



HENRAD

DISCOVER ALTO



STANDARD RANGE

GENERAL INFORMATION

ALTO

You only have limited space to fit a radiator? The Alto is the solution. This vertical radiator takes up a minimum of space and optimally heats the cold air next to large window sections in the kitchen or entrance hall.

Product:	the vertical panel radiator with a centre connection
Finishing:	side panels (only for types 11, 20, 21 and 22)
Also supplied:	wall brackets, ETA safety screws and plugs, screws, plugs, air vent, blind plugs and installation instructions
Connections:	4 x ½" female connection (centre connection included). Types 20, 21 and 22 can be reversed (front/back), in which case inlet and outlet are also reversed.
Lugs:	no lugs
Packaging:	Every radiator is sturdily packaged in high-quality cardboard and wrapped in plastic. The radiator's characteristics are shown on the label: type – height – length.
Warranty:	10 years, as long as the installation instructions have been followed and Henrad's warranty conditions have been met.
Paint process:	All radiators are degreased, phosphated, cataphoretically primed and powder-coated in Henrad white 9016 as standard.
Colours:	Henrad white 9016 + 35 different Henrad colours and about 200 RAL-colours are possible
Heat cost allocator:	Suitable for heat cost allocators, both electronic and according to the evaporation principle (covered by the norm of EN834 & EN835).
Max. operating pressure:	10 bar (tested to 13 bar)
Max. operating temperature:	110 °C
Conformity:	in accordance with EN442
Quality assurance:	NF
Types:	10 11 20 21 22
Heights:	1.600 1.800 2.000 2.200 mm
Lengths:	300 400 500 600 700 mm
Depths:	47 47 77 77 100 mm



2006

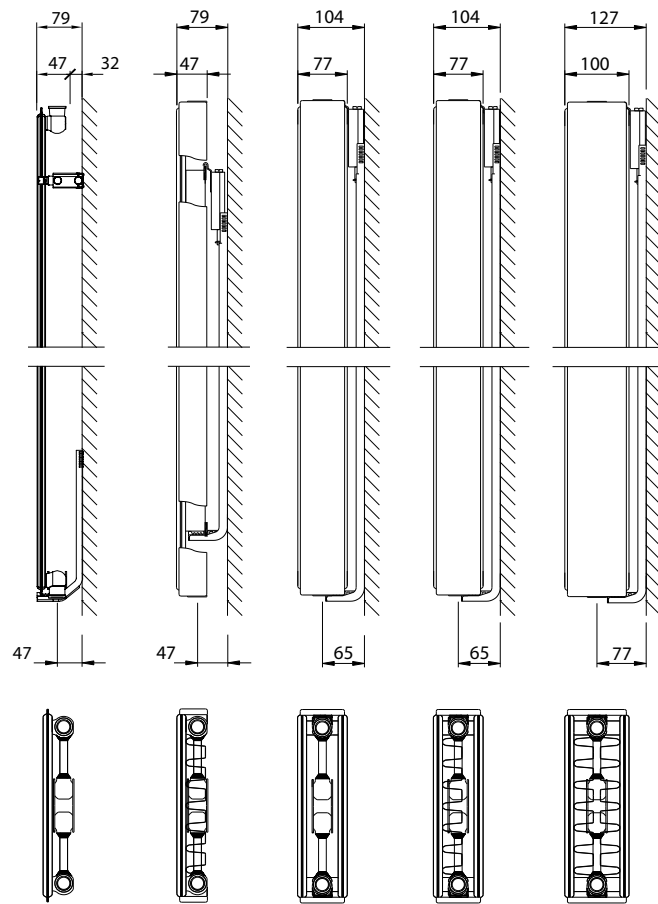
STANDARD RANGE

TYPE OVERVIEW

Calculation factor
per meter
at 75/65/20°C
according to EN442

Characteristic equation:

$$\Phi = K_M \times \Delta T^n$$



Height		T10	T11	T20	T21	T22	Height
1600	W	1.677	2.157	2.592	3.030	3.630	1600
	kg	30,90	42,90	63,30	71,70	80,70	
	l	7,20	7,20	14,40	14,10	14,10	
	m ²	3,67	9,40	7,33	12,66	28,99	
	n	1,27	1,34	1,32	1,32	1,33	
1800	W	1.863	2.379	2.865	3.330	3.960	1800
	kg	34,50	48,30	71,10	80,10	88,80	
	l	8,40	8,40	16,20	16,50	16,20	
	m ²	4,13	9,86	8,25	13,58	29,90	
	n	1,29	1,33	1,31	1,33	1,33	
2000	W	2.058	2.595	3.120	3.600	4.290	2000
	kg	38,10	53,70	78,60	89,10	96,60	
	l	9,30	9,30	18,00	18,60	18,00	
	m ²	4,59	12,15	9,17	16,20	37,74	
	n	1,30	1,33	1,31	1,33	1,33	
2200	W	2.265	2.802	3.390	3.870	4.620	2200
	kg	42,00	57,90	87,60	98,40	108,90	
	l	10,20	10,20	20,10	20,10	20,10	
	m ²	5,04	12,61	10,09	17,11	38,66	
	n	1,32	1,32	1,30	1,33	1,34	

W=heat output per meter / kg=weight per meter / l=content per meter / m²=surface per meter / n=exponent
The manufacturer reserves the right to alter any of the specifications shown in this document without prior notice.

STANDARD RANGE

Centre connection
4x R½" int.

ALTO

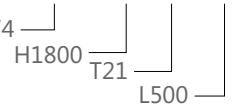
HEAT OUTPUTS IN WATT ACCORDING TO EN442



On the label:

VERTICAL T10-22:

Art. 0274 18 21 05



EN442 (W) 70/50/20°C

EN442 (W) 55/45/20°C

Height	1600					1800					2000					2200					Height	
	Type	10	11	20	21	22	10	11	20	21	22	10	11	20	21	22	10	11	20	21		22
300		378	480	579	677	810	419	530	642	743	883	461	578	699	803	956	507	626	761	862	1028	300
		262	327	396	462	553	289	362	440	507	602	317	395	480	548	651	347	428	524	588	700	
		0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	
400		505	641	772	902	1080	559	707	855	991	1177	615	772	932	1070	1274	675	834	1015	1150	1371	400
		350	436	528	616	737	386	482	586	676	803	423	527	640	730	868	462	570	698	784	933	
		0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	
500		631	800	965	1128	1350	699	884	1068	1238	1471	769	965	1165	1338	1593	844	1043	1268	1437	1714	500
		437	545	660	771	921	482	603	732	846	1003	529	659	800	913	1085	577	712	873	980	1166	
		0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	
600		757	960	1158	1353	1620	839	1060	1282	1486	1765	923	1158	1399	1606	1911	1013	1251	1522	1725	2057	600
		525	654	792	925	1105	579	723	879	1015	1204	635	790	960	1095	1302	693	855	1047	1176	1400	
		0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	
700		883	1121	1351	1579	1890	978	1237	1496	1734	2060	1077	1350	1632	1873	2230	1182	1459	1775	2012	2399	700
		612	763	924	1079	1290	675	843	1025	1184	1404	740	922	1120	1278	1519	809	997	1222	1372	1633	
		0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	0274	

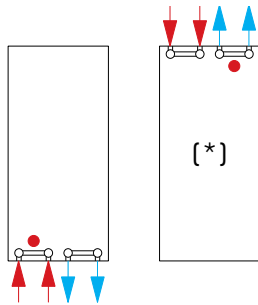
HENRAD IN/PL18/0004/0014

Core assortment (Henrad white 9016) available ex factory within 10 days.
Core assortment is subject to change, please refer to www.henrad.eu for the latest information.
Delivery time depends on the model, please refer to your distributor.

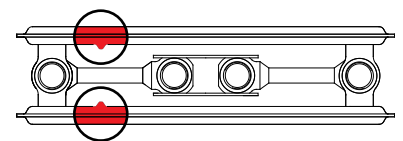
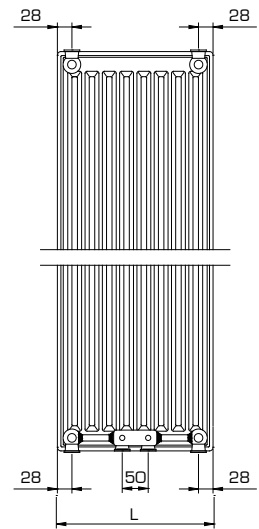
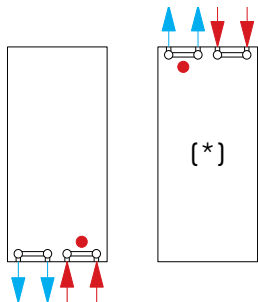
CONNECTION POSSIBILITIES

View: front of radiator

Types 10 / 11 / 20 / 21 / 22



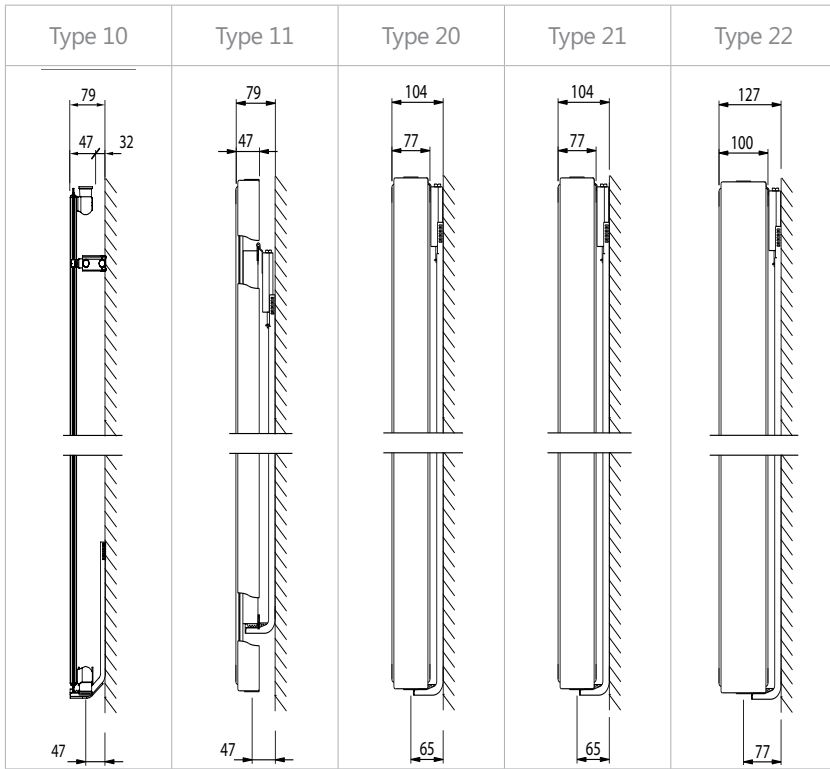
Types 20 / 21 / 22



● flow lock

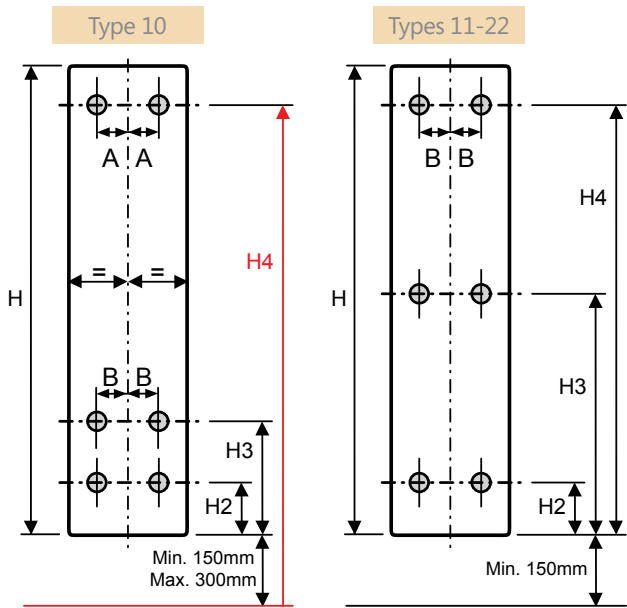
(*) With these connection options, both the supply and return must be vented. Top connection allowed provided there is a temperature difference between flow and return of maximum 20°C.

WALL BRACKETS



Nominal Height (mm)	Type 10			Type 11			Types 20-22		
	H2	H3	H4	H2	H3	H4	H2	H3	H4
1600	170	270	1500	160	730	1300	70	740	1410
1800	170	270	1700	160	830	1500	70	840	1610
2000	170	270	1900	160	930	1700	70	940	1810
2200	170	270	2100	160	1030	1900	70	1040	2010

Nominal Length (mm)	Type 10		Type 11	Types 20-22
	A	B	B	B
L 300	45	75	50	60
L 400	95	125	80	110
L 500	145	175	130	160
L 600	195	225	180	210
L 700	245	275	230	260



Always refer to the installation instructions and safety regulations before mounting a radiator!

An additional floor support for vertical radiators (types 20-22) is available for weak walls.

A professional inspection of the wall should always be conducted prior to mounting the radiator.

ATTENTION:

Always to be used in combination with the supplied wall brackets!



VALVED DESIGN CONNECTION FITTING

SPECIFICATIONS

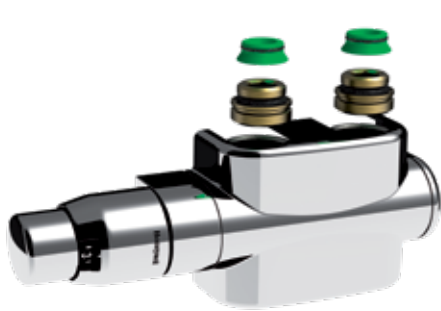
- design cover
- design thermostatic head
- 2x 3/4" - 1/2" reduction
- 2x conical adapter
- Inlet on thermostatic head side
- valve with adjustable Kv (8 presettings)
- maximum operating temperature: 90°C
- maximum operating pressure: 6 bar
- maximum tightening torque: 35 Nm
- body in white high-quality plastic

The valve cannot be replaced.
For two-pipe systems, not suitable for one-pipe systems.



DESIGN CONNECTION SET STRAIGHT PIPING WITH LEFT OR RIGHT HANDED VALVE (REVERSIBLE)

Art. N°. T2121 - white
Art. N°. T2122 - chrome



DESIGN CONNECTION SET ANGLE PIPING WITH LEFT HANDED VALVE

Art. N°. T2123 - white
Art. N°. T2124 - chrome



DESIGN CONNECTION SET ANGLE PIPING WITH RIGHT HANDED VALVE

Art. N°. T2125 - white
Art. N°. T2126 - chrome

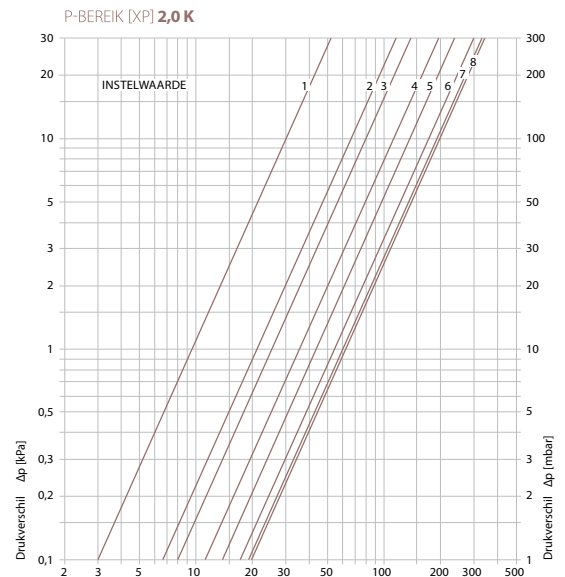
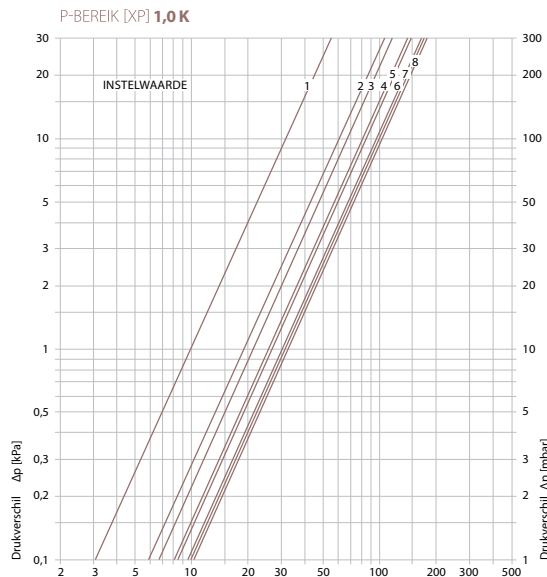


VALVED DESIGN CONNECTION FITTING

ADJUSTMENT OF THE VALVED CONNECTION FITTING



Voorinstelling	p-bereik xp 2,0 K	p-bereik xp 1,0 K
1	0,10	0,10
2	0,21	0,19
3	0,26	0,21
4	0,36	0,25
5	0,44	0,27
6	0,54	0,32
7	0,60	0,32
8	0,61	0,33



LOCK FUNCTION

The lock function can be used to lock the radiator without shutting down the heating system.

The valved design connection fitting closes the inlet and outlet by closing the closing screw and the thermostatic head.

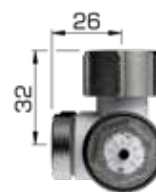


MOUNTING DIMENSIONS

The supplied adapters enable the connection fitting to be fitted on the most commonly used connections:

- 3/4" external thread with flat sealing,
- 3/4" external thread Eurocone and
- 1/2" internal thread.

The mounting dimensions are also valid for the connection fittings without valve.



3/4" external thread with flat sealing



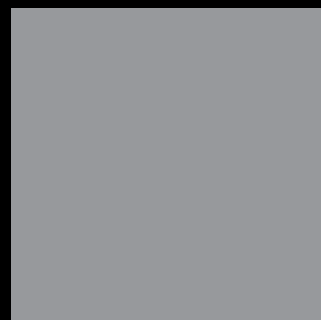
3/4" external thread Eurocone



1/2" internal thread



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HENRAD

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