		153,53		388,13		850,77		101,87		487,37	
Price/metre		€		2.244,58		2.024,26		2.075,67		1.194,33		2.395,59	
Length		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price	
Elements		mm		W		€		W		€		W	
2	141	448	470,02	498	673,55			350	270,27			486	498,59
3	212	672	629,38	747	817,27	885	1.290,81	525	355,07	651	737,67	729	668,68
4	283	896	788,75	996	961,00	1180	1.438,18	700	439,87	868	821,50	972	838,76
5	354	1120	948,11	1245	1.104,72	1475	1.585,56	875	524,66	1085	905,33	1215	1.008,85
6	425	1344	1.107,48	1494	1.248,44	1770	1.732,93	1050	609,46	1302	989,15	1458	1.178,94
7	496	1568	1.266,84	1743	1.392,16	2065	1.880,30	1225	694,26	1519	1.072,98	1701	1.349,02
8	567	1792	1.426,21	1992	1.535,89	2360	2.027,67	1400	779,06	1736	1.156,81	1944	1.519,11
9	638	2016	1.585,57	2241	1.679,61	2655	2.175,05	1575	863,85	1953	1.240,64	2187	1.689,20
10	709	2240	1.744,94	2490	1.823,33	2950	2.322,42	1750	948,65	2170	1.324,47	2430	1.859,28
11	780	2464	1.904,30	2739	1.967,05	3245	2.469,79	1925	1.033,45	2387	1.408,29	2673	2.029,37
12	851	2688	2.063,67	2988	2.110,78	3540	2.617,17	2100	1.118,24	2604	1.492,12	2916	2.199,46
13	922	2912	2.223,03	3237	2.254,50	3835	2.764,54	2275	1.203,04	2821	1.575,95	3159	2.369,54
14	993	3136	2.382,40	3486	2.398,22	4130	2.911,91	2450	1.287,84	3038	1.659,78	3402	2.539,63
15	1064			3735	2.541,94	4425	3.059,28	2625	1.372,64	3255	1.743,60		
16	1135			3984	2.685,67	4720	3.206,66	2800	1.457,43	3472	1.827,43		
17	1206			4233	2.829,39	5015	3.354,03	2975	1.542,23	3689	1.911,26		
18	1277			4482	2.973,11	5310	3.501,40	3150	1.627,03	3906	1.995,09		
19	1348			4731	3.116,83	5605	3.648,77	3325	1.711,83	4123	2.078,91		
20	1419			4980	3.260,55	5900	3.796,15	3500	1.796,62	4340	2.162,74		
21	1490			5229	3.404,28	6195	3.943,52	3675	1.881,42	4557	2.246,57		
22	1561			5478	3.548,00	6490	4.090,89	3850	1.966,22	4774	2.330,40		
23	1632			5727	3.691,72	6785	4.238,26	4025	2.051,02	4991	2.414,22		
24	1703			5976	3.835,44	7080	4.385,64	4200	2.135,81	5208	2.498,05		

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova



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

Height		mm		2400				2600				2800			
Model		NVV240-4SR		NVLV240		NV260		NVV260		NVV260-4SR		NV280			
Depth	mm	92		110		45		53		92		45			
Exponent	n	1,33		1,45		1,32		1,32		1,34		1,32			
Basic price	€	395,26		886,92		105,27		168,14		402,45		108,71			
Price/metre	€	2.172,94		2.227,89		1.269,91		2.546,65		2.319,43		1.345,41			
Length		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$		$\Phi_s$			
Elements		W		W		W		W		W		W			
mm		€		€		€		€		€		€			
2	141	544	701,64			382	284,33	524	527,22	590	729,49	414	298,41		
3	212	816	855,92	948	1.359,23	573	374,49	786	708,03	885	894,17	621	393,94		
4	283	1088	1.010,20	1264	1.517,41	764	464,65	1048	888,84	1180	1.058,85	828	489,46		
5	354	1360	1.164,48	1580	1.675,59	955	554,82	1310	1.069,65	1475	1.223,53	1035	584,99		
6	425	1632	1.318,76	1896	1.833,77	1146	644,98	1572	1.250,47	1770	1.388,21	1242	680,51		
7	496	1904	1.473,04	2212	1.991,95	1337	735,15	1834	1.431,28	2065	1.552,89	1449	776,03		
8	567	2176	1.627,32	2528	2.150,13	1528	825,31	2096	1.612,09	2360	1.717,57	1656	871,56		
9	638	2448	1.781,60	2844	2.308,31	1719	915,47	2358	1.792,90	2655	1.882,25	1863	967,08		
10	709	2720	1.935,87	3160	2.466,49	1910	1.005,64	2620	1.973,71	2950	2.046,93	2070	1.062,61		
11	780	2992	2.090,15	3476	2.624,67	2101	1.095,80	2882	2.154,53	3245	2.211,61	2277	1.158,13		
12	851	3264	2.244,43	3792	2.782,85	2292	1.185,96	3144	2.335,34	3540	2.376,28	2484	1.253,65		
13	922	3536	2.398,71	4108	2.941,03	2483	1.276,13	3406	2.516,15	3835	2.540,96	2691	1.349,18		
14	993	3808	2.552,99	4424	3.099,21	2674	1.366,29	3668	2.696,96	4130	2.705,64	2898	1.444,70		
15	1064	4080	2.707,27	4740	3.257,39	2865	1.456,45			4425	2.870,32	3105	1.540,23		
16	1135	4352	2.861,55	5056	3.415,58	3056	1.546,62			4720	3.035,00	3312	1.635,75		
17	1206	4624	3.015,83	5372	3.573,76	3247	1.636,78			5015	3.199,68	3519	1.731,27		
18	1277	4896	3.170,10	5688	3.731,94	3438	1.726,95			5310	3.364,36	3726	1.826,80		
19	1348	5168	3.324,38	6004	3.890,12	3629	1.817,11			5605	3.529,04	3933	1.922,32		
20	1419	5440	3.478,66	6320	4.048,30	3820	1.907,27			5900	3.693,72	4140	2.017,85		
21	1490	5712	3.632,94	6636	4.206,48	4011	1.997,44			6195	3.858,40	4347	2.113,37		
22	1561	5984	3.787,22	6952	4.364,66	4202	2.087,60			6490	4.023,08	4554	2.208,90		
23	1632	6256	3.941,50	7268	4.522,84	4393	2.177,76			6785	4.187,76	4761	2.304,42		
24	1703	6528	4.095,78	7584	4.681,02	4584	2.267,93			7080	4.352,44	4968	2.399,94		

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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

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

Height		mm		2800				3000				3200			
Model		NVV280		NVV280-4SR		NV300		NVV300		NVV300-4SR		NV320			
Depth	mm	53		92		45		53		92		45			
Exponent	n	1,32		1,34		1,33		1,32		1,35		1,33			
Basic price	€	175,45		409,59		112,13		182,82		416,81		115,52			
Price/metre	€	2.697,59		2.468,03		1.420,92		2.848,63		2.615,89		1.496,40			
Length		$\Phi_s$		Price		$\Phi_s$		Price		$\Phi_s$		Price			
Elements	mm	W	€	W	€	W	€	W	€	W	€	W	€		
2	141	562	555,81	638	757,58	448	312,48	598	584,48	686	785,65	482	326,51		
3	212	843	747,34	957	932,81	672	413,37	897	786,73	1029	971,38	723	432,76		
4	283	1124	938,87	1276	1.108,04	896	514,25	1196	988,98	1372	1.157,11	964	539,00		
5	354	1405	1.130,40	1595	1.283,27	1120	615,14	1495	1.191,24	1715	1.342,84	1205	645,25		
6	425	1686	1.321,93	1914	1.458,50	1344	716,02	1794	1.393,49	2058	1.528,56	1446	751,49		
7	496	1967	1.513,45	2233	1.633,73	1568	816,91	2093	1.595,74	2401	1.714,29	1687	857,73		
8	567	2248	1.704,98	2552	1.808,96	1792	917,79	2392	1.797,99	2744	1.900,02	1928	963,98		
9	638	2529	1.896,51	2871	1.984,19	2016	1.018,68	2691	2.000,25	3087	2.085,75	2169	1.070,22		
10	709	2810	2.088,04	3190	2.159,42	2240	1.119,56	2990	2.202,50	3430	2.271,48	2410	1.176,47		
11	780	3091	2.279,57	3509	2.334,65	2464	1.220,45	3289	2.404,75	3773	2.457,20	2651	1.282,71		
12	851	3372	2.471,10	3828	2.509,88	2688	1.321,33	3588	2.607,00	4116	2.642,93	2892	1.388,96		
13	922	3653	2.662,63	4147	2.685,11	2912	1.422,22	3887	2.809,26	4459	2.828,66	3133	1.495,20		
14	993	3934	2.854,16	4466	2.860,34	3136	1.523,10	4186	3.011,51	4802	3.014,39	3374	1.601,45		
15	1064			4785	3.035,57	3360	1.623,99			5145	3.200,12	3615	1.707,69		
16	1135			5104	3.210,80	3584	1.724,87			5488	3.385,85	3856	1.813,93		
17	1206			5423	3.386,03	3808	1.825,76			5831	3.571,57	4097	1.920,18		
18	1277			5742	3.561,26	4032	1.926,64			6174	3.757,30	4338	2.026,42		
19	1348			6061	3.736,49	4256	2.027,53			6517	3.943,03	4579	2.132,67		
20	1419			6380	3.911,72	4480	2.128,42			6860	4.128,76	4820	2.238,91		
21	1490			6699	4.086,95	4704	2.229,30			7203	4.314,49	5061	2.345,16		
22	1561			7018	4.262,18	4928	2.330,19			7546	4.500,21	5302	2.451,40		
23	1632			7337	4.437,41	5152	2.431,07			7889	4.685,94	5543	2.557,64		
24	1703			7656	4.612,65	5376	2.531,96			8232	4.871,67	5784	2.663,89		

Surcharge for Completo, valve at top, connections V013/V014 €: 181,73

Surcharge for "Breakthrough", valve at top, connections V513/V514 €: 221,19



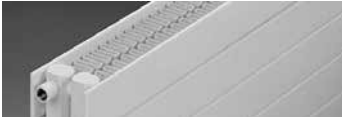

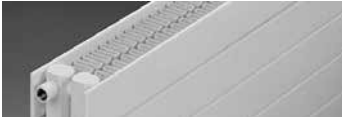

Warning: Weight over 100 kg

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

For side panels, see "Special versions", on page 37

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 Nova

		Price €		
<b>Intermediate lengths and smaller lengths</b> for horizontal models, charged for by the next largest catalogue length, minimum length 400 mm		+ 10% surcharge		
<b>Intermediate heights and smaller heights</b> for horizontal models, charged for by the next largest catalogue height, minimum height 400 mm		+ 10% surcharge		
<b>Galvanised version</b> (depending on the model, as Zehnder Nova with 4 mm gap; this can cause the height or length to deviate slightly from the standard). Not possible for Zehnder Nova Completo, Zehnder Nova "Breakthrough" and models NHH, NVV and NVV-4SR, max. size 1000 x 2000 mm. See keyword list "Galvanising"		On request		
<b>Angled, curved</b> see next page		On request		
<b>High-pressure version max. 10 bar</b>		+ 12% surcharge		
<b>Additional connections</b>		On request		
<b>Immersion tube</b> for horizontal models with connection type 3570/5310 and 2670/6210		93,02		
<b>Side covers for Zehnder Nova Vertical</b> surcharge per radiator ex works:  For retrofitting: <b>Version (price per radiator):</b>		<b>Models</b> NV, NVV NVV-4SR  112,44 170,66		
<b>Model</b>	Depth	Article number <sup>1)</sup>	<b>RAL 9016</b>	<b>Colour</b>
NVV	34 mm	128161	248,32	309,91
NVV-4SR	73 mm	128111	248,32	309,91
NVLV	91 mm	128171	248,32	309,91
The side covers are included in the scope of delivery for the Completo and "Breakthrough" versions and for models with fins				
<b>Grille</b> welded in place at factory, price per metre of radiator		<b>Models</b>		
		NHL	37,93	
		NHLH	37,93	
		NHLLH	44,24	
		NHLLHL	75,84	
<b>Cover strip</b> mounted at factory, for models NHL, NHLH, NHLLH, price per metre of radiator plus basic price of each radiator		<b>Models</b>		
		NHL	116,63	
		NHLH	116,63	
		NHLLH	116,63	
		NHLLHL	116,63	
		<b>Basic price</b>	174,96	
<b>Cover strip</b> for retrofitting		<b>Models</b>	<b>RAL 9016</b>	<b>Colour</b>
		Article number <sup>1)</sup>		
		128131	NHL	114,85
		128121	NHLH	114,85
		128141	NHLLH	114,85
		128151	NHLLHL	114,85
		<b>Basic price</b>	172,26	258,42
<b>Valve position at special height</b> for Zehnder Nova vertical, Completo, or "Breakthrough", free choice of height, but min. 118 mm from top or bottom edge of the radiator				228,64

<sup>1)</sup> For subsequent ordering, the article no. of the special finish is produced by replacing the end digit 1 with the end digit 9.



Curved version (only horizontal models)		
Version	Sketch/template	Prices €
<p><b>Inside radius</b> Possible models: NH Minimum outside radius: 1500 mm (NHL only possible to a limited extent, please ask)</p>		On request
<p><b>Outside radius</b> Possible models: NH Minimum outside radius: 800 mm (NHL only possible to a limited extent, please ask)</p>		On request
Angled version		
Version	Sketch/template	Prices €
<p>Special version angled, available from 90° to 179°. Ensure that all necessary data are indicated.</p>		On request
		On request
		On request

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

- HK = Radiator
- WA = Wall clearance
- R = Radius
- $\alpha_1, \alpha_2$  = Angle [°]
- $L_1, L_2, L_3$  = Lengths

Dimensions in mm



**Horizontal models**

Connection type      **Price €**      Dimensional drawings: Front view, side view and top view (bottom)

**Connection 2-tube with external valve**

<p>same-side or opposite end</p>	<p><b>No additional charge</b></p>	<p>Connection type 1270/7610 possible from H = 141</p>
<p>from bottom to bottom</p>	<p><b>62,11</b></p>	
<p>from bottom to bottom, at side 50 mm</p> <p>Please note: For Completo, see p. 41</p>	<p><b>166,92</b></p>	
<p>Retrofit model, connection on the side</p>	<p><b>65,80</b></p>	<p>Connection possible from H = 141</p>

For the Zehnder Nova horizontal the desired connection type must always be indicated. The flow is always on the front for models with 4 collector tubes.

**Horizontal models**

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
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**Connection 2-tube with external valve**

from bottom to bottom,  
central 50 mm

Please note: For Completo, see p. 41

**166,92**

Connection possible from H = 141 mm. The lowermost parallel pipes are implemented without fins (depending on the model, this results in slightly reduced output)

**Connection 1-tube with external valve** - See note on single-pipe system in the keyword list

for horizontal baffle plate <sup>1)</sup>

**31,08**

for vertical baffle plate <sup>1)</sup>

**31,08**

For the Zehnder Nova horizontal the desired connection type must always be indicated.

- H = Height
- L = Length
- N = Boss spacing
- T = Depth
- L<sub>1</sub> = Connection length (side connection)
- L<sub>2</sub> = Connection length (horizontal connection)
- \* = Venting
- Δ = Draining
- = Internal installations

Connection size Ø	1/4"	3/8"	1/2"	3/4"
L <sub>1</sub> (mm)	6	6	6	7,5
L <sub>2</sub> (mm)	0	0	0	24

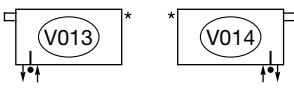
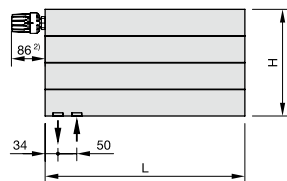





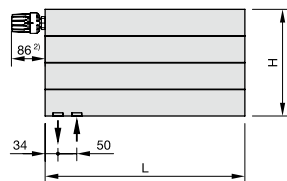





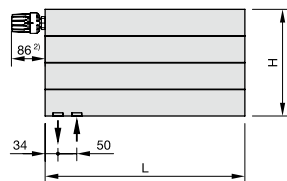





- 1) Specify valve unit when placing order
- 2) Only valid for Zehnder thermostat "LH2"
- 3) Other variants with integrated valve, e.g. with central connections, on request.

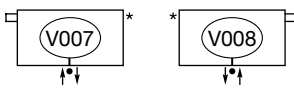
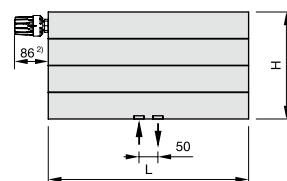





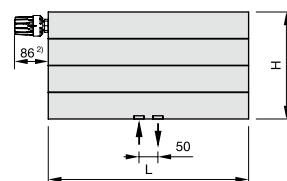





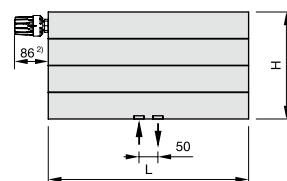





Dimensions in mm

**Horizontal models**

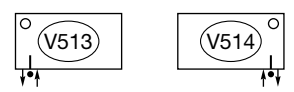
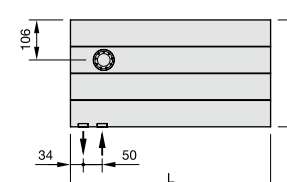





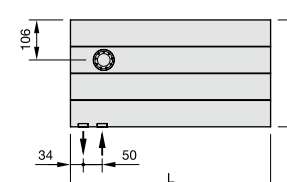





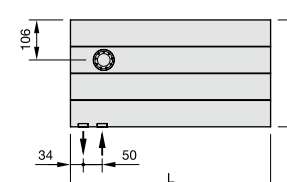





Connection type      **Price €**      Dimensional drawings: Front view, side view and top view (bottom)

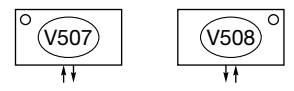
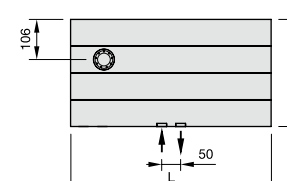





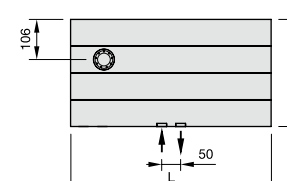





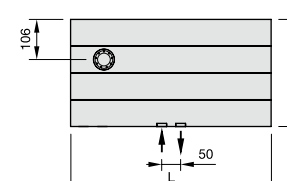





**Completo connection with integrated valve<sup>3)</sup> (max. recommended flow rate 250 kg/h)**

<p>50 mm connection on side</p> 	<p><b>181,73</b></p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">NH</td> <td style="text-align: center;">NHL</td> <td style="text-align: center;">NHH/NHLH</td> <td style="text-align: center;">NLLH</td> <td style="text-align: center;">NLLHL</td> </tr> <tr> <td style="text-align: right;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> <tr> <td></td> <td style="text-align: center;">45</td> <td style="text-align: center;">60</td> <td style="text-align: center;">53</td> <td style="text-align: center;">92</td> <td style="text-align: center;">128</td> </tr> <tr> <td></td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> </tr> </table> <p>Connection possible from H = 141</p>		NH	NHL	NHH/NHLH	NLLH	NLLHL								45	60	53	92	128		26	26	26	26	26
	NH	NHL	NHH/NHLH	NLLH	NLLHL																					
																										
	45	60	53	92	128																					
	26	26	26	26	26																					

<p>Central connection, 50 mm</p> 	<p><b>341,53</b></p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">NH</td> <td style="text-align: center;">NHL</td> <td style="text-align: center;">NHH/NHLH</td> <td style="text-align: center;">NLLH</td> <td style="text-align: center;">NLLHL</td> </tr> <tr> <td style="text-align: right;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> <tr> <td></td> <td style="text-align: center;">45</td> <td style="text-align: center;">60</td> <td style="text-align: center;">53</td> <td style="text-align: center;">92</td> <td style="text-align: center;">128</td> </tr> <tr> <td></td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> </tr> </table> <p>For model NHL, the depth is 45 mm up to H = 283                  Connection possible from H = 141 mm. The lowermost parallel pipes are implemented without fins (depending on the model, this results in slightly reduced output)</p>		NH	NHL	NHH/NHLH	NLLH	NLLHL								45	60	53	92	128		26	26	26	26	26
	NH	NHL	NHH/NHLH	NLLH	NLLHL																					
																										
	45	60	53	92	128																					
	26	26	26	26	26																					

**Connection with valve integrated for cut-out in front panel "Breakthrough"<sup>3)</sup> (Ø 45 mm, max. flow rate 250 kg/h)**

<p>50 mm connection on side</p> 	<p><b>221,19</b></p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">NH</td> <td style="text-align: center;">NHL</td> <td style="text-align: center;">NHH/NHLH</td> <td style="text-align: center;">NLLH</td> <td style="text-align: center;">NLLHL</td> </tr> <tr> <td style="text-align: right;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> <tr> <td></td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> </tr> <tr> <td></td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> </tr> </table> <p>Connection possible from H = 212</p>		NH	NHL	NHH/NHLH	NLLH	NLLHL								84	84	84	84	84		26	26	26	26	26
	NH	NHL	NHH/NHLH	NLLH	NLLHL																					
																										
	84	84	84	84	84																					
	26	26	26	26	26																					

<p>Central connection, 50 mm</p> 	<p><b>374,67</b></p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">NH</td> <td style="text-align: center;">NHL</td> <td style="text-align: center;">NHH/NHLH</td> <td style="text-align: center;">NLLH</td> <td style="text-align: center;">NLLHL</td> </tr> <tr> <td style="text-align: right;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> <tr> <td></td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> <td style="text-align: center;">84</td> </tr> <tr> <td></td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> </tr> </table> <p>The lowermost parallel pipes are implemented without fins (depending on the model, this results in slightly reduced output)</p>		NH	NHL	NHH/NHLH	NLLH	NLLHL								84	84	84	84	84		26	26	26	26	26
	NH	NHL	NHH/NHLH	NLLH	NLLHL																					
																										
	84	84	84	84	84																					
	26	26	26	26	26																					

For the Zehnder Nova horizontal the desired connection type must always be indicated.

**Vertical models**

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
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**Connection 2-tube with external valve**

<p>same-side or opposite end</p>	<p>No additional charge</p>	
	<p>28,43</p>	
	<p>56,81</p>	
<p>from bottom to bottom</p>	<p>90,50</p>	

When an order is placed without indication of the connection type, the standard connection 4 x 1/2" (S001) is delivered.  
 Suitable for connection types 1270/7610, 1670/7210.  
 The flow is always on the front for models with 4 collectors.

- H = Height
- L = Length
- N = Boss spacing
- ST = Brace
- L<sub>1</sub> = Connection length (side connection)
- L<sub>2</sub> = Connection length (bottom connection)
- \* = Venting
- Δ = Draining
- = Internal installations


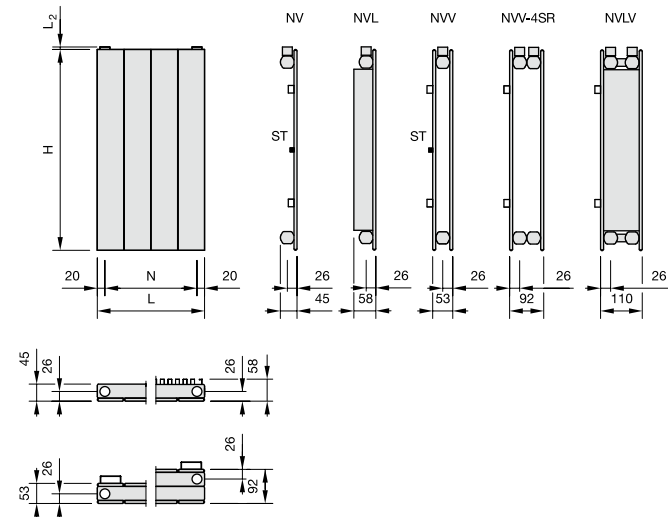
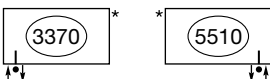
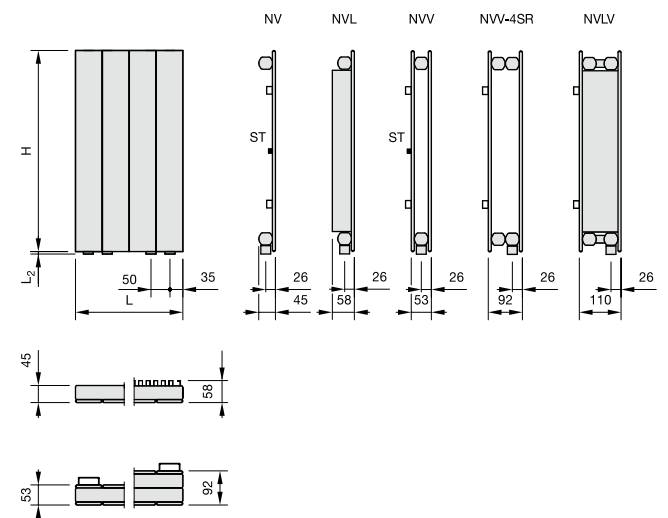
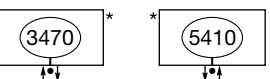
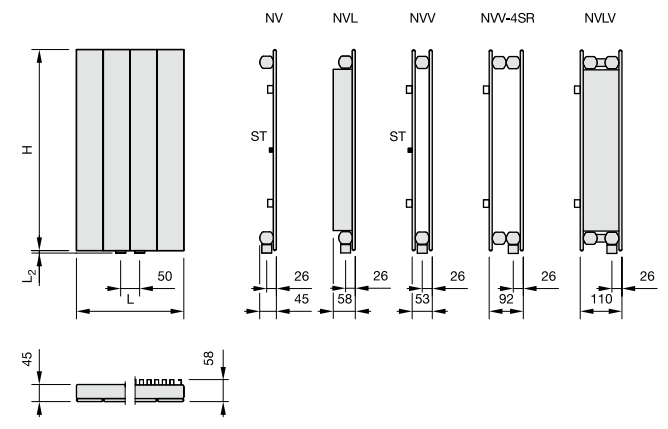
Dimensions in mm

Connection size Ø	1/4"	3/8"	1/2"	3/4"
L <sub>1</sub> (mm)	6	6	6	7,5
L <sub>2</sub> (mm)	0	0	0	24

**Vertical models**

Connection type **Price €** Dimensional drawings: Front view, side view and top view (bottom)

**Connection 2-tube with external valve**

<p>from top to top</p>  <p><b>118,93</b></p>	
<p>from bottom to bottom, at side 50 mm</p>  <p><b>90,50</b></p> <p>Please note: For Completo, see p. 45</p>	
<p>from bottom to bottom, central 50 mm</p>  <p><b>184,69</b></p> <p>Please note: For Completo, see p. 45</p>	 <p>Possible as of 2 elements</p>

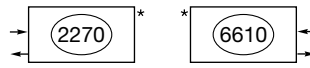
When an order is placed without indication of the connection type, the standard connection 4 x 1/2" (S001) is delivered.  
Suitable for connection types 1270/7610, 1670/7210.  
The flow is always on the front for models with 4 collectors, the return always facing the wall.

**Vertical models**

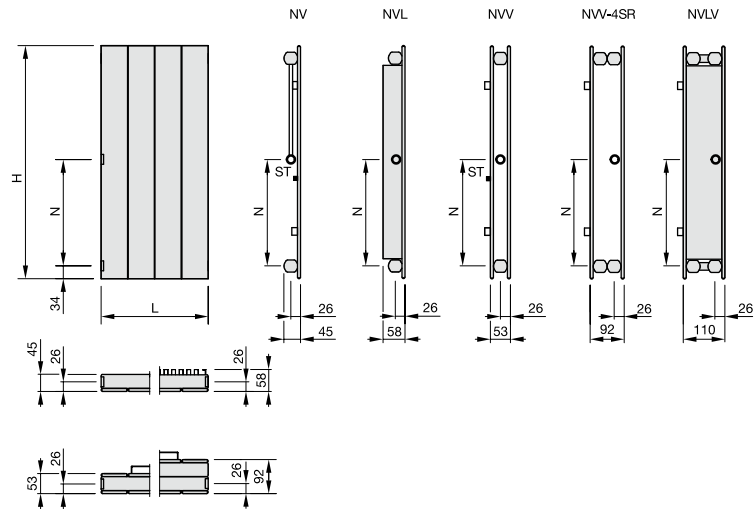
Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
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**Connection 2-tube with external valve**

for retrofitting,  
lateral connection upon request



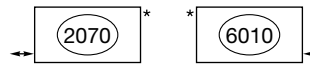
100,88



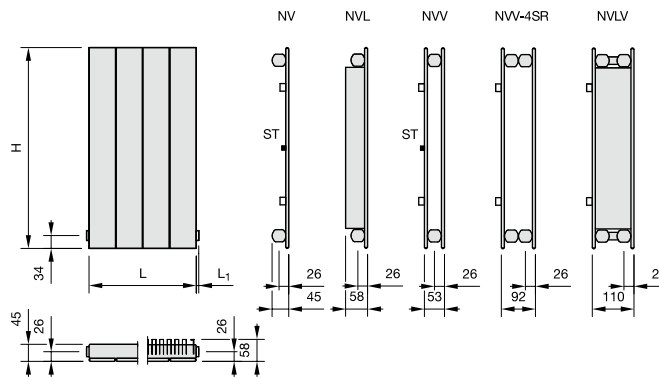
Possible as of 3 elements,  $N_{max.} = H - 134$  mm

**Connection 1-tube with external valve** - See note on single-pipe system in the keyword list

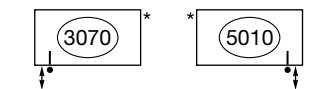
for horizontal baffle plate 1)



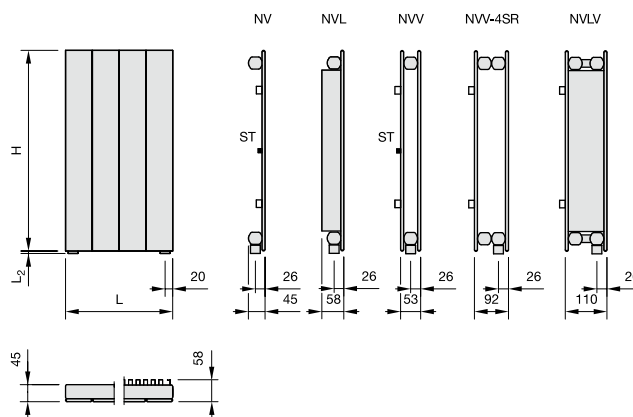
No additional charge



for vertical baffle plate 1)



31,08



When an order is placed without indication of the connection type, the standard connection 4 x 1/2" (S001) is delivered.  
Suitable for connection types 1270/7610, 1670/7210.

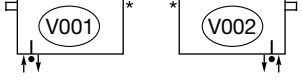
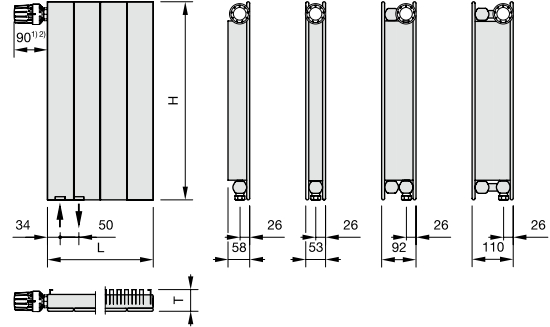
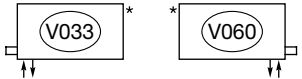
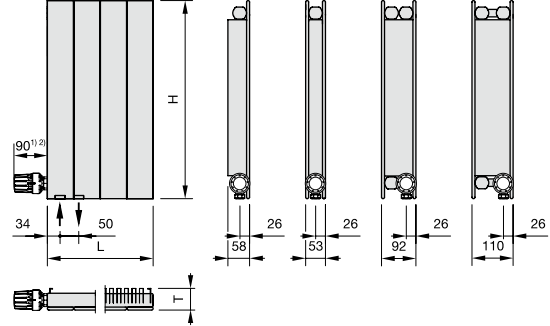
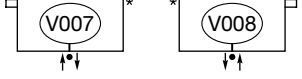
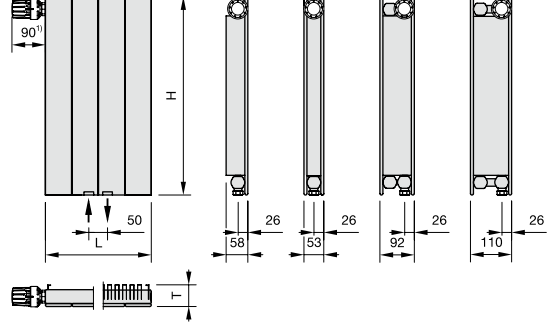
- H = Height
- L = Length
- ST = Brace
- L<sub>1</sub> = Connection length (side connection)
- L<sub>2</sub> = Connection length (bottom connection)
- \* = Venting
- = Internal installations

Connection size Ø	1/4"	3/8"	1/2"	3/4"
L <sub>1</sub> (mm)	6	6	6	7,5
L <sub>2</sub> (mm)	0	0	0	24

1) Specify valve unit when placing order

Dimensions in mm

**Vertical models**

Connection type	Price €	Dimensional drawings: Front view, side view and top view (bottom)
<b>Completo connection with integrated valve<sup>3)</sup> (max. recommended flow rate 250 kg/h)</b>		
50 mm connection on side  	<b>181,73</b>	<div style="display: flex; justify-content: space-around;"> <span>NV/NVL</span> <span>NVW</span> <span>NVW-4SR</span> <span>NVLV</span> </div>  <p>Illustration: Connection on left</p>
	<b>181,73</b>	<div style="display: flex; justify-content: space-around;"> <span>NV/NVL</span> <span>NVW</span> <span>NVW-4SR</span> <span>NVLV</span> </div>  <p>Illustration: Connection on left</p>
central connection, 50 mm  	<b>341,53</b>	<div style="display: flex; justify-content: space-around;"> <span>NV/NVL</span> <span>NVW</span> <span>NVW-4SR</span> <span>NVLV</span> </div>  <p>Illustration: Connection central</p>

When an order is placed without indication of the connection type, the standard connection 4 x 1/2" (S001) is delivered. Suitable for connection types 1270/7610, 1670/7210.

- H = Height
- L = Length
- N = Boss spacing
- T = Depth
- \* = Venting
- = Internal installations

- 1) Dimension valid for Zehnder thermostat LH2
- 2) The valve can be integrated at any height (surcharge, see page 37), minimum dimension from top or bottom edge 118 mm.
- 3) Other variants with integrated valve available on request, possible as of 2 elements.

Dimensions in mm



**Vertical models**

Connection type	<b>Price €</b>	Dimensional drawings: Front view, side view and top view (bottom)
-----------------	----------------	---

**Connection with valve integrated for cut-out in front panel "Breakthrough"<sup>3)</sup> (Ø 45 mm, max. flow rate, see above)**

<p>50 mm connection on side</p>	<p><b>221,19</b></p>	<p>Illustration: Connection on left</p>
<p>central connection, 50 mm</p>	<p><b>374,67</b></p>	<p>Illustration: Connection central</p>

When an order is placed without indication of the connection type, the standard connection 4 x 1/2" (S001) is delivered.  
 Suitable for connection types 1270/7610, 1670/7210.

- H = Height
- L = Length
- N = Boss spacing
- T = Depth
- \* = Venting
- = Internal installations

1) Dimension valid for Zehnder thermostat LH2  
 2) The valve can be integrated at any height (surcharge, see page 37), minimum dimension from top or bottom edge 118 mm.  
 3) Other variants with integrated valve, e.g. with central connections, on request.

Dimensions in mm

Series version

Horizontal models	Opposite-end connection, flow on left	Opposite-end connection, flow on right
Height 70 mm Zeta value $3 \times 2,2 = 6,6$ (100% water quantity)		
Height 141 - 1680 mm Zeta value 2,2 (100% water quantity) plus $4 \times 2,2 = 8,8$ (50% water quantity)		
Same-side connection, flow on left		
Height 141 - 1680 mm Zeta value $5 \times 2,2 = 11$ (100% water quantity)		
Vertical models	Opposite-end connection, flow on left	Opposite-end connection, flow on right
Height 141 - 1680 mm Zeta value 1,8 (100% water quantity) plus $4 \times 1,8 = 7,2$ (50% water quantity)		
Same-side connection, flow on left		
Height 141 - 1680 mm Zeta value $5 \times 1,8 = 9$ (100% water quantity)		

\* Ventilation, Δ Draining, \*\*\* Baffle

Zehnder Nova 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 radiators of 6000 mm in length each should be installed in series. Recommended dimension of the on-site connection  $\frac{3}{4}$ ". The radiators must be installed in accordance with the arrangement shown here. When placing an order, please indicate the number of the required arrangement. Prices on request.

**Please note:**

The minimum water flow for Zehnder Nova installed in series from the following table must be observed:

Horizontal construction	20%
Vertical construction	17%

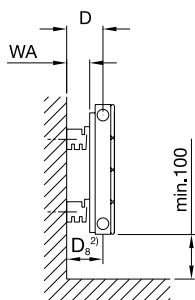
Recommended for installation situations with normal or increased requirements (VDI 6036 Classes 1 and 2).<sup>1)</sup>

Illustration	Sketch Side view	Model				
		Application	Wall clearance WA mm	Brackets in set	Article no. <sup>4)</sup> Set white	€/Set White Colour

Fixing details for accessory sets CVD



incl. retaining spring



Distance D:

NH	44 mm
NHL	44 mm
NHH	54 mm
NHLH	54 mm
NHLLH <sup>3)</sup>	94/94 mm
NHLLHL <sup>3)</sup>	113/73 mm

Distance D<sub>8</sub><sup>2)</sup>:

NHLLH <sup>3)</sup>	94/94 mm
NHLLHL <sup>3)</sup>	103/103 mm

Type NH					
Height 70 - 141 mm					
L = 500-3500	25	3 x CVD 2	795321	19,53	34,19
L = 3600-6000		4 x CVD 2	795421	25,27	44,82
Height 212 - 1703 mm					
L = 500-1500	25	4 x CVD 2	795421	25,27	44,82
L = 1600-3500		6 x CVD 2	795621	36,82	66,11
L = 3600-6000		8 x CVD 2	795821	48,35	87,40
Type NHH, NHLH, NHLLH					
Height 70 - 141 mm					
L = 500-3500	27	3 x CVD 0	795301	10,18	25,41
L = 3600-6000		4 x CVD 0	795401	12,77	33,14
Height 212 - 1703 mm					
L = 500-1500	27	4 x CVD 0	795401	12,77	33,14
L = 1600-3500		6 x CVD 0	795601	18,12	48,56
L = 3600-6000		8 x CVD 0	795801	23,37	64,01
Type NHL with H ≤ 280 mm					
Height 70 - 141 mm					
L = 500-1500	25	3 x CVD 1	795311	10,18	25,41
L = 1600-3500		3 x CVD 1	795311	10,18	25,41
L = 3600-6000		4 x CVD 1	795411	12,77	33,14
Height 212 - 283 mm					
L = 500-1500	25	4 x CVD 1	795411	12,77	33,14
L = 1600-3500		6 x CVD 1	795611	18,12	48,56
L = 3600-6000		8 x CVD 1	795811	23,37	64,01
Type NHL with H ≥ 350 mm, NHLLHL					
Height 70 and 141 mm					
L = 500-3500	11	3 x CVD 0 <sup>5)</sup>	795301	10,18	25,41
L = 3600-6000		4 x CVD 0	795401	12,77	33,14
Height 212 - 851 mm					
L = 500-1500	NHL: 9	4 x CVD 0	795401	12,77	33,14
L = 1600-3500	NHLLHL: 11	6 x CVD 0	795601	18,12	48,56
L = 3600-6000		8 x CVD 0	795801	23,37	64,01

- H = Height
- L = Length
- D/D<sub>8</sub> = Distance from wall to middle of connection
- WA = Distance from wall to back of radiator


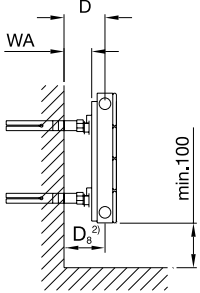
Dimensions in mm

<sup>1)</sup> Notes on load requirements, safety and installation conditions in the keyword list.  
<sup>2)</sup> For models with integrated valve (Completo/"Breakthrough"), in case D differing.  
<sup>3)</sup> The connection dimension for VL/RL must be indicated for models with 2 header tubes behind each other.  
<sup>4)</sup> The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.  
<sup>5)</sup> For height 70 mm to L = 1500: 2 x CVD.

Recommended for installation situations with normal or increased requirements (VDI 6036 Classes 1 and 2).<sup>1)</sup>

Illustration	Sketch Side view	Model			
		Application	Wall clearance WA mm	Brackets in set	Article no. set

Fixing details for accessory sets BKE

Set BKE <sup>4)</sup>			Type NH, NHH, NHLH, NLLH				
			Distance D <sup>2)</sup> : NH 40 mm NHL ≤ 280 mm 61 mm NHL ≥ 350 mm 75 mm NHH, NHLH 85 mm NLLH <sup>2)</sup> 124/84 mm NLLHL <sup>2)</sup> 145/105 mm  Distance D <sub>8</sub> : NLLH <sup>3)</sup> 124/124 mm NLLHL <sup>3)</sup> 145/145 mm				Height 70 - 141 mm L = 500-3500 NH: 21 3 x BKE 160 766332 <b>14,95</b> L = 3600-6000 others: 58 4 x BKE 160 766432 <b>19,94</b>
				Height 212 - 1703 mm L = 500-1500 NH: 21 4 x BKE 160 766432 <b>19,94</b> L = 1600-3500 others: 58 6 x BKE 160 766632 <b>29,92</b> L = 3600-6000 8 x BKE 160 766832 <b>39,89</b>			
				Type NHL, NLLHL			
				Height 70 - 141 mm L = 500-1500 42 2 x BKE 160 766232 <b>9,99</b> L = 1600-3500 3 x BKE 160 766332 <b>14,95</b> L = 3600-6000 4 x BKE 160 766432 <b>19,94</b>			
				Height 212 - 1703 mm L = 500-1500 42 4 x BKE 160 766432 <b>19,94</b> L = 1600-3500 6 x BKE 160 766632 <b>29,92</b> L = 3600-6000 8 x BKE 160 766832 <b>39,89</b>			

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

<sup>2)</sup> Dimension D<sub>8</sub> applies to models with integrated valve (Completo/"Breakthrough"), in case D differing.

<sup>3)</sup> The connection dimension for VL/RL must be indicated for models with 2 header tubes behind each other.

<sup>4)</sup> Average distances are given for D and WA for set BKE, as bracket installation depth is variable.

An on-site locking device may be required depending on the installation and connection situation, and net weight of the radiator.




- H = Height
- L = Length
- D/D<sub>8</sub> = Distance from wall to middle of connection
- WA = Distance from wall to back of radiator

Dimensions in mm

Recommended for installation situations with normal or increased requirements (VDI 6036 Classes 1 and 2).<sup>1)</sup>

Illustration	Description	Model			
		Application	Amount + type of brackets	Article no. Piece	Price/piece €

For other fixing options using accessories, see page 70 onwards.

Illustration	Description	Model			
		Application	Amount + type of brackets	Article no. Piece	Price/piece €
<b>Wall bracket AK<sup>2)</sup></b> 	For adjustable wall clearance, short and long version possible, standard: Short, RAL 9016 For details, see "Accessories"	<b>Type NH, NHH, NHLH, NLLH</b>			
		Height 70 mm			
		L = 500-3500 L = 3600-6000	3 x AK 1 4 x AK 1	796011	<b>13,70</b>
		Height 141 mm			
		L = 500-1500 L = 1600-3500 L = 3600-6000	3 x AK 1 4 x AK 1 8 x AK 1	796011	<b>13,70</b>
		Height 212 - 1703 mm			
		L = 500-1500 L = 1600-3500 L = 3600-6000	4 x AK 1 6 x AK 1 8 x AK 1	796011	<b>13,70</b>
		<b>Type NHL, NLLHL</b>			
		Height 70 - 141 mm			
		L = 500-3500 L = 3600-6000	3 x AK 1 <sup>3)</sup> 4 x AK 1	796011	<b>13,70</b>
Height 212 - 851 mm					
L = 500-1500 L = 1600-3500 L = 3600-6000	4 x AK 1 6 x AK 1 8 x AK 1	796011	<b>13,70</b>		
<b>Floor bracket STF<sup>4)</sup></b> 	For mounting on unfinished or finished floor, different lengths possible, standard: RAL 9016 For details, see "Accessories"	<b>All types and models up to max. construction height of 600 mm</b>			
		L = 500-1500 L = 1600-3500 L = 3600-6000	2 x STF 1 3 x STF 1 4 x STF 1	by size	<b>61,78 / 66,99</b>
<b>Welded floor support<sup>4)</sup></b> 	For mounting on unfinished floors, in colour of the radiator, heights <sup>5)</sup> : 120 - 170 mm 150 - 200 mm 200 - 250 mm  For details on the cover see page 72	<b>All types and models</b>			
		L = 500-1500 L = 1600-3500 L = 3600-6000	2 x bracket 3 x bracket 4 x bracket	-	<b>120,48</b>

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

<sup>2)</sup> An on-site locking device may be required depending on the installation and connection situation, and net weight of the radiator.

<sup>3)</sup> For height 70 mm to L = 1500: 2 x AK1.

<sup>4)</sup> Depending on the installation situation, an additional bracket is required on the welded lugs at the rear.


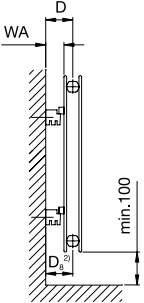

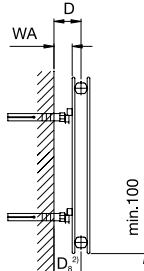
Stand-alone installation without additional stabilisation up to a max. construction height of 600 mm (construction height = radiator incl. bracket).

<sup>5)</sup> Height of welded floor support: Bottom edge of radiator up to bottom edge of footplate.

L = Length of radiator in mm

# Zehnder Nova

Recommended for installation situations with normal or increased requirements (VDI 6036 Classes 1 and 2).<sup>1)</sup>

Illustration	Sketch Side view	Model					
		Application	Wall clearance WA mm	Brackets in set	Article no. <sup>4)</sup> Set white	€/Set White Colour	
Fixing details for accessory sets CVD, BKE							
<p><b>Set CVD</b></p>  <p>incl. retaining spring</p>	 <p>Distance D<sup>3)</sup>:</p> <p>NV 44 mm NVL 44 mm NVV 54 mm NVV-4SR 2) 94/54 mm NVLV<sup>2)</sup> 112/54 mm</p> <p>Distance D<sub>8</sub><sup>3)</sup>:</p> <p>NVV-4SR 2) 94/94 mm NVLV<sup>2)</sup> 112/112 mm</p>	<b>Type NV<sup>5)</sup></b>					
		Length 70 - 141 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	25	2 x CVD 2 3 x CVD 2 4 x CVD 2	795221 795321 795421	<b>13,71</b> <b>19,53</b> <b>25,27</b>	<b>23,43</b> <b>34,19</b> <b>44,82</b>
		Length 212 - 1703 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	25	4 x CVD 2 6 x CVD 2 8 x CVD 2	795421 795621 795821	<b>25,27</b> <b>36,82</b> <b>48,35</b>	<b>44,82</b> <b>66,11</b> <b>87,40</b>
		<b>Type NVV, NVV-4SR, NVLV</b>					
		Length 70 - 141 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	27	2 x CVD 0 3 x CVD 0 4 x CVD 0	795201 795301 795401	<b>7,48</b> <b>10,18</b> <b>12,77</b>	<b>17,61</b> <b>25,41</b> <b>33,14</b>
		Length 212 - 1703 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	27	4 x CVD 0 6 x CVD 0 8 x CVD 0	795401 795601 795801	<b>12,77</b> <b>18,12</b> <b>23,37</b>	<b>33,14</b> <b>48,56</b> <b>64,01</b>
		<b>Type NVL – all models</b>					
		All models	11	4 x CVD 0	795401	<b>12,77</b>	<b>33,14</b>
<p><b>Set BKE<sup>6)</sup></b></p> 	 <p>Distance D<sup>3)</sup>:</p> <p>NV 40 mm NVL 75 mm NVV 85 mm NVV-4SR 2) 124/84 mm NVLV<sup>2)</sup> 112/54 mm</p> <p>Distance D<sub>8</sub><sup>3)</sup>:</p> <p>NVV-4SR 2) 124/124 mm NVLV<sup>2)</sup> 112/112 mm</p>	<b>Type NV</b>					
		Length 70 - 141 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	21	2 x BKE 160 3 x BKE 160 4 x BKE 160	766232 766332 766432	<b>9,99</b> <b>14,95</b> <b>19,94</b>	- - -
		Length 212 - 1703 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	21	4 x BKE 160 6 x BKE 160 8 x BKE 160	766432 766632 766832	<b>19,94</b> <b>29,92</b> <b>39,89</b>	- - -
		<b>Type NVV, NVV-4SR, NVLV</b>					
		Length 70 - 141 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	58	2 x BKE 160 3 x BKE 160 4 x BKE 160	766232 766332 766432	<b>9,99</b> <b>14,95</b> <b>19,94</b>	- - -
		Length 212 - 1703 mm					
		H = 600-1500 H = 1600-3500 H = 3600-6000	58	4 x BKE 160 6 x BKE 160 8 x BKE 160	766432 766632 766832	<b>19,94</b> <b>29,92</b> <b>39,89</b>	- - -
		<b>Type NVL – all models</b>					
		All models	43	4 x BKE 160	766432	<b>19,94</b>	-




<sup>1)</sup> Notes on load requirements, safety and installation conditions in the keyword list. H = Height of radiator in mm  
<sup>2)</sup> The connection dimension for VL/RL must be indicated for models with 2 header tubes behind each other.  
<sup>3)</sup> Dimension D<sub>8</sub> applies to models with integrated valve (Completo/"Breakthrough"), in case D differing.  
<sup>4)</sup> The article no. of the set in colour is produced by replacing the end digit 1 by the end digit 9.  
<sup>5)</sup> Model NV in special solution with side covers is supplied with brackets CVD 0.  
<sup>6)</sup> An on-site locking device may be required depending on the installation and connection situation, and net weight of the radiator.



Recommended for installation situations with normal or increased requirements (VDI 6036 Classes 1 and 2).<sup>1)</sup>

Illustration	Description	Model			
		Application	Amount + type of brackets	Article no. Piece	Price/piece €

For other fixing options using accessories, see page 70 onwards.

Wall bracket AK <sup>3)</sup>		Type NV, NVV, NVLV			
	For adjustable wall clearance, short and long version possible, standard: short, RAL 9016 For details, see "Accessories"	Length 70 - 141 mm			
		H = 600-1500 H = 1600-3500 H = 3600-4600	2 x AK 1 3 x AK 1 4 x AK 1	796011	13,70
		Length 212 - 1703 mm			
		H = 600-1500 H = 1600-3500 H = 3600-4600	4 x AK 1 6 x AK 1 8 x AK 1	796011	13,70
		Type NVL			
		All lengths			
H = 600-2400	4 x AK 1	796011	13,70		
Welded floor support <sup>4)</sup>		All models up to max. construction height of 600 mm			
	For mounting on unfinished floors, in colour of the radiator, heights <sup>2)</sup> : 120 - 170 mm 150 - 200 mm 200 - 250 mm	L = 283-1206 L = 1277-1703	2 x footplate 3 x footplate	-	120,48
Cover		White Special finish		753141	25,82
	For welded floor support (dimension 123 x 73 x 20 mm made of steel, painted)			753149	38,79

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

<sup>2)</sup> Height of welded floor support: Bottom edge of radiator up to bottom edge of footplate.

<sup>3)</sup> An on-site locking device may be required depending on the installation and connection situation, and net weight of the radiator.

<sup>4)</sup> Depending on the installation situation, an additional bracket is required on the welded lugs at the rear.

Stand-alone installation without additional stabilisation up to a max. construction height of 600 mm (construction height = radiator incl. bracket).

H = Height of radiator in mm

L = Length of radiator in mm

**Pressure loss**

**Pressure loss determination  $\Delta P$**

The pressure loss of a Zehnder Nova is determined using the following formula:

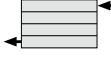
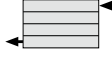
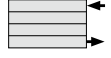
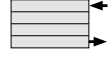


$$\Delta P = q_m^{1,9125} \cdot C$$

- $\Delta P$  = Pressure loss in Pa
- $q_m$  = Water flow in kg/h
- C = Pressure loss constant

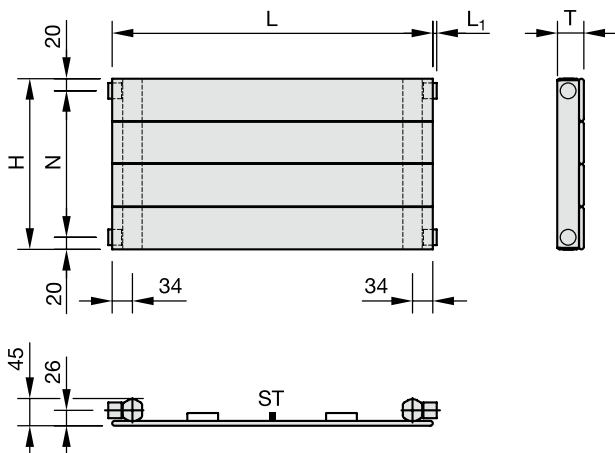
The pressure loss constant C is to be read from the table below, depending on the type, height and connection type.

Example: Model NH 70, length 1000 mm  
 Same-end connection,  
 $q_{ms} = 63,0$  kg/h  
 Pressure loss constant C = 0,2993  
 Result:  $\Delta P = 63,00^{1,9125} \cdot 0,2993$   
 $\Delta P = 827$  Pa

**Pressure loss constant C**

	 NH, NHL	 NHH, NHHLLH, NHLH, NHHLLH	 NH, NHL	 NHH, NHHLLH, NHHLLH, NHLH	 NH, NHL	 NHH, NHHLLH, NHHLLH, NHLH	
Height mm	Factor C						
70	0,0748	0,0199	-	0,0397	0,0199	0,0397	
141							
212							
283							
354	0,2244	0,0596	0,1496	0,0795	0,0596	0,0795	
425							
496							
567							
638	0,3741	0,0994	0,2993	0,1192	0,0994	0,1192	
709							
780							
851							
922	0,5237	0,1391	0,4489	0,1391	0,1391	0,1391	
993							
1064							
1135							
1206	0,5237	0,1391	0,4489	0,1192	0,1391	0,1192	
1277							
1348							
1419							
1490	0,5237	0,1391	0,4489	0,1192	0,1391	0,1192	
1561							
1632							
1703							
Height mm	Factor C						
600 to 4600	0,0073	0,0073	0,0073	0,0073	0,1496	0,0397	

**Model NH horizontal**



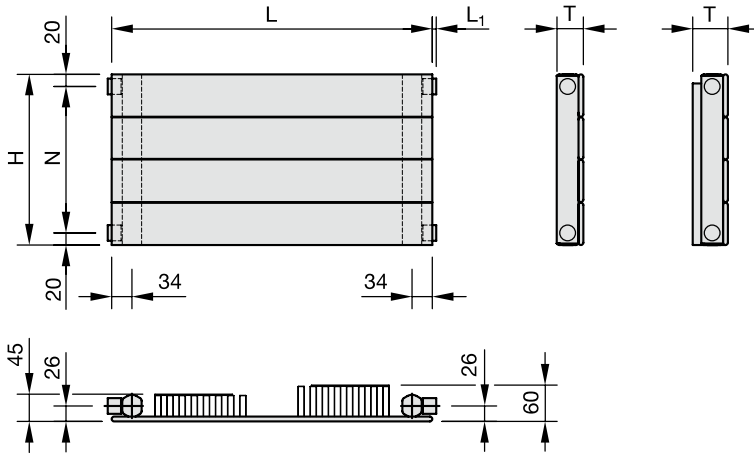
- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- ST = Stabilising brace
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

**Technical specifications for length 1000 mm**

Model	H mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NH07	70	30	45	0,18	0,4	2,3	38	9,0	1,22	105	85	56
NH14	141	101	45	0,36	0,9	4,3	36	16,0	1,23	182	148	96
NH21	212	172	45	0,53	1,3	6,2	36	22,0	1,23	254	206	135
NH28	283	243	45	0,70	1,8	8,2	36	28,0	1,24	323	262	170
NH35	354	314	45	0,87	2,2	10,1	35	34,0	1,24	391	317	206
NH42	425	385	45	1,04	2,7	12,1	35	39,0	1,25	459	371	241
NH49	496	456	45	1,21	3,1	14,0	35	45,0	1,25	527	426	276
NH56	567	527	45	1,37	3,5	16,0	35	51,0	1,26	596	481	311
NH63	638	598	45	1,54	4,0	17,9	34	57,0	1,26	665	537	347
NH70	709	669	45	1,71	4,4	19,8	34	63,0	1,27	736	593	382
NH77	780	740	45	1,88	4,9	21,8	34	70,0	1,27	808	651	419
NH84	851	811	45	2,05	5,3	23,7	34	76,0	1,28	882	710	455
NH91	922	882	45	2,22	5,8	25,7	34	82,0	1,28	957	770	494
NH98	993	953	45	2,39	6,2	27,6	34	88,0	1,28	1024	824	528
NH105	1064	1024	45	2,56	6,7	29,5	34	94,0	1,28	1089	877	562
NH112	1135	1095	45	2,73	7,1	31,5	34	99,0	1,28	1153	928	595
NH119	1206	1166	45	2,89	7,5	33,4	34	105,0	1,28	1218	980	629
NH126	1277	1237	45	3,06	8,0	35,4	34	110,0	1,28	1282	1032	662
NH133	1348	1308	45	3,23	8,4	37,3	34	116,0	1,29	1347	1082	692
NH140	1419	1379	45	3,40	8,9	39,2	34	122,0	1,29	1411	1134	724

**Model NHL horizontal**



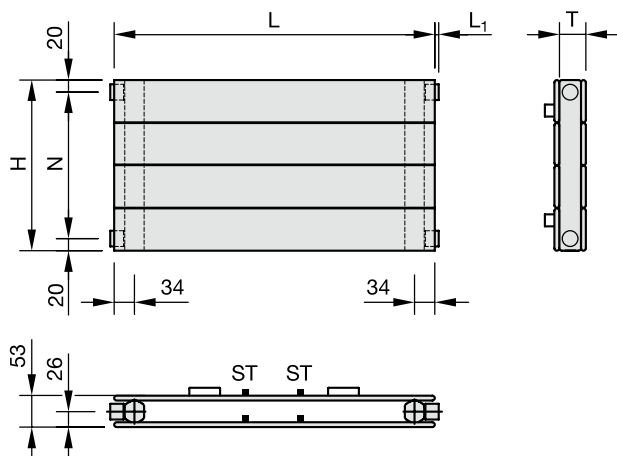
- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4" = 6; 3/8" = 7,5
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

**Technical specifications for length 1000 mm**

Model	H mm	H Fin mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NHL07/07	70	55	30	45	0,62	0,4	3,5	21	17,0	1,22	194	158	103
NHL14/14	141	125	101	45	1,28	0,9	6,6	19	29,0	1,23	339	275	180
NHL21/21	212	195	172	45	1,95	1,3	9,7	19	39,0	1,25	456	369	239
NHL28/28	283	265	243	45	2,61	1,8	12,9	20	47,0	1,26	545	440	284
NHL35/21	354	195	314	60	2,77	2,2	14,7	22	52,0	1,25	606	490	318
NHL35/35	354	330	314	60	4,06	2,2	17,6	20	61,0	1,27	710	572	368
NHL42/21	425	195	385	60	2,94	2,7	16,6	23	58,0	1,26	673	543	351
NHL42/42	425	400	385	60	4,90	2,7	21,1	20	70,0	1,27	814	656	422
NHL49/28	496	265	456	60	3,78	3,1	20,1	23	68,0	1,26	789	637	411
NHL49/49	496	471	456	60	5,75	3,1	24,6	20	79,0	1,28	917	738	473
NHL56/28	567	265	527	60	3,95	3,5	22,1	24	74,0	1,27	857	691	445
NHL56/56	567	541	527	60	6,58	3,5	28,1	21	88,0	1,29	1024	823	526
NHL63/28	638	265	598	60	4,12	4,0	24,0	25	80,0	1,27	927	747	481
NHL63/56	638	541	598	60	6,75	4,0	30,0	22	93,0	1,29	1086	873	558
NHL70/28	709	265	669	60	4,28	4,4	25,9	26	86,0	1,27	996	803	517
NHL70/56	709	541	669	60	6,92	4,4	32,0	23	99,0	1,29	1149	923	590
NHL77/28	780	265	740	60	4,88	4,9	28,0	24	92,0	1,27	1065	859	552
NHL77/56	780	541	740	60	8,12	4,9	34,0	22	104,0	1,29	1212	974	622
NHL84/28	851	265	811	60	5,48	5,3	29,9	24	97,0	1,27	1132	913	587
NHL84/56	851	541	811	60	9,32	5,3	36,0	22	110,0	1,29	1274	1024	654

**Model NHH horizontal**



- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- ST = Stabilising brace
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

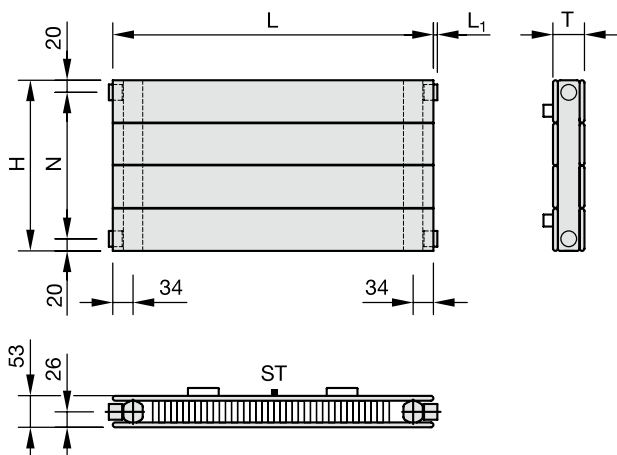
Dimensions in mm

**Technical specifications for length 1000 mm**

Model	H	N	T	A	V	M	s <sub>k</sub>	q <sub>ms</sub>	Exp.	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
	mm	mm	mm	m <sup>2</sup>	dm <sup>3</sup>	kg	%	kg/h	n			
NHH07	70	30	53	0,33	0,9	3,9	24	15,0	1,23	179	145	95
NHH14	141	101	53	0,67	1,8	7,7	23	26,0	1,24	303	246	160
NHH21	212	172	53	0,99	2,6	11,3	22	36,0	1,24	415	336	219
NHH28	283	243	53	1,31	3,5	15,0	22	45,0	1,25	522	422	274
NHH35	354	314	53	1,63	4,4	18,7	22	54,0	1,25	626	506	328
NHH42	425	385	53	1,96	5,3	22,3	22	63,0	1,26	729	589	380
NHH49	496	456	53	2,28	6,2	25,9	22	72,0	1,26	832	672	434
NHH56	567	527	53	2,60	7,1	29,6	22	80,0	1,27	935	754	485
NHH63	638	598	53	2,92	8,0	33,2	22	89,0	1,27	1040	838	540
NHH70	709	669	53	3,24	8,9	36,9	22	99,0	1,28	1146	922	591
NHH77	780	740	53	3,50	8,6	40,5	22	108,0	1,28	1253	1008	647
NHH84	851	811	53	3,80	9,4	44,2	22	118,0	1,29	1362	1094	699

# Zehnder Nova

## Model NHLH horizontal



- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- ST = Stabilising brace
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>s</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

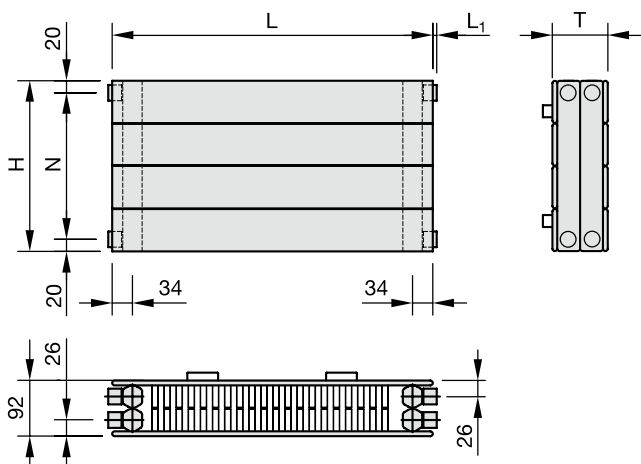
Dimensions in mm

### Technical specifications for length 1000 mm

Model	H mm	H Fin mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>s</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NHLH07/07	70	55	30	53	0,80	0,9	5,8	15	23,0	1,24	263	213	139
NHLH14/14	141	125	101	53	1,64	1,8	10,9	13	38,0	1,25	442	358	232
NHLH21/21	212	195	172	53	2,49	2,6	16,0	12	51,0	1,27	595	480	309
NHLH28/28	283	265	243	53	3,33	3,5	21,1	12	63,0	1,29	730	587	375
NHLH35/21	354	195	314	53	3,67	4,4	24,8	15	66,0	1,28	773	622	399
NHLH35/35	354	330	314	53	4,96	4,4	27,8	12	73,0	1,30	850	682	434
NHLH42/21	425	195	385	53	4,02	5,3	28,7	15	74,0	1,28	865	696	446
NHLH42/42	425	400	385	53	5,98	5,3	33,2	12	83,0	1,32	962	769	486
NHLH49/28	496	265	456	53	5,04	6,2	34,1	15	85,0	1,30	989	793	505
NHLH49/49	496	471	456	53	7,01	6,2	38,6	13	92,0	1,33	1072	855	539
NHLH56/28	567	265	527	53	5,39	7,1	38,0	15	93,0	1,30	1081	867	552
NHLH56/56	567	541	527	53	8,02	7,1	44,0	13	102,0	1,34	1185	944	593
NHLH63/28	638	265	598	53	5,74	8,0	41,9	16	101,0	1,30	1177	944	601
NHLH63/56	638	541	598	53	8,37	8,0	47,9	14	109,0	1,34	1265	1008	633
NHLH70/28	709	265	669	53	6,08	8,9	45,8	16	110,0	1,30	1275	1023	651
NHLH70/56	709	541	669	53	8,72	8,9	51,8	14	116,0	1,33	1344	1073	676



**Model NHLLH horizontal**



- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

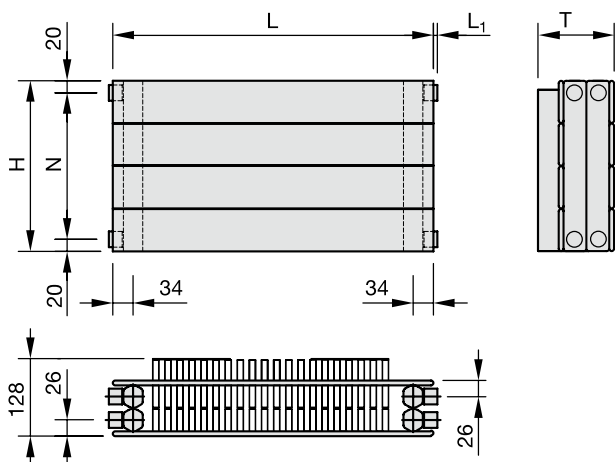
Dimensions in mm

**Technical specifications for length 1000 mm**

Model	H mm	H Fin mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NHLLH07/07	70	55	30	92	1,14	0,9	5,9	15	32,0	1,21	376	306	201
NHLLH14/14	141	125	101	92	2,47	1,8	11,8	13	54,0	1,23	630	511	334
NHLLH21/21	212	195	172	92	3,80	2,7	17,7	12	74,0	1,25	857	693	449
NHLLH28/28	283	265	243	92	5,12	3,5	23,6	12	91,0	1,28	1062	855	548
NHLLH35/21	354	195	314	92	4,48	4,4	25,9	15	91,0	1,27	1062	856	551
NHLLH35/35	354	330	314	92	6,38	4,4	29,6	12	107,0	1,30	1250	1003	638
NHLLH42/21	425	195	385	92	4,82	5,3	29,8	15	101,0	1,28	1170	942	604
NHLLH42/42	425	400	385	92	7,71	5,3	35,4	12	122,0	1,31	1424	1140	724
NHLLH49/28	496	265	456	92	6,14	6,2	35,6	15	118,0	1,29	1370	1101	703
NHLLH49/49	496	471	456	92	9,05	6,2	41,3	13	137,0	1,33	1590	1269	800
NHLLH56/28	567	265	527	92	6,48	7,1	39,4	15	127,0	1,29	1480	1189	760
NHLLH56/56	567	541	527	92	10,34	7,1	47,1	13	150,0	1,34	1750	1394	876
NHLLH63/28	638	265	598	92	6,82	8,0	43,3	16	137,0	1,30	1590	1275	812
NHLLH63/56	638	541	598	92	10,72	8,0	50,9	14	158,0	1,34	1843	1468	922
NHLLH70/28	709	265	669	92	7,16	8,9	47,2	16	146,0	1,30	1699	1363	868
NHLLH70/56	709	541	669	92	11,06	8,9	54,8	14	166,0	1,34	1936	1542	969
NHLLH77/28	780	265	740	92	7,89	9,7	51,2	15	155,0	1,30	1804	1447	921
NHLLH77/56	780	541	740	92	12,28	9,7	58,6	13	174,0	1,34	2029	1616	1015
NHLLH84/28	851	265	811	92	8,80	10,6	55,2	15	164,0	1,31	1904	1525	967
NHLLH84/56	851	541	811	92	13,86	10,6	62,4	13	182,0	1,34	2122	1690	1062

# Zehnder Nova

## Model NHLLHL horizontal



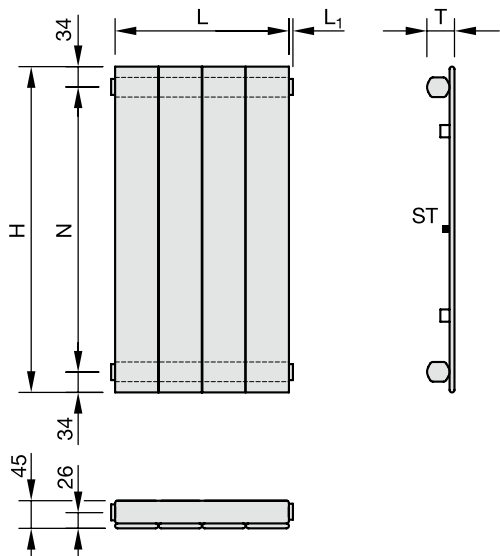
- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

### Technical specifications for length 1000 mm

Model	H mm	H Fin mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NHLLHL07/07	70	55	30	128	1,58	0,9	6,9	16	39,0	1,20	452	369	243
NHLLHL14/14	141	125	101	128	3,40	1,8	13,8	12	66,0	1,23	763	619	404
NHLLHL21/21	212	195	172	128	5,23	2,7	20,7	12	89,0	1,25	1037	839	544
NHLLHL28/28	283	265	243	128	7,05	3,5	27,6	11	110,0	1,28	1281	1031	661
NHLLHL35/21	354	195	314	128	5,90	4,4	28,7	13	105,0	1,27	1224	987	635
NHLLHL35/35	354	330	314	128	8,77	4,4	34,4	11	129,0	1,30	1504	1206	768
NHLLHL42/21	425	195	385	128	6,24	5,3	32,7	14	115,0	1,27	1333	1075	692
NHLLHL42/42	425	400	385	128	10,59	5,3	41,3	11	147,0	1,31	1711	1370	869
NHLLHL49/28	496	265	456	128	8,07	6,2	39,6	14	136,0	1,29	1583	1272	813
NHLLHL49/49	496	471	456	128	12,44	6,2	48,1	11	164,0	1,33	1910	1524	961
NHLLHL56/28	567	265	527	128	8,40	7,1	43,5	14	146,0	1,29	1702	1367	874
NHLLHL56/56	567	541	527	128	14,27	7,1	55,0	12	181,0	1,35	2109	1677	1050
NHLLHL63/28	638	265	598	128	8,74	8,0	47,4	15	157,0	1,29	1823	1465	936
NHLLHL63/56	638	541	598	128	14,60	8,0	58,9	12	189,0	1,35	2200	1750	1095
NHLLHL70/28	709	265	669	128	9,08	8,9	51,4	16	167,0	1,30	1942	1558	992
NHLLHL70/56	709	541	669	128	14,94	8,9	62,9	13	197,0	1,35	2291	1822	1140
NHLLHL77/28	780	265	740	128	7,89	9,7	55,1	15	177,0	1,30	2055	1648	1050
NHLLHL77/56	780	541	740	128	12,28	9,7	66,8	13	205,0	1,35	2382	1894	1186
NHLLHL84/28	851	265	811	128	8,80	10,6	58,9	15	186,0	1,31	2158	1728	1097
NHLLHL84/56	851	541	811	128	13,86	10,6	70,7	13	213,0	1,35	2473	1967	1231

**Model NV vertical**



- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- ST = Stabilising brace
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

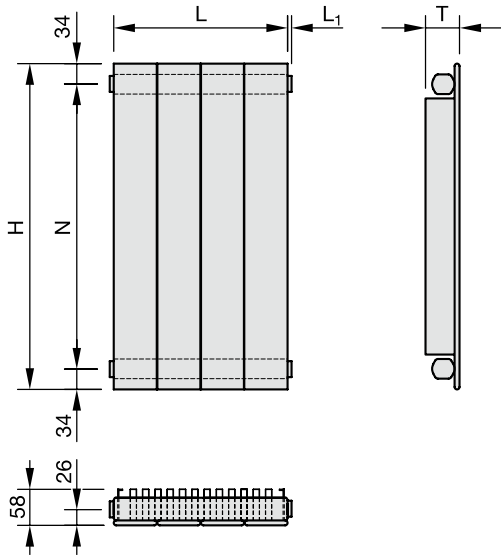
Dimensions in mm

**Technical specifications per element**

Model	H mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NV60	600	532	45	0,11	0,3	1,6	33	4,0	1,27	46,0	37,1	23,9
NV80	800	732	45	0,14	0,4	2,0	33	5,0	1,27	60,0	48,4	31,1
NV100	1000	932	45	0,17	0,4	2,2	33	6,0	1,28	74,0	59,6	38,2
NV120	1200	1132	45	0,20	0,5	2,5	33	8,0	1,28	88,0	70,8	45,4
NV140	1400	1332	45	0,23	0,6	2,9	33	9,0	1,29	101,0	81,1	51,9
NV160	1600	1532	45	0,28	0,7	3,3	33	10,0	1,29	116,0	93,2	59,6
NV180	1800	1732	45	0,31	0,7	3,6	33	11,0	1,30	130,0	104,3	66,4
NV200	2000	1932	45	0,34	0,8	4,0	33	12,0	1,30	145,0	116,3	74,1
NV220	2200	2132	45	0,37	0,9	4,3	33	14,0	1,31	160,0	128,1	81,3
NV240	2400	2332	45	0,40	0,9	4,7	34	15,0	1,31	175,0	140,1	88,9
NV260	2600	2532	45	0,43	1,0	5,0	34	16,0	1,32	191,0	152,7	96,6
NV280	2800	2732	45	0,46	1,1	5,4	34	18,0	1,32	207,0	165,5	104,6
NV300	3000	2932	45	0,49	1,1	5,7	34	19,0	1,33	224,0	178,8	112,7
NV320	3200	3132	45	0,52	1,2	6,0	34	20,0	1,33	241,0	192,3	121,2

# Zehnder Nova

**Model NVL vertical**



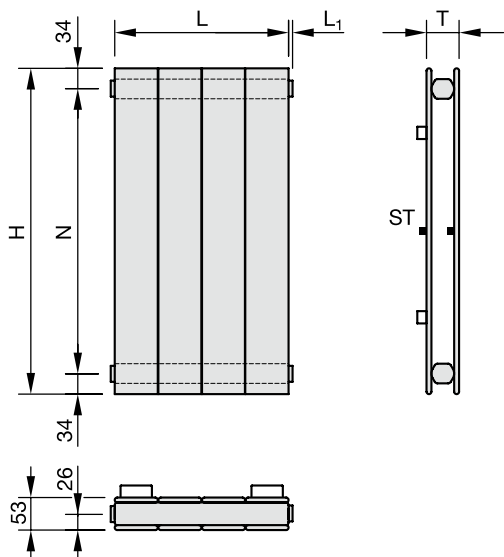
- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

**Technical specifications per element**

Model	H mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NVL60	600	532	58	0,28	0,3	1,7	24	6,0	1,28	71,0	57,1	36,6
NVL80	800	732	58	0,32	0,4	2,1	25	8,0	1,28	88,0	70,8	45,4
NVL100	1000	932	58	0,52	0,4	2,8	24	9,0	1,29	105,0	84,4	53,9
NVL120	1200	1132	58	0,55	0,5	3,2	25	10,0	1,29	121,0	97,2	62,1
NVL140	1400	1332	58	0,75	0,6	3,9	25	12,0	1,30	137,0	109,9	70,0
NVL160	1600	1532	58	0,79	0,7	4,3	26	13,0	1,30	153,0	122,7	78,1
NVL180	1800	1732	58	0,98	0,7	5,0	25	15,0	1,31	169,0	135,3	85,9
NVL200	2000	1932	58	1,02	0,8	5,4	26	16,0	1,31	185,0	148,1	94,0
NVL220	2200	2132	58	1,05	0,9	5,8	27	17,0	1,32	201,0	160,7	101,6
NVL240	2400	2332	58	1,09	0,9	6,1	28	19,0	1,32	217,0	173,5	109,7

**Model NVV vertical**



- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- ST = Stabilising brace
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

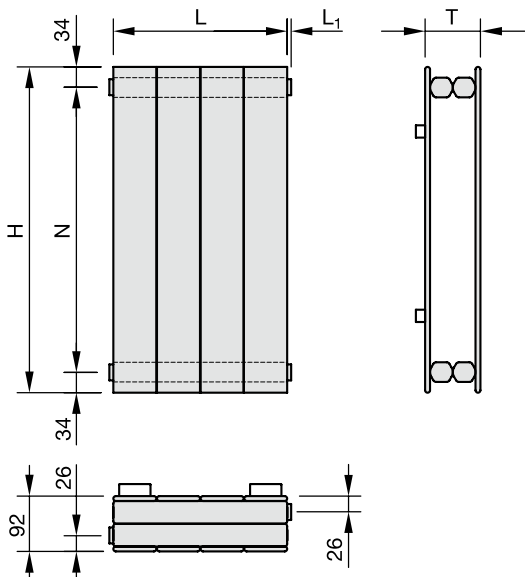
Dimensions in mm

**Technical specifications per element**

Model	H mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NVV60	600	532	53	0,20	0,5	2,3	23	6,0	1,32	67,0	53,6	33,9
NVV80	800	732	53	0,26	0,6	3,0	23	7,0	1,32	87,0	69,5	44,0
NVV100	1000	932	53	0,32	0,8	3,6	23	9,0	1,32	107,0	85,5	54,1
NVV120	1200	1132	53	0,38	0,9	4,3	23	11,0	1,32	127,0	101,5	64,2
NVV140	1400	1332	53	0,44	1,1	5,0	23	13,0	1,32	147,0	117,5	74,3
NVV160	1600	1532	53	0,50	1,2	5,7	23	14,0	1,32	166,0	132,7	83,9
NVV180	1800	1732	53	0,56	1,3	6,3	24	16,0	1,32	185,0	147,9	93,5
NVV200	2000	1932	53	0,62	1,5	7,0	24	18,0	1,32	204,0	163,1	103,1
NVV220	2200	2132	53	0,68	1,6	7,7	24	19,0	1,32	224,0	179,1	113,2
NVV240	2400	2332	53	0,74	1,7	8,4	25	21,0	1,32	243,0	194,2	122,8
NVV260	2600	2532	53	0,80	1,9	9,0	24	23,0	1,32	262,0	209,4	132,4
NVV280	2800	2732	53	0,87	2,0	9,7	24	24,0	1,32	280,0	223,8	141,5
NVV300	3000	2932	53	0,93	2,1	10,4	25	26,0	1,32	299,0	239,0	151,2

# Zehnder Nova

## Model NVV-4SR vertical



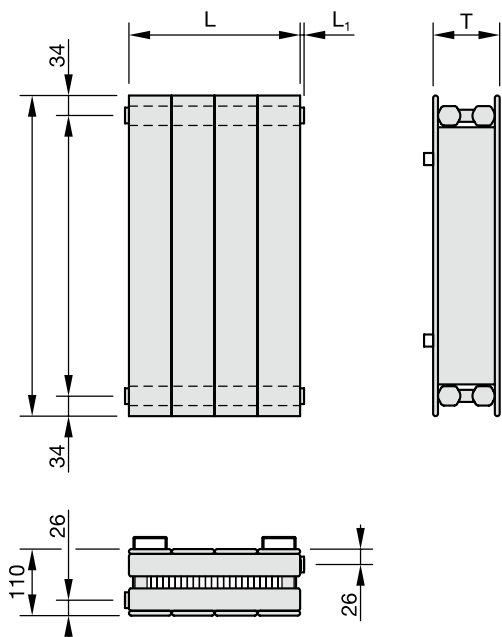
- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4" = 6; 3/8" = 7,5
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm

### Technical specifications per element

Model	H mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NVV60-4SR	600	532	92	0,22	0,6	2,5	23	7,0	1,28	79,0	63,6	40,8
NVV80-4SR	800	732	92	0,26	0,8	3,2	23	9,0	1,29	100,0	80,3	51,3
NVV100-4SR	1000	932	92	0,32	0,9	3,9	23	10,0	1,29	121,0	97,2	62,1
NVV120-4SR	1200	1132	92	0,40	1,0	4,6	23	12,0	1,30	141,0	113,1	72,0
NVV140-4SR	1400	1332	92	0,44	1,2	5,2	23	14,0	1,31	163,0	130,5	82,8
NVV160-4SR	1600	1532	92	0,51	1,3	6,0	23	16,0	1,31	184,0	147,3	93,5
NVV180-4SR	1800	1732	92	0,57	1,4	6,6	24	18,0	1,32	205,0	163,9	103,6
NVV200-4SR	2000	1932	92	0,63	1,6	7,3	24	20,0	1,32	227,0	181,5	114,8
NVV220-4SR	2200	2132	92	0,70	1,7	8,0	24	21,0	1,33	249,0	198,7	125,2
NVV240-4SR	2400	2332	92	0,76	1,8	8,7	25	23,0	1,33	272,0	217,1	136,8
NVV260-4SR	2600	2532	92	0,82	2,0	9,3	25	25,0	1,34	295,0	235,0	147,6
NVV280-4SR	2800	2732	92	0,88	2,1	10,1	25	27,0	1,34	319,0	254,1	159,6
NVV300-4SR	3000	2932	92	0,94	2,2	10,7	25	29,0	1,35	343,0	272,8	170,7

**Model NVLV vertical**



- H = Height
- L = Length
- N = Boss spacing
- L<sub>1</sub> = Excess length thread, 1/4", 3/8", 1/2" = 6; 3/4" = 7,5
- T = Depth of radiator
- A = Surface
- V = Water content
- M = Weight
- s<sub>k</sub> = Proportion of radiation
- q<sub>ms</sub> = Nominal flow rate
- n = Exponent
- Φ<sub>S</sub> = Nominal heat output according to EN 442 (75/65/20 °C)
- Φ = Thermal output at system temperatures

Dimensions in mm


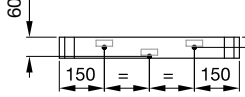
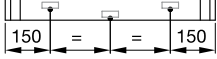
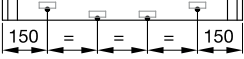

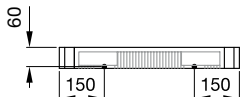
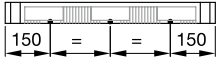
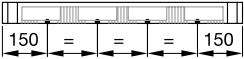

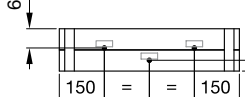
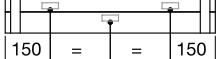
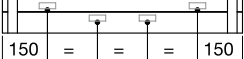

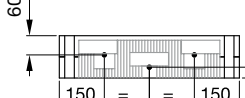
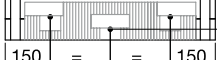
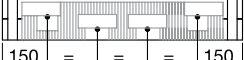

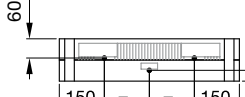
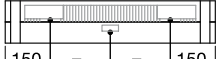
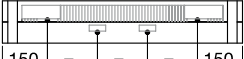

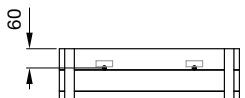



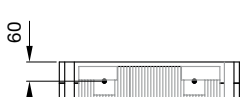
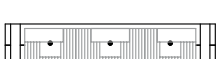
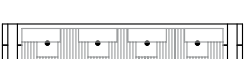

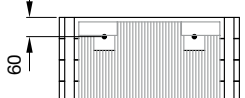
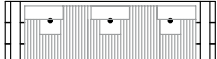

**Technical specifications per element**

Model	H mm	N mm	T mm	A m <sup>2</sup>	V dm <sup>3</sup>	M kg	s <sub>k</sub> %	q <sub>ms</sub> kg/h	Exp. n	Φ <sub>S</sub> =ΔT 50 K EN442 Watt	Φ 70/55/20 °C Watt	Φ 55/45/20 °C Watt
NVLV60	600	532	110	0,39	0,6	3,0	24	8,0	1,31	96,1	77,3	49,6
NVLV80	800	732	110	0,46	0,8	3,7	25	10,0	1,32	120,0	95,9	60,7
NVLV100	1000	932	110	0,69	0,9	4,8	24	12,0	1,33	144,0	114,9	72,4
NVLV120	1200	1132	110	0,75	1,0	5,5	25	15,0	1,34	169,0	134,6	84,5
NVLV140	1400	1332	110	0,98	1,2	6,5	25	17,0	1,35	195,0	155,1	97,1
NVLV160	1600	1532	110	1,05	1,3	7,3	26	19,0	1,35	222,0	176,5	110,5
NVLV180	1800	1732	110	1,27	1,4	8,4	25	22,0	1,35	251,0	199,6	124,9
NVLV200	2000	1932	110	1,34	1,6	9,0	26	23,0	1,35	273,0	217,1	135,9
NVLV220	2200	2132	110	1,40	1,7	9,8	27	25,0	1,35	295,0	234,6	146,8
NVLV240	2400	2332	110	1,47	1,8	10,5	28	27,0	1,35	316,0	251,3	157,3



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

Horizontal version, dimensions for bores when using bracket/set CVD (upper drill hole)

H = 70 <sup>1)</sup>	B	L = 400 - 1500	B	L > 1500 - 3500	B	L > 3500 - 6000
NH, NHH, NHLH, NLLH 	3		3		4	
NHL, NLLHL 	2		3		4	
H = 141 <sup>1)</sup>	B	L = 400 - 1500	B	L > 1500 - 3500	B	L > 3500 - 6000
NH, NHH, NHLH, NLLH 	3		3		4	
NHL, NLLHL 	3		3		4	
NHL, NLLHL – variable fins 	3		3		4	
H = 212 - 1419	B	L = 400 - 1500	B	L > 1500 - 3500	B	L > 3500 - 6000
NH, NHH, NHLH, NLLH 	4		6		8	
NHL, NLLHL 	4		6		8	
NHL, NLLHL – variable fins 	4		6		8	

- = Position of drill hole
- H = Height
- L = Length
- B = Required number of brackets

<sup>1)</sup> Models with heights 70 and 141 mm may need to be stabilised by means of the connections, otherwise it is possible that the radiator may tip over due to the position of the mounting axes.

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

Vertical version, dimensions for drill holes when using bracket/set CVD (upper drill hole)

H = 600 - 1500	B	L = 70 - 141 <sup>1)</sup>	B	L = 212	B	L = 283 - 2129
NV, NVV, NVLV, NVV4SR 	2		4		4	
H = 1600 - 3500 NV, NVV, NVLV, NVV4SR 	3		6		6	
H = 3600 - 4600 NV, NVV, NVLV, NVV4SR 	4		8		8	
H = 600 - 2400 NVL 			4		4	

<sup>1)</sup> Models with heights 70 and 141 mm may need to be stabilised by means of the connections, otherwise it is possible that the radiator may tip over due to the position of the mounting axes.

- = Position of drill hole
- H = Height
- L = Length
- B = Required number of brackets

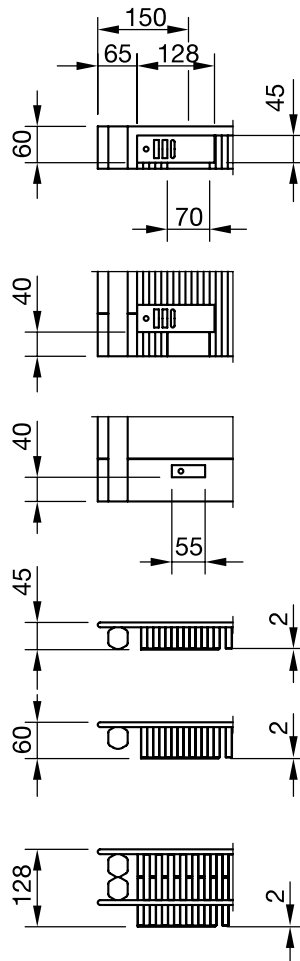
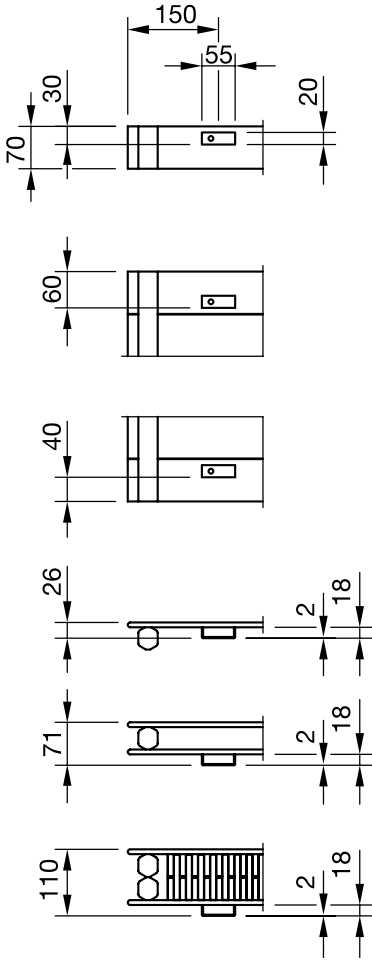
Dimensions in mm

# Zehnder Nova

**Detail of lugs for horizontal version**

NH, NHH, NHLH, NHLH

NHL, NHLHL



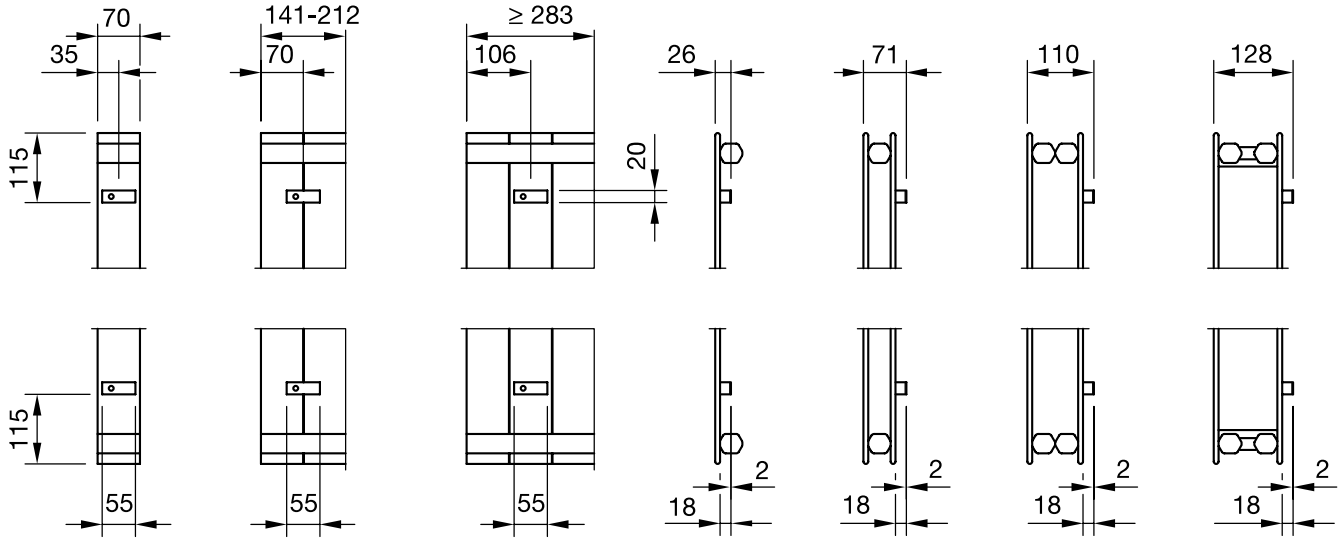
Dimensions in mm

**Note:**

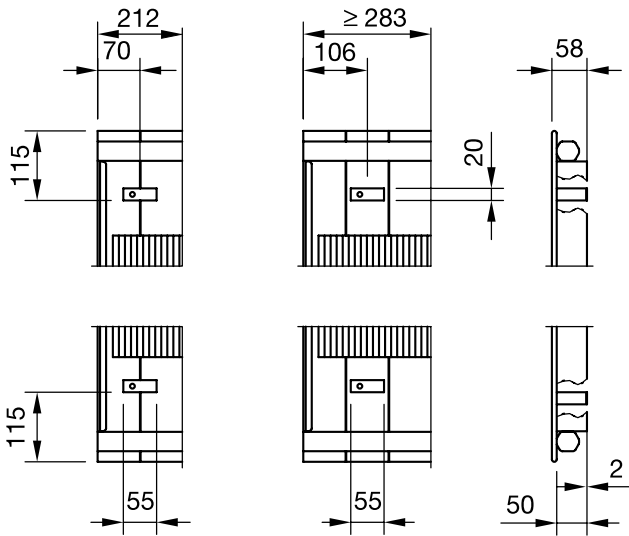
On the version with integrated valve (Completo/“Breakthrough”), the position of the lugs and installation points change for the length  $\geq 283$  mm. Details on request.

**Detail of lugs for vertical version**

NV, NVV, NVLV, NVV4SR



NVL



Dimensions in mm

**Note:**  
 On the version with integrated valve (Completo/"Breakthrough"), the position of the lugs and installation points change for the length  $\geq 283$  mm. Details on request.



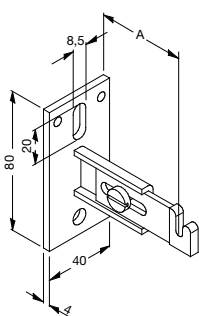
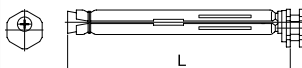
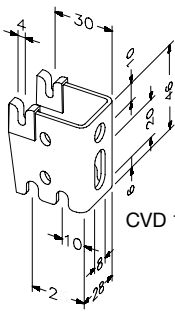

## Sets for wall mounting

Description	Version	Article number	Price €	Application
<b>Set AK1<sup>1)</sup></b> Fixing set, consisting of: - Bracket AK 1 Wall clearance 40 - 55 mm	RAL 9016 4 x AK 1 6 x AK 1 8 x AK 1 10 x AK 1	796411 796611 796811 796911	<b>54,73</b> <b>82,10</b> <b>109,45</b> <b>136,82</b>	For all radiators with suspension brackets or plates
<b>Set BKE<sup>1)</sup></b> Wall hole Ø 18 mm, bracket length 160 mm Depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm  Fixing set, consisting of: - Build-in bracket BKE	Galvanised/ RAL 9016 4 x BKE 6 x BKE 8 x BKE 10 x BKE	766432 766632 766832 766932	<b>19,94</b> <b>29,92</b> <b>39,89</b> <b>49,82</b>	Zehnder Nova Zehnder
<b>Set CVD 0</b> Fixing set, consisting of: - Bracket CVD 0 - Attenuator (white) - Locking mechanism	RAL 9016 3 x CVD 0 4 x CVD 0 6 x CVD 0 8 x CVD 0 10 x CVD 0	795301 795401 795601 795801 795901	<b>10,18</b> <b>12,77</b> <b>18,12</b> <b>23,37</b> <b>28,66</b>	Zehnder Nova (not all models)
<b>Set CVD 1</b> Fixing set, consisting of: - Bracket CVD 1 - Attenuator (white) - Locking mechanism	RAL 9016 3 x CVD 1 4 x CVD 1 6 x CVD 1 8 x CVD 1 10 x CVD 1	795311 795411 795611 795811 795911	<b>10,18</b> <b>12,77</b> <b>18,12</b> <b>23,37</b> <b>28,66</b>	Zehnder Nova (not all models)
<b>Set CVD 2</b> Fixing set, consisting of: - Bracket CVD 2 - Attenuator (white) - Locking mechanism	RAL 9016 3 x CVD 2 4 x CVD 2 6 x CVD 2 8 x CVD 2 10 x CVD 2	795321 795421 795621 795821 795921	<b>19,53</b> <b>25,27</b> <b>36,82</b> <b>48,35</b> <b>59,84</b>	Zehnder Nova (not all models)

Screws and anchors are not included in the scope of delivery. Accessories in special finishes not available as a set, see individual bracket

<sup>1)</sup> An on-site locking device may be required depending on the installation and connection situation and the net weight of the radiator

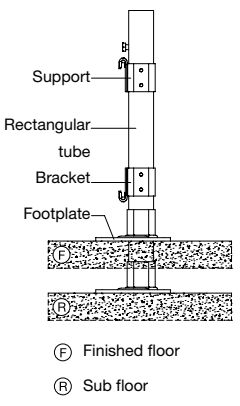
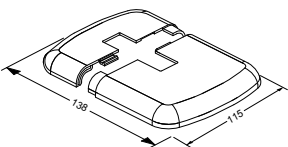
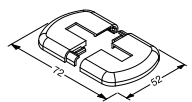
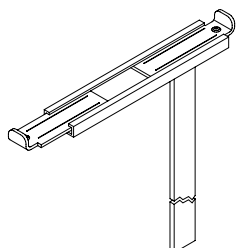
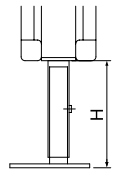
## Individual brackets for wall mounting

Description		Version	Article number	Price €	Application
<b>Wall bracket AK 1</b> <sup>1)</sup> With attenuator, clearance A 40 - 55 mm		RAL 9016 Special finish	796011 796019	<b>13,70</b> <b>23,85</b>	For all radiators with suspension brackets or plates
<b>Wall bracket AK 2</b> <sup>1)</sup> With attenuator, clearance A 60 - 80 mm		RAL 9016 Special finish	796021 796029	<b>14,17</b> <b>24,34</b>	For all radiators with suspension brackets or plates
<b>Build-in bracket BKE</b> <sup>1)</sup> Wall hole Ø 18 mm, depth regulation and plastic head off-centre, height-adjustable 0 - 7 mm.		Galvanised	L = 100 mm L = 130 mm L = 160 mm L = 200 mm L = 240 mm	<b>4,55</b> <b>4,77</b> <b>4,98</b> <b>5,93</b> <b>7,31</b>	For all radiators with suspension brackets or plates
<b>Wall bracket CVD 0</b> <sup>1)</sup> With attenuator, clearances 10/15 mm		RAL 9016 Special finish	795031 795039	<b>2,63</b> <b>7,74</b>	For all radiators with suspension brackets or plates
<b>Wall bracket CVD 1</b> <sup>1)</sup> With attenuator, clearances 25/30 mm		RAL 9016 Special finish	795041 795049	<b>2,63</b> <b>7,74</b>	For all radiators with suspension brackets or plates
<b>Wall bracket CVD 2</b> <sup>1)</sup> With attenuator, clearances 30/45/50 mm		RAL 9016 Special finish	795051 795059	<b>5,75</b> <b>10,79</b>	For all radiators with suspension brackets or plates
<b>Retaining spring for CVD</b> For wall brackets CVD 0, CVD 1 and CVD 2 with lugs with height 20 mm. Price valid for 2 retaining springs		Spring steel	948012	<b>2,24</b>	Zehnder Zehnder Nova

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





## Individual supports for floor mounting, etc.





Description	Version	Article number	Price €	Application	
<p><b>Floor bracket STF 1 for tightening</b> With bracket, without bench frame, RAL 9016</p> <p><b>Comprising:</b> - Support - Rectangular tube - Bracket - Footplate - Sealing cap, plastic</p> <p><b>Can be combined with:</b> <b>Cover AD 1</b> for footplate <b>Cover AR</b> for rectangular tube</p> <p>* The desired dimension depends on the sum of the floor construction, ground clearance and height of the radiator.</p>		<p>Dimension*</p> <p>360 mm 410 mm 460 mm 510 mm 560 mm 610 mm 660 mm 710 mm 760 mm 810 mm 860 mm 910 mm 960 mm 1010 mm 1060 mm 1110 mm 1160 mm</p>	<p>718011 718021 718031 718041 718051 718061 718071 718081 718091 718101 718111 718121 718131 718141 718151 718161 718171</p>	<p><b>61,78</b> <b>61,78</b> <b>61,78</b> <b>61,78</b> <b>61,78</b> <b>61,78</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b> <b>66,99</b></p>	<p>For all radiators with lugs up to a construction height of 600 mm<sup>1)</sup></p> <p>Exceptions: Zehnder Nova models NV</p>
<p><b>Plastic cover AD 1</b> For footplate. Not included in price of STF, suitable for retrofitting</p>		Plastic, white	703000	<b>14,95</b>	Floor brackets STF
<p><b>Cover AR</b> For rectangular tube. Not included in price of STF.</p>		Plastic, white	704000	<b>3,88</b>	Floor brackets STF
<p><b>Bench frame for floor bracket STF</b></p>		Galvanised	713002	<b>28,48</b>	Floor brackets STF
<p><b>Floor support, welded</b> Height-adjustable, see fixing accessories in the relevant radiator chapter</p>				<b>120,48</b>	Zehnder Nova

<sup>1)</sup> Provide additional bracket from a construction height (= radiator incl. bracket) greater than 600 mm for the requirements class 2.

## Rails and hooks








Description	Version	Article number	Price €	Application	
<p><b>Magnetic towel rail for panel radiators</b></p> <p>Max. load 5 kg L = Attachment distance in mm Overall length = L + 102 mm</p>		<p>Chrome</p> <p>L = 297 mm L = 330 mm L = 429 mm</p>	<p>471108 471118 471128</p>	<p><b>269,02</b> <b>280,57</b> <b>308,62</b></p>	Zehnder Nova
<p><b>Magnetic towel hooks for panel radiators</b></p> <p>Max. load 5 kg</p>		Chrome	470328	<b>135,31</b>	Zehnder Nova

# Thermostats

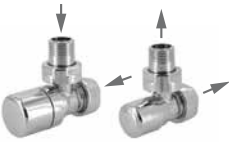


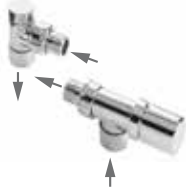

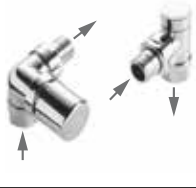
Description		Version	Article number	Price €	Application
<b>Zehnder thermostat "LH2"</b> Thermostat with integrated fluid sensor, tested according to EN 215. Can be restricted and locked to individual reference value of 7 to 28 °C. Version with zero setting and threaded connection for thermostat M 30 x 1,5		White Chrome	819140 819148	<b>35,02</b> <b>60,35</b>	For all radiators with threaded connection M 30 x 1,5 mm
<b>Zehnder thermostat "DH"</b> Thermostat with integrated expansion material sensor, reference value range 7 to 28 °C. Version with zero setting		White Chrome	819050 819058	<b>35,02</b> <b>53,36</b>	
<b>Zehnder thermostat "SH"</b> 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	<b>38,09</b> <b>53,47</b> <b>53,47</b>	
<b>Zehnder thermostat „Design Line“</b> 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	<b>64,11</b> <b>64,11</b> <b>131,65</b> <b>73,79</b>	

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

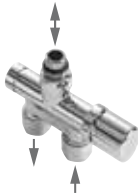
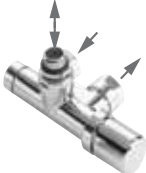
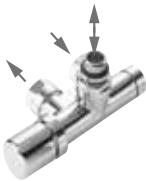




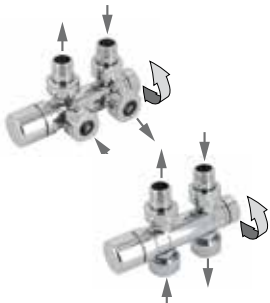
# Zehnder Design Line Valve

Description		Version	Article number	Price €	Application
<b>Valve set type A</b> 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	<b>76,44</b>	For all radiators with ½" female thread
<b>Valve set type B</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	<b>119,66</b> <b>119,66</b>	
<b>Valve set type C</b> 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	<b>119,66</b> <b>119,66</b>	
<b>Valve set type D</b> 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	<b>125,37</b> <b>125,37</b>	
<b>Valve set type G</b> 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	<b>133,41</b> <b>133,41</b>	
<b>Valve set type I</b> 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	<b>133,41</b> <b>133,41</b>	

→ 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 78

Description		Version	Article number	Price €	Application
<b>Valve type J</b> 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	<b>132,50</b> <b>132,50</b>	For all radiators with 1/2" female thread
<b>Valve type K</b> 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	<b>129,26</b> <b>129,26</b>	
<b>Valve type M</b> 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	<b>129,26</b> <b>129,26</b>	
<b>Valve type N</b> 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	<b>173,82</b> <b>173,82</b>	
<b>Valve type O</b> 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	<b>132,50</b> <b>132,50</b>	
<b>Valve type P</b> 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	<b>132,50</b> <b>132,50</b>	
<b>Valve type Q</b> 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	<b>132,50</b> <b>132,50</b>	
<b>Valve type U</b> 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	<b>242,19</b> <b>242,19</b>	










## Zehnder Design Line Coloured Valves



Description	Version	Article nr.	Price €	Application
<p><b>Zehnder thermostat "Design Line"</b> 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	<b>73,79</b>	For all radiators with ½" female thread, in colour of radiator
<p><b>Valve set type B</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	<b>119,66</b>	
	Valve set including Design Line thermostat	839439	<b>193,45</b>	
<p><b>Valve type O</b> 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	<b>132,50</b>	
	Valve set including Design Line thermostat	839409	<b>206,29</b>	
<p><b>Valve type P</b> 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	<b>132,50</b>	
	Valve set including Design Line thermostat	839419	<b>206,29</b>	
<p><b>Valve type Q</b> 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	<b>132,50</b>	
	Valve set including Design Line thermostat	839429	<b>206,29</b>	



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
<b>Nut ½", 2 pcs</b> Fe - ¾" Eurocone	White Chrome	842001 842008	<b>24,23</b> <b>24,23</b>	Adaptor for screw fittings with ½" external thread
				
<b>Adaptors, 2 pcs</b> Multilayer Ø 14 mm	Brass	842160	<b>11,41</b>	Matching to Zehnder Design Line valves and union nuts (2 x ¾" Eurocone Ø 16,8 mm) which are in the scope of delivery
				
<b>Adaptors, 2 pcs</b> Multilayer 16 x 2,0 mm	Brass	842060	<b>11,41</b>	
				
<b>Adaptors, 2 pcs</b> PEX 12 x 1,0 mm	Brass	842070	<b>11,41</b>	
				
<b>Adaptors, 2 pcs</b> Multilayer Ø 16 x 2,25 mm	Brass	842170	<b>11,41</b>	
				
<b>Adaptors, 2 pcs</b> Copper Ø 10 mm	Brass	842080	<b>7,13</b>	
				
Copper Ø 12 mm	Brass	842090	<b>7,13</b>	
Copper Ø 14 mm	Brass	842100	<b>7,13</b>	
Copper Ø 15 mm	Brass	842110	<b>7,13</b>	
Copper Ø 16 mm	Brass	842120	<b>7,13</b>	
<b>Nuts Ø 18 mm - ¾" Eurocone + adaptors copper Ø 18 mm</b> <b>2 pcs</b>	Chrome / Brass	842140	<b>35,63</b>	
				
<b>Nuts Ø 20,8 mm - ¾" Eurocone + adaptors multilayer Ø 20 x 2 mm</b> <b>2 pcs</b>	Chrome / Brass	842150	<b>35,63</b>	
				
<b>Universal Adaptor set</b> (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	<b>39,90</b>	
				



## Zehnder Design Line Accessories

Description		Version	Article number	Price €	Application
<b>Sleeving kit</b>  L = 70 mm L = 160 mm		Chrome Chrome	853738 853668	<b>24,23</b> <b>31,33</b>	For radiator installation
<b>Collar Ø45 mm</b>  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  White Chrome	816241 816248  816251 816258  816261 816268  816271 816278  816281 816288  816291 816298  816301 816308	<b>2,85</b> <b>7,13</b>  <b>2,85</b> <b>7,13</b>  <b>2,85</b> <b>7,13</b>  <b>2,85</b> <b>7,13</b>  <b>2,85</b> <b>7,13</b>  <b>2,85</b> <b>7,13</b>	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 Nova	CE - 05

### 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 Nova	1000 x 2000 mm

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 Nova	X <sup>1)</sup>

<sup>1)</sup> only without fins

## 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.

Product/product family	$q_{m \min}$ in % of $q_{ms}$
Zehnder Nova - vertical models	17%
Zehnder Nova - horizontal models	20%

## 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 Nova	4,5	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  $\frac{3}{4}$ " 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.

### 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 Nova	X	-	X <sup>1)</sup>	X <sup>3)</sup>

### 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

<sup>1)</sup> Only horizontal, single-layer models

<sup>2)</sup> Height max. 420 mm

<sup>3)</sup> Only models with 4 mm gap

<sup>4)</sup> Only vertical models

<sup>5)</sup> Only single-layer models without fins

### Standard colour/finish

The standard colour for Zehnder radiators is RAL 9016. Exceptions: Zehnder Fare Tech, Zehnder Alura Tech RAL 9010. 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)

# Keyword list

## System temperatures

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

## Technical specifications

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

## Technoline

See "Colours"

## Test pressure

Each radiator is checked for leaks by subjecting it to 1,3 times its rated maximum operating pressure before delivery. For orders that do not indicate the required operating pressure, the radiator will be delivered with the operating pressure of the standard version.

## Thermal output $\Phi$

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  $\Phi_s$ :

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

## Thermal outputs $\Phi$ (different $\Delta T$ 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

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

$\Delta T$  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  $\Delta T_n$  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 86/87.

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 Nova:

Model NH21, length 2000 mm  
 $\Phi_s = 508 \text{ W}$ , exponent  $n = 1,23$   
 $t_1 = 70 \text{ }^\circ\text{C}$ ,  $t_2 = 50 \text{ }^\circ\text{C}$ ,  $t_r = 22 \text{ }^\circ\text{C}$

$$\Phi = 508 \text{ W} \times 0,692 = \underline{352 \text{ W}}$$

## 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 class 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.

# Keyword list

## 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"

## 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 <sup>2</sup>	Surface
V	dm <sup>3</sup>	Water content
M	kg	Empty weight
N <sub>s</sub>	-	Number of elements
t <sub>1</sub>	°C	Flow temperature
t <sub>2</sub>	°C	Return temperature
t <sub>r</sub>	°C	Room air temperature
t <sub>m</sub>	°C	Mean water temperature (t <sub>1</sub> +t <sub>2</sub> )/2
ΔT	K	Excess temperature t <sub>m</sub> - t <sub>r</sub>
Φ	W=(J/s)	Thermal output
Φ <sub>s</sub>	W	Nominal heat output
Φ <sub>L</sub>	W	Nominal heat output of the module
C <sub>p</sub>	J/(kg K)	Specific heat capacity
n	-	Radiator indicator, exponent
S <sub>k</sub>	%	Proportion of radiation
C <sub>K</sub>	-	Conversion factor to Φ <sub>s</sub>
q <sub>m</sub>	kg/h/(kg/s)	Water flow
q <sub>ms</sub>	kg/h/(kg/s)	Nominal flow rate
v	m/s	Velocity
Δp	kPa	Pressure loss, pressure drop
ζ	-	Resistance coefficient
ln	-	Natural logarithm

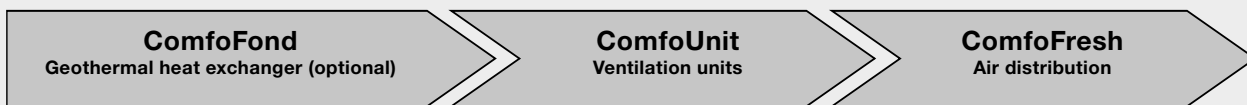
## Physical unit

°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



# 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.



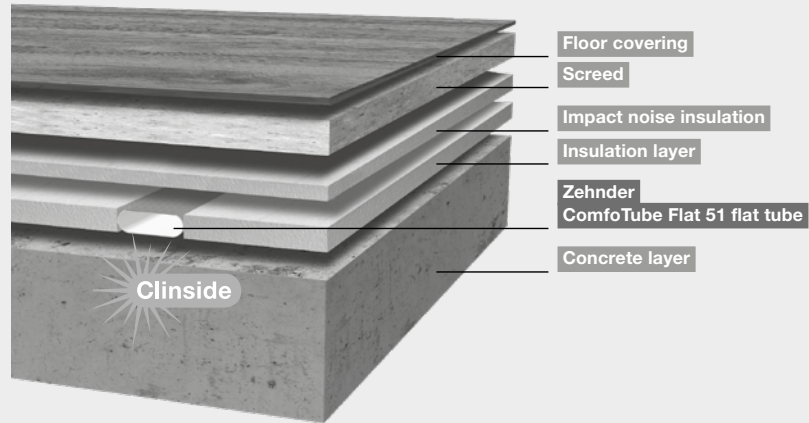


## Air distribution system – effective and hygienic

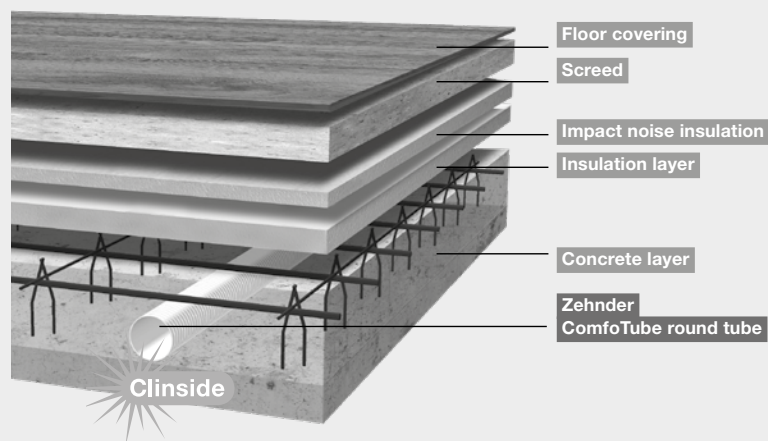
There are two versions of air distribution systems available: Zehnder OnFloor and InFloor. In both cases, the volume of air is regulated as required. They are characterised by the ease with which they can be integrated into the building and their rapid installation. In the case of Zehnder OnFloor, fresh 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)

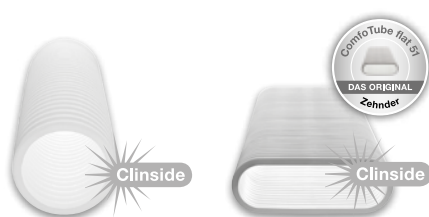


The air distribution system with round tube for cover, wall and floor (Zehnder InFloor)



- 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



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



Certificates issued by a recognised hygiene institute.

# 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



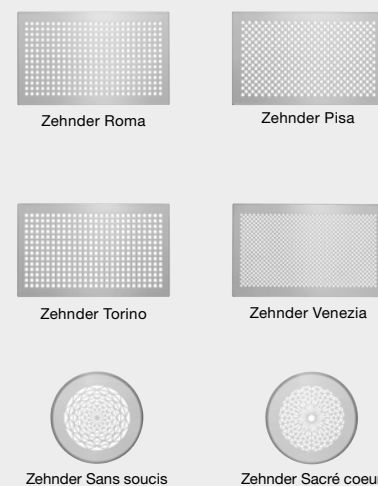
## Zehnder ComfoAir ventilation units

- 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

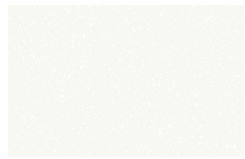
- Elegant and discreet
- For every interior
- Surface-mounted and flush-mounted version
- Available in white or stainless steel
- Suitable for displacement ventilation



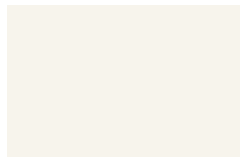
# Warm colours

**zehnder**

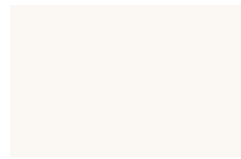
## Colour category 1: CORE



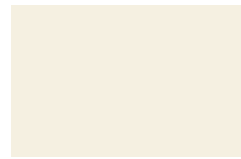
**White Quartz** <sup>1)</sup>  
0521



**Pure White** <sup>2)</sup>  
RAL 9010 / 9010



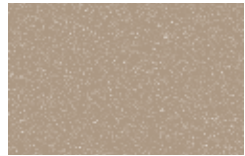
**Edelweiss**  
0067



**Cream**  
RAL 9001 / 9001



**Telegrey 4**  
RAL 7047 / 7247



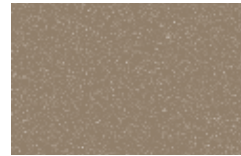
**Beige Quartz**  
0523



**Golden Sand**  
0258



**Yellow Grey**  
RAL 7034 / 7234



**Pearl Beige**  
RAL 1035 / 1235



**Beach Gold**  
0272



**Concrete Grey**  
0265



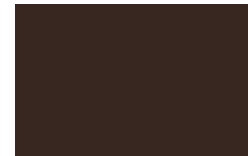
**Beige Grey**  
0267



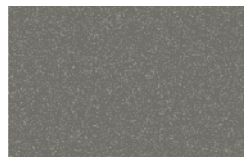
**Bronze**  
0276



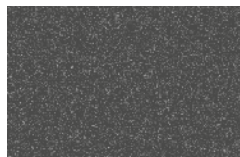
**Brown Quartz**  
0529



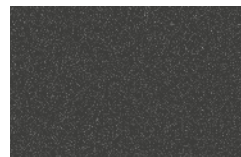
**Dark Brown**  
0270



**Grey Aluminium**  
9007



**Anthracite**  
0346



**Umbra Grey**  
RAL 7022 / 7222

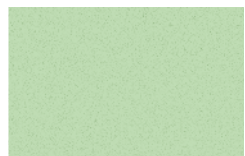


**Volcanic**  
0336



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 %

<sup>1)</sup> 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.

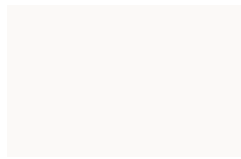
<sup>1)</sup> Not for Zehnder Nova, Nova Neo and Excelsior

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

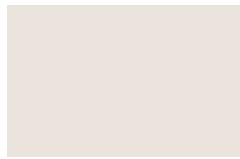
<sup>3)</sup> Only for Zehnder Charleston and Zehnder Metropolitan

# Cool colours

## Colour category 1: CORE



**White Matt**  
0556



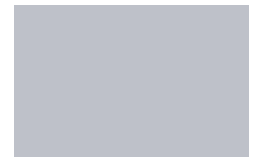
**Light Beige**  
0253



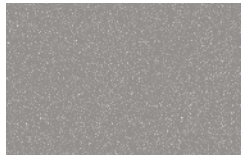
**Light Grey**  
0262



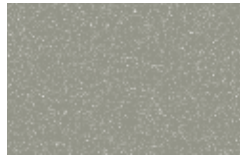
**White Aluminium**  
9006



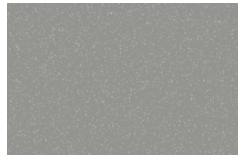
**Light Jeans**  
0264



**Titane**  
0335



**Inox Look**  
0332



**Telegrey 2**  
RAL 7046 / 7246



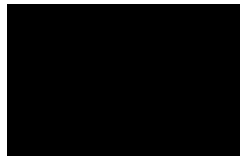
**Blue Grey**  
RAL 7031 / 7231



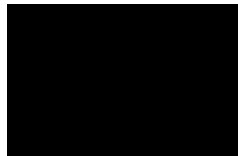
**Anthracite Grey**  
RAL 7016 / 7016



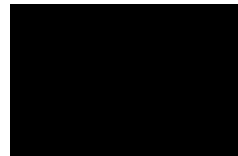
**Black Quartz**  
0550



**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)** <sup>3)</sup>  
0325



**Chrome (Surface)**  
0008



**Stainless steel brushed**  
9517

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

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

