



Subject to technical and price changes.

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Sizes, units of measurement, symbols (EN 442)

Symbol	Unit	Description
H	mm	Height
L	mm	Length
T	mm	Depth
H Lam.	mm	Height of fins
N	mm	Distance between connections
A	m ²	Surface area
V	dm ³	Water capacity
M	kg	Empty weight
E	-	Number of elements
t ₁	°C	Flow temperature
t ₂	°C	Return temperature
t _r	°C	Room temperature
t _m	°C	Mean water temperature $\frac{t_1 + t_2}{2}$
∅T	K	Temperature difference t _m - t _r
Φ	W=(J/s)	Heat capacity
Φ _S	W	Nominal heat emission
Φ _L	W	Nominal heat emission per module
c _p	J/kg K	Mean specific heat capacity
n	-	Radiator characteristic, exponent
s _k	%	Percentage of emission by radiation
c _K	-	Correction factor to Φ _S
q _m	kg/h/(kg/s)	Water flow
q _{ms}	kg/h/(kg/s)	Normal water flow
v	m/s	Speed
∅p	kPa	Pressure loss, pressure drop
ζ	-	Coefficient of resistance

General

Technical details such as dimensions, weights, heat surfaces always relate to the standard model of the specific product. This information is applicable only to radiators with an overall length of 1000 mm. For other lengths, the influence of the couplings and/or header tubes must be taken into consideration.

The heat emission figures are valid for connections on the same end. The influence of other connection types is described in the technical literature. We will be pleased to provide you with information regarding specific cases.



On the 1st January 1998, the new European standards EN 442-1 to 442-3 came into force as Swiss standards SIA 384.501, SIA 384.502 and SIA 384.503.

This recommendation was accepted by most of the European countries including Switzerland.

It prescribes the test procedures and measuring methods to be followed in similarly equipped test laboratories. Thus, one single measuring procedure, valid for the whole of Europe, has replaced the measuring methods, which varied from country to country hitherto.

Heat capacity Φ

The heat emission of a radiator model is determined from the nominal characteristics:

$$\Phi = K_M \cdot \Delta T^n \quad \text{where } K_M \text{ is the constant for the model.}$$

According to the new standard SIA 384.502 (EN442-2), the temperature difference is calculated from the arithmetic mean between the flow and return temperatures and the reference air temperature.

$$\Delta T = \frac{t_1 + t_2}{2} - t_r$$

Temperature difference ∅T

The heat emission for temperature differences ∅T other than the nominal temperature difference ∅T = 50 K can therefore be calculated from the equation

$$\Phi = \Phi_S \left(\frac{\Delta T K}{50 K} \right)^n$$

Example of the heat emission calculation for Φ

- Φ_S = 459 W
- Exponent n = 1.24
- t₁ = 60 °C
- t₂ = 40 °C
- t_r = 15 °C

$$\Delta T = \frac{60^\circ\text{C} + 40^\circ\text{C}}{2} - 15^\circ\text{C} = 35\text{K}$$

$$\Phi = 459 \text{ W} \left(\frac{35\text{K}}{50\text{K}} \right)^{1.24} = 459 \text{ W} \cdot 0.6426 = 295 \text{ W}$$

Nominal water flow q_{ms}

(heating medium flow, flow-through quantity, mass flow)

The nominal water flow q_{ms} of a radiator results in a temperature spread of 10K with a flow temperature of 75 °C (nominal heat emission conditions).

$$\text{Therefore } q_{ms} = \frac{\Phi}{c_p(t_1 - t_2)} \quad c_p \approx 4187 \frac{\text{J}}{\text{kg}\cdot\text{K}}$$

The actual water flow q_m of a radiator can differ considerably from the nominal water flow q_{ms} with flow and return temperatures other than 75/65 °C.

Case 1:

Zehnder nova
 $\Phi_S = 459 \text{ W}$
 Model NH42-1000
 Temperatrues: 75/65/20 °C

$$q_{ms} = \frac{459}{4187(75 - 65)} \quad q_{ms} = 0.011 \text{ kg/s} \approx 39.5 \text{ kg/h}$$

Case 2:

Zehnder nova
 $\Phi_S = 239 \text{ W}$
 Model NH42-1000
 Temperatrues: 55/40/18 °C

$$q_{ms} = \frac{239}{4187(55 - 40)} \quad q_{ms} = 0.0038 \text{ kg/s} \approx 13.7 \text{ kg/h}$$

The actual water flow q_m as a % of q_{ms} in Case 2 is therefore :

$$\frac{q_m}{q_{ms}} \text{ as a \%}$$

$$\frac{13.7}{39.5} \text{ as a \%}$$

q_m is therefore 35% q_{ms}

The minimum according to the table is 20%.
 Case 2 fulfils the minimum water flow requirements.

Minimum water flow $q_{m \text{ min.}}$

The series of measurements that we have carried out has indicated that individual radiators react differently to deviations in the nominal water flow q_{ms} and that, for water flows below certain minimum water flows $q_{m \text{ min.}}$, it is difficult to make reliable statements about the heat emission. With constructional measures, operation with smaller water flows q_m is often made possible.

We will be pleased to be of assistance in specific cases; critical applications can be tested in our laboratory. The following table indicates the minimum water flows q_m as a % of the nominal water flows q_{ms} , which under normal circumstances should not be lessened:

Radiators	q_m as % of q_{ms}
- zehnder nova panel radiator (horizontal model)	20 %
- zehnder nova panel radiator (vertical model)	17 %
- zehnder multicolumn	17 %
- zehnder radiavector	30 %
- zehnder stratos	30 %

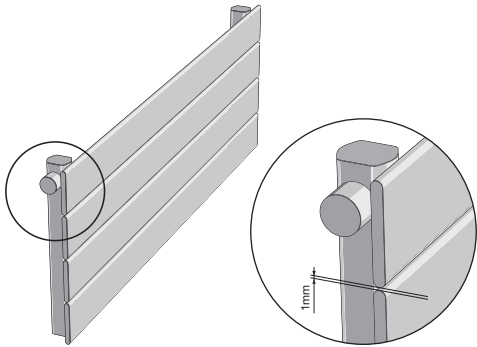
Bathroom radiators	q_m as % of q_{ms}
zehnder universal, toga, janda	27 %

Models overview

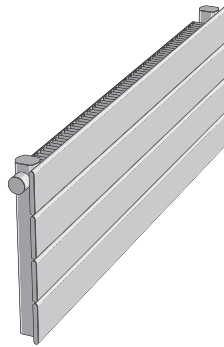
zehnder nova



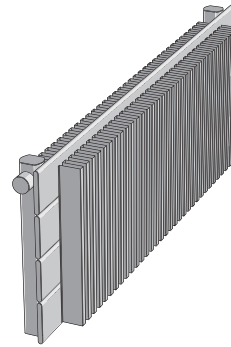
zehnder nova horizontal



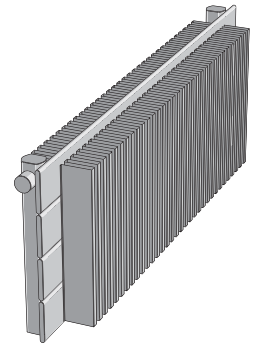
Type NH



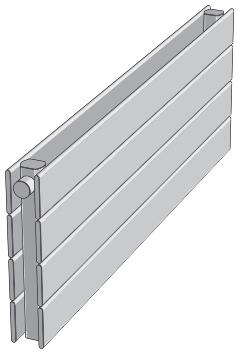
Type NHL



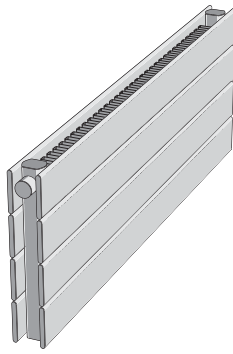
Type NLHLS



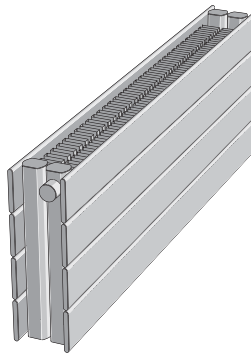
Type NLHL



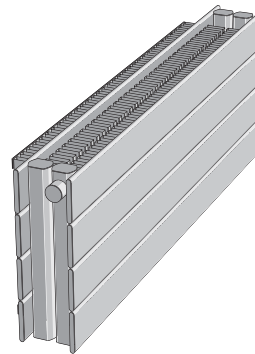
Type NHH



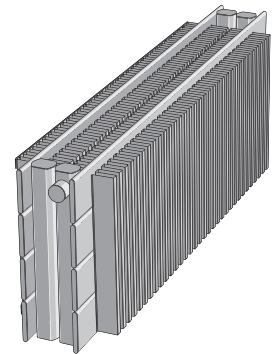
Type NHLH



Type NHLLH

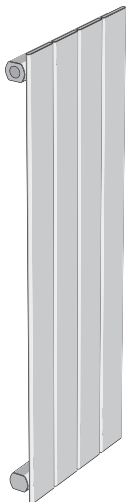


Type NHLLHL

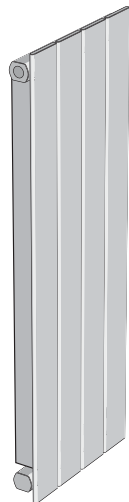


Type NLHLLHLS

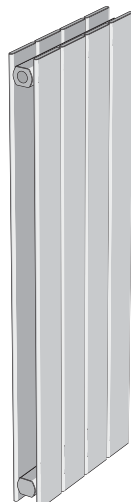
zehnder nova vertical



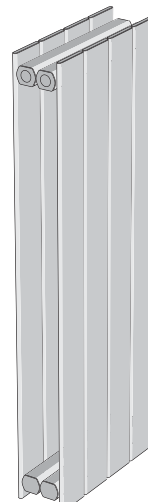
Type NV



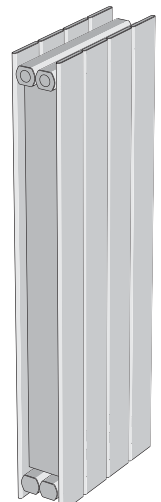
Type NVL



Type NVV



Type NVV-4SR



Type NVLV

General

The **zehnder** nova panel radiator consists of flat oval precision tubes pressure-welded with a one-mm air gap to symmetric water channels. The shapes of the flat oval tubes and water channels preclude any risk of physical injury.

Materials used

Flat oval tubes collectors	70 x 8 mm
Water-channel tubing (section)	37 x 32 mm
Fins	Sheet steel

Particularly advantageous features

- Small overall depth
- Modern, elegant design
- Wide range of models
- Horizontal and vertical configurations
- No sharp edges or corners
- Very small water content
- Very efficient
- Suitable for low temperature systems and minimum energy applications

Application

The extensive range of **zehnder** nova panel radiators enables their installation almost anywhere.

Dimensions

Horizontal panel radiators:	
Overall lengths	400 to 6000 mm (in 100 mm increments)
Overall heights	70 to 2129 mm (max. 30 flat oval tubes)
Vertical panel radiators:	
Overall lengths	70 to 1703 mm (max. 24 flat oval tubes)
Overall heights	600 to 4600 mm (in 200 mm increments)

An average length tolerance of ± 2 mm per metre run must be allowed for.

Important! Remember transport limitations!

Test pressures

Standard	6.0 bar
High pressure (price supplement)	13.0 bar

Operating pressures (EN 442)

Standard	max. 4.6 bar
High pressure (price supplement)	max. 10.0 bar
Operating temperature	max. 120 °C

Basic delivery schedule for standard configuration

Supplied ready-to-install with 2, 3 or 4 connectors for flow, return, vent and drain welded in. Stove-enamelled in RAL 9016 standard pure white with transport packing.

Special versions

- Curved or angled configuration, on request and according to drawing
- Intermediate lengths, horizontal
- Intermediate heights, vertical
- Vertical overlengths up to 6000 mm
- High-pressure version
- Covering grille
- Standard accessories in the radiator's colour
- One-pipe connections

Stove enamelling

Standard version RAL 9016 pure white

Special enamelling with price supplement

- Zehnder colour range
- Other RAL, NCS-S and sanitary ware colours

Optional on request

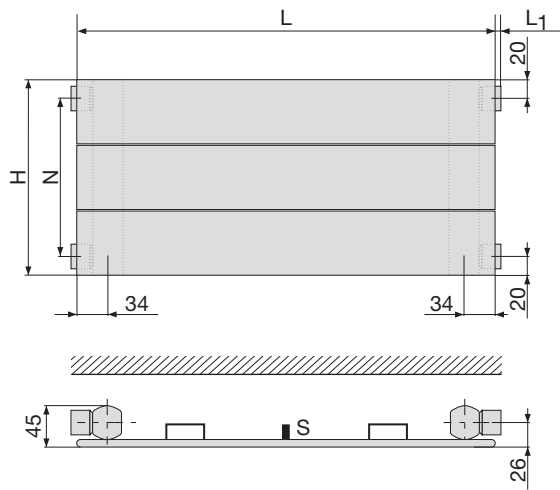
Metallic enamelling, clear lacquer and RAL luminous colours on request.

Slight variations in comparison with the original RAL or NCS colours are possible, due to varying glazes and production techniques.

The British Standard Code of Practice BS7593: 1992 Treatment of Water in Hot Water Central Heating Systems, should be observed when installing a system.

All Zehnder products are supplied with a 2 year warranty on materials and manufacture. However, this may be invalidated should adequate water treatment not be applied during installation and throughout the life of the system.

Type NH horizontal



- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments)
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent
- S = Supports (welded onto the reverse side for stabilization purposes)

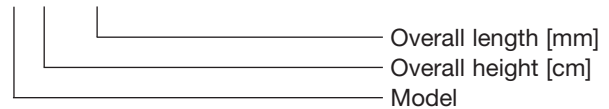
≤ 141 H: Welded-on floor supports recommended

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Model description (ordering example)

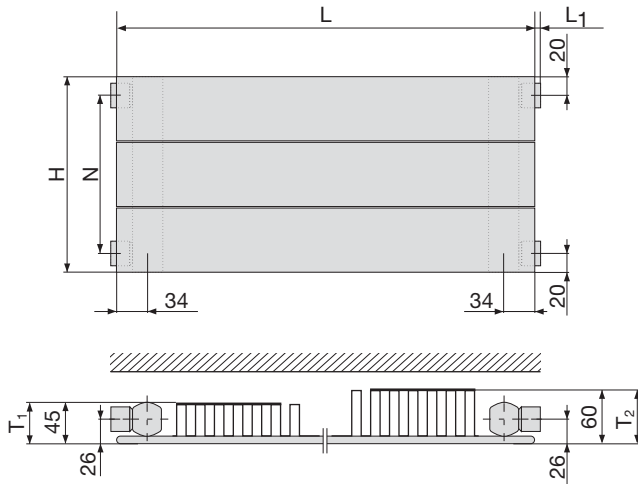
NH77-2000



Technical data per 1000 mm

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _{L=∅T 50 K} EN 442 Watt
NH07	70	30	0.18	0.44	2.27	38	9	1.23	105
NH14	141	101	0.36	0.88	4.30	36	16	1.24	182
NH21	212	172	0.53	1.32	6.24	36	22	1.25	254
NH28	283	243	0.70	1.77	8.20	36	28	1.24	323
NH35	354	314	0.87	2.21	10.14	35	34	1.24	391
NH42	425	385	1.04	2.66	12.08	35	39	1.24	459
NH49	496	456	1.21	3.10	14.01	35	45	1.24	527
NH56	567	527	1.37	3.54	15.95	35	51	1.25	596
NH63	638	598	1.54	3.99	17.89	34	57	1.25	666
NH70	709	669	1.71	4.43	19.83	34	63	1.25	736
NH77	780	740	1.88	4.87	21.76	34	70	1.25	809
NH84	851	811	2.05	5.32	23.70	34	76	1.25	882
NH91	922	882	2.22	5.76	25.66	34	82	1.26	957
NH98	993	953	2.39	6.21	27.60	34	88	1.26	1026
NH105	1064	1024	2.56	6.65	29.54	34	94	1.27	1091
NH112	1135	1095	2.73	7.09	31.48	34	99	1.27	1155
NH119	1206	1166	2.89	7.54	33.41	34	105	1.28	1220
NH126	1277	1237	3.06	7.98	35.35	34	110	1.28	1285
NH133	1348	1308	3.23	8.42	37.29	34	116	1.29	1349
NH140	1419	1379	3.40	8.87	39.22	34	122	1.29	1414
NH147	1490	1450	3.57	9.31	41.16	34	127	1.30	1479
NH154	1561	1521	3.74	9.76	43.10	34	133	1.30	1544
NH161	1632	1592	3.91	10.20	45.04	34	138	1.30	1609
NH168	1703	1663	4.08	10.64	46.97	34	144	1.30	1674

Type NHL horizontal



- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments)
- T₁ = 45 mm to overall height 283 mm
- T₂ = 60 mm, from overall height 354 mm
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

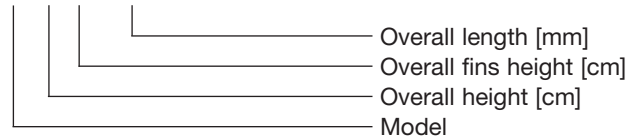
≤ 141 H: Welded-on floor supports recommended

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Model description (ordering example)

NHL49/35-2000



Technical data per 1000 mm

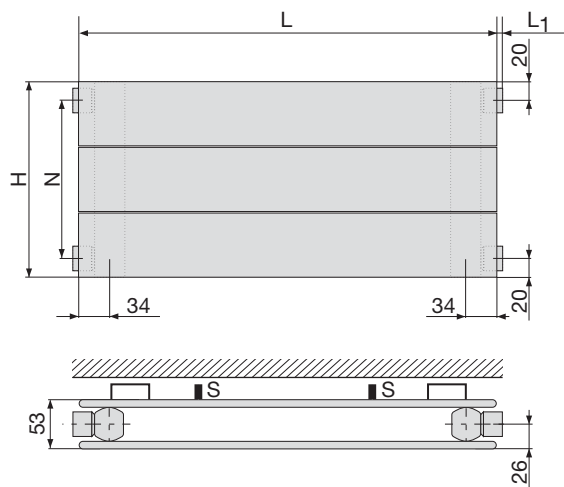
Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NHL07/07	70	55	30	0.62	0.44	3.53	21	17	1.22	194
NHL14/07	141	55	101	0.79	0.88	5.48	24	23	1.22	266
NHL14/14	141	125	101	1.28	0.88	6.63	19	29	1.23	339
NHL21/07	212	55	172	0.96	1.32	7.42	26	29	1.23	339
NHL21/14	212	125	172	1.45	1.32	8.58	22	35	1.24	405
NHL21/21	212	195	172	1.95	1.32	9.73	19	39	1.25	456
NHL28/07	283	55	243	1.12	1.77	9.38	27	36	1.24	413
NHL28/14	283	125	243	1.62	1.77	10.54	24	40	1.25	471
NHL28/21	283	195	243	2.11	1.77	11.70	21	44	1.25	515
NHL28/28	283	265	243	2.61	1.77	12.85	20	47	1.26	545
NHL35/07	354	55	314	1.43	2.21	11.63	29	43	1.24	498
NHL35/14	354	125	314	2.10	2.21	13.17	25	47	1.25	552
NHL35/21	354	195	314	2.77	2.21	14.70	22	52	1.25	606
NHL35/28	354	265	314	3.44	2.21	16.24	21	57	1.26	660
NHL35/35	354	330	314	4.06	2.21	17.63	20	61	1.27	710
NHL42/07	425	55	385	1.60	2.66	13.57	29	49	1.24	570
NHL42/14	425	125	385	2.27	2.66	15.11	26	54	1.25	623
NHL42/21	425	195	385	2.94	2.66	16.64	23	58	1.26	673
NHL42/28	425	265	385	3.61	2.66	18.18	22	62	1.26	723
NHL42/35	425	330	385	4.23	2.66	19.60	21	66	1.27	773
NHL42/42	425	400	385	4.90	2.66	21.10	20	70	1.27	814

Type NHL horizontal

Technical data per 1000 mm (continued)

Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	S _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NHL49/07	496	55	456	1.77	3.10	15.51	30	55	1.25	642
NHL49/14	496	125	456	2.44	3.10	17.04	26	60	1.25	694
NHL49/21	496	195	456	3.11	3.10	18.58	24	64	1.26	741
NHL49/28	496	265	456	3.78	3.10	20.11	23	68	1.26	789
NHL49/35	496	330	456	4.40	3.10	21.54	22	72	1.27	838
NHL49/42	496	400	456	5.07	3.10	23.07	21	76	1.27	879
NHL49/49	496	471	456	5.75	3.10	24.59	20	79	1.28	917
NHL56/07	567	55	527	1.94	3.54	17.45	30	61	1.25	714
NHL56/14	567	125	527	2.61	3.54	18.98	27	66	1.26	765
NHL56/21	567	195	527	3.28	3.54	20.52	25	70	1.26	811
NHL56/28	567	265	527	3.95	3.54	22.05	24	74	1.26	857
NHL56/35	567	330	527	4.57	3.54	23.47	23	78	1.27	903
NHL56/42	567	400	527	5.24	3.54	25.01	22	81	1.28	944
NHL56/49	567	471	527	5.91	3.54	26.57	21	85	1.28	983
NHL56/56	567	541	527	6.58	3.54	28.06	21	88	1.29	1024
NHL63/07	638	55	598	2.11	3.99	19.38	30	67	1.26	785
NHL63/14	638	125	598	2.78	3.99	20.92	28	72	1.26	835
NHL63/21	638	195	598	3.45	3.99	22.45	26	76	1.26	881
NHL63/28	638	265	598	4.12	3.99	23.99	25	80	1.27	927
NHL63/35	638	330	598	4.74	3.99	25.41	24	83	1.27	969
NHL63/42	638	400	598	5.40	3.99	26.95	23	87	1.28	1009
NHL63/49	638	471	598	6.08	3.99	28.5	22	90	1.28	1048
NHL63/56	638	541	598	6.75	3.99	30.04	22	93	1.29	1086
NHL70/07	709	55	669	2.28	4.43	21.32	31	73	1.26	854
NHL70/14	709	125	669	2.95	4.43	22.86	28	78	1.27	904
NHL70/21	709	195	669	3.62	4.43	24.39	27	82	1.27	951
NHL70/28	709	265	669	4.28	4.43	25.93	26	86	1.27	996
NHL70/35	709	330	669	4.90	4.43	27.35	25	89	1.27	1036
NHL70/42	709	400	669	5.57	4.43	28.88	24	93	1.28	1076
NHL70/49	709	471	669	6.25	4.43	30.44	23	96	1.28	1114
NHL70/56	709	541	669	6.92	4.43	31.98	23	99	1.29	1149
NHL77/14	780	125	740	3.25	4.87	24.9	28	79	1.27	970
NHL77/21	780	195	740	4.07	4.87	26.4	26	83	1.27	1019
NHL77/28	780	265	740	4.88	4.87	28.0	24	88	1.27	1065
NHL77/35	780	330	740	5.65	4.87	29.4	23	92	1.27	1103
NHL77/42	780	400	740	6.47	4.87	30.9	23	95	1.28	1142
NHL77/49	780	471	740	7.30	4.87	32.5	23	98	1.29	1179
NHL77/56	780	541	740	8.12	4.87	34.0	22	101	1.29	1212
NHL84/14	851	125	811	3.55	5.32	26.9	28	104	1.27	1034
NHL84/21	851	195	811	4.52	5.32	28.4	26	84	1.27	1085
NHL84/28	851	265	811	5.48	5.32	29.9	24	89	1.27	1132
NHL84/35	851	330	811	6.40	5.32	31.3	23	93	1.28	1171
NHL84/42	851	400	811	7.37	5.32	32.9	23	97	1.28	1210
NHL84/49	851	471	811	8.35	5.32	34.4	23	101	1.29	1244
NHL84/56	851	541	811	9.32	5.32	36.0	22	104	1.29	1274

Type NHH horizontal



- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments – excluding boss)
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent
- S = Supports (welded onto the reverse side for stabilization purposes)

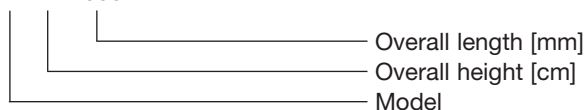
≤ 141 H: Welded-on floor supports recommended

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Model designation (ordering example)

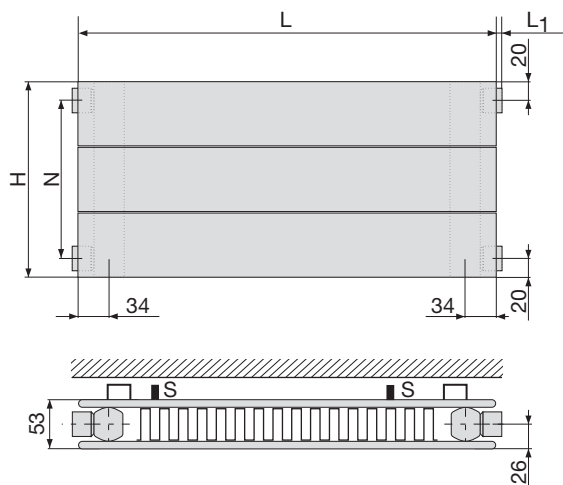
NHH42-2000



Technical data per 1000 mm

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NHH07	70	30	0.33	0.88	3.94	24	15	1.24	179
NHH14	141	101	0.67	1.76	7.70	23	26	1.24	303
NHH21	212	172	0.99	2.64	11.34	22	36	1.23	415
NHH28	283	243	1.31	3.54	15.01	22	45	1.24	522
NHH35	354	314	1.63	4.42	18.65	22	54	1.26	626
NHH42	425	385	1.96	5.32	22.29	22	63	1.26	729
NHH49	496	456	2.28	6.20	25.93	22	72	1.27	832
NHH56	567	527	2.60	7.08	29.57	22	80	1.27	936
NHH63	638	598	2.92	7.98	33.21	22	89	1.28	1040
NHH70	709	669	3.24	8.86	36.85	22	99	1.28	1146

Type NHLH horizontal



- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments – excluding boss)
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent
- S = Supports (welded onto the reverse side for stabilization purposes)

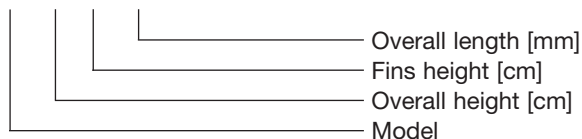
≤ 141 H: Welded-on floor supports recommended

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Model designation (ordering example)

NHLH56/28-2000



Technical data for overall 1000 mm lengths

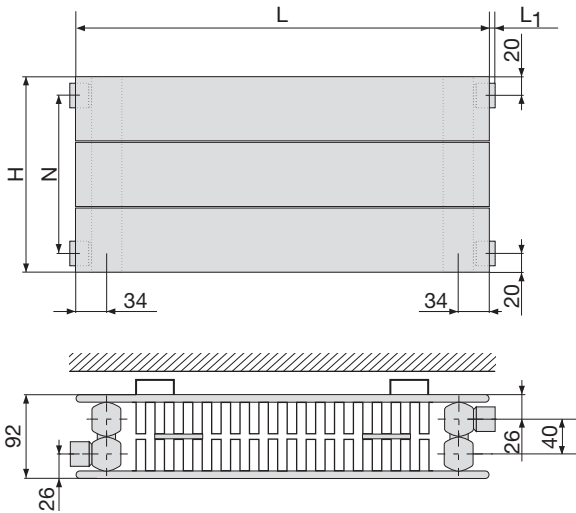
Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NHLH07/07	70	55	30	0.80	0.88	5.8	15	23	1.24	263
NHLH14/07	141	55	101	1.15	1.76	9.8	16	33	1.24	381
NHLH14/14	141	125	101	1.64	1.76	10.9	13	38	1.25	442
NHLH21/07	212	55	172	1.50	2.64	13.7	17	42	1.25	490
NHLH21/14	212	125	172	1.99	2.64	14.8	14	46	1.26	539
NHLH21/21	212	195	172	2.49	2.64	16.0	12	51	1.27	595
NHLH28/07	283	55	243	1.84	3.54	17.6	18	51	1.25	594
NHLH28/14	283	125	243	2.34	3.54	18.7	15	55	1.26	636
NHLH28/21	283	195	243	2.83	3.54	19.9	13	59	1.28	683
NHLH28/28	283	265	243	3.33	3.54	21.1	12	63	1.29	730
NHLH35/07	354	55	314	2.33	4.42	21.8	18	60	1.25	693
NHLH35/14	354	125	314	3.00	4.42	23.3	16	63	1.26	733
NHLH35/21	354	195	314	3.67	4.42	24.8	15	66	1.28	773
NHLH35/28	354	265	314	4.34	4.42	26.4	13	70	1.29	813
NHLH35/35	354	330	314	4.96	4.42	27.8	12	73	1.30	850
NHLH42/07	425	55	385	2.68	5.32	25.7	19	68	1.25	790
NHLH42/14	425	125	385	3.35	5.32	27.2	16	71	1.27	830
NHLH42/21	425	195	385	4.02	5.32	28.7	15	74	1.28	865
NHLH42/28	425	265	385	4.69	5.32	30.3	14	77	1.29	900
NHLH42/35	425	330	385	5.31	5.32	31.7	13	81	1.30	940
NHLH42/42	425	400	385	5.98	5.32	33.2	12	83	1.32	962

Type NHLH horizontal

Technical data for overall 1000 mm lengths (continued)

Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =ØT 50 K EN 442 Watt
NHLH49/07	496	55	456	3.03	6.20	29.5	19	76	1.26	885
NHLH49/14	496	125	456	3.70	6.20	31.1	17	80	1.27	927
NHLH49/21	496	195	456	4.37	6.20	32.6	16	82	1.28	958
NHLH49/28	496	265	456	5.04	6.20	34.1	15	85	1.30	989
NHLH49/35	496	330	456	5.66	6.20	35.6	14	88	1.31	1029
NHLH49/42	496	400	456	6.33	6.20	37.1	13	90	1.32	1051
NHLH49/49	496	471	456	7.01	6.20	38.6	13	92	1.33	1072
NHLH56/07	567	55	527	3.38	7.08	33.4	19	84	1.26	981
NHLH56/14	567	125	527	4.05	7.08	34.9	18	88	1.27	1023
NHLH56/21	567	195	527	4.72	7.08	36.5	16	91	1.29	1053
NHLH56/28	567	265	527	5.39	7.08	38.0	15	93	1.30	1081
NHLH56/35	567	330	527	6.01	7.08	39.4	14	96	1.31	1119
NHLH56/42	567	400	527	6.68	7.08	41.0	14	98	1.32	1140
NHLH56/49	567	471	527	7.35	7.08	42.5	13	100	1.33	1159
NHLH56/56	567	541	527	8.02	7.08	44.0	13	102	1.34	1185
NHLH63/07	638	55	598	3.73	7.98	37.3	20	93	1.27	1078
NHLH63/14	638	125	598	4.40	7.98	38.8	17	96	1.28	1120
NHLH63/21	638	195	598	5.07	7.98	40.3	17	99	1.29	1149
NHLH63/28	638	265	598	5.74	7.98	41.9	16	101	1.30	1177
NHLH63/35	638	330	598	6.36	7.98	43.3	15	104	1.31	1208
NHLH63/42	638	400	598	7.02	7.98	44.8	14	106	1.32	1229
NHLH63/49	638	471	598	7.70	7.98	46.4	14	107	1.33	1246
NHLH63/56	638	541	598	8.37	7.98	47.9	14	109	1.34	1265
NHLH70/07	709	55	669	4.08	8.86	41.2	20	101	1.27	1180
NHLH70/14	709	125	669	4.75	8.86	42.7	18	105	1.28	1216
NHLH70/21	709	195	669	5.42	8.86	44.2	17	107	1.29	1248
NHLH70/28	709	265	669	6.08	8.86	45.8	16	110	1.30	1275
NHLH70/35	709	330	669	6.70	8.86	47.2	16	112	1.31	1298
NHLH70/42	709	400	669	7.37	8.86	48.7	15	113	1.32	1317
NHLH70/49	709	471	669	8.05	8.86	50.3	15	115	1.33	1333
NHLH70/56	709	541	669	8.72	8.86	51.8	14	116	1.33	1344

Type NHLLH horizontal



- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments – excluding boss)
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

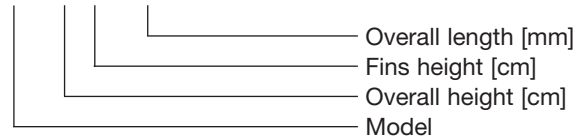
≤ 141 H: Welded-on floor supports recommended

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Model designation (ordering example)

NHLLH42/07-2000



Location of connections

- Standard version
- Flow = front side
- Return = wall side
- Vent/drain = wall side

Technical data for overall 1000 mm lengths

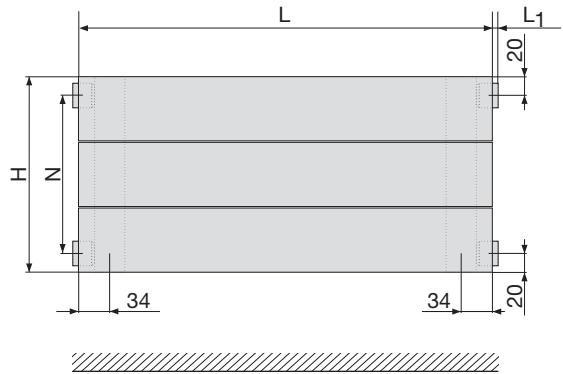
Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NHLLH07/07	70	55	30	1.14	0.88	6.28	15	32	1.21	367
NHLLH14/07	141	55	101	1.49	1.76	10.27	16	44	1.22	517
NHLLH14/14	141	125	101	2.47	1.76	12.55	13	54	1.23	630
NHLLH21/07	212	55	172	1.83	2.65	14.14	17	55	1.23	643
NHLLH21/14	212	125	172	2.82	2.65	16.47	14	64	1.24	742
NHLLH21/21	212	195	172	3.80	2.65	18.74	12	74	1.25	857
NHLLH28/07	283	55	243	2.17	3.54	18.07	18	65	1.24	758
NHLLH28/14	283	125	243	3.15	3.54	20.40	15	73	1.25	853
NHLLH28/21	283	195	243	4.14	3.54	22.72	13	82	1.26	957
NHLLH28/28	283	265	243	5.12	3.54	24.99	12	91	1.28	1062
NHLLH35/07	354	55	314	2.50	4.43	21.95	18	75	1.25	868
NHLLH35/14	354	125	314	3.49	4.43	24.27	16	83	1.26	965
NHLLH35/21	354	195	314	4.48	4.43	26.59	15	91	1.27	1062
NHLLH35/28	354	265	314	5.47	4.43	28.91	13	100	1.29	1159
NHLLH35/35	354	330	314	6.38	4.43	31.02	12	107	1.30	1250

Type NHLLH horizontal

Technical data for overall 1000 mm lengths (continued)

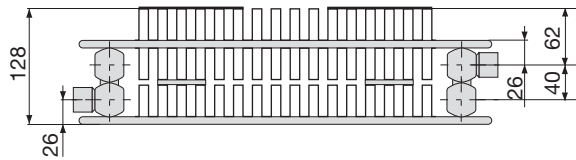
Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NHLLH42/07	425	55	385	2.84	5.31	25.82	19	84	1.25	974
NHLLH42/14	425	125	385	3.83	5.31	28.14	16	93	1.26	1076
NHLLH42/21	425	195	385	4.82	5.31	30.47	15	101	1.28	1170
NHLLH42/28	425	265	385	5.81	5.31	32.79	14	109	1.29	1263
NHLLH42/35	425	330	385	6.72	5.31	34.94	13	117	1.30	1356
NHLLH42/42	425	400	385	7.71	5.31	37.22	12	122	1.31	1424
NHLLH49/07	496	55	456	3.18	6.20	29.70	19	93	1.26	1080
NHLLH49/14	496	125	456	4.17	6.20	32.02	17	102	1.27	1187
NHLLH49/21	496	195	456	5.16	6.20	34.34	16	110	1.28	1281
NHLLH49/28	496	265	456	6.14	6.20	36.66	15	118	1.29	1370
NHLLH49/35	496	330	456	7.06	6.20	38.81	14	126	1.30	1461
NHLLH49/42	496	400	456	8.05	6.20	41.14	13	131	1.32	1529
NHLLH49/49	496	471	456	9.05	6.20	43.45	13	137	1.33	1590
NHLLH56/07	567	55	527	3.52	7.09	33.57	19	102	1.26	1188
NHLLH56/14	567	125	527	4.50	7.09	35.89	18	112	1.27	1297
NHLLH56/21	567	195	527	5.49	7.09	38.21	16	120	1.28	1392
NHLLH56/28	567	265	527	6.48	7.09	40.54	15	127	1.29	1480
NHLLH56/35	567	330	527	7.40	7.09	42.69	14	135	1.30	1565
NHLLH56/42	567	400	527	8.39	7.09	45.01	14	140	1.32	1633
NHLLH56/49	567	471	527	9.39	7.09	47.37	13	145	1.33	1692
NHLLH56/56	567	541	527	10.37	7.09	49.64	13	150	1.34	1750
NHLLH63/07	638	55	598	3.85	7.98	37.44	20	112	1.27	1298
NHLLH63/14	638	125	598	4.84	7.98	39.77	17	121	1.28	1407
NHLLH63/21	638	195	598	5.83	7.98	42.09	17	129	1.29	1503
NHLLH63/28	638	265	598	6.82	7.98	44.41	16	137	1.30	1590
NHLLH63/35	638	330	598	7.74	7.98	46.56	15	143	1.30	1667
NHLLH63/42	638	400	598	8.73	7.98	48.89	14	149	1.32	1735
NHLLH63/49	638	471	598	9.73	7.98	51.24	14	154	1.33	1793
NHLLH63/56	638	541	598	10.72	7.98	53.56	14	158	1.34	1843
NHLLH70/07	709	55	669	4.19	8.86	41.32	20	121	1.27	1409
NHLLH70/14	709	125	669	5.18	8.86	43.64	18	130	1.28	1516
NHLLH70/21	709	195	669	6.17	8.86	45.96	17	139	1.29	1612
NHLLH70/28	709	265	669	7.16	8.86	48.29	16	146	1.30	1699
NHLLH70/35	709	330	669	8.08	8.86	50.44	16	152	1.31	1769
NHLLH70/42	709	400	669	9.06	8.86	52.76	15	158	1.32	1835
NHLLH70/49	709	471	669	10.07	8.86	55.12	15	163	1.33	1891
NHLLH70/56	709	541	669	11.06	8.86	57.44	14	166	1.34	1936
NHLLH77/14	780	125	740	5.67	9.74	48.40	17	140	1.28	1624
NHLLH77/21	780	195	740	6.78	9.74	50.70	16	148	1.29	1719
NHLLH77/28	780	265	740	7.89	9.74	53.00	15	155	1.30	1804
NHLLH77/35	780	330	740	8.93	9.74	55.20	14	161	1.31	1870
NHLLH77/42	780	400	740	10.03	9.74	57.50	14	166	1.32	1934
NHLLH77/49	780	471	740	11.17	9.74	59.90	14	171	1.33	1988
NHLLH77/56	780	541	740	12.28	9.74	62.20	13	174	1.34	2029
NHLLH84/14	851	125	811	6.25	10.62	52.50	17	149	1.29	1731
NHLLH84/21	851	195	811	7.53	10.62	54.80	16	157	1.30	1823
NHLLH84/28	851	265	811	8.80	10.62	57.10	15	164	1.31	1904
NHLLH84/35	851	330	811	10.00	10.62	59.30	14	169	1.32	1970
NHLLH84/42	851	400	811	11.27	10.62	61.60	14	175	1.33	2031
NHLLH84/49	851	471	811	12.58	10.62	63.90	14	179	1.34	2082
NHLLH84/56	851	541	811	13.86	10.62	66.30	13	182	1.34	2122

Type NLLHL horizontal



- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments – excluding boss)
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

≤ 141 H: Welded-on floor supports recommended

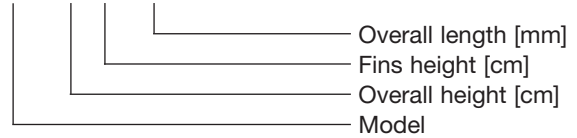


Connection sizes

ø	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Model designation (ordering example)

NLLHL42/07-2000



Location of connections

- Standard version
- Flow = front side
- Return = wall side
- Vent/drain = wall side

Technical data for overall 1000 mm lengths

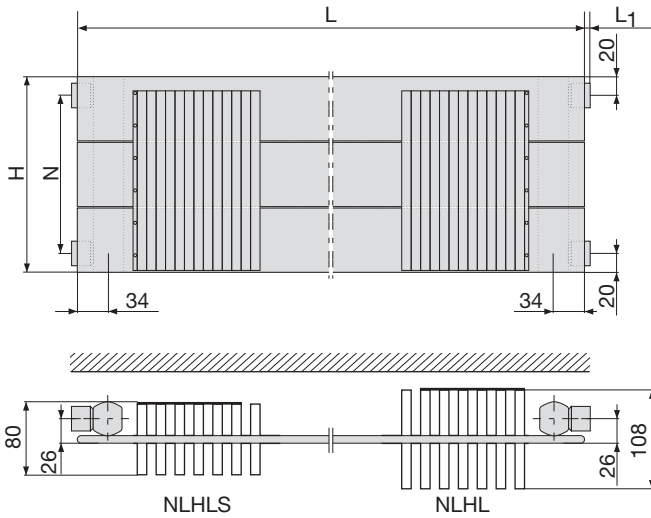
Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _{L=∅T} 50 K EN 442 Watt
NLLHL07/07	70	55	30	1.58	0.88	7.54	16	39	1.20	452
NLLHL14/07	141	55	101	1.92	1.76	11.45	18	51	1.21	588
NLLHL14/14	141	125	101	3.40	1.76	14.93	12	66	1.23	763
NLLHL21/07	212	55	172	2.25	2.65	15.32	18	61	1.22	710
NLLHL21/14	212	125	172	3.74	2.65	18.84	14	74	1.24	862
NLLHL21/21	212	195	172	5.23	2.65	22.31	12	89	1.25	1037
NLLHL28/07	283	55	243	2.59	3.54	19.25	18	71	1.23	824
NLLHL28/14	283	125	243	4.08	3.54	22.76	15	83	1.24	968
NLLHL28/21	283	195	243	5.57	3.54	26.28	13	97	1.26	1124
NLLHL28/28	283	265	243	7.05	3.54	29.76	11	110	1.28	1281
NLLHL35/07	354	55	314	2.93	4.43	23.12	19	80	1.24	933
NLLHL35/14	354	125	314	4.42	4.43	26.64	16	93	1.25	1079
NLLHL35/21	354	195	314	5.90	4.43	30.15	13	105	1.27	1224
NLLHL35/28	354	265	314	7.39	4.43	33.66	12	118	1.28	1369
NLLHL35/35	354	330	314	8.77	4.43	36.89	11	129	1.30	1504

Type NHLLHL horizontal

Technical data for overall 1000 mm lengths (continued)

Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _{L=∅T} 50 K EN 442 Watt
NHLLHL42/07	425	55	385	3.27	5.31	27.00	19	90	1.24	1042
NHLLHL42/14	425	125	385	4.75	5.31	30.51	16	103	1.26	1193
NHLLHL42/21	425	195	385	6.24	5.31	34.03	14	115	1.27	1333
NHLLHL42/28	425	265	385	7.73	5.31	37.54	13	126	1.29	1471
NHLLHL42/35	425	330	385	9.11	5.31	40.80	12	139	1.30	1614
NHLLHL42/42	425	400	385	10.59	5.31	44.27	11	147	1.31	1711
NHLLHL49/07	496	55	456	3.60	6.20	30.87	19	99	1.25	1153
NHLLHL49/14	496	125	456	5.09	6.20	34.39	17	113	1.26	1310
NHLLHL49/21	496	195	456	6.58	6.20	37.9	15	125	1.28	1450
NHLLHL49/28	496	265	456	8.07	6.20	41.41	14	136	1.29	1583
NHLLHL49/35	496	330	456	9.45	6.20	44.67	13	148	1.30	1724
NHLLHL49/42	496	400	456	10.93	6.20	48.18	12	157	1.32	1823
NHLLHL49/49	496	471	456	12.44	6.20	51.71	11	164	1.33	1910
NHLLHL56/07	567	55	527	3.94	7.09	34.75	20	109	1.26	1266
NHLLHL56/14	567	125	527	5.43	7.09	38.26	17	123	1.27	1428
NHLLHL56/21	567	195	527	6.92	7.09	41.77	16	135	1.28	1570
NHLLHL56/28	567	265	527	8.40	7.09	45.29	14	146	1.29	1702
NHLLHL56/35	567	330	527	9.78	7.09	48.55	13	158	1.30	1833
NHLLHL56/42	567	400	527	11.27	7.09	52.06	13	166	1.32	1933
NHLLHL56/49	567	471	527	12.78	7.09	55.62	12	174	1.33	2020
NHLLHL56/56	567	541	527	14.27	7.09	59.10	12	181	1.35	2109
NHLLHL63/07	638	55	598	4.28	7.98	38.62	20	119	1.26	1382
NHLLHL63/14	638	125	598	5.77	7.98	42.14	18	133	1.27	1547
NHLLHL63/21	638	195	598	7.25	7.98	45.65	16	145	1.28	1692
NHLLHL63/28	638	265	598	8.74	7.98	49.16	15	157	1.29	1823
NHLLHL63/35	638	330	598	10.12	7.98	52.42	14	167	1.30	1941
NHLLHL63/42	638	400	598	11.61	7.98	55.93	13	175	1.32	2041
NHLLHL63/49	638	471	598	13.12	7.98	59.50	13	183	1.33	2125
NHLLHL63/56	638	541	598	14.60	7.98	63.01	12	189	1.35	2200
NHLLHL70/07	709	55	669	4.62	8.86	42.50	20	129	1.27	1499
NHLLHL70/14	709	125	669	6.10	8.86	46.01	18	143	1.28	1664
NHLLHL70/21	709	195	669	7.59	8.86	49.52	17	156	1.29	1811
NHLLHL70/28	709	265	669	9.08	8.86	53.04	16	167	1.30	1942
NHLLHL70/35	709	330	669	10.46	8.86	56.29	15	176	1.31	2048
NHLLHL70/42	709	400	669	11.95	8.86	59.81	14	185	1.32	2146
NHLLHL70/49	709	471	669	13.45	8.86	63.37	14	191	1.33	2227
NHLLHL70/56	709	541	669	14.94	8.86	66.89	13	197	1.35	2291
NHLLHL77/14	780	125	740	5.67	9.74	48.40	17	153	1.28	1778
NHLLHL77/21	780	195	740	6.78	9.74	50.70	16	166	1.29	1926
NHLLHL77/28	780	265	740	7.89	9.74	53.00	15	177	1.30	2055
NHLLHL77/35	780	330	740	8.92	9.74	55.20	14	185	1.31	2154
NHLLHL77/42	780	400	740	10.03	9.74	57.50	14	193	1.32	2248
NHLLHL77/49	780	471	740	11.17	9.74	59.90	14	200	1.34	2326
NHLLHL77/56	780	541	740	12.28	9.74	62.20	13	205	1.35	2382
NHLLHL84/14	851	125	811	6.25	10.62	52.50	17	162	1.29	1889
NHLLHL84/21	851	195	811	7.53	10.62	54.80	16	175	1.30	2033
NHLLHL84/28	851	265	811	8.80	10.62	57.10	15	186	1.31	2158
NHLLHL84/35	851	330	811	10.00	10.62	59.30	14	194	1.31	2258
NHLLHL84/42	851	400	811	11.27	10.62	61.60	14	202	1.33	2348
NHLLHL84/49	851	471	811	12.58	10.62	63.90	14	208	1.34	2421
NHLLHL84/56	851	541	811	13.86	10.62	66.30	13	213	1.35	2473

Type NLHLS / NLHL horizontal

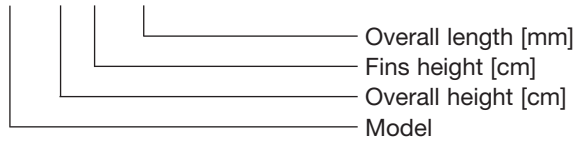


- H = overall height [mm]
- L = overall length 400 to 6000 mm
(in 100 mm increments – excluding boss)
- T₁ = model LHLS, 80 mm overall depth
- T₂ = model LHL, overall depth 108 mm
- N = connection spacing [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

≤ 141 H: Welded-on floor supports recommended

Model designation (ordering example)

NLHLS28/28-2000



Model designation (ordering example)

NLHL28/28-2000



Connection sizes

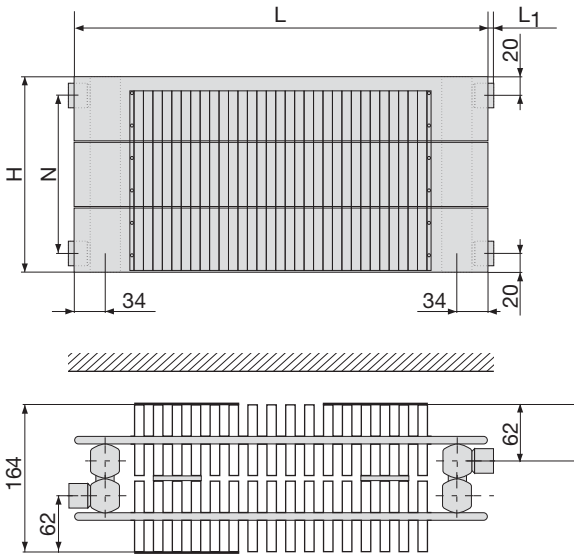
ø	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Models NLHLS and NLHL with fins on both sides lend themselves especially well to installations in floor ducts or behind encasements. They are an inexpensive alternative to radiavectors.

Technical data per 1000 mm

Types	Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _{L=∅T 50 K} EN 442 Watt
	NLHLS07/07	70	55	30	1.0	0.4	4.5	19	24	1.22	282
	NLHLS14/14	141	125	101	2.2	0.9	8.8	17	41	1.24	475
	NLHLS21/21	212	195	172	3.3	1.3	13.0	16	55	1.25	636
	NLHLS28/28	283	265	243	4.5	1.8	17.4	16	67	1.27	776
	NLHLS35/35	354	330	314	5.1	2.2	22.4	25	77	1.29	900
	NLHLS42/42	425	400	385	6.1	2.6	26.8	25	87	1.30	1010
	NLHLS49/49	496	471	456	7.1	3.1	31.3	25	95	1.30	1110
NLHLS56/56	567	541	527	8.1	3.5	35.8	25	103	1.31	1199	
	NLHL07/07	70	55	30	1.3	0.4	5.1	25	26	1.19	304
	NLHL14/14	141	125	101	2.8	0.9	10.1	25	45	1.21	523
	NLHL21/21	212	195	172	4.3	1.3	15.1	25	61	1.23	707
	NLHL28/28	283	265	243	5.8	1.8	20.2	25	75	1.26	868
	NLHL35/35	354	330	314	6.5	2.2	25.3	25	87	1.28	1009
	NLHL42/42	425	400	385	7.7	2.6	30.3	25	98	1.28	1134
	NLHL49/49	496	471	456	9.0	3.1	35.4	25	107	1.29	1246
NLHL56/56	567	541	527	10.3	3.5	40.4	25	116	1.29	1345	

Type NLHLLHLS horizontal

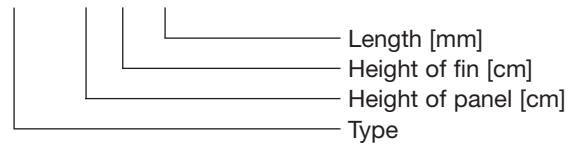


- H = height [mm]
- L = length from 400 to 6000 mm
(increments 100 mm)
- T = depth 164 mm
- N = distance between connections [mm]
- L₁ = connection length [mm]
- A = surface area [m²]
- V = volume [dm³]
- M = dry weight [kg]
- q_{ms} = nominal mass flow [kg/h]
- n = exponent
- Φ_s = nominal heat emission [Watts]

≤ 141 H: Welded-on floor supports recommended

Model designation (ordering example)

NLHLLHLS28/28-700



The panels types NLHLLHLS with fins on both sides are specially recommended for installation with Low Surface Temperature (front covers) or in floor ducts. They are not suitable for unprotected applications.

Connection sizes

ø	1/4"	3/8"	1/2"	3/4"
L ₁ mm	6	6	6	7.5

Technical data per 1000 mm

Types	Model	H mm	H Fins mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _{L=∅T 50 K} EN 442 Watt
	NLHLLHLS07/07	70	55	30	2.0	0.9	8.9	21	47	1.21	547
	NLHLLHLS14/14	141	125	101	4.0	1.8	17.9	24	80	1.24	930
	NLHLLHLS21/21	212	195	172	6.1	2.6	26.8	19	108	1.26	1251
	NLHLLHLS28/28	283	265	243	8.1	3.5	35.8	26	131	1.29	1528
	NLHLLHLS35/35	354	330	314	10.1	4.4	44.7	22	152	1.31	1772
	NLHLLHLS42/42	425	400	385	12.1	5.3	53.6	19	171	1.32	1988
	NLHLLHLS49/49	496	471	456	14.1	6.2	62.6	27	187	1.33	2180
	NLHLLHLS56/56	567	541	527	16.2	7.0	71.5	24	202	1.34	2351

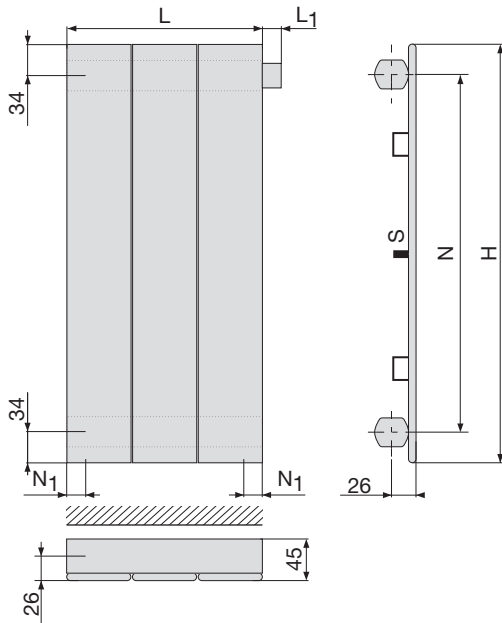
Overall lengths L in mm for vertical panel radiators

Number vertical elements	Model NV	Model NV NVV-4SR	Model NVL60 NVL80	Model NVL100 NVL120	Model NVL140 NVL160	Model NVL180 NVL200 NVL220 NVL240
	L = [mm]	L = [mm]	L = [mm]	L = [mm]	L = [mm]	L = [mm]
1	70	70	-	-	-	-
2	141	14	-	-	-	-
3	212	212				
4	283	283	283	283	283	283
5	354	354	354	354	354	354
6	425	425	425	425	425	425
7	496	496	496	496	496	496
8	567	567	567	567	567	567
9	638	638	638	638	638	638
10	709	709	709	709	709	709
11	780	780 (4SR)	780	780	780	780
12	851	851 (4SR)		851	851	851
13	922	922 (4SR)		922	922	922
14	993	993 (4SR)		993	993	993
15	1064	1064 (4SR)		1064	1064	1064
16	1135	1135 (4SR)		1135	1135	1135
17	1206	1206 (4SR)		1206	1206	1206
18	1277	1277 (4SR)			1277	1277
19	1348	1348 (4SR)			1348	1348
20	1419	1419 (4SR)			1419	1419
21	1490	1490 (4SR)			1490	1490
22	1561	1561 (4SR)			1561	1561
23	1632	1632 (4SR)				1632
24	1703	1703 (4SR)				1703

Overlengths on request

4SR = 4 collectors

Type NV vertical



- H = overall height [mm]
- L = overall length 70 to 1703 mm
- N = connection spacing [mm]
- N₁ = connection dimension [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent
- S = supports welded onto reverse side for stabilizing purposes

Location of connections

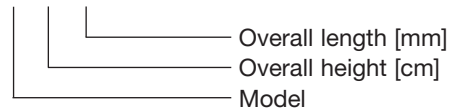
Standard connections 3/8", 1/2", 3/4" =
N₁ connection dimension 20 mm

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	-	-	-	24

Model designation (ordering example)

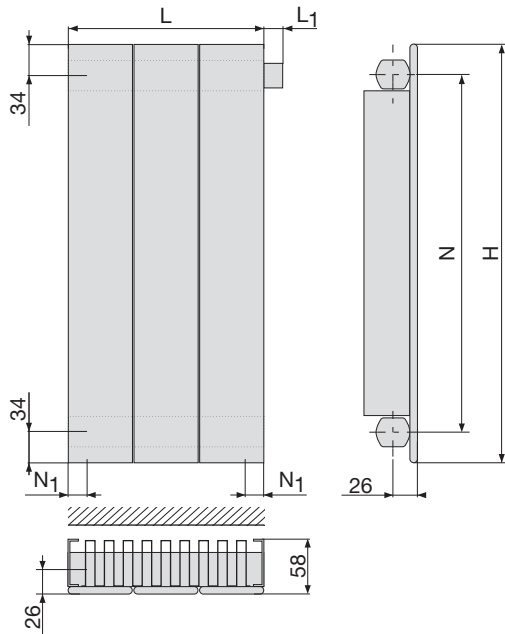
NV200-8



Technical data per flat oval tube

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NV60	600	532	0.11	0.31	1.26	33	4	1.27	46
NV80	800	732	0.14	0.38	1.61	33	5	1.27	60
NV100	1000	932	0.17	0.44	1.95	33	6	1.27	74
NV120	1200	1132	0.20	0.51	2.28	33	8	1.28	88
NV140	1400	1332	0.23	0.58	2.62	33	9	1.29	102
NV160	1600	1532	0.26	0.65	2.98	33	10	1.30	116
NV180	1800	1732	0.29	0.71	3.31	33	11	1.31	130
NV200	2000	1932	0.32	0.78	3.65	33	12	1.31	145
NV220	2200	2132	0.35	0.85	4.01	33	14	1.31	160
NV240	2400	2332	0.38	0.91	4.34	34	15	1.31	176
NV260	2600	2532	0.41	0.98	4.67	34	16	1.31	191
NV280	2800	2732	0.45	1.05	5.03	34	18	1.31	208
NV300	3000	2932	0.48	1.12	5.37	34	19	1.31	224
NV320	3200	3132	0.51	1.18	5.70	34	20	1.31	233
NV340	3400	3332	0.54	1.25	6.03	34	21	1.31	248
NV360	3600	3532	0.57	1.32	6.40	34	23	1.31	262
NV380	3800	3732	0.60	1.39	6.73	34	24	1.31	277
NV400	4000	3932	0.63	1.45	7.07	34	25	1.31	291
NV420	4200	4132	0.66	1.52	7.40	34	26	1.31	306
NV440	4400	4332	0.69	1.59	7.76	34	28	1.31	320
NV460	4600	4532	0.72	1.66	8.09	34	29	1.31	335

Type NVL vertical



- H = overall height [mm]
- L = overall length 212 to 1703 mm
- N = connection spacing [mm]
- N₁ = connection dimension [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

Location of connections

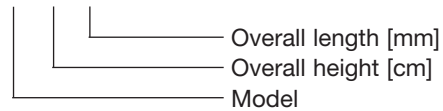
Standard connections 3/8", 1/2", 3/4" =
N₁ connection dimension 20 mm

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	-	-	-	24

Model designation (ordering example)

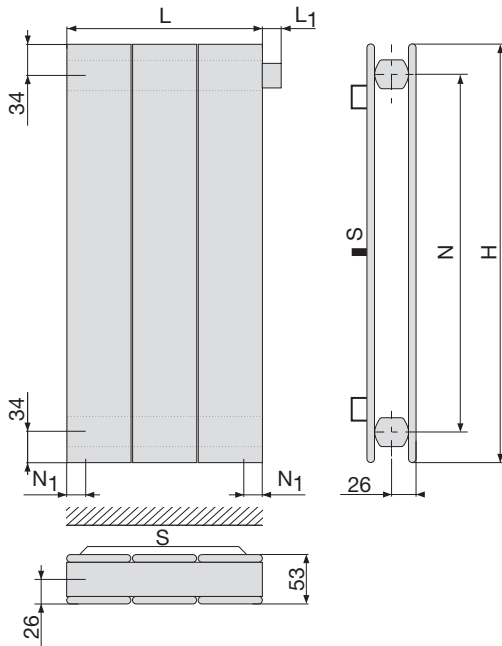
NVL200-8



Technical data per flat oval tube

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NVL60	600	532	0.28	0.31	1.70	24	6	1.28	71
NVL80	800	732	0.32	0.38	2.08	25	8	1.29	88
NVL100	1000	932	0.52	0.44	2.82	24	9	1.29	105
NVL120	1200	1132	0.55	0.51	3.17	25	10	1.30	121
NVL140	1400	1332	0.75	0.58	3.92	25	12	1.31	137
NVL160	1600	1532	0.79	0.65	4.29	26	13	1.32	153
NVL180	1800	1732	0.98	0.71	5.04	25	15	1.33	169
NVL200	2000	1932	1.02	0.78	5.39	26	16	1.32	185
NVL220	2200	2132	1.05	0.85	5.76	27	17	1.31	201
NVL240	2400	2332	1.09	0.91	6.12	28	19	1.30	217

Type NVV vertical



- H = overall height [mm]
- L = overall length 70 to 709 mm
- N = connection spacing [mm]
- N₁ = connection dimension [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent
- S = supports welded onto reverse side for stabilizing purposes

Location of connections

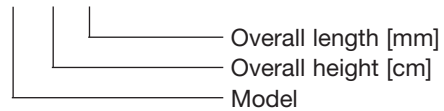
Standard connections 3/8", 1/2", 3/4" =
N₁ connection dimension 20 mm

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	-	-	-	24

Model designation (ordering example)

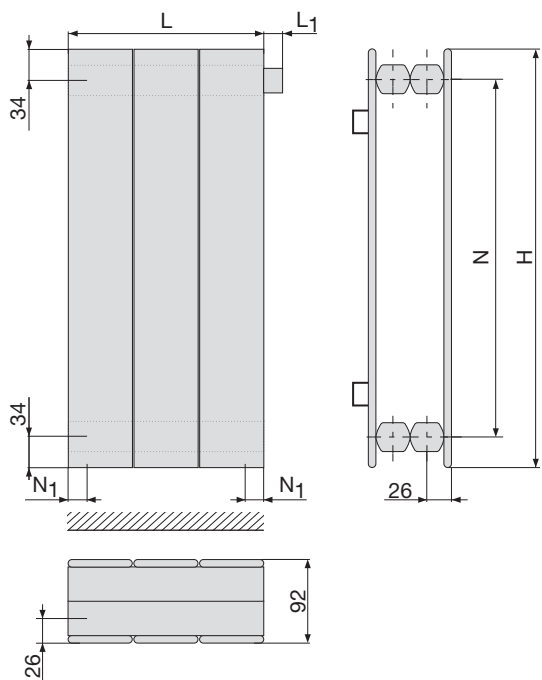
NVV200-8



Technical data per flat oval tube

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NVV60	600	532	0.20	0.51	2.26	23	6	1.30	67
NVV80	800	732	0.26	0.60	2.95	23	7	1.31	87
NVV100	1000	932	0.32	0.78	3.62	23	9	1.33	107
NVV120	1200	1132	0.38	0.91	4.29	23	11	1.34	127
NVV140	1400	1332	0.44	1.05	4.96	23	13	1.34	147
NVV160	1600	1532	0.50	1.18	5.66	23	14	1.33	166
NVV180	1800	1732	0.56	1.32	6.32	24	16	1.33	185
NVV200	2000	1932	0.62	1.45	6.99	24	18	1.33	205
NVV220	2200	2132	0.68	1.59	7.69	24	19	1.33	224
NVV240	2400	2332	0.74	1.72	8.35	25	21	1.33	243
NVV260	2600	2532	0.80	1.86	9.02	24	23	1.33	262
NVV280	2800	2732	0.86	1.99	9.71	24	24	1.33	281
NVV300	3000	2932	0.92	2.13	10.38	25	26	1.33	300
NVV320	3200	3132	0.98	2.26	11.05	25	27	1.33	318
NVV340	3400	3332	1.04	2.40	11.72	25	29	1.33	336
NVV360	3600	3532	1.11	2.53	12.42	25	31	1.33	355
NVV380	3800	3732	1.17	2.67	13.09	25	32	1.33	373
NVV400	4000	3932	1.23	2.80	13.76	25	34	1.33	392
NVV420	4200	4132	1.29	2.93	14.43	25	35	1.33	410
NVV440	4400	4332	1.35	3.07	15.12	25	37	1.33	428
NVV460	4600	4532	1.41	3.20	15.79	25	38	1.33	447

Type NVV-4SR vertical



- H = overall height[mm]
- L = overall length 70 to 1703 mm
- N = connection spacing [mm]
- N₁ = connection dimension [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

Location of connections

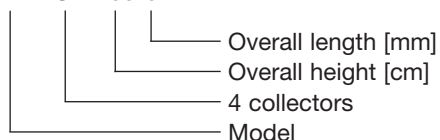
Standard connections 3/8", 1/2", 3/4" =
N₁ connection dimension 20 mm

Connection sizes

ø	1/4"	3/8"	1/2"	3/4"
L ₁ mm	-	-	-	24

Model designation (ordering example)

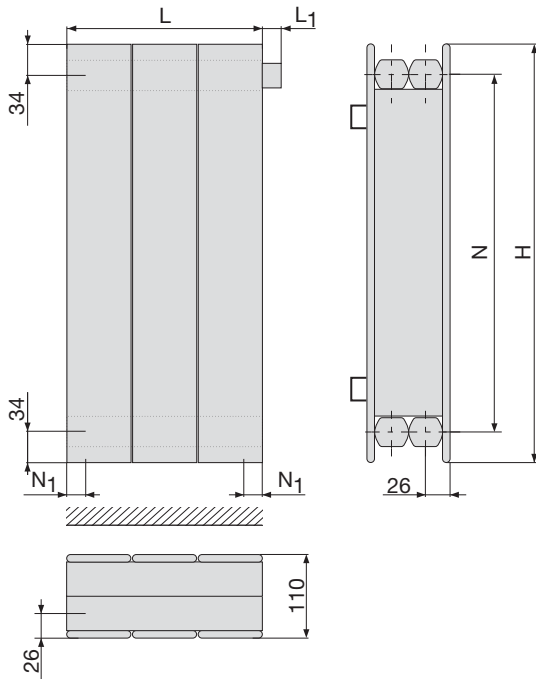
NVV-4SR-200-8



Technical data per flat oval tube

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NVV060-4SR	600	532	0.22	0.62	2.5	23	7	1.30	79
NVV080-4SR	800	732	0.28	0.76	3.2	23	9	1.31	100
NVV100-4SR	1000	932	0.34	0.88	3.9	23	10	1.31	121
NVV120-4SR	1200	1132	0.40	1.02	4.6	23	12	1.32	141
NVV140-4SR	1400	1332	0.46	1.16	5.2	23	14	1.32	162
NVV160-4SR	1600	1532	0.52	1.30	6.0	23	16	1.32	184
NVV180-4SR	1800	1732	0.58	1.42	6.6	24	18	1.32	205
NVV200-4SR	2000	1932	0.64	1.56	7.3	24	20	1.31	227
NVV220-4SR	2200	2132	0.70	1.70	8.0	24	21	1.31	249
NVV240-4SR	2400	2332	0.76	1.82	8.7	25	23	1.30	272
NVV260-4SR	2600	2532	0.82	1.96	9.3	25	25	1.30	295
NVV280-4SR	2800	2732	0.90	2.10	10.1	25	27	1.30	318
NVV300-4SR	3000	2932	0.96	2.24	10.7	25	29	1.30	343
NVV320-4SR	3200	3132	1.02	2.36	11.4	25	31	1.30	357
NVV340-4SR	3400	3332	1.08	2.50	12.1	25	33	1.30	378
NVV360-4SR	3600	3532	1.14	2.64	12.8	25	34	1.30	400
NVV380-4SR	3800	3732	1.20	2.78	13.5	25	36	1.30	421
NVV400-4SR	4000	3932	1.26	2.90	14.1	25	38	1.30	443
NVV420-4SR	4200	4132	1.32	3.04	14.8	25	40	1.30	464
NVV440-4SR	4400	4332	1.38	3.18	15.5	25	42	1.30	486
NVV460-4SR	4600	4532	1.44	3.32	16.2	25	44	1.30	507

Type NVLV vertical



- H = overall height [mm]
- L = overall length 70 to 1703 mm
- N = connection spacing [mm]
- N₁ = connection dimension [mm]
- L₁ = connection boss length [mm]
- A = surface area per module [m²]
- V = water content [dm³]
- M = dry weight [kg]
- s_k = radiation percentage [%]
- q_{ms} = rated water flow [kg/h]
- n = exponent

Location of connections

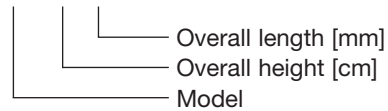
Standard connections 3/8", 1/2", 3/4" =
N₁ connection dimension 20 mm

Connection sizes

∅	1/4"	3/8"	1/2"	3/4"
L ₁ mm	-	-	-	24

Model designation (ordering example)

NVLV200-8



Technical data per flat oval tube

Model	H mm	N mm	A m ²	V dm ³	M kg	s _k %	q _{ms} kg/h	Exp. n	Φ _L =∅T 50 K EN 442 Watt
NVLV60	600	532	0.39	0.62	2.96	24	8	1.31	96
NVLV80	800	732	0.46	0.76	3.69	25	10	1.32	120
NVLV100	1000	932	0.69	0.88	4.77	24	12	1.33	144
NVLV120	1200	1132	0.75	1.02	5.45	25	15	1.34	169
NVLV140	1400	1332	0.98	1.16	6.54	25	17	1.35	195
NVLV160	1600	1532	1.05	1.3	7.27	26	19	1.35	222
NVLV180	1800	1732	1.27	1.42	8.35	25	22	1.35	251
NVLV200	2000	1932	1.34	1.56	9.04	26	23	1.35	273
NVLV220	2200	2132	1.4	1.7	9.77	27	25	1.35	295
NVLV240	2400	2332	1.47	1.82	10.46	28	27	1.35	316

Minimum water flow $q_{m \text{ min. min.}}$

The technical data table gives the rated flow q_{ms} for each model. The effective water flow q_m should not normally be less than 20% of the rated flow q_{ms} for **zehnder nova** horizontal panel radiators or 17% for the vertical models.

**Pressure drop Δp
(incl. flow and return resistance losses)**

The pressure drop Δp between flow and return of a **zehnder nova** depends on the model and on the effective water flow q_m . Δp is calculated using the formula $\Delta p = q_m^{1,9125} \cdot c$. Obtain factor c from table below.

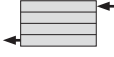
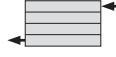
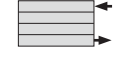
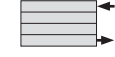








Pressure drop for series-connected panel radiators

Because the baffle arrangement is different to that of the individually connected panel radiators, attention should be drawn to the following flow requirements:

Minimum water flow $q_{m \text{ min.}}$:
Horizontal configuration: 20 % of q_{ms}
Vertical configuration: 17 % of q_{ms}

Pressure drop:
Flow and return resistance per panel radiator $\zeta = 4.0$
(the internal resistance can be neglected) plus the pressure drop due to the coupling pipes.

$$\Delta p = q_m^{1,9125} \cdot c \quad \Delta p = [\text{Pa}] \quad q_m = [\text{kg/h}] \quad c = \text{factor} \quad 1,9125 = \text{constant}$$

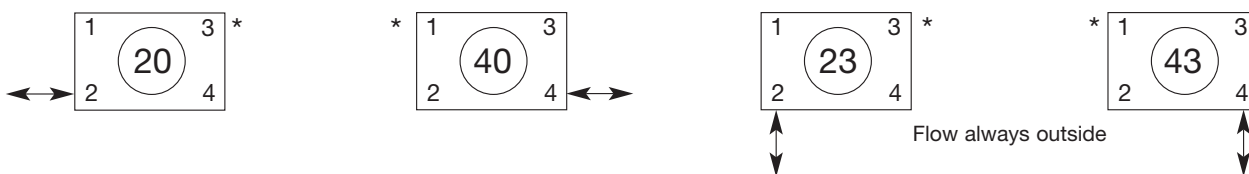
	 NH, NHL, NLHLS, NLHL	 NHH, NHELLH, NHLH, NHELLHL, NLHLLHLS	 NH, NHL, NLHLS, NLHL	 NHH, NHELLH, NHELLHL, NHLH, NLHLLHLS	 NH, NHL, NLHLS, NLHL	 NHH, NHELLH, NHELLHL, NHLH, NLHLLHLS
Overall height mm	Factor c					
70	0,0748	0,0199	-		0,0199	0,0397
141						
212						
283						
354	0,2244	0,0596	0,1496		0,0596	0,0397
425						
496						
567						
638						
709						
780	0,3741	0,0994	0,2993		0,0795	0,0795
851						
922						
993						
1064	0,5237	0,1391	0,4489		0,1192	0,1192
1135						
1206						
1277						
1348						
1419						
1490	0,4489	0,1192	0,4489		0,1192	0,1192
1561						
1632						
1703						
	 NV, NVL	 NVLV, NVV, NVV-4SR	 NV, NVL	 NVLV, NVV, NVV-4SR	 NV, NVL	 NVLV, NVV, NVV-4SR
Overall height mm	Factor c					
600 to 4600	0,0073	0,0073	0,0073	0,0073	0,1496	0,0397

zehnder nova panel radiators operate in the forced flow mode and are fitted with the necessary baffles at the factory. They must therefore be connected as ordered in accordance with the following drawings.

Normal connections when used with single entry connections (price supplement)

Technical data concerning the operation of the panel radiators with various valve types will be supplied on request.

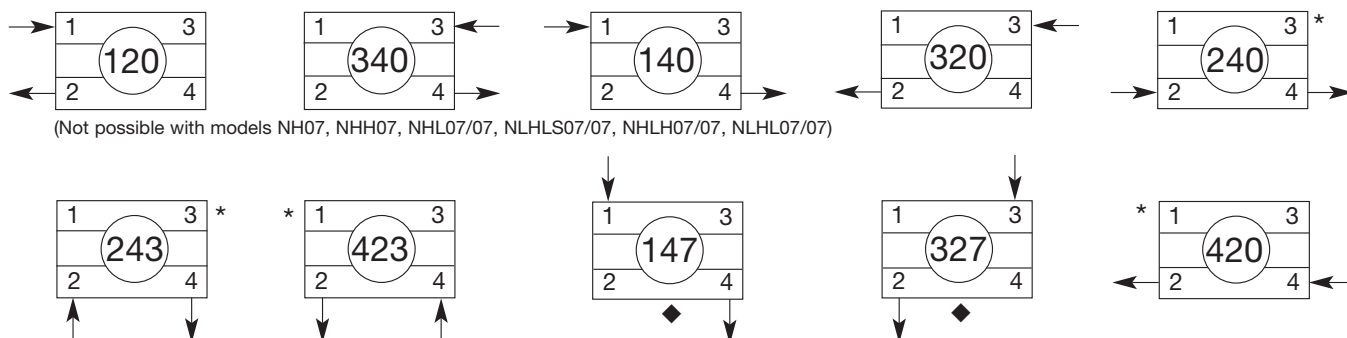
Min. overall height: 140 mm



Connections when used with two-pipe systems

Types horizontal

Standard connections 1/4", 3/8", 1/2", 3/4":



* vent mandatory
 ♦ price supplement

Locations of connections on double panel radiators

Standard configuration (see drawings)

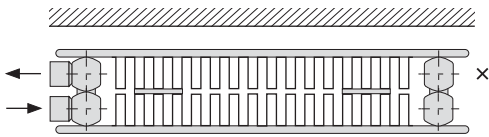
flow = front side

return = wall side

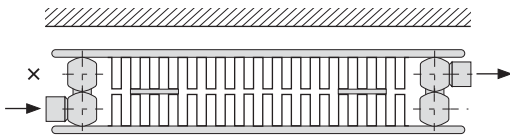
vent/drain (x) = wall side

Types NHLLH and NHLLHL

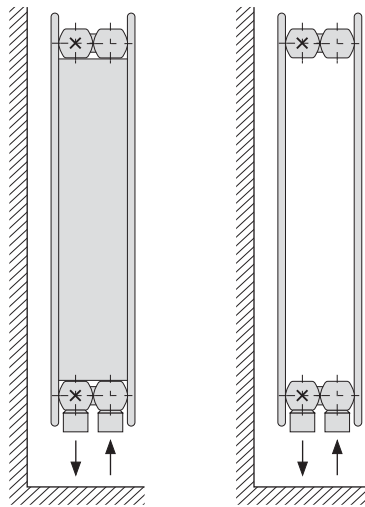
Connections on same end:



Connections on opposite ends:

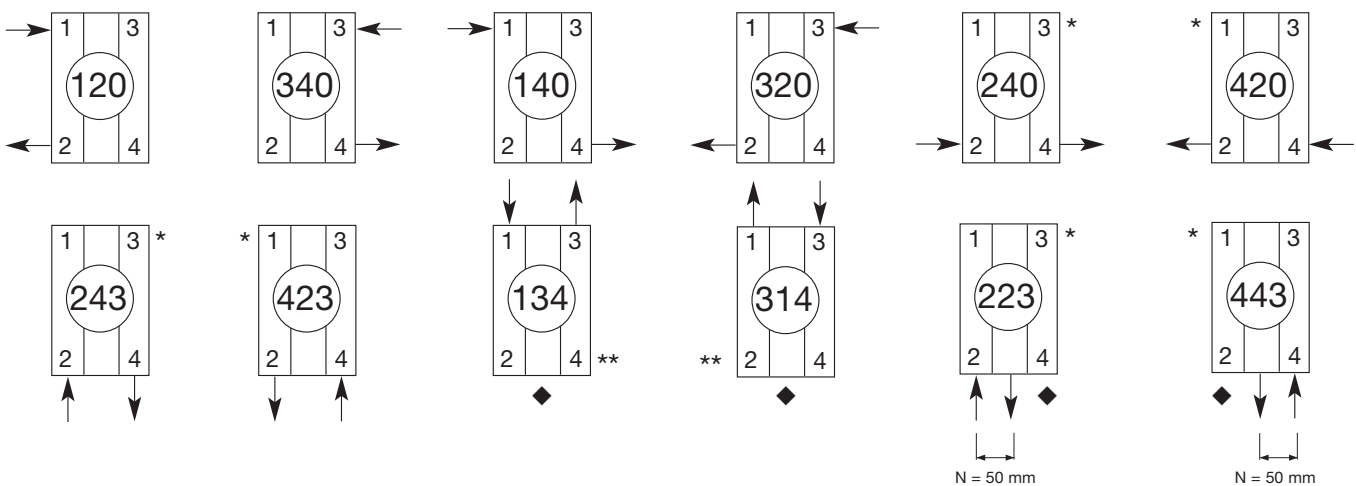


Types NVLV and NVV-4SR



Types vertical

Standard connections 1/4", 3/8", 1/2", 3/4":



- * Vent mandatory
- ** Drain mandatory
- ♦ Price supplement

Basic principles

Technically, series-connected radiators can be regarded as a single radiator.

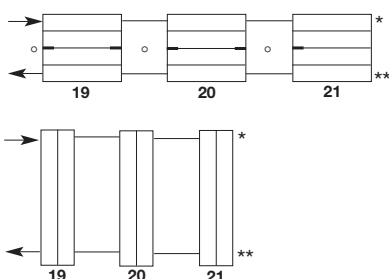
Use the coupling numbers below when ordering series-connected horizontal panel radiators.

In the case of double panel radiators, the coupling pipes are on the wall side, the flow pipe on the front side and the return pipe on the wall side.

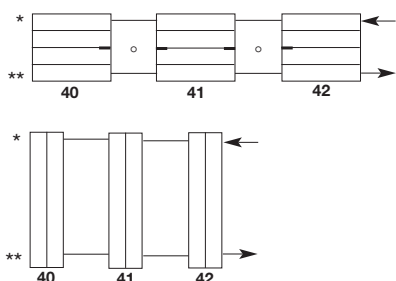
Same-side connection

The overall length of the entire **zehnder nova** series is limited to a maximum of 12 metres (consisting of a maximum of 3 radiator units).

Flow on left:



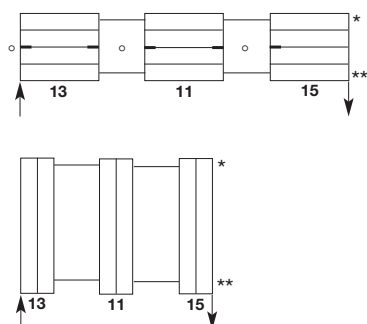
Flow on right:



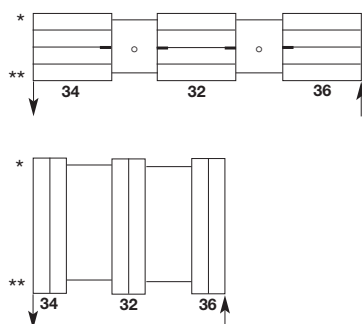
Vertical connection

The overall length of the entire **zehnder nova** series is limited to a maximum of 18 metres (consisting of a maximum of 5 radiator units).

Flow on left:



Flow on right:



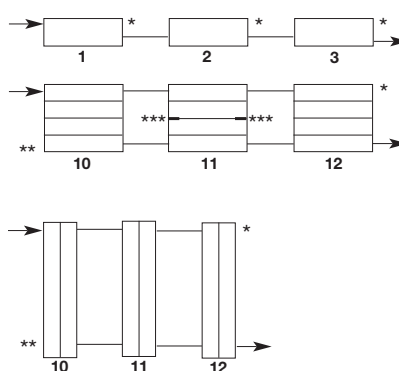
Link piping

The individual flow resistances of the coupling pipes of each radiator of the series must not be excessive. These pipes should at least be one size larger than the flow and return pipes. The recommended coupling size is: 3/4".

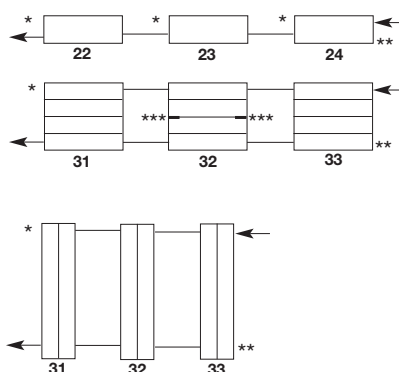
Connections on opposite ends

The overall length of the entire **zehnder nova** series is limited to max. 18 m (with max. 5 radiators).

Flow on left:



Flow on right:

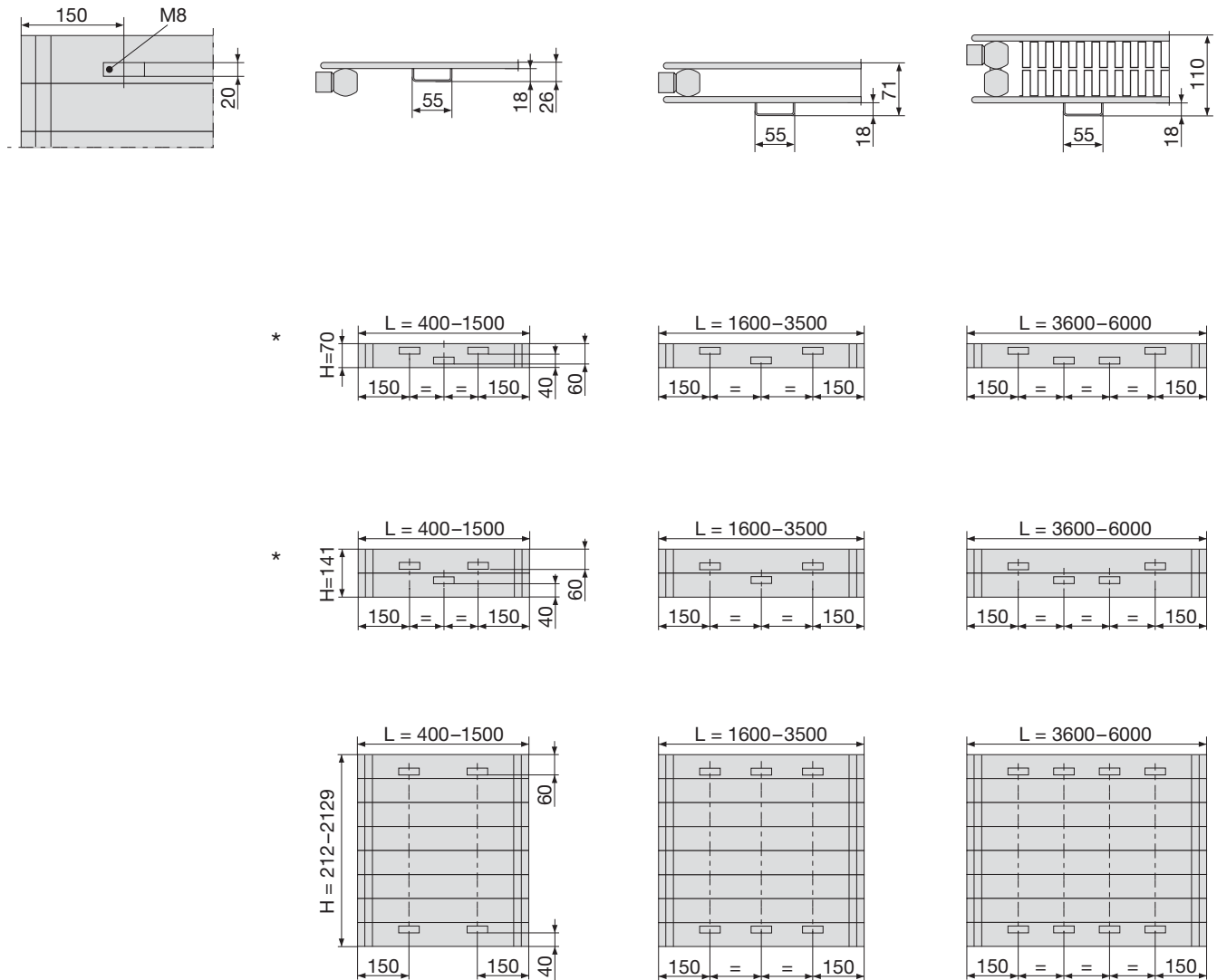


- * Vent mandatory
- ** Drain mandatory
- *** Baffle
- ° Baffle 100% watertight (price supplement)

Horizontal configuration (standard)

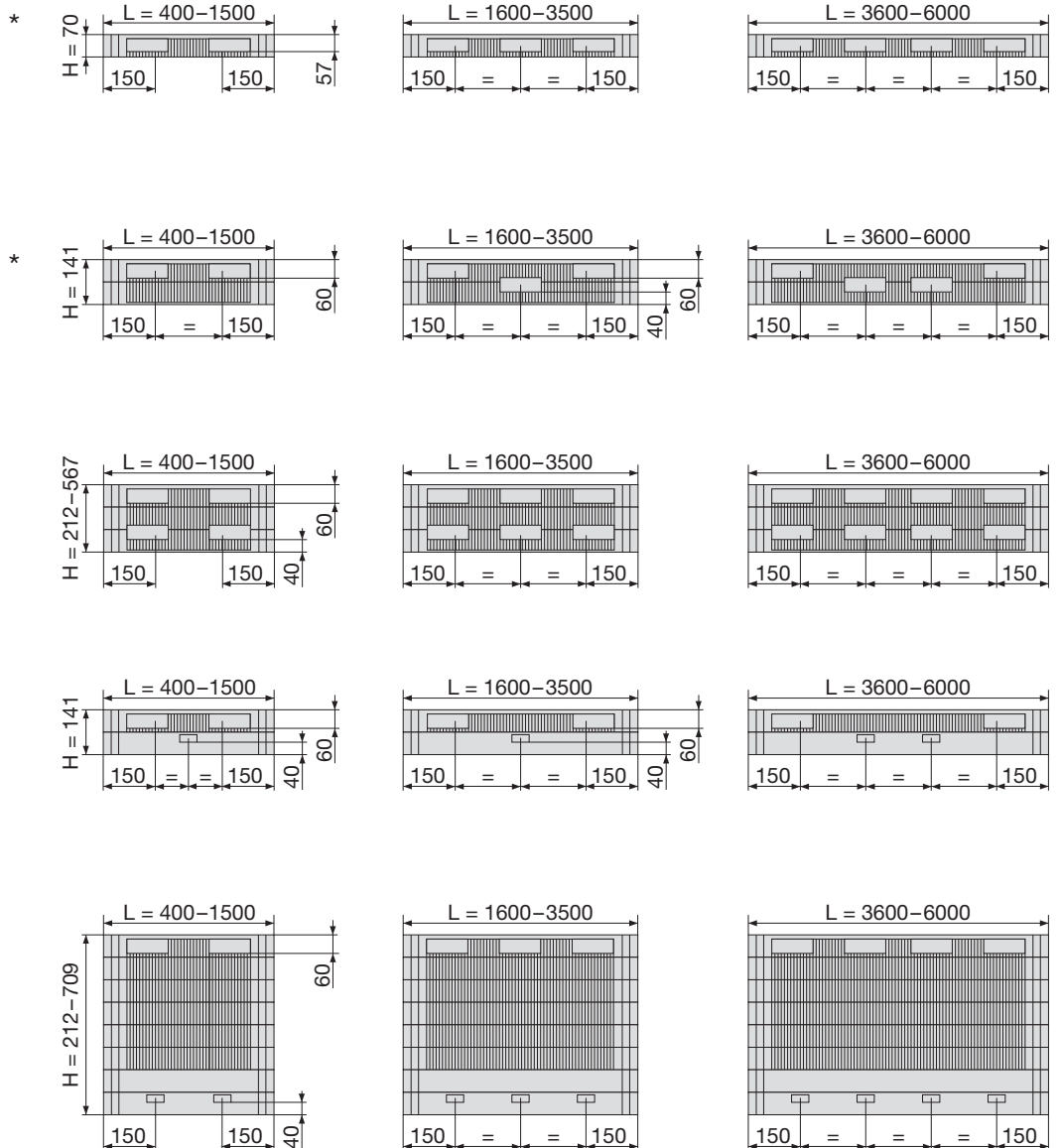
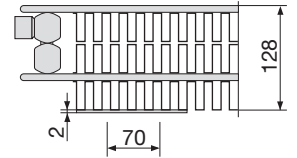
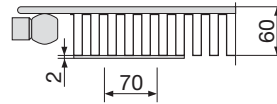
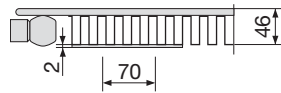
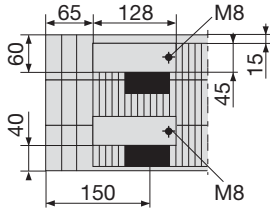
Drawing: view from the rear (dimensions in mm, tolerances of fixing points ± 5 mm)

Types NH, NHH; NHELLH, NHLH



* Welded-on foot supports recommended

Types NHL, NLHLS; NLHL, NLLHL, NLHLLHS



Type NHL

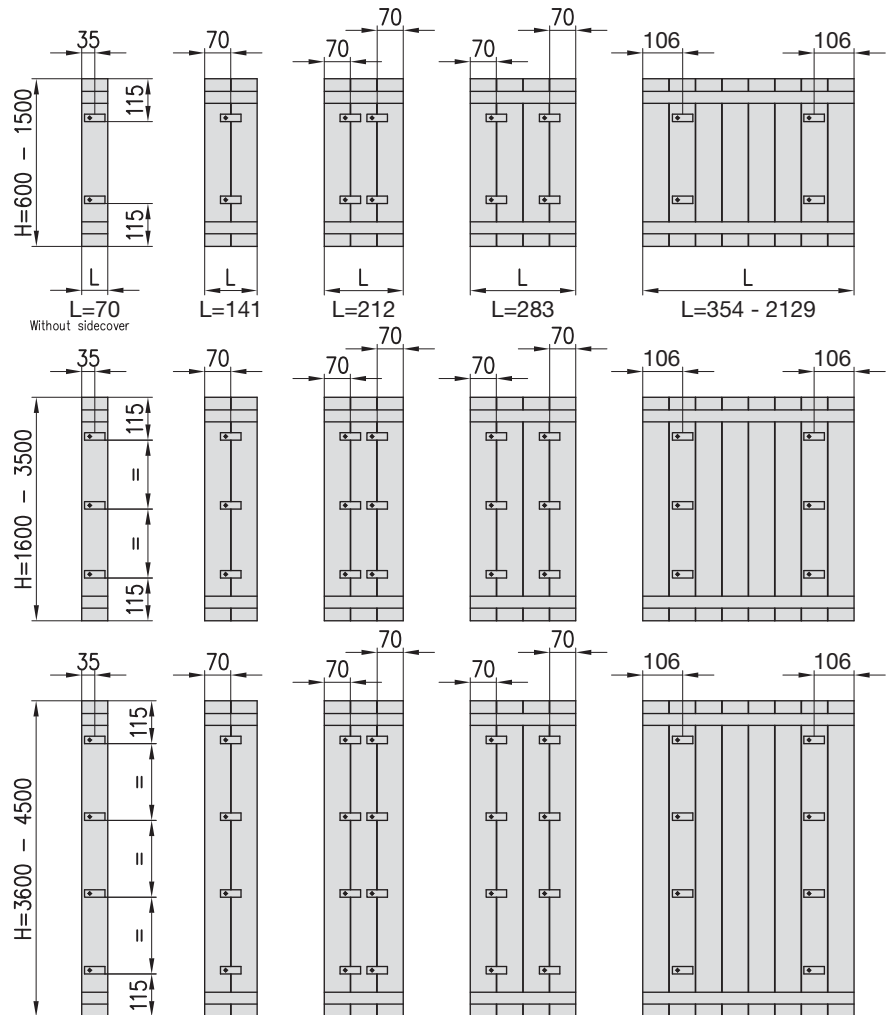
Up to overall height 283 mm = fin depth 36 mm
 From overall height 354 mm = fin depth 50 mm

* Welded-on foot supports recommended

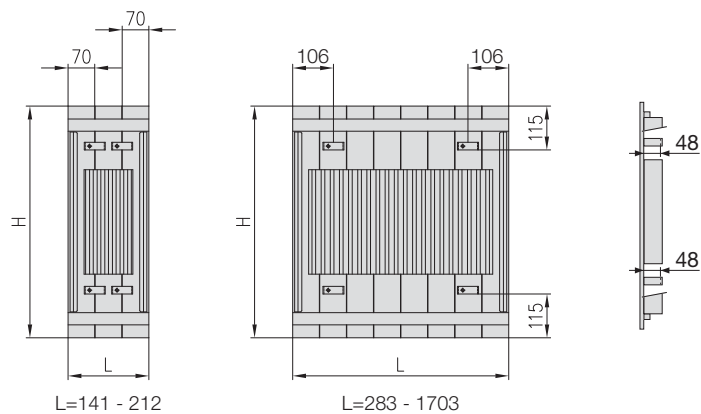
Vertical configuration (standard)

Drawing: view from the rear (dimensions in mm)

Types NV, NVV, NVV-4SR, NVLV



Type NVL

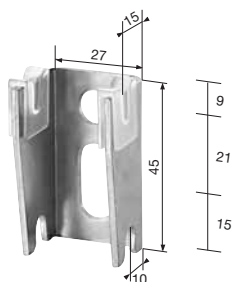


A **zehnder** nova assembly kit consisting of the required number of brackets is shipped together with the radiator.

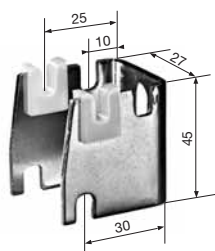
Type	Distance from front of radiator to bracket	Bracket dimensions		From front of radiator to centre of connections	Radiator depth	From back of radiator to wall	From wall to centre of connections	From front of radiator to wall
H mm	mm	Type	P mm	mm	T mm	D mm	D1 mm	D2 mm
NH	25	CVD-2	45	26	45	25	44	70
NHL	45	CVD-1	25	26	45	25	44	70
NHL	354-851	CVD-0	10	26	60	9	44	69
NHH	70	CVD-0	10	26	53	27	54	80
NHLH	70	CVD-0	10	26	53	27	54	80
NHLLH	109	CVD-0	10	66 R	92	27	54 R	119
				26 F			94 F	
NHLLHL	129	CVD-0	10	66 R	128	11	73 R	139
				26 F			113 F	
NLHLS	81	CVD-1	25	64	80	26	44	106
NLHL	109	CVD-0	10	82	108	11	44	119
NLHLLHLS	165	CVD-0	10	62/102	164	11	73/113	175
NV	25	CVD-2	45	26	45	25	44	70
NVL	59	CVD-0	10	26	58	11	44	69
NVV	70	CVD-0	10	26	53	27	54	80
NVV-4SR	109	CVD-0	10	66 R	92	27	54 R	119
				26 F			94 F	
NVLV	127	CVD-0	10	84 R	110	27	54 R	137
				26 F			111 F	

Legend: P = Bracket dimensions
R = return
F = flow

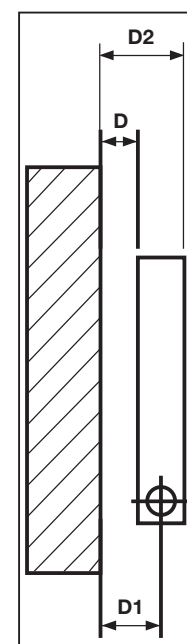
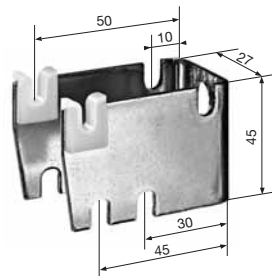
CVD-0



CVD-1



CVD-2



A special version is also available with welded on support legs. The leg assemblies must be ordered together with the radiators. The various ordering codes are listed below.

From a stability point of view, welded on feet are suitable for a free-standing Zehnder Nova assembly of up to around 600 mm. The floor characteristics and the radiator dimensions influence the stability of the construction. In case of more demanding requirements, an upper fixation must be fitted.



Fixed tubular foot

Version: 30 mm ø tube welded onto base plate 120x70x5 mm, matching the radiator's colours
Application: For all **zehnder** novas

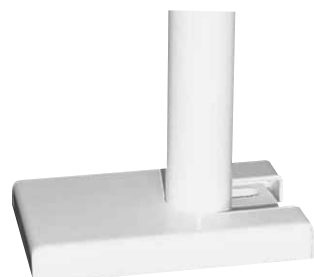
Description	Distance from floor mm	Order code
Fixed tubular foot	100	Field 13 = 23
Fixed tubular foot	120	Field 13 = 13
Fixed tubular foot	Special dimension	Field 13 = 24



Adjustable tubular foot

Version: 30 mm ø sleeve, L = 105 mm, welded onto radiator, clamp screws to the rear, 25mm ø tube, welded onto base plate 120 x 70 x 5 mm, delivered loose. Matching radiator's colours.
Application: For all **zehnder** novas

Description	Distance from floor mm	Order code
Adjustable tubular foot	100–150	Field 13 = 16
Adjustable tubular foot	150–200	Field 13 = 17
Adjustable tubular foot	200–250	Field 13 = 18
Adjustable tubular foot	Special dimensions	Field 13 = 19



Base plate cover

As a cover for the base plate, dimensions 123 x 73 x 20 mm, made of painted steel. The foot opening is recessed to the rear, allowing the option of mounting later.

Foot cover for tubular foot with base plate 120 x 70 mm

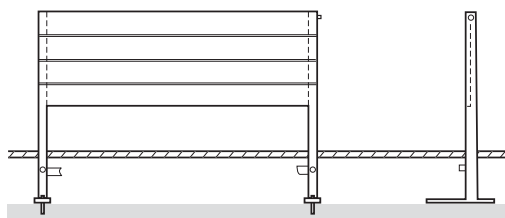
Designation	Description	Art. N° RAL 9016	Art. N° Special colour
Cover	Single unit 123 x 73 x 20	753141	753149

RAF panel radiators

This type of radiator has been developed to blend with modern building methods. All fixing, pipe and valve connections can be concealed under the raised access floor. Only the functional panel radiator and the two headers are visible. These smooth lines make it easy to clean and very attractive, particularly if it is free standing in front of glazing.

This range of radiators has been developed with the designer in mind. There are a number of variations to the basic model that can be selected, enabling the radiator to fit into the design and function of the building.

RAF panel radiators are also available for wall fixing with standard brackets, and without base plates on the extended headers.

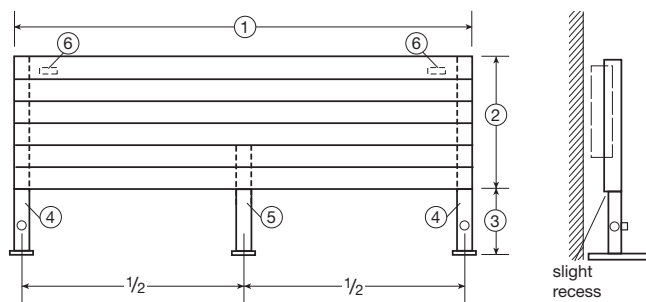


RAF (Raised Access Floor) connections

Extended header tube (30 mm diameter) with floor fixing base plate.

Recommended position of connections:
Inner or outer surface of extended header, with connections not higher than 35 mm from the base, to avoid dead-water area at base of feet. Connections higher than 35 mm above base plate available at extra cost. Connections on front or back face of extended header available at extra cost.

For radiator greater than 1500 mm long, additional (adjustable) feet will be required.
Please note: The alignment of the additional intermediate feet will differ from the extended header RAF feet.



- ① Length: 500 mm to maximum of 3000 mm
- ② Height: 70 mm to maximum of 700 mm
- ③ Height of RAF feet: Maximum of 500 mm
- ④ Extended headers: 30 mm diameter
- ⑤ Base Plate: 120 x 70 x 2 mm
- ⑥ Panels with heights of 420 mm to 700 mm need 2 additional wall brackets at the top (refer to catalogue)



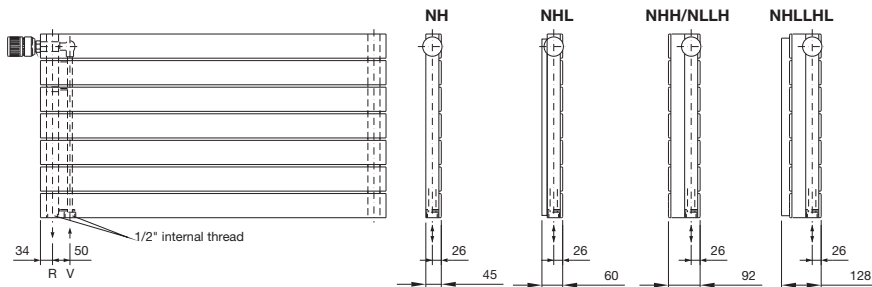
Standard manufacture includes

- Painted to RAL 9016 finish
- Integrated valve body, ready for installation
- Suitable for use with any M30 x 1.5 mm TRV head
- AV6 valve, pre-setting (Oventrop or Danfoss RA 2000)
- 2 x 1/2" connections, 50 mm distances
- 1/2" air vent connection
- 4.5 bar maximum operating pressure
- 120 °C maximum operating temperature – Oventrop

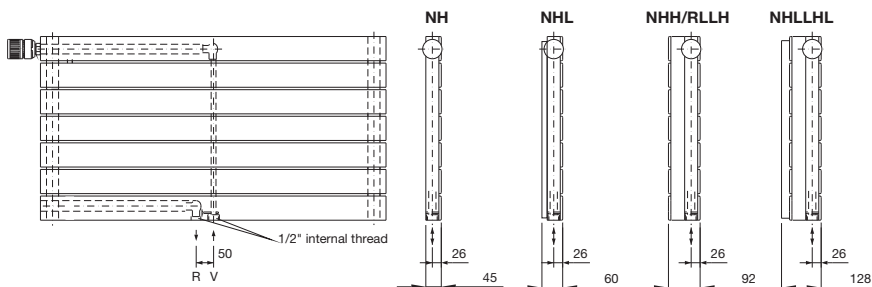
Horizontal Nova completo

Horizontal Model

Nova completo with connections at left hand side (standard production).

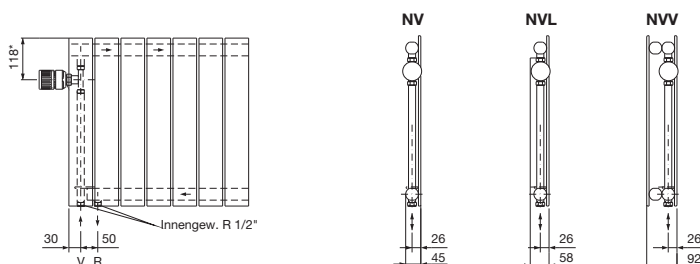


Nova completo with middle connections (light type)



Vertical Model

Nova completo with connections at left hand side (standard production).

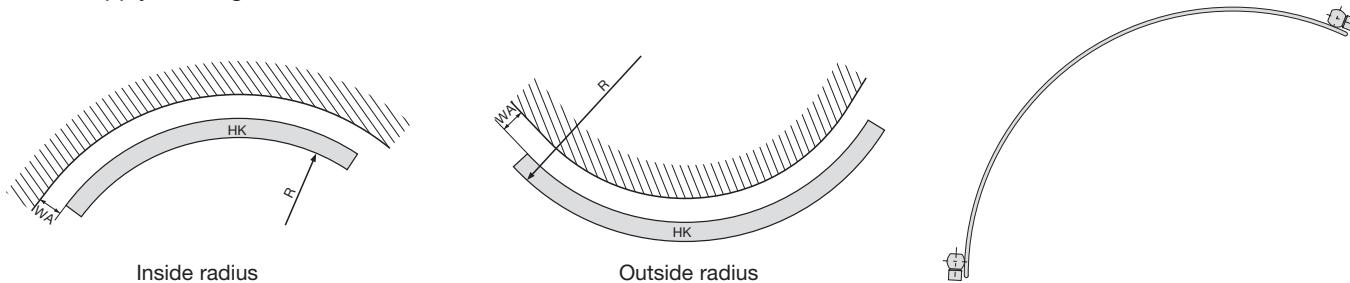


Pressure drop:

The maximum mass flow for this model is 200 l/h.

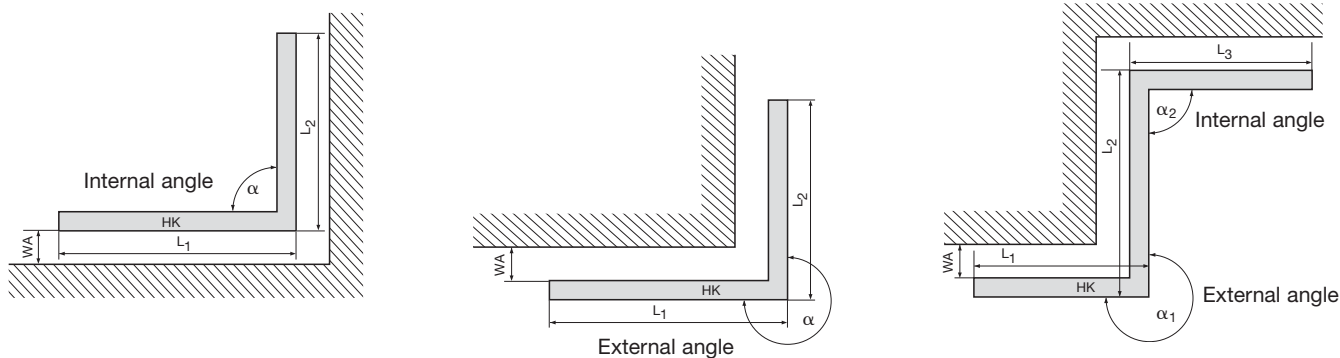
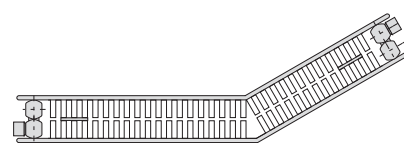
Curved configurations

Inside radius $R_{min.} = 1500$ mm,
 Outside radius $R_{min.} = 800$ mm
 (available for models NH, NHL and NLLH up to 14 tubes)
 Please supply drawing with order.



Angled configurations

Panel radiators with several angles can be supplied
 (max. 3 or 4 angles, available for all models).
 Please supply drawing with order.



Cover grilles and lateral cover plates

Cover grilles can be supplied for horizontal models NH, NHL, NHH, NHLH and NLLH.
 Lateral cover plates can be supplied for all vertical models.



Cover grilles (can extend over or before header tubes)




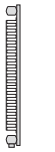
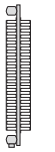


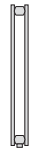
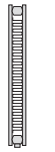


Lateral cover plates are either welded on or inserted with spring clips (dependant on model).

Important: Take transportability into account!
Special configurations on request!

- HK = Panel radiator
- WA = Distance from wall [mm]
- R = Wall radius [mm]
- $\alpha, \alpha_1, \alpha_2$ = Wall angles [°]
- L_1, L_2, L_3 = Length [mm]

Overall height = 70 mm

$\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

																														
Mod.		NH 07			NHL 07/07			NLHLS 07/07			NLHL 07/07			NLHLLHLS 07/07			NHH 07/07			NHLH 07/07			NHLLH 07/07			NHLHL 07/07				
T mm		45			45			80			108			218			53			53			92			128				
H mm		70			70			70			70			70			70			70			70			70				
H Lam. mm		-			55			55			55			55			-			55			55			55				
Exp. n		1.23			1.22			1.22			1.19			1.21			1.24			1.24			1.21			1.20				
Length	Watt																													
	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60
400	42	48	53	78	89	97	113	130	141	122	139	151	219	251	273	72	82	90	105	121	132	150	173	188	181	207	225			
500	53	60	66	97	111	121	141	162	176	152	174	189	274	314	341	90	103	112	132	151	165	188	216	234	226	259	281			
600	63	72	79	116	134	145	169	194	211	182	209	227	328	376	409	107	124	135	158	182	198	226	259	281	271	311	338			
700	74	84	92	136	156	170	197	227	247	213	244	264	383	439	477	125	144	157	184	212	231	263	302	328	316	362	394			
800	84	97	105	155	178	194	226	259	282	243	278	302	438	502	546	143	165	180	210	242	264	301	345	375	362	414	450			
900	95	109	118	175	200	218	254	291	317	274	313	340	492	565	614	161	185	202	237	272	297	338	388	422	407	466	506			
1000	105	121	131	194	223	242	282	324	352	304	348	378	547	627	682	179	206	224	263	303	330	376	431	469	452	518	563			
1100	116	133	145	213	245	267	310	356	387	334	383	415	602	690	750	197	227	247	289	333	363	414	474	516	497	570	619			
1200	126	145	158	233	267	291	338	389	423	365	417	453	656	753	818	215	247	269	316	363	396	451	518	563	542	621	675			
1300	137	157	171	252	290	315	367	421	458	395	452	491	711	816	887	233	268	292	342	393	429	489	561	609	588	673	731			
1400	147	169	184	272	312	339	395	453	493	426	487	529	766	878	955	251	288	314	368	424	462	526	604	656	633	725	788			
1500	158	181	197	291	334	363	423	486	528	456	522	566	821	941	1023	269	309	337	395	454	495	564	647	703	678	777	844			
1600	168	193	210	310	356	388	451	518	564	486	557	604	875	1004	1091	286	330	359	421	484	528	602	690	750	723	829	900			
1700	179	205	223	330	379	412	479	550	599	517	591	642	930	1067	1159	304	350	381	447	515	561	639	733	797	768	880	956			
1800	189	217	237	349	401	436	508	583	634	547	626	680	985	1129	1228	322	371	404	473	545	593	677	776	844	814	932	1013			
1900	200	229	250	369	423	460	536	615	669	578	661	718	1039	1192	1296	340	391	426	500	575	626	714	819	891	859	984	1069			
2000	210	241	263	388	446	485	564	648	704	608	696	755	1094	1255	1364	358	412	449	526	605	659	752	863	938	904	1036	1125			
2200	231	266	289	427	490	533	620	712	775	669	765	831	1203	1380	1500	394	453	494	579	666	725	827	949	1031	994	1139	1238			
2400	252	290	315	466	535	582	677	777	845	730	835	906	1313	1506	1637	430	494	539	631	726	791	902	1035	1125	1085	1243	1350			
2600	273	314	342	504	579	630	733	842	916	790	905	982	1422	1631	1773	465	536	583	684	787	857	978	1121	1219	1175	1346	1463			
2800	294	338	368	543	624	679	790	907	986	851	974	1057	1532	1757	1910	501	577	628	736	848	923	1053	1208	1313	1266	1450	1575			
3000	315	362	394	582	668	727	846	971	1057	912	1044	1133	1641	1882	2046	537	618	673	789	908	989	1128	1294	1406	1356	1554	1688			
3200	336	386	420	621	713	775	902	1036	1127	973	1113	1209	1750	2008	2182	573	659	718	842	969	1055	1203	1380	1500	1446	1657	1800			
3400	357	410	447	660	757	824	959	1101	1198	1034	1183	1284	1860	2133	2319	609	700	763	894	1029	1121	1278	1466	1594	1537	1761	1913			
3600	378	435	473	698	802	872	1015	1166	1268	1094	1252	1360				644	742	808	947	1090	1187	1354	1553	1688	1627	1864	2025			
3800	399	459	499	737	847	921	1072	1230	1339	1155	1322	1435				680	783	853	999	1150	1253	1429	1639	1781	1718	1968	2138			
4000	420	483	526	776	891	969	1128	1295	1409	1216	1392	1511				716	824	898	1052	1211	1319	1504	1725	1875	1808	2071	2250			
4200	441	507	552	815	936	1018	1184	1360	1479	1277	1461	1586				752	865	943	1105	1271	1385	1579	1811	1969	1898	2175	2363			
4400	462	531	578	854	980	1066	1241	1425	1550	1338	1531	1662				788	906	987	1157	1332	1451	1654	1898	2063	1989	2279	2475			
4600	483	555	604	892	1025	1115	1297	1490	1620	1398	1600	1737				823	948	1032	1210	1392	1517	1730	1984	2157	2079	2382	2588			
4800	504	579	631	931	1069	1163	1354	1554	1691	1459	1670	1813				859	989	1077	1262	1453	1583	1805	2070	2250	2170	2486	2700			
5000	525	604	657	970	1114	1212	1410	1619	1761	1520	1739	1888				895	1030	1122	1315	1513	1649	1880	2156	2344	2260	2589	2813			
5200	546	628	683	1009	1158	1260	1466	1684	1832	1581	1809	1964				931	1071	1167	1368	1574	1715	1955	2243	2438	2350	2693	2925			
5400	567	652	710	1048	1203	1309	1523	1749	1902	1642	1879	2039				967	1112	1212	1420	1634	1780	2030	2329	2532	2441	2796	3038			
5600	588	676	736	1086	1247	1357	1579	1813	1973	1702	1948	2115				1002	1154	1257	1473	1695	1846	2106	2415	2625	2531	2900	3150			
5800	609	700	762	1125	1292	1405	1636	1878	2043	1763	2018	2190				1038	1195	1302	1525	1756	1912	2181	2501	2719	2622	3004	3263			
6000	630	724	788	1164	1337	1454	1692	1943	2113	1824	2087	2266				1074	1236	1346	1578	1816	1978	2256	2588	2813	2712	3107	3375			

Overall height = 141 mm $\Phi_L = \Delta T \text{ 50 K EN 442 (SN 384.501-503)}$

Mod.		NH 14			NHL 14/14			NLHLS 14/14			NLHL 14/14			NLHLLHLS 14/14			NHH 14			NHLH 14/14			NHLH 14/14			NHLH 14/14															
T mm		45			45			80			108			218			53			53			92			128															
H mm		141			141			141			141			141			141			141			141			141															
H Lam. mm		-			125			125			125			125			-			125			125			125															
Exp. n		1.24			1.23			1.24			1.21			1.24			1.24			1.25			1.23			1.23															
Length	Watt			Watt			Watt			Watt			Watt			Watt			Watt			Watt			Watt			Watt													
	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56	60	50	56
400	73	84	91	136	156	170	190	219	238	209	240	261	372	428	466	121	139	152	177	204	222	252	290	315	305	351	382														
500	91	105	114	170	195	212	238	273	298	262	300	326	465	535	583	152	174	190	221	255	278	315	362	394	382	439	477														
600	109	126	137	203	234	255	285	328	357	314	360	391	558	642	700	182	209	228	265	306	333	378	435	473	458	526	573														
700	127	147	160	237	273	297	333	383	417	366	420	456	651	749	816	212	244	266	309	356	389	441	507	552	534	614	668														
800	146	168	183	271	312	339	380	437	476	418	480	522	744	856	933	242	279	304	354	407	444	504	579	631	610	702	764														
900	164	189	205	305	351	382	428	492	536	471	540	587	837	963	1049	273	314	342	398	458	500	567	652	710	687	789	859														
1000	182	209	228	339	390	424	475	547	595	523	600	652	930	1070	1166	303	349	380	442	509	555	630	724	788	763	877	955														
1100	200	230	251	373	429	467	523	601	655	575	660	717	1023	1177	1283	333	384	418	486	560	611	693	797	867	839	965	1050														
1200	218	251	274	407	468	509	570	656	715	628	720	783	1116	1284	1399	364	418	456	530	611	666	756	869	946	916	1053	1146														
1300	237	272	297	441	507	551	618	711	774	680	780	848	1209	1391	1516	394	453	494	575	662	722	819	942	1025	992	1140	1241														
1400	255	293	319	475	546	594	665	765	834	732	840	913	1302	1498	1632	424	488	532	619	713	777	882	1014	1104	1068	1228	1337														
1500	273	314	342	509	585	636	713	820	893	785	900	978	1395	1605	1749	455	523	570	663	764	833	945	1086	1183	1145	1316	1432														
1600	291	335	365	542	624	679	760	875	953	837	960	1043	1488	1713	1865	485	558	608	707	815	888	1008	1159	1261	1221	1403	1528														
1700	309	356	388	576	663	721	808	929	1012	889	1020	1109	1581	1820	1982	515	593	646	751	866	944	1071	1231	1340	1297	1491	1623														
1800	328	377	411	610	701	764	855	984	1072	941	1080	1174	1674	1927	2099	545	628	684	796	917	999	1134	1304	1419	1373	1579	1719														
1900	346	398	434	644	740	806	903	1039	1131	994	1140	1239	1767	2034	2215	576	663	722	840	968	1055	1197	1376	1498	1450	1667	1814														
2000	364	419	456	678	779	848	950	1093	1191	1046	1200	1304	1860	2141	2332	606	697	760	884	1019	1110	1260	1448	1577	1526	1754	1910														
2200	400	461	502	746	857	933	1045	1203	1310	1151	1320	1435	2046	2355	2565	667	767	836	972	1120	1221	1386	1593	1734	1679	1930	2101														
2400	437	503	548	814	935	1018	1140	1312	1429	1255	1440	1565	2232	2569	2798	727	837	912	1061	1222	1332	1512	1738	1892	1831	2105	2292														
2600	473	545	593	881	1013	1103	1235	1421	1548	1360	1560	1695	2418	2783	3031	788	907	988	1149	1324	1443	1638	1883	2050	1984	2281	2483														
2800	510	586	639	949	1091	1188	1330	1531	1667	1464	1680	1826	2604	2997	3265	848	976	1064	1238	1426	1554	1764	2028	2207	2136	2456	2673														
3000	546	628	685	1017	1169	1273	1425	1640	1786	1569	1800	1956	2790	3211	3498	909	1046	1140	1326	1528	1665	1890	2173	2365	2289	2631	2864														
3200	582	670	730	1085	1247	1358	1520	1749	1906	1674	1920	2087	2976	3425	3731	970	1116	1216	1414	1630	1776	2016	2318	2523	2442	2807	3055														
3400	619	712	776	1153	1325	1442	1615	1859	2025	1778	2040	2217	3162	3639	3964	1030	1186	1292	1503	1732	1887	2142	2462	2680	2594	2982	3246														
3600	655	754	821	1220	1403	1527	1710	1968	2144	1883	2160	2348	3348	3853	4197	1091	1255	1368	1591	1833	1998	2268	2607	2838	2747	3158	3437														
3800	692	796	867	1288	1481	1612	1805	2077	2263	1987	2279	2478	3534	4067	4430	1151	1325	1443	1680	1935	2110	2394	2752	2996	2899	3333	3628														
4000	728	838	913	1356	1559	1697	1900	2187	2382	2092	2399	2608	3720	4281	4664	1212	1395	1519	1768	2037	2221	2520	2897	3154	3052	3509	3819														
4200	764	880	958	1424	1637	1782	1995	2296	2501	2197	2519	2739	3906	4495	4897	1273	1465	1595	1856	2139	2332	2646	3042	3311	3205	3684	4010														
4400	801	922	1004	1492	1715	1867	2090	2405	2620	2301	2639	2869	4092	4709	5130	1333	1534	1671	1945	2241	2443	2772	3187	3469	3357	3859	4201														
4600	837	964	1050	1559	1793	1951	2185	2515	2739	2406	2759	3000	4278	4923	5363	1394	1604	1747	2033	2343	2554	2898	3331	3627	3510	4035	4392														
4800	874	1005	1095	1627	1871	2036	2280	2624	2858	2510	2879	3130	4464	5138	5596	1454	1674	1823	2122	2444	2665	3024	3476	3784	3662	4210	4583														
5000	910	1047	1141	1695	1949	2121	2375	2733	2977	2615	2999	3260	4650	5352	5830	1515	1744	1899	2210	2546	2776	3150	3621	3942	3815	4386	4774														
5200	946	1089	1186	1763	2026	2206	2470	2843	3097	2720	3119	3391	4836	5566	6063	1576	1813	1975	2298	2648	2887	3276	3766	4100	3968	4561	4965														
5400	983	1131	1232	1831	2104	2291	2565	2952	3216	2824	3239	3521	5022	5780	6296	1636	1883	2051	2387	2750	2998	3402	3911	4257	4120	4736	5156														
5600	1019	1173	1278	1898	2182	2376	2660	3061	3335	2929	3359	3652	5208	5994	6529	1697	1953	2127	2475	2852	3109	3528	4056	4415	4273	4912	5347														
5800	1056	1215	1323	1966	2260	2460	2755	3171	3454	3033	3479	3782	5394	6208	6762	1757	2023	2203	2564	2954	3220	3654	4201	4573	4425	5087	5538														
6000	1092	1257	1369	2034	2338	2545	2850	3280	3573	3138	3599	3913	5580	6422	6996	1818	2092	2279	2652	3056	3331	3780	4345	4730	4578	5263	5729														

Overall height = 212 mm $\Phi_L = \Delta T$ 50 K EN 442 (SN 384.501-503)

Mod.	NH 21			NHL 21/21			NLHLS 21/21			NLHL 21/21			NLHLLHLS 21/21			NHH 21			NHLH 21/21			NHLLH 21/21			NHLHL 21/21											
	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm	T mm	H mm	H Lam. mm						
Exp. n	1.25			1.25			1.25			1.23			1.26			1.23			1.27			1.25			1.25											
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60			
400	102	117	128	182	210	229	254	293	320	283	325	354	500	577	630	166	191	208	238	275	300	343	395	431	415	478	521									
500	127	146	160	228	263	286	318	366	399	354	406	442	626	722	787	208	239	260	298	344	375	429	494	538	519	597	651									
600	152	176	191	274	315	344	382	440	479	424	488	531	751	866	944	249	286	312	357	412	450	514	592	646	622	717	781									
700	178	205	223	319	368	401	445	513	559	495	569	619	876	1010	1102	291	334	364	417	481	525	600	691	753	726	836	912									
800	203	234	255	365	420	458	509	586	639	566	650	708	1001	1154	1259	332	382	415	476	550	600	686	790	861	830	956	1042									
900	229	263	287	410	473	515	572	660	719	636	731	796	1126	1299	1417	374	429	467	536	618	675	771	889	969	933	1075	1172									
1000	254	293	319	456	525	573	636	733	799	707	813	885	1251	1443	1574	415	477	519	595	687	750	857	987	1076	1037	1195	1302									
1100	279	322	351	502	578	630	700	806	879	778	894	973	1376	1587	1731	457	525	571	655	756	825	943	1086	1184	1141	1314	1433									
1200	305	351	383	547	630	687	763	879	959	848	975	1062	1501	1732	1889	498	572	623	714	825	900	1028	1185	1292	1244	1434	1563									
1300	330	380	415	593	683	745	827	953	1038	919	1057	1150	1626	1876	2046	540	620	675	774	893	975	1114	1284	1399	1348	1553	1693									
1400	356	410	447	638	736	802	890	1026	1118	990	1138	1239	1751	2020	2204	581	668	727	833	962	1050	1200	1382	1507	1452	1673	1823									
1500	381	439	479	684	788	859	954	1099	1198	1061	1219	1327	1877	2165	2361	623	716	779	893	1031	1125	1286	1481	1615	1556	1792	1954									
1600	406	468	510	730	841	916	1018	1172	1278	1131	1300	1416	2002	2309	2519	664	763	831	952	1099	1200	1371	1580	1722	1659	1912	2084									
1700	432	498	542	775	893	974	1081	1246	1358	1202	1382	1504	2127	2453	2676	706	811	883	1012	1168	1275	1457	1679	1830	1763	2031	2214									
1800	457	527	574	821	946	1031	1145	1319	1438	1273	1463	1593	2252	2597	2833	747	859	935	1071	1237	1350	1543	1777	1937	1867	2151	2344									
1900	483	556	606	866	998	1088	1208	1392	1518	1343	1544	1681	2377	2742	2991	789	906	987	1131	1306	1425	1628	1876	2045	1970	2270	2475									
2000	508	585	638	912	1051	1145	1272	1466	1598	1414	1626	1769	2502	2886	3148	830	954	1039	1190	1374	1500	1714	1975	2153	2074	2390	2605									
2200	559	644	702	1003	1156	1260	1399	1612	1757	1555	1788	1946	2752	3175	3463	913	1050	1143	1309	1512	1650	1885	2172	2368	2281	2629	2865									
2400	610	702	766	1094	1261	1375	1526	1759	1917	1697	1951	2123	3002	3463	3778	996	1145	1246	1428	1649	1800	2057	2370	2583	2489	2868	3126									
2600	660	761	829	1186	1366	1489	1654	1905	2077	1838	2113	2300	3253	3752	4093	1079	1240	1350	1547	1786	1950	2228	2567	2799	2696	3107	3386									
2800	711	819	893	1277	1471	1604	1781	2052	2237	1980	2276	2477	3503	4040	4407	1162	1336	1454	1666	1924	2100	2400	2765	3014	2904	3345	3647									
3000	762	878	957	1368	1576	1718	1908	2198	2396	2121	2438	2654	3753	4329	4722	1245	1431	1558	1785	2061	2250	2571	2962	3229	3111	3584	3907									
3200	813	937	1021	1459	1681	1833	2035	2345	2556	2262	2601	2831	4003	4618	5037	1328	1527	1662	1904	2199	2400	2742	3160	3444	3318	3823	4168									
3400	864	995	1085	1550	1786	1947	2162	2491	2716	2404	2763	3008	4253	4906	5352	1411	1622	1766	2023	2336	2550	2914	3357	3660	3526	4062	4428									
3600	914	1054	1148	1642	1891	2062	2290	2638	2876	2545	2926	3185	4504	5195	5667	1494	1717	1870	2142	2474	2700	3085	3555	3875	3733	4301	4689									
3800	965	1112	1212	1733	1997	2176	2417	2785	3035	2687	3088	3362	4754	5483	5981	1577	1813	1973	2261	2611	2850	3257	3752	4090	3941	4540	4949									
4000	1016	1171	1276	1824	2102	2291	2544	2931	3195	2828	3251	3539	5004	5772	6296	1660	1908	2077	2380	2748	3000	3428	3950	4305	4148	4779	5210									
4200	1067	1229	1340	1915	2207	2405	2671	3078	3355	2969	3414	3716	5254	6061	6611	1743	2004	2181	2499	2886	3150	3599	4147	4521	4355	5018	5470									
4400	1118	1288	1404	2006	2312	2520	2798	3224	3515	3111	3576	3893	5504	6349	6926	1826	2099	2285	2618	3023	3300	3771	4345	4736	4563	5257	5731									
4600	1168	1346	1468	2098	2417	2635	2926	3371	3674	3252	3739	4070	5755	6638	7241	1909	2195	2389	2737	3161	3450	3942	4542	4951	4770	5496	5991									
4800	1219	1405	1531	2189	2522	2749	3053	3517	3834	3394	3901	4247	*6005	*6926	*7556	1992	2290	2493	2856	3298	3600	4114	4740	5167	4978	5735	6252									
5000	1207	1463	1595	2280	2627	2864	3180	3664	3994	3535	4064	4424	*6255	*7215	*7870	2075	2385	2597	2975	3436	3750	4285	4937	5382	5185	5974	6512									
5200	1321	1522	1659	2371	2732	2978	3307	3811	4154	3676	4226	4601	*6505	*7504	*8185	2158	2481	2701	3094	3573	3900	4456	5135	5597	5392	6213	6773									
5400	1372	1580	1723	2462	2837	3093	3434	3957	4313	3818	4389	4778	*6755	*7792	*8500	2241	2576	2804	3213	3710	4050	4628	5332	5812	5600	6452	7033									
5600	1422	1639	1787	2554	2942	3207	3562	4104	4473	3959	4551	4955	*7006	*8081	*8815	2324	2672	2908	3332	3848	4200	4799	5530	6028	5807	6691	7294									
5800	1473	1697	1850	2645	3047	3322	3689	4250	4633	4101	4714	5131	*7256	*8370	*9130	2407	2767	3012	3451	3985	4350	4971	5727	6243	*6015	*6930	*7554									
6000	1524	1756	1914	2736	3152	3436	3816	4397	4793	4242	4877	5308	*7506	*8658	*9444	2490	2862	3116	3570	4123	4500	5142	5925	6458	*6222	*7169	*7815									

* weight = >125kg

Overall height = 283 mm $\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

Mod.	NH 28			NHL 28/28			NLHLS 28/28			NLHL 28/28			NLHLLHLS 28/28			NHH 28			NHLH 28/28			NHLH 28/28			NHLHL 28/28		
	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm
400	129	149	162	218	251	274	310	358	391	347	400	437	611	707	773	209	240	262	292	338	369	425	491	536	512	592	647
500	162	186	202	273	314	343	388	448	489	434	501	546	764	884	967	261	300	327	365	422	462	531	614	671	641	740	809
600	194	223	243	327	377	411	466	538	587	521	601	655	917	1061	1160	313	360	393	438	507	554	637	737	805	769	889	971
700	226	260	283	382	440	480	543	627	685	608	701	765	1070	1238	1353	365	421	458	511	591	646	743	859	939	897	1037	1132
800	258	297	324	436	503	549	621	717	783	694	801	874	1222	1415	1547	418	481	524	584	676	739	850	982	1073	1025	1185	1294
900	291	335	364	491	566	617	698	807	880	781	901	983	1375	1592	1740	470	541	589	657	760	831	956	1105	1207	1153	1333	1456
1000	323	372	405	545	629	686	776	896	978	868	1001	1092	1528	1769	1933	522	601	654	730	845	924	1062	1228	1341	1281	1481	1618
1100	355	409	445	600	692	754	854	986	1076	955	1101	1201	1681	1945	2126	574	661	720	803	929	1016	1168	1351	1475	1409	1629	1779
1200	388	446	486	654	754	823	931	1075	1174	1042	1201	1311	1834	2122	2320	626	721	785	876	1014	1108	1274	1473	1609	1537	1777	1941
1300	420	483	526	709	817	891	1009	1165	1272	1128	1302	1420	1986	2299	2513	679	781	851	949	1098	1201	1381	1596	1743	1665	1925	2103
1400	452	520	567	763	880	960	1086	1255	1369	1215	1402	1529	2139	2476	2706	731	841	916	1022	1183	1293	1487	1719	1878	1793	2073	2265
1500	485	558	607	818	943	1029	1164	1344	1467	1302	1502	1638	2292	2653	2900	783	901	982	1095	1267	1385	1593	1842	2012	1922	2221	2427
1600	517	595	648	872	1006	1097	1242	1434	1565	1389	1602	1747	2445	2830	3093	835	961	1047	1168	1352	1478	1699	1964	2146	2050	2370	2588
1700	549	632	688	927	1069	1166	1319	1523	1663	1476	1702	1857	2598	3007	3286	887	1021	1113	1241	1436	1570	1805	2087	2280	2178	2518	2750
1800	581	669	729	981	1132	1234	1397	1613	1761	1562	1802	1966	2750	3183	3480	940	1081	1178	1314	1521	1662	1912	2210	2414	2306	2666	2912
1900	614	706	769	1036	1194	1303	1474	1703	1859	1649	1902	2075	2903	3360	3673	992	1141	1243	1387	1605	1755	2018	2333	2548	2434	2814	3074
2000	646	743	810	1090	1257	1371	1552	1792	1956	1736	2002	2184	3056	3537	3866	1044	1202	1309	1460	1690	1847	2124	2456	2682	2562	2962	3235
2200	711	818	891	1199	1383	1509	1707	1971	2152	1910	2203	2403	3362	3891	4253	1148	1322	1440	1606	1859	2032	2336	2701	2951	2818	3258	3559
2400	775	892	972	1308	1509	1646	1862	2151	2348	2083	2403	2621	3667	4244	4640	1253	1442	1571	1752	2028	2217	2549	2947	3219	3074	3554	3883
2600	840	967	1053	1417	1634	1783	2018	2330	2543	2257	2603	2840	3973	4598	5026	1357	1562	1701	1898	2197	2401	2761	3192	3487	3331	3851	4206
2800	904	1041	1134	1526	1760	1920	2173	2509	2739	2430	2803	3058	4278	4952	5413	1462	1682	1832	2044	2366	2586	2974	3438	3755	3587	4147	4530
3000	969	1115	1215	1635	1886	2057	2328	2688	2935	2604	3004	3276	4584	5306	5799	1566	1802	1963	2190	2535	2771	3186	3683	4023	3843	4443	4853
3200	1034	1190	1296	1744	2012	2194	2483	2868	3130	2778	3204	3495	4890	5659	6186	1670	1922	2094	2336	2704	2955	3398	3929	4292	4099	4739	5177
3400	1098	1264	1377	1853	2137	2332	2638	3047	3326	2951	3404	3713	5195	6013	6573	1775	2043	2225	2482	2873	3140	3611	4174	4560	4355	5035	5500
3600	1163	1338	1458	1962	2263	2469	2794	3226	3521	3125	3604	3932	*5501	*6367	*6959	1879	2163	2356	2628	3042	3325	3823	4420	4828	4612	5332	5824
3800	1227	1413	1539	2071	2389	2606	2949	3405	3717	3298	3805	4150	*5806	*6720	*7346	1984	2283	2487	2774	3211	3510	4036	4666	5096	4868	5628	6147
4000	1292	1487	1620	2180	2515	2743	3104	3585	3913	3472	4005	4369	*6112	*7074	*7733	2088	2403	2618	2920	3380	3694	4248	4911	5365	5124	5924	6471
4200	1357	1561	1701	2289	2640	2880	3259	3764	4108	3646	4205	4587	*6418	*7428	*8119	2192	2523	2749	3066	3549	3879	4460	5157	5633	5380	6220	6794
4400	1421	1636	1782	2398	2766	3017	3414	3943	4304	3819	4405	4806	*6723	*7782	*8506	2297	2643	2879	3212	3718	4064	4673	5402	5901	*5636	*6516	*7118
4600	1486	1710	1863	2507	2892	3154	3570	4122	4500	3993	4606	5024	*7029	*8135	*8893	2401	2763	3010	3358	3887	4248	4885	5648	6169	*5893	*6812	*7441
4800	1550	1784	1944	2616	3018	3292	3725	4301	4695	4166	4806	5242	*7334	*8489	*9279	2506	2884	3141	3504	4056	4433	5098	5893	6438	*6149	*7109	*7765
5000	1615	1859	2025	2725	3143	3429	3880	4481	4891	4340	5006	5461	*7640	*8843	*9666	2610	3004	3272	3650	4225	4618	5310	6139	6706	*6405	*7405	*8089
5200	1680	1933	2106	2834	3269	3566	4035	4660	5087	4514	5206	5679	*7946	*9196	*10052	2714	3124	3403	3796	4394	4803	*5522	*6385	*6974	*6661	*7701	*8412
5400	1744	2007	2187	2943	3395	3703	4190	4839	5282	4687	5407	5898	*8251	*9550	*10439	2819	3244	3534	3942	4563	4987	*5735	*6630	*7242	*6917	*7997	*8736
5600	1809	2082	2268	3052	3520	3840	4346	5018	5478	4861	5607	6116	*8557	*9904	*10826	2923	3364	3665	4088	4732	5172	*5947	*6876	*7510	*7174	*8293	*9059
5800	1873	2156	2349	3161	3646	3977	4501	5198	5673	5034	5807	6335	*8862	*10258	*11212	3028	3484	3796	4234	4901	5357	*6160	*7121	*7779	*7430	*8590	*9383
6000	1938	2230	2430	3270	3772	4114	4656	5377	5869	5208	6007	6553	*9168	*10611	*11599	3132	3605	3927	*4380	*5070	*5541	*6372	*7367	*8047	*7686	*8886	*9706

* weight = >125kg

Overall height = 354 mm $\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

Mod.	NH 35			NHL 35/35			NLHLS 35/35			NLHL 35/35			NLHLLHS 35/35			NHH 35			NHLH 35/35			NHLLH 35/35			NHLHL 35/35		
	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm	Exp. n	T mm	H mm	H Lam. mm
400	156	180	196	284	328	358	360	417	455	404	467	510	709	822	900	250	289	315	340	394	431	500	579	634	602	697	763
500	196	225	245	355	410	447	450	521	569	505	583	637	886	1028	1125	313	361	394	425	492	539	625	724	792	752	871	953
600	235	270	294	426	492	537	540	625	683	605	700	765	1063	1233	1350	376	433	473	510	591	646	750	869	951	902	1046	1144
700	274	315	343	497	574	626	630	729	797	706	817	892	1240	1439	1575	438	505	551	595	689	754	875	1014	1109	1053	1220	1334
800	313	360	392	568	656	716	720	833	911	807	933	1019	1418	1644	1800	501	578	630	680	788	862	1000	1159	1267	1203	1394	1525
900	352	405	441	639	738	805	810	938	1025	908	1050	1147	1595	1850	2025	563	650	709	765	886	970	1125	1304	1426	1354	1568	1716
1000	391	450	490	710	820	895	900	1042	1139	1009	1167	1274	1772	2056	2250	626	722	788	850	985	1077	1250	1448	1584	1504	1743	1906
1100	430	495	539	781	902	984	990	1146	1253	1110	1283	1402	1949	2261	2475	689	794	866	935	1083	1185	1375	1593	1743	1654	1917	2097
1200	469	540	588	852	984	1074	1080	1250	1366	1211	1400	1529	2126	2467	2700	751	867	945	1020	1182	1293	1500	1738	1901	1805	2091	2288
1300	508	585	637	923	1066	1163	1170	1354	1480	1312	1516	1656	2304	2672	2925	814	939	1024	1105	1280	1401	1625	1883	2060	1955	2266	2478
1400	547	630	686	994	1148	1253	1260	1458	1594	1413	1633	1784	2481	2878	3150	876	1011	1103	1190	1379	1508	1750	2028	2218	2106	2440	2669
1500	587	675	735	1065	1230	1342	1350	1563	1708	1514	1750	1911	2658	3083	3375	939	1083	1182	1275	1477	1616	1875	2173	2376	2256	2614	2859
1600	626	720	784	1136	1312	1432	1440	1667	1822	1614	1866	2039	2835	3289	3600	1002	1155	1260	1360	1576	1724	2000	2317	2535	2406	2788	3050
1700	665	765	833	1207	1394	1521	1530	1771	1936	1715	1983	2166	3012	3495	3825	1064	1228	1339	1445	1674	1831	2125	2462	2693	2557	2963	3241
1800	704	810	882	1278	1476	1611	1620	1875	2050	1816	2100	2294	3190	3700	4050	1127	1300	1418	1530	1773	1939	2250	2607	2852	2707	3137	3431
1900	743	855	931	1349	1558	1700	1710	1979	2163	1917	2216	2421	3367	3906	4275	1189	1372	1497	1615	1871	2047	2375	2752	3010	2858	3311	3622
2000	782	900	980	1420	1640	1790	1800	2083	2277	2018	2333	2548	3544	4111	4500	1252	1444	1575	1700	1970	2155	2500	2897	3169	3008	3485	3813
2200	860	990	1078	1562	1804	1969	1980	2292	2505	2220	2566	2803	3898	4522	4950	1377	1589	1733	1870	2167	2370	2750	3187	3486	3309	3834	4194
2400	938	1080	1176	1704	1968	2148	2160	2500	2733	2422	2800	3058	4253	4933	5400	1502	1733	1890	2040	2364	2586	3000	3476	3802	3610	4183	4575
2600	1017	1170	1274	1846	2132	2327	2340	2708	2960	2623	3033	3313	4607	5345	5850	1628	1877	2048	2210	2561	2801	3250	3766	4119	3910	4531	4956
2800	1095	1260	1373	1988	2296	2506	2520	2917	3188	2825	3266	3568	*4962	*5756	*6300	1753	2022	2205	2380	2758	3017	3500	4056	4436	4211	4880	5338
3000	1173	1350	1471	2130	2460	2685	2700	3125	3416	3027	3500	3823	*5316	*6167	*6750	1878	2166	2363	2550	2955	3232	3750	4345	4753	4512	5228	5719
3200	1251	1440	1569	2272	2624	2864	2880	3333	3644	3229	3733	4077	*5670	*6578	*7200	2003	2311	2521	2720	3152	3448	4000	4635	5070	4813	5577	6100
3400	1329	1530	1667	2414	2788	3043	3060	3542	3871	3431	3966	4332	*6025	*6989	*7650	2128	2455	2678	2890	3349	3663	4250	4925	5387	*5114	*5925	*6481
3600	1408	1620	1765	2556	2952	3222	3240	3750	4099	3632	4199	4587	*6379	*7400	*8100	2254	2600	2836	3060	3546	3878	4500	5214	5704	*5414	*6274	*6863
3800	1486	1710	1863	2698	3116	3401	3420	3958	4327	3834	4433	4842	*6734	*7811	*8550	2379	2744	2993	3230	3743	4094	4750	5504	6020	*5715	*6622	*7244
4000	1564	1800	1961	2840	3280	3580	3600	4167	4555	4036	4666	5097	*7088	*8222	*9000	2504	2888	3151	3400	3940	4309	5000	5794	6337	*6016	*6971	*7625
4200	1642	1890	2059	2982	3444	3759	3780	4375	4782	4238	4899	5352	*7442	*8634	*9450	2629	3033	3308	3570	4137	4525	*5250	*6083	*6654	*6317	*7319	*8006
4400	1720	1980	2157	3124	3608	3938	3960	4583	5010	4440	5133	5607	*7797	*9045	*9900	2754	3177	3466	3740	4334	4740	*5500	*6373	*6971	*6618	*7668	*8388
4600	1799	2070	2255	3266	3772	4117	4140	4792	5238	4641	5366	5861	*8151	*9456	*10350	2880	3322	3623	*3910	*4531	*4956	*5750	*6663	*7288	*6918	*8017	*8769
4800	1877	2160	2353	3408	3936	4296	4320	5000	5465	4843	5599	6116	*8506	*9867	*10800	3005	3466	3781	*4080	*4728	*5171	*6000	*6952	*7605	*7219	*8365	*9150
5000	1955	2250	2451	3550	4100	4475	4500	5208	5693	*5045	*5833	*6371	*8860	*10278	*11250	3130	3610	3938	*4250	*4925	*5387	*6250	*7242	*7922	*7520	*8714	*9531
5200	2033	2340	2549	3692	4264	4654	4680	5417	5921	*5247	*6066	*6626	*9214	*10689	*11700	3255	3755	4096	*4420	*5122	*5602	*6500	*7532	*8239	*7821	*9062	*9913
5400	2111	2430	2647	3834	4428	4833	4860	5625	6149	*5449	*6299	*6881	*9569	*11100	*12150	3380	3899	4253	*4590	*5319	*5818	*6750	*7821	*8555	*8122	*9411	*10294
5600	2190	2520	2745	3976	4591	5012	*5040	*5833	*6376	*5650	*6532	*7136	*9923	*11511	*12600	3506	4044	4411	*4760	*5516	*6033	*7000	*8111	*8872	*8422	*9759	*10675
5800	2268	2610	2843	4118	4755	5191	*5220	*6042	*6604	*5852	*6766	*7390	*10278	*11922	*13050	3631	4188	4568	*4930	*5713	*6249	*7250	*8401	*9189	*8723	*10108	*11056
6000	2346	2700	2941	4260	4919	5370	*5400	*6250	*6832	*6054	*6999	*7645	*10632	*12334	*13500	3756	4333	4726	*5100	*5910	*6464	*7500	*8690	*9506	*9024	*10456	*11438

* weight = >125kg

Overall height = 425 mm $\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

Mod.	NH 42	NHL 42/42	NLHLS 42/42	NLHL 42/42	NLHLLHLS 42/42	NHH 42	NHLH 42/42	NHLH 42/42	NHLH 42/42	NHLH 42/42																										
T mm	45	60	80	108	164	53	53	92	128																											
H mm	425	425	425	425	425	425	425	425	425																											
H Lam. mm	-	400	400	400	400	-	400	400	400																											
M kg	12.08	21.1	26.8	30.3	53.6	22.29	33.2	37.22	44.27																											
P 50K	459	814	1010	1134	1988	729	962	1424	1711																											
Exp. n	1.24	1.27	1.3	1.28	1.32	1.26	1.32	1.31	1.31																											
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60						
400	184	211	230	326	376	410	404	468	512	454	524	573	795	924	1012	292	336	367	385	447	490	570	661	723	684	794	869									
500	230	264	288	407	470	513	505	585	640	567	656	716	994	1154	1264	365	420	459	481	559	612	712	826	904	856	992	1086									
600	275	317	345	488	564	616	606	702	768	680	787	859	1193	1385	1517	437	505	550	577	670	734	854	991	1085	1027	1191	1304									
700	321	370	403	570	658	718	707	819	896	794	918	1002	1392	1616	1770	510	589	642	673	782	857	997	1156	1266	1198	1389	1521									
800	367	423	460	651	752	821	808	936	1024	907	1049	1146	1590	1847	2023	583	673	734	770	894	979	1139	1322	1447	1369	1588	1738									
900	413	475	518	733	846	923	909	1053	1152	1021	1180	1289	1789	2078	2276	656	757	826	866	1006	1101	1282	1487	1627	1540	1786	1955									
1000	459	528	575	814	940	1026	1010	1170	1280	1134	1311	1432	1988	2309	2529	729	841	917	962	1117	1224	1424	1652	1808	1711	1985	2173									
1100	505	581	633	895	1034	1129	1111	1287	1408	1247	1442	1575	2187	2540	2782	802	925	1009	1058	1229	1346	1566	1817	1989	1882	2183	2390									
1200	551	634	691	977	1128	1231	1212	1404	1536	1361	1573	1718	2386	2771	3035	875	1009	1101	1154	1341	1469	1709	1982	2170	2053	2382	2607									
1300	597	687	748	1058	1222	1334	1313	1521	1664	1474	1704	1862	2584	3001	3288	948	1093	1192	1251	1452	1591	1851	2147	2351	2224	2580	2824									
1400	643	740	806	1140	1316	1437	1414	1638	1792	1588	1835	2005	2783	3232	3540	1021	1177	1284	1347	1564	1713	1994	2313	2531	2395	2779	3042									
1500	689	792	863	1221	1410	1539	1515	1755	1920	1701	1967	2148	2982	3463	3793	1094	1261	1376	1443	1676	1836	2136	2478	2712	2567	2977	3259									
1600	734	845	921	1302	1504	1642	1616	1873	2048	1814	2098	2291	3181	3694	4046	1166	1345	1468	1539	1788	1958	2278	2643	2893	2738	3176	3476									
1700	780	898	978	1384	1598	1744	1717	1990	2176	1928	2229	2435	3380	3925	4299	1239	1430	1559	1635	1899	2080	2421	2808	3074	2909	3374	3693									
1800	826	951	1036	1465	1692	1847	1818	2107	2304	2041	2360	2578	3578	4156	4552	1312	1514	1651	1732	2011	2203	2563	2973	3255	3080	3573	3911									
1900	872	1004	1093	1547	1786	1950	1919	2224	2432	2155	2491	2721	3777	4387	4805	1385	1598	1743	1828	2123	2325	2706	3139	3436	3251	3771	4128									
2000	918	1057	1151	1628	1880	2052	2020	2341	2560	2268	2622	2864	3976	4618	5058	1458	1682	1835	1924	2234	2448	2848	3304	3616	3422	3970	4345									
2200	1010	1162	1266	1791	2068	2257	2222	2575	2816	2495	2884	3151	4374	5079	5564	1604	1850	2018	2116	2458	2692	3133	3634	3978	3764	4367	4780									
2400	1102	1268	1381	1954	2256	2463	2424	2809	3072	2722	3146	3437	*4771	*5541	*6069	1750	2018	2201	2309	2681	2937	3418	3965	4340	4106	4764	5214									
2600	1193	1373	1496	2116	2444	2668	2626	3043	3328	2948	3409	3723	*5169	*6003	*6575	1895	2186	2385	2501	2905	3182	3702	4295	4701	4449	5161	5649									
2800	1285	1479	1611	2279	2632	2873	2828	3277	3584	3175	3671	4010	*5566	*6465	*7081	2041	2355	2568	2694	3128	3427	3987	4625	5063	4791	5558	6083									
3000	1377	1585	1726	2442	2820	3078	3030	3511	3840	3402	3933	4296	*5964	*6926	*7587	2187	2523	2752	2886	3352	3671	4272	4956	5424	*5133	*5955	*6518									
3200	1469	1690	1841	2605	3008	3283	3232	3745	4096	3629	4195	4583	*6362	*7388	*8093	2333	2691	2935	3078	3575	3916	4557	5286	5786	*5475	*6351	*6952									
3400	1561	1796	1956	2768	3196	3489	3434	3979	4352	3856	4457	4869	*6759	*7850	*8598	2479	2859	3119	3271	3799	4161	*4842	*5616	*6148	*5817	*6748	*7387									
3600	1652	1902	2072	2930	3384	3694	3636	4213	4608	4082	4720	5155	*7157	*8312	*9104	2624	3027	3302	3463	4022	4406	*5126	*5947	*6509	*6160	*7145	*7821									
3800	1744	2007	2187	3093	3572	3899	3838	4447	4865	4309	4982	5442	*7554	*8773	*9610	2770	3195	3486	*3656	*4245	*4650	*5411	*6277	*6871	*6502	*7542	*8256									
4000	1836	2113	2302	3256	3760	4104	4040	4681	5121	4536	5244	5728	*7952	*9235	*10116	2916	3364	3669	*3848	*4469	*4895	*5696	*6608	*7233	*6844	*7939	*8690									
4200	1928	2219	2417	3419	3948	4310	4242	4915	5377	*4763	*5506	*6015	*8350	*9697	*10621	3062	3532	3853	*4040	*4692	*5140	*5981	*6938	*7594	*7186	*8336	*9125									
4400	2020	2324	2532	3582	4136	4515	4444	5149	5633	*4990	*5769	*6301	*8747	*10159	*11127	3208	3700	4036	*4233	*4916	*5385	*6266	*7268	*7956	*7528	*8733	*9559									
4600	2111	2430	2647	3744	4324	4720	4646	5383	5889	*5216	*6031	*6588	*9145	*10620	*11633	3353	3868	4219	*4425	*5139	*5629	*6550	*7599	*8318	*7871	*9130	*9994									
4800	2203	2536	2762	3907	4512	4925	*4848	*5618	*6145	*5443	*6293	*6874	*9542	*11082	*12139	3499	4036	4403	*4618	*5363	*5874	*6835	*7929	*8679	*8213	*9527	*10428									
5000	2295	2641	2877	4070	4700	5130	*5050	*5852	*6401	*5670	*6555	*7160	*9940	*11544	*12645	3645	4204	4586	*4810	*5586	*6119	*7120	*8260	*9041	*8555	*9924	*10863									
5200	2387	2747	2992	4233	4888	5336	*5252	*6086	*6657	*5897	*6817	*7447	*10338	*12006	*13150	3791	4373	4770	*5002	*5810	*6364	*7405	*8590	*9402	*8897	*10321	*11297									
5400	2479	2853	3107	4396	5076	5541	*5454	*6320	*6913	*6124	*7080	*7733	*10735	*12467	*13656	3937	4541	4953	*5195	*6033	*6608	*7690	*8920	*9764	*9239	*10718	*11732									
5600	2570	2958	3222	4558	5264	5746	*5656	*6554	*7169	*6350	*7342	*8020	*11133	*12929	*14162	4082	4709	5137	*5387	*6256	*6853	*7974	*9251	*10126	*9582	*11115	*12166									
5800	2662	3064	3338	4721	5452	5951	*5858	*6788	*7425	*6577	*7604	*8306	*11530	*13391	*14668	*4228	*4877	*5320	*5580	*6480	*7098	*8259	*9581	*10487	*9924	*11512	*12601									
6000	2754	3170	3453	*4884	*5640	*6157	*6060	*7022	*7681	*6804	*7866	*8592	*11928	*13853	*15174	*4374	*5045	*5504	*5772	*6703	*7343	*8544	*9911	*10849	*10266	*11909	*13036									

* weight = >125kg

Overall height = 496 mm $\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

Mod.	NH 49			NHL 49/49			NLHLS 49/49			NLHL 49/49			NLHLLHLS 49/49			NHH 49			NHLH 49/49			NHLLH 49/49			NHLHL 49/49				
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K
400	211	243	264	367	424	463	444	514	563	498	577	631	872	1014	1111	333	384	420	429	499	546	636	739	811	764	888	974		
500	264	303	330	459	530	579	555	643	703	623	721	788	1090	1267	1389	416	480	524	536	623	683	795	924	1013	955	1110	1217		
600	316	364	396	550	636	695	666	772	844	748	865	946	1308	1521	1667	499	576	629	643	748	820	954	1109	1216	1146	1332	1460		
700	369	425	462	642	742	811	777	900	985	872	1010	1103	1526	1774	1945	582	673	734	750	872	956	1113	1294	1418	1337	1555	1704		
800	422	485	529	734	848	926	888	1029	1126	997	1154	1261	1744	2028	2223	666	769	839	858	997	1093	1272	1479	1621	1528	1777	1947		
900	474	546	595	825	954	1042	999	1158	1266	1121	1298	1419	1962	2281	2500	749	865	944	965	1122	1230	1431	1664	1824	1719	1999	2191		
1000	527	607	661	917	1060	1158	1110	1286	1407	1246	1442	1576	2180	2535	2778	832	961	1049	1072	1246	1366	1590	1849	2026	1910	2221	2434		
1100	580	667	727	1009	1166	1274	1221	1415	1548	1371	1586	1734	2398	2788	3056	915	1057	1154	1179	1371	1503	1749	2034	2229	2101	2443	2678		
1200	632	728	793	1100	1272	1390	1332	1543	1688	1495	1731	1892	2616	3042	3334	998	1153	1259	1286	1496	1639	1908	2218	2432	2292	2665	2921		
1300	685	788	859	1192	1378	1505	1443	1672	1829	1620	1875	2049	2834	3295	3612	1082	1249	1363	1394	1620	1776	2067	2403	2634	2483	2887	3164		
1400	738	849	925	1284	1484	1621	1554	1801	1970	1744	2019	2207	3052	3548	3890	1165	1345	1468	1501	1745	1913	2226	2588	2837	2674	3109	3408		
1500	791	910	991	1376	1590	1737	1665	1929	2110	1869	2163	2365	3270	3802	4167	1248	1441	1573	1608	1870	2049	2385	2773	3039	2865	3331	3651		
1600	843	970	1057	1467	1696	1853	1776	2058	2251	1994	2307	2522	3488	4055	4445	1331	1537	1678	1715	1994	2186	2544	2958	3242	3056	3553	3895		
1700	896	1031	1123	1559	1802	1969	1887	2187	2392	2118	2452	2680	3706	4309	4723	1414	1633	1783	1822	2119	2322	2703	3143	3445	3247	3775	4138		
1800	949	1092	1189	1651	1908	2084	1998	2315	2532	2243	2596	2837	3924	4562	5001	1498	1729	1888	1930	2244	2459	2862	3328	3647	3438	3997	4381		
1900	1001	1152	1255	1742	2014	2200	2109	2444	2673	2367	2740	2995	4142	4816	5279	1581	1826	1993	2037	2368	2596	3021	3512	3850	3629	4219	4625		
2000	1054	1213	1321	1834	2120	2316	2220	2572	2814	2492	2884	3153	*4360	*5069	*5556	1664	1922	2098	2144	2493	2732	3180	3697	4053	3820	4441	4868		
2200	1159	1334	1454	2017	2332	2548	2442	2830	3095	2741	3173	3468	*4796	*5576	*6112	1830	2114	2307	2358	2742	3006	3498	4067	4458	4202	4886	5355		
2400	1265	1456	1586	2201	2544	2779	2664	3087	3377	2990	3461	3783	*5232	*6083	*6668	1997	2306	2517	2573	2991	3279	3816	4437	4863	4584	5330	5842		
2600	1370	1577	1718	2384	2756	3011	2886	3344	3658	3240	3750	4099	*5668	*6590	*7223	2163	2498	2727	2787	3241	3552	4134	4807	5268	*4966	*5774	*6329		
2800	1476	1698	1850	2568	2968	3242	3108	3601	3939	3489	4038	4414	*6104	*7097	*7779	2330	2690	2937	3002	3490	3825	4452	5176	5674	*5348	*6218	*6816		
3000	1581	1820	1982	2751	3180	3474	3330	3859	4221	3738	4326	4729	*6540	*7604	*8335	2496	2882	3146	3216	3739	4099	*4770	*5546	*6079	*5730	*6662	*7302		
3200	1686	1941	2114	2934	3392	3706	3552	4116	4502	3987	4615	5044	*6976	*8111	*8890	2662	3075	3356	3430	3988	4372	*5088	*5916	*6484	*6112	*7106	*7789		
3400	1792	2062	2246	3118	3605	3937	3774	4373	4783	4236	4903	5360	*7412	*8618	*9446	2829	3267	3566	*3645	*4238	*4645	*5406	*6285	*6889	*6494	*7550	*8276		
3600	1897	2183	2378	3301	3817	4169	3996	4630	5065	*4486	*5192	*5675	*7848	*9125	*10002	2995	3459	3776	*3859	*4487	*4918	*5724	*6655	*7295	*6876	*7995	*8763		
3800	2003	2305	2511	3485	4029	4401	4218	4888	5346	*4735	*5480	*5990	*8284	*9632	*10557	3162	3651	3985	*4074	*4736	*5191	*6042	*7025	*7700	*7258	*8439	*9250		
4000	2108	2426	2643	3668	4241	4632	*4440	*5145	*5628	*4984	*5769	*6306	*8720	*10139	*11113	3328	3843	4195	*4288	*4986	*5465	*6360	*7395	*8105	*7640	*8883	*9737		
4200	2213	2547	2775	3851	4453	4864	*4662	*5402	*5909	*5233	*6057	*6621	*9156	*10645	*11669	3494	4035	4405	*4502	*5235	*5738	*6678	*7764	*8511	*8022	*9327	*10223		
4400	2319	2669	2907	4035	4665	5095	*4884	*5659	*6190	*5482	*6345	*6936	*9592	*11152	*12224	3661	4227	4615	*4717	*5484	*6011	*6996	*8134	*8916	*8404	*9771	*10710		
4600	2424	2790	3039	4218	4877	5327	*5106	*5916	*6472	*5732	*6634	*7251	*10028	*11659	*12780	3827	4420	4824	*4931	*5733	*6284	*7314	*8504	*9321	*8786	*10215	*11197		
4800	2530	2911	3171	4402	5089	5559	*5328	*6174	*6753	*5981	*6922	*7567	*10464	*12166	*13335	3994	4612	5034	*5146	*5983	*6558	*7632	*8874	*9726	*9168	*10659	*11684		
5000	2635	3033	3303	4585	5301	5790	*5550	*6431	*7034	*6230	*7211	*7882	*10900	*12673	*13891	*4160	*4804	*5244	*5360	*6232	*6831	*7950	*9243	*10132	*9550	*11104	*12171		
5200	2740	3154	3436	*4768	*5513	*6022	*5772	*6688	*7316	*6479	*7499	*8197	*11336	*13180	*14447	*4326	*4996	*5454	*5574	*6481	*7104	*8268	*9613	*10537	*9932	*11548	*12657		
5400	2846	3275	3568	*4952	*5725	*6253	*5994	*6945	*7597	*6728	*7788	*8512	*11772	*13687	*15002	*4493	*5188	*5663	*5789	*6731	*7377	*8586	*9983	*10942	*10314	*11992	*13144		
5600	2951	3396	3700	*5135	*5937	*6485	*6216	*7203	*7879	*6978	*8076	*8828	*12208	*14194	*15558	*4659	*5380	*5873	*6003	*6980	*7651	*8904	*10352	*11347	*10696	*12436	*13631		
5800	3057	3518	3832	*5319	*6149	*6717	*6438	*7460	*8160	*7227	*8364	*9143	*12644	*14701	*16114	*4826	*5573	*6083	*6218	*7229	*7924	*9222	*10722	*11753	*11078	*12880	*14118		
6000	3162	3639	3964	*5502	*6361	*6948	*6660	*7717	*8441	*7476	*8653	*9458	*13080	*15208	*16669	*4992	*5765	*6293	*6432	*7478	*8197	*9540	*11092	*12158	*11460	*13324	*14605		

* weight = >125kg

Overall height = 567 mm $\Phi_L = \Delta T \ 50 \ K \ EN \ 442 \ (SN \ 384.501-503)$

Mod.	NH 56			NHL 56/56			NLHLS 56/56			NLHL 56/56			NLHLLHLS 56/56			NHH 56			NHLH 56/56			NHLH 56/56			NHLHL 56/56		
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n																					
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
400	238	275	299	410	474	518	480	556	609	538	623	681	940	1095	1201	374	432	472	474	552	605	700	815	894	844	983	1079
500	298	343	374	512	593	648	600	695	761	673	778	851	1176	1368	1501	468	540	590	593	690	756	875	1018	1117	1055	1229	1349
600	358	412	449	614	711	777	719	835	913	807	934	1021	1411	1642	1801	562	649	708	711	828	908	1050	1222	1341	1265	1475	1619
700	417	481	524	717	830	907	839	974	1066	942	1090	1191	1646	1916	2101	655	757	826	830	966	1059	1225	1426	1564	1476	1720	1888
800	477	549	599	819	948	1036	959	1113	1218	1076	1245	1361	1881	2189	2401	749	865	944	948	1103	1210	1400	1630	1787	1687	1966	2158
900	536	618	674	922	1067	1166	1079	1252	1370	1211	1401	1531	2116	2463	2701	842	973	1062	1067	1241	1362	1575	1833	2011	1898	2212	2428
1000	596	687	749	1024	1185	1296	1199	1391	1522	1345	1557	1702	2351	2737	3002	936	1081	1180	1185	1379	1513	1750	2037	2234	2109	2458	2698
1100	656	755	823	1126	1304	1425	1319	1530	1675	1480	1712	1872	2586	3010	3302	1030	1189	1298	1304	1517	1664	1925	2241	2458	2320	2703	2967
1200	715	824	898	1229	1422	1555	1439	1669	1827	1614	1868	2042	2821	3284	3602	1123	1297	1416	1422	1655	1816	2100	2444	2681	2531	2949	3237
1300	775	893	973	1331	1541	1684	1559	1808	1979	1749	2024	2212	3056	3558	3902	1217	1405	1534	1541	1793	1967	2275	2648	2905	2742	3195	3507
1400	834	961	1048	1434	1659	1814	1679	1947	2131	1883	2179	2382	3291	3831	4202	1310	1513	1652	1659	1931	2118	2450	2852	3128	2953	3441	3777
1500	894	1030	1123	1536	1778	1943	1799	2086	2284	2018	2335	2552	3527	4105	4502	1404	1621	1770	1778	2069	2269	2625	3055	3351	3164	3686	4046
1600	954	1099	1198	1638	1896	2073	1918	2225	2436	2152	2491	2723	3762	4378	4803	1498	1729	1888	1896	2207	2421	2800	3259	3575	3374	3932	4316
1700	1013	1167	1273	1741	2015	2202	2038	2365	2588	2287	2646	2893	3997	4652	5103	1591	1838	2006	2015	2345	2572	2975	3463	3798	3585	4178	4586
1800	1073	1236	1347	1843	2133	2332	2158	2504	2740	2421	2802	3063	*4232	*4928	*5403	1685	1946	2124	2133	2483	2723	3150	3667	4022	3796	4424	4856
1900	1132	1305	1422	1946	2252	2461	2278	2643	2893	2556	2958	3233	*4467	*5199	*5703	1778	2054	2242	2252	2621	2875	3325	3870	4245	4007	4670	5125
2000	1192	1373	1497	2048	2370	2591	2398	2782	3045	2690	3113	3403	*4702	*5473	*6003	1872	2162	2360	2370	2759	3026	3500	4074	4469	4218	4915	5395
2200	1311	1511	1647	2253	2607	2850	2638	3060	3349	2959	3425	3744	*5172	*6020	*6604	2059	2378	2596	2607	3035	3328	3850	4481	4915	*4640	*5407	*5935
2400	1430	1648	1797	2458	2844	3109	2878	3338	3654	3228	3736	4084	*5642	*6568	*7204	2246	2594	2832	2844	3310	3631	4200	4889	5362	*5062	*5898	*6474
2600	1550	1785	1946	2662	3082	3368	3117	3616	3958	3497	4048	4424	*6113	*7115	*7804	2434	2810	3068	3081	3586	3934	*4550	*5296	*5809	*5483	*6390	*7014
2800	1669	1923	2096	2867	3319	3627	3357	3895	4263	3766	4359	4765	*6583	*7662	*8405	2621	3027	3304	3318	3862	4236	*4900	*5704	*6256	*5905	*6881	*7553
3000	1788	2060	2246	3072	3556	3887	3597	4173	4567	4035	4670	5105	*7053	*8210	*9005	2808	3243	3540	*3555	*4138	*4539	*5250	*6111	*6703	*6327	*7373	*8093
3200	1907	2197	2395	3277	3793	4146	3837	4451	4872	*4304	*4982	*5445	*7523	*8757	*9605	2995	3459	3776	*3792	*4414	*4841	*5600	*6518	*7150	*6749	*7864	*8632
3400	2026	2335	2545	3482	4030	4405	4077	4729	5176	*4573	*5293	*5786	*7993	*9304	*10206	3182	3675	4012	*4029	*4690	*5144	*5950	*6926	*7597	*7171	*8356	*9172
3600	2146	2472	2695	3686	4267	4664	*4316	*5007	*5481	*4842	*5604	*6126	*8464	*9852	*10806	3370	3891	4248	*4266	*4966	*5447	*6300	*7333	*8043	*7592	*8848	*9711
3800	2265	2609	2845	3891	4504	4923	*4556	*5285	*5785	*5111	*5916	*6466	*8934	*10392	*11408	3557	4107	4484	*4503	*5241	*5749	*6650	*7741	*8490	*8014	*9339	*10251
4000	2384	2747	2994	4096	4741	5182	*4796	*5564	*6090	*5380	*6227	*6807	*9404	*10946	*12006	3744	4324	4720	*4740	*5517	*6052	*7000	*8148	*8937	*8436	*9831	*10790
4200	2503	2884	3144	4301	4978	5441	*5036	*5842	*6394	*5649	*6538	*7147	*9874	*11494	*12607	3931	4540	4955	*4977	*5793	*6354	*7350	*8555	*9384	*8858	*10322	*11330
4400	2622	3021	3294	4506	5215	5700	*5276	*6120	*6699	*5918	*6850	*7487	*10344	*12041	*13207	*4118	*4756	*5191	*5214	*6069	*6657	*7700	*8963	*9831	*9280	*10814	*11869
4600	2742	3159	3443	*4710	*5452	*5959	*5515	*6398	*7003	*6187	*7161	*7828	*10815	*12588	*13807	*4306	*4972	*5427	*5451	*6345	*6960	*8050	*9370	*10278	*9701	*11305	*12409
4800	2861	3296	3593	*4915	*5689	*6218	*5755	*6676	*7308	*6456	*7472	*8168	*11285	*13135	*14408	*4493	*5188	*5663	*5688	*6621	*7262	*8400	*9778	*10725	*10123	*11797	*12948
5000	2980	3434	3743	*5120	*5926	*6478	*5995	*6954	*7612	*6725	*7784	*8508	*11755	*13683	*15008	*4680	*5404	*5899	*5925	*6897	*7565	*8750	*10185	*11171	*10545	*12288	*13488
5200	3099	3571	3892	*5325	*6163	*6737	*6235	*7233	*7917	*6994	*8095	*8848	*12225	*14230	*15608	*4867	*5621	*6135	*6162	*7173	*7867	*9100	*10592	*11618	*10967	*12780	*14027
5400	3218	3708	4042	*5530	*6400	*6996	*6475	*7511	*8221	*7263	*8406	*9189	*12695	*14777	*16209	*5054	*5837	*6371	*6399	*7448	*8170	*9450	*11000	*12065	*11389	*13271	*14567
5600	3338	3846	4192	*5734	*6637	*7255	*6714	*7789	*8526	*7532	*8718	*9529	*13166	*15325	*16809	*5242	*6053	*6607	*6636	*7724	*8472	*9800	*11407	*12512	*11810	*13763	*15106
5800	3457	3983	4342	*5939	*6874	*7514	*6954	*8067	*8830	*7801	*9029	*9869	*13636	*15872	*17409	*5429	*6269	*6843	*6873	*8000	*8775	*10150	*11815	*12959	*12232	*14254	*15646
6000	3576	4120	4491	*6144	*7111	*7773	*7194	*8345	*9135	*8070	*9340	*10210	*14106	*16419	*18010	*5616	*6485	*7079	*7110	*8276	*9078	*10500	*12222	*13406	*12654	*14746	*16185

* weight = >125kg

Overall height = 638 mm $\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

Mod.	NH 63			NHL 63/56			NHH 63			NHLH 63/56			NHLLH 63/56			NHLLHL 63/56																				
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n																		
	45	638	-	17.89	666	1.25	60	638	541	30.04	1086	1.29	53	638	-	33.21	1040	1.28	53	638	541	47.9	1265	1.34	92	638	541	53.56	1843	1.34	128	638	541	63.01	2200	1.35
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60															
400	266	307	335	434	503	550	416	481	525	506	589	646	737	858	941	880	1025	1126																		
500	333	384	418	543	628	687	520	601	657	633	736	808	922	1073	1177	1100	1282	1407																		
600	400	460	502	652	754	824	624	721	788	759	883	969	1106	1287	1412	1320	1538	1688																		
700	466	537	586	760	880	962	728	842	919	886	1031	1131	1290	1502	1647	1540	1795	1970																		
800	533	614	669	869	1006	1099	832	962	1051	1012	1178	1292	1474	1716	1882	1760	2051	2251																		
900	599	691	753	977	1131	1237	936	1082	1182	1139	1325	1454	1659	1931	2118	1980	2307	2533																		
1000	666	767	836	1086	1257	1374	1040	1202	1313	1265	1472	1615	1843	2145	2353	2200	2564	2814																		
1100	733	844	920	1195	1383	1511	1144	1323	1445	1392	1620	1777	2027	2360	2588	2420	2820	3095																		
1200	799	921	1004	1303	1508	1649	1248	1443	1576	1518	1767	1938	2212	2574	2824	2640	3076	3377																		
1300	866	998	1087	1412	1634	1786	1352	1563	1707	1645	1914	2100	2396	2789	3059	2860	3333	3658																		
1400	932	1074	1171	1520	1760	1924	1456	1683	1839	1771	2061	2261	2580	3003	3294	3080	3589	3940																		
1500	999	1151	1255	1629	1885	2061	1560	1804	1970	1898	2209	2423	2765	3218	3530	3300	3846	4221																		
1600	1066	1228	1338	1738	2011	2198	1664	1924	2101	2024	2356	2584	2949	3432	3765	3520	4102	4502																		
1700	1132	1305	1422	1846	2137	2336	1768	2044	2233	2151	2503	2746	3133	3647	4000	3740	4358	4784																		
1800	1199	1381	1506	1955	2263	2473	1872	2164	2364	2277	2650	2907	3317	3861	4235	3960	4615	5065																		
1900	1265	1458	1589	2063	2388	2611	1976	2284	2495	2404	2798	3069	3502	4076	4471	4180	4871	5347																		
2000	1332	1535	1673	2172	2514	2748	2080	2405	2627	2530	2945	3230	3686	4290	4706	*4400	*5127	*5628																		
2200	1465	1688	1840	2389	2765	3023	2288	2645	2889	2783	3239	3553	4055	4720	5177	*4840	*5640	*6191																		
2400	1598	1842	2008	2606	3017	3298	2496	2886	3152	3036	3534	3876	*4423	*5149	*5647	*5280	*6153	*6753																		
2600	1732	1995	2175	2824	3268	3572	2704	3126	3415	3289	3828	4199	*4792	*5578	*6118	*5720	*6666	*7316																		
2800	1865	2149	2342	3041	3519	3847	2912	3367	3677	*3542	*4123	*4522	*5160	*6007	*6588	*6160	*7178	*7879																		
3000	1998	2302	2509	3258	3771	4122	3120	3607	3940	*3795	*4417	*4845	*5529	*6436	*7059	*6600	*7691	*8442																		
3200	2131	2456	2677	3475	4022	4397	3328	3848	4203	*4048	*4712	*5168	*5898	*6865	*7530	*7040	*8204	*9005																		
3400	2264	2609	2844	3692	4274	4671	3536	4088	4465	*4301	*5006	*5491	*6266	*7294	*8000	*7480	*8717	*9567																		
3600	2398	2762	3011	3910	4525	4946	3744	4328	4728	*4554	*5301	*5814	*6635	*7723	*8471	*7920	*9229	*10130																		
3800	2531	2916	3179	4127	4776	5221	*3952	*4569	*4991	*4807	*5595	*6137	*7003	*8152	*8942	*8360	*9742	*10693																		
4000	2664	3069	3346	4344	5028	5496	*4160	*4809	*5253	*5060	*5890	*6460	*7372	*8581	*9412	*8800	*10255	*11256																		
4200	2797	3223	3513	*4561	*5279	*5771	*4368	*5050	*5516	*5313	*6184	*6783	*7741	*9010	*9883	*9240	*10768	*11819																		
4400	2930	3376	3680	*4778	*5531	*6045	*4576	*5290	*5779	*5566	*6479	*7106	*8109	*9439	*10353	*9680	*11280	*12381																		
4600	3064	3530	3848	*4996	*5782	*6320	*4784	*5531	*6041	*5819	*6773	*7429	*8478	*9868	*10824	*10120	*11793	*12944																		
4800	3197	3683	4015	*5213	*6033	*6595	*4992	*5771	*6304	*6072	*7068	*7752	*8846	*10297	*11295	*10560	*12306	*13507																		
5000	3330	3837	4182	*5430	*6285	*6870	*5200	*6012	*6567	*6325	*7362	*8075	*9215	*10726	*11765	*11000	*12818	*14070																		
5200	3463	3990	4350	*5647	*6536	*7145	*5408	*6252	*6829	*6578	*7657	*8398	*9584	*11155	*12236	*11440	*13331	*14633																		
5400	3596	4144	4517	*5864	*6788	*7419	*5616	*6493	*7092	*6831	*7951	*8721	*9952	*11584	*12706	*11880	*13844	*15195																		
5600	3730	4297	4684	*6082	*7039	*7694	*5824	*6733	*7355	*7084	*8246	*9044	*10321	*12013	*13177	*12320	*14357	*15758																		
5800	3863	4451	4852	*6299	*7290	*7969	*6032	*6974	*7618	*7337	*8540	*9367	*10689	*12442	*13648	*12760	*14869	*16321																		
6000	3996	4604	5019	*6516	*7542	*8244	*6240	*7214	*7880	*7590	*8835	*9690	*11058	*12871	*14118	*13200	*15382	*16884																		

* weight = >125kg

Overall height = 709 mm $\Phi_L = \Delta T \text{ 50 K EN 442 (SN 384.501-503)}$

Mod.	NH 70			NHL 70/56			NHH 70			NHLH 70/56			NHLHL 70/56			NHLHLH 70/56		
	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
T mm	45			60			53			53			92			128		
H mm	709			709			709			709			709			709		
H Lam. mm	-			541			-			541			541			541		
M kg	19.83			31.98			36.85			51.8			57.44			66.89		
P 50K	736			1149			1146			1344			1936			2291		
Exp. n	1.25			1.29			1.28			1.33			1.34			1.35		
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
400	294	339	370	460	532	581	458	530	579	538	625	685	774	901	989	916	1068	1172
500	368	424	462	575	665	727	573	662	724	672	781	856	968	1127	1236	1146	1335	1465
600	442	509	555	689	798	872	688	795	868	806	938	1028	1162	1352	1483	1375	1602	1758
700	515	594	647	804	931	1018	802	927	1013	941	1094	1199	1355	1577	1730	1604	1869	2051
800	589	678	740	919	1064	1163	917	1060	1158	1075	1250	1370	1549	1803	1977	1833	2136	2344
900	662	763	832	1034	1197	1308	1031	1192	1303	1210	1406	1542	1742	2028	2225	2062	2403	2637
1000	736	848	924	1149	1330	1454	1146	1325	1447	1344	1563	1713	1936	2253	2472	2291	2670	2930
1100	810	933	1017	1264	1463	1599	1261	1457	1592	1478	1719	1884	2130	2479	2719	2520	2937	3223
1200	883	1018	1109	1379	1596	1744	1375	1590	1737	1613	1875	2055	2323	2704	2966	2749	3204	3516
1300	957	1102	1202	1494	1729	1890	1490	1722	1881	1747	2031	2227	2517	2930	3213	2978	3471	3809
1400	1030	1187	1294	1609	1862	2035	1604	1855	2026	1882	2188	2398	2710	3155	3460	3207	3738	4102
1500	1104	1272	1387	1724	1995	2180	1719	1987	2171	2016	2344	2569	2904	3380	3708	3437	4005	4396
1600	1178	1357	1479	1838	2128	2326	1834	2120	2316	2150	2500	2741	3098	3606	3955	3666	4272	4689
1700	1251	1442	1571	1953	2261	2471	1948	2252	2460	2285	2656	2912	3291	3831	4202	3895	4539	4982
1800	1325	1526	1664	2068	2394	2617	2063	2385	2605	2419	2813	3083	3485	4056	4449	4124	4806	5275
1900	1398	1611	1756	2183	2527	2762	2177	2517	2750	2554	2969	3254	3678	4282	4696	*4353	*5073	*5568
2000	1472	1696	1849	2298	2660	2907	2292	2650	2894	2688	3125	3426	3872	4507	4944	*4582	*5339	*5861
2200	1619	1866	2034	2528	2926	3198	2521	2915	3184	2957	3438	3768	*4259	*4958	*5438	*5040	*5873	*6447
2400	1766	2035	2219	2758	3192	3489	2750	3180	3473	3226	3750	4111	*4646	*5408	*5932	*5498	*6407	*7033
2600	1914	2205	2403	2987	3458	3780	2980	3445	3763	*3494	*4063	*4453	*5034	*5859	*6427	*5957	*6941	*7619
2800	2061	2374	2588	3217	3724	4070	3209	3710	4052	*3763	*4375	*4796	*5421	*6310	*6921	*6415	*7475	*8205
3000	2208	2544	2773	3447	3990	4361	3438	3975	4342	*4032	*4688	*5138	*5808	*6760	*7415	*6873	*8009	*8791
3200	2355	2714	2958	3677	4256	4652	3667	4240	4631	*4301	*5000	*5481	*6195	*7211	*7910	*7331	*8543	*9377
3400	2502	2883	3143	3907	4522	4942	*3896	*4505	*4921	*4570	*5313	*5824	*6582	*7662	*8404	*7789	*9077	*9963
3600	2650	3053	3328	4136	4788	5233	*4126	*4770	*5210	*4838	*5626	*6166	*6970	*8113	*8898	*8248	*9611	*10549
3800	2797	3222	3513	4366	5054	5524	*4355	*5035	*5499	*5107	*5938	*6509	*7357	*8563	*9393	*8706	*10145	*11135
4000	2944	3392	3698	*4596	*5320	*5815	*4584	*5300	*5789	*5376	*6251	*6851	*7744	*9014	*9887	*9164	*10679	*11721
4200	3091	3562	3882	*4826	*5585	*6105	*4813	*5565	*6078	*5645	*6563	*7194	*8131	*9465	*10381	*9622	*11213	*12307
4400	3238	3731	4067	*5056	*5851	*6396	*5042	*5830	*6368	*5914	*6876	*7536	*8518	*9915	*10876	*10080	*11747	*12894
4600	3386	3901	4252	*5285	*6117	*6687	*5272	*6095	*6657	*6182	*7188	*7879	*8906	*10366	*11370	*10539	*12281	*13480
4800	3533	4070	4437	*5515	*6383	*6978	*5501	*6360	*6947	*6451	*7501	*8222	*9293	*10817	*11865	*10997	*12815	*14066
5000	3680	4240	4622	*5745	*6649	*7268	*5730	*6625	*7236	*6720	*7813	*8564	*9680	*11267	*12359	*11455	*13349	*14652
5200	3827	4410	4807	*5975	*6915	*7559	*5959	*6889	*7526	*6989	*8126	*8907	*10067	*11718	*12853	*11913	*13883	*15238
5400	3974	4579	4992	*6205	*7181	*7850	*6188	*7154	*7815	*7258	*8438	*9249	*10454	*12169	*13348	*12371	*14417	*15824
5600	4122	4749	5177	*6434	*7447	*8141	*6418	*7419	*8104	*7526	*8751	*9592	*10842	*12620	*13842	*12830	*14951	*16410
5800	4269	4918	5361	*6664	*7713	*8431	*6647	*7684	*8394	*7795	*9063	*9934	*11229	*13070	*14336	*13288	*15485	*16996
6000	4416	5088	5546	*6894	*7979	*8722	*6876	*7949	*8683	*8064	*9376	*10277	*11616	*13521	*14831	*13746	*16018	*17582

* weight = >125kg

Overall height = 851 mm $\Phi_L = \Delta T 50 K EN 442$ (SN 384.501-503)

Mod.	NH 84			NHL 84/56			NHLLH 84/56			NHLLHL 84/56																					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	
	45	851	-	23.7	882	1.25	60	851	541	36	1274	1.29	92	851	541	66.3	2122	1.34	128	851	541	66.3	2473	1.35							
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60																
400	353	406	443	510	590	645	849	988	1084	989	1153	1265																			
500	441	508	554	637	737	806	1061	1235	1355	1237	1441	1582																			
600	529	610	665	764	885	967	1273	1482	1626	1484	1729	1898																			
700	617	711	775	892	1032	1128	1485	1729	1896	1731	2017	2214																			
800	706	813	886	1019	1180	1289	1698	1976	2167	1978	2305	2531																			
900	794	915	997	1147	1327	1451	1910	2223	2438	2226	2594	2847																			
1000	882	1016	1108	1274	1475	1612	2122	2470	2709	2473	2882	3163																			
1100	970	1118	1219	1401	1622	1773	2334	2717	2980	2720	3170	3479																			
1200	1058	1219	1329	1529	1769	1934	2546	2964	3251	2968	3458	3796																			
1300	1147	1321	1440	1656	1917	2095	2759	3211	3522	3215	3746	4112																			
1400	1235	1423	1551	1784	2064	2257	2971	3458	3793	3462	4035	4428																			
1500	1323	1524	1662	1911	2212	2418	3183	3705	4064	3710	4323	4745																			
1600	1411	1626	1772	2038	2359	2579	3395	3952	4335	3957	4611	5061																			
1700	1499	1728	1883	2166	2507	2740	3607	4199	4606	4204	4899	5377																			
1800	1588	1829	1994	2293	2654	2901	3820	4446	4877	4451	5187	5694																			
1900	1676	1931	2105	2421	2802	3062	*4032	*4693	*5148	*4699	*5475	*6010																			
2000	1764	2032	2216	2548	2949	3224	*4244	*4940	*5418	*4946	*5764	*6326																			
2200	1940	2236	2437	2803	3244	3546	*4668	*5434	*5960	*5441	*6340	*6959																			
2400	2117	2439	2659	3058	3539	3868	*5093	*5928	*6502	*5935	*6916	*7592																			
2600	2293	2642	2880	3312	3834	4191	*5517	*6422	*7044	*6430	*7493	*8224																			
2800	2470	2845	3102	3567	4129	4513	*5942	*6916	*7586	*6924	*8069	*8857																			
3000	2646	3049	3323	3822	4424	4835	*6366	*7410	*8128	*7419	*8645	*9489																			
3200	2822	3252	3545	4077	4719	5158	*6790	*7904	*8670	*7914	*9222	*10122																			
3400	2999	3455	3766	4332	5013	5480	*7215	*8398	*9211	*8408	*9798	*10755																			
3600	3175	3658	3988	*4586	*5308	*5803	*7639	*8892	*9753	*8903	*10375	*11387																			
3800	3352	3862	4209	*4841	*5603	*6125	*8064	*9386	*10295	*9397	*10951	*12020																			
4000	3528	4065	4431	*5096	*5898	*6447	*8488	*9880	*10837	*9892	*11527	*12653																			
4200	3704	4268	4653	*5351	*6193	*6770	*8912	*10374	*11379	*10387	*12104	*13285																			
4400	3881	4471	4874	*5606	*6488	*7092	*9337	*10868	*11921	*10881	*12680	*13918																			
4600	4057	4675	5096	*5860	*6783	*7414	*9761	*11362	*12463	*11376	*13256	*14550																			
4800	4234	4878	5317	*6115	*7078	*7737	*10186	*11856	*13004	*11870	*13833	*15183																			
5000	4410	5081	5539	*6370	*7373	*8059	*10610	*12350	*13546	*12365	*14409	*15816																			
5200	4586	5284	5760	*6625	*7668	*8381	*11034	*12844	*14088	*12860	*14986	*16448																			
5400	*4763	*5488	*5982	*6880	*7963	*8704	*11459	*13338	*14630	*13354	*15562	*17081																			
5600	*4939	*5691	*6203	*7134	*8258	*9026	*11883	*13832	*15172	*13849	*16138	*17714																			
5800	*5116	*5894	*6425	*7389	*8552	*9348	*12308	*14326	*15714	*14343	*16715	*18346																			
6000	*5292	*6097	*6647	*7644	*8847	*9671	*12732	*14820	*16255	*14838	*17291	*18979																			

Overall height = 922–1561 mm

$$\Phi_L = \Delta T \text{ 50 K EN 442 (SN 384.501-503)}$$

Mod.	NH 91			NH 98			NH 105			NH 112			NH 119			NH 126			NH 133			NH 140			NH 147			NH 154					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n																											
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
400	383	442	482	410	473	516	436	504	550	462	534	582	488	564	616	514	594	649	540	625	683	566	655	716	592	686	750	618	716	783			
500	479	552	602	513	592	645	546	630	688	578	667	728	610	705	770	643	743	811	675	781	853	707	818	894	740	857	937	772	895	978			
600	574	662	722	616	710	775	655	756	825	693	800	874	732	846	924	771	891	974	809	937	1024	848	982	1073	887	1028	1125	926	1073	1174			
700	670	773	843	718	828	904	764	882	963	809	934	1019	854	987	1078	900	1040	1136	944	1093	1195	990	1146	1252	1035	1200	1312	1081	1252	1370			
800	766	883	963	821	947	1033	873	1008	1100	924	1067	1165	976	1128	1233	1028	1188	1298	1079	1249	1365	1131	1309	1431	1183	1371	1500	1235	1431	1566			
900	861	994	1084	923	1065	1162	982	1134	1238	1040	1200	1310	1098	1269	1387	1157	1337	1460	1214	1405	1536	1273	1473	1610	1331	1542	1687	1390	1610	1761			
1000	957	1104	1204	1026	1183	1291	1091	1260	1375	1155	1334	1456	1220	1410	1541	1285	1486	1623	1349	1561	1707	1414	1637	1789	1479	1714	1875	1544	1789	1957			
1100	1053	1214	1325	1129	1302	1420	1200	1386	1513	1271	1467	1602	1342	1551	1695	1414	1634	1785	1484	1717	1877	1555	1800	1968	1627	1885	2062	1698	1968	2153			
1200	1148	1325	1445	1231	1420	1549	1309	1512	1650	1386	1601	1747	1464	1693	1849	1542	1783	1947	1619	1874	2048	1697	1964	2147	1775	2057	2249	1853	2147	2348			
1300	1244	1435	1565	1334	1539	1678	1418	1638	1788	1502	1734	1893	1586	1834	2003	1671	1931	2110	1754	2030	2219	1838	2128	2326	1923	2228	2437	2007	2326	2544			
1400	1340	1545	1686	1436	1657	1807	1527	1764	1925	1617	1867	2038	1708	1975	2157	1799	2080	2272	1889	2186	2389	1980	2291	2505	2071	2399	2624	2162	2505	2740			
1500	1436	1656	1806	1539	1775	1936	1637	1890	2063	1733	2001	2184	1830	2116	2311	1928	2228	2434	2024	2342	2560	2121	2455	2683	2219	2571	2812	2316	2684	2935			
1600	1531	1766	1927	1642	1894	2066	1746	2016	2200	1848	2134	2329	1952	2257	2465	2056	2377	2596	2158	2498	2731	2262	2619	2862	2366	2742	2999	2470	2863	3131			
1700	1627	1877	2047	1744	2012	2195	1855	2142	2338	1964	2267	2475	2074	2398	2619	2185	2526	2759	2293	2654	2901	2404	2782	3041	2514	2913	3187	2625	3041	3327			
1800	1723	1987	2167	1847	2130	2324	1964	2268	2475	2079	2401	2621	2196	2539	2773	2313	2674	2921	2428	2810	3072	2545	2946	3220	2662	3085	3374	2779	3220	3523			
1900	1818	2097	2288	1949	2249	2453	2073	2394	2613	2195	2534	2766	2318	2680	2927	2442	2823	3083	2563	2967	3243	2687	3110	3399	2810	3256	3562	2934	3399	3718			
2000	1914	2208	2408	2052	2367	2582	2182	2520	2751	2310	2668	2912	2440	2821	3081	2570	2971	3246	2698	3123	3413	2828	3273	3578	2958	3428	3749	3088	3578	3914			
2200	2105	2429	2649	2257	2604	2840	2400	2772	3026	2541	2934	3203	2684	3103	3389	2827	3268	3570	2968	3435	3755	3111	3601	3936	3254	3770	4124	3397	3936	4305			
2400	2297	2649	2890	2462	2840	3098	2618	3024	3301	2772	3201	3494	2928	3385	3698	3084	3565	3895	3238	3747	4096	3394	3928	4293	3550	4113	4499	3706	4294	4697			
2600	2488	2870	3131	2668	3077	3357	2837	3276	3576	3003	3468	3785	3172	3667	4006	3341	3863	4219	3507	4060	4437	3676	4255	4651	3845	4456	4874	4014	4652	5088			
2800	2680	3091	3372	2873	3314	3615	3055	3528	3851	3234	3735	4077	3416	3949	4314	3598	4160	4544	3777	4372	4779	3959	4582	5009	4141	4799	5249	4323	5009	5480			
3000	2871	3312	3612	3078	3550	3873	3273	3780	4126	3465	4001	4368	3660	4231	4622	3855	4457	4868	4047	4684	5120	4242	4910	5367	4437	5141	5624	*4632	*5367	*5871			
3200	3062	3532	3853	3283	3787	4131	3491	4032	4401	3696	4268	4659	3904	4513	4930	4112	4754	5193	4317	4996	5461	*4525	*5237	*5725	*4733	*5484	*5999	*4941	*5725	*6262			
3400	3254	3753	4094	3488	4024	4389	3709	4284	4676	3927	4535	4950	4148	4796	5238	4369	5051	5517	*4587	*5309	*5803	*4808	*5564	*6082	*5029	*5827	*6374	*5250	*6083	*6654			
3600	3445	3974	4335	3694	4261	4647	3928	4536	4951	4158	4802	5241	4392	5078	5546	*4626	*5348	*5842	*4856	*5621	*6144	*5090	*5892	*6440	*5324	*6170	*6748	*5558	*6441	*7045			
3800	3637	4195	4576	3899	4497	4906	4146	4788	5226	4389	5068	5533	*4636	*5360	*5855	*4883	*5645	*6166	*5126	*5933	*6485	*5373	*6219	*6798	*5620	*6512	*7123	*5867	*6799	*7436			
4000	3828	4416	4817	4104	4734	5164	4364	5040	5501	*4620	*5335	*5824	*4880	*5642	*6163	*5140	*5942	*6491	*5396	*6245	*6827	*5656	*6546	*7156	*5916	*6855	*7498	*6176	*7156	*7828			
4200	4019	4636	5057	4309	4971	5422	4582	5292	5776	*4851	*5602	*6115	*5124	*5924	*6471	*5397	*6240	*6816	*5666	*6558	*7168	*5939	*6874	*7514	*6212	*7198	*7873	*6485	*7514	*8219			
4400	4211	4857	5298	4514	5207	5680	*4800	*5544	*6051	*5082	*5869	*6406	*5368	*6206	*6779	*5654	*6537	*7140	*5936	*6870	*7509	*6222	*7201	*7871	*6508	*7541	*8248	*6794	*7872	*8611			
4600	4402	5078	5539	*4720	*5444	*5938	*5019	*5795	*6326	*5313	*6135	*6697	*5612	*6488	*7087	*5911	*6834	*7465	*6205	*7182	*7851	*6504	*7528	*8229	*6803	*7883	*8623	*7102	*8230	*9002			
4800	4594	5299	5780	*4925	*5681	*6197	*5237	*6047	*6601	*5544	*6402	*6988	*5856	*6770	*7395	*6168	*7131	*7789	*6475	*7495	*8192	*6787	*7856	*8587	*7099	*8226	*8998	*7411	*8588	*9393			
5000	*4785	*5519	*6021	*5130	*5917	*6455	*5455	*6299	*6876	*5775	*6669	*7280	*6100	*7052	*7703	*6425	*7428	*8114	*6745	*7807	*8533	*7070	*8183	*8945	*7395	*8569	*9373	*7720	*8945	*9785			
5200	*4976	*5740	*6262	*5335	*6154	*6713	*5673	*6551	*7151	*6006	*6936	*7571	*6344	*7334	*8012	*6682	*7725	*8438	*7015	*8119	*8875	*7353	*8510	*9302	*7691	*8912	*9748	*8029	*9303	*10176			
5400	*5168	*5961	*6502	*5540	*6391	*6971	*5891	*6803	*7426	*6237	*7202	*7862	*6588	*7616	*8320	*6939	*8022	*8763	*7285	*8431	*9216	*7636	*8838	*9660	*7987	*9254	*10123	*8338	*9661	*10568			
5600	*5359	*6182	*6743	*5746	*6628	*7229	*6110	*7055	*7701	*6468	*7469	*8153	*6832	*7899	*8628	*7196	*8319	*9087	*7554	*8744	*9557	*7918	*9165	*10018	*8282	*9597	*10498	*8646	*10019	*10959			
5800	*5551	*6403	*6984	*5951	*6864	*7488	*6328	*7307	*7977	*6699	*7736	*8444	*7076	*8181	*8936	*7453	*8616	*9412	*7824	*9056	*9899	*8201	*9492	*10376	*8578	*9940	*10873	*8955	*10377	*11350			
6000	*5742	*6623	*7225	*6156	*7101	*7746	*6546	*7559	*8252	*6930	*8003	*8736	*7320	*8463	*9244	*7710	*8914	*9737	*8094	*9368	*10240	*8484	*9820	*10734	*8874	*10283	*11247	*9264	*10735	*11742			

* weight = >125kg

zehnder nova

Overall height = 1632–1703 mm

$\Phi_L = \Delta T \text{ 50 K EN 442}$ (SN 384.501-503)

Mod.	NH 151			NH 168										
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n								
	45	1632	-	45.04	1609	1.3								
	45	1703	-	46.97	1674	1.3								
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60								
400	644	746	816	670	776	849								
500	805	932	1020	837	970	1061								
600	965	1119	1224	1004	1164	1273								
700	1126	1305	1428	1172	1358	1485								
800	1287	1492	1631	1339	1552	1697								
900	1448	1678	1835	1507	1746	1910								
1000	1609	1864	2039	1674	1940	2122								
1100	1770	2051	2243	1841	2134	2334								
1200	1931	2237	2447	2009	2328	2546								
1300	2092	2424	2651	2176	2522	2758								
1400	2253	2610	2855	2344	2716	2970								
1500	2414	2797	3059	2511	2910	3183								
1600	2574	2983	3263	2678	3104	3395								
1700	2735	3169	3467	2846	3298	3607								
1800	2896	3356	3671	3013	3491	3819								
1900	3057	3542	3875	3181	3685	4031								
2000	3218	3729	4079	3348	3879	4243								
2200	3540	4102	4487	3683	4267	4668								
2400	3862	4475	4894	4018	4655	5092								
2600	4183	4847	5302	4352	5043	5517								
2800	*4505	*5220	*5710	*4687	*5431	*5941								
3000	*4827	*5593	*6118	*5022	*5819	*6365								
3200	*5149	*5966	*6526	*5357	*6207	*6790								
3400	*5471	*6339	*6934	*5692	*6595	*7214								
3600	*5792	*6712	*7342	*6026	*6983	*7638								
3800	*6114	*7085	*7750	*6361	*7371	*8063								
4000	*6436	*7458	*8157	*6696	*7759	*8487								
4200	*6758	*7830	*8565	*7031	*8147	*8911								
4400	*7080	*8203	*8973	*7366	*8535	*9336								
4600	*7401	*8576	*9381	*7700	*8923	*9760								
4800	*7723	*8949	*9789	*8035	*9311	*10184								
5000	*8045	*9322	*10197	*8370	*9699	*10609								
5200	*8367	*9695	*10605	*8705	*10087	*11033								
5400	*8689	*10068	*11012	*9040	*10474	*11457								
5600	*9010	*10441	*11420	*9374	*10862	*11882								
5800	*9332	*10814	*11828	*9709	*11250	*12306								
6000	*9654	*11186	*12236	*10044	*11638	*12730								

* weight = >125kg

Overall height = 600–800 mm

$\Phi_L = \Delta T$ 50 K EN 442 (SN 384.501-503)

Mod.	NV 60			NVL 60			NVV ¹ 60			NVV 60-4SR			NVLV 60			NV 80			NVL 80			NVV ¹ 80			NVV 80-4SR			NVLV 80					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n			
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60			
1	46	53	58				67	78	85	79	92	100				60	69	76				87	101	110	100	116	127						
2	92	106	116				134	155	170	158	183	200				120	139	151				174	202	221	200	232	254						
3	138	159	174				201	233	255	237	275	300				180	208	227				261	303	331	300	348	381						
4	184	212	232	284	328	359	268	311	340	316	366	401	384	445	488	240	277	303	352	407	445	348	404	442	400	464	508	480	557	611			
5	230	266	290	355	410	448	335	388	425	395	458	501	480	557	609	300	346	378	440	509	557	435	505	552	500	580	635	600	697	763			
6	276	319	348	426	493	538	402	466	510	474	549	601	576	668	731	360	416	454	528	611	668	522	606	663	600	696	762	720	836	916			
7	322	372	406	497	575	628	469	543	594	553	641	701	672	780	853	420	485	529	616	713	779	609	706	773	700	812	889	840	976	1069			
8	368	425	464	568	657	717	536	621	679	632	732	801	768	891	975	480	554	605	704	815	891	696	807	884	800	928	1016	960	1115	1221			
9	414	478	522	639	739	807	603	699	764	711	824	901	864	1002	1097	540	624	681	792	917	1002	783	908	994	900	1044	1143	1080	1254	1374			
10	460	531	580	710	821	897	670	776	849	790	915	1001	960	1114	1219	600	693	756	880	1019	1113	870	1009	1105	1000	1160	1270	1200	1394	1527			
11	506	584	638	781	903	986	737	854	934	869	1007	1101	1056	1225	1341	660	762	832	968	1120	1225	957	1110	1216	1100	1276	1397	1320	1533	1679			
12	552	637	696				804	931	1019	948	1098	1202				720	831	908				1044	1211	1326	1200	1392	1524						
13	598	691	754				871	1009	1104	1027	1190	1302				780	901	983				1131	1312	1437	1300	1508	1651						
14	644	744	812				938	1086	1189	1106	1282	1402				840	970	1059				1218	1413	1547	1400	1624	1778						
15	690	797	870							1185	1373	1502				900	1039	1134							1500	1740	1905						
16	736	850	928							1264	1465	1602				960	1109	1210							1600	1856	2032						
17	782	903	986							1343	1556	1702				1020	1178	1286							1700	1972	2159						
18	828	956	1044							1422	1648	1802				1080	1247	1361							1800	2088	2286						
19	874	1009	1102							1501	1739	1902				1140	1316	1437							1900	2204	2413						
20	920	1062	1160							1580	1831	2003				1200	1386	1513							2000	2320	2540						
21	966	1116	1218							1659	1922	2103				1260	1455	1588							2100	2436	2667						
22	1012	1169	1276							1738	2014	2203				1320	1524	1664							2200	2552	2794						
23	1058	1222	1334							1817	2105	2303				1380	1594	1740							2300	2668	2920						
24	1104	1275	1392							1896	2197	2403				1440	1663	1815							2400	2784	3047						

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 1000–1200 mm

$\Phi_L = \Delta T \ 50 \ K \ EN \ 442 \ (SN \ 384.501-503)$

Mod.	NV 100			NVL 100			NVV ¹ 100			NVV 100-4SR			NVLV 100			NV 120			NVL 120			NVV ¹ 120			NVV 120-4SR					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	74	85	93				107	124	136	121	140	154				88	102	111				127	148	162	141	164	179			
2	148	171	187				214	249	273	242	281	307				176	203	222				254	296	324	282	328	359			
3	222	256	280				321	373	409	363	421	461				264	305	333				381	443	486	423	491	538			
4	296	342	373	420	486	531	428	498	545	484	561	615	576	670	734	352	407	445	484	561	613	508	591	649	564	655	717			
5	370	427	466	525	608	664	535	622	682	605	702	768	720	837	918	440	509	556	605	701	767	635	739	811	705	819	897			
6	444	513	560	630	729	797	642	746	818	726	842	922	864	1005	1101	528	610	667	726	841	920	762	887	973	846	983	1076			
7	518	598	653	735	851	930	749	871	955	847	983	1076	1008	1172	1285	616	712	778	847	981	1074	889	1035	1135	987	1146	1256			
8	592	684	746	840	972	1063	856	995	1091	968	1123	1229	1152	1339	1468	704	814	889	968	1122	1227	1016	1183	1297	1128	1310	1435			
9	666	769	840	945	1094	1196	963	1120	1227	1089	1263	1383	1296	1507	1652	792	916	1000	1089	1262	1380	1143	1330	1459	1269	1474	1614			
10	740	855	933	1050	1215	1328	1070	1244	1364	1210	1404	1536	1440	1674	1835	880	1017	1111	1210	1402	1534	1270	1478	1621	1410	1638	1794			
11	814	940	1026	1155	1337	1461	1177	1368	1500	1331	1544	1690	1584	1842	2019	968	1119	1222	1331	1542	1687	1397	1626	1783	1551	1801	1973			
12	888	1025	1119	1260	1458	1594	1284	1493	1637	1452	1684	1844	1728	2009	2202	1056	1221	1334	1452	1682	1840	1524	1774	1945	1692	1965	2152			
13	962	1111	1213	1365	1580	1727	1391	1617	1773	1573	1825	1997	1872	2177	2386	1144	1323	1445	1573	1823	1994	1651	1921	2107	1833	2129	2332			
14	1036	1196	1306	1470	1701	1860	1498	1742	1910	1694	1965	2151	2016	2344	2569	1232	1424	1556	1694	1963	2147	1778	2069	2269	1974	2293	2511			
15	1110	1282	1399	1575	1823	1993				1815	2105	2305	2160	2511	2753	1320	1526	1667	1815	2103	2300				2115	2456	2690			
16	1184	1367	1492	1680	1944	2125				1936	2246	2458	2304	2679	2936	1408	1628	1778	1936	2243	2454				2256	2620	2870			
17	1258	1453	1586	1785	2066	2258				2057	2386	2612	2448	2846	3120	1496	1730	1889	2057	2384	2607				2397	2784	3049			
18	1332	1538	1679							2178	2527	2766				1584	1831	2000							2538	2948	3229			
19	1406	1624	1772							2299	2667	2919				1672	1933	2111							2679	3111	3408			
20	1480	1709	1866							2420	2807	3073				1760	2035	2223							2820	3275	3587			
21	1554	1795	1959							2541	2948	3227				1848	2136	2334							2961	3439	3767			
22	1628	1880	2052							2662	3088	3380				1936	2238	2445							3102	3603	3946			
23	1702	1965	2145							2783	3228	3534				2024	2340	2556							3243	3766	4125			
24	1776	2051	2239							2904	3369	3687				2112	2442	2667							3384	3930	4305			

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 1400–1600 mm

$\Phi_L = \Delta T \ 50 \ K \ EN \ 442 \ (SN \ 384.501-503)$

Mod.	NV 140			NVL 140			NVV ¹ 140			NVV 140-4SR			NVLV 140			NV 160			NVL 160			NVV ¹ 160			NVV 160-4SR			NVLV 160		
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	102	118	129				147	171	188	162	188	206				116	134	147				166	193	212	184	214	234			
2	204	236	258				294	342	375	324	376	412				232	269	294				332	386	423	368	427	468			
3	306	354	387				441	513	563	486	564	618				348	403	441				498	579	635	552	641	702			
4	408	472	516	548	636	696	588	684	751	648	753	824	780	909	998	464	538	588	612	711	779	664	772	846	736	855	936	888	1035	1136
5	510	590	645	685	795	870	735	856	938	810	941	1030	975	1136	1247	580	672	735	765	888	973	830	965	1058	920	1068	1170	1110	1294	1420
6	612	708	774	822	954	1044	882	1027	1126	972	1129	1236	1170	1363	1497	696	806	882	918	1066	1168	996	1158	1269	1104	1282	1404	1332	1552	1704
7	714	826	903	959	1112	1218	1029	1198	1314	1134	1317	1443	1365	1591	1746	812	941	1029	1071	1244	1362	1162	1351	1481	1288	1496	1638	1554	1811	1988
8	816	944	1032	1096	1271	1392	1176	1369	1501	1296	1505	1649	1560	1818	1995	928	1075	1176	1224	1422	1557	1328	1544	1692	1472	1710	1873	1776	2070	2272
9	918	1063	1161	1233	1430	1566	1323	1540	1689	1458	1693	1855	1755	2045	2245	1044	1210	1323	1377	1599	1752	1494	1737	1904	1656	1923	2107	1998	2328	2556
10	1020	1181	1290	1370	1589	1740	1470	1711	1877	1620	1881	2061	1950	2272	2494	1160	1344	1470	1530	1777	1946	1660	1930	2116	1840	2137	2341	2220	2587	2840
11	1122	1299	1420	1507	1748	1914	1617	1882	2065	1782	2070	2267	2145	2500	2744	1276	1479	1617	1683	1955	2141	1862	2123	2328	2024	2351	2575	2442	2846	3123
12	1224	1417	1549	1644	1907	2088	1764	2053	2252	1944	2258	2473	2340	2727	2993	1392	1613	1764	1836	2132	2336	1992	2316	2539	2208	2564	2809	2664	3104	3407
13	1326	1535	1678	1781	2066	2261	1911	2224	2440	2106	2446	2679	2535	2954	3242	1508	1747	1911	1989	2310	2530	2158	2509	2751	2392	2778	3043	2886	3363	3691
14	1428	1653	1807	1918	2225	2435	2058	2395	2628	2268	2634	2885	2730	3181	3492	1624	1882	2058	2142	2488	2725	2324	2702	2962	2576	2992	3277	3108	3622	3975
15	1530	1771	1936	2055	2384	2609				2430	2822	3091	2925	3409	3741	1740	2016	2205	2295	2665	2919				2760	3205	3511	3330	3881	4259
16	1632	1889	2065	2192	2543	2783				2592	3010	3297	3120	3636	3991	1856	2151	2352	2448	2843	3114				2944	3419	3745	3552	4139	4543
17	1734	2007	2194	2329	2702	2957				2754	3198	3503	3315	3863	4240	1972	2285	2499	2601	3021	3309				3128	3633	3979	3774	4398	4827
18	1836	2125	2323	2466	2861	3131				2916	3387	3709	3510	4090	4490	2088	2419	2646	2754	3198	3503				3312	3846	4213	*3996	*4657	*5111
19	1938	2243	2452	2603	3020	3305				3078	3575	3916	3705	4318	4739	2204	2554	2793	2907	3376	3698				3496	4060	4447	*4218	*4915	*5395
20	2040	2361	2581	2740	3179	3479				3240	3763	4122	*3900	*4545	*4988	2320	2688	2941	3060	3554	3893				3680	4274	4681	*4440	*5174	*5679
21	2142	2479	2710	2877	3337	3653				3402	3951	4328	*4095	*4772	*5238	2436	2823	3088	3213	3731	4087				*3864	*4488	*4915	*4662	*5433	*5963
22	2244	2597	2839	3014	3496	3827				3564	4139	4534	*4290	*4999	*5487	2552	2957	3235	3366	3909	4282				*4048	*4701	*5149	*4884	*5691	*6247
23	2346	2715	2968							3726	4327	4740				2668	3092	3382							*4232	*4915	*5384			
24	2448	2833	3097							3888	4515	4946				2784	3226	3529							*4416	*5129	*5618			

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 1800–2000 mm

$\Phi_L = \Delta T$ 50 K EN 442 (SN 384.501-503)

Mod.	NV 180			NVL 180			NVV ¹ 180			NVV 180-4SR			NVLV 180			NV 200			NVL 200			NVV ¹ 200			NVV 200-4SR			NVLV 200		
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	130	151	165				185	215	236	205	238	261				145	168	184				205	238	261	227	263	288			
2	260	302	330				370	430	472	410	476	522				290	336	368				410	477	523	454	527	576			
3	390	452	495				555	645	707	615	714	782				435	505	552				615	715	784	681	790	865			
4	520	603	660	676	786	862	740	860	943	820	952	1043	1004	1170	1284	580	673	736	740	859	941	820	953	1045	908	1053	1153	1092	1273	1397
5	650	754	825	845	982	1077	925	1075	1179	1025	1190	1304	1255	1462	1605	725	841	921	925	1074	1177	1025	1192	1306	1135	1317	1441	1365	1591	1746
6	780	905	990	1014	1179	1292	1110	1291	1415	1230	1428	1565	1506	1755	1926	870	1009	1105	1110	1289	1412	1230	1430	1568	1362	1580	1729	1638	1909	2095
7	910	1056	1155	1183	1375	1508	1295	1506	1650	1435	1667	1825	1757	2047	2247	1015	1177	1289	1295	1504	1647	1435	1668	1829	1589	1843	2018	1911	2227	2444
8	1040	1206	1321	1352	1572	1723	1480	1721	1886	1640	1905	2086	2008	2340	2568	1160	1346	1473	1480	1719	1883	1640	1907	2090	1816	2107	2306	2184	2545	2793
9	1170	1357	1486	1521	1768	1938	1665	1936	2122	1845	2143	2347	2259	2632	2889	1305	1514	1657	1665	1934	2118	1845	2145	2351	2043	2370	2594	2457	2863	3143
10	1300	1508	1651	1690	1965	2154	1850	2151	2358	2050	2381	2608	2510	2925	3210	1450	1682	1841	1850	2149	2353	2050	2383	2613	2270	2633	2882	2730	3181	3492
11	1430	1659	1816	1859	2161	2369	2035	2366	2594	2255	2619	2869	2761	3217	3532	1595	1850	2025	2035	2363	2589	2255	2621	2874	2497	2897	3171	3003	3499	3841
12	1560	1810	1981	2028	2358	2585	2220	2581	2830	2460	2857	3129	3012	3510	3853	1740	2018	2209	2220	2578	2824	2460	2860	3136	2724	3160	3459	3276	3818	4190
13	1690	1960	2146	2197	2554	2800	2405	2796	3065	2665	3095	3390	3263	3802	4174	1885	2187	2394	2405	2793	3059	2665	3098	3397	2951	3423	3747	3549	4136	4539
14	1820	2111	2311	2366	2751	3015	2590	3011	3301	2870	3333	3651	3514	4095	4495	2030	2355	2578	2590	3008	3295	2870	3336	3658	3178	3687	4035	*3822	*4454	*4889
15	1950	2262	2476	2535	2947	3231				3075	3571	3912	*3765	*4387	*4816	2175	2523	2762	2775	3223	3530				3405	3950	4324	*4095	*4772	*5238
16	2080	2413	2641	2704	3144	3446				3280	3809	4172	*4016	*4680	*5137	2320	2691	2946	2960	3438	3765				3632	4213	4612	*4368	*5090	*5587
17	2210	2564	2806	2873	3340	3661				3485	4047	4433	*4267	*4972	*5458	2465	2860	3130	3145	3652	4001				3859	4477	4900	*4641	*5408	*5936
18	2340	2715	2971	3042	3537	3877				3690	4285	4694	*4518	*5265	*5779	2610	3028	3314	3330	3867	4236				*4086	*4740	*5188	*4914	*5726	*6285
19	2470	2865	3136	3211	3733	4092				*3895	*4524	*4955	*4769	*5557	*6100	2755	3196	3498	3515	4082	4471				*4313	*5003	*5477	*5187	*6045	*6635
20	2600	3016	3301	3380	3930	4308				*4100	*4762	*5216	*5020	*5850	*6421	2900	3364	3682	3700	4297	4707				*4540	*5267	*5765	*5460	*6363	*6984
21	2730	3167	3466	3549	4126	4523				*4305	*5000	*5476	*5271	*6142	*6742	3045	3532	3866	3885	4512	4942				*4767	*5530	*6053	*5733	*6681	*7333
22	2860	3318	3632	3718	4323	4738				*4510	*5238	*5737	*5522	*6435	*7063	3190	3701	4051	4070	4727	5177				*4994	*5793	*6341	*6006	*6999	*7682
23	2990	3469	3797	3887	4519	4954				*4715	*5476	*5998	*5773	*6727	*7384	3335	3869	4235	4255	4942	5413				*5221	*6057	*6630	*6279	*7317	*8031
24	3120	3619	3962	4056	4716	5169				*4920	*5714	*6259	*6024	*7020	*7705	3480	4037	4419	*4440	*5156	*5648				*5448	*6320	*6918	*6552	*7635	*8380

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 2200–2400 mm

$\Phi_L = \Delta T \text{ 50 K EN 442 (SN 384.501-503)}$

Mod.	NV 220			NVL 220			NVV ¹ 220			NVV 220-4SR			NVLV 220			NV 240			NVL 240			NVV ¹ 240			NVV 240-4SR			NVLV 240		
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	160	186	203				224	260	285	249	289	316				176	204	223				243	283	310	272	315	345			
2	320	371	406				448	521	571	498	578	632				352	408	447				486	565	619	544	630	690			
3	480	557	609				672	781	856	747	867	949				528	613	670				729	848	929	816	946	1034			
4	640	742	813	804	933	1021	896	1042	1142	996	1155	1265	1180	1375	1509	704	817	894	868	1006	1100	972	1130	1239	1088	1261	1379	1264	1473	1617
5	800	928	1016	1005	1166	1276	1120	1302	1427	1245	1444	1581	1475	1719	1887	880	1021	1117	1085	1257	1375	1215	1413	1548	1360	1576	1724	1580	1841	2021
6	960	1114	1219	1206	1399	1531	1344	1563	1713	1494	1733	1897	1770	2063	2264	1056	1225	1341	1302	1509	1650	1458	1695	1858	1632	1891	2069	1896	2209	2425
7	1120	1299	1422	1407	1632	1787	1568	1823	1998	1743	2022	2213	2065	2406	2641	1232	1429	1564	1519	1760	1925	1701	1978	2168	1904	2206	2413	2212	2578	2829
8	1280	1485	1625	1608	1865	2042	1792	2084	2284	1992	2311	2529	2360	2750	3019	1408	1633	1788	1736	2012	2200	1944	2260	2477	2176	2521	2758	2528	2946	3233
9	1440	1670	1828	1809	2099	2297	2016	2344	2569	2241	2600	2846	2655	3094	3396	1584	1838	2011	1953	2263	2475	2187	2543	2787	2448	2837	3103	2844	3314	3638
10	1600	1856	2032	2010	2332	2552	2240	2604	2855	2490	2889	3162	2950	3438	3773	1760	2042	2235	2170	2514	2750	2430	2825	3097	2720	3152	3448	3160	3682	4042
11	1760	2042	2235	2211	2565	2807	2464	2864	3141	2739	3177	3478	3245	3781	4151	1936	2246	2458	2387	2766	3025	2673	3108	3407	2992	3467	3792	3476	4051	4446
12	1920	2227	2438	2412	2798	3063	2688	3125	3426	2988	3466	3794	3540	4125	4528	2112	2450	2682	2604	3017	3300	2916	3390	3716	3264	3782	4137	*3792	*4419	*4850
13	2080	2413	2641	2613	3031	3318	2912	3385	3712	3237	3755	4110	*3835	*4469	*4905	2288	2654	2905	2821	3269	3576	3159	3673	4026	3536	4097	4482	*4108	*4787	*5254
14	2240	2599	2844	2814	3264	3573	3136	3646	3997	3486	4044	4426	*4130	*4813	*5283	2464	2858	3129	3038	3520	3851	3402	3955	4336	3808	4412	4827	*4424	*5155	*5659
15	2400	2784	3047	3015	3498	3828				3735	4333	4743	*4425	*5157	*5660	2640	3063	3352	3255	3772	4126				*4080	*4728	*5171	*4740	*5524	*6063
16	2560	2970	3251	3216	3731	4084				*3984	*4622	*5059	*4720	*5500	*6037	2816	3267	3576	3472	4023	4401				*4352	*5043	*5516	*5056	*5892	*6467
17	2720	3155	3454	3417	3964	4339				*4233	*4910	*5375	*5015	*5844	*6415	2992	3471	3799	3689	4275	4676				*4624	*5358	*5861	*5372	*6260	*6871
18	2880	3341	3657	3618	4197	4594				*4482	*5199	*5691	*5310	*6188	*6792	3168	3675	4023	3906	4526	4951				*4896	*5673	*6206	*5688	*6628	*7275
19	3040	3527	3860	3819	4430	4849				*4731	*5488	*6007	*5605	*6532	*7169	3344	3879	4246	4123	4777	5226				*5168	*5988	*6550	*6004	*6997	*7680
20	3200	3712	4063	4020	4663	5105				*4980	*5777	*6323	*5900	*6875	*7547	3520	4083	4470	4340	5029	5501				*5440	*6304	*6895	*6320	*7365	*8084
21	3360	3898	4266	4221	4897	5360				*5229	*6066	*6640	*6195	*7219	*7924	3696	4288	4693	*4557	*5280	*5776				*5712	*6619	*7240	*6636	*7733	*8488
22	3520	4083	4470	*4422	*5130	*5615				*5478	*6355	*6956	*6490	*7563	*8301	3872	4492	4917	*4774	*5532	*6051				*5984	*6934	*7585	*6952	*8101	*8892
23	3680	4269	4673	*4623	*5363	*5870				*5727	*6644	*7272	*6785	*7907	*8678	4048	4696	5140	*4991	*5783	*6326				*6256	*7249	*7929	*7268	*8470	*9296
24	3840	4455	4876	*4824	*5596	*6125				*5976	*6932	*7588	*7080	*8250	*9056	4224	4900	5364	*5208	*6035	*6601				*6528	*7564	*8274	*7584	*8838	*9700

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 2600–3000 mm

$\Phi_L = \Delta T$ 50 K EN 442 (SN 384.501-503)

Mod.	NV 260			NVV ¹ 260			NVV 260-4SR			NV 280			NVV ¹ 280			NVV 280-4SR			NV 300			NVV ¹ 300			NVV 300-4SR					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	191	222	243	262	305	334	295	342	374	208	241	264	281	327	358	318	368	403	224	260	284	300	349	382	343	397	435			
2	382	443	485	524	609	668	590	684	748	416	483	528	562	653	716	636	737	806	448	520	569	600	698	765	686	795	869			
3	573	665	728	786	914	1002	885	1025	1122	624	724	792	843	980	1074	954	1105	1209	672	780	853	900	1046	1147	1029	1192	1304			
4	764	886	970	1048	1218	1336	1180	1367	1496	832	965	1056	1124	1307	1432	1272	1474	1612	896	1039	1138	1200	1395	1529	1372	1590	1739			
5	955	1108	1213	1310	1523	1669	1475	1709	1870	1040	1206	1321	1405	1634	1791	1590	1842	2015	1120	1299	1422	1500	1744	1912	1715	1987	2174			
6	1146	1329	1455	1572	1828	2003	1770	2051	2243	1248	1448	1585	1686	1960	2149	1908	2211	2418	1344	1559	1707	1800	2093	2294	2058	2385	2608			
7	1337	1551	1698	1834	2132	2337	2065	2393	2617	1456	1689	1849	1967	2287	2507	2226	2579	2821	1568	1819	1991	2100	2442	2676	2401	2782	3043			
8	1528	1773	1940	2096	2437	2671	2360	2735	2991	1664	1930	2113	2248	2614	2865	2544	2948	3224	1792	2079	2275	2400	2790	3059	2744	3180	3478			
9	1719	1994	2183	2358	2742	3005	2655	3076	3365	1872	2172	2377	2529	2940	3223	2862	3316	3627	2016	2339	2560	2700	3139	3441	3087	3577	3913			
10	1910	2216	2425	2620	3046	3339	2950	3418	3739	2080	2413	2641	2810	3267	3581	3180	3685	4031	2240	2599	2844	3000	3488	3823	3430	3974	4347			
11	2101	2437	2668	2882	3351	3673	3245	3760	4113	2288	2654	2905	3091	3594	3939	3498	4053	4434	2464	2858	3129	3300	3837	4205	3773	4372	4782			
12	2292	2659	2910	3144	3655	4007	3540	4102	4487	2496	2895	3169	3372	3920	4297	3816	4422	4837	2688	3118	3413	3600	4186	4588	*4116	*4769	*5217			
13	2483	2880	3153	3406	3960	4341	3835	4444	4861	2704	3137	3433	3653	4247	4655	*4134	*4790	*5240	2912	3378	3698	3900	4534	4970	*4459	*5167	*5652			
14	2674	3102	3395	3668	4264	4675	*4130	*4786	*5235	2912	3378	3698	3934	4574	5013	*4452	*5159	*5643	3136	3638	3982	4200	4883	5352	*4802	*5564	*6086			
15	2865	3324	3638				*4425	*5127	*5609	3120	3619	3962				*4770	*5527	*6046	3360	3898	4266				*5145	*5962	*6521			
16	3056	3545	3880				*4720	*5469	*5982	3328	3861	4226				*5088	*5896	*6449	3584	4158	4551				*5488	*6359	*6956			
17	3247	3767	4123				*5015	*5811	*6356	3536	4102	4490				*5406	*6264	*6852	3808	4417	4835				*5831	*6757	*7391			
18	3438	3988	4365				*5310	*6153	*6730	3744	4343	4754				*5724	*6633	*7255	4032	4677	5120				*6174	*7154	*7825			
19	3629	4210	4608				*5605	*6495	*7104	3952	4585	5018				*6042	*7001	*7658	4256	4937	5404				*6517	*7551	*8260			
20	3820	4431	4851				*5900	*6837	*7478	4160	4826	5282				*6360	*7370	*8061	4480	5197	5689				*6860	*7949	*8695			
21	4011	4653	5093				*6195	*7178	*7852	4368	5067	5546				*6678	*7738	*8464	4704	5457	5973				*7203	*8346	*9130			
22	4202	4875	5336				*6490	*7520	*8226	4576	5308	5810				*6996	*8106	*8867	4928	5717	6257				*7546	*8744	*9564			
23	4393	5096	5578				*6785	*7862	*8600	4784	5550	6075				*7314	*8475	*9270	5152	5977	6542				*7889	*9141	*9999			
24	4584	5318	5821				*7080	*8204	*8974	4992	5791	6339				*7632	*8843	*9673	5376	6236	6826				*8232	*9539	*10434			

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 3200–3600 mm

$\Phi_L = \Delta T \ 50 \ K \ EN \ 442 \ (SN \ 384.501-503)$

Mod.	NV 320			NVV ¹ 320			NVV 320-4SR			NV 340			NVV ¹ 340			NVV 340-4SR			NV 360			NVV ¹ 360			NVV 360-4SR					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	233	270	296	318	370	405	357	414	452	248	288	315	336	391	428	378	438	479	262	304	333	355	413	452	400	463	507			
2	466	541	592	636	739	811	714	827	905	496	575	630	672	781	856	756	876	958	524	608	665	710	826	905	800	927	1014			
3	699	811	888	954	1109	1216	1071	1241	1357	744	863	945	1008	1172	1285	1134	1314	1437	786	912	998	1065	1238	1357	1200	1390	1521			
4	932	1081	1183	1272	1479	1621	1428	1655	1810	992	1151	1260	1344	1563	1713	1512	1752	1916	1048	1216	1331	1420	1651	1810	1600	1854	2028			
5	1165	1351	1479	1590	1849	2026	1785	2068	2262	1240	1438	1575	1680	1953	2141	1890	2190	2396	1310	1520	1663	1775	2064	2262	2000	2317	2535			
6	1398	1622	1775	1908	2218	2432	2142	2482	2715	1488	1726	1889	2016	2344	2569	2268	2628	2875	1572	1824	1996	2130	2477	2715	2400	2781	3042			
7	1631	1892	2071	2226	2588	2837	2499	2896	3167	1736	2014	2204	2352	2735	2997	2646	3066	3354	1834	2128	2329	2485	2889	3167	2800	3244	3549			
8	1864	2162	2367	2544	2958	3242	2856	3309	3620	1984	2302	2519	2688	3125	3426	3024	3504	3833	2096	2431	2661	2840	3302	3619	3200	3708	4056			
9	2097	2433	2663	2862	3328	3647	3213	3723	4072	2232	2589	2834	3024	3516	3854	3402	3942	4312	2358	2735	2994	3195	3715	4072	3600	4171	4563			
10	2330	2703	2959	3180	3697	4053	3570	4137	4525	2480	2877	3149	3360	3907	4282	3780	4380	4791	2620	3039	3327	3550	4128	4524	*4000	*4635	*5070			
11	2563	2973	3254	3498	4067	4458	*3927	*4550	*4977	2728	3165	3464	3696	4298	4710	*4158	*4818	*5270	2882	3343	3659	3905	4541	4976	*4400	*5098	*5577			
12	2796	3243	3550	3816	4436	4864	*4284	*4964	*5430	2976	3452	3779	4032	4688	5138	*4536	*5256	*5749	3144	3647	3992	4260	4954	5429	*4800	*5562	*6084			
13	3029	3514	3846	4134	4806	5269	*4641	*5378	*5882	3224	3740	4094	4368	5079	5567	*4914	*5694	*6228	3406	3951	4325	4615	5366	5881	*5200	*6025	*6591			
14	3262	3784	4142	4452	5176	5674	*4998	*5791	*6335	3472	4028	4409	4704	5470	5995	*5292	*6132	*6707	3668	4255	4658	4970	5779	6334	*5600	*6489	*7098			
15	3495	4054	4438				*5355	*6205	*6787	3720	4315	4724				*5670	*6570	*7187	3930	4559	4990				*6000	*6952	*7605			
16	3728	4325	4734				*5712	*6619	*7240	3968	4603	5038				*6048	*7008	*7666	4192	4863	5323				*6400	*7416	*8112			
17	3961	4595	5030				*6069	*7032	*7692	4216	4891	5353				*6426	*7446	*8145	4454	5167	5656				*6800	*7879	*8619			
18	4194	4865	5325				*6426	*7446	*8145	4464	5178	5668				*6804	*7884	*8624	4716	5471	5988				*7200	*8343	*9126			
19	4427	5136	5621				*6783	*7860	*8597	4712	5466	5983				*7182	*8322	*9103	4978	5775	6321				*7600	*8806	*9633			
20	4660	5406	5917				*7140	*8273	*9050	4960	5754	6298				*7560	*8760	*9582	5240	6079	6654				*8000	*9270	*10140			
21	4893	5676	6213				*7497	*8687	*9502	5208	6042	6613				*7938	*9198	*10061	5502	6383	6986				*8400	*9733	*10647			
22	*5126	*5946	*6509				*7854	*9101	*9955	5456	6329	6928				*8316	*9636	*10540	5764	6687	7319				*8800	*10197	*11154			
23	*5359	*6217	*6805				*8211	*9514	*10407	5704	6617	7243				*8694	*10074	*11019	6026	6990	7652				*9200	*10660	*11661			
24	*5592	*6487	*7101				*8568	*9928	*10860	5952	6905	7558				*9072	*10512	*11498	6288	7294	7984				*9600	*11124	*12168			

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 3800–4200 mm

$$\Phi_L = \Delta T \text{ 50 K EN 442 (SN 384.501-503)}$$

Mod.	NV 380			NVV ¹ 380			NVV 380-4SR			NV 400			NVV ¹ 400			NVV 400-4SR			NV 420			NVV ¹ 420			NVV 420-4SR					
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60
1	277	321	352	373	434	475	421	488	534	291	338	370	392	456	500	443	513	561	306	355	389	410	477	523	464	538	588			
2	554	643	703	746	867	951	842	976	1067	582	675	739	784	912	999	886	1027	1123	612	710	777	820	953	1045	928	1075	1176			
3	831	964	1055	1119	1301	1426	1263	1463	1601	873	1013	1109	1176	1367	1499	1329	1540	1684	918	1065	1166	1230	1430	1568	1392	1613	1764			
4	1108	1285	1407	1492	1735	1901	1684	1951	2134	1164	1350	1478	1568	1823	1998	1772	2053	2246	1224	1420	1554	1640	1907	2090	1856	2151	2352			
5	1385	1607	1759	1865	2168	2377	2105	2439	2668	1455	1688	1848	1960	2279	2498	2215	2567	2807	1530	1775	1943	2050	2383	2613	2320	2688	2941			
6	1662	1928	2110	2238	2602	2852	2526	2927	3202	1746	2025	2217	2352	2735	2997	2658	3080	3369	1836	2130	2331	2460	2860	3135	2784	3226	3529			
7	1939	2249	2462	2611	3036	3327	2947	3415	3735	2037	2363	2587	2744	3190	3497	3101	3593	3930	2142	2485	2720	2870	3337	3658	3248	3764	4117			
8	2216	2571	2814	2984	3469	3803	3368	3903	4269	2328	2701	2956	3136	3646	3997	3544	4107	4492	2448	2840	3108	3280	3814	4180	3712	4301	4705			
9	2493	2892	3166	3357	3903	4278	3789	4390	4802	2619	3038	3326	3528	4102	4496	*3987	*4620	*5053	2754	3195	3497	*3690	*4290	*4703	*4176	*4839	*5293			
10	2770	3213	3517	*3730	*4337	*4754	*4210	*4878	*5336	2910	3376	3695	*3920	*4558	*4996	*4430	*5133	*5615	3060	3550	3886	*4100	*4767	*5225	*4640	*5377	*5881			
11	3047	3535	3869	*4103	*4771	*5229	*4631	*5366	*5870	3201	3713	4065	*4312	*5014	*5496	*4873	*5647	*6176	3366	3905	4274	*4510	*5244	*5748	*5104	*5914	*6469			
12	3324	3856	4221	*4476	*5204	*5705	*5052	*5854	*6403	3492	4051	4434	*4704	*5470	*5995	*5316	*6160	*6738	3672	4260	4663	*4920	*5720	*6270	*5568	*6452	*7057			
13	3601	4177	4572	*4849	*5638	*6180	*5473	*6342	*6937	3783	4388	4804	*5096	*5925	*6495	*5759	*6673	*7299	3978	4615	5051	*5330	*6197	*6793	*6032	*6989	*7645			
14	3878	4499	4924	*5222	*6072	*6656	*5894	*6830	*7470	4074	4726	5173	*5488	*6381	*6994	*6202	*7186	*7861	4284	4970	5440	*5740	*6674	*7315	*6496	*7527	*8233			
15	4155	4820	5276				*6315	*7317	*8004	4365	5064	5543				*6645	*7700	*8422	4590	5325	5828				*6960	*8065	*8822			
16	4432	5141	5628				*6736	*7805	*8538	4656	5401	5912				*7088	*8213	*8984	4896	5680	6217				*7424	*8602	*9410			
17	4709	5463	5979				*7157	*8293	*9071	4947	5739	6282				*7531	*8726	*9545	*5202	*6035	*6605				*7888	*9140	*9998			
18	4986	5784	6331				*7578	*8781	*9605	*5238	*6076	*6651				*7974	*9240	*10107	*5508	*6390	*6994				*8352	*9678	*10586			
19	*5263	*6105	*6683				*7999	*9269	*10138	*5529	*6414	*7021				*8417	*9753	*10668	*5814	*6745	*7382				*8816	*10215	*11174			
20	*5540	*6427	*7035				*8420	*9757	*10672	*5820	*6751	*7390				*8860	*10266	*11230	*6120	*7099	*7771				*9280	*10753	*11762			
21	*5817	*6748	*7386				*8841	*10244	*11206	*6111	*7089	*7760				*9303	*10780	*11791	*6426	*7454	*8160				*9744	*11291	*12350			
22	*6094	*7069	*7738				*9262	*10732	*11739	*6402	*7427	*8129				*9746	*11293	*12353	*6732	*7809	*8548				*10208	*11828	*12938			
23	*6371	*7391	*8090				*9683	*11220	*12273	*6693	*7764	*8499				*10189	*11806	*12914	*7038	*8164	*8937				*10672	*12366	*13526			
24	*6648	*7712	*8441				*10104	*11708	*12806	*6984	*8102	*8868				*10632	*12320	*13476	*7344	*8519	*9325				*11136	*12904	*14114			

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Overall height = 4400–4600 mm

$\Phi_L = \Delta T \text{ 50 K EN 442 (SN 384.501-503)}$

Mod.	NV 440			NVV ¹ 440			NVV 440-4SR			NV 460			NVV ¹ 460			NVV 460-4SR																								
	T mm	H mm	H Lam. mm	M kg	P 50K	Exp. n																																		
	45	4400	-	7.76	320	1.31	53	4400	-	15.12	428	1.33	92	4400	-	15.5	486	1.3	45	4600	-	8.09	335	1.31	53	4600	-	15.79	447	1.33	92	4600	-	16.2	507	1.3				
Length	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60	Watt 50	Watt 56	Watt 60							
1	320	371	406	428	498	545	486	563	616	335	389	425	447	520	570	507	587	643																						
2	640	742	813	856	995	1091	972	1126	1232	670	777	851	894	1039	1139	1014	1175	1285																						
3	960	1114	1219	1284	1493	1636	1458	1689	1848	1005	1166	1276	1341	1559	1709	1521	1762	1928																						
4	1280	1485	1625	1712	1991	2182	1944	2253	2464	1340	1554	1702	1788	2079	2279	2028	2350	2570																						
5	1600	1856	2032	2140	2488	2727	2430	2816	3080	1675	1943	2127	2235	2599	2848	2535	2937	3213																						
6	1920	2227	2438	2568	2986	3273	2916	3379	3696	2010	2332	2552	2682	3118	3418	3042	3525	3856																						
7	2240	2599	2844	2996	3483	3818	3402	3942	4312	2345	2720	2978	3129	3638	3988	3549	4112	4498																						
8	2560	2970	3251	3424	3981	4364	3888	4505	4928	2680	3109	3403	*3576	*4158	*4557	*4056	*4700	*5141																						
9	2880	3341	3657	*3852	*4479	*4909	*4374	*5068	*5544	3015	3498	3828	*4023	*4677	*5127	*4563	*5287	*5783																						
10	3200	3712	4063	*4280	*4976	*5454	*4860	*5631	*6160	3350	3886	4254	*4470	*5197	*5697	*5070	*5875	*6426																						
11	3520	4083	4470	*4708	*5474	*5999	*5346	*6195	*6776	3685	4275	4679	*4917	*5717	*6267	*5577	*6462	*7069																						
12	3840	4455	4876	*5136	*5971	*6545	*5832	*6758	*7392	4020	4663	5105	*5394	*6236	*6836	*6084	*7050	*7711																						
13	4160	4826	5282	*5564	*6469	*7090	*6318	*7321	*8008	4355	5052	5530	*5811	*6756	*7406	*6591	*7637	*8354																						
14	4480	5197	5689	*5992	*6966	*7636	*6804	*7884	*8624	4690	5441	5955	*6258	*7276	*7976	*7098	*8225	*8996																						
15	4800	5568	6095				*7290	*8447	*9240	5025	5829	6381				*7605	*8812	*9639																						
16	5120	5939	6501				*7776	*9010	*9856	*5360	*6218	*6806				*8112	*9400	*10282																						
17	*5440	*6311	*6908				*8262	*9573	*10472	*5695	*6606	*7231				*8619	*9987	*10924																						
18	*5760	*6682	*7314				*8748	*10137	*11088	*6030	*6995	*7657				*9126	*10575	*11567																						
19	*6080	*7053	*7720				*9234	*10700	*11704	*6365	*7384	*8082				*9633	*11162	*12209																						
20	*6400	*7424	*8127				*9720	*11263	*12320	*6700	*7772	*8508				*10140	*11750	*12852																						
21	*6720	*7796	*8533				*10206	*11826	*12936	*7035	*8161	*8933				*10647	*12337	*13495																						
22	*7040	*8167	*8939				*10692	*12389	*13552	*7370	*8550	*9358				*11154	*12925	*14137																						
23	*7360	*8538	*9346				*11178	*12952	*14168	*7705	*8938	*9784				*11661	*13512	*14780																						
24	*7680	*8909	*9752				*11664	*13515	*14784	*8040	*9327	*10209				*12168	*14099	*15423																						

* weight = >125kg

1 NVV model available upto 14 sections.

After 14 sections, the NVV-4SR model is automatically substituted for the NVV model.

Configuration examples

zehnder nova



Many different special versions are available on request.
Please call us and we shall be pleased to advise you.

With bespoke end profile



Angled configuration



With adjustable support legs



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

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

ΔT K \ n	1,16	1,17	1,18	1,19	1,20	1,21	1,22	1,23	1,24	1,25	1,26	1,27	1,28	1,29	1,30
10	0,1546	0,1521	0,1497	0,1473	0,1450	0,1426	0,1404	0,1381	0,1359	0,1337	0,1316	0,1295	0,1274	0,1254	0,1234
11	0,1727	0,1701	0,1675	0,1650	0,1625	0,1601	0,1577	0,1553	0,1530	0,1507	0,1484	0,1462	0,1440	0,1418	0,1397
12	0,1910	0,1883	0,1856	0,1830	0,1804	0,1779	0,1753	0,1728	0,1704	0,1680	0,1656	0,1633	0,1609	0,1587	0,1564
13	0,2096	0,2068	0,2040	0,2013	0,1986	0,1959	0,1933	0,1907	0,1882	0,1857	0,1832	0,1807	0,1783	0,1759	0,1736
14	0,2284	0,2255	0,2227	0,2198	0,2171	0,2143	0,2116	0,2089	0,2063	0,2037	0,2011	0,1986	0,1960	0,1936	0,1911
15	0,2474	0,2445	0,2415	0,2387	0,2358	0,2330	0,2302	0,2274	0,2247	0,2220	0,2194	0,2167	0,2141	0,2116	0,2091
16	0,2667	0,2636	0,2607	0,2577	0,2548	0,2519	0,2490	0,2462	0,2434	0,2407	0,2380	0,2353	0,2326	0,2300	0,2274
17	0,2861	0,2830	0,2800	0,2770	0,2740	0,2711	0,2682	0,2653	0,2624	0,2596	0,2568	0,2541	0,2514	0,2487	0,2460
18	0,3057	0,3026	0,2995	0,2965	0,2935	0,2905	0,2875	0,2846	0,2817	0,2789	0,2760	0,2732	0,2704	0,2677	0,2650
19	0,3255	0,3224	0,3193	0,3162	0,3131	0,3101	0,3071	0,3042	0,3013	0,2984	0,2955	0,2926	0,2898	0,2870	0,2843
20	0,3455	0,3423	0,3392	0,3361	0,3330	0,3300	0,3270	0,3240	0,3210	0,3181	0,3152	0,3123	0,3095	0,3067	0,3039
21	0,3656	0,3624	0,3593	0,3562	0,3531	0,3501	0,3470	0,3440	0,3411	0,3381	0,3352	0,3323	0,3294	0,3266	0,3238
22	0,3858	0,3827	0,3796	0,3765	0,3734	0,3703	0,3673	0,3643	0,3613	0,3584	0,3554	0,3525	0,3496	0,3468	0,3439
23	0,4063	0,4031	0,4000	0,3969	0,3938	0,3908	0,3878	0,3848	0,3818	0,3788	0,3759	0,3730	0,3701	0,3672	0,3644
24	0,4268	0,4237	0,4206	0,4175	0,4145	0,4114	0,4084	0,4054	0,4025	0,3995	0,3966	0,3937	0,3908	0,3880	0,3851
25	0,4475	0,4444	0,4414	0,4383	0,4353	0,4323	0,4293	0,4263	0,4234	0,4204	0,4175	0,4147	0,4118	0,4090	0,4061
26	0,4683	0,4653	0,4623	0,4592	0,4563	0,4533	0,4503	0,4474	0,4445	0,4416	0,4387	0,4358	0,4330	0,4302	0,4274
27	0,4893	0,4863	0,4833	0,4803	0,4774	0,4745	0,4715	0,4686	0,4658	0,4629	0,4601	0,4572	0,4544	0,4516	0,4489
28	0,5104	0,5074	0,5045	0,5016	0,4987	0,4958	0,4929	0,4901	0,4873	0,4844	0,4816	0,4788	0,4761	0,4733	0,4706
29	0,5316	0,5287	0,5258	0,5230	0,5201	0,5173	0,5145	0,5117	0,5089	0,5062	0,5034	0,5007	0,4980	0,4952	0,4926
30	0,5529	0,5501	0,5473	0,5445	0,5417	0,5390	0,5362	0,5335	0,5308	0,5281	0,5254	0,5227	0,5200	0,5174	0,5148
31	0,5743	0,5716	0,5689	0,5662	0,5635	0,5608	0,5581	0,5554	0,5528	0,5502	0,5475	0,5449	0,5423	0,5397	0,5372
32	0,5959	0,5932	0,5906	0,5880	0,5854	0,5827	0,5801	0,5776	0,5750	0,5724	0,5699	0,5673	0,5648	0,5623	0,5598
33	0,6175	0,6150	0,6124	0,6099	0,6074	0,6049	0,6023	0,5998	0,5974	0,5949	0,5924	0,5900	0,5875	0,5851	0,5826
34	0,6393	0,6368	0,6344	0,6320	0,6295	0,6271	0,6247	0,6223	0,6199	0,6175	0,6151	0,6128	0,6104	0,6080	0,6057
35	0,6612	0,6588	0,6565	0,6541	0,6518	0,6495	0,6472	0,6449	0,6426	0,6403	0,6380	0,6357	0,6335	0,6312	0,6290
36	0,6831	0,6809	0,6787	0,6764	0,6742	0,6720	0,6698	0,6676	0,6654	0,6632	0,6611	0,6589	0,6567	0,6546	0,6524
37	0,7052	0,7031	0,7010	0,6989	0,6968	0,6947	0,6926	0,6905	0,6884	0,6863	0,6843	0,6822	0,6802	0,6781	0,6761
38	0,7274	0,7254	0,7234	0,7214	0,7194	0,7174	0,7155	0,7135	0,7116	0,7096	0,7077	0,7057	0,7038	0,7019	0,6999
39	0,7496	0,7477	0,7459	0,7440	0,7422	0,7403	0,7385	0,7367	0,7348	0,7330	0,7312	0,7294	0,7276	0,7258	0,7240
40	0,7719	0,7702	0,7685	0,7668	0,7651	0,7634	0,7617	0,7600	0,7583	0,7566	0,7549	0,7532	0,7515	0,7499	0,7482
41	0,7944	0,7928	0,7912	0,7897	0,7881	0,7865	0,7850	0,7834	0,7819	0,7803	0,7788	0,7772	0,7757	0,7741	0,7726
42	0,8169	0,8155	0,8140	0,8126	0,8112	0,8098	0,8084	0,8070	0,8056	0,8042	0,8028	0,8014	0,8000	0,7986	0,7972
43	0,8395	0,8382	0,8370	0,8357	0,8344	0,8332	0,8319	0,8307	0,8294	0,8282	0,8269	0,8257	0,8244	0,8232	0,8220
44	0,8622	0,8611	0,8600	0,8589	0,8578	0,8567	0,8556	0,8545	0,8534	0,8523	0,8512	0,8501	0,8491	0,8480	0,8469
45	0,8850	0,8840	0,8831	0,8822	0,8812	0,8803	0,8794	0,8785	0,8775	0,8766	0,8757	0,8748	0,8738	0,8729	0,8720
46	0,9078	0,9071	0,9063	0,9055	0,9048	0,9040	0,9033	0,9025	0,9018	0,9010	0,9003	0,8995	0,8988	0,8980	0,8973
47	0,9307	0,9302	0,9296	0,9290	0,9284	0,9279	0,9273	0,9267	0,9261	0,9256	0,9250	0,9244	0,9239	0,9233	0,9227
48	0,9538	0,9534	0,9530	0,9526	0,9522	0,9518	0,9514	0,9510	0,9506	0,9503	0,9499	0,9495	0,9491	0,9487	0,9483
49	0,9768	0,9766	0,9764	0,9762	0,9760	0,9759	0,9757	0,9755	0,9753	0,9751	0,9749	0,9747	0,9745	0,9743	0,9741
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	1,0232	1,0234	1,0236	1,0238	1,0240	1,0243	1,0245	1,0247	1,0249	1,0251	1,0253	1,0255	1,0257	1,0259	1,0261
52	1,0465	1,0470	1,0474	1,0478	1,0482	1,0486	1,0490	1,0494	1,0498	1,0502	1,0507	1,0511	1,0515	1,0519	1,0523
53	1,0699	1,0706	1,0712	1,0718	1,0724	1,0731	1,0737	1,0743	1,0749	1,0756	1,0762	1,0768	1,0774	1,0781	1,0787
54	1,0934	1,0942	1,0951	1,0959	1,0968	1,0976	1,0984	1,0993	1,1001	1,1010	1,1018	1,1027	1,1035	1,1044	1,1052
55	1,1169	1,1180	1,1190	1,1201	1,1212	1,1222	1,1233	1,1244	1,1255	1,1265	1,1276	1,1287	1,1298	1,1308	1,1319
56	1,1405	1,1418	1,1431	1,1444	1,1457	1,1470	1,1483	1,1496	1,1509	1,1522	1,1535	1,1548	1,1561	1,1574	1,1587
57	1,1642	1,1657	1,1672	1,1687	1,1703	1,1718	1,1733	1,1749	1,1764	1,1780	1,1795	1,1811	1,1826	1,1842	1,1857
58	1,1879	1,1896	1,1914	1,1932	1,1949	1,1967	1,1985	1,2003	1,2021	1,2039	1,2056	1,2074	1,2092	1,2110	1,2128
59	1,2117	1,2137	1,2157	1,2177	1,2197	1,2217	1,2238	1,2258	1,2278	1,2299	1,2319	1,2339	1,2360	1,2380	1,2401
60	1,2355	1,2378	1,2400	1,2423	1,2446	1,2468	1,2491	1,2514	1,2537	1,2560	1,2583	1,2606	1,2629	1,2652	1,2675
61	1,2594	1,2619	1,2645	1,2670	1,2695	1,2720	1,2746	1,2771	1,2796	1,2822	1,2847	1,2873	1,2899	1,2924	1,2950
62	1,2834	1,2862	1,2890	1,2917	1,2945	1,2973	1,3001	1,3029	1,3057	1,3085	1,3113	1,3142	1,3170	1,3198	1,3227
63	1,3075	1,3105	1,3135	1,3166	1,3196	1,3227	1,3257	1,3288	1,3319	1,3349	1,3380	1,3411	1,3442	1,3473	1,3505
64	1,3316	1,3349	1,3382	1,3415	1,3448	1,3481	1,3514	1,3548	1,3581	1,3615	1,3648	1,3682	1,3716	1,3750	1,3784
65	1,3557	1,3593	1,3629	1,3664	1,3700	1,3736	1,3772	1,3809	1,3845	1,3881	1,3918	1,3954	1,3991	1,4028	1,4065
66	1,3800	1,3838	1,3876	1,3915	1,3954	1,3992	1,4031	1,4070	1,4110	1,4149	1,4188	1,4228	1,4267	1,4307	1,4347
67	1,4042	1,4084	1,4125	1,4166	1,4208	1,4249	1,4291	1,4333	1,4375	1,4417	1,4459	1,4502	1,4544	1,4587	1,4630
68	1,4286	1,4330	1,4374	1,4418	1,4463	1,4507	1,4552	1,4597	1,4642	1,4687	1,4732	1,4777	1,4823	1,4868	1,4914
69	1,4530	1,4577	1,4624	1,4671	1,4718	1,4766	1,4813	1,4861	1,4909	1,4957	1,5005	1,5054	1,5102	1,5151	1,5200
70	1,4774	1,4824	1,4874	1,4924	1,4975	1,5025	1,5076	1,5126	1,5177	1,5229	1,5280	1,5331	1,5383	1,5435	1,5487
ΔT K \ n	1,16	1,17	1,18	1,19	1,20	1,21	1,22	1,23	1,24	1,25	1,26	1,27	1,28	1,29	1,30

1,31	1,32	1,33	1,34	1,35	1,36	1,37	1,38	1,39	1,40	1,41	1,42	1,43	1,44	1,45	n	Т К
0,1214	0,1195	0,1176	0,1157	0,1139	0,1120	0,1103	0,1085	0,1068	0,1051	0,1034	0,1017	0,1001	0,0985	0,0969	10	
0,1376	0,1355	0,1335	0,1315	0,1295	0,1276	0,1256	0,1237	0,1219	0,1201	0,1183	0,1165	0,1147	0,1130	0,1113	11	
0,1542	0,1520	0,1499	0,1477	0,1456	0,1436	0,1415	0,1395	0,1376	0,1356	0,1337	0,1318	0,1299	0,1281	0,1263	12	
0,1712	0,1690	0,1667	0,1645	0,1623	0,1601	0,1579	0,1558	0,1537	0,1517	0,1497	0,1477	0,1457	0,1437	0,1418	13	
0,1887	0,1863	0,1840	0,1816	0,1793	0,1771	0,1748	0,1726	0,1704	0,1683	0,1661	0,1640	0,1620	0,1599	0,1579	14	
0,2066	0,2041	0,2016	0,1992	0,1968	0,1945	0,1922	0,1899	0,1876	0,1853	0,1831	0,1809	0,1788	0,1766	0,1745	15	
0,2248	0,2222	0,2197	0,2172	0,2148	0,2123	0,2099	0,2075	0,2052	0,2029	0,2006	0,1983	0,1960	0,1938	0,1916	16	
0,2434	0,2407	0,2382	0,2356	0,2331	0,2306	0,2281	0,2257	0,2232	0,2208	0,2185	0,2161	0,2138	0,2115	0,2092	17	
0,2623	0,2596	0,2570	0,2544	0,2518	0,2492	0,2467	0,2442	0,2417	0,2392	0,2368	0,2344	0,2320	0,2297	0,2273	18	
0,2815	0,2788	0,2761	0,2735	0,2708	0,2682	0,2656	0,2631	0,2606	0,2580	0,2556	0,2531	0,2507	0,2482	0,2459	19	
0,3011	0,2983	0,2956	0,2929	0,2903	0,2876	0,2850	0,2824	0,2798	0,2773	0,2747	0,2722	0,2697	0,2673	0,2648	20	
0,3210	0,3182	0,3154	0,3127	0,3100	0,3073	0,3047	0,3021	0,2994	0,2969	0,2943	0,2918	0,2892	0,2867	0,2843	21	
0,3411	0,3383	0,3356	0,3328	0,3301	0,3274	0,3247	0,3221	0,3194	0,3168	0,3142	0,3117	0,3091	0,3066	0,3041	22	
0,3616	0,3588	0,3560	0,3533	0,3505	0,3478	0,3451	0,3425	0,3398	0,3372	0,3346	0,3320	0,3294	0,3269	0,3243	23	
0,3823	0,3795	0,3767	0,3740	0,3713	0,3685	0,3658	0,3632	0,3605	0,3579	0,3553	0,3527	0,3501	0,3475	0,3450	24	
0,4033	0,4005	0,3978	0,3950	0,3923	0,3896	0,3869	0,3842	0,3816	0,3789	0,3763	0,3737	0,3711	0,3686	0,3660	25	
0,4246	0,4218	0,4191	0,4163	0,4136	0,4109	0,4082	0,4056	0,4029	0,4003	0,3977	0,3951	0,3925	0,3900	0,3874	26	
0,4461	0,4434	0,4406	0,4379	0,4352	0,4326	0,4299	0,4273	0,4246	0,4220	0,4194	0,4169	0,4143	0,4118	0,4092	27	
0,4679	0,4652	0,4625	0,4598	0,4571	0,4545	0,4519	0,4493	0,4467	0,4441	0,4415	0,4390	0,4364	0,4339	0,4314	28	
0,4899	0,4872	0,4846	0,4819	0,4793	0,4767	0,4741	0,4716	0,4690	0,4664	0,4639	0,4614	0,4589	0,4564	0,4539	29	
0,5121	0,5095	0,5069	0,5043	0,5018	0,4992	0,4967	0,4941	0,4916	0,4891	0,4866	0,4841	0,4817	0,4792	0,4768	30	
0,5346	0,5321	0,5295	0,5270	0,5245	0,5220	0,5195	0,5170	0,5145	0,5121	0,5097	0,5072	0,5048	0,5024	0,5000	31	
0,5573	0,5548	0,5524	0,5499	0,5474	0,5450	0,5426	0,5402	0,5378	0,5354	0,5330	0,5306	0,5282	0,5259	0,5236	32	
0,5802	0,5778	0,5754	0,5730	0,5707	0,5683	0,5659	0,5636	0,5613	0,5589	0,5566	0,5543	0,5520	0,5497	0,5474	33	
0,6034	0,6011	0,5987	0,5964	0,5941	0,5919	0,5896	0,5873	0,5850	0,5828	0,5805	0,5783	0,5761	0,5739	0,5717	34	
0,6267	0,6245	0,6223	0,6201	0,6178	0,6156	0,6135	0,6113	0,6091	0,6069	0,6048	0,6026	0,6005	0,5983	0,5962	35	
0,6503	0,6482	0,6460	0,6439	0,6418	0,6397	0,6376	0,6355	0,6334	0,6313	0,6293	0,6272	0,6252	0,6231	0,6211	36	
0,6741	0,6720	0,6700	0,6680	0,6660	0,6640	0,6620	0,6600	0,6580	0,6560	0,6541	0,6521	0,6501	0,6482	0,6462	37	
0,6980	0,6961	0,6942	0,6923	0,6904	0,6885	0,6866	0,6847	0,6829	0,6810	0,6791	0,6773	0,6754	0,6736	0,6717	38	
0,7222	0,7204	0,7186	0,7168	0,7150	0,7133	0,7115	0,7097	0,7080	0,7062	0,7045	0,7027	0,7010	0,6992	0,6975	39	
0,7465	0,7449	0,7432	0,7416	0,7399	0,7382	0,7366	0,7350	0,7333	0,7317	0,7301	0,7284	0,7268	0,7252	0,7236	40	
0,7711	0,7695	0,7680	0,7665	0,7650	0,7635	0,7619	0,7604	0,7589	0,7574	0,7559	0,7544	0,7529	0,7514	0,7499	41	
0,7958	0,7944	0,7930	0,7917	0,7903	0,7889	0,7875	0,7861	0,7848	0,7834	0,7820	0,7807	0,7793	0,7780	0,7766	42	
0,8207	0,8195	0,8182	0,8170	0,8158	0,8146	0,8133	0,8121	0,8109	0,8097	0,8084	0,8072	0,8060	0,8048	0,8036	43	
0,8458	0,8447	0,8436	0,8426	0,8415	0,8404	0,8393	0,8383	0,8372	0,8361	0,8351	0,8340	0,8329	0,8319	0,8308	44	
0,8711	0,8702	0,8692	0,8683	0,8674	0,8665	0,8656	0,8647	0,8638	0,8629	0,8619	0,8610	0,8601	0,8592	0,8583	45	
0,8965	0,8958	0,8950	0,8943	0,8935	0,8928	0,8921	0,8913	0,8906	0,8898	0,8891	0,8883	0,8876	0,8869	0,8861	46	
0,9221	0,9216	0,9210	0,9204	0,9199	0,9193	0,9187	0,9182	0,9176	0,9170	0,9165	0,9159	0,9153	0,9148	0,9142	47	
0,9479	0,9475	0,9472	0,9468	0,9464	0,9460	0,9456	0,9452	0,9448	0,9445	0,9441	0,9437	0,9433	0,9429	0,9425	48	
0,9739	0,9737	0,9735	0,9733	0,9731	0,9729	0,9727	0,9725	0,9723	0,9721	0,9719	0,9717	0,9715	0,9713	0,9711	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	
1,0263	1,0265	1,0267	1,0269	1,0271	1,0273	1,0275	1,0277	1,0279	1,0281	1,0283	1,0285	1,0287	1,0289	1,0291	51	
1,0527	1,0531	1,0535	1,0540	1,0544	1,0548	1,0552	1,0556	1,0560	1,0564	1,0569	1,0573	1,0577	1,0581	1,0585	52	
1,0793	1,0800	1,0806	1,0812	1,0818	1,0825	1,0831	1,0837	1,0844	1,0850	1,0856	1,0863	1,0869	1,0875	1,0882	53	
1,1061	1,1069	1,1078	1,1086	1,1095	1,1103	1,1112	1,1121	1,1129	1,1138	1,1146	1,1155	1,1163	1,1172	1,1181	54	
1,1330	1,1341	1,1351	1,1362	1,1373	1,1384	1,1395	1,1406	1,1417	1,1427	1,1438	1,1449	1,1460	1,1471	1,1482	55	
1,1600	1,1614	1,1627	1,1640	1,1653	1,1666	1,1680	1,1693	1,1706	1,1719	1,1733	1,1746	1,1759	1,1773	1,1786	56	
1,1873	1,1888	1,1904	1,1919	1,1935	1,1951	1,1966	1,1982	1,1998	1,2013	1,2029	1,2045	1,2061	1,2077	1,2092	57	
1,2146	1,2164	1,2182	1,2200	1,2219	1,2237	1,2255	1,2273	1,2291	1,2310	1,2328	1,2346	1,2364	1,2383	1,2401	58	
1,2421	1,2442	1,2462	1,2483	1,2504	1,2524	1,2545	1,2566	1,2587	1,2608	1,2629	1,2649	1,2670	1,2691	1,2712	59	
1,2698	1,2721	1,2744	1,2767	1,2791	1,2814	1,2837	1,2861	1,2884	1,2908	1,2931	1,2955	1,2979	1,3002	1,3026	60	
1,2976	1,3002	1,3027	1,3053	1,3079	1,3105	1,3131	1,3158	1,3184	1,3210	1,3236	1,3263	1,3289	1,3316	1,3342	61	
1,3255	1,3284	1,3312	1,3341	1,3370	1,3398	1,3427	1,3456	1,3485	1,3514	1,3543	1,3572	1,3602	1,3631	1,3660	62	
1,3536	1,3567	1,3599	1,3630	1,3662	1,3693	1,3725	1,3757	1,3788	1,3820	1,3852	1,3884	1,3916	1,3949	1,3981	63	
1,3818	1,3852	1,3886	1,3921	1,3955	1,3990	1,4024	1,4059	1,4094	1,4128	1,4163	1,4198	1,4233	1,4269	1,4304	64	
1,4102	1,4139	1,4176	1,4213	1,4250	1,4288	1,4325	1,4363	1,4401	1,4438	1,4476	1,4514	1,4553	1,4591	1,4629	65	
1,4386	1,4426	1,4466	1,4507	1,4547	1,4587	1,4628	1,4669	1,4709	1,4750	1,4791	1,4833	1,4874	1,4915	1,4957	66	
1,4673	1,4716	1,4759	1,4802	1,4845	1,4889	1,4933	1,4976	1,5020	1,5064	1,5108	1,5153	1,5197	1,5242	1,5286	67	
1,4960	1,5006	1,5052	1,5099	1,5145	1,5192	1,5239	1,5286	1,5333	1,5380	1,5427	1,5475	1,5522	1,5570	1,5618	68	
1,5249	1,5298	1,5348	1,5397	1,5447	1,5497	1,5547	1,5597	1,5647	1,5698	1,5748	1,5799	1,5850	1,5901	1,5952	69	
1,5539	1,5592	1,5644	1,5697	1,5750	1,5803	1,5856	1,5910	1,5963	1,6017	1,6071	1,6125	1,6179	1,6234	1,6289	70	
1,31	1,32	1,33	1,34	1,35	1,36	1,37	1,38	1,39	1,40	1,41	1,42	1,43	1,44	1,45	n	Т К

