Zehnder Nova Neo

zehnder

always
around you

Heating | Cooling | Fresh Air | Clean Air

Zehnder – everything you need to create a comfortable, healthy and energy-efficient indoor climate

Heating, cooling, fresh and clean air: at Zehnder, you will find everything you need for comfortable, healthy and energy-efficient indoor living. Zehnder's wide and clearly structured portfolio can offer the right product for any project, be it private, public or commercial, new build or renovation. And where service is also concerned, you'll find that Zehnder is "always around you".

Heating

At Zehnder, Heating doesn't just come in the form of designer radiators. We offer solutions in all shapes and sizes, from radiant ceiling panels to heat pumps with integrated ventilation devices.

- Designer radiators
- Compact energy station with integrated heat pump
- Heating and cooling ceiling systems
- Comfortable indoor ventilation with heat recovery

Zehnder Designer Radiators

Cooling

Zehnder also offers sophisticated solutions for indoor Cooling. These range from cooling ceiling systems to comfortable indoor ventilation with a supply of pre-cooled fresh air.

- Heating and cooling ceiling systems
- Compact energy station with heat pump and brine pipe
- Comfortable indoor ventilation with geothermal heat exchanger for fresh air pre-cooling

Zehnder Heating and Cooling Ceiling Systems

PLUS X AWARD®
zehnder
MOST INNOVATIVE BRAND 2011

Most innovative brand
in the category
heating & climate

zehnder

always
around you

Fresh Air

Fresh Air – a product range with a long tradition at Zehnder. Zehnder Comfosystems provides products and solutions for comfortable indoor ventilation with heat recovery for houses and apartments, for new builds and for renovation projects.

- Comfortable indoor ventilation
- Compact energy station with integrated ventilation device

Zehnder Comfosystems

Clean Air

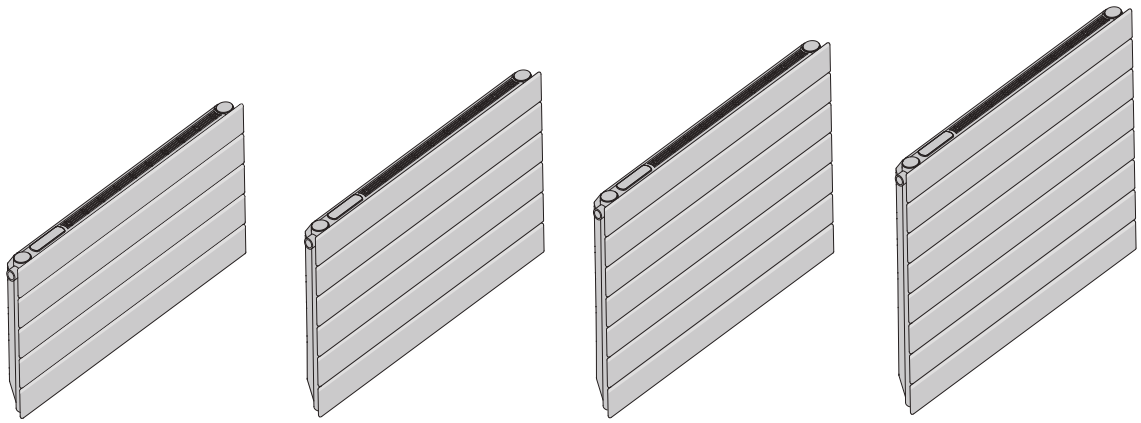
Zehnder Clean Air Solutions provide Clean Air in buildings which are particularly prone to dust. In residential applications, the comfortable indoor ventilation provided by Zehnder Comfosystems filters external pollutants out of the air.

- Comfortable indoor ventilation with integrated fresh-air filter
- Compact energy station with integrated fresh-air filter
- Systems for clean air

Zehnder Clean Air Solutions

zehnder *nova neo*

Zehnder Nova Neo



Length mm	Height mm			
	370	444	518	592
700	VRX-037-070/BF	VRX-044-070/BF	VRX-051-070/BF	VRX-059-070/BF
800	VRX-037-080/BF	VRX-044-080/BF	VRX-051-080/BF	VRX-059-080/BF
1000	VRX-037-100/BF	VRX-044-100/BF	VRX-051-100/BF	VRX-059-100/BF
1100	VRX-037-110/BF	VRX-044-110/BF	VRX-051-110/BF	VRX-059-110/BF
1200	VRX-037-120/BF	VRX-044-120/BF	VRX-051-120/BF	VRX-059-120/BF
1400	VRX-037-140/BF	VRX-044-140/BF	VRX-051-140/BF	VRX-059-140/BF
1500	VRX-037-150/BF	VRX-044-150/BF	VRX-051-150/BF	VRX-059-150/BF

General Sales and Delivery Conditions:

Our General Sales and Delivery Conditions apply.
You can find these under Terms and Conditions on our homepage at www.zehnder.co.uk.

zehnder *nova neo*

Product description

Zehnder Nova Neo (Neo = New Energy Optimized) stands out as an attractive radiator especially for low system temperatures. In addition to its high proportion of radiant heat, Zehnder Nova Neo also has integrated fans, which rapidly and quietly boost to the desired heat output allowing the decorative radiator to achieve up to five times the performance of conventional radiators at low temperatures.

In terms of appearance, the front panel consists of horizontal, flat-oval tubes positioned with a 4mm gap and welded at the front to round collector tubes. The resulting level surface provides pleasant radiant heat. Convection heat is emitted via the heat emitter, which is positioned behind the front panel and supported by a row of compact fans, to produce the best possible heating performance. This fan support can be switched off or on, choosing from a range of three different speeds. A grille enhances the appearance and the safety of the radiator and directs the airstream into the room. The air that is fed into the system is cleaned as it passes through a filter. The filter is quickly and easily removed to be cleaned.

The ½" connections can be fitted in a variety of positions: at the front, bottom left or right, at the same or opposite ends. Zehnder Nova Neo is delivered ready to plug into an existing socket. The fan control panel is elegantly integrated into the top cover of the radiator. Zehnder Nova Neo is supplied with a wall attachment in the form of an easy-to-install mounting plate. It is available in a variety of colours and surfaces, gloss or matt.

Technical specifications

- Flat tubes 70 x 11 mm
- Round collector pipes Ø 38 mm
- Maximum operating pressure: 4.0 bar
- Operating temperature max. 75°C
- Maximum test pressure: 5.2 bar
- Powder coated, RAL 9016
- Thermal output tested to EN 442, with CE marking
- Integrated electrical power supply
- IP24 protection class (splashproof)
- Supply voltage: 230 V
- Low noise (34 dB (A) in Boost mode) tested to ISO 3741

Benefits

- Compatible with a heat pump and low temperature systems
- Quiet, integrated fans with three speed operation
- Integrated filter for improved hygiene of air quality
- Easy installation with concealed mounting plate
- Contemporary appearance in a variety of colours and surfaces

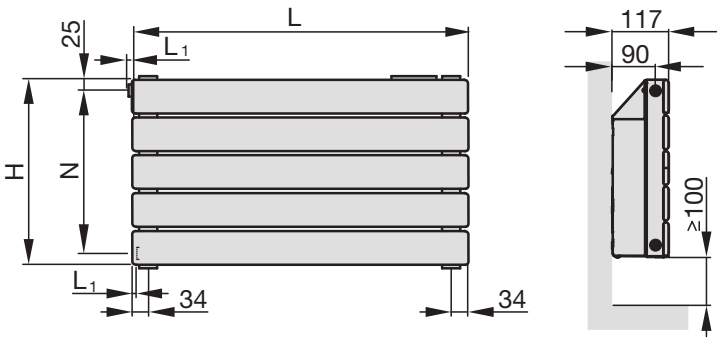
Standard scope of delivery:

- Powder coated, RAL 9016
- 2 x ½" connection at front
- ⅛" connection at front to ventilate radiator
- Air vent ⅛"
- Connection cable 1.20 m (supplied without plug)
- Mounting accessories
- Packaging

* All performance values are determined on the basis of EN 442 in the standardised test chamber of the Zehnder Group. Subject to change through enhancement of the product.

zehnder *nova neo*

Height 370 mm



H = Height
L = Length
L_1 = Thread overlap = 2 (Reset at return)
N = Boss spacing = H - 49
T = Depth of radiator
V = Water content
M = Weight
s_k = Proportion of radiation (without fans)
q_{ms} = Nominal flow rate
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20°C)
Φ = Thermal output at system temperatures

Dimensions in mm

Technical specifications per radiator

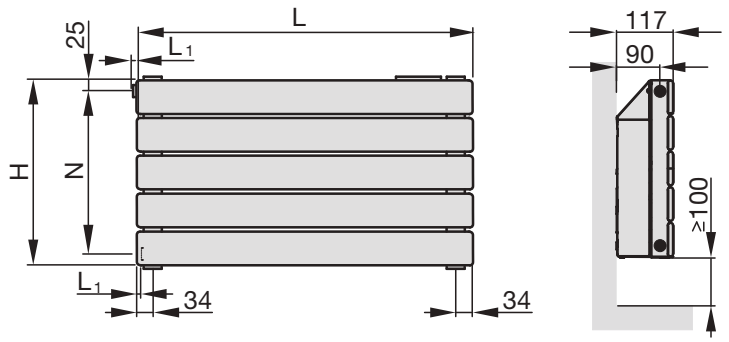
Model	H	L	T	V	M	s_k	q_{ms}	Fan speed	Exp.	Φ_s=ΔT 50 K EN442	Φ 55/45/20°C	Φ 35/28/20°C
	mm	mm	mm	dm^3	kg	%	kg/h		n	Watt	Watt	Watt
VRX-037-070/BF	370	700	117	2.9	16.7	20	31.3	0	1.30	364	186	52
							72.7	1	1.06	845	489	173
							89.6	2	1.04	1,042	609	220
							108.4	3	1.01	1,261	747	276
VRX-037-080/BF	370	800	117	3.1	18.5	20	35.8	0	1.30	416	212	59
							83.1	1	1.06	966	559	198
							102.4	2	1.04	1,191	697	251
							123.9	3	1.01	1,441	853	316
VRX-037-100/BF	370	1000	117	3.9	23.1	20	42.6	0	1.29	496	254	71
							119.2	1	1.01	1,386	820	303
							152.9	2	0.99	1,778	1,065	403
							191.5	3	0.97	2,227	1,349	521
VRX-037-110/BF	370	1100	117	4.3	25.3	20	46.9	0	1.29	546	280	79
							131.1	1	1.01	1,525	903	333
							168.2	2	0.99	1,956	1,172	443
							210.7	3	0.97	2,450	1,484	573
VRX-037-120/BF	370	1200	117	4.7	27.7	20	51.2	0	1.29	596	305	86
							143.1	1	1.01	1,664	985	364
							183.5	2	0.99	2,134	1,279	483
							229.8	3	0.97	2,673	1,619	625
VRX-037-140/BF	370	1400	117	5.5	32.3	20	58.7	0	1.32	683	346	95
							169.4	1	0.99	1,970	1,181	447
							224.5	2	0.96	2,611	1,590	620
							291.9	3	0.93	3,395	2,103	846
VRX-037-150/BF	370	1500	117	5.6	33.7	20	62.9	0	1.32	732	371	102
							181.5	1	0.99	2,111	1,265	479
							240.5	2	0.96	2,797	1,703	664
							312.8	3	0.93	3,638	2,253	907

Depending on the length of the radiator:

- Sound pressure level at medium fan speed at a distance of 1.5 m: 26-28 dB (A)
- Sound pressure level in boost mode (level 3) max. 32-34 dB (A)
- Power consumption at level 3: 3 to 10.2 Watt
- Power consumption without fans: 0.7 Watt

zehnder *nova neo*

Height 444 mm



H = Height
L = Length
L_1 = Thread overlap = 2 (Reset at return)
N = Boss spacing = H - 49
T = Depth of radiator
V = Water content
M = Weight
s_k = Proportion of radiation (without fans)
q_{ms} = Nominal flow rate
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20°C)
Φ = Thermal output at system temperatures

Dimensions in mm

Technical specifications per radiator

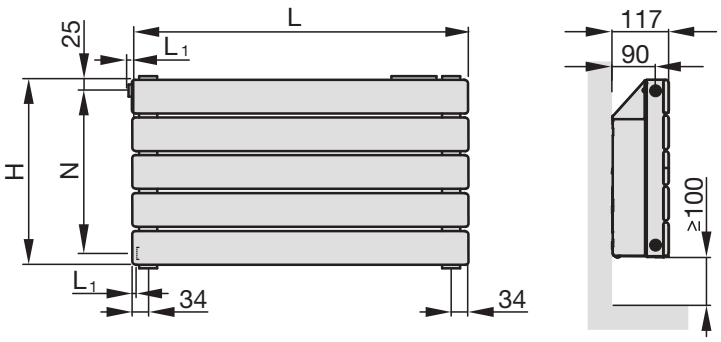
Model	H mm	L mm	T mm	V dm^3	M kg	s_k %	q_{ms} kg/h	Fan speed	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 55/45/20°C Watt	Φ 35/28/20°C Watt
VRX-044-070/BF	444	700	117	3.5	18.3	20	38.3 77.0 93.5 112.5	0	1.30	446	227	63
								1	1.08	895	513	178
								2	1.05	1,087	631	225
								3	1.03	1,308	770	281
VRX-044-080/BF	444	800	117	3.7	20.1	20	43.9 88.0 106.9 128.5	0	1.30	510	260	72
								1	1.08	1,023	586	204
								2	1.05	1,243	722	257
								3	1.03	1,495	880	322
VRX-044-100/BF	444	1000	117	4.6	25.2	20	52.3 126.3 159.5 198.6	0	1.30	608	311	87
								1	1.03	1,469	861	312
								2	1.01	1,855	1,103	411
								3	0.98	2,310	1,391	531
VRX-044-110/BF	444	1100	117	5.0	27.5	20	57.5 139.0 175.5 218.5	0	1.30	669	342	96
								1	1.03	1,616	947	343
								2	1.01	2,041	1,214	452
								3	0.98	2,541	1,530	584
VRX-044-120/BF	444	1200	117	5.6	30.2	20	62.8 151.6 191.5 238.4	0	1.30	730	374	105
								1	1.03	1,763	1,033	375
								2	1.01	2,227	1,324	494
								3	0.98	2,772	1,669	637
VRX-044-140/BF	444	1400	117	6.5	35.3	20	72.0 179.5 234.2 302.8	0	1.32	837	424	116
								1	1.01	2,088	1,239	460
								2	0.97	2,724	1,646	633
								3	0.94	3,522	2,168	863
VRX-044-150/BF	444	1500	117	6.6	36.6	20	77.1 192.3 251.0 324.4	0	1.32	897	454	125
								1	1.01	2,237	1,328	493
								2	0.97	2,919	1,764	678
								3	0.94	3,773	2,323	924

Depending on the length of the radiator:

- Sound pressure level at medium fan speed at a distance of 1.5 m: 26-28 dB (A)
- Sound pressure level in boost mode (level 3) max. 32-34 dB (A)
- Power consumption at level 3: 3 to 10.2 Watt
- Power consumption without fans: 0.7 Watt

zehnder *nova neo*

Height 518 mm



H = Height
L = Length
L_1 = Thread overlap = 2 (Reset at return)
N = Boss spacing = H - 49
T = Depth of radiator
V = Water content
M = Weight
s_k = Proportion of radiation (without fans)
q_{ms} = Nominal flow rate
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20°C)
Φ = Thermal output at system temperatures

Dimensions in mm

Technical specifications per radiator

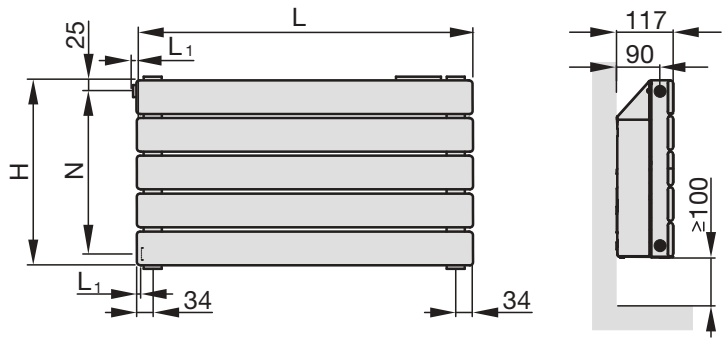
Model	H	L	T	V	M	s_k	q_{ms}	Fan speed	Exp.	Φ_s=ΔT 50 K EN442	Φ 55/45/20°C	Φ 35/28/20°C
	mm	mm	mm	dm^3	kg	%	kg/h		n	Watt	Watt	Watt
VRX-051-070/BF	518	700	117	4.0	20.2	20	46.9 81.6 97.6 116.6	0	1.31	546	278	77
								1	1.10	949	539	184
								2	1.07	1,135	654	229
								3	1.04	1,356	793	287
VRX-051-080/BF	518	800	117	4.3	22.0	20	53.7 93.2 111.5 133.3	0	1.31	625	318	88
								1	1.10	1,084	615	210
								2	1.07	1,297	747	262
								3	1.04	1,550	907	328
VRX-051-100/BF	518	1000	117	5.3	27.5	20	64.1 133.9 166.5 206.0	0	1.30	745	381	106
								1	1.05	1,557	904	322
								2	1.02	1,936	1,143	420
								3	0.99	2,396	1,434	541
VRX-051-110/BF	518	1100	117	5.8	30.0	20	70.5 147.2 183.1 226.6	0	1.30	820	419	117
								1	1.05	1,712	994	354
								2	1.02	2,130	1,257	462
								3	0.99	2,635	1,577	595
VRX-051-120/BF	518	1200	117	6.4	33.0	20	76.9 160.6 199.7 247.2	0	1.30	894	457	128
								1	1.05	1,868	1,084	386
								2	1.02	2,323	1,371	504
								3	0.99	2,875	1,721	649
VRX-051-140/BF	518	1400	117	7.4	38.5	20	88.2 190.2 244.4 314.0	0	1.32	1,026	519	142
								1	1.03	2,212	1,300	474
								2	0.99	2,842	1,705	646
								3	0.95	3,652	2,234	879
VRX-051-150/BF	518	1500	117	7.5	39.7	20	94.5 203.8 261.8 336.5	0	1.32	1,099	556	152
								1	1.03	2,370	1,393	508
								2	0.99	3,045	1,827	692
								3	0.95	3,913	2,394	941

Depending on the length of the radiator:

- Sound pressure level at medium fan speed at a distance of 1.5 m: 26-28 dB (A)
- Sound pressure level in boost mode (level 3) max. 32-34 dB (A)
- Power consumption at level 3: 3 to 10.2 Watt
- Power consumption without fans: 0.7 Watt

zehnder *nova neo*

Height 592 mm



H = Height
L = Length
L_1 = Thread overlap = 2 (Reset at return)
N = Boss spacing = H - 49
T = Depth of radiator
V = Water content
M = Weight
s_k = Proportion of radiation (without fans)
q_{ms} = Nominal flow rate
n = Exponent
Φ_S = Nominal heat output according to EN 442 (75/65/20°C)
Φ = Thermal output at system temperatures

Dimensions in mm

Technical specifications per radiator

Model	H mm	L mm	T mm	V dm^3	M kg	s_k %	q_{ms} kg/h	Fan speed	Exp. n	Φ_s=ΔT 50 K EN442 Watt	Φ 55/45/20°C Watt	Φ 35/28/20°C Watt
VRX-059-070/BF	592	700	117	4.5	21.8	21	57.6 86.4 101.8 121.0	0	1.31	670	341	94
								1	1.12	1,005	565	189
								2	1.08	1,184	677	234
								3	1.05	1,407	818	292
VRX-059-080/BF	592	800	117	4.8	23.7	21	65.8 98.8 116.3 138.3	0	1.31	765	389	108
								1	1.12	1,149	646	216
								2	1.08	1,353	774	267
								3	1.05	1,608	935	334
VRX-059-100/BF	592	1000	117	6.0	29.6	21	78.5 141.9 173.7 213.7	0	1.30	913	466	130
								1	1.07	1,650	948	331
								2	1.03	2,020	1,183	428
								3	1.01	2,485	1,478	551
VRX-059-110/BF	592	1100	117	6.5	32.2	21	86.3 156.1 191.0 235.0	0	1.30	1,004	512	143
								1	1.07	1,815	1,043	364
								2	1.03	2,222	1,302	471
								3	1.01	2,733	1,626	606
VRX-059-120/BF	592	1200	117	7.2	35.6	21	94.2 170.3 208.4 256.4	0	1.30	1,096	559	156
								1	1.07	1,980	1,138	397
								2	1.03	2,424	1,420	514
								3	1.01	2,982	1,774	661
VRX-059-140/BF	592	1400	117	8.4	41.5	21	108.1 201.6 255.0 325.7	0	1.32	1,257	635	173
								1	1.05	2,344	1,364	488
								2	1.00	2,966	1,766	659
								3	0.96	3,788	2,303	895
VRX-059-150/BF	592	1500	117	8.5	42.7	21	115.8 216.0 273.2 349.0	0	1.32	1,347	680	186
								1	1.05	2,512	1,462	523
								2	1.00	3,178	1,892	706
								3	0.96	4,059	2,486	959

Depending on the length of the radiator:

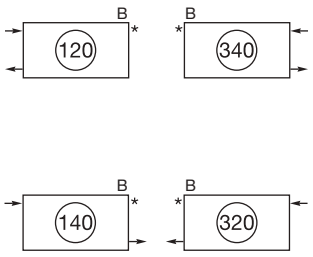
- Sound pressure level at medium fan speed at a distance of 1.5 m: 26-28 dB (A)
- Sound pressure level in boost mode (level 3) max. 32-34 dB (A)
- Power consumption at level 3: 3 to 10.2 Watt
- Power consumption without fans: 0.7 Watt

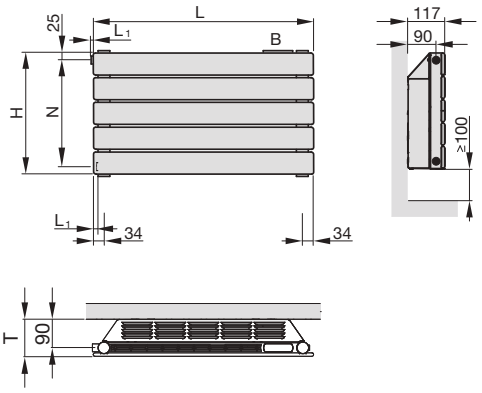
zehnder *nova neo*

Type of connection[1)]	Scale drawing: Front view, side view and topview (bottom)

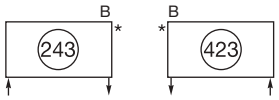
Standard connection 2-tube with external valve

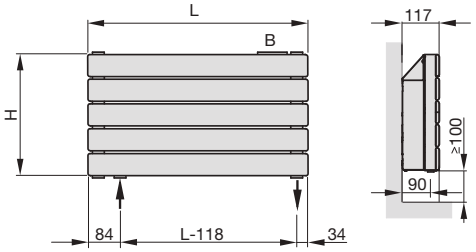
same or opposite end



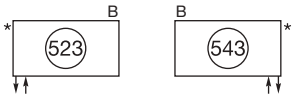


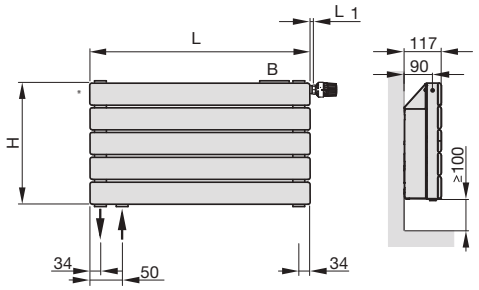
from bottom to bottom
opposite end





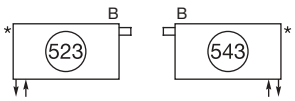
from bottom to bottom,
at side 50 mm

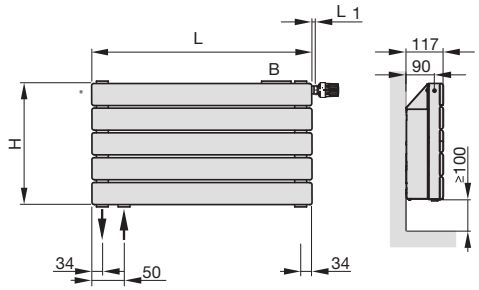




Completto connection with integrated valve (max. flow rate 250 kg/h)

from bottom to bottom,
at side 50 mm





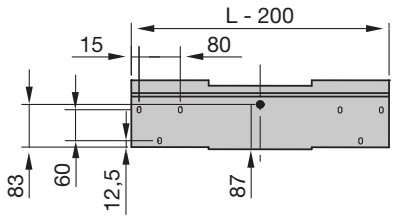
H = Height
L = Length
N = Boss spacing = H - 49 mm
L_1 = Thread overlap = 2
(Reset at return)

T = Depth of radiator
B = Operating panel

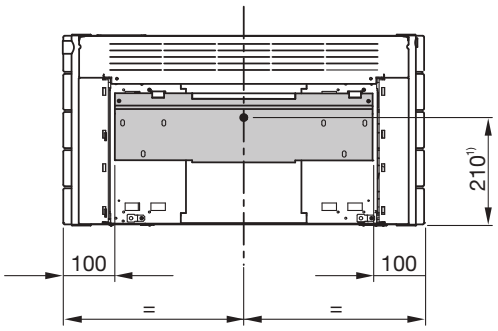
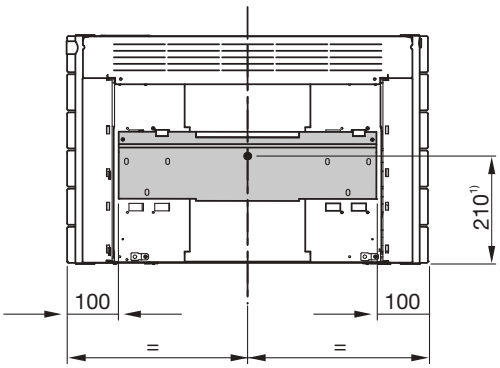
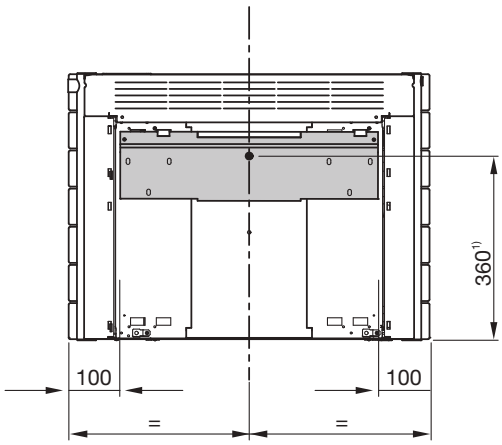
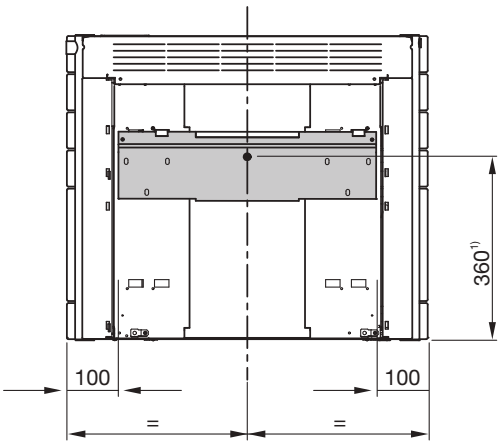
Dimensions in mm

zehnder *nova neo*

Note on load requirements, safety and installation conditions on request.

Dimensions for drill holes in mounting plate	L = all lengths
	

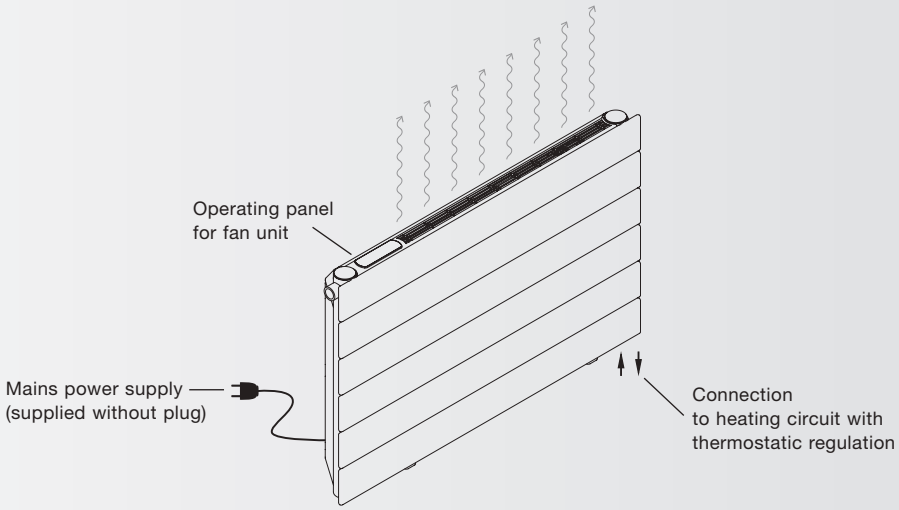
Dimensions for mounting plate on radiator and reference point

H = 370	H = 444
	
H = 518	**H = 592**
	

0 = Position of drill holes, long hole in mounting plate 12 x 7
H = Height
L = Length
¹⁾ = Reference point for installation Ø7

Dimensions in mm

zehnder *nova neo*



1 LED display indicating fan function

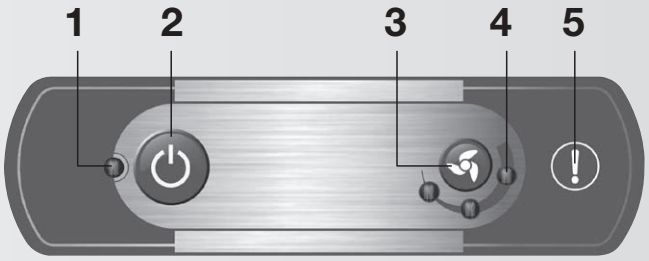
2 Fan function ON/OFF

3 Button to regulate fan speed

4 LED display indicating
fan speed 1-2-3 [1)]

5 LED display for filter replacement
(lights) and sensor fields (flashing)

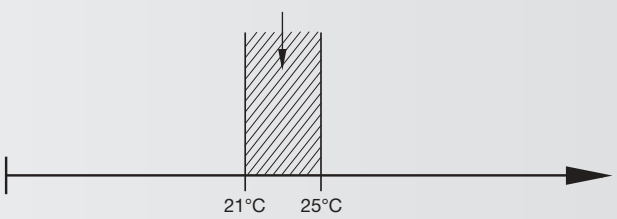
[1)] Level 3 (booster) is automatically switched down to level 1 after one hour



Automatic control to save energy

The radiator is regulated via the thermostatic valve. The heat output can be supported by the fans. Once the desired room temperature has been attained, supply of hot water is restricted and the temperature of the radiator goes down. Sensors integrated into the inside of the radiator detect the temperature and switch off the fans (radiator temperature ≤ 25°C) independent of the selected operating level.

When the thermostatic valve opens again (radiator temperature ≥ 25°C), the fans are switched back on automatically.



Zehnder Colours

Standard

Traffic White RAL 9016
9016*
Code: B1

Colour category 1

⇨ Includes the selection of special colours shown here, **surcharge on the standard RAL 9016 finish: 20%**.

Classic colours

Edelweiss
C 0067
Code: 67

RAL 9010
C 9010*
Code: B4

Pergamon
C 0081*
Code: AI

Jasmine
C 0072
Code: 72

RAL 9001
C 9001*
Code: AZ

RAL 1013
C 1013*
Code: AJ

RAL 1023
C 1023*
Code: AL

Natura
C 0035*
Code: 35

Bahama
C 0054*
Code: 54

RAL 9002
C 9002*
Code: B2

Aegean
C 0040*
Code: 40

Greenwich
C 0044*
Code: 44

Calypso
C 0043*
Code: 43

RAL 5002
C 5002*
Code: AQ

Manhattan
C 0077*
Code: A8

RAL 7016
C 7016*
Code: AW

RAL 9017
C 9217
Code: B5

RAL 9005
C 9005*
Code: B3

RAL 8017
C 8017*
Code: AY

RAL 3003
C 3003*
Code: AO

RAL 3000
C 3000*
Code: AN

Colour category 2

⇨ Includes the following selection of special colours, **surcharge on the standard RAL 9016 finish: 30%**.
All other special colours in the RAL, RAL-D, NCS-S, Sanitary, DB colour systems are also available as required, surcharge on request.

Classic colours

NCS-S-0520-Y20R
C 0801
Code: AC

NCS-S-0530-Y10R
C 0802
Code: AE

Flamingo
C 0069*
Code: 69

NCS-S-1030-R80B
C 0813
Code: AH

RAL 5017
C 5017*
Code: AS

Chinchilla
C 0064
Code: 64

Trendy colours

Spring Green T 0846
Code: BI

Ivory
T 0849
Code: BM

NCS-S-0530-Y30R
T 0806
Code: B9

Dark Brown
T 0847
Code: BK

NCS-S-2010-G60Y
T 8723
Code: BQ

NCS-S-0520-R90B
T 5613
Code: BR

NCS-S-2055-B10G
T 5743
Code: BO

Dark Purple
T 0848
Code: BL

NCS-S-2065-R20B
T 3770
Code: BN

NCS-S-0520-R
T 1808
Code: AB

Metallic colours

Sand Quartz
M 0522
Code: BA

Beige Quartz
M 0523
Code: BB

Brown Quartz
M 0529
Code: BH

Orange Quartz
M 0528
Code: BG

Red Quartz
M 0526
Code: BE

Stone Quartz
M 0527
Code: BF

Green Quartz
M 0524
Code: BC

Blue Quartz
M 0525
Code: BD

Titane
M 0335*
Code: A5

Anthracite
M 0346
Code: A1

Volcanic
M 0336
Code: A6

White Aluminium
M 9006*
Code: A7

Grey Aluminium
M 9007*
Code: A3

---

* These colours have a glossy finish, all others are matt.

Due to different manufacturing techniques of the original colours, deviations can occur in colouring and polish.
RAL and NCS are markings of the manufacturer.

Conversion factors f1 for ΔT temperature differences other than 50 K (EN 442)

$$f_1 = \left(\frac{\Delta T}{50}\right)^n$$

ΔT K \ n	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14
10	0.2506	0.2427	0.2350	0.2275	0.2203	0.2133	0.2066	0.2000	0.1937	0.1876	0.1816	0.1759	0.1703	0.1649	0.1597
11	0.2720	0.2639	0.2560	0.2484	0.2410	0.2338	0.2268	0.2200	0.2135	0.2071	0.2009	0.1950	0.1891	0.1835	0.1780
12	0.2931	0.2849	0.2769	0.2691	0.2615	0.2541	0.2470	0.2400	0.2333	0.2267	0.2204	0.2142	0.2081	0.2023	0.1966
13	0.3140	0.3057	0.2975	0.2896	0.2819	0.2744	0.2671	0.2600	0.2531	0.2464	0.2399	0.2335	0.2273	0.2212	0.2154
14	0.3347	0.3263	0.3181	0.3101	0.3023	0.2947	0.2873	0.2800	0.2730	0.2661	0.2595	0.2529	0.2466	0.2404	0.2343
15	0.3551	0.3467	0.3384	0.3304	0.3225	0.3149	0.3074	0.3000	0.2929	0.2859	0.2791	0.2725	0.2660	0.2597	0.2535
16	0.3754	0.3669	0.3587	0.3506	0.3427	0.3350	0.3274	0.3200	0.3128	0.3058	0.2989	0.2922	0.2856	0.2792	0.2729
17	0.3955	0.3870	0.3788	0.3707	0.3628	0.3550	0.3475	0.3400	0.3328	0.3257	0.3187	0.3119	0.3053	0.2988	0.2924
18	0.4154	0.4070	0.3988	0.3907	0.3828	0.3751	0.3675	0.3600	0.3528	0.3456	0.3386	0.3318	0.3251	0.3185	0.3121
19	0.4352	0.4268	0.4187	0.4106	0.4028	0.3950	0.3875	0.3800	0.3728	0.3656	0.3586	0.3517	0.3450	0.3384	0.3319
20	0.4548	0.4465	0.4384	0.4305	0.4227	0.4150	0.4074	0.4000	0.3928	0.3857	0.3787	0.3718	0.3650	0.3584	0.3519
21	0.4743	0.4661	0.4581	0.4502	0.4425	0.4349	0.4274	0.4200	0.4128	0.4057	0.3987	0.3919	0.3852	0.3785	0.3720
22	0.4936	0.4856	0.4777	0.4699	0.4623	0.4547	0.4473	0.4400	0.4329	0.4258	0.4189	0.4121	0.4054	0.3988	0.3923
23	0.5129	0.5050	0.4972	0.4895	0.4820	0.4746	0.4672	0.4600	0.4530	0.4460	0.4391	0.4323	0.4257	0.4191	0.4127
24	0.5320	0.5242	0.5166	0.5091	0.5017	0.4944	0.4871	0.4800	0.4731	0.4662	0.4594	0.4527	0.4461	0.4396	0.4332
25	0.5510	0.5434	0.5359	0.5286	0.5213	0.5141	0.5070	0.5000	0.4932	0.4864	0.4797	0.4731	0.4666	0.4601	0.4538
26	0.5699	0.5625	0.5552	0.5480	0.5409	0.5338	0.5269	0.5200	0.5133	0.5066	0.5000	0.4935	0.4871	0.4808	0.4746
27	0.5887	0.5815	0.5744	0.5673	0.5604	0.5535	0.5467	0.5400	0.5334	0.5269	0.5205	0.5141	0.5078	0.5016	0.4954
28	0.6074	0.6004	0.5935	0.5866	0.5799	0.5732	0.5666	0.5600	0.5536	0.5472	0.5409	0.5347	0.5285	0.5224	0.5164
29	0.6260	0.6192	0.6125	0.6059	0.5993	0.5928	0.5864	0.5800	0.5738	0.5675	0.5614	0.5553	0.5493	0.5433	0.5375
30	0.6445	0.6380	0.6315	0.6251	0.6187	0.6124	0.6062	0.6000	0.5940	0.5879	0.5819	0.5760	0.5702	0.5644	0.5586
31	0.6630	0.6567	0.6504	0.6442	0.6381	0.6320	0.6260	0.6200	0.6142	0.6083	0.6025	0.5968	0.5911	0.5855	0.5799
32	0.6813	0.6753	0.6693	0.6633	0.6574	0.6516	0.6458	0.6400	0.6344	0.6287	0.6231	0.6176	0.6121	0.6067	0.6013
33	0.6996	0.6938	0.6881	0.6824	0.6767	0.6711	0.6656	0.6600	0.6546	0.6492	0.6438	0.6385	0.6332	0.6279	0.6228
34	0.7178	0.7123	0.7068	0.7014	0.6960	0.6906	0.6853	0.6800	0.6748	0.6696	0.6645	0.6594	0.6543	0.6493	0.6443
35	0.7359	0.7307	0.7255	0.7203	0.7152	0.7101	0.7051	0.7000	0.6951	0.6901	0.6852	0.6804	0.6755	0.6707	0.6660
36	0.7539	0.7490	0.7441	0.7392	0.7344	0.7296	0.7248	0.7200	0.7153	0.7107	0.7060	0.7014	0.6968	0.6922	0.6877
37	0.7719	0.7673	0.7627	0.7581	0.7535	0.7490	0.7445	0.7400	0.7356	0.7312	0.7268	0.7224	0.7181	0.7138	0.7095
38	0.7898	0.7855	0.7812	0.7769	0.7727	0.7684	0.7642	0.7600	0.7559	0.7518	0.7476	0.7435	0.7395	0.7354	0.7314
39	0.8077	0.8037	0.7997	0.7957	0.7918	0.7878	0.7839	0.7800	0.7762	0.7723	0.7685	0.7647	0.7609	0.7571	0.7534
40	0.8254	0.8218	0.8181	0.8145	0.8108	0.8072	0.8036	0.8000	0.7965	0.7929	0.7894	0.7859	0.7824	0.7789	0.7754
41	0.8432	0.8398	0.8365	0.8332	0.8299	0.8266	0.8233	0.8200	0.8168	0.8136	0.8103	0.8071	0.8039	0.8008	0.7976
42	0.8608	0.8578	0.8548	0.8518	0.8489	0.8459	0.8430	0.8400	0.8371	0.8342	0.8313	0.8284	0.8255	0.8227	0.8198
43	0.8784	0.8758	0.8731	0.8705	0.8679	0.8653	0.8626	0.8600	0.8575	0.8549	0.8523	0.8497	0.8472	0.8446	0.8421
44	0.8959	0.8937	0.8914	0.8891	0.8868	0.8846	0.8823	0.8800	0.8778	0.8756	0.8733	0.8711	0.8689	0.8667	0.8644
45	0.9134	0.9115	0.9096	0.9077	0.9058	0.9039	0.9019	0.9000	0.8982	0.8963	0.8944	0.8925	0.8906	0.8887	0.8869
46	0.9309	0.9293	0.9278	0.9262	0.9247	0.9231	0.9216	0.9200	0.9185	0.9170	0.9155	0.9139	0.9124	0.9109	0.9094
47	0.9482	0.9471	0.9459	0.9447	0.9435	0.9424	0.9412	0.9400	0.9389	0.9377	0.9366	0.9354	0.9343	0.9331	0.9319
48	0.9656	0.9648	0.9640	0.9632	0.9624	0.9616	0.9608	0.9600	0.9593	0.9585	0.9577	0.9569	0.9561	0.9554	0.9546
49	0.9828	0.9824	0.9820	0.9816	0.9812	0.9808	0.9804	0.9800	0.9797	0.9793	0.9789	0.9785	0.9781	0.9777	0.9773
50	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
51	1.0172	1.0176	1.0180	1.0184	1.0188	1.0192	1.0196	1.0200	1.0205	1.0209	1.0213	1.0217	1.0221	1.0225	1.0229
52	1.0344	1.0352	1.0360	1.0368	1.0376	1.0384	1.0392	1.0400	1.0409	1.0417	1.0425	1.0433	1.0441	1.0450	1.0458
53	1.0514	1.0527	1.0539	1.0551	1.0564	1.0576	1.0588	1.0600	1.0613	1.0625	1.0638	1.0650	1.0662	1.0675	1.0687
54	1.0685	1.0701	1.0718	1.0734	1.0751	1.0767	1.0784	1.0800	1.0817	1.0834	1.0850	1.0867	1.0884	1.0901	1.0917
55	1.0855	1.0875	1.0896	1.0917	1.0938	1.0959	1.0980	1.1000	1.1021	1.1043	1.1064	1.1085	1.1106	1.1127	1.1148
56	1.1024	1.1049	1.1074	1.1099	1.1125	1.1150	1.1175	1.1200	1.1226	1.1251	1.1277	1.1303	1.1328	1.1354	1.1380
57	1.1193	1.1223	1.1252	1.1282	1.1311	1.1341	1.1371	1.1400	1.1430	1.1460	1.1490	1.1521	1.1551	1.1581	1.1612
58	1.1362	1.1396	1.1430	1.1464	1.1498	1.1532	1.1566	1.1600	1.1635	1.1670	1.1704	1.1739	1.1774	1.1809	1.1844
59	1.1530	1.1568	1.1607	1.1645	1.1684	1.1723	1.1762	1.1800	1.1840	1.1879	1.1918	1.1958	1.1997	1.2037	1.2077
60	1.1698	1.1741	1.1784	1.1827	1.187	1.1913	1.1957	1.2000	1.2044	1.2088	1.2132	1.2177	1.2221	1.2266	1.2311
61	1.1866	1.1913	1.1960	1.2008	1.2056	1.2104	1.2152	1.2200	1.2249	1.2298	1.2347	1.2396	1.2446	1.2495	1.2545
62	1.2033	1.2085	1.2137	1.2189	1.2241	1.2294	1.2347	1.2400	1.2454	1.2508	1.2562	1.2616	1.2670	1.2725	1.2780
63	1.2199	1.2256	1.2313	1.2370	1.2427	1.2485	1.2542	1.2600	1.2659	1.2718	1.2776	1.2836	1.2895	1.2955	1.3015
64	1.2366	1.2427	1.2488	1.2550	1.2612	1.2675	1.2737	1.2800	1.2864	1.2928	1.2991	1.3056	1.3120	1.3185	1.3251
65	1.2532	1.2598	1.2664	1.2730	1.2797	1.2865	1.2932	1.3000	1.3069	1.3138	1.3207	1.3276	1.3346	1.3416	1.3487
66	1.2697	1.2768	1.2839	1.2911	1.2982	1.3055	1.3127	1.3200	1.3274	1.3348	1.3422	1.3497	1.3572	1.3648	1.3724
67	1.2863	1.2938	1.3014	1.3090	1.3167	1.3245	1.3322	1.3400	1.3479	1.3558	1.3638	1.3718	1.3798	1.3879	1.3961
68	1.3027	1.3108	1.3189	1.3270	1.3352	1.3434	1.3517	1.3600	1.3684	1.3769	1.3854	1.3939	1.4025	1.4112	1.4199
69	1.3192	1.3277	1.3363	1.3449	1.3536	1.3624	1.3712	1.3800	1.3890	1.3979	1.4070	1.4161	1.4252	1.4344	1.4437
70	1.3356	1.3446	1.3537	1.3629	1.3721	1.3813	1.3907	1.4000	1.4095	1.4190	1.4286	1.4382	1.4480	1.4577	1.4676
ΔT K \ n	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14

1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.42	1.44	n / ΔT K
0.1546	0.1497	0.1450	0.1404	0.1360	0.1317	0.1275	0.1235	0.1195	0.1158	0.1121	0.1085	0.1051	0.1018	0.0986	**10**
0.1727	0.1676	0.1626	0.1577	0.1530	0.1485	0.1440	0.1397	0.1356	0.1315	0.1276	0.1238	0.1201	0.1165	0.1131	**11**
0.1911	0.1857	0.1805	0.1754	0.1704	0.1657	0.1610	0.1565	0.1521	0.1478	0.1436	0.1396	0.1357	0.1318	0.1281	**12**
0.2096	0.2041	0.1986	0.1934	0.1882	0.1832	0.1784	0.1736	0.1690	0.1645	0.1601	0.1559	0.1517	0.1477	0.1438	**13**
0.2285	0.2227	0.2171	0.2117	0.2063	0.2012	0.1961	0.1912	0.1864	0.1817	0.1771	0.1727	0.1683	0.1641	0.1600	**14**
0.2475	0.2416	0.2359	0.2302	0.2248	0.2194	0.2142	0.2091	0.2041	0.1993	0.1945	0.1899	0.1854	0.1810	0.1767	**15**
0.2667	0.2607	0.2548	0.2491	0.2435	0.2380	0.2326	0.2274	0.2223	0.2173	0.2124	0.2076	0.2029	0.1983	0.1939	**16**
0.2861	0.2800	0.2741	0.2682	0.2625	0.2569	0.2514	0.2460	0.2408	0.2357	0.2306	0.2257	0.2209	0.2162	0.2116	**17**
0.3058	0.2996	0.2935	0.2876	0.2818	0.2761	0.2705	0.2650	0.2597	0.2544	0.2493	0.2442	0.2393	0.2344	0.2297	**18**
0.3255	0.3193	0.3132	0.3072	0.3013	0.2955	0.2899	0.2843	0.2789	0.2735	0.2683	0.2631	0.2581	0.2532	0.2483	**19**
0.3455	0.3392	0.3331	0.3270	0.3211	0.3153	0.3095	0.3039	0.2984	0.293	0.2877	0.2824	0.2773	0.2723	0.2673	**20**
0.3656	0.3593	0.3532	0.3471	0.3411	0.3352	0.3295	0.3238	0.3182	0.3128	0.3074	0.3021	0.2969	0.2918	0.2868	**21**
0.3859	0.3796	0.3734	0.3673	0.3614	0.3555	0.3497	0.3440	0.3384	0.3329	0.3275	0.3221	0.3169	0.3117	0.3066	**22**
0.4063	0.4000	0.3939	0.3878	0.3818	0.3760	0.3702	0.3645	0.3588	0.3533	0.3479	0.3425	0.3372	0.3320	0.3269	**23**
0.4269	0.4206	0.4145	0.4085	0.4025	0.3967	0.3909	0.3852	0.3796	0.374	0.3686	0.3632	0.3579	0.3527	0.3476	**24**
0.4476	0.4414	0.4353	0.4293	0.4234	0.4176	0.4118	0.4062	0.4006	0.3951	0.3896	0.3843	0.3790	0.3738	0.3686	**25**
0.4684	0.4623	0.4563	0.4504	0.4445	0.4387	0.4330	0.4274	0.4219	0.4164	0.4110	0.4056	0.4004	0.3952	0.3900	**26**
0.4894	0.4834	0.4774	0.4716	0.4658	0.4601	0.4545	0.4489	0.4434	0.438	0.4326	0.4273	0.4221	0.4169	0.4118	**27**
0.5104	0.5046	0.4987	0.4930	0.4873	0.4817	0.4761	0.4706	0.4652	0.4599	0.4546	0.4493	0.4441	0.4390	0.4340	**28**
0.5316	0.5259	0.5202	0.5145	0.5090	0.5035	0.4980	0.4926	0.4873	0.482	0.4768	0.4716	0.4665	0.4614	0.4564	**29**
0.5530	0.5473	0.5418	0.5363	0.5308	0.5254	0.5201	0.5148	0.5096	0.5044	0.4993	0.4942	0.4892	0.4842	0.4793	**30**
0.5744	0.5689	0.5635	0.5582	0.5528	0.5476	0.5424	0.5372	0.5321	0.527	0.5220	0.5171	0.5121	0.5073	0.5024	**31**
0.5959	0.5906	0.5854	0.5802	0.5750	0.5699	0.5649	0.5599	0.5549	0.5499	0.5451	0.5402	0.5354	0.5307	0.5259	**32**
0.6176	0.6125	0.6074	0.6024	0.5974	0.5925	0.5876	0.5827	0.5779	0.5731	0.5684	0.5636	0.5590	0.5544	0.5498	**33**
0.6394	0.6344	0.6296	0.6247	0.6199	0.6152	0.6104	0.6058	0.6011	0.5965	0.5919	0.5874	0.5828	0.5784	0.5739	**34**
0.6612	0.6565	0.6519	0.6472	0.6426	0.6381	0.6335	0.6290	0.6245	0.6201	0.6157	0.6113	0.6070	0.6027	0.5984	**35**
0.6832	0.6787	0.6743	0.6699	0.6655	0.6611	0.6568	0.6525	0.6482	0.644	0.6397	0.6356	0.6314	0.6273	0.6232	**36**
0.7052	0.7010	0.6968	0.6926	0.6885	0.6843	0.6802	0.6761	0.6721	0.668	0.6640	0.6600	0.6561	0.6521	0.6482	**37**
0.7274	0.7234	0.7195	0.7155	0.7116	0.7077	0.7038	0.7000	0.6962	0.6923	0.6886	0.6848	0.6810	0.6773	0.6736	**38**
0.7497	0.7459	0.7422	0.7386	0.7349	0.7313	0.7276	0.7240	0.7204	0.7169	0.7133	0.7098	0.7063	0.7028	0.6993	**39**
0.7720	0.7686	0.7651	0.7617	0.7583	0.7550	0.7516	0.7482	0.7449	0.7416	0.7383	0.7350	0.7317	0.7285	0.7252	**40**
0.7944	0.7913	0.7881	0.7850	0.7819	0.7788	0.7757	0.7727	0.7696	0.7665	0.7635	0.7605	0.7575	0.7545	0.7515	**41**
0.8169	0.8141	0.8113	0.8084	0.8056	0.8028	0.8000	0.7972	0.7945	0.7917	0.7889	0.7862	0.7835	0.7807	0.7780	**42**
0.8395	0.8370	0.8345	0.8320	0.8295	0.8270	0.8245	0.8220	0.8195	0.8171	0.8146	0.8121	0.8097	0.8073	0.8048	**43**
0.8622	0.8600	0.8578	0.8556	0.8535	0.8513	0.8491	0.8469	0.8448	0.8426	0.8405	0.8383	0.8362	0.8340	0.8319	**44**
0.8850	0.8831	0.8813	0.8794	0.8776	0.8757	0.8739	0.8720	0.8702	0.8684	0.8666	0.8647	0.8629	0.8611	0.8593	**45**
0.9079	0.9063	0.9048	0.9033	0.9018	0.9003	0.8988	0.8973	0.8958	0.8943	0.8928	0.8914	0.8899	0.8884	0.8869	**46**
0.9308	0.9296	0.9285	0.9273	0.9262	0.9250	0.9239	0.9228	0.9216	0.9205	0.9193	0.9182	0.9171	0.9159	0.9148	**47**
0.9538	0.9530	0.9522	0.9515	0.9507	0.9499	0.9491	0.9484	0.9476	0.9468	0.9460	0.9453	0.9445	0.9437	0.9430	**48**
0.9769	0.9765	0.9761	0.9757	0.9753	0.9749	0.9745	0.9741	0.9737	0.9733	0.9729	0.9726	0.9722	0.9718	0.9714	**49**
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	**50**
1.0233	1.0237	1.0241	1.0245	1.0249	1.0253	1.0257	1.0261	1.0265	1.0269	1.0273	1.0278	1.0282	1.0286	1.0290	**51**
1.0466	1.0474	1.0482	1.0491	1.0499	1.0507	1.0515	1.0524	1.0532	1.054	1.0548	1.0557	1.0565	1.0573	1.0582	**52**
1.0700	1.0712	1.0725	1.0737	1.0750	1.0762	1.0775	1.0787	1.0800	1.0813	1.0825	1.0838	1.0850	1.0863	1.0876	**53**
1.0934	1.0951	1.0968	1.0985	1.1002	1.1019	1.1036	1.1053	1.1070	1.1087	1.1104	1.1121	1.1138	1.1155	1.1172	**54**
1.1170	1.1191	1.1212	1.1234	1.1255	1.1276	1.1298	1.1320	1.1341	1.1363	1.1384	1.1406	1.1428	1.1450	1.1472	**55**
1.1405	1.1431	1.1457	1.1483	1.1509	1.1535	1.1562	1.1588	1.1614	1.164	1.1667	1.1693	1.1720	1.1746	1.1773	**56**
1.1642	1.1673	1.1703	1.1734	1.1765	1.1796	1.1827	1.1858	1.1889	1.192	1.1951	1.1982	1.2014	1.2045	1.2077	**57**
1.1879	1.1915	1.1950	1.1986	1.2021	1.2057	1.2093	1.2129	1.2165	1.2201	1.2237	1.2274	1.2310	1.2347	1.2383	**58**
1.2117	1.2157	1.2198	1.2238	1.2279	1.2319	1.2360	1.2401	1.2442	1.2484	1.2525	1.2567	1.2608	1.2650	1.2692	**59**
1.2356	1.2401	1.2446	1.2492	1.2537	1.2583	1.2629	1.2675	1.2721	1.2768	1.2815	1.2861	1.2908	1.2955	1.3003	**60**
1.2595	1.2645	1.2695	1.2746	1.2797	1.2848	1.2899	1.2950	1.3002	1.3054	1.3106	1.3158	1.3211	1.3263	1.3316	**61**
1.2835	1.2890	1.2946	1.3001	1.3057	1.3114	1.3170	1.3227	1.3284	1.3341	1.3399	1.3457	1.3515	1.3573	1.3631	**62**
1.3075	1.3136	1.3197	1.3258	1.3319	1.3381	1.3443	1.3505	1.3568	1.3631	1.3694	1.3757	1.3821	1.3885	1.3949	**63**
1.3316	1.3382	1.3448	1.3515	1.3582	1.3649	1.3717	1.3784	1.3853	1.3921	1.3990	1.4059	1.4129	1.4199	1.4269	**64**
1.3558	1.3629	1.3701	1.3773	1.3845	1.3918	1.3991	1.4065	1.4139	1.4213	1.4288	1.4363	1.4439	1.4515	1.4591	**65**
1.3800	1.3877	1.3954	1.4032	1.4110	1.4189	1.4268	1.4347	1.4427	1.4507	1.4588	1.4669	1.4751	1.4833	1.4916	**66**
1.4043	1.4125	1.4208	1.4292	1.4376	1.4460	1.4545	1.4630	1.4716	1.4803	1.4889	1.4977	1.5065	1.5153	1.5242	**67**
1.4286	1.4374	1.4463	1.4552	1.4642	1.4732	1.4823	1.4915	1.5007	1.5099	1.5192	1.5286	1.5380	1.5475	1.5571	**68**
1.4530	1.4624	1.4719	1.4814	1.4910	1.5006	1.5103	1.5200	1.5299	1.5398	1.5497	1.5597	1.5698	1.5799	1.5902	**69**
1.4775	1.4875	1.4975	1.5076	1.5178	1.5280	1.5384	1.5487	1.5592	1.5697	1.5803	1.5910	1.6017	1.6126	1.6234	**70**
1.16	**1.18**	**1.20**	**1.22**	**1.24**	**1.26**	**1.28**	**1.30**	**1.32**	**1.34**	**1.36**	**1.38**	**1.40**	**1.42**	**1.44**	**ΔT K / n**

Z_UK_V0612_1_RAD_PRL_Nova_Neo_en, subject to change without notice

Zehnder (commercial) · Unit 4 Watchmoor Point · Camberley · Surrey · GU15 3AD
T +44 (0) 1252 515151 · F +44 (0) 1252 522528 · sales@zehnder.co.uk · www.zehnder.co.uk
Zehnder (commercial) is a division of Zehnder Group UK Ltd · Registered in England 2296696