Technical catalogue
10/2021

panel radiators

comfort delivered by PURMO

PURMO
GROUP

THE POWER OF A WORLD RANKING COMPANY

Purmo Group markets a variety of top brands, well-known to professionals in the heating business at national, European and international level. Beyond the continent of Europe, we must also mention our growing operations in Asia and America. With annual sales of approximately EUR 640 million, the Purmo Group can justly claim to be Europe's biggest radiator and underfloor heating company.

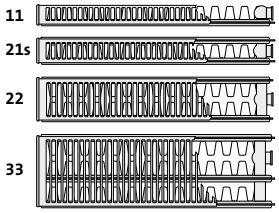
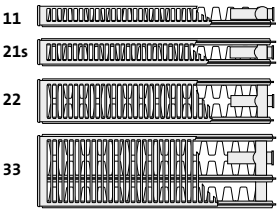
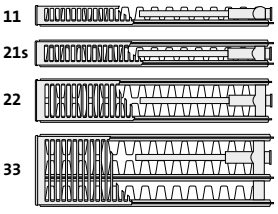
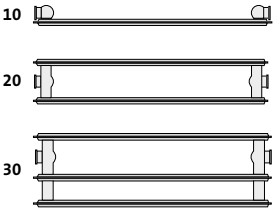
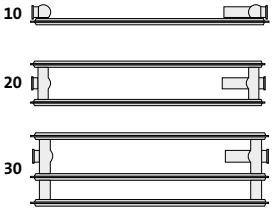
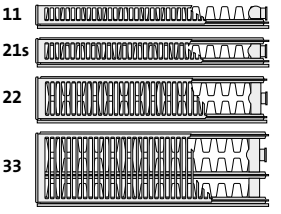
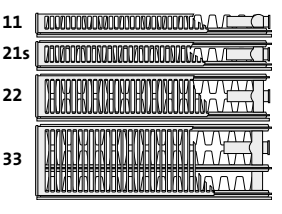
The values that the company brings to its customers are based on the creation, maintenance and development of win-win commercial relationships. Today, the Purmo Group has the contribution of more than 3300 experienced and enthusiastic employees behind it. Purmo Group's products consist of steel panels, convectors, design and bathroom radiators and underfloor heating systems.

panel radiators

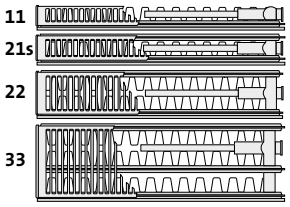
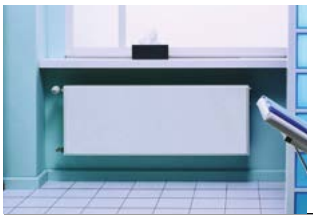
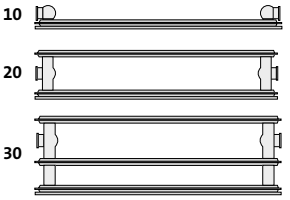
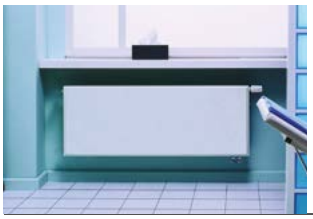
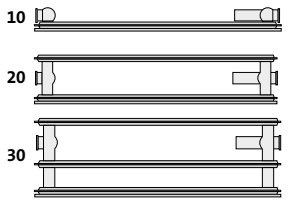
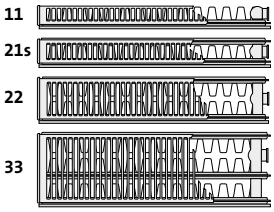
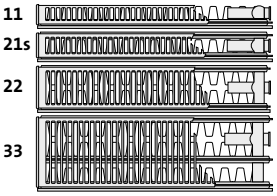
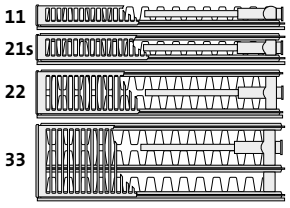
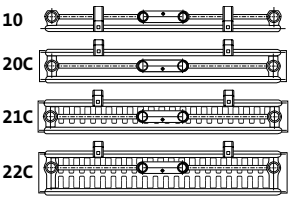
panel radiators

additional information

Type overview

		types
	**Compact** **4 connections** height [mm]: 300, 400, 450, 500, 550, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000	
	**Ventil Compact** **6 connections** height [mm]: 300, 400, 450, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000	
	**Ventil Compact M** **6 connections** height [mm]: 300, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Ventil Compact M model of height 900 mm	
	**Hygiene** **4 connections** height [mm]: 300, 400, 450, 500, 550, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000	
	**Ventil Hygiene** **6 connections** height [mm]: 300, 400, 450, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300, 2600, 3000	
	**Plan Compact** **4 connections** height [mm]: 300, 400, 500, 550, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Plan Compact model of height 900 mm	
	**Plan Ventil Compact** **6 connections** height [mm]: 300, 400, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300* 2600* 3000* * except for the Plan Ventil Compact model of height 900 mm	

Type overview

		types
	**Plan Ventil Compact M** **6 connections** height [mm]: 300, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Plan Ventil Compact M model of height 900 mm	
	**Plan Hygiene** **4 connections** height [mm]: 300, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Plan Hygiene model of height 900 mm	
	**Plan Ventil Hygiene** **6 connections** height [mm]: 300, 500, 600, 900 length [mm]: 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Plan Ventil Hygiene model of height 900 mm	
	**Ramo Compact** **4 connections** height [mm]: 300, 400, 500, 600, 900 length [mm]: 400, 500, 600, 800, 1000, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Ramo Compact model of height 900 mm	
	**Ramo Ventil Compact** **6 connections** height [mm]: 300, 400, 500, 600, 900 length [mm]: 400, 500, 600, 800, 1000, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * xcept for the Ramo Ventil Compact model of height 900 mm	
	**Ramo Ventil Compact M** **6 connections** height [mm]: 300, 500, 600, 900 length [mm]: 400, 500, 600, 800, 1000, 1200, 1400, 1600, 1800, 2000, 2300*, 2600*, 3000* * except for the Ramo Ventil Compact M model of height 900 mm	
	**Vertical** **4 connections** height [mm]: 1500, 1800, 1950, 2100, 2300 width [mm]: 300, 450, 600, 750	

Conditions for application of panel radiators

The PURMO radiators are intended for applications in forced circulation heating systems with black steel, copper or plastic piping with diffusion barrier where water is used as heating medium. They can be used in both single and double-pipe systems. These radiators can also be installed in gravity fed systems, but with restrictions due to their hydraulic resistance.

The PURMO radiators are used for heating of residential, office, commercial and other spaces where the atmosphere is free from adverse influence of corrosive substances and particularly where there is no permanent or periodic moistness of radiator surfaces. These radiators must not be used in spaces where such adverse influence takes place, e.g. in bathrooms, laundry rooms, baths, swimming pool halls, car washes, refrigeration plants and food processing plants. For the same reason the PURMO radiators must not be installed in houses which will not be heated during the first year after their construction or modernization.

The PURMO radiators should be installed in tight, sealed heating systems protected with diaphragm expansion tanks. They may also be installed in small open-vent systems of heating power up to 25 kW, provided approved corrosion inhibitors are used as well.

Systems with the PURMO radiators installed must be filled and replenished with water of appropriate quality. Main water quality indicators may not exceed the following values:

- summarized content of chloride and sulphide ions may not exceed 150 mg/l (in the case of copper piping systems it may not exceed 50 mg/l),
- oxygen content may not exceed 0.1 mg/l,
- pH value should fall within the range of 7.0 ÷ 10.0,
- general hardness may not exceed 4.0 mval/l.

Except for emergency situations, it is unacceptable to drain water from the central heating system. In case of necessity of draining water e.g. due to a repair, only parts of system, where it is necessary, should be drained. The drained parts should be re-filled with water immediately after the completion of repair works. Yearly loss of water in the central heating system should not exceed 5% and 10% of the total water volume, respectively, for closed and open-vent systems.

Using these radiators in systems where the maximal working pressure may exceed 10 bar or the maximal working temperature may exceed 110°C is forbidden. The leakproof test pressure may not exceed 12 bar.

Heating systems with the PURMO radiators installed can be powered with boilers or heat exchange centres. The radiators must not be installed in central heating systems directly connected to a high-temperature heating network e.g. through a hydroelevator or a pump mixing heat distribution centre.

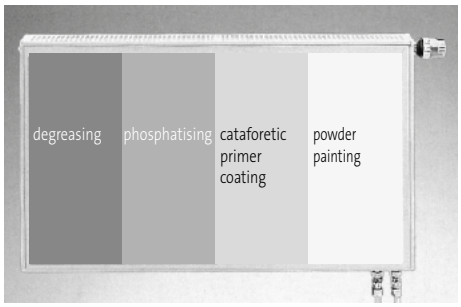
The radiators must be installed with their individual factory packaging even if the central heating system is in operation for building heating during finishing works or for building drying. It is recommended for the packaging to be removed by a user of the space after the completion of all finishing works.

The PURMO radiators must be stored indoors only, in closed and dry spaces. It is not allowed to store the radiators outdoors or in moist spaces. The radiators must be transported with due care in dry and closed cargo spaces and handled only in vertical position.

It is not allowed to use cleaning agents containing solvents, acids or other corrosive substances for cleaning the surfaces of the radiator.

production

The PURMO panel radiators are made in accordance with EN 10130 and EN 10131 cold rolled steel delivered in form of coiled strips. Heating panels are produced from sheets of thickness in accordance with EN 442. Forming of heating panels with vertical water channels spaced at 33.3 mm (in the Vertical model – 50 mm) is performed on fully automated, computer controlled production lines where one process line (interconnected with roller conveyors) delivers products ready for painting and packing. The processes of coating and packing are automated as well.
The Plan Compact, Plan Ventil Compact, Plan Ventil Compact M, Plint P, Plan Hygiene and Plan Ventil Hygiene models of panel radiators are equipped with an additional, decorative front panel glued to the front heating panel. The Plint PD model of height 200 mm also has an additional, decorative panel glued to the rear heating panel.
The Ramo Compact, Ramo Ventil Compact, Ramo Ventil Compact M and Plint R model of panel radiators are equipped with an additional flat front panel, but with subtle horizontal ribbing, also glued to the front heating panel. The Plint RD model of height 200 mm has similar decorative panel glued to the rear heating panel.



Radiator surface preparation

painting

After passing through the first stages of process line, the raw radiators are subjected to further processing providing a surface ready for varnishing. This processing consists of:

- preparing the surface (washing, degreasing, iron phosphatising, flushing) in a pass through a washer with a special chemical showering system,
- priming with the use of the second generation cataforetic KTL II method by complete submerging of the radiators in a white priming paint ensuring an excellent corrosion protection,
- after-priming drying in a dripping chamber and a gas tunnel dryer,
- powder painting with an epoxy paint by electrostatic coating in a painting chamber, with the use of special painting tools,
- polymerization (curing) of the powder paint coat during a pass through a gas furnace in a temperature of ~190°C.

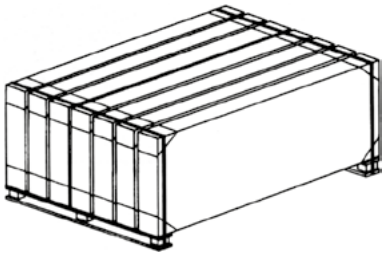
As a standard, all the panel radiators with a profiled or flat front panel are finished in white RAL 9016 colour. Other colours in accordance with the RAL colour chart are available at an additional charge.


The RAL colour palette radiators

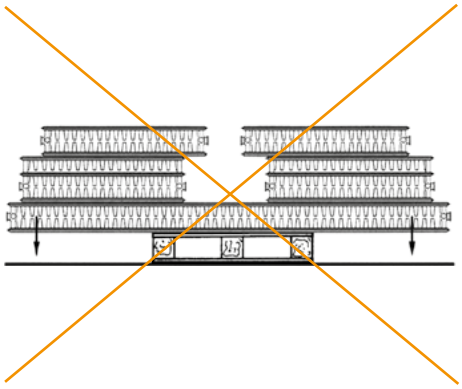
Conditions for application of panel radiators

A radiator packaging

Radiator type	Quantity on a pallet
type 10	12 pieces
type 11	12 pieces
type 20	7 pieces
type 21s	10 pieces
type 22	7 pieces
type 30	5 pieces
type 33	5 pieces
type 44	4 pieces



Palletizing of radiators



An example of improper, storage possibly leading to a radiator damage

packaging

The panel radiators with profiled and flat front panels are delivered in a protective packaging allowing for installation without unpacking. The radiators are factory wrapped in a heat-shrinkable film. Additional protection of edges is provided by two durable, corrugated board sheets placed longitudinally on the top and bottom of the radiator. Corners are additionally protected with four cardboard guards.
During installation, the packaging should be opened in the designated place only. The whole packaging can be removed after the completion of all works that could cause to a damage of the radiator. During heating, the packaging must be completely removed.
Single radiators are vertically placed on wooden pallets and bound with a band in order to prevent uncontrolled movement during storage and transport.

transport and storage

The radiators must be transported with due care in dry and closed cargo spaces and handled only in vertical position.
Both pallets and single radiators in transport must be secured in a manner preventing their movement. Loading and unloading of the radiators should be carried in a manner preventing from damaging their paint coating or deforming the radiator on impact.
The radiators must be stored indoors in closed and dry spaces and protected from moisture or caustic agents that could cause a damage of their paint coating. The radiators must not be stored outdoors, even when they are protected with a film or a canvas cover. If traces of moisture are found inside packaging, they must be immediately removed and the affected radiator must be dried.
The radiators must be stored on pallets, and when removed from pallets, they should be stored vertically, with special attention to protection of bottom edges from any damage. The radiators must not be thrown or dragged.
Improper transport or storage of the radiators can cause deformation leading to the loss of their tightness. Long radiators, in particular, should not be stored or transported on small pallets in horizontal position. The same pertains to a situation where protruding ends of a longer radiator are loaded by stacks of smaller radiators causing bending and deformation of the bottom radiator.

HEIZKÖRPER RAL GÜTEZEICHEN AUS STAHL 371013

BS EN442 KM 32532

CE 05

bsi. ISO 9001 Quality Management FM 32533

bsi. ISO 14001 Environmental Management EMS 75685

EURONORM EN 442

	Compact	Ventil Compact	Ventil Compact M	Hygiene	Ventil Hygiene	Plan Compact	Plan Ventil Compact	Plan Ventil Compact M	Plan Hygiene	Plan Ventil Hygiene	Ramo Compact	Ramo Ventil Compact	Ramo Ventil Compact M	Vertical
profiled front panel	x	x	x	x	x	-	-	-	-	-	-	-	-	x
flat front panel	-	-	-	-	-	x	x	x	x	x	x	x	x	-
max. working pressure [bar]	10	10	10	10	10	10	10	10	10	10	10	10	10	6
no. of connectors – side + bottom	4	4 + 2	4 + 2	4	4 + 2	4	4 + 2	4 + 2	4	4 + 2	4	4 + 2	4 + 2	0 + 4
side connection – GW ½ "	x	x	x	x	x	x	x	x	x	x	x	x	x	-
bottom connection – GW ½ "	-	x	-	-	x	-	x	-	-	x	-	x	-	x
mid-bottom connection – GW ½ "	-	-	x	-	-	-	-	x	-	-	-	-	x	x
brackets bundled with the radiator	x	x	x	- [1)]	- [1)]	x	x	x	- [1)]	- [1)]	x	x	x	x
side covers	x	x	x	-	-	x	x	x	-	-	x	x	x	x
top grille	x	x	x	-	-	x	x	x	-	-	x	x	x	-
built-in thermostatic valve	-	x	x	-	x	-	x	x	-	x	-	x	x	-

Note:
[1)] **The Hygiene, Ventil Hygiene, Plan Hygiene and Plan Ventil Hygiene radiators are not bundled with mounting brackets. The special Monclac MCK type hospital mountings must be ordered separately. For more information see pages 30, 36, 60, 66.**

thermal output of the radiators

Thermal output of the radiators was determined in accordance with EN 442 based on laboratory measurements.
The temperatures of 75/65/20 °C were accepted as reference values.
Thermal output of the radiators for other values can be calculated with the following formula:

$$\phi = \phi_n \left[\frac{\Delta t}{\Delta t_n} \right]^n$$

where:
ϕ - thermal output of the radiator [W]
ϕ_n - thermal output of the radiator determined based on measurements in accordance with EN 442 [W]
Δt - arithmetic or logarithmic difference of temperatures [K]
Δt_n - arithmetic difference of temperatures 50 [K] calculated for reference temperatures 75/65/20 °C
n - exponent characteristic for a given type of radiator

Notice

If the condition $c = \frac{t_p - t_i}{t_z - t_i} < 0.7$ is met,

Then the temperature difference Δt should be calculated according to formula: $\Delta t_{logarithmic} = \frac{t_z - t_p}{\ln((t_z - t_i) / (t_p - t_i))}$

Isn't met, then Δt value should be calculated according to formula: $\Delta t_{arithmetic} = \frac{t_z + t_p}{2} - t_i$

where: t_z - supply water temperature [°C]; t_p - return water temperature [°C]; t_i - room temperature [°C]

All the PURMO radiators have a declaration of performance with EN 442. Every radiator is factory marked at the bottom of a panel with the following data: the name of manufacturer, country of origin, type, EN 442 conformity register number, maximal working pressure and date and time of production.
These are some examples of conformity register numbers printed inside the individual radiators types:
type 10 = 0810, type 11 = 0811, type 21s = 0812, type 22 = 0813, type 33 = 0814

COMPACT *(Purmo C)*

The PURMO Compact panel radiators with profiled heating panels and convection fins are equipped with side covers and a top grille. Four G ½ " threaded female connectors allow for side connection on both right and left side.

technical specifications

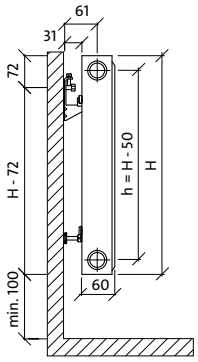
- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator: brackets, plug, air vent.

The Compact radiators are also available in a special version with additional corrosion protection.

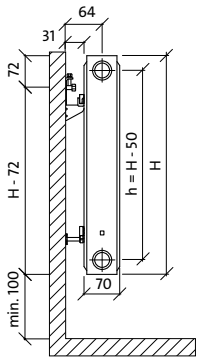
COMPACT

side views

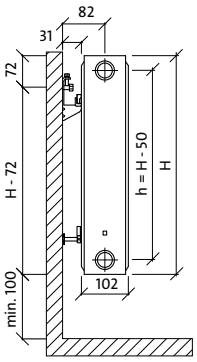
type C 11



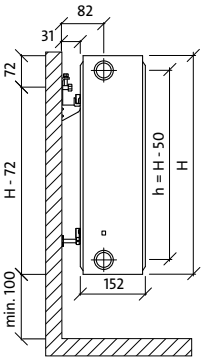
type C 21s



type C 22



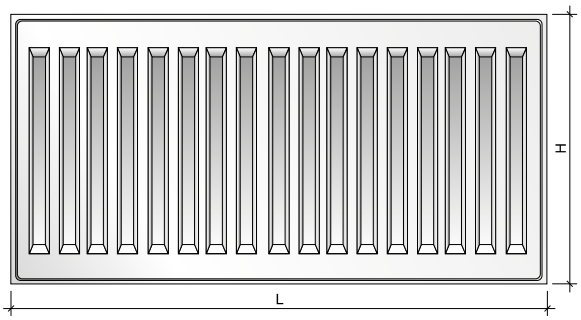
type C 33



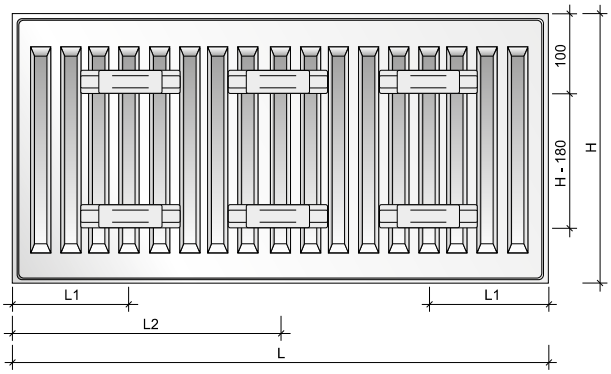
dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



rear view



water volume, weight and mounting distances

water volume : l/m

height / type	300	400	450	500	550	600	900
11	1.7	2.2	2.5	2.7	3.0	3.2	4.5
21s	3.4	4.5	5.0	5.5	6.1	6.6	9.0
22	3.4	4.5	5.0	5.5	6.1	6.6	9.0
33	5.1	6.7	7.5	8.2	9.0	9.8	13.3

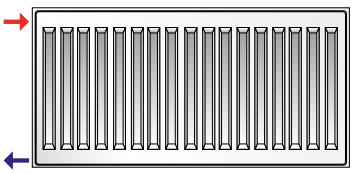
weight : kg/m

height / type	300	400	450	500	550	600	900
11	9.2	12.1	14.2	15.0	16.5	17.9	27.2
21s	13.9	18.2	21.9	22.6	25.6	27.4	40.2
22	15.9	21.1	25.0	26.3	29.3	32.0	47.6
33	23.5	31.4	37.2	39.2	43.2	47.3	70.3

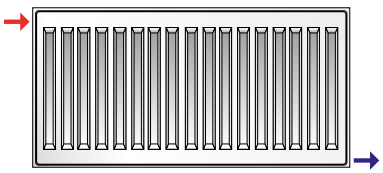
mounting distances : mm

type	C 11		C 21s, C 22, C 33	
L	**L1**	**L2**	**L1**	**L2**
400-1600	117	-	133	-
1800	117	917	133	900
2000	117	1017	133	1000
2300	117	1150	133	1167
2600	117	1317	133	1300
3000	117	1517	133	1500

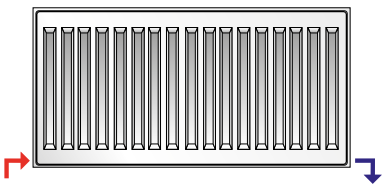
recommended connections



same end connection



flow-through connection



opposite ends connection

↑ - *supply* ↓ - *return*

COMPACT
type 11

PURMO C 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO C 11 600 x 1200

name
type
height
length

length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	**75/65/20 °C**	**218**	**284**	**316**	**347**	**378**	**407**	**571**
	55/45/20 °C	113	146	162	178	193	208	291
500	**75/65/20 °C**	**273**	**356**	**395**	**434**	**472**	**509**	**714**
	55/45/20 °C	141	183	203	223	242	260	364
600	**75/65/20 °C**	**328**	**427**	**474**	**521**	**566**	**611**	**856**
	55/45/20 °C	169	219	243	267	290	313	437
700	**75/65/20 °C**	**382**	**498**	**553**	**608**	**661**	**713**	**999**
	55/45/20 °C	197	256	284	312	339	365	510
800	**75/65/20 °C**	**437**	**569**	**632**	**694**	**755**	**814**	**1142**
	55/45/20 °C	225	292	325	356	387	417	583
900	**75/65/20 °C**	**491**	**640**	**711**	**781**	**850**	**916**	**1284**
	55/45/20 °C	253	329	365	401	435	469	655
1000	**75/65/20 °C**	**546**	**711**	**790**	**868**	**944**	**1018**	**1427**
	55/45/20 °C	281	366	406	445	484	521	728
1100	**75/65/20 °C**	**601**	**782**	**869**	**955**	**1038**	**1120**	**1570**
	55/45/20 °C	309	402	446	490	532	573	801
1200	**75/65/20 °C**	**655**	**853**	**948**	**1042**	**1133**	**1222**	**1712**
	55/45/20 °C	338	439	487	534	580	625	874
1400	**75/65/20 °C**	**764**	**995**	**1106**	**1215**	**1322**	**1425**	**1998**
	55/45/20 °C	394	512	568	623	677	729	1019
1600	**75/65/20 °C**	**874**	**1138**	**1264**	**1389**	**1510**	**1629**	**2283**
	55/45/20 °C	450	585	649	712	774	834	1165
1800	**75/65/20 °C**	**983**	**1280**	**1422**	**1562**	**1699**	**1832**	**2569**
	55/45/20 °C	506	658	730	801	871	938	1311
2000	**75/65/20 °C**	**1092**	**1422**	**1580**	**1736**	**1888**	**2036**	**2854**
	55/45/20 °C	563	731	811	890	967	1042	1456
2300	**75/65/20 °C**	**1256**	**1635**	**1817**	**1996**	**2171**	**2341**	**3282**
	55/45/20 °C	647	841	933	1024	1112	1198	1675
2600	**75/65/20 °C**	**1420**	**1849**	**2054**	**2257**	**2454**	**2647**	**3710**
	55/45/20 °C	731	950	1055	1158	1257	1354	1893
3000	**75/65/20 °C**	**1638**	**2133**	**2370**	**2604**	**2832**	**3054**	**4281**
	55/45/20 °C	844	1097	1217	1336	1451	1563	2185

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**686**	**895**	**994**	**1093**	**1189**	**1283**	**1800**
exponent n	**1.2981**	**1.3026**	**1.3048**	**1.3070**	**1.3093**	**1.3115**	**1.3170**

COMPACT

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO C 21s 600 x 1200

name
type
height
length

PURMO C 21s

length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	75/65/20 °C	304	385	424	462	500	536	744
	55/45/20 °C	158	199	218	237	255	273	376
500	75/65/20 °C	381	482	530	578	625	670	931
	55/45/20 °C	198	249	273	296	319	341	470
600	75/65/20 °C	457	578	636	694	749	804	1117
	55/45/20 °C	237	298	327	356	383	409	563
700	75/65/20 °C	533	674	742	809	874	938	1303
	55/45/20 °C	277	348	382	415	447	478	657
800	75/65/20 °C	609	770	848	925	999	1072	1489
	55/45/20 °C	317	398	436	474	511	546	751
900	75/65/20 °C	685	867	954	1040	1124	1206	1675
	55/45/20 °C	356	448	491	533	574	614	845
1000	75/65/20 °C	761	963	1060	1156	1249	1340	1861
	55/45/20 °C	396	497	545	593	638	682	939
1100	75/65/20 °C	837	1059	1166	1272	1374	1474	2047
	55/45/20 °C	435	547	600	652	702	751	1033
1200	75/65/20 °C	913	1156	1272	1387	1499	1608	2233
	55/45/20 °C	475	597	654	711	766	819	1127
1400	75/65/20 °C	1065	1348	1484	1618	1749	1876	2605
	55/45/20 °C	554	696	764	830	893	955	1315
1600	75/65/20 °C	1218	1541	1696	1850	1998	2144	2978
	55/45/20 °C	633	796	873	948	1021	1092	1502
1800	75/65/20 °C	1370	1733	1908	2081	2248	2412	3350
	55/45/20 °C	712	895	982	1067	1149	1228	1690
2000	75/65/20 °C	1522	1926	2120	2312	2498	2680	3722
	55/45/20 °C	791	994	1091	1185	1276	1365	1878
2300	75/65/20 °C	1750	2215	2438	2659	2873	3082	4280
	55/45/20 °C	910	1144	1254	1363	1468	1569	2160
2600	75/65/20 °C	1979	2504	2756	3006	3247	3484	4839
	55/45/20 °C	1029	1293	1418	1541	1659	1774	2442
3000	75/65/20 °C	2283	2889	3180	3468	3747	4020	5583
	55/45/20 °C	1187	1492	1636	1778	1915	2047	2817

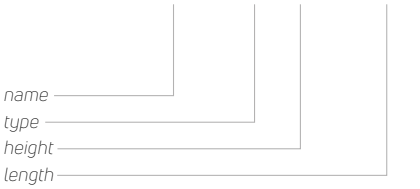
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	954	1210	1333	1456	1575	1691	2356
exponent n	1.2803	1.2940	1.3008	1.3076	1.3145	1.3213	1.3390

COMPACT
type 22

PURMO C 22

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO C 22 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	**75/65/20 °C**	**384**	**488**	**539**	**588**	**636**	**684**	**955**
	55/45/20 °C	197	249	274	299	322	346	478
500	**75/65/20 °C**	**481**	**611**	**674**	**735**	**796**	**855**	**1194**
	55/45/20 °C	246	311	343	373	403	432	597
600	**75/65/20 °C**	**577**	**733**	**808**	**882**	**955**	**1025**	**1433**
	55/45/20 °C	295	374	411	448	484	518	717
700	**75/65/20 °C**	**673**	**855**	**943**	**1029**	**1114**	**1196**	**1672**
	55/45/20 °C	345	436	480	522	564	605	836
800	**75/65/20 °C**	**769**	**977**	**1078**	**1176**	**1273**	**1367**	**1910**
	55/45/20 °C	394	498	548	597	645	691	956
900	**75/65/20 °C**	**865**	**1099**	**1212**	**1323**	**1432**	**1538**	**2149**
	55/45/20 °C	443	560	617	672	725	777	1075
1000	**75/65/20 °C**	**961**	**1221**	**1347**	**1470**	**1591**	**1709**	**2388**
	55/45/20 °C	492	623	685	746	806	864	1194
1100	**75/65/20 °C**	**1057**	**1343**	**1482**	**1617**	**1750**	**1880**	**2627**
	55/45/20 °C	542	685	754	821	887	950	1314
1200	**75/65/20 °C**	**1153**	**1465**	**1616**	**1764**	**1909**	**2051**	**2866**
	55/45/20 °C	591	747	822	896	967	1037	1433
1400	**75/65/20 °C**	**1345**	**1709**	**1886**	**2058**	**2227**	**2393**	**3343**
	55/45/20 °C	689	872	960	1045	1128	1209	1672
1600	**75/65/20 °C**	**1538**	**1954**	**2155**	**2352**	**2546**	**2734**	**3821**
	55/45/20 °C	788	996	1097	1194	1289	1382	1911
1800	**75/65/20 °C**	**1730**	**2198**	**2425**	**2646**	**2864**	**3076**	**4298**
	55/45/20 °C	886	1121	1234	1343	1451	1555	2150
2000	**75/65/20 °C**	**1922**	**2442**	**2694**	**2940**	**3182**	**3418**	**4776**
	55/45/20 °C	985	1245	1371	1493	1612	1728	2389
2300	**75/65/20 °C**	**2210**	**2808**	**3098**	**3381**	**3659**	**3931**	**5492**
	55/45/20 °C	1132	1432	1576	1717	1854	1987	2747
2600	**75/65/20 °C**	**2499**	**3175**	**3502**	**3822**	**4137**	**4443**	**6209**
	55/45/20 °C	1280	1619	1782	1940	2095	2246	3106
3000	**75/65/20 °C**	**2883**	**3663**	**4041**	**4410**	**4773**	**5127**	**7164**
	55/45/20 °C	1477	1868	2056	2239	2418	2591	3583

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1211**	**1540**	**1701**	**1857**	**2012**	**2163**	**3033**
exponent n	**1.3094**	**1.3182**	**1.3226**	**1.3270**	**1.3314**	**1.3358**	**1.3561**

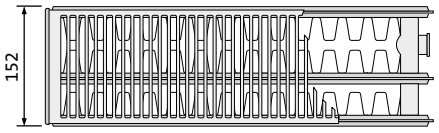
COMPACT

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO C 33 600 x 1200

name
type
height
length

PURMO C 33



length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	**75/65/20 °C**	**539**	**680**	**748**	**814**	**879**	**942**	**1304**
	55/45/20 °C	275	345	379	411	443	473	651
500	**75/65/20 °C**	**674**	**850**	**935**	**1018**	**1099**	**1178**	**1630**
	55/45/20 °C	344	432	473	514	553	592	814
600	**75/65/20 °C**	**808**	**1019**	**1121**	**1221**	**1318**	**1414**	**1956**
	55/45/20 °C	413	518	568	617	664	710	976
700	**75/65/20 °C**	**943**	**1189**	**1308**	**1425**	**1538**	**1649**	**2282**
	55/45/20 °C	482	604	663	719	775	828	1139
800	**75/65/20 °C**	**1078**	**1359**	**1495**	**1628**	**1758**	**1885**	**2608**
	55/45/20 °C	551	691	757	822	885	946	1302
900	**75/65/20 °C**	**1212**	**1529**	**1682**	**1832**	**1977**	**2120**	**2934**
	55/45/20 °C	620	777	852	925	996	1065	1465
1000	**75/65/20 °C**	**1347**	**1699**	**1869**	**2035**	**2197**	**2356**	**3260**
	55/45/20 °C	688	863	947	1028	1106	1183	1627
1100	**75/65/20 °C**	**1482**	**1869**	**2056**	**2239**	**2417**	**2592**	**3586**
	55/45/20 °C	757	950	1041	1131	1217	1301	1790
1200	**75/65/20 °C**	**1616**	**2039**	**2243**	**2442**	**2636**	**2827**	**3912**
	55/45/20 °C	826	1036	1136	1233	1328	1420	1953
1400	**75/65/20 °C**	**1886**	**2379**	**2617**	**2849**	**3076**	**3298**	**4564**
	55/45/20 °C	964	1209	1326	1439	1549	1656	2278
1600	**75/65/20 °C**	**2155**	**2718**	**2990**	**3256**	**3515**	**3770**	**5216**
	55/45/20 °C	1101	1381	1515	1645	1770	1893	2604
1800	**75/65/20 °C**	**2425**	**3058**	**3364**	**3663**	**3955**	**4241**	**5868**
	55/45/20 °C	1239	1554	1704	1850	1992	2129	2929
2000	**75/65/20 °C**	**2694**	**3398**	**3738**	**4070**	**4394**	**4712**	**6520**
	55/45/20 °C	1377	1726	1894	2056	2213	2366	3255
2300	**75/65/20 °C**	**3098**	**3908**	**4299**	**4681**	**5053**	**5419**	**7498**
	55/45/20 °C	1583	1985	2178	2364	2545	2721	3743
2600	**75/65/20 °C**	**3502**	**4417**	**4859**	**5291**	**5712**	**6126**	**8476**
	55/45/20 °C	1790	2244	2462	2672	2877	3076	4231
3000	**75/65/20 °C**	**4041**	**5097**	**5607**	**6105**	**6591**	**7068**	**9780**
	55/45/20 °C	2065	2590	2840	3084	3319	3549	4882

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1698**	**2146**	**2363**	**2576**	**2784**	**2988**	**4143**
exponent n	**1.3140**	**1.3255**	**1.3313**	**1.3371**	**1.3428**	**1.3486**	**1.3600**

VENTIL COMPACT *(Purmo CV)*

The versatile PURMO Ventil Compact panel radiators with profiled heating panels and convection fins are equipped with side covers and a top grille. Two bottom and four side G ½ " threaded female connectors allow for bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.

technical specifications

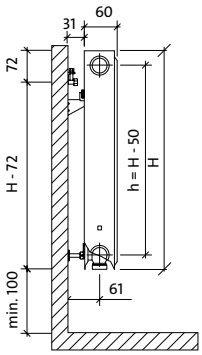
- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " bottom, right side connectors (left side - available on request)
  4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator: brackets, plug, air vent.

The Ventil Compact radiators are also available in a special version with additional corrosion protection.

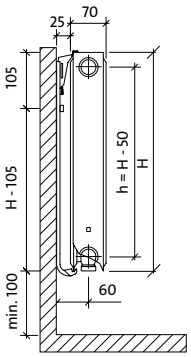
VENTIL COMPACT

side views

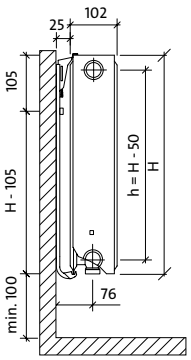
type CV 11



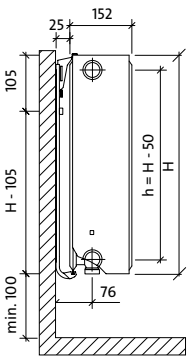
type CV 21 s



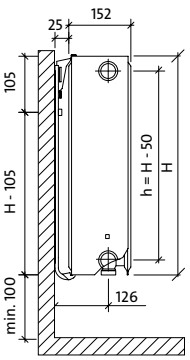
type CV 22



type CV 33



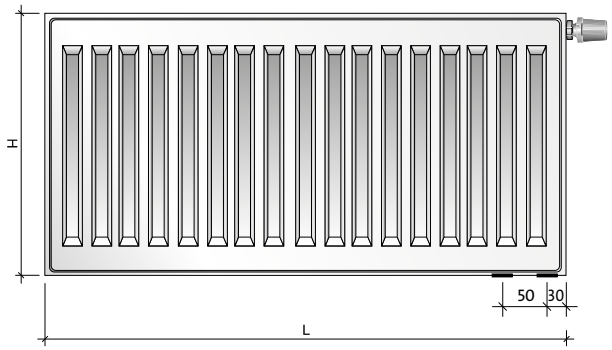
type CV 33 (after conversion to the left side)



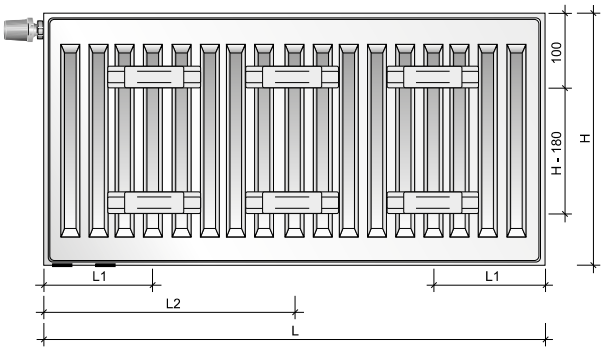
dimensions in mm

H *= height*
L *= length*
h *= spacing of connectors*

front view



rear view - CV 11 type only



water volume, weight and mounting distances

water volume : l/m

height / type	300	400	450	500	600	900
11	1.7	2.2	2.5	2.7	3.2	4.5
21s	3.4	4.5	5.0	5.5	6.6	9.0
22	3.4	4.5	5.0	5.5	6.6	9.0
33	5.1	6.7	7.5	8.2	9.8	13.3

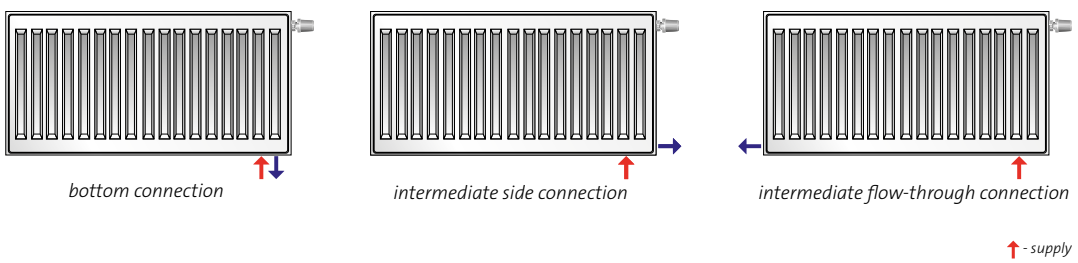
weight : kg/m

height / type	300	400	450	500	600	900
11	9.5	12.5	14.6	15.3	18.3	27.2
21s	14.4	19.0	22.5	23.5	28.3	42.2
22	16.3	21.8	25.7	27.0	32.9	48.3
33	24.0	32.0	37.9	40.1	48.0	71.9

mounting distances : mm

type	CV 11	
L	**L1**	**L2**
400-1600	117	-
1800	117	917
2000	117	1017
2300	117	1150
2600	117	1317
3000	117	1517

recommended connections



VENTIL COMPACT

type 11

PURMO CV 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CV 11 600 x 1200 L

- name
- type
- height
- length
- L : only for the left side version
- (no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	75/65/20 °C	218	284	316	347	407	571
	55/45/20 °C	113	146	162	178	208	291
500	75/65/20 °C	273	356	395	434	509	714
	55/45/20 °C	141	183	203	223	260	364
600	75/65/20 °C	328	427	474	521	611	856
	55/45/20 °C	169	219	243	267	313	437
700	75/65/20 °C	382	498	553	608	713	999
	55/45/20 °C	197	256	284	312	365	510
800	75/65/20 °C	437	569	632	694	814	1142
	55/45/20 °C	225	292	325	356	417	583
900	75/65/20 °C	491	640	711	781	916	1284
	55/45/20 °C	253	329	365	401	469	655
1000	75/65/20 °C	546	711	790	868	1018	1427
	55/45/20 °C	281	366	406	445	521	728
1100	75/65/20 °C	601	782	869	955	1120	1570
	55/45/20 °C	309	402	446	490	573	801
1200	75/65/20 °C	655	853	948	1042	1222	1712
	55/45/20 °C	338	439	487	534	625	874
1400	75/65/20 °C	764	995	1106	1215	1425	1998
	55/45/20 °C	394	512	568	623	729	1019
1600	75/65/20 °C	874	1138	1264	1389	1629	2283
	55/45/20 °C	450	585	649	712	834	1165
1800	75/65/20 °C	983	1280	1422	1562	1832	2569
	55/45/20 °C	506	658	730	801	938	1311
2000	75/65/20 °C	1092	1422	1580	1736	2036	2854
	55/45/20 °C	563	731	811	890	1042	1456
2300	75/65/20 °C	1256	1635	1817	1996	2341	3282
	55/45/20 °C	647	841	933	1024	1198	1675
2600	75/65/20 °C	1420	1849	2054	2257	2647	3710
	55/45/20 °C	731	950	1055	1158	1354	1893
3000	75/65/20 °C	1638	2133	2370	2604	3054	4281
	55/45/20 °C	844	1097	1217	1336	1563	2185

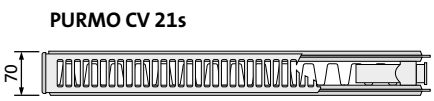
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

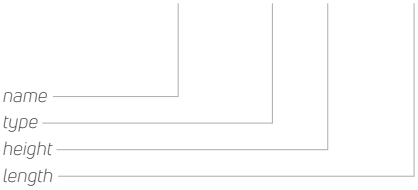
[W/m] 90/70/20 °C	686	895	994	1093	1283	1800
exponent n	1.2981	1.3026	1.3048	1.3070	1.3115	1.3170

VENTIL COMPACT

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CV 21s 600 x 1200





length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	**75/65/20 °C**	**304**	**385**	**424**	**462**	**536**	**744**
	55/45/20 °C	158	199	218	237	273	376
500	**75/65/20 °C**	**381**	**482**	**530**	**578**	**670**	**931**
	55/45/20 °C	198	249	273	296	341	470
600	**75/65/20 °C**	**457**	**578**	**636**	**694**	**804**	**1117**
	55/45/20 °C	237	298	327	356	409	563
700	**75/65/20 °C**	**533**	**674**	**742**	**809**	**938**	**1303**
	55/45/20 °C	277	348	382	415	478	657
800	**75/65/20 °C**	**609**	**770**	**848**	**925**	**1072**	**1489**
	55/45/20 °C	317	398	436	474	546	751
900	**75/65/20 °C**	**685**	**867**	**954**	**1040**	**1206**	**1675**
	55/45/20 °C	356	448	491	533	614	845
1000	**75/65/20 °C**	**761**	**963**	**1060**	**1156**	**1340**	**1861**
	55/45/20 °C	396	497	545	593	682	939
1100	**75/65/20 °C**	**837**	**1059**	**1166**	**1272**	**1474**	**2047**
	55/45/20 °C	435	547	600	652	751	1033
1200	**75/65/20 °C**	**913**	**1156**	**1272**	**1387**	**1608**	**2233**
	55/45/20 °C	475	597	654	711	819	1127
1400	**75/65/20 °C**	**1065**	**1348**	**1484**	**1618**	**1876**	**2605**
	55/45/20 °C	554	696	764	830	955	1315
1600	**75/65/20 °C**	**1218**	**1541**	**1696**	**1850**	**2144**	**2978**
	55/45/20 °C	633	796	873	948	1092	1502
1800	**75/65/20 °C**	**1370**	**1733**	**1908**	**2081**	**2412**	**3350**
	55/45/20 °C	712	895	982	1067	1228	1690
2000	**75/65/20 °C**	**1522**	**1926**	**2120**	**2312**	**2680**	**3722**
	55/45/20 °C	791	994	1091	1185	1365	1878
2300	**75/65/20 °C**	**1750**	**2215**	**2438**	**2659**	**3082**	**4280**
	55/45/20 °C	910	1144	1254	1363	1569	2160
2600	**75/65/20 °C**	**1979**	**2504**	**2756**	**3006**	**3484**	**4839**
	55/45/20 °C	1029	1293	1418	1541	1774	2442
3000	**75/65/20 °C**	**2283**	**2889**	**3180**	**3468**	**4020**	**5583**
	55/45/20 °C	1187	1492	1636	1778	2047	2817

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

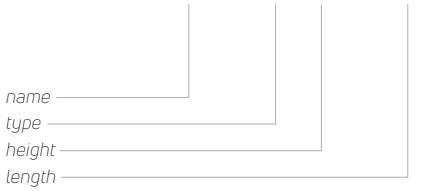
[W/m] 90/70/20 °C	**954**	**1210**	**1333**	**1456**	**1691**	**2356**
exponent n	**1.2803**	**1.2940**	**1.3008**	**1.3076**	**1.3213**	**1.3390**

VENTIL COMPACT

type 22

PURMO CV 22

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CV 22 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	**75/65/20 °C**	**384**	**488**	**539**	**588**	**684**	**955**
	55/45/20 °C	197	249	274	299	346	478
500	**75/65/20 °C**	**481**	**611**	**674**	**735**	**855**	**1194**
	55/45/20 °C	246	311	343	373	432	597
600	**75/65/20 °C**	**577**	**733**	**808**	**882**	**1025**	**1433**
	55/45/20 °C	295	374	411	448	518	717
700	**75/65/20 °C**	**673**	**855**	**943**	**1029**	**1196**	**1672**
	55/45/20 °C	345	436	480	522	605	836
800	**75/65/20 °C**	**769**	**977**	**1078**	**1176**	**1367**	**1910**
	55/45/20 °C	394	498	548	597	691	956
900	**75/65/20 °C**	**865**	**1099**	**1212**	**1323**	**1538**	**2149**
	55/45/20 °C	443	560	617	672	777	1075
1000	**75/65/20 °C**	**961**	**1221**	**1347**	**1470**	**1709**	**2388**
	55/45/20 °C	492	623	685	746	864	1194
1100	**75/65/20 °C**	**1057**	**1343**	**1482**	**1617**	**1880**	**2627**
	55/45/20 °C	542	685	754	821	950	1314
1200	**75/65/20 °C**	**1153**	**1465**	**1616**	**1764**	**2051**	**2866**
	55/45/20 °C	591	747	822	896	1037	1433
1400	**75/65/20 °C**	**1345**	**1709**	**1886**	**2058**	**2393**	**3343**
	55/45/20 °C	689	872	960	1045	1209	1672
1600	**75/65/20 °C**	**1538**	**1954**	**2155**	**2352**	**2734**	**3821**
	55/45/20 °C	788	996	1097	1194	1382	1911
1800	**75/65/20 °C**	**1730**	**2198**	**2425**	**2646**	**3076**	**4298**
	55/45/20 °C	886	1121	1234	1343	1555	2150
2000	**75/65/20 °C**	**1922**	**2442**	**2694**	**2940**	**3418**	**4776**
	55/45/20 °C	985	1245	1371	1493	1728	2389
2300	**75/65/20 °C**	**2210**	**2808**	**3098**	**3381**	**3931**	**5492**
	55/45/20 °C	1132	1432	1576	1717	1987	2747
2600	**75/65/20 °C**	**2499**	**3175**	**3502**	**3822**	**4443**	**6209**
	55/45/20 °C	1280	1619	1782	1940	2246	3106
3000	**75/65/20 °C**	**2883**	**3663**	**4041**	**4410**	**5127**	**7164**
	55/45/20 °C	1477	1868	2056	2239	2591	3583

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1211**	**1540**	**1701**	**1857**	**2163**	**3033**
exponent n	**1.3094**	**1.3182**	**1.3226**	**1.3270**	**1.3358**	**1.3561**

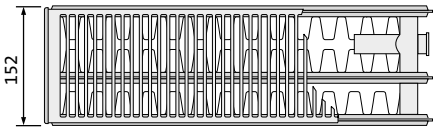
VENTIL COMPACT

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CV 33 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO CV 33



length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	**75/65/20 °C**	**539**	**680**	**748**	**814**	**942**	**1304**
	55/45/20 °C	275	345	379	411	473	651
500	**75/65/20 °C**	**674**	**850**	**935**	**1018**	**1178**	**1630**
	55/45/20 °C	344	432	473	514	592	814
600	**75/65/20 °C**	**808**	**1019**	**1121**	**1221**	**1414**	**1956**
	55/45/20 °C	413	518	568	617	710	976
700	**75/65/20 °C**	**943**	**1189**	**1308**	**1425**	**1649**	**2282**
	55/45/20 °C	482	604	663	719	828	1139
800	**75/65/20 °C**	**1078**	**1359**	**1495**	**1628**	**1885**	**2608**
	55/45/20 °C	551	691	757	822	946	1302
900	**75/65/20 °C**	**1212**	**1529**	**1682**	**1832**	**2120**	**2934**
	55/45/20 °C	620	777	852	925	1065	1465
1000	**75/65/20 °C**	**1347**	**1699**	**1869**	**2035**	**2356**	**3260**
	55/45/20 °C	688	863	947	1028	1183	1627
1100	**75/65/20 °C**	**1482**	**1869**	**2056**	**2239**	**2592**	**3586**
	55/45/20 °C	757	950	1041	1131	1301	1790
1200	**75/65/20 °C**	**1616**	**2039**	**2243**	**2442**	**2827**	**3912**
	55/45/20 °C	826	1036	1136	1233	1420	1953
1400	**75/65/20 °C**	**1886**	**2379**	**2617**	**2849**	**3298**	**4564**
	55/45/20 °C	964	1209	1326	1439	1656	2278
1600	**75/65/20 °C**	**2155**	**2718**	**2990**	**3256**	**3770**	**5216**
	55/45/20 °C	1101	1381	1515	1645	1893	2604
1800	**75/65/20 °C**	**2425**	**3058**	**3364**	**3663**	**4241**	**5868**
	55/45/20 °C	1239	1554	1704	1850	2129	2929
2000	**75/65/20 °C**	**2694**	**3398**	**3738**	**4070**	**4712**	**6520**
	55/45/20 °C	1377	1726	1894	2056	2366	3255
2300	**75/65/20 °C**	**3098**	**3908**	**4299**	**4681**	**5419**	**7498**
	55/45/20 °C	1583	1985	2178	2364	2721	3743
2600	**75/65/20 °C**	**3502**	**4417**	**4859**	**5291**	**6126**	**8476**
	55/45/20 °C	1790	2244	2462	2672	3076	4231
3000	**75/65/20 °C**	**4041**	**5097**	**5607**	**6105**	**7068**	**9780**
	55/45/20 °C	2065	2590	2840	3084	3549	4882

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1698**	**2146**	**2363**	**2576**	**2988**	**4143**
exponent n	**1.3140**	**1.3255**	**1.3313**	**1.3371**	**1.3486**	**1.3600**

VENTIL COMPACT M (PURMO CVM)

The PURMO Ventil Compact M panel radiators with mid-bottom connectors, profiled heating panels and convection fins are equipped with side covers and a top grille. Two mid-bottom and four side G ½" threaded female connectors allow for central bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.
The main advantage of the central bottom connection relies of the fact that regardless of the length, height and depth of the radiator, the layout of heating system connections can be defined at the building shell stage and it will not change as a result of the selection of a specific size and type of the radiator.

technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " mid-bottom connectors,
  4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request
- Accessories bundled with the radiator : brackets, plugs, air vent.

NOTE:

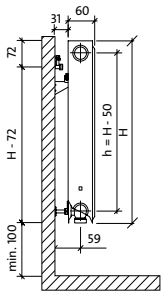
the CVM radiator is available in the right side version only.

The Ventil Compact M radiators are also available in a special version with additional corrosion protection.

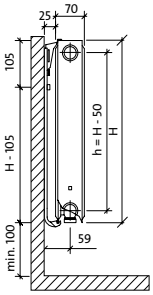
VENTIL COMPACT M

side views

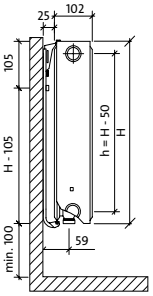
type CVM 11



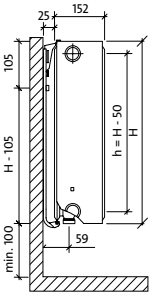
type CVM 21s



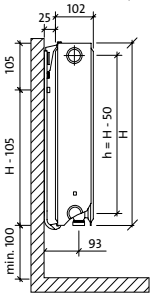
type CVM 22



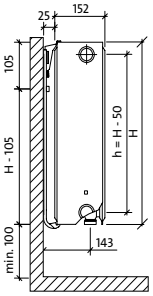
type CVM 33



type CVM 22 (after conversion to the left side)



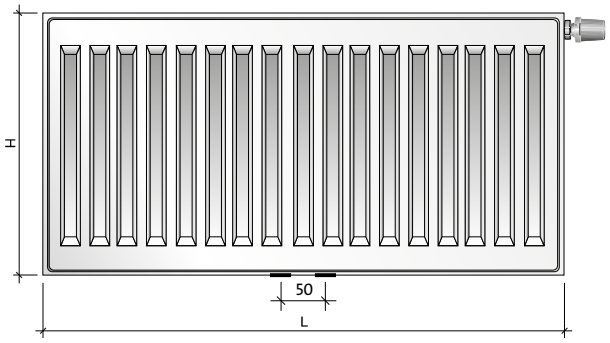
type CVM 33 (after conversion to the left side)



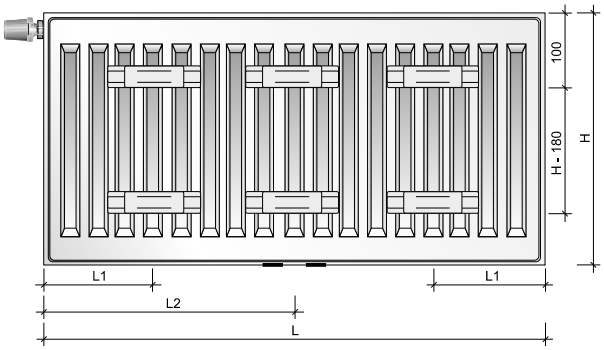
dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



rear view - CVM 11 type only



water volume, weight and mounting distances

water volume : l/m

height / type	300	500	600	900
11	1.7	2.7	3.2	4.5
21s	3.4	5.5	6.6	9.0
22	3.4	5.5	6.6	9.0
33	5.1	8.2	9.8	13.3

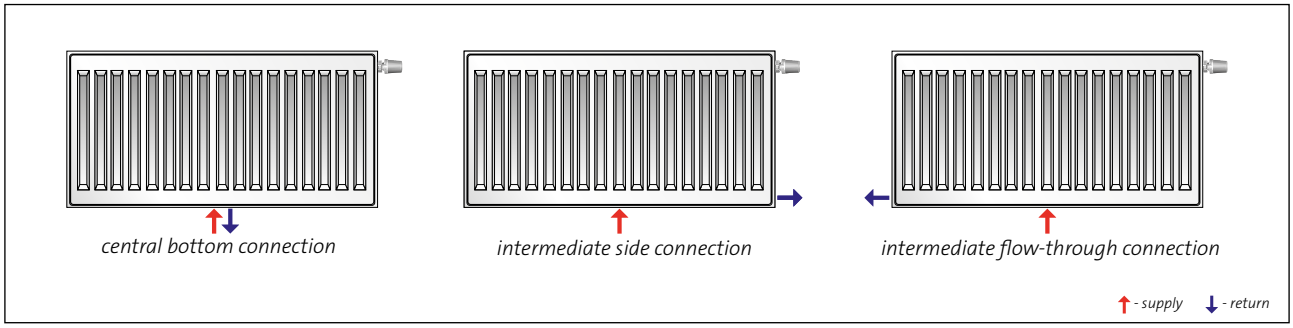
weight : kg/m

height / type	300	500	600	900
11	9.7	15.7	18.7	27.9
21s	14.6	23.8	28.6	42.5
22	16.6	27.6	33.3	49.7
33	24.2	40.3	48.0	71.4

mounting distances : mm

type	CVM 11	
L	**L1**	**L2**
400-1600	117	-
1800	117	917
2000	117	1017
2300	117	1150
2600	117	1317
3000	117	1517

recommended connections



VENTIL COMPACT M

type 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CVM 11 600 x 1200

name
type
height
length

PURMO CVM 11

NOTE: the CVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**218**	**347**	**407**	**571**
	55/45/20 °C	113	178	208	291
500	**75/65/20 °C**	**273**	**434**	**509**	**714**
	55/45/20 °C	141	223	260	364
600	**75/65/20 °C**	**328**	**521**	**611**	**856**
	55/45/20 °C	169	267	313	437
700	**75/65/20 °C**	**382**	**608**	**713**	**999**
	55/45/20 °C	197	312	365	510
800	**75/65/20 °C**	**437**	**694**	**814**	**1142**
	55/45/20 °C	225	356	417	583
900	**75/65/20 °C**	**491**	**781**	**916**	**1284**
	55/45/20 °C	253	401	469	655
1000	**75/65/20 °C**	**546**	**868**	**1018**	**1427**
	55/45/20 °C	281	445	521	728
1100	**75/65/20 °C**	**601**	**955**	**1120**	**1570**
	55/45/20 °C	309	490	573	801
1200	**75/65/20 °C**	**655**	**1042**	**1222**	**1712**
	55/45/20 °C	338	534	625	874
1400	**75/65/20 °C**	**764**	**1215**	**1425**	**1998**
	55/45/20 °C	394	623	729	1019
1600	**75/65/20 °C**	**874**	**1389**	**1629**	**2283**
	55/45/20 °C	450	712	834	1165
1800	**75/65/20 °C**	**983**	**1562**	**1832**	**2569**
	55/45/20 °C	506	801	938	1311
2000	**75/65/20 °C**	**1092**	**1736**	**2036**	**2854**
	55/45/20 °C	563	890	1042	1456
2300	**75/65/20 °C**	**1256**	**1996**	**2341**	
	55/45/20 °C	647	1024	1198	
2600	**75/65/20 °C**	**1420**	**2257**	**2647**	
	55/45/20 °C	731	1158	1354	
3000	**75/65/20 °C**	**1638**	**2604**	**3054**	
	55/45/20 °C	844	1336	1563	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**686**	**1093**	**1283**	**1800**
exponent n	**1.2981**	**1.3070**	**1.3115**	**1.3170**

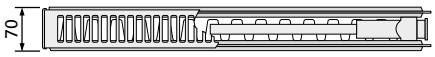
VENTIL COMPACT M

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CVM 21s 600 x 1200

name
type
height
length

PURMO CVM 21s



NOTE: the CVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**304**	**462**	**536**	**744**
	55/45/20 °C	158	237	273	376
500	**75/65/20 °C**	**381**	**578**	**670**	**931**
	55/45/20 °C	198	296	341	470
600	**75/65/20 °C**	**457**	**694**	**804**	**1117**
	55/45/20 °C	237	356	409	563
700	**75/65/20 °C**	**533**	**809**	**938**	**1303**
	55/45/20 °C	277	415	478	657
800	**75/65/20 °C**	**609**	**925**	**1072**	**1489**
	55/45/20 °C	317	474	546	751
900	**75/65/20 °C**	**685**	**1040**	**1206**	**1675**
	55/45/20 °C	356	533	614	845
1000	**75/65/20 °C**	**761**	**1156**	**1340**	**1861**
	55/45/20 °C	396	593	682	939
1100	**75/65/20 °C**	**837**	**1272**	**1474**	**2047**
	55/45/20 °C	435	652	751	1033
1200	**75/65/20 °C**	**913**	**1387**	**1608**	**2233**
	55/45/20 °C	475	711	819	1127
1400	**75/65/20 °C**	**1065**	**1618**	**1876**	**2605**
	55/45/20 °C	554	830	955	1315
1600	**75/65/20 °C**	**1218**	**1850**	**2144**	**2978**
	55/45/20 °C	633	948	1092	1502
1800	**75/65/20 °C**	**1370**	**2081**	**2412**	**3350**
	55/45/20 °C	712	1067	1228	1690
2000	**75/65/20 °C**	**1522**	**2312**	**2680**	**3722**
	55/45/20 °C	791	1185	1365	1878
2300	**75/65/20 °C**	**1750**	**2659**	**3082**	
	55/45/20 °C	910	1363	1569	
2600	**75/65/20 °C**	**1979**	**3006**	**3484**	
	55/45/20 °C	1029	1541	1774	
3000	**75/65/20 °C**	**2283**	**3468**	**4020**	
	55/45/20 °C	1187	1778	2047	

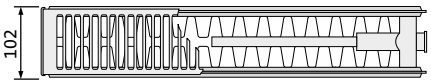
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**954**	**1456**	**1691**	**2356**
exponent n	**1.2803**	**1.3076**	**1.3213**	**1.3390**

VENTIL COMPACT M

type 22

PURMO CVM 22



RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CVM 22 600 x 1200

name
type
height
length

NOTE: the CVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	75/65/20 °C	384	588	684	955
	55/45/20 °C	197	299	346	478
500	75/65/20 °C	481	735	855	1194
	55/45/20 °C	246	373	432	597
600	75/65/20 °C	577	882	1025	1433
	55/45/20 °C	295	448	518	717
700	75/65/20 °C	673	1029	1196	1672
	55/45/20 °C	345	522	605	836
800	75/65/20 °C	769	1176	1367	1910
	55/45/20 °C	394	597	691	956
900	75/65/20 °C	865	1323	1538	2149
	55/45/20 °C	443	672	777	1075
1000	75/65/20 °C	961	1470	1709	2388
	55/45/20 °C	492	746	864	1194
1100	75/65/20 °C	1057	1617	1880	2627
	55/45/20 °C	542	821	950	1314
1200	75/65/20 °C	1153	1764	2051	2866
	55/45/20 °C	591	896	1037	1433
1400	75/65/20 °C	1345	2058	2393	3343
	55/45/20 °C	689	1045	1209	1672
1600	75/65/20 °C	1538	2352	2734	3821
	55/45/20 °C	788	1194	1382	1911
1800	75/65/20 °C	1730	2646	3076	4298
	55/45/20 °C	886	1343	1555	2150
2000	75/65/20 °C	1922	2940	3418	4776
	55/45/20 °C	985	1493	1728	2389
2300	75/65/20 °C	2210	3381	3931	
	55/45/20 °C	1132	1717	1987	
2600	75/65/20 °C	2499	3822	4443	
	55/45/20 °C	1280	1940	2246	
3000	75/65/20 °C	2883	4410	5127	
	55/45/20 °C	1477	2239	2591	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1211	1857	2163	3033
exponent n	1.3094	1.3270	1.3358	1.3561

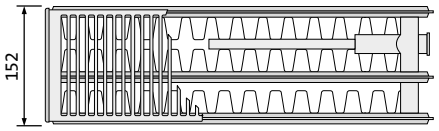
VENTIL COMPACT M

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO CVM 33 600 x 1200

name
type
height
length

PURMO CVM 33



NOTE: the CVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**539**	**814**	**942**	**1304**
	55/45/20 °C	275	411	473	651
500	**75/65/20 °C**	**674**	**1018**	**1178**	**1630**
	55/45/20 °C	344	514	592	814
600	**75/65/20 °C**	**808**	**1221**	**1414**	**1956**
	55/45/20 °C	413	617	710	976
700	**75/65/20 °C**	**943**	**1425**	**1649**	**2282**
	55/45/20 °C	482	719	828	1139
800	**75/65/20 °C**	**1078**	**1628**	**1885**	**2608**
	55/45/20 °C	551	822	946	1302
900	**75/65/20 °C**	**1212**	**1832**	**2120**	**2934**
	55/45/20 °C	620	925	1065	1465
1000	**75/65/20 °C**	**1347**	**2035**	**2356**	**3260**
	55/45/20 °C	688	1028	1183	1627
1100	**75/65/20 °C**	**1482**	**2239**	**2592**	**3586**
	55/45/20 °C	757	1131	1301	1790
1200	**75/65/20 °C**	**1616**	**2442**	**2827**	**3912**
	55/45/20 °C	826	1233	1420	1953
1400	**75/65/20 °C**	**1886**	**2849**	**3298**	**4564**
	55/45/20 °C	964	1439	1656	2278
1600	**75/65/20 °C**	**2155**	**3256**	**3770**	**5216**
	55/45/20 °C	1101	1645	1893	2604
1800	**75/65/20 °C**	**2425**	**3663**	**4241**	**5868**
	55/45/20 °C	1239	1850	2129	2929
2000	**75/65/20 °C**	**2694**	**4070**	**4712**	**6520**
	55/45/20 °C	1377	2056	2366	3255
2300	**75/65/20 °C**	**3098**	**4681**	**5419**	
	55/45/20 °C	1583	2364	2721	
2600	**75/65/20 °C**	**3502**	**5291**	**6126**	
	55/45/20 °C	1790	2672	3076	
3000	**75/65/20 °C**	**4041**	**6105**	**7068**	
	55/45/20 °C	2065	3084	3549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1698**	**2576**	**2988**	**4143**
exponent n	**1.3140**	**1.3371**	**1.3486**	**1.3600**

HYGIENE *(Purmo H)*

The PURMO Hygiene panel radiators with profiled heating panels are not equipped with convection fins. Due to the absence of side covers and a top grille, they are intended for applications in health care and other facilities of elevated hygienic requirements. Four side G ½ " threaded female connectors allow for side connection on both right and left side.

technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator: plug, air vent.

NOTE:

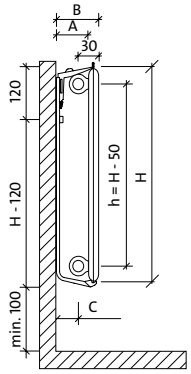
Mounting brackets must be ordered separately. For the method of selecting and ordering see page 30

The Hygiene radiators are also available in a special version with additional corrosion protection.

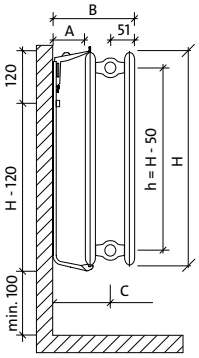
HYGIENE

side views

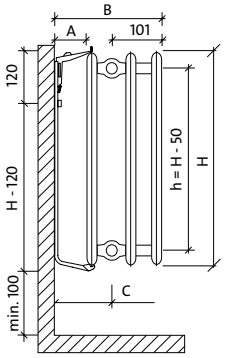
type H 10



type H 20



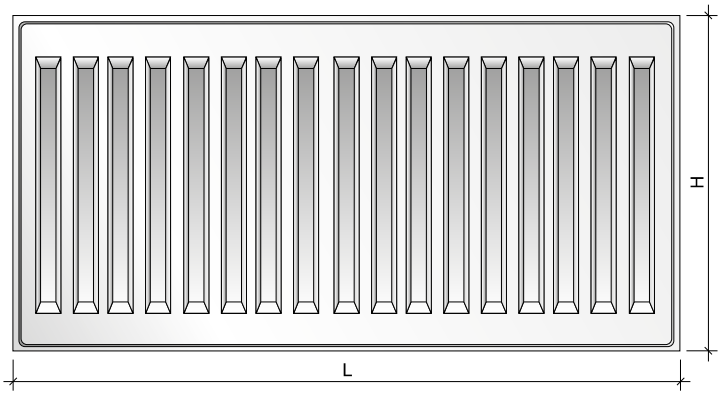
type H 30



dimensions in mm

H *= height*
L *= length*
h *= spacing of connectors*

front view



mounting distances : mm

type	H 10	H 20	H 30
radiator depth	47	102	152
A-mounting depth	100	100	100
B-total depth	114	202	252
C-connection axis*	84	151	151

* 201 mm in case of the H 30 type radiator after conversion to the left side

water volume and weight

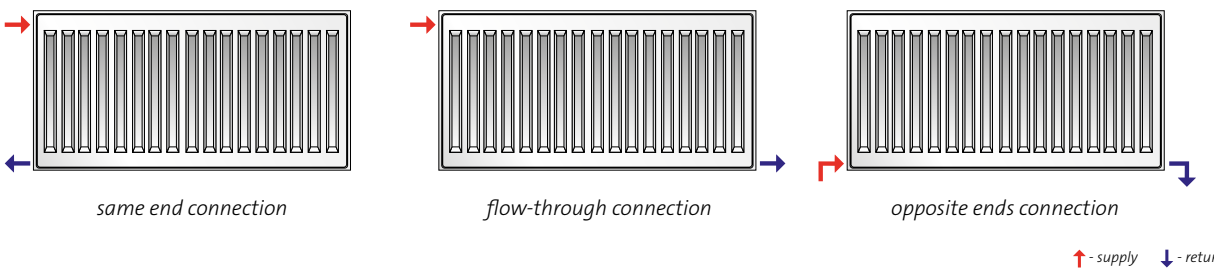
water volume : l/m

type \ height	300	400	450	500	550	600	900
10	1.7	2.2	2.5	2.7	3.0	3.2	4.5
20	3.4	4.5	5.0	5.5	6.1	6.6	9.0
30	5.1	6.7	7.5	8.2	9.0	9.8	13.3

weight : kg/m

type \ height	300	400	450	500	550	600	900
10	6.2	7.8	9.4	9.5	10.7	11.6	16.9
20	11.5	14.6	17.6	18.0	20.5	22.3	31.7
30	16.2	21.1	25.4	25.7	28.8	31.5	44.9

recommended connections



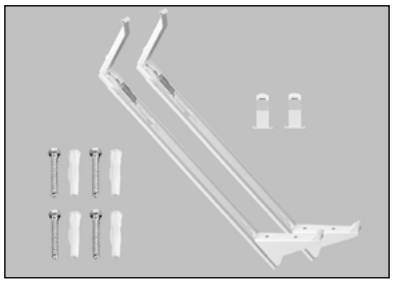
BRACKETS

Required quantities of the Monclac MCK 108 hospital brackets for various types and heights of the PURMO hygienic radiators

Brackets of outreach 108 mm – max. vertical load of 125 kg per single bracket.
(new brackets with reinforced foot structure)

NOTE: Mounting brackets for hygienic radiators must be ordered separately. Mounting brackets are packed in sets of 2 or 3 pieces. In the table, there are presented quantities of single mounting brackets, not sets!!!

height	300			400			450			500			550			600			900		
length	10	20	30	10	20	30	10	20	30	10	20	30	10	20	30	10	20	30	10	20	30
[mm]	quantity			quantity			quantity			quantity			quantity			quantity			quantity		
400	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
500	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
600	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
700	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
800	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
900	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1000	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2 [1]	2	2	2	3
1100	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
1200	2	2	3	2	2	3	2	2	3	2	2	3	2	2	3	2	2	2	2	2	3
1400	2	3	3	2	2	3	2	2	3	2	2	3	2	2	3	2	2	3	2	3	3
1600	3	3	3	2	3	3	2	3	3	2	3	3	2	3	3	2	2	3	3	3	3
1800	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	4
2000	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3 [2]	3	3	3	4
2300	4	4	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	4	3	4	4
2600	4	4	5	4	4	4	4	4	4	4	4	5	4	4	5	3	3	4	4	4	5
3000	5	5	6	4	4	5	4	4	5	4	4	5	4	4	5	4	4 [3]	5	4	4	5



Rules for selecting sets of the Monclac MCK 108 mounting brackets, using the example of the type 20 hygienic radiator of 600 mm height:

[1] For the length of 1000 mm - 1 double set	AZ02BW2MC601080R9016
[2] For the length of 2000 mm - 1 triple set	AZ02BW3MC601080R9016
[3] For the length of 3000 mm - 2 double sets	AZ02BW2MC601080R9016

description	order code
2-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW2MC301080R9016
3-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW3MC301080R9016
2-element Monclac MCK-108 set for radiators of 400 mm height	AZ02BW2MC401080R9016
3-element Monclac MCK-108 set for radiators of 400 mm height	AZ02BW3MC401080R9016
2-element Monclac MCK-108 set for radiators of 450 mm height	AZ02BW2MC451080R9016
3-element Monclac MCK-108 set for radiators of 450 mm height	AZ02BW3MC451080R9016
2-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW2MC501080R9016
3-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW3MC501080R9016
2-element Monclac MCK-108 set for radiators of 550 mm height	AZ02BW2MC551080R9016
3-element Monclac MCK-108 set for radiators of 550 mm height	AZ02BW3MC551080R9016
2-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW2MC601080R9016
3-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW3MC601080R9016
2-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW2MC901080R9016
3-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW3MC901080R9016

HYGIENE

type 10

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO H 10 600 x 1200

name
type
height
length

PURMO H 10

length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	75/65/20 °C	139	180	199	218	237	256	361
	55/45/20 °C	70	91	102	112	122	132	186
500	75/65/20 °C	174	225	249	273	297	320	452
	55/45/20 °C	88	114	127	140	153	165	233
600	75/65/20 °C	209	269	299	328	356	383	542
	55/45/20 °C	105	137	152	168	183	198	279
700	75/65/20 °C	244	314	349	382	415	447	632
	55/45/20 °C	123	160	178	196	214	231	326
800	75/65/20 °C	278	359	398	437	474	511	722
	55/45/20 °C	140	183	203	224	244	264	372
900	75/65/20 °C	313	404	448	491	534	575	813
	55/45/20 °C	158	205	229	252	275	297	419
1000	75/65/20 °C	348	449	498	546	593	639	903
	55/45/20 °C	175	228	254	280	305	330	465
1100	75/65/20 °C	383	494	548	601	652	703	993
	55/45/20 °C	193	251	280	308	336	363	512
1200	75/65/20 °C	418	539	598	655	712	767	1084
	55/45/20 °C	210	274	305	336	366	396	558
1400	75/65/20 °C	487	629	697	764	830	895	1264
	55/45/20 °C	245	319	356	392	427	462	651
1600	75/65/20 °C	557	718	797	874	949	1022	1445
	55/45/20 °C	280	365	407	448	488	529	744
1800	75/65/20 °C	626	808	896	983	1067	1150	1625
	55/45/20 °C	316	411	457	504	549	595	837
2000	75/65/20 °C	696	898	996	1092	1186	1278	1806
	55/45/20 °C	351	456	508	560	610	661	930
2300	75/65/20 °C	800	1033	1145	1256	1364	1470	2077
	55/45/20 °C	403	525	584	644	702	760	1070
2600	75/65/20 °C	905	1167	1295	1420	1542	1661	2348
	55/45/20 °C	456	593	661	728	794	859	1209
3000	75/65/20 °C	1044	1347	1494	1638	1779	1917	2709
	55/45/20 °C	526	684	762	839	916	991	1395

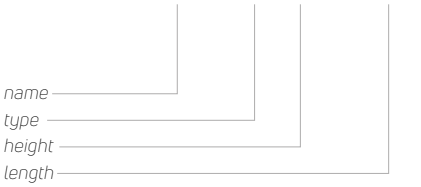
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	441	567	628	688	746	802	1135
exponent n	1.3425	1.3255	1.3171	1.3086	1.3001	1.2916	1.2988

HYGIENE
type 20

PURMO H 20

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO H 20 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	**75/65/20 °C**	**252**	**315**	**345**	**375**	**405**	**434**	**606**
	55/45/20 °C	131	163	179	195	210	225	311
500	**75/65/20 °C**	**315**	**394**	**432**	**469**	**506**	**543**	**758**
	55/45/20 °C	164	204	224	243	262	281	389
600	**75/65/20 °C**	**378**	**472**	**518**	**563**	**607**	**651**	**910**
	55/45/20 °C	196	245	269	292	315	337	467
700	**75/65/20 °C**	**441**	**551**	**604**	**657**	**708**	**760**	**1061**
	55/45/20 °C	229	286	313	340	367	393	545
800	**75/65/20 °C**	**504**	**630**	**690**	**750**	**810**	**868**	**1213**
	55/45/20 °C	262	327	358	389	420	450	623
900	**75/65/20 °C**	**567**	**708**	**777**	**844**	**911**	**977**	**1364**
	55/45/20 °C	295	368	403	438	472	506	701
1000	**75/65/20 °C**	**630**	**787**	**863**	**938**	**1012**	**1085**	**1516**
	55/45/20 °C	327	409	448	486	525	562	779
1100	**75/65/20 °C**	**693**	**866**	**949**	**1032**	**1113**	**1194**	**1668**
	55/45/20 °C	360	449	493	535	577	618	857
1200	**75/65/20 °C**	**756**	**944**	**1036**	**1126**	**1214**	**1302**	**1819**
	55/45/20 °C	393	490	537	584	629	674	934
1400	**75/65/20 °C**	**882**	**1102**	**1208**	**1313**	**1417**	**1519**	**2122**
	55/45/20 °C	458	572	627	681	734	787	1090
1600	**75/65/20 °C**	**1008**	**1259**	**1381**	**1501**	**1619**	**1736**	**2426**
	55/45/20 °C	524	654	716	778	839	899	1246
1800	**75/65/20 °C**	**1134**	**1417**	**1553**	**1688**	**1822**	**1953**	**2729**
	55/45/20 °C	589	735	806	876	944	1012	1402
2000	**75/65/20 °C**	**1260**	**1574**	**1726**	**1876**	**2024**	**2170**	**3032**
	55/45/20 °C	655	817	895	973	1049	1124	1557
2300	**75/65/20 °C**	**1449**	**1810**	**1985**	**2157**	**2328**	**2496**	**3487**
	55/45/20 °C	753	940	1030	1119	1206	1293	1791
2600	**75/65/20 °C**	**1638**	**2046**	**2244**	**2439**	**2631**	**2821**	**3942**
	55/45/20 °C	851	1062	1164	1265	1364	1461	2025
3000	**75/65/20 °C**	**1890**	**2361**	**2589**	**2814**	**3036**	**3255**	**4548**
	55/45/20 °C	982	1226	1343	1459	1574	1686	2336

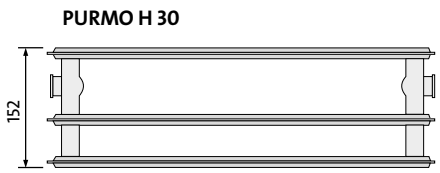
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

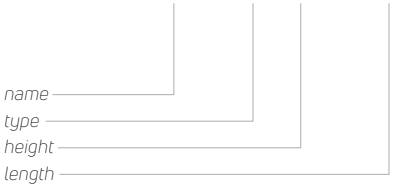
[W/m] 90/70/20 °C	**790**	**987**	**1082**	**1177**	**1270**	**1361**	**1908**
exponent n	**1.2815**	**1.2835**	**1.2846**	**1.2856**	**1.2866**	**1.2876**	**1.3042**

HYGIENE

type 30

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO H 30 600 x 1200





length [mm]	temperatures t_z / t_p / t_i	height [mm]						
		300	400	450	500	550	600	900
400	75/65/20 °C	350	439	482	524	564	604	828
	55/45/20 °C	180	226	248	269	289	309	417
500	75/65/20 °C	437	549	549	655	705	755	1035
	55/45/20 °C	225	283	310	336	362	387	521
600	75/65/20 °C	524	659	723	785	846	906	1241
	55/45/20 °C	271	339	372	403	434	464	626
700	75/65/20 °C	612	769	844	916	987	1057	1448
	55/45/20 °C	316	396	434	470	506	541	730
800	75/65/20 °C	699	878	964	1047	1128	1208	1655
	55/45/20 °C	361	452	496	538	578	619	834
900	75/65/20 °C	787	988	1085	1178	1269	1359	1862
	55/45/20 °C	406	509	557	605	651	696	938
1000	75/65/20 °C	874	1098	1205	1309	1410	1510	2069
	55/45/20 °C	451	565	619	672	723	773	1043
1100	75/65/20 °C	961	1208	1326	1440	1551	1661	2276
	55/45/20 °C	496	622	681	739	795	851	1147
1200	75/65/20 °C	1049	1318	1446	1571	1692	1812	2483
	55/45/20 °C	541	678	743	806	868	928	1251
1400	75/65/20 °C	1224	1537	1687	1833	1974	2114	2897
	55/45/20 °C	631	791	867	941	1012	1083	1460
1600	75/65/20 °C	1398	1757	1928	2094	2256	2416	3310
	55/45/20 °C	721	904	991	1075	1157	1237	1668
1800	75/65/20 °C	1573	1976	2169	2356	2538	2718	3724
	55/45/20 °C	812	1017	1115	1210	1301	1392	1877
2000	75/65/20 °C	1748	2196	2410	2618	2820	3020	4138
	55/45/20 °C	902	1130	1239	1344	1446	1547	2085
2300	75/65/20 °C	2010	2525	2772	3011	3243	3473	4759
	55/45/20 °C	1037	1300	1425	1546	1663	1779	2398
2600	75/65/20 °C	2272	2855	3133	3403	3666	3926	5379
	55/45/20 °C	1172	1469	1610	1747	1880	2011	2711
3000	75/65/20 °C	2622	3294	3615	3927	4230	4530	6207
	55/45/20 °C	1353	1695	1858	2016	2169	2320	3128

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1098	1381	1516	1648	1776	1902	2621
exponent n	1.2957	1.3004	1.3028	1.3051	1.3075	1.3098	1.3418

VENTIL HYGIENE *(Purmo HV)*

The PURMO Ventil Hygiene panel radiators with profiled heating panels are not equipped with convection fins. Due to the absence of side covers and a top grille, they are intended for applications in health care and other facilities of elevated hygienic requirements. Two bottom and four side G ½ " threaded female connectors allow for bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.

technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " bottom, right side connectors (left side - available on request)
  4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator : plugs, air vent.

NOTE:

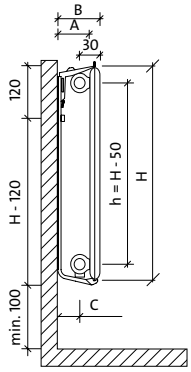
Mounting brackets must be ordered separately. For the method of selecting and ordering see page 36

The Ventil Hygiene radiators are also available in a special version with additional corrosion protection.

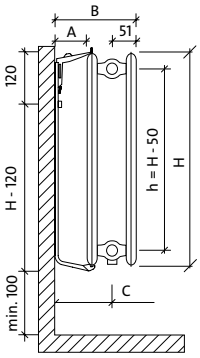
VENTIL HYGIENE

side views

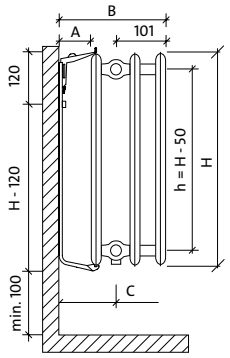
type HV 10



type HV 20



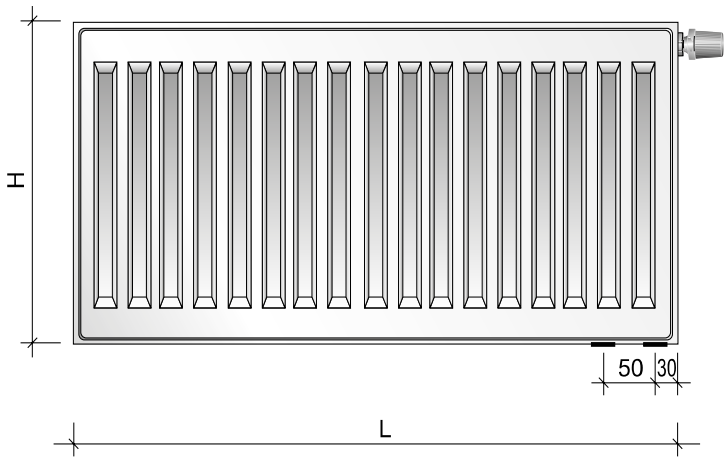
type HV 30



dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



mounting distances : mm

type	HV 10	HV 20	HV 30
radiator depth	47	102	152
A-mounting depth	100	100	100
B-total depth	114	202	252
C-connection axis*	84	151	151

* 201 mm in case of the HV 30 type radiator after conversion to the left side

water volume and weight

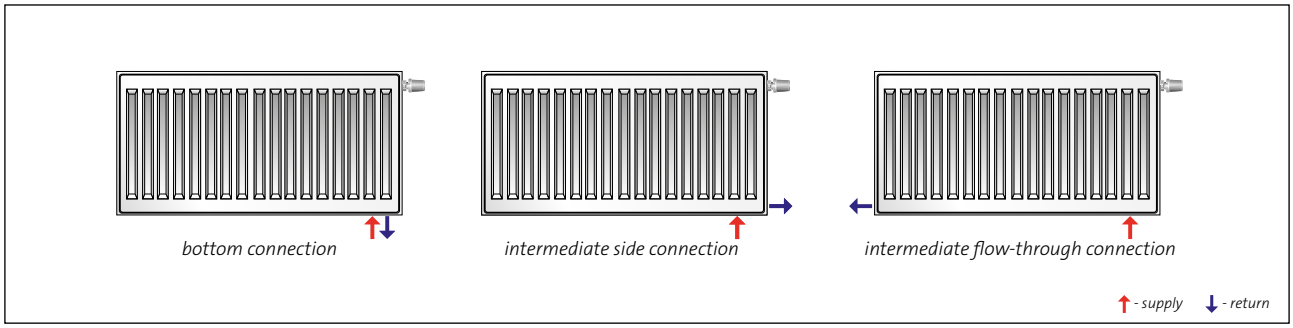
water volume : l/m

type \ height	300	400	450	500	600	900
10	1.7	2.2	2.5	2.7	3.2	4.5
20	3.4	4.5	5.0	5.5	6.6	9.0
30	5.1	6.7	7.5	8.2	9.8	13.3

weight : kg/m

type \ height	300	400	450	500	600	900
10	7.0	9.0	10.7	10.9	13.2	19.0
20	11.9	15.3	18.3	18.7	23.2	32.4
30	16.7	21.7	26.2	26.6	32.3	46.5

recommended connections



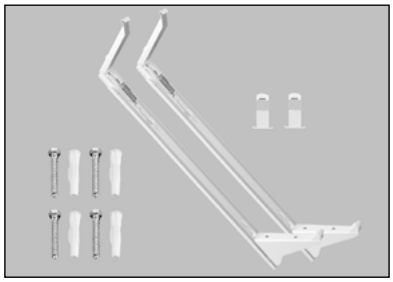
BRACKETS

Required quantities of the Monclac MCK 108 hospital brackets for various types and heights of the PURMO hygienic radiators

Brackets of outreach 108 mm – max. vertical load of 125 kg per single bracket.
(new brackets with reinforced foot structure)

NOTE: Mounting brackets for hygienic radiators must be ordered separately. Mounting brackets are packed in sets of 2 or 3 pieces. In the table, there are presented quantities of single mounting brackets, not sets!!!

height	300			400			450			500			600			900		
length [mm]	10	20	30	10	20	30	10	20	30	10	20	30	10	20	30	10	20	30
	quantity			quantity			quantity			quantity			quantity			quantity		
400	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
500	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
600	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
700	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
800	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
900	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1000	2	2	2	2	2	2	2	2	2	2	2	2	2	2 [1)]	2	2	2	3
1100	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
1200	2	2	3	2	2	3	2	2	3	2	2	3	2	2	2	2	2	3
1400	2	3	3	2	2	3	2	2	3	2	2	3	2	2	3	2	3	3
1600	3	3	3	2	3	3	2	3	3	2	3	3	2	2	3	3	3	3
1800	3	3	4	3	3	3	3	3	3	3	3	3	2	3	3	3	3	4
2000	3	3	4	3	3	4	3	3	4	3	3	4	3	3 [2)]	3	3	3	4
2300	4	4	4	3	3	4	3	3	4	3	3	4	3	3	4	3	4	4
2600	4	4	5	4	4	4	4	4	4	4	4	5	3	3	4	4	4	5
3000	5	5	6	4	4	5	4	4	5	4	4	5	4	4 [3)]	5	4	4	5



Rules for selecting sets of the Monclac MCK 108 mounting brackets, using the example of the type 20 hygienic radiator of 600 mm height:

[1)] For the length of 1000 mm - 1 double set	AZ02BW2MC601080R9016
[2)] For the length of 2000 mm - 1 triple set	AZ02BW3MC601080R9016
[3)] For the length of 3000 mm - 2 double sets	AZ02BW2MC601080R9016

description	order code
2-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW2MC301080R9016
3-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW3MC301080R9016
2-element Monclac MCK-108 set for radiators of 400 mm height	AZ02BW2MC401080R9016
3-element Monclac MCK-108 set for radiators of 400 mm height	AZ02BW3MC401080R9016
2-element Monclac MCK-108 set for radiators of 450 mm height	AZ02BW2MC451080R9016
3-element Monclac MCK-108 set for radiators of 450 mm height	AZ02BW3MC451080R9016
2-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW2MC501080R9016
3-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW3MC501080R9016
2-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW2MC601080R9016
3-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW3MC601080R9016
2-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW2MC901080R9016
3-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW3MC901080R9016

VENTIL HYGIENE

type 10

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO HV 10 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO HV 10

length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	**75/65/20 °C**	**139**	**180**	**199**	**218**	**256**	**361**
	55/45/20 °C	70	91	102	112	132	186
500	**75/65/20 °C**	**174**	**225**	**249**	**273**	**320**	**452**
	55/45/20 °C	88	114	127	140	165	233
600	**75/65/20 °C**	**209**	**269**	**299**	**328**	**383**	**542**
	55/45/20 °C	105	137	152	168	198	279
700	**75/65/20 °C**	**244**	**314**	**349**	**382**	**447**	**632**
	55/45/20 °C	123	160	178	196	231	326
800	**75/65/20 °C**	**278**	**359**	**398**	**437**	**511**	**722**
	55/45/20 °C	140	183	203	224	264	372
900	**75/65/20 °C**	**313**	**404**	**448**	**491**	**575**	**813**
	55/45/20 °C	158	205	229	252	297	419
1000	**75/65/20 °C**	**348**	**449**	**498**	**546**	**639**	**903**
	55/45/20 °C	175	228	254	280	330	465
1100	**75/65/20 °C**	**383**	**494**	**548**	**601**	**703**	**993**
	55/45/20 °C	193	251	280	308	363	512
1200	**75/65/20 °C**	**418**	**539**	**598**	**655**	**767**	**1084**
	55/45/20 °C	210	274	305	336	396	558
1400	**75/65/20 °C**	**487**	**629**	**697**	**764**	**895**	**1264**
	55/45/20 °C	245	319	356	392	462	651
1600	**75/65/20 °C**	**557**	**718**	**797**	**874**	**1022**	**1445**
	55/45/20 °C	280	365	407	448	529	744
1800	**75/65/20 °C**	**626**	**808**	**896**	**983**	**1150**	**1625**
	55/45/20 °C	316	411	457	504	595	837
2000	**75/65/20 °C**	**696**	**898**	**996**	**1092**	**1278**	**1806**
	55/45/20 °C	351	456	508	560	661	930
2300	**75/65/20 °C**	**800**	**1033**	**1145**	**1256**	**1470**	**2077**
	55/45/20 °C	403	525	584	644	760	1070
2600	**75/65/20 °C**	**905**	**1167**	**1295**	**1420**	**1661**	**2348**
	55/45/20 °C	456	593	661	728	859	1209
3000	**75/65/20 °C**	**1044**	**1347**	**1494**	**1638**	**1917**	**2709**
	55/45/20 °C	526	684	762	839	991	1395

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

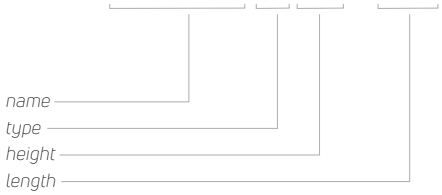
[W/m] 90/70/20 °C	**441**	**567**	**628**	**688**	**802**	**1135**
exponent n	**1.3425**	**1.3255**	**1.3171**	**1.3086**	**1.2916**	**1.2988**

VENTIL HYGIENE

type 20

PURMO HV 20

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO HV 20 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	**75/65/20 °C**	**252**	**315**	**345**	**375**	**434**	**606**
	55/45/20 °C	131	163	179	195	225	311
500	**75/65/20 °C**	**315**	**394**	**432**	**469**	**543**	**758**
	55/45/20 °C	164	204	224	243	281	389
600	**75/65/20 °C**	**378**	**472**	**518**	**563**	**651**	**910**
	55/45/20 °C	196	245	269	292	337	467
700	**75/65/20 °C**	**441**	**551**	**604**	**657**	**760**	**1061**
	55/45/20 °C	229	286	313	340	393	545
800	**75/65/20 °C**	**504**	**630**	**690**	**750**	**868**	**1213**
	55/45/20 °C	262	327	358	389	450	623
900	**75/65/20 °C**	**567**	**708**	**777**	**844**	**977**	**1364**
	55/45/20 °C	295	368	403	438	506	701
1000	**75/65/20 °C**	**630**	**787**	**863**	**938**	**1085**	**1516**
	55/45/20 °C	327	409	448	486	562	779
1100	**75/65/20 °C**	**693**	**866**	**949**	**1032**	**1194**	**1668**
	55/45/20 °C	360	449	493	535	618	857
1200	**75/65/20 °C**	**756**	**944**	**1036**	**1126**	**1302**	**1819**
	55/45/20 °C	393	490	537	584	674	934
1400	**75/65/20 °C**	**882**	**1102**	**1208**	**1313**	**1519**	**2122**
	55/45/20 °C	458	572	627	681	787	1090
1600	**75/65/20 °C**	**1008**	**1259**	**1381**	**1501**	**1736**	**2426**
	55/45/20 °C	524	654	716	778	899	1246
1800	**75/65/20 °C**	**1134**	**1417**	**1553**	**1688**	**1953**	**2729**
	55/45/20 °C	589	735	806	876	1012	1402
2000	**75/65/20 °C**	**1260**	**1574**	**1726**	**1876**	**2170**	**3032**
	55/45/20 °C	655	817	895	973	1124	1557
2300	**75/65/20 °C**	**1449**	**1810**	**1985**	**2157**	**2496**	**3487**
	55/45/20 °C	753	940	1030	1119	1293	1791
2600	**75/65/20 °C**	**1638**	**2046**	**2244**	**2439**	**2821**	**3942**
	55/45/20 °C	851	1062	1164	1265	1461	2025
3000	**75/65/20 °C**	**1890**	**2361**	**2589**	**2814**	**3255**	**4548**
	55/45/20 °C	982	1226	1343	1459	1686	2336

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**790**	**987**	**1082**	**1177**	**1361**	**1908**
exponent n	**1.2815**	**1.2835**	**1.2846**	**1.2856**	**1.2876**	**1.3042**

VENTIL HYGIENE

type 30

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO HV 30 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO HV 30

length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	450	500	600	900
400	**75/65/20 °C**	**350**	**439**	**482**	**524**	**604**	**828**
	55/45/20 °C	180	226	248	269	309	417
500	**75/65/20 °C**	**437**	**549**	**549**	**655**	**755**	**1035**
	55/45/20 °C	225	283	310	336	387	521
600	**75/65/20 °C**	**524**	**659**	**723**	**785**	**906**	**1241**
	55/45/20 °C	271	339	372	403	464	626
700	**75/65/20 °C**	**612**	**769**	**844**	**916**	**1057**	**1448**
	55/45/20 °C	316	396	434	470	541	730
800	**75/65/20 °C**	**699**	**878**	**964**	**1047**	**1208**	**1655**
	55/45/20 °C	361	452	496	538	619	834
900	**75/65/20 °C**	**787**	**988**	**1085**	**1178**	**1359**	**1862**
	55/45/20 °C	406	509	557	605	696	938
1000	**75/65/20 °C**	**874**	**1098**	**1205**	**1309**	**1510**	**2069**
	55/45/20 °C	451	565	619	672	773	1043
1100	**75/65/20 °C**	**961**	**1208**	**1326**	**1440**	**1661**	**2276**
	55/45/20 °C	496	622	681	739	851	1147
1200	**75/65/20 °C**	**1049**	**1318**	**1446**	**1571**	**1812**	**2483**
	55/45/20 °C	541	678	743	806	928	1251
1400	**75/65/20 °C**	**1224**	**1537**	**1687**	**1833**	**2114**	**2897**
	55/45/20 °C	631	791	867	941	1083	1460
1600	**75/65/20 °C**	**1398**	**1757**	**1928**	**2094**	**2416**	**3310**
	55/45/20 °C	721	904	991	1075	1237	1668
1800	**75/65/20 °C**	**1573**	**1976**	**2169**	**2356**	**2718**	**3724**
	55/45/20 °C	812	1017	1115	1210	1392	1877
2000	**75/65/20 °C**	**1748**	**2196**	**2410**	**2618**	**3020**	**4138**
	55/45/20 °C	902	1130	1239	1344	1547	2085
2300	**75/65/20 °C**	**2010**	**2525**	**2772**	**3011**	**3473**	**4759**
	55/45/20 °C	1037	1300	1425	1546	1779	2398
2600	**75/65/20 °C**	**2272**	**2855**	**3133**	**3403**	**3926**	**5379**
	55/45/20 °C	1172	1469	1610	1747	2011	2711
3000	**75/65/20 °C**	**2622**	**3294**	**3615**	**3927**	**4530**	**6207**
	55/45/20 °C	1353	1695	1858	2016	2320	3128

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1098**	**1381**	**1516**	**1648**	**1902**	**2621**
exponent n	**1.2957**	**1.3004**	**1.3028**	**1.3051**	**1.3098**	**1.3418**

PLAN COMPACT *(Purmo FC)*

The PURMO Plan Contact panel radiators stand out due to their completely flat front panel. The panel is glued to the profiled front, base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. The radiators are equipped with side covers and a top grille. Four G ½ " threaded female connectors allow for side connection on both right and left side

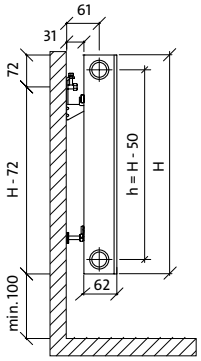
technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator: brackets, plug, air vent.

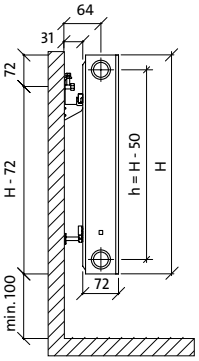
PLAN COMPACT

side views

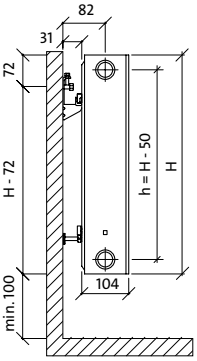
type FC 11



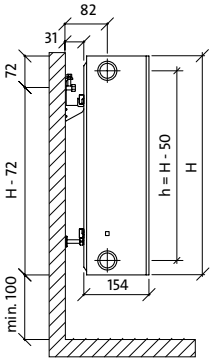
type FC 21s



type FC 22



type FC 33

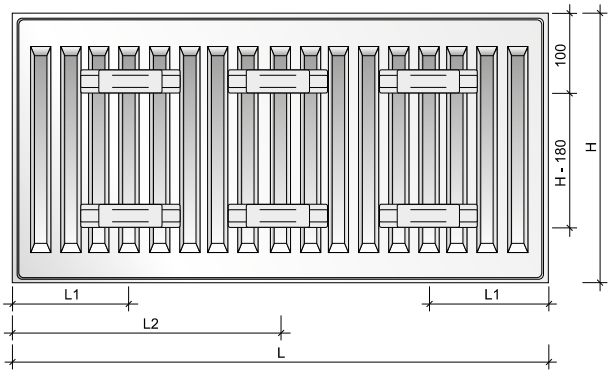


dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view

rear view



water volume, weight and mounting distances

water volume : l/m

height / type	300	400	500	550	600	900
11	1.7	2.2	2.7	3.0	3.2	4.5
21s	3.4	4.5	5.5	6.1	6.6	9.0
22	3.4	4.5	5.5	6.1	6.6	9.0
33	5.1	6.7	8.2	9.0	9.8	13.3

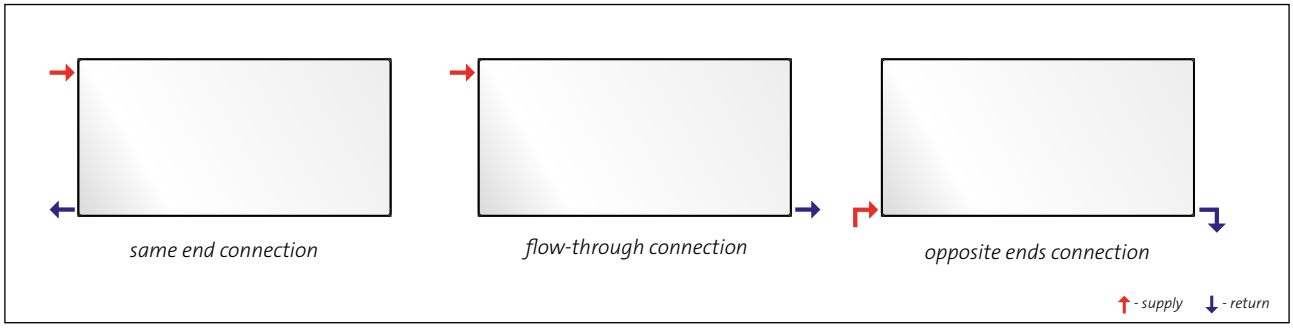
weight : kg/m

height / type	300	400	500	550	600	900
11	12.2	15.9	19.8	21.7	23.7	35.7
21s	16.8	22.1	27.4	30.8	33.1	48.7
22	18.9	25.0	31.1	34.6	37.7	56.1
33	26.4	35.2	43.9	48.4	53.0	78.8

mounting distances : mm

type	FC 11		FC 21s, FC 22, FC 33	
L	**L1**	**L2**	**L1**	**L2**
400-1600	117	-	133	-
1800	117	917	133	900
2000	117	1017	133	1000
2300	117	1150	133	1167
2600	117	1317	133	1300
3000	117	1517	133	1500

recommended connections



PLAN COMPACT

type 11

PURMO FC 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FC 11 600 x 1200

name
type
height
length

length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	500	550	600	900
400	75/65/20 °C	212	272	329	357	384	539
	55/45/20 °C	110	141	171	185	200	277
500	75/65/20 °C	265	340	412	447	481	674
	55/45/20 °C	137	177	214	232	249	346
600	75/65/20 °C	317	408	494	536	577	808
	55/45/20 °C	165	212	256	278	299	416
700	75/65/20 °C	370	476	576	625	673	943
	55/45/20 °C	192	247	299	325	349	485
800	75/65/20 °C	423	544	658	714	769	1078
	55/45/20 °C	220	283	342	371	399	554
900	75/65/20 °C	476	612	741	804	865	1212
	55/45/20 °C	247	318	385	417	449	624
1000	75/65/20 °C	529	680	823	893	961	1347
	55/45/20 °C	275	353	427	464	499	693
1100	75/65/20 °C	582	748	905	982	1057	1482
	55/45/20 °C	302	389	470	510	549	762
1200	75/65/20 °C	635	816	988	1072	1153	1616
	55/45/20 °C	330	424	513	556	599	831
1400	75/65/20 °C	741	952	1152	1250	1345	1886
	55/45/20 °C	385	494	598	649	699	970
1600	75/65/20 °C	846	1088	1317	1429	1538	2155
	55/45/20 °C	440	565	684	742	798	1109
1800	75/65/20 °C	952	1224	1481	1607	1730	2425
	55/45/20 °C	495	636	769	835	898	1247
2000	75/65/20 °C	1058	1360	1646	1786	1922	2694
	55/45/20 °C	550	706	855	927	998	1386
2300	75/65/20 °C	1217	1564	1893	2054	2210	
	55/45/20 °C	632	812	983	1067	1148	
2600	75/65/20 °C	1375	1768	2140	2322	2499	
	55/45/20 °C	715	918	1111	1206	1297	
3000	75/65/20 °C	1587	2040	2469	2679	2883	
	55/45/20 °C	824	1060	1282	1391	1497	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	663	852	1032	1120	1205	1694
exponent n	1.2820	1.2824	1.2827	1.2829	1.2831	1.3013

PLAN COMPACT

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FC 21s 600 x 1200

name
type
height
length

PURMO FC 21s

length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	500	550	600	900
400	75/65/20 °C	293	372	445	481	515	706
	55/45/20 °C	152	193	230	248	266	357
500	75/65/20 °C	366	465	557	601	644	883
	55/45/20 °C	190	241	288	310	332	446
600	75/65/20 °C	439	557	668	721	773	1059
	55/45/20 °C	229	289	345	372	398	535
700	75/65/20 °C	512	650	779	841	902	1236
	55/45/20 °C	267	337	403	435	465	624
800	75/65/20 °C	586	743	890	962	1030	1412
	55/45/20 °C	305	386	461	497	531	713
900	75/65/20 °C	659	836	1002	1082	1159	1589
	55/45/20 °C	343	434	518	559	598	802
1000	75/65/20 °C	732	929	1113	1202	1288	1765
	55/45/20 °C	381	482	576	621	664	891
1100	75/65/20 °C	805	1022	1224	1322	1417	1942
	55/45/20 °C	419	530	633	683	731	981
1200	75/65/20 °C	878	1115	1336	1442	1546	2118
	55/45/20 °C	457	578	691	745	797	1070
1400	75/65/20 °C	1025	1301	1558	1683	1803	2471
	55/45/20 °C	533	675	806	869	930	1248
1600	75/65/20 °C	1171	1486	1781	1923	2061	2824
	55/45/20 °C	610	771	921	993	1063	1426
1800	75/65/20 °C	1318	1672	2003	2164	2318	3177
	55/45/20 °C	686	868	1036	1117	1195	1605
2000	75/65/20 °C	1464	1858	2226	2404	2576	3530
	55/45/20 °C	762	964	1151	1241	1328	1783
2300	75/65/20 °C	1684	2137	2560	2765	2962	
	55/45/20 °C	876	1109	1324	1428	1527	
2600	75/65/20 °C	1903	2415	2894	3125	3349	
	55/45/20 °C	990	1253	1497	1614	1727	
3000	75/65/20 °C	2196	2787	3339	3606	3864	
	55/45/20 °C	1143	1446	1727	1862	1992	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

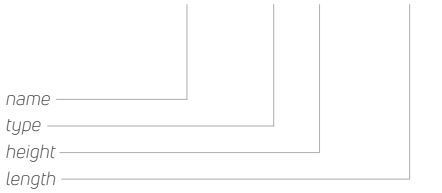
[W/m] 90/70/20 °C	917	1165	1397	1510	1619	2234
exponent n	1.2786	1.2846	1.2907	1.2937	1.2967	1.3371

PLAN COMPACT

type 22

PURMO FC 22

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FC 22 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	500	550	600	900
400	**75/65/20 °C**	**375**	**479**	**578**	**624**	**670**	**920**
	55/45/20 °C	193	245	294	317	340	462
500	**75/65/20 °C**	**469**	**599**	**722**	**781**	**838**	**1151**
	55/45/20 °C	241	307	368	397	425	578
600	**75/65/20 °C**	**562**	**719**	**866**	**937**	**1006**	**1381**
	55/45/20 °C	289	368	442	476	510	693
700	**75/65/20 °C**	**656**	**839**	**1011**	**1093**	**1173**	**1611**
	55/45/20 °C	338	430	515	555	595	809
800	**75/65/20 °C**	**750**	**958**	**1155**	**1249**	**1341**	**1841**
	55/45/20 °C	386	491	589	635	680	924
900	**75/65/20 °C**	**843**	**1078**	**1300**	**1405**	**1508**	**2071**
	55/45/20 °C	434	552	662	714	765	1040
1000	**75/65/20 °C**	**937**	**1198**	**1444**	**1561**	**1676**	**2301**
	55/45/20 °C	482	614	736	793	850	1155
1100	**75/65/20 °C**	**1031**	**1318**	**1588**	**1717**	**1844**	**2531**
	55/45/20 °C	531	675	809	873	935	1271
1200	**75/65/20 °C**	**1124**	**1438**	**1733**	**1873**	**2011**	**2761**
	55/45/20 °C	579	736	883	952	1020	1386
1400	**75/65/20 °C**	**1312**	**1677**	**2022**	**2185**	**2346**	**3221**
	55/45/20 °C	675	859	1030	1111	1190	1617
1600	**75/65/20 °C**	**1499**	**1917**	**2310**	**2498**	**2682**	**3682**
	55/45/20 °C	772	982	1177	1270	1360	1848
1800	**75/65/20 °C**	**1687**	**2156**	**2599**	**2810**	**3017**	**4142**
	55/45/20 °C	868	1104	1325	1428	1530	2080
2000	**75/65/20 °C**	**1874**	**2396**	**2888**	**3122**	**3352**	**4602**
	55/45/20 °C	965	1227	1472	1587	1700	2311
2300	**75/65/20 °C**	**2155**	**2755**	**3321**	**3590**	**3855**	
	55/45/20 °C	1109	1411	1692	1825	1955	
2600	**75/65/20 °C**	**2436**	**3115**	**3754**	**4059**	**4358**	
	55/45/20 °C	1254	1595	1913	2063	2210	
3000	**75/65/20 °C**	**2811**	**3594**	**4332**	**4683**	**5028**	
	55/45/20 °C	1447	1841	2208	2380	2549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1178**	**1509**	**1822**	**1972**	**2119**	**2919**
exponent n	**1.3000**	**1.3098**	**1.3197**	**1.3246**	**1.3295**	**1.3488**

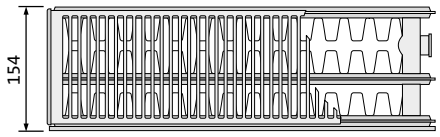
PLAN COMPACT

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FC 33 600 x 1200

name
type
height
length

PURMO FC 33



length [mm]	temperatures t_z / t_p / t_i	height [mm]					
		300	400	500	550	600	900
400	**75/65/20 °C**	**526**	**666**	**798**	**861**	**924**	**1268**
	55/45/20 °C	268	338	404	435	465	633
500	**75/65/20 °C**	**657**	**832**	**997**	**1077**	**1155**	**1586**
	55/45/20 °C	335	423	505	544	582	791
600	**75/65/20 °C**	**788**	**998**	**1196**	**1292**	**1385**	**1903**
	55/45/20 °C	403	508	606	652	698	949
700	**75/65/20 °C**	**920**	**1165**	**1396**	**1507**	**1616**	**2220**
	55/45/20 °C	470	592	706	761	814	1107
800	**75/65/20 °C**	**1051**	**1331**	**1595**	**1722**	**1847**	**2537**
	55/45/20 °C	537	677	807	870	931	1266
900	**75/65/20 °C**	**1183**	**1498**	**1795**	**1938**	**2078**	**2854**
	55/45/20 °C	604	761	908	979	1047	1424
1000	**75/65/20 °C**	**1314**	**1664**	**1994**	**2153**	**2309**	**3171**
	55/45/20 °C	671	846	1009	1087	1164	1582
1100	**75/65/20 °C**	**1445**	**1830**	**2193**	**2368**	**2540**	**3488**
	55/45/20 °C	738	930	1110	1196	1280	1740
1200	**75/65/20 °C**	**1577**	**1997**	**2393**	**2584**	**2771**	**3805**
	55/45/20 °C	805	1015	1211	1305	1396	1898
1400	**75/65/20 °C**	**1840**	**2330**	**2792**	**3014**	**3233**	**4439**
	55/45/20 °C	939	1184	1413	1522	1629	2215
1600	**75/65/20 °C**	**2102**	**2662**	**3190**	**3445**	**3694**	**5074**
	55/45/20 °C	1073	1353	1615	1740	1862	2531
1800	**75/65/20 °C**	**2365**	**2995**	**3589**	**3875**	**4156**	**5708**
	55/45/20 °C	1208	1523	1817	1957	2094	2848
2000	**75/65/20 °C**	**2628**	**3328**	**3988**	**4306**	**4618**	**6342**
	55/45/20 °C	1342	1692	2018	2175	2327	3164
2300	**75/65/20 °C**	**3022**	**3827**	**4586**	**4952**	**5311**	
	55/45/20 °C	1543	1946	2321	2501	2676	
2600	**75/65/20 °C**	**3416**	**4326**	**5184**	**5598**	**6003**	
	55/45/20 °C	1744	2199	2624	2827	3025	
3000	**75/65/20 °C**	**3942**	**4992**	**5982**	**6459**	**6927**	
	55/45/20 °C	2013	2538	3028	3262	3491	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1657**	**2102**	**2525**	**2725**	**2923**	**4007**
exponent n	**1.3159**	**1.3245**	**1.3331**	**1.3374**	**1.3417**	**1.3612**

PLAN VENTIL COMPACT *(Purmo FCV)*

The versatile PURMO Plan Ventil Contact panel radiators stand out due to their completely flat front panel. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. The radiators are equipped with convection fins as well as side covers and a top grille. Two bottom and four side G ½ " threaded female connectors allow for bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing presetting.

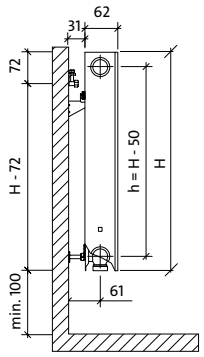
technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " bottom, right side connectors (left side - available on request)
  4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator : brackets, plugs, air vent.

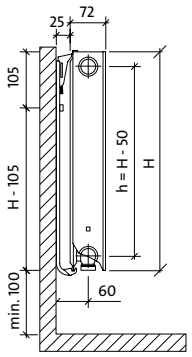
PLAN VENTIL COMPACT

side views

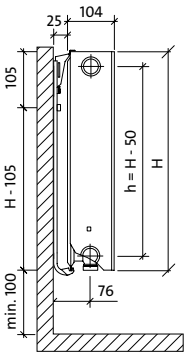
type FCV 11



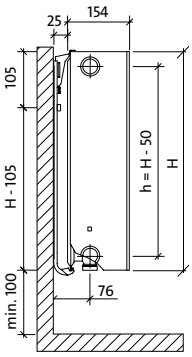
type FCV 21 s



type FCV 22



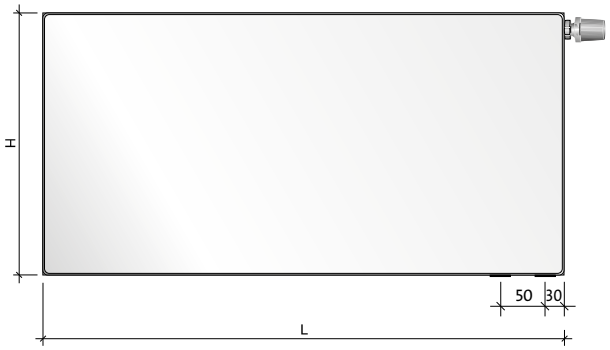
type FCV 33



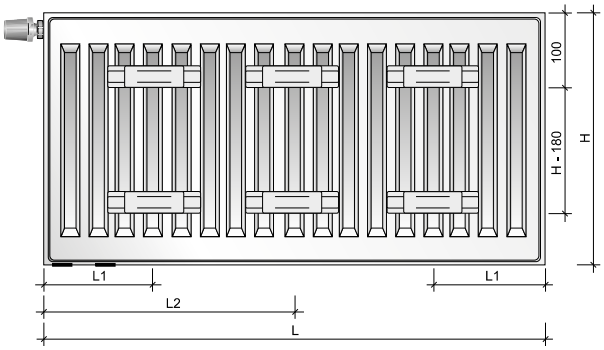
dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



rear view - FCV 11 type only



water volume, weight and mounting distances

water volume : l/m

type \ height	300	400	500	600	900
11	1.7	2.2	2.7	3.2	4.5
21s	3.4	4.5	5.5	6.6	9.0
22	3.4	4.5	5.5	6.6	9.0
33	5.1	6.7	8.2	9.8	13.3

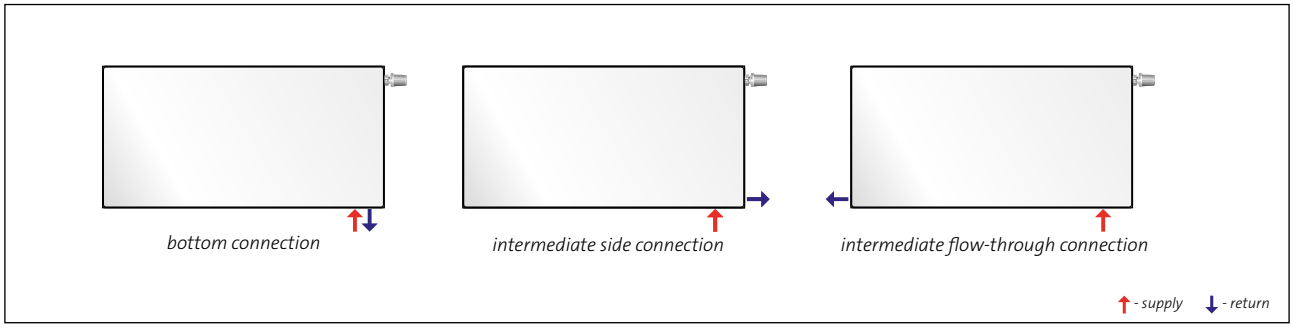
weight : kg/m

type \ height	300	400	500	600	900
11	12.4	16.3	20.1	24.0	35.7
21s	17.4	22.8	28.3	34.0	50.7
22	19.3	25.7	31.8	38.6	56.8
33	26.9	35.8	44.9	53.8	80.4

mounting distances : mm

type	FCV 11	
L	**L1**	**L2**
400-1600	117	-
1800	117	917
2000	117	1017
2300	117	1150
2600	117	1317
3000	117	1517

recommended connections



PLAN VENTIL COMPACT

type 11

PURMO FCV 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCV 11 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	212	272	329	384	539
	55/45/20 °C	110	141	171	200	277
500	75/65/20 °C	265	340	412	481	674
	55/45/20 °C	137	177	214	249	346
600	75/65/20 °C	317	408	494	577	808
	55/45/20 °C	165	212	256	299	416
700	75/65/20 °C	370	476	576	673	943
	55/45/20 °C	192	247	299	349	485
800	75/65/20 °C	423	544	658	769	1078
	55/45/20 °C	220	283	342	399	554
900	75/65/20 °C	476	612	741	865	1212
	55/45/20 °C	247	318	385	449	624
1000	75/65/20 °C	529	680	823	961	1347
	55/45/20 °C	275	353	427	499	693
1100	75/65/20 °C	582	748	905	1057	1482
	55/45/20 °C	302	389	470	549	762
1200	75/65/20 °C	635	816	988	1153	1616
	55/45/20 °C	330	424	513	599	831
1400	75/65/20 °C	741	952	1152	1345	1886
	55/45/20 °C	385	494	598	699	970
1600	75/65/20 °C	846	1088	1317	1538	2155
	55/45/20 °C	440	565	684	798	1109
1800	75/65/20 °C	952	1224	1481	1730	2425
	55/45/20 °C	495	636	769	898	1247
2000	75/65/20 °C	1058	1360	1646	1922	2694
	55/45/20 °C	550	706	855	998	1386
2300	75/65/20 °C	1217	1564	1893	2210	
	55/45/20 °C	632	812	983	1148	
2600	75/65/20 °C	1375	1768	2140	2499	
	55/45/20 °C	715	918	1111	1297	
3000	75/65/20 °C	1587	2040	2469	2883	
	55/45/20 °C	824	1060	1282	1497	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	663	852	1032	1205	1694
exponent n	1.2820	1.2824	1.2827	1.2831	1.3013

PLAN VENTIL COMPACT

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : **PURMO FCV 21s 600 x 1200 L**

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO FCV 21s

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	**75/65/20 °C**	**293**	**372**	**445**	**515**	**706**
	55/45/20 °C	152	193	230	266	357
500	**75/65/20 °C**	**366**	**465**	**557**	**644**	**883**
	55/45/20 °C	190	241	288	332	446
600	**75/65/20 °C**	**439**	**557**	**668**	**773**	**1059**
	55/45/20 °C	229	289	345	398	535
700	**75/65/20 °C**	**512**	**650**	**779**	**902**	**1236**
	55/45/20 °C	267	337	403	465	624
800	**75/65/20 °C**	**586**	**743**	**890**	**1030**	**1412**
	55/45/20 °C	305	386	461	531	713
900	**75/65/20 °C**	**659**	**836**	**1002**	**1159**	**1589**
	55/45/20 °C	343	434	518	598	802
1000	**75/65/20 °C**	**732**	**929**	**1113**	**1288**	**1765**
	55/45/20 °C	381	482	576	664	891
1100	**75/65/20 °C**	**805**	**1022**	**1224**	**1417**	**1942**
	55/45/20 °C	419	530	633	731	981
1200	**75/65/20 °C**	**878**	**1115**	**1336**	**1546**	**2118**
	55/45/20 °C	457	578	691	797	1070
1400	**75/65/20 °C**	**1025**	**1301**	**1558**	**1803**	**2471**
	55/45/20 °C	533	675	806	930	1248
1600	**75/65/20 °C**	**1171**	**1486**	**1781**	**2061**	**2824**
	55/45/20 °C	610	771	921	1063	1426
1800	**75/65/20 °C**	**1318**	**1672**	**2003**	**2318**	**3177**
	55/45/20 °C	686	868	1036	1195	1605
2000	**75/65/20 °C**	**1464**	**1858**	**2226**	**2576**	**3530**
	55/45/20 °C	762	964	1151	1328	1783
2300	**75/65/20 °C**	**1684**	**2137**	**2560**	**2962**	
	55/45/20 °C	876	1109	1324	1527	
2600	**75/65/20 °C**	**1903**	**2415**	**2894**	**3349**	
	55/45/20 °C	990	1253	1497	1727	
3000	**75/65/20 °C**	**2196**	**2787**	**3339**	**3864**	
	55/45/20 °C	1143	1446	1727	1992	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**917**	**1165**	**1397**	**1619**	**2234**
exponent n	**1.2786**	**1.2846**	**1.2907**	**1.2967**	**1.3371**

PLAN VENTIL COMPACT

type 22

PURMO FCV 22

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCV 22 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	375	479	578	670	920
	55/45/20 °C	193	245	294	340	462
500	75/65/20 °C	469	599	722	838	1151
	55/45/20 °C	241	307	368	425	578
600	75/65/20 °C	562	719	866	1006	1381
	55/45/20 °C	289	368	442	510	693
700	75/65/20 °C	656	839	1011	1173	1611
	55/45/20 °C	338	430	515	595	809
800	75/65/20 °C	750	958	1155	1341	1841
	55/45/20 °C	386	491	589	680	924
900	75/65/20 °C	843	1078	1300	1508	2071
	55/45/20 °C	434	552	662	765	1040
1000	75/65/20 °C	937	1198	1444	1676	2301
	55/45/20 °C	482	614	736	850	1155
1100	75/65/20 °C	1031	1318	1588	1844	2531
	55/45/20 °C	531	675	809	935	1271
1200	75/65/20 °C	1124	1438	1733	2011	2761
	55/45/20 °C	579	736	883	1020	1386
1400	75/65/20 °C	1312	1677	2022	2346	3221
	55/45/20 °C	675	859	1030	1190	1617
1600	75/65/20 °C	1499	1917	2310	2682	3682
	55/45/20 °C	772	982	1177	1360	1848
1800	75/65/20 °C	1687	2156	2599	3017	4142
	55/45/20 °C	868	1104	1325	1530	2080
2000	75/65/20 °C	1874	2396	2888	3352	4602
	55/45/20 °C	965	1227	1472	1700	2311
2300	75/65/20 °C	2155	2755	3321	3855	
	55/45/20 °C	1109	1411	1692	1955	
2600	75/65/20 °C	2436	3115	3754	4358	
	55/45/20 °C	1254	1595	1913	2210	
3000	75/65/20 °C	2811	3594	4332	5028	
	55/45/20 °C	1447	1841	2208	2549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

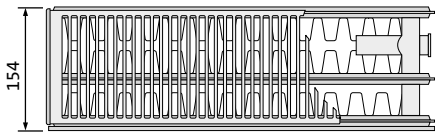
[W/m] 90/70/20 °C	1178	1509	1822	2119	2919
exponent n	1.3000	1.3098	1.3197	1.3295	1.3488

PLAN VENTIL COMPACT

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCV 33 600 x 1200 L

PURMO FCV 33



name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	526	666	798	924	1268
	55/45/20 °C	268	338	404	465	633
500	75/65/20 °C	657	832	997	1155	1586
	55/45/20 °C	335	423	505	582	791
600	75/65/20 °C	788	998	1196	1385	1903
	55/45/20 °C	403	508	606	698	949
700	75/65/20 °C	920	1165	1396	1616	2220
	55/45/20 °C	470	592	706	814	1107
800	75/65/20 °C	1051	1331	1595	1847	2537
	55/45/20 °C	537	677	807	931	1266
900	75/65/20 °C	1183	1498	1795	2078	2854
	55/45/20 °C	604	761	908	1047	1424
1000	75/65/20 °C	1314	1664	1994	2309	3171
	55/45/20 °C	671	846	1009	1164	1582
1100	75/65/20 °C	1445	1830	2193	2540	3488
	55/45/20 °C	738	930	1110	1280	1740
1200	75/65/20 °C	1577	1997	2393	2771	3805
	55/45/20 °C	805	1015	1211	1396	1898
1400	75/65/20 °C	1840	2330	2792	3233	4439
	55/45/20 °C	939	1184	1413	1629	2215
1600	75/65/20 °C	2102	2662	3190	3694	5074
	55/45/20 °C	1073	1353	1615	1862	2531
1800	75/65/20 °C	2365	2995	3589	4156	5708
	55/45/20 °C	1208	1523	1817	2094	2848
2000	75/65/20 °C	2628	3328	3988	4618	6342
	55/45/20 °C	1342	1692	2018	2327	3164
2300	75/65/20 °C	3022	3827	4586	5311	
	55/45/20 °C	1543	1946	2321	2676	
2600	75/65/20 °C	3416	4326	5184	6003	
	55/45/20 °C	1744	2199	2624	3025	
3000	75/65/20 °C	3942	4992	5982	6927	
	55/45/20 °C	2013	2538	3028	3491	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1657	2102	2525	2923	4007
exponent n	1.3159	1.3245	1.3331	1.3417	1.3612

PLAN VENTIL COMPACT M (PURMO FCVM)

The PURMO Plan Ventil Contact M panel radiators with mid-bottom connectors stand out due to their completely flat front panel. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. The radiators are equipped with convection fins as well as side covers and a top grille. Two mid-bottom and four side G ½ " threaded female connectors allow for central bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.
The main advantage of the central bottom connection relies of the fact that regardless of the length, height and depth of the radiator, the layout of heating system connections can be defined at the building shell stage and it will not change as a result of the selection of a specific size and type of the radiator.

technical specifications

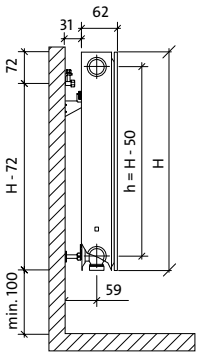
- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " mid-bottom connectors,
  4 x G ½ " side connectors
- Working pressure : 10 bar · Maximal temperature : 110 °C · Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request
- Accessories bundled with the radiator : brackets, plugs, air vent.

NOTE: the FCVM radiator is available in the right side version only.

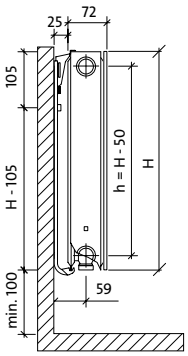
PLAN VENTIL COMPACT M

side views

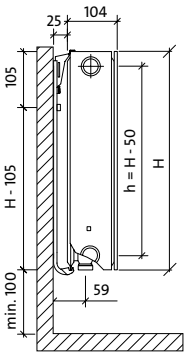
type FCVM 11



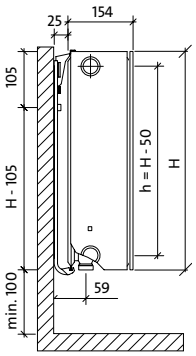
type FCVM 21s



type FCVM 22



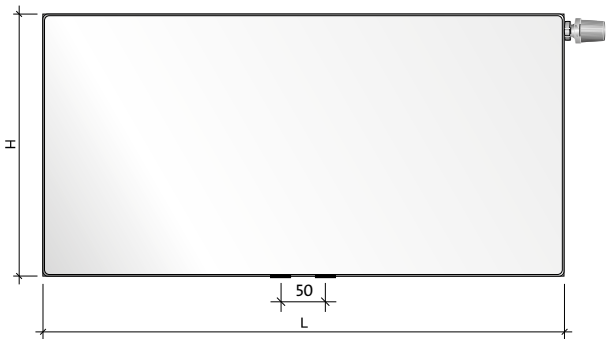
type FCVM 33



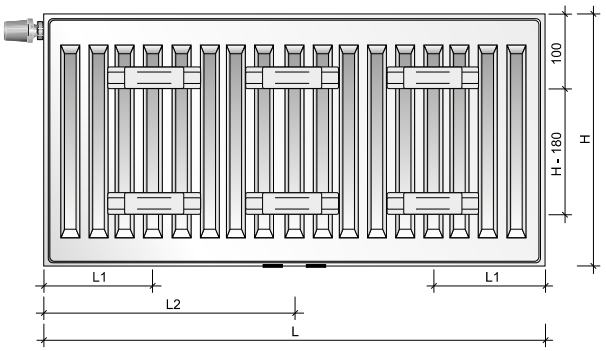
dimensions in mm

H *= height*
L *= length*
h *= spacing of connectors*

front view



rear view - FCVM 11 type only



water volume, weight and mounting distances

water volume : l/m

type \ height	300	500	600	900
11	1.7	2.7	3.2	4.5
21s	3.4	5.5	6.6	9.0
22	3.4	5.5	6.6	9.0
33	5.1	8.2	9.8	13.3

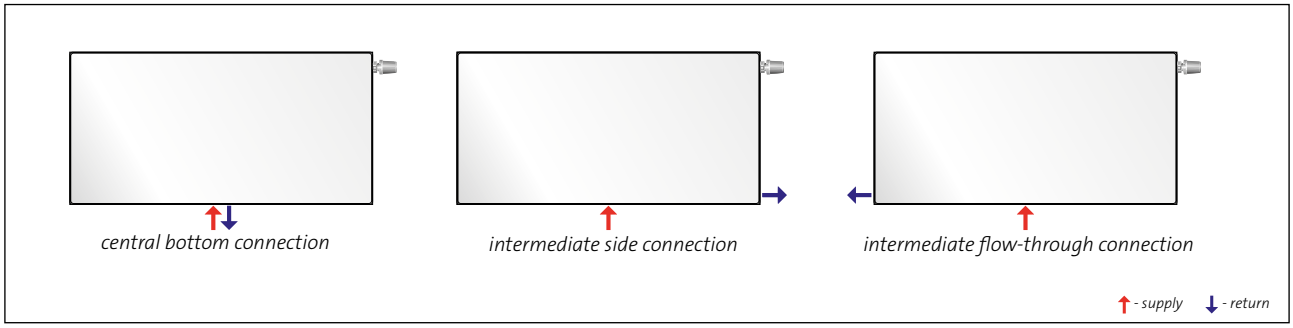
weight : kg/m

type \ height	300	500	600	900
11	12.7	20.5	24.4	36.4
21s	17.5	28.6	34.3	51.0
22	19.6	32.4	39.1	58.2
33	27.2	45.1	53.8	80.0

mounting distances : mm

type	FCVM 11	
L	**L1**	**L2**
400-1600	117	-
1800	117	917
2000	117	1017
2300	117	1150
2600	117	1317
3000	117	1517

recommended connections



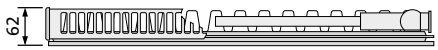
PLAN VENTIL COMPACT M

type 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCVM 11 600 x 1200

name
type
height
length

PURMO FCVM 11



NOTE: the FCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**212**	**329**	**384**	**539**
	55/45/20 °C	110	171	200	277
500	**75/65/20 °C**	**265**	**412**	**481**	**674**
	55/45/20 °C	137	214	249	346
600	**75/65/20 °C**	**317**	**494**	**577**	**808**
	55/45/20 °C	165	256	299	416
700	**75/65/20 °C**	**370**	**576**	**673**	**943**
	55/45/20 °C	192	299	349	485
800	**75/65/20 °C**	**423**	**658**	**769**	**1078**
	55/45/20 °C	220	342	399	554
900	**75/65/20 °C**	**476**	**741**	**865**	**1212**
	55/45/20 °C	247	385	449	624
1000	**75/65/20 °C**	**529**	**823**	**961**	**1347**
	55/45/20 °C	275	427	499	693
1100	**75/65/20 °C**	**582**	**905**	**1057**	**1482**
	55/45/20 °C	302	470	549	762
1200	**75/65/20 °C**	**635**	**988**	**1153**	**1616**
	55/45/20 °C	330	513	599	831
1400	**75/65/20 °C**	**741**	**1152**	**1345**	**1886**
	55/45/20 °C	385	598	699	970
1600	**75/65/20 °C**	**846**	**1317**	**1538**	**2155**
	55/45/20 °C	440	684	798	1109
1800	**75/65/20 °C**	**952**	**1481**	**1730**	**2425**
	55/45/20 °C	495	769	898	1247
2000	**75/65/20 °C**	**1058**	**1646**	**1922**	**2694**
	55/45/20 °C	550	855	998	1386
2300	**75/65/20 °C**	**1217**	**1893**	**2210**	
	55/45/20 °C	632	983	1148	
2600	**75/65/20 °C**	**1375**	**2140**	**2499**	
	55/45/20 °C	715	1111	1297	
3000	**75/65/20 °C**	**1587**	**2469**	**2883**	
	55/45/20 °C	824	1282	1497	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**663**	**1032**	**1205**	**1694**
exponent n	**1.2820**	**1.2827**	**1.2831**	**1.3013**

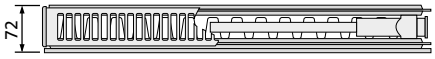
PLAN VENTIL COMPACT M

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCVM 21s 600 x 1200

name
type
height
length

PURMO FCVM 21s



NOTE: the FCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**293**	**445**	**515**	**706**
	55/45/20 °C	152	230	266	357
500	**75/65/20 °C**	**366**	**557**	**644**	**883**
	55/45/20 °C	190	288	332	446
600	**75/65/20 °C**	**439**	**668**	**773**	**1059**
	55/45/20 °C	229	345	398	535
700	**75/65/20 °C**	**512**	**779**	**902**	**1236**
	55/45/20 °C	267	403	465	624
800	**75/65/20 °C**	**586**	**890**	**1030**	**1412**
	55/45/20 °C	305	461	531	713
900	**75/65/20 °C**	**659**	**1002**	**1159**	**1589**
	55/45/20 °C	343	518	598	802
1000	**75/65/20 °C**	**732**	**1113**	**1288**	**1765**
	55/45/20 °C	381	576	664	891
1100	**75/65/20 °C**	**805**	**1224**	**1417**	**1942**
	55/45/20 °C	419	633	731	981
1200	**75/65/20 °C**	**878**	**1336**	**1546**	**2118**
	55/45/20 °C	457	691	797	1070
1400	**75/65/20 °C**	**1025**	**1558**	**1803**	**2471**
	55/45/20 °C	533	806	930	1248
1600	**75/65/20 °C**	**1171**	**1781**	**2061**	**2824**
	55/45/20 °C	610	921	1063	1426
1800	**75/65/20 °C**	**1318**	**2003**	**2318**	**3177**
	55/45/20 °C	686	1036	1195	1605
2000	**75/65/20 °C**	**1464**	**2226**	**2576**	**3530**
	55/45/20 °C	762	1151	1328	1783
2300	**75/65/20 °C**	**1684**	**2560**	**2962**	
	55/45/20 °C	876	1324	1527	
2600	**75/65/20 °C**	**1903**	**2894**	**3349**	
	55/45/20 °C	990	1497	1727	
3000	**75/65/20 °C**	**2196**	**3339**	**3864**	
	55/45/20 °C	1143	1727	1992	

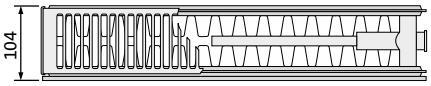
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**917**	**1397**	**1619**	**2234**
exponent n	**1.2786**	**1.2907**	**1.2967**	**1.3371**

PLAN VENTIL COMPACT M

type 22

PURMO FCVM 22



RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCVM 22 600 x 1200

name
type
height
length

NOTE: the FCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**375**	**578**	**670**	**920**
	55/45/20 °C	193	294	340	462
500	**75/65/20 °C**	**469**	**722**	**838**	**1151**
	55/45/20 °C	241	368	425	578
600	**75/65/20 °C**	**562**	**866**	**1006**	**1381**
	55/45/20 °C	289	442	510	693
700	**75/65/20 °C**	**656**	**1011**	**1173**	**1611**
	55/45/20 °C	338	515	595	809
800	**75/65/20 °C**	**750**	**1155**	**1341**	**1841**
	55/45/20 °C	386	589	680	924
900	**75/65/20 °C**	**843**	**1300**	**1508**	**2071**
	55/45/20 °C	434	662	765	1040
1000	**75/65/20 °C**	**937**	**1444**	**1676**	**2301**
	55/45/20 °C	482	736	850	1155
1100	**75/65/20 °C**	**1031**	**1588**	**1844**	**2531**
	55/45/20 °C	531	809	935	1271
1200	**75/65/20 °C**	**1124**	**1733**	**2011**	**2761**
	55/45/20 °C	579	883	1020	1386
1400	**75/65/20 °C**	**1312**	**2022**	**2346**	**3221**
	55/45/20 °C	675	1030	1190	1617
1600	**75/65/20 °C**	**1499**	**2310**	**2682**	**3682**
	55/45/20 °C	772	1177	1360	1848
1800	**75/65/20 °C**	**1687**	**2599**	**3017**	**4142**
	55/45/20 °C	868	1325	1530	2080
2000	**75/65/20 °C**	**1874**	**2888**	**3352**	**4602**
	55/45/20 °C	965	1472	1700	2311
2300	**75/65/20 °C**	**2155**	**3321**	**3855**	
	55/45/20 °C	1109	1692	1955	
2600	**75/65/20 °C**	**2436**	**3754**	**4358**	
	55/45/20 °C	1254	1913	2210	
3000	**75/65/20 °C**	**2811**	**4332**	**5028**	
	55/45/20 °C	1447	2208	2549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1178**	**1822**	**2119**	**2919**
exponent n	**1.3000**	**1.3197**	**1.3295**	**1.3488**

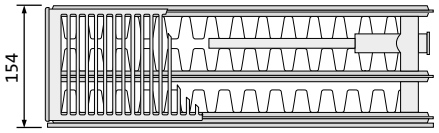
PLAN VENTIL COMPACT M

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FCVM 33 600 x 1200

name
type
height
length

PURMO FCVM 33



NOTE: the FCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**526**	**798**	**924**	**1268**
	55/45/20 °C	268	404	465	633
500	**75/65/20 °C**	**657**	**997**	**1155**	**1586**
	55/45/20 °C	335	505	582	791
600	**75/65/20 °C**	**788**	**1196**	**1385**	**1903**
	55/45/20 °C	403	606	698	949
700	**75/65/20 °C**	**920**	**1396**	**1616**	**2220**
	55/45/20 °C	470	706	814	1107
800	**75/65/20 °C**	**1051**	**1595**	**1847**	**2537**
	55/45/20 °C	537	807	931	1266
900	**75/65/20 °C**	**1183**	**1795**	**2078**	**2854**
	55/45/20 °C	604	908	1047	1424
1000	**75/65/20 °C**	**1314**	**1994**	**2309**	**3171**
	55/45/20 °C	671	1009	1164	1582
1100	**75/65/20 °C**	**1445**	**2193**	**2540**	**3488**
	55/45/20 °C	738	1110	1280	1740
1200	**75/65/20 °C**	**1577**	**2393**	**2771**	**3805**
	55/45/20 °C	805	1211	1396	1898
1400	**75/65/20 °C**	**1840**	**2792**	**3233**	**4439**
	55/45/20 °C	939	1413	1629	2215
1600	**75/65/20 °C**	**2102**	**3190**	**3694**	**5074**
	55/45/20 °C	1073	1615	1862	2531
1800	**75/65/20 °C**	**2365**	**3589**	**4156**	**5708**
	55/45/20 °C	1208	1817	2094	2848
2000	**75/65/20 °C**	**2628**	**3988**	**4618**	**6342**
	55/45/20 °C	1342	2018	2327	3164
2300	**75/65/20 °C**	**3022**	**4586**	**5311**	
	55/45/20 °C	1543	2321	2676	
2600	**75/65/20 °C**	**3416**	**5184**	**6003**	
	55/45/20 °C	1744	2624	3025	
3000	**75/65/20 °C**	**3942**	**5982**	**6927**	
	55/45/20 °C	2013	3028	3491	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1657**	**2525**	**2923**	**4007**
exponent n	**1.3159**	**1.3331**	**1.3417**	**1.3612**

PLAN HYGIENE (PURMO FH)

The PURMO Plan Hygiene panel radiators are characterized by a completely flat front panel. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. Due to the absence of side covers and a top grille, they are intended for applications in health care and other facilities of elevated hygienic requirements. Four side G ½ " threaded female connectors allow for side connection on both right and left side.

technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request
- Accessories bundled with the radiator: plug, air vent.

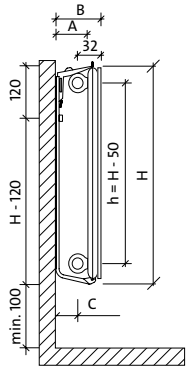
NOTE:

Mounting brackets must be ordered separately. For the method of selecting and ordering see page 60

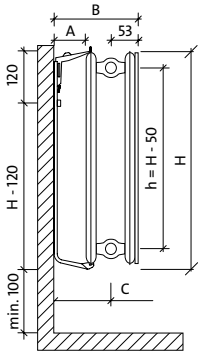
PLAN HYGIENE

side views

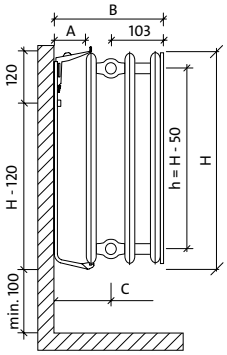
type FH 10



type FH 20



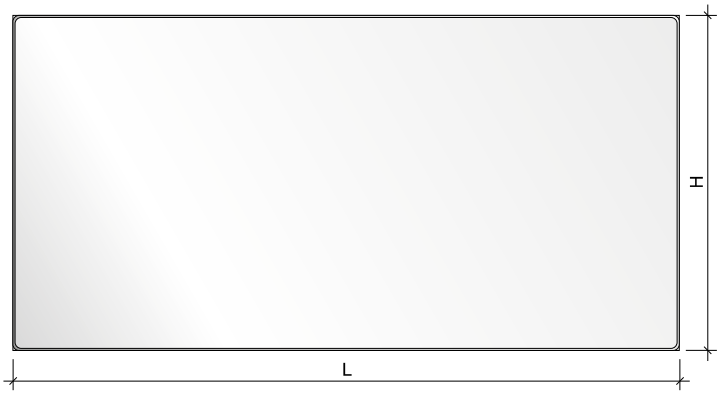
type FH 30



dimensions in mm

H *= height*
L *= length*
h *= spacing of connectors*

front view



mounting distances : mm

type	FH 10	FH 20	FH 30
radiator depth	49	104	154
A-mounting depth	100	100	100
B-total depth	116	204	254
C-connection axis	84	151	151

water volume and weight

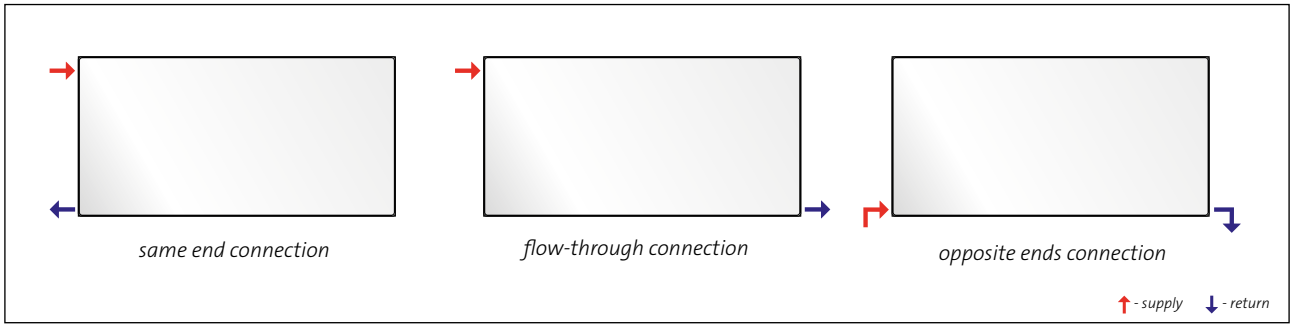
water volume : l/m

type \ height	300	500	600	900
10	1.7	2.7	3.2	4.5
20	3.4	5.5	6.6	9.0
30	5.1	8.2	9.8	13.3

weight : kg/m

type \ height	300	500	600	900
10	9.7	15.4	18.5	27.5
20	14.4	22.8	28.0	40.2
30	19.2	30.5	37.3	53.4

recommended connections



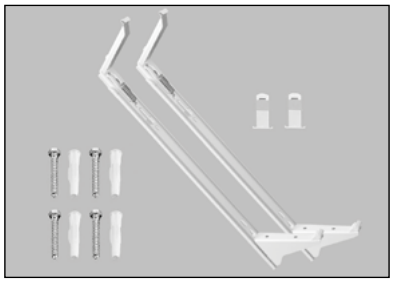
BRACKETS

Required quantities of the Monclac MCK 108 hospital brackets for various types and heights of the PURMO hygienic radiators.

Brackets of outreach 108 mm – max. vertical load of 125 kg per single bracket.
(new brackets with reinforced foot structure)

NOTE: Mounting brackets for hygienic radiators must be ordered separately. Mounting brackets are packed in sets of 2 or 3 pieces. In the table, there are presented quantities of single mounting brackets, not sets!!!

height	300			500			600			900		
length [mm]	10	20	30	10	20	30	10	20	30	10	20	30
	quantity			quantity			quantity			quantity		
400	2	2	2	2	2	2	2	2	2	2	2	2
500	2	2	2	2	2	2	2	2	2	2	2	2
600	2	2	2	2	2	2	2	2	2	2	2	2
700	2	2	2	2	2	2	2	2	2	2	2	2
800	2	2	2	2	2	2	2	2	2	2	2	2
900	2	2	2	2	2	2	2	2	2	2	2	2
1000	2	2	2	2	2	2	2	2 [1)]	2	2	2	3
1100	2	2	3	2	2	2	2	2	2	2	2	3
1200	2	2	3	2	2	3	2	2	2	2	2	3
1400	2	3	3	2	2	3	2	2	3	2	3	3
1600	3	3	3	2	3	3	2	2	3	3	3	3
1800	3	3	4	3	3	3	2	3	3	3	3	4
2000	3	3	4	3	3	4	3	3 [2)]	3	3	3	4
2300	4	4	4	3	3	4	3	3	4	3	4	4
2600	4	4	5	4	4	5	3	3	4	4	4	5
3000	5	5	6	4	4	5	4	4 [3)]	5	4	4	5



Rules for selecting sets of the Monclac MCK 108 mounting brackets, using the example of the type 20 hygienic radiator of 600 mm height:

[1)] For the length of 1000 mm - 1 double set — AZ02BW2MC601080R9016
[2)] For the length of 2000 mm - 1 triple set — AZ02BW3MC601080R9016
[3)] For the length of 3000 mm - 2 double sets — AZ02BW2MC601080R9016

description	order code
2-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW2MC301080R9016
3-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW3MC301080R9016
2-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW2MC501080R9016
3-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW3MC501080R9016
2-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW2MC601080R9016
3-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW3MC601080R9016
2-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW2MC901080R9016
3-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW3MC901080R9016

PLAN HYGIENE

type 10

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FH 10 600 x 1200

name
type
height
length

PURMO FH 10

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**125**	**202**	**237**	**328**
	55/45/20 °C	64	105	124	171
500	**75/65/20 °C**	**157**	**253**	**296**	**410**
	55/45/20 °C	80	131	155	214
600	**75/65/20 °C**	**188**	**303**	**355**	**492**
	55/45/20 °C	96	158	186	256
700	**75/65/20 °C**	**219**	**354**	**414**	**574**
	55/45/20 °C	112	184	217	299
800	**75/65/20 °C**	**250**	**404**	**474**	**656**
	55/45/20 °C	128	210	248	342
900	**75/65/20 °C**	**282**	**455**	**533**	**738**
	55/45/20 °C	144	236	279	384
1000	**75/65/20 °C**	**313**	**505**	**592**	**820**
	55/45/20 °C	161	263	310	427
1100	**75/65/20 °C**	**344**	**556**	**651**	**902**
	55/45/20 °C	177	289	341	470
1200	**75/65/20 °C**	**376**	**606**	**710**	**984**
	55/45/20 °C	193	315	372	513
1400	**75/65/20 °C**	**438**	**707**	**829**	**1148**
	55/45/20 °C	225	368	434	598
1600	**75/65/20 °C**	**501**	**808**	**947**	**1312**
	55/45/20 °C	257	420	496	683
1800	**75/65/20 °C**	**563**	**909**	**1066**	**1476**
	55/45/20 °C	289	473	558	769
2000	**75/65/20 °C**	**626**	**1010**	**1184**	**1640**
	55/45/20 °C	321	526	621	854
2300	**75/65/20 °C**	**720**	**1162**	**1362**	
	55/45/20 °C	369	604	714	
2600	**75/65/20 °C**	**814**	**1313**	**1539**	
	55/45/20 °C	417	683	807	
3000	**75/65/20 °C**	**939**	**1515**	**1776**	
	55/45/20 °C	482	788	931	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

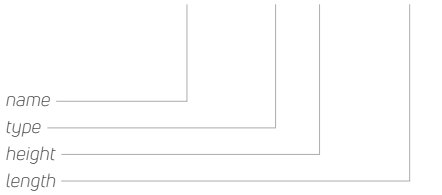
[W/m] 90/70/20 °C	**394**	**633**	**740**	**1 027**
exponent n	**1.3073**	**1.2790**	**1.2648**	**1.2769**

PLAN HYGIENE

type 20

PURMO FH 20

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FH 20 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**239**	**352**	**406**	**564**
	55/45/20 °C	125	183	210	295
500	**75/65/20 °C**	**299**	**440**	**508**	**706**
	55/45/20 °C	156	229	263	368
600	**75/65/20 °C**	**359**	**528**	**609**	**847**
	55/45/20 °C	187	274	316	442
700	**75/65/20 °C**	**419**	**616**	**711**	**988**
	55/45/20 °C	219	320	368	516
800	**75/65/20 °C**	**478**	**704**	**812**	**1129**
	55/45/20 °C	250	366	421	589
900	**75/65/20 °C**	**538**	**792**	**914**	**1270**
	55/45/20 °C	281	412	474	663
1000	**75/65/20 °C**	**598**	**880**	**1015**	**1411**
	55/45/20 °C	312	457	526	736
1100	**75/65/20 °C**	**658**	**968**	**1117**	**1552**
	55/45/20 °C	344	503	579	810
1200	**75/65/20 °C**	**718**	**1056**	**1218**	**1693**
	55/45/20 °C	375	549	631	884
1400	**75/65/20 °C**	**837**	**1232**	**1421**	**1975**
	55/45/20 °C	437	640	737	1031
1600	**75/65/20 °C**	**957**	**1408**	**1624**	**2258**
	55/45/20 °C	500	732	842	1178
1800	**75/65/20 °C**	**1076**	**1584**	**1827**	**2540**
	55/45/20 °C	562	823	947	1326
2000	**75/65/20 °C**	**1196**	**1760**	**2030**	**2822**
	55/45/20 °C	625	915	1052	1473
2300	**75/65/20 °C**	**1375**	**2024**	**2335**	
	55/45/20 °C	719	1052	1210	
2600	**75/65/20 °C**	**1555**	**2288**	**2639**	
	55/45/20 °C	812	1189	1368	
3000	**75/65/20 °C**	**1794**	**2640**	**3045**	
	55/45/20 °C	937	1372	1579	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**748**	**1 103**	**1 273**	**1 766**
exponent n	**1.2706**	**1.2809**	**1.2861**	**1.2729**

PLAN HYGIENE

type 30

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO FH 30 600 x 1200

PURMO FH 30

name
type
height
length

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	75/65/20 °C	334	488	560	771
	55/45/20 °C	172	251	287	394
500	75/65/20 °C	417	610	700	964
	55/45/20 °C	215	313	359	492
600	75/65/20 °C	500	731	840	1156
	55/45/20 °C	259	376	431	591
700	75/65/20 °C	584	853	980	1349
	55/45/20 °C	302	439	503	689
800	75/65/20 °C	667	975	1120	1542
	55/45/20 °C	345	501	574	787
900	75/65/20 °C	751	1097	1260	1734
	55/45/20 °C	388	564	646	886
1000	75/65/20 °C	834	1219	1400	1927
	55/45/20 °C	431	627	718	984
1100	75/65/20 °C	917	1341	1540	2120
	55/45/20 °C	474	689	790	1083
1200	75/65/20 °C	1001	1463	1680	2312
	55/45/20 °C	517	752	862	1181
1400	75/65/20 °C	1168	1707	1960	2698
	55/45/20 °C	603	877	1005	1378
1600	75/65/20 °C	1334	1950	2240	3083
	55/45/20 °C	689	1003	1149	1575
1800	75/65/20 °C	1501	2194	2520	3469
	55/45/20 °C	776	1128	1292	1772
2000	75/65/20 °C	1668	2438	2800	3854
	55/45/20 °C	862	1253	1436	1968
2300	75/65/20 °C	1918	2804	3220	
	55/45/20 °C	991	1442	1651	
2600	75/65/20 °C	2168	3169	3640	
	55/45/20 °C	1120	1630	1867	
3000	75/65/20 °C	2502	3657	4200	
	55/45/20 °C	1293	1880	2154	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1 047	1 534	1 763	2 430
exponent n	1.2926	1.3023	1.3072	1.3153

PLAN VENTIL HYGIENE (PURMO FHV)

The PURMO Plan Ventil Hygiene panel radiators are characterized by a completely flat front panel. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. Due to the absence of side covers and a top grille, they are intended for applications in health care and other facilities of elevated hygienic requirements. Two bottom and four side G½" threaded female connectors allow for bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.

technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " bottom, right side connectors (left side - available on request), 4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request
- Accessories bundled with the radiator : plugs, air vent.

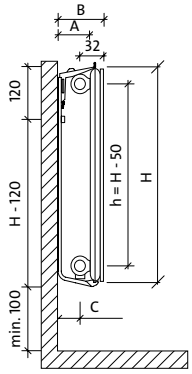
NOTE:

Mounting brackets must be ordered separately. For the method of selecting and ordering see page 66

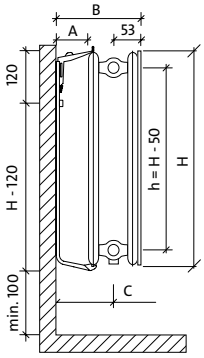
PLAN VENTIL HYGIENE

side views

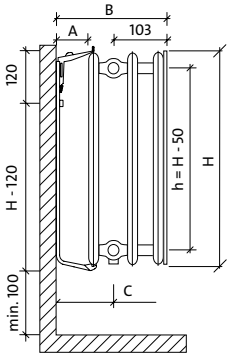
type FHV 10



type FHV 20



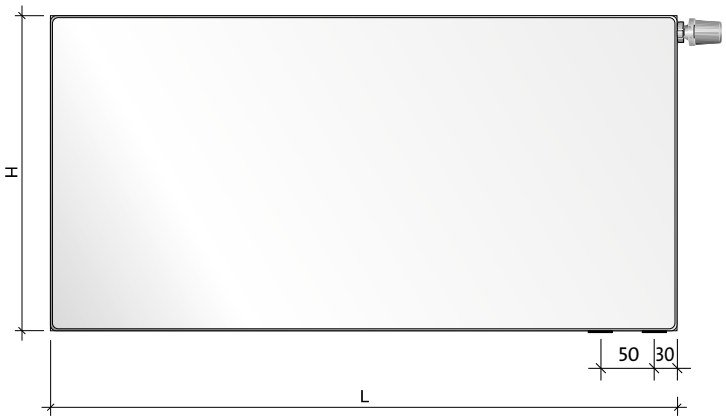
type FHV 30



dimensions in mm

H *= height*
L *= length*
h *= spacing of connectors*

front view



mounting distances : mm

type	FHV 10	FHV 20	FHV 30
radiator depth	49	104	154
A-mounting depth	100	100	100
B-total depth	116	204	254
C-connection axis	84	151	151

water volume and weight

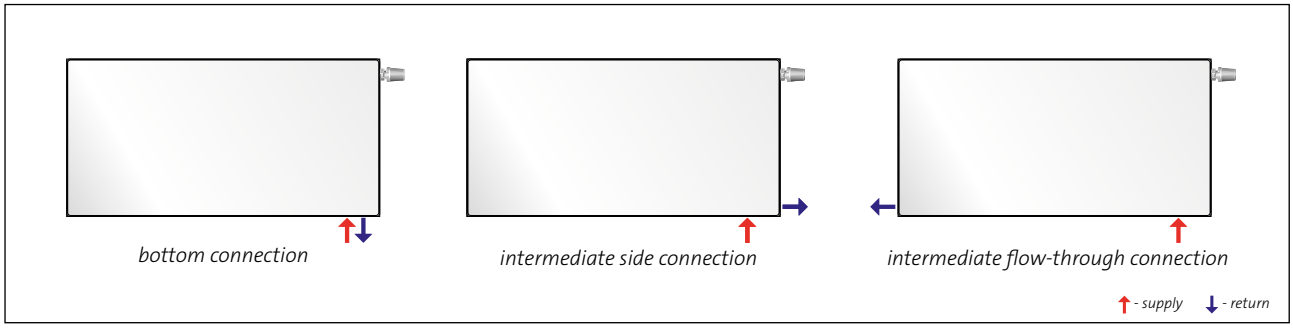
water volume : l/m

type \ height	300	500	600	900
10	1.7	2.7	3.2	4.5
20	3.4	5.5	6.6	9.0
30	5.1	8.2	9.8	13.3

weight : kg/m

type \ height	300	500	600	900
10	9.9	15.7	18.9	27.5
20	14.8	23.5	28.6	40.9
30	19.7	31.4	38.0	55.0

recommended connections



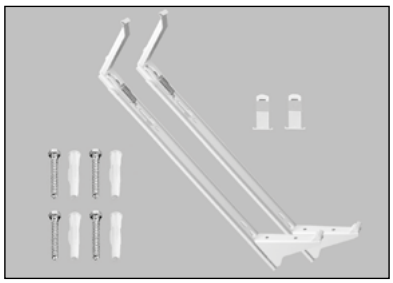
ZAWIESZENIA

Required quantities of the Monclac MCK 108 hospital brackets for various types and heights of the PURMO hygienic radiators

Brackets of outreach 108 mm – max. vertical load of 125 kg per single bracket.
(new brackets with reinforced foot structure)

NOTE: Mounting brackets for hygienic radiators must be ordered separately. Mounting brackets are packed in sets of 2 or 3 pieces. In the table, there are presented quantities of single mounting brackets, not sets!!!

height	300			500			600			900		
length [mm]	10	20	30	10	20	30	10	20	30	10	20	30
	quantity			quantity			quantity			quantity		
400	2	2	2	2	2	2	2	2	2	2	2	2
500	2	2	2	2	2	2	2	2	2	2	2	2
600	2	2	2	2	2	2	2	2	2	2	2	2
700	2	2	2	2	2	2	2	2	2	2	2	2
800	2	2	2	2	2	2	2	2	2	2	2	2
900	2	2	2	2	2	2	2	2	2	2	2	2
1000	2	2	2	2	2	2	2	2 [1)]	2	2	2	3
1100	2	2	3	2	2	2	2	2	2	2	2	3
1200	2	2	3	2	2	3	2	2	2	2	2	3
1400	2	3	3	2	2	3	2	2	3	2	3	3
1600	3	3	3	2	3	3	2	2	3	3	3	3
1800	3	3	4	3	3	3	2	3	3	3	3	4
2000	3	3	4	3	3	4	3	3 [2)]	3	3	3	4
2300	4	4	4	3	3	4	3	3	4	3	4	4
2600	4	4	5	4	4	5	3	3	4	4	4	5
3000	5	5	6	4	4	5	4	4 [3)]	5	4	4	5



Rules for selecting sets of the Monclac MCK 108 mounting brackets, using the example of the type 20 hygienic radiator of 600 mm height:

[1)] For the length of 1000 mm - 1 double set — AZ02BW2MC601080R9016
[2)] For the length of 2000 mm - 1 triple set — AZ02BW3MC601080R9016
[3)] For the length of 3000 mm - 2 double sets — AZ02BW2MC601080R9016

description	order code
2-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW2MC301080R9016
3-element Monclac MCK-108 set for radiators of 300 mm height	AZ02BW3MC301080R9016
2-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW2MC501080R9016
3-element Monclac MCK-108 set for radiators of 500 mm height	AZ02BW3MC501080R9016
2-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW2MC601080R9016
3-element Monclac MCK-108 set for radiators of 600 mm height	AZ02BW3MC601080R9016
2-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW2MC901080R9016
3-element Monclac MCK-108 set for radiators of 900 mm height	AZ02BW3MC901080R9016

PLAN VENTIL HYGIENE

type 10

RADIATOR DESCRIPTION - AN EXAMPLE : **PURMO FHV 10 600 x 1200 L**

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO FHV 10

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**125**	**202**	**237**	**328**
	55/45/20 °C	64	105	124	171
500	**75/65/20 °C**	**157**	**253**	**296**	**410**
	55/45/20 °C	80	131	155	214
600	**75/65/20 °C**	**188**	**303**	**355**	**492**
	55/45/20 °C	96	158	186	256
700	**75/65/20 °C**	**219**	**354**	**414**	**574**
	55/45/20 °C	112	184	217	299
800	**75/65/20 °C**	**250**	**404**	**474**	**656**
	55/45/20 °C	128	210	248	342
900	**75/65/20 °C**	**282**	**455**	**533**	**738**
	55/45/20 °C	144	236	279	384
1000	**75/65/20 °C**	**313**	**505**	**592**	**820**
	55/45/20 °C	161	263	310	427
1100	**75/65/20 °C**	**344**	**556**	**651**	**902**
	55/45/20 °C	177	289	341	470
1200	**75/65/20 °C**	**376**	**606**	**710**	**984**
	55/45/20 °C	193	315	372	513
1400	**75/65/20 °C**	**438**	**707**	**829**	**1148**
	55/45/20 °C	225	368	434	598
1600	**75/65/20 °C**	**501**	**808**	**947**	**1312**
	55/45/20 °C	257	420	496	683
1800	**75/65/20 °C**	**563**	**909**	**1066**	**1476**
	55/45/20 °C	289	473	558	769
2000	**75/65/20 °C**	**626**	**1010**	**1184**	**1640**
	55/45/20 °C	321	526	621	854
2300	**75/65/20 °C**	**720**	**1162**	**1362**	
	55/45/20 °C	369	604	714	
2600	**75/65/20 °C**	**814**	**1313**	**1539**	
	55/45/20 °C	417	683	807	
3000	**75/65/20 °C**	**939**	**1515**	**1776**	
	55/45/20 °C	482	788	931	

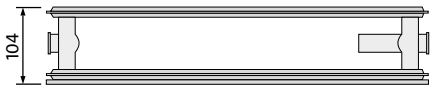
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**394**	**633**	**740**	**1 027**
exponent n	**1.3073**	**1.2790**	**1.2648**	**1.2769**

PLAN VENTIL HYGIENE

type 20

PURMO FHV 20



RADIATOR DESCRIPTION - AN EXAMPLE : **PURMO FHV 20 600 x 1200 L**

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**239**	**352**	**406**	**564**
	55/45/20 °C	125	183	210	295
500	**75/65/20 °C**	**299**	**440**	**508**	**706**
	55/45/20 °C	156	229	263	368
600	**75/65/20 °C**	**359**	**528**	**609**	**847**
	55/45/20 °C	187	274	316	442
700	**75/65/20 °C**	**419**	**616**	**711**	**988**
	55/45/20 °C	219	320	368	516
800	**75/65/20 °C**	**478**	**704**	**812**	**1129**
	55/45/20 °C	250	366	421	589
900	**75/65/20 °C**	**538**	**792**	**914**	**1270**
	55/45/20 °C	281	412	474	663
1000	**75/65/20 °C**	**598**	**880**	**1015**	**1411**
	55/45/20 °C	312	457	526	736
1100	**75/65/20 °C**	**658**	**968**	**1117**	**1552**
	55/45/20 °C	344	503	579	810
1200	**75/65/20 °C**	**718**	**1056**	**1218**	**1693**
	55/45/20 °C	375	549	631	884
1400	**75/65/20 °C**	**837**	**1232**	**1421**	**1975**
	55/45/20 °C	437	640	737	1031
1600	**75/65/20 °C**	**957**	**1408**	**1624**	**2258**
	55/45/20 °C	500	732	842	1178
1800	**75/65/20 °C**	**1076**	**1584**	**1827**	**2540**
	55/45/20 °C	562	823	947	1326
2000	**75/65/20 °C**	**1196**	**1760**	**2030**	**2822**
	55/45/20 °C	625	915	1052	1473
2300	**75/65/20 °C**	**1375**	**2024**	**2335**	
	55/45/20 °C	719	1052	1210	
2600	**75/65/20 °C**	**1555**	**2288**	**2639**	
	55/45/20 °C	812	1189	1368	
3000	**75/65/20 °C**	**1794**	**2640**	**3045**	
	55/45/20 °C	937	1372	1579	

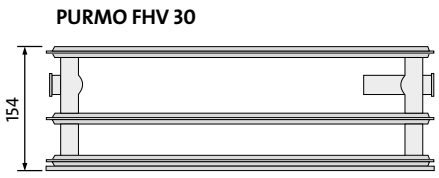
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**748**	**1 103**	**1 273**	**1 766**
exponent n	**1.2706**	**1.2809**	**1.2861**	**1.2729**

PLAN VENTIL HYGIENE

type 30

RADIATOR DESCRIPTION - AN EXAMPLE : **PURMO FHV 30 600 x 1200 L**



name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**334**	**488**	**560**	**771**
	55/45/20 °C	172	251	287	394
500	**75/65/20 °C**	**417**	**610**	**700**	**964**
	55/45/20 °C	215	313	359	492
600	**75/65/20 °C**	**500**	**731**	**840**	**1156**
	55/45/20 °C	259	376	431	591
700	**75/65/20 °C**	**584**	**853**	**980**	**1349**
	55/45/20 °C	302	439	503	689
800	**75/65/20 °C**	**667**	**975**	**1120**	**1542**
	55/45/20 °C	345	501	574	787
900	**75/65/20 °C**	**751**	**1097**	**1260**	**1734**
	55/45/20 °C	388	564	646	886
1000	**75/65/20 °C**	**834**	**1219**	**1400**	**1927**
	55/45/20 °C	431	627	718	984
1100	**75/65/20 °C**	**917**	**1341**	**1540**	**2120**
	55/45/20 °C	474	689	790	1083
1200	**75/65/20 °C**	**1001**	**1463**	**1680**	**2312**
	55/45/20 °C	517	752	862	1181
1400	**75/65/20 °C**	**1168**	**1707**	**1960**	**2698**
	55/45/20 °C	603	877	1005	1378
1600	**75/65/20 °C**	**1334**	**1950**	**2240**	**3083**
	55/45/20 °C	689	1003	1149	1575
1800	**75/65/20 °C**	**1501**	**2194**	**2520**	**3469**
	55/45/20 °C	776	1128	1292	1772
2000	**75/65/20 °C**	**1668**	**2438**	**2800**	**3854**
	55/45/20 °C	862	1253	1436	1968
2300	**75/65/20 °C**	**1918**	**2804**	**3220**	
	55/45/20 °C	991	1442	1651	
2600	**75/65/20 °C**	**2168**	**3169**	**3640**	
	55/45/20 °C	1120	1630	1867	
3000	**75/65/20 °C**	**2502**	**3657**	**4200**	
	55/45/20 °C	1293	1880	2154	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1 047**	**1 534**	**1 763**	**2 430**
exponent n	**1.2926**	**1.3023**	**1.3072**	**1.3153**

RAMO COMPACT *(Purmo RC)*

The PURMO Ramo Contact panel radiators with side connectors stand out due to their flat front panel with slight horizontal ribbing. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. The radiators are equipped with side covers and a top grille. Four side G ½ " threaded female connectors allow for side connection on both right and left side.

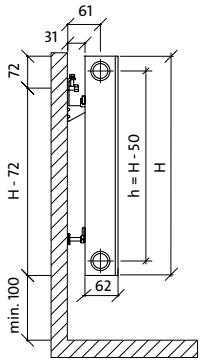
technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator : brackets, plug, air vent.

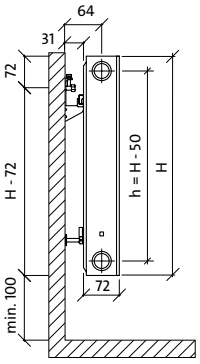
RAMO COMPACT

side views

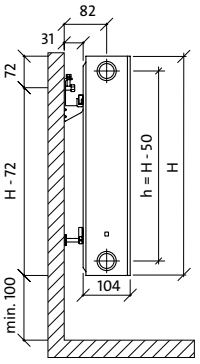
type RC 11



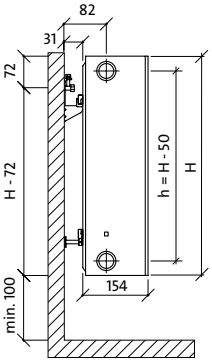
type RC 21s



type RC 22



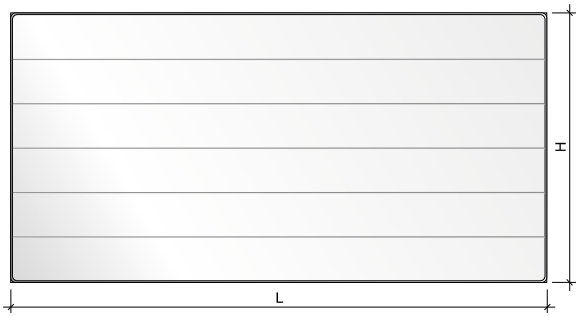
type RC 33



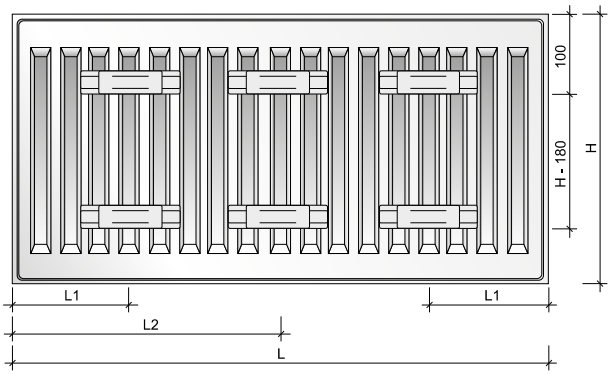
dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



rear view



water volume, weight and mounting distances

water volume : l/m

type \ height	300	400	500	600	900
11	1.7	2.2	2.7	3.2	4.5
21s	3.4	4.5	5.5	6.6	9.0
22	3.4	4.5	5.5	6.6	9.0
33	5.1	6.7	8.2	9.8	13.3

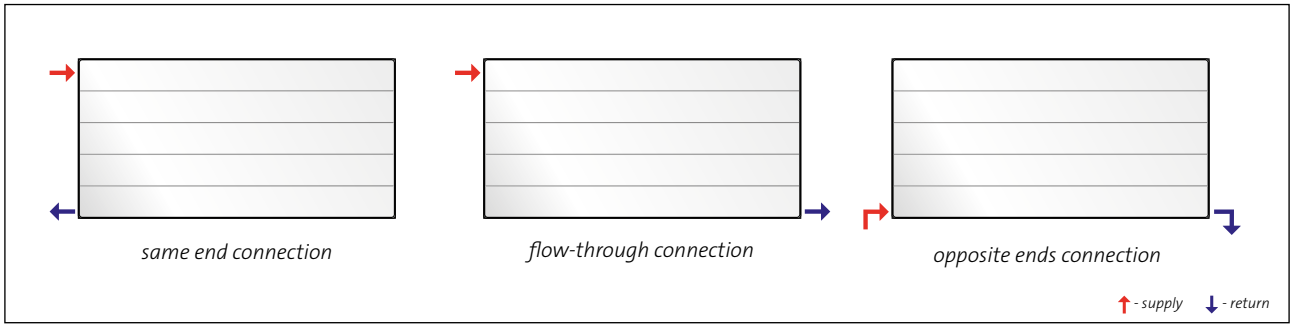
weight : kg/m

type \ height	300	400	500	600	900
11	12.2	15.9	19.8	23.7	35.7
21s	16.8	22.1	27.4	33.1	48.7
22	18.9	25.0	31.1	37.7	56.1
33	26.4	35.2	43.9	53.0	78.8

mounting distances : mm

type	RC 11		RC 21s, RC 22, RC 33	
L	**L1**	**L2**	**L1**	**L2**
400-1600	117	-	133	-
1800	117	917	133	900
2000	117	1017	133	1000
2300	117	1150	133	1150
2600	117	1317	133	1300
3000	117	1517	133	1500

recommended connections

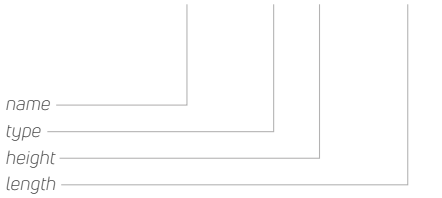


RAMO COMPACT

type 11

PURMO RC 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RC 11 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	212	272	329	384	539
	55/45/20 °C	110	141	171	200	277
500	75/65/20 °C	265	340	412	481	674
	55/45/20 °C	137	177	214	249	346
600	75/65/20 °C	317	408	494	577	808
	55/45/20 °C	165	212	256	299	416
700	75/65/20 °C					
	55/45/20 °C					
800	75/65/20 °C	423	544	658	769	1078
	55/45/20 °C	220	283	342	399	554
900	75/65/20 °C					
	55/45/20 °C					
1000	75/65/20 °C	529	680	823	961	1347
	55/45/20 °C	275	353	427	499	693
1100	75/65/20 °C					
	55/45/20 °C					
1200	75/65/20 °C	635	816	988	1153	1616
	55/45/20 °C	330	424	513	599	831
1400	75/65/20 °C	741	952	1152	1345	1886
	55/45/20 °C	385	494	598	699	970
1600	75/65/20 °C	846	1088	1317	1538	2155
	55/45/20 °C	440	565	684	798	1109
1800	75/65/20 °C	952	1224	1481	1730	2425
	55/45/20 °C	495	636	769	898	1247
2000	75/65/20 °C	1058	1360	1646	1922	2694
	55/45/20 °C	550	706	855	998	1386
2300	75/65/20 °C	1217	1564	1893	2210	
	55/45/20 °C	632	812	983	1148	
2600	75/65/20 °C	1375	1768	2140	2499	
	55/45/20 °C	715	918	1111	1297	
3000	75/65/20 °C	1587	2040	2469	2883	
	55/45/20 °C	824	1060	1282	1497	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	663	852	1032	1205	1694
exponent n	1.2820	1.2824	1.2827	1.2831	1.3013

RAMO COMPACT

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RC 21s 600 x 1200

name
type
height
length

PURMO RC 21s

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	293	372	445	515	706
	55/45/20 °C	152	193	230	266	357
500	75/65/20 °C	366	465	557	644	883
	55/45/20 °C	190	241	288	332	446
600	75/65/20 °C	439	557	668	773	1059
	55/45/20 °C	229	289	345	398	535
700	75/65/20 °C					
	55/45/20 °C					
800	75/65/20 °C	586	743	890	1030	1412
	55/45/20 °C	305	386	461	531	713
900	75/65/20 °C					
	55/45/20 °C					
1000	75/65/20 °C	732	929	1113	1288	1765
	55/45/20 °C	381	482	576	664	891
1100	75/65/20 °C					
	55/45/20 °C					
1200	75/65/20 °C	878	1115	1336	1546	2118
	55/45/20 °C	457	578	691	797	1070
1400	75/65/20 °C	1025	1301	1558	1803	2471
	55/45/20 °C	533	675	806	930	1248
1600	75/65/20 °C	1171	1486	1781	2061	2824
	55/45/20 °C	610	771	921	1063	1426
1800	75/65/20 °C	1318	1672	2003	2318	3177
	55/45/20 °C	686	868	1036	1195	1605
2000	75/65/20 °C	1464	1858	2226	2576	3530
	55/45/20 °C	762	964	1151	1328	1783
2300	75/65/20 °C	1684	2137	2560	2962	
	55/45/20 °C	876	1109	1324	1527	
2600	75/65/20 °C	1903	2415	2894	3349	
	55/45/20 °C	990	1253	1497	1727	
3000	75/65/20 °C	2196	2787	3339	3864	
	55/45/20 °C	1143	1446	1727	1992	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

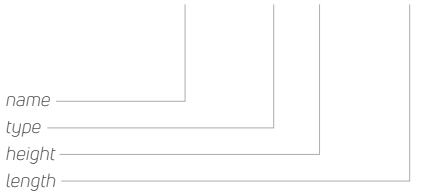
[W/m] 90/70/20 °C	917	1165	1397	1619	2234
exponent n	1.2786	1.2846	1.2907	1.2967	1.3371

RAMO COMPACT

type 22

PURMO RC 22

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RC 22 600 x 1200



length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	375	479	578	670	920
	55/45/20 °C	193	245	294	340	462
500	75/65/20 °C	469	599	722	838	1151
	55/45/20 °C	241	307	368	425	578
600	75/65/20 °C	562	719	866	1006	1381
	55/45/20 °C	289	368	442	510	693
700	75/65/20 °C					
	55/45/20 °C					
800	75/65/20 °C	750	958	1155	1341	1841
	55/45/20 °C	386	491	589	680	924
900	75/65/20 °C					
	55/45/20 °C					
1000	75/65/20 °C	937	1198	1444	1676	2301
	55/45/20 °C	482	614	736	850	1155
1100	75/65/20 °C					
	55/45/20 °C					
1200	75/65/20 °C	1124	1438	1733	2011	2761
	55/45/20 °C	579	736	883	1020	1386
1400	75/65/20 °C	1312	1677	2022	2346	3221
	55/45/20 °C	675	859	1030	1190	1617
1600	75/65/20 °C	1499	1917	2310	2682	3682
	55/45/20 °C	772	982	1177	1360	1848
1800	75/65/20 °C	1687	2156	2599	3017	4142
	55/45/20 °C	868	1104	1325	1530	2080
2000	75/65/20 °C	1874	2396	2888	3352	4602
	55/45/20 °C	965	1227	1472	1700	2311
2300	75/65/20 °C	2155	2755	3321	3855	
	55/45/20 °C	1109	1411	1692	1955	
2600	75/65/20 °C	2436	3115	3754	4358	
	55/45/20 °C	1254	1595	1913	2210	
3000	75/65/20 °C	2811	3594	4332	5028	
	55/45/20 °C	1447	1841	2208	2549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1178	1509	1822	2119	2919
exponent n	1.3000	1.3098	1.3197	1.3295	1.3488

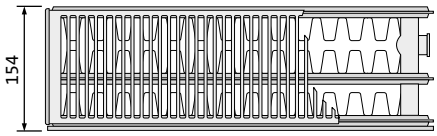
RAMO COMPACT

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RC 33 600 x 1200

name
type
height
length

PURMO RC 33



length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	526	666	798	924	1268
	55/45/20 °C	268	338	404	465	633
500	75/65/20 °C	657	832	997	1155	1586
	55/45/20 °C	335	423	505	582	791
600	75/65/20 °C	788	998	1196	1385	1903
	55/45/20 °C	403	508	606	698	949
700	75/65/20 °C					
	55/45/20 °C					
800	75/65/20 °C	1051	1331	1595	1847	2537
	55/45/20 °C	537	677	807	931	1266
900	75/65/20 °C					
	55/45/20 °C					
1000	75/65/20 °C	1314	1664	1994	2309	3171
	55/45/20 °C	671	846	1009	1164	1582
1100	75/65/20 °C					
	55/45/20 °C					
1200	75/65/20 °C	1577	1997	2393	2771	3805
	55/45/20 °C	805	1015	1211	1396	1898
1400	75/65/20 °C	1840	2330	2792	3233	4439
	55/45/20 °C	939	1184	1413	1629	2215
1600	75/65/20 °C	2102	2662	3190	3694	5074
	55/45/20 °C	1073	1353	1615	1862	2531
1800	75/65/20 °C	2365	2995	3589	4156	5708
	55/45/20 °C	1208	1523	1817	2094	2848
2000	75/65/20 °C	2628	3328	3988	4618	6342
	55/45/20 °C	1342	1692	2018	2327	3164
2300	75/65/20 °C	3022	3827	4586	5311	
	55/45/20 °C	1543	1946	2321	2676	
2600	75/65/20 °C	3416	4326	5184	6003	
	55/45/20 °C	1744	2199	2624	3025	
3000	75/65/20 °C	3942	4992	5982	6927	
	55/45/20 °C	2013	2538	3028	3491	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1657	2102	2525	2923	4007
exponent n	1.3159	1.3245	1.3331	1.3417	1.3612

RAMO VENTIL COMPACT *(Purmo RCV)*

The versatile PURMO Ramo Ventil Contact panel radiators stand out due to their flat front panel with slight horizontal ribbing. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. The radiators are equipped with convection fins as well as side covers and a top grille. Two bottom and four side G ½ " threaded female connectors allow for bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.

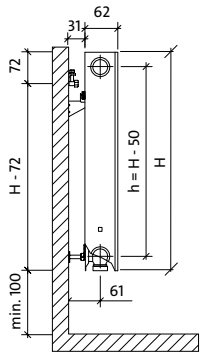
technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " bottom, right side connectors (left side - available on request)
  4 x G ½ " side connectors
- Working pressure : 10 bar
- Maximal temperature : 110 °C
- Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator : brackets, plugs, air vent.

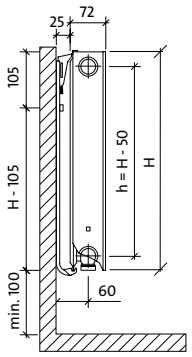
RAMO VENTIL COMPACT

side views

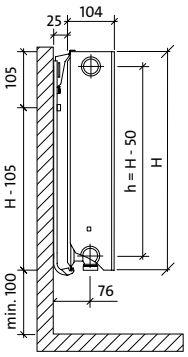
type RCV 11



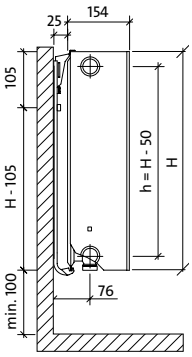
type RCV 21 s



type RCV 22



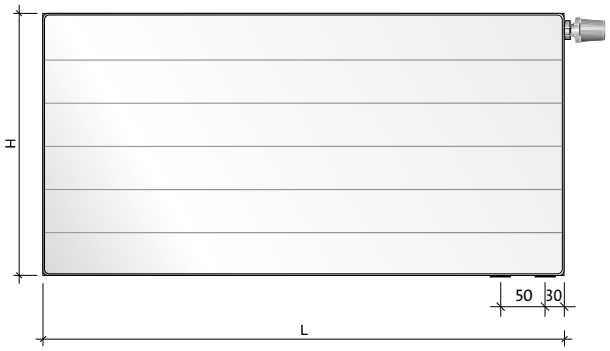
type RCV 33



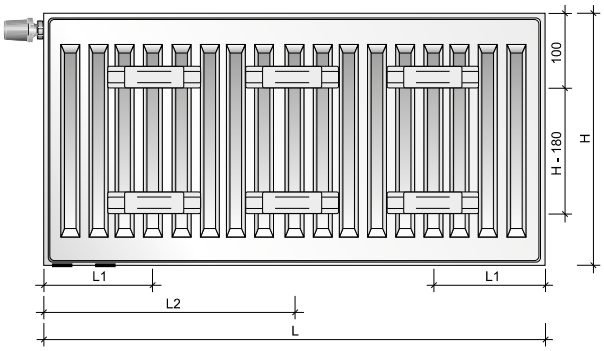
dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



rear view - RCV 11 type only



water volume, weight and mounting distances

water volume : l/m

type \ height	300	400	500	600	900
11	1.7	2.2	2.7	3.2	4.5
21s	3.4	4.5	5.5	6.6	9.0
22	3.4	4.5	5.5	6.6	9.0
33	5.1	6.7	8.2	9.8	13.3

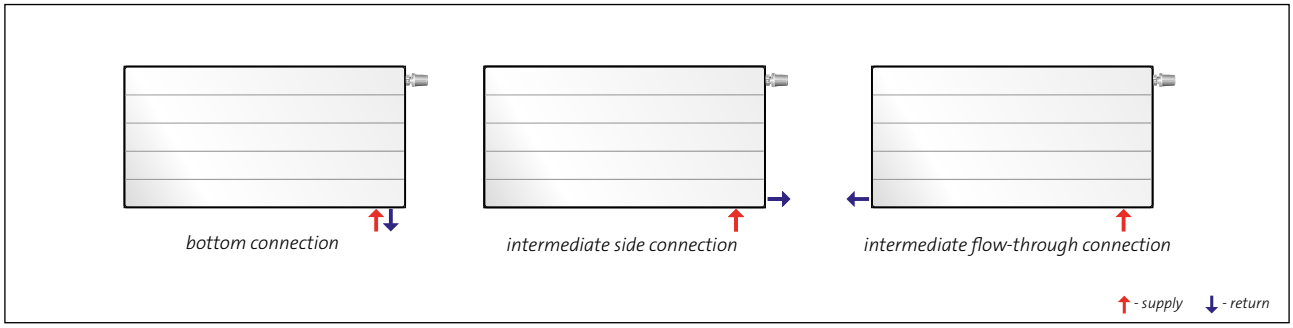
weight : kg/m

type \ height	300	400	500	600	900
11	12.4	16.3	20.1	24.0	35.7
21s	17.4	22.8	28.3	34.0	50.7
22	19.3	25.7	31.8	38.6	56.8
33	26.9	35.8	44.9	53.8	80.4

mounting distances : mm

type	RCV 11	
L	**L1**	**L2**
400-1600	117	-
1800	117	917
2000	117	1017
2300	117	1150
2600	117	1317
3000	117	1517

recommended connections



RAMO VENTIL COMPACT

type 11

PURMO RCV 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RCV 11 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	212	272	329	384	539
	55/45/20 °C	110	141	171	200	277
500	75/65/20 °C	265	340	412	481	674
	55/45/20 °C	137	177	214	249	346
600	75/65/20 °C	317	408	494	577	808
	55/45/20 °C	165	212	256	299	416
700	75/65/20 °C					
	55/45/20 °C					
800	75/65/20 °C	423	544	658	769	1078
	55/45/20 °C	220	283	342	399	554
900	75/65/20 °C					
	55/45/20 °C					
1000	75/65/20 °C	529	680	823	961	1347
	55/45/20 °C	275	353	427	499	693
1100	75/65/20 °C					
	55/45/20 °C					
1200	75/65/20 °C	635	816	988	1153	1616
	55/45/20 °C	330	424	513	599	831
1400	75/65/20 °C	741	952	1152	1345	1886
	55/45/20 °C	385	494	598	699	970
1600	75/65/20 °C	846	1088	1317	1538	2155
	55/45/20 °C	440	565	684	798	1109
1800	75/65/20 °C	952	1224	1481	1730	2425
	55/45/20 °C	495	636	769	898	1247
2000	75/65/20 °C	1058	1360	1646	1922	2694
	55/45/20 °C	550	706	855	998	1386
2300	75/65/20 °C	1217	1564	1893	2210	
	55/45/20 °C	632	812	983	1148	
2600	75/65/20 °C	1375	1768	2140	2499	
	55/45/20 °C	715	918	1111	1297	
3000	75/65/20 °C	1587	2040	2469	2883	
	55/45/20 °C	824	1060	1282	1497	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	663	852	1032	1205	1694
exponent n	1.2820	1.2824	1.2827	1.2831	1.3013

RAMO VENTIL COMPACT

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : **PURMO RCV 21s 600 x 1200 L**

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO RCV 21s

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	**75/65/20 °C**	**293**	**372**	**445**	**515**	**706**
	55/45/20 °C	152	193	230	266	357
500	**75/65/20 °C**	**366**	**465**	**557**	**644**	**883**
	55/45/20 °C	190	241	288	332	446
600	**75/65/20 °C**	**439**	**557**	**668**	**773**	**1059**
	55/45/20 °C	229	289	345	398	535
700	**75/65/20 °C**					
	55/45/20 °C					
800	**75/65/20 °C**	**586**	**743**	**890**	**1030**	**1412**
	55/45/20 °C	305	386	461	531	713
900	**75/65/20 °C**					
	55/45/20 °C					
1000	**75/65/20 °C**	**732**	**929**	**1113**	**1288**	**1765**
	55/45/20 °C	381	482	576	664	891
1100	**75/65/20 °C**					
	55/45/20 °C					
1200	**75/65/20 °C**	**878**	**1115**	**1336**	**1546**	**2118**
	55/45/20 °C	457	578	691	797	1070
1400	**75/65/20 °C**	**1025**	**1301**	**1558**	**1803**	**2471**
	55/45/20 °C	533	675	806	930	1248
1600	**75/65/20 °C**	**1171**	**1486**	**1781**	**2061**	**2824**
	55/45/20 °C	610	771	921	1063	1426
1800	**75/65/20 °C**	**1318**	**1672**	**2003**	**2318**	**3177**
	55/45/20 °C	686	868	1036	1195	1605
2000	**75/65/20 °C**	**1464**	**1858**	**2226**	**2576**	**3530**
	55/45/20 °C	762	964	1151	1328	1783
2300	**75/65/20 °C**	**1684**	**2137**	**2560**	**2962**	
	55/45/20 °C	876	1109	1324	1527	
2600	**75/65/20 °C**	**1903**	**2415**	**2894**	**3349**	
	55/45/20 °C	990	1253	1497	1727	
3000	**75/65/20 °C**	**2196**	**2787**	**3339**	**3864**	
	55/45/20 °C	1143	1446	1727	1992	

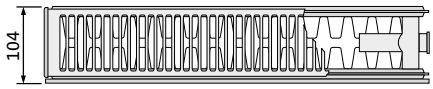
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**917**	**1165**	**1397**	**1619**	**2234**
exponent n	**1.2786**	**1.2846**	**1.2907**	**1.2967**	**1.3371**

RAMO VENTIL COMPACT

type 22

PURMO RCV 22



RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RCV 22 600 x 1200 L

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	75/65/20 °C	375	479	578	670	920
	55/45/20 °C	193	245	294	340	462
500	75/65/20 °C	469	599	722	838	1151
	55/45/20 °C	241	307	368	425	578
600	75/65/20 °C	562	719	866	1006	1381
	55/45/20 °C	289	368	442	510	693
700	75/65/20 °C					
	55/45/20 °C					
800	75/65/20 °C	750	958	1155	1341	1841
	55/45/20 °C	386	491	589	680	924
900	75/65/20 °C					
	55/45/20 °C					
1000	75/65/20 °C	937	1198	1444	1676	2301
	55/45/20 °C	482	614	736	850	1155
1100	75/65/20 °C					
	55/45/20 °C					
1200	75/65/20 °C	1124	1438	1733	2011	2761
	55/45/20 °C	579	736	883	1020	1386
1400	75/65/20 °C	1312	1677	2022	2346	3221
	55/45/20 °C	675	859	1030	1190	1617
1600	75/65/20 °C	1499	1917	2310	2682	3682
	55/45/20 °C	772	982	1177	1360	1848
1800	75/65/20 °C	1687	2156	2599	3017	4142
	55/45/20 °C	868	1104	1325	1530	2080
2000	75/65/20 °C	1874	2396	2888	3352	4602
	55/45/20 °C	965	1227	1472	1700	2311
2300	75/65/20 °C	2155	2755	3321	3855	
	55/45/20 °C	1109	1411	1692	1955	
2600	75/65/20 °C	2436	3115	3754	4358	
	55/45/20 °C	1254	1595	1913	2210	
3000	75/65/20 °C	2811	3594	4332	5028	
	55/45/20 °C	1447	1841	2208	2549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	1178	1509	1822	2119	2919
exponent n	1.3000	1.3098	1.3197	1.3295	1.3488

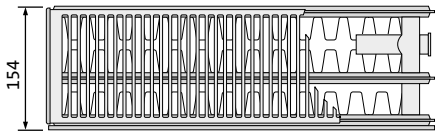
RAMO VENTIL COMPACT

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : **PURMO RCV 33 600 x 1200 L**

name
type
height
length
L : only for the left side version
(no letter: standard, i.e. the right side version)

PURMO RCV 33



length [mm]	temperatures t_z / t_p / t_i	height [mm]				
		300	400	500	600	900
400	**75/65/20 °C**	**526**	**666**	**798**	**924**	**1268**
	55/45/20 °C	268	338	404	465	633
500	**75/65/20 °C**	**657**	**832**	**997**	**1155**	**1586**
	55/45/20 °C	335	423	505	582	791
600	**75/65/20 °C**	**788**	**998**	**1196**	**1385**	**1903**
	55/45/20 °C	403	508	606	698	949
700	**75/65/20 °C**					
	55/45/20 °C					
800	**75/65/20 °C**	**1051**	**1331**	**1595**	**1847**	**2537**
	55/45/20 °C	537	677	807	931	1266
900	**75/65/20 °C**					
	55/45/20 °C					
1000	**75/65/20 °C**	**1314**	**1664**	**1994**	**2309**	**3171**
	55/45/20 °C	671	846	1009	1164	1582
1100	**75/65/20 °C**					
	55/45/20 °C					
1200	**75/65/20 °C**	**1577**	**1997**	**2393**	**2771**	**3805**
	55/45/20 °C	805	1015	1211	1396	1898
1400	**75/65/20 °C**	**1840**	**2330**	**2792**	**3233**	**4439**
	55/45/20 °C	939	1184	1413	1629	2215
1600	**75/65/20 °C**	**2102**	**2662**	**3190**	**3694**	**5074**
	55/45/20 °C	1073	1353	1615	1862	2531
1800	**75/65/20 °C**	**2365**	**2995**	**3589**	**4156**	**5708**
	55/45/20 °C	1208	1523	1817	2094	2848
2000	**75/65/20 °C**	**2628**	**3328**	**3988**	**4618**	**6342**
	55/45/20 °C	1342	1692	2018	2327	3164
2300	**75/65/20 °C**	**3022**	**3827**	**4586**	**5311**	
	55/45/20 °C	1543	1946	2321	2676	
2600	**75/65/20 °C**	**3416**	**4326**	**5184**	**6003**	
	55/45/20 °C	1744	2199	2624	3025	
3000	**75/65/20 °C**	**3942**	**4992**	**5982**	**6927**	
	55/45/20 °C	2013	2538	3028	3491	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1657**	**2102**	**2525**	**2923**	**4007**
exponent n	**1.3159**	**1.3245**	**1.3331**	**1.3417**	**1.3612**

RAMO VENTIL COMPACT M (PURMO RCVM)

The PURMO Ramo Ventil Contact M panel radiators with mid-bottom connectors stand out due to their flat front panel with slight horizontal ribbing. The panel is glued to the profiled, front base heating panel in a manner concealing any protruding edges, when looking at the radiator from the front. The radiators are equipped with convection fins as well as side covers and a top grille. Two mid-bottom and four side G ½ " threaded female connectors allow for central bottom or side connection. The radiator is also equipped with a built-in thermostatic Oventrop valve insert providing pre-setting.
The main advantage of the central bottom connection relies of the fact that regardless of the length, height and depth of the radiator, the layout of heating system connections can be defined at the building shell stage and it will not change as a result of the selection of a specific size and type of the radiator.

technical specifications

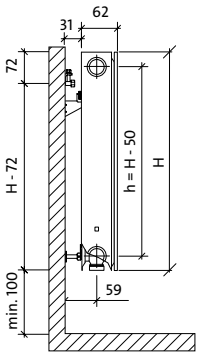
- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 33.3 mm
- Connections : 2 x G ½ " mid-bottom connectors,
  4 x G ½ " side connectors
- Working pressure : 10 bar • Maximal temperature : 110 °C • Test pressure : 13 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request
- Accessories bundled with the radiator : brackets, plugs, air vent.

NOTE: the RCVM radiator is available in the right side version only.

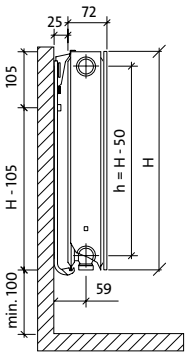
RAMO VENTIL COMPACT M

side views

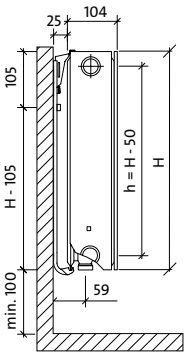
type RCVM 11



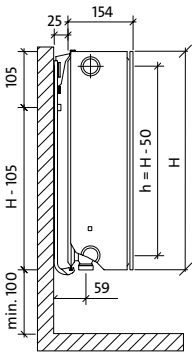
type RCVM 21s



type RCVM 22



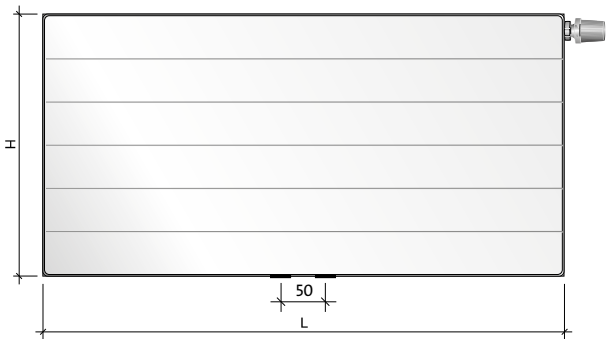
type RCVM 33



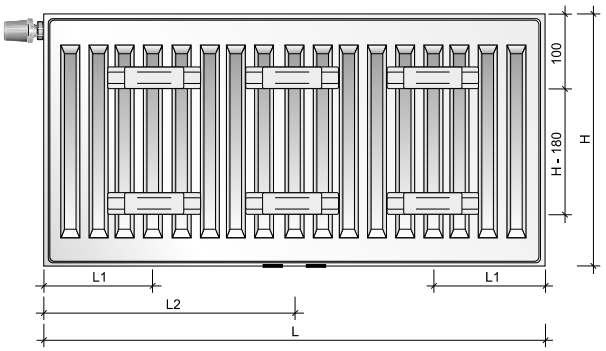
dimensions in mm

H = *height*
L = *length*
h = *spacing of connectors*

front view



rear view - RCVM 11 type only



water volume, weight and mounting distances

water volume : l/m

type \ height	300	500	600	900
11	1.7	2.7	3.2	4.5
21s	3.4	5.5	6.6	9.0
22	3.4	5.5	6.6	9.0
33	5.1	8.2	9.8	13.3

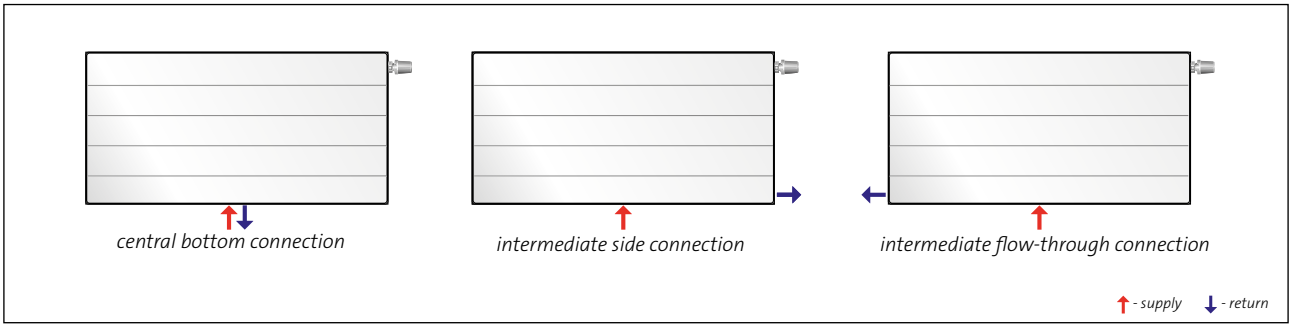
weight : kg/m

type \ height	300	500	600	900
11	12.7	20.5	24.4	36.4
21s	17.5	28.6	34.3	51.0
22	19.6	32.4	39.1	58.2
33	27.2	45.1	53.8	80.0

mounting distances : mm

type	RCVM 11	
L	**L1**	**L2**
400-1600	117	-
1800	117	917
2000	117	1017
2300	117	1150
2600	117	1317
3000	117	1517

recommended connections



RAMO VENTIL COMPACT M

type 11

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RCVM 11 600 x 1200

name
type
height
length

PURMO RCVM 11

NOTE: the RCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**212**	**329**	**384**	**539**
	55/45/20 °C	110	171	200	277
500	**75/65/20 °C**	**265**	**412**	**481**	**674**
	55/45/20 °C	137	214	249	346
600	**75/65/20 °C**	**317**	**494**	**577**	**808**
	55/45/20 °C	165	256	299	416
700	**75/65/20 °C**				
	55/45/20 °C				
800	**75/65/20 °C**	**423**	**658**	**769**	**1078**
	55/45/20 °C	220	342	399	554
900	**75/65/20 °C**				
	55/45/20 °C				
1000	**75/65/20 °C**	**529**	**823**	**961**	**1347**
	55/45/20 °C	275	427	499	693
1100	**75/65/20 °C**				
	55/45/20 °C				
1200	**75/65/20 °C**	**635**	**988**	**1153**	**1616**
	55/45/20 °C	330	513	599	831
1400	**75/65/20 °C**	**741**	**1152**	**1345**	**1886**
	55/45/20 °C	385	598	699	970
1600	**75/65/20 °C**	**846**	**1317**	**1538**	**2155**
	55/45/20 °C	440	684	798	1109
1800	**75/65/20 °C**	**952**	**1481**	**1730**	**2425**
	55/45/20 °C	495	769	898	1247
2000	**75/65/20 °C**	**1058**	**1646**	**1922**	**2694**
	55/45/20 °C	550	855	998	1386
2300	**75/65/20 °C**	**1217**	**1893**	**2210**	
	55/45/20 °C	632	983	1148	
2600	**75/65/20 °C**	**1375**	**2140**	**2499**	
	55/45/20 °C	715	1111	1297	
3000	**75/65/20 °C**	**1587**	**2469**	**2883**	
	55/45/20 °C	824	1282	1497	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**663**	**1032**	**1205**	**1694**
exponent n	**1.2820**	**1.2827**	**1.2831**	**1.3013**

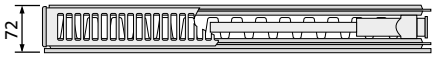
RAMO VENTIL COMPACT M

type 21s

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RCVM 21s 600 x 1200

name
type
height
length

PURMO RCVM 21s



NOTE: the RCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**293**	**445**	**515**	**706**
	55/45/20 °C	152	230	266	357
500	**75/65/20 °C**	**366**	**557**	**644**	**883**
	55/45/20 °C	190	288	332	446
600	**75/65/20 °C**	**439**	**668**	**773**	**1059**
	55/45/20 °C	229	345	398	535
700	**75/65/20 °C**				
	55/45/20 °C				
800	**75/65/20 °C**	**586**	**890**	**1030**	**1412**
	55/45/20 °C	305	461	531	713
900	**75/65/20 °C**				
	55/45/20 °C				
1000	**75/65/20 °C**	**732**	**1113**	**1288**	**1765**
	55/45/20 °C	381	576	664	891
1100	**75/65/20 °C**				
	55/45/20 °C				
1200	**75/65/20 °C**	**878**	**1336**	**1546**	**2118**
	55/45/20 °C	457	691	797	1070
1400	**75/65/20 °C**	**1025**	**1558**	**1803**	**2471**
	55/45/20 °C	533	806	930	1248
1600	**75/65/20 °C**	**1171**	**1781**	**2061**	**2824**
	55/45/20 °C	610	921	1063	1426
1800	**75/65/20 °C**	**1318**	**2003**	**2318**	**3177**
	55/45/20 °C	686	1036	1195	1605
2000	**75/65/20 °C**	**1464**	**2226**	**2576**	**3530**
	55/45/20 °C	762	1151	1328	1783
2300	**75/65/20 °C**	**1684**	**2560**	**2962**	
	55/45/20 °C	876	1324	1527	
2600	**75/65/20 °C**	**1903**	**2894**	**3349**	
	55/45/20 °C	990	1497	1727	
3000	**75/65/20 °C**	**2196**	**3339**	**3864**	
	55/45/20 °C	1143	1727	1992	

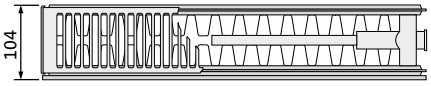
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**917**	**1397**	**1619**	**2234**
exponent n	**1.2786**	**1.2907**	**1.2967**	**1.3371**

RAMO VENTIL COMPACT M

type 22

PURMO RCVM 22



RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RCVM 22 600 x 1200

name
type
height
length

NOTE: the RCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**375**	**578**	**670**	**920**
	55/45/20 °C	193	294	340	462
500	**75/65/20 °C**	**469**	**722**	**838**	**1151**
	55/45/20 °C	241	368	425	578
600	**75/65/20 °C**	**562**	**866**	**1006**	**1381**
	55/45/20 °C	289	442	510	693
700	**75/65/20 °C**				
	55/45/20 °C				
800	**75/65/20 °C**	**750**	**1155**	**1341**	**1841**
	55/45/20 °C	386	589	680	924
900	**75/65/20 °C**				
	55/45/20 °C				
1000	**75/65/20 °C**	**937**	**1444**	**1676**	**2301**
	55/45/20 °C	482	736	850	1155
1100	**75/65/20 °C**				
	55/45/20 °C				
1200	**75/65/20 °C**	**1124**	**1733**	**2011**	**2761**
	55/45/20 °C	579	883	1020	1386
1400	**75/65/20 °C**	**1312**	**2022**	**2346**	**3221**
	55/45/20 °C	675	1030	1190	1617
1600	**75/65/20 °C**	**1499**	**2310**	**2682**	**3682**
	55/45/20 °C	772	1177	1360	1848
1800	**75/65/20 °C**	**1687**	**2599**	**3017**	**4142**
	55/45/20 °C	868	1325	1530	2080
2000	**75/65/20 °C**	**1874**	**2888**	**3352**	**4602**
	55/45/20 °C	965	1472	1700	2311
2300	**75/65/20 °C**	**2155**	**3321**	**3855**	
	55/45/20 °C	1109	1692	1955	
2600	**75/65/20 °C**	**2436**	**3754**	**4358**	
	55/45/20 °C	1254	1913	2210	
3000	**75/65/20 °C**	**2811**	**4332**	**5028**	
	55/45/20 °C	1447	2208	2549	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1178**	**1822**	**2119**	**2919**
exponent n	**1.3000**	**1.3197**	**1.3295**	**1.3488**

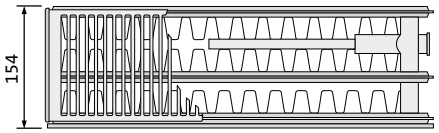
RAMO VENTIL COMPACT M

type 33

RADIATOR DESCRIPTION - AN EXAMPLE : PURMO RCVM 33 600 x 1200

name
type
height
length

PURMO RCVM 33



NOTE: the RCVM radiator is available in the right side version only.

length [mm]	temperatures t_z / t_p / t_i	height [mm]			
		300	500	600	900
400	**75/65/20 °C**	**526**	**798**	**924**	**1268**
	55/45/20 °C	268	404	465	633
500	**75/65/20 °C**	**657**	**997**	**1155**	**1586**
	55/45/20 °C	335	505	582	791
600	**75/65/20 °C**	**788**	**1196**	**1385**	**1903**
	55/45/20 °C	403	606	698	949
700	**75/65/20 °C**				
	55/45/20 °C				
800	**75/65/20 °C**	**1051**	**1595**	**1847**	**2537**
	55/45/20 °C	537	807	931	1266
900	**75/65/20 °C**				
	55/45/20 °C				
1000	**75/65/20 °C**	**1314**	**1994**	**2309**	**3171**
	55/45/20 °C	671	1009	1164	1582
1100	**75/65/20 °C**				
	55/45/20 °C				
1200	**75/65/20 °C**	**1577**	**2393**	**2771**	**3805**
	55/45/20 °C	805	1211	1396	1898
1400	**75/65/20 °C**	**1840**	**2792**	**3233**	**4439**
	55/45/20 °C	939	1413	1629	2215
1600	**75/65/20 °C**	**2102**	**3190**	**3694**	**5074**
	55/45/20 °C	1073	1615	1862	2531
1800	**75/65/20 °C**	**2365**	**3589**	**4156**	**5708**
	55/45/20 °C	1208	1817	2094	2848
2000	**75/65/20 °C**	**2628**	**3988**	**4618**	**6342**
	55/45/20 °C	1342	2018	2327	3164
2300	**75/65/20 °C**	**3022**	**4586**	**5311**	
	55/45/20 °C	1543	2321	2676	
2600	**75/65/20 °C**	**3416**	**5184**	**6003**	
	55/45/20 °C	1744	2624	3025	
3000	**75/65/20 °C**	**3942**	**5982**	**6927**	
	55/45/20 °C	2013	3028	3491	

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**1657**	**2525**	**2923**	**4007**
exponent n	**1.3159**	**1.3331**	**1.3417**	**1.3612**

Radiators of height 200 mm

		types
	**Plint** A versatile panel radiator with profiled heating panels and convection fins. **6 connections** height [mm]: 200 length [mm]: 600 - 3000 The Plint radiators are also available in a special version with additional corrosion protection.	**21s** **22** **33** **44**
	**Plint P** A versatile panel radiator with a flat front panel and a profiled rear panel. **6 connections** height [mm]: 200 length [mm]: 600 - 3000	**21s** **22** **33** **44**
	**Plint R** A versatile panel radiator with a flat, slightly horizontally ribbed front panel and a profiled rear panel. **6 connections** height [mm]: 200 length [mm]: 600 - 3000	**21s** **22** **33** **44**
	**Plint PD** A versatile, flat on both sides panel radiator. Front and rear panels are completely flat. **6 connections** height [mm]: 200 length [mm]: 600 - 3000	**21s** **22** **33** **44**
	**Plint RD** A versatile, flat on both sides panel radiator. Front and rear panels are slightly horizontally ribbed. **6 connections** height [mm]: 200 length [mm]: 600 - 3000	**21s** **22** **33** **44**

	Plint	Plint P	Plint R	Plint PD	Plint RD
profiled front panel	X	-	-	-	-
flat front panel	-	X	X	X	X
flat rear panel	-	-	-	X	X
max. working pressure [bar]	10	10	10	10	10
no. of connectors – side + bottom	4 + 2	4 + 2	4 + 2	4 + 2	4 + 2
side connection – GW ½ "	X	X	X	X	X
bottom connection – GW ½ "	X	X	X	X	X
mid-bottom connection – GW ½ "	-	-	-	-	-
brackets bundled with the radiator	-	-	-	-	-
side covers	X	X	X	X	X
top grille	X	X	X	X	X
built-in thermostatic valve	X	X	X	X	X

NOTE: Mounting brackets must be ordered separately. For the method of selecting and ordering see page 106

water volume and weight

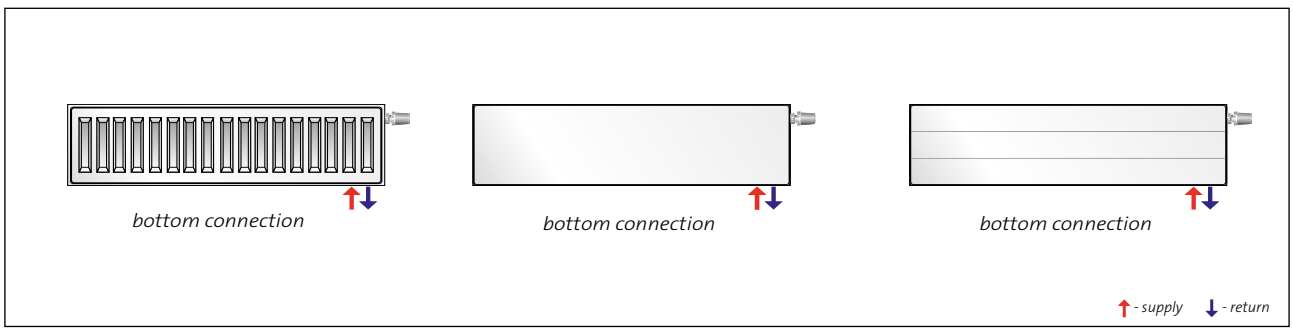
water volume : l/m

radiator \ type	21s	22	33	44
Plint	2.5	2.5	3.8	5.5
Plint P	2.5	2.5	3.8	5.5
Plint R	2.5	2.5	3.8	5.5
Plint PD	2.5	2.5	3.8	5.5
Plint RD	2.5	2.5	3.8	5.5

weight : kg/m

radiator \ type	21s	22	33	44
Plint	11.2	12.8	22.3	27.8
Plint P	14.4	16.8	24	29.5
Plint R	14.4	16.8	24	29.5
Plint PD	17.5	20.8	25.8	32.3
Plint RD	17.5	20.8	25.8	32.3

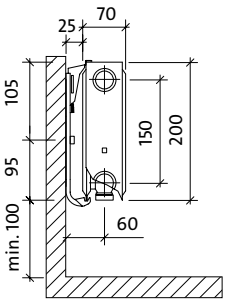
connection examples



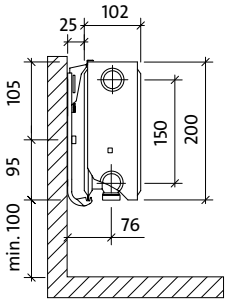
Side views

Plint - wall brackets

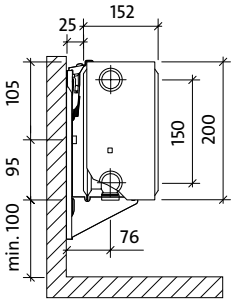
type 21 s



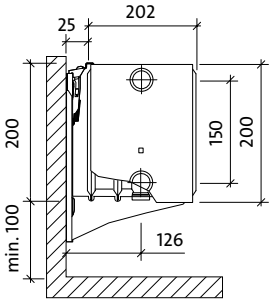
type 22



type 33

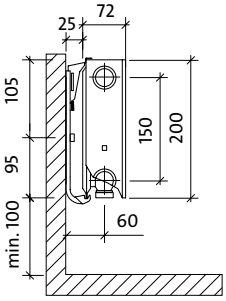


type 44

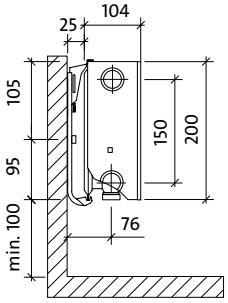


Plint P and Plint R - wall brackets

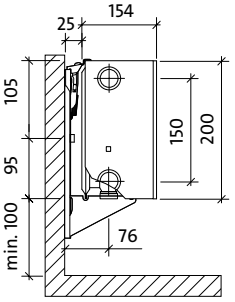
type 21 s



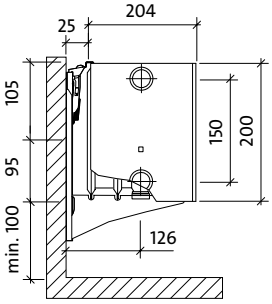
type 22



type 33

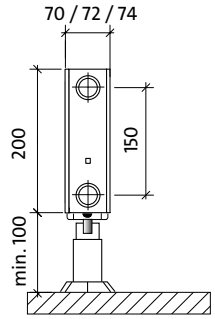


type 44

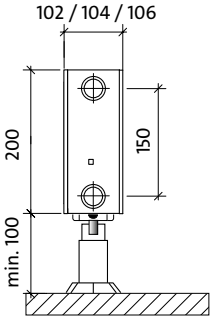


Plint, Plint P, Plint R, Plint PD and Plint RD - floor brackets

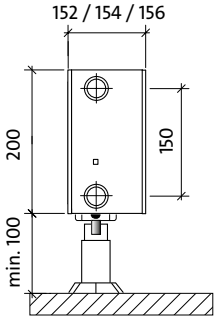
type 21 s



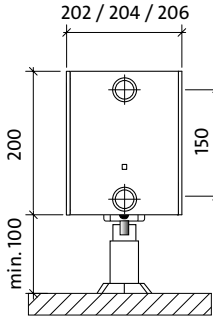
type 22



type 33



type 44



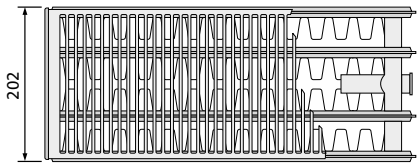
PLINT

height 200

RADIATOR DESCRIPTION - AN EXAMPLE : PLINT 44 200 x 1200

name
type
height
length

PLINT 44



length [mm]	temperatures t_z / t_p / t_i	type			
		21 s	22	33	44
400	75/65/20 °C				
	55/45/20 °C				
500	75/65/20 °C				
	55/45/20 °C				
600	75/65/20 °C	329	434	613	802
	55/45/20 °C	167	221	309	402
700	75/65/20 °C	384	507	715	936
	55/45/20 °C	194	257	361	469
800	75/65/20 °C	439	579	818	1070
	55/45/20 °C	222	294	412	536
900	75/65/20 °C	494	652	920	1203
	55/45/20 °C	250	331	464	603
1000	75/65/20 °C	549	724	1022	1337
	55/45/20 °C	278	368	515	670
1100	75/65/20 °C	604	794	1124	1471
	55/45/20 °C	306	404	567	737
1200	75/65/20 °C	659	869	1226	1604
	55/45/20 °C	333	441	618	804
1400	75/65/20 °C	769	1014	1431	1872
	55/45/20 °C	389	515	721	938
1600	75/65/20 °C	879	1158	1635	2139
	55/45/20 °C	445	588	825	1073
1800	75/65/20 °C	988	1303	1840	2407
	55/45/20 °C	500	662	928	1207
2000	75/65/20 °C	1098	1448	2044	2674
	55/45/20 °C	556	735	1031	1341
2300	75/65/20 °C	1263	1665	2351	3075
	55/45/20 °C	639	845	1185	1542
2600	75/65/20 °C	1427	1882	2657	3476
	55/45/20 °C	722	956	1340	1743
3000	75/65/20 °C	1647	2172	3066	4011
	55/45/20 °C	834	1103	1546	2011

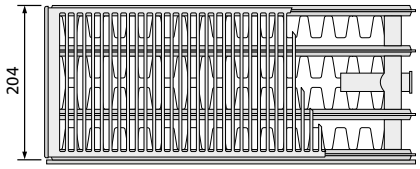
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	694	915	1294	1697
exponent n	1.3332	1.3269	1.3403	1.3516

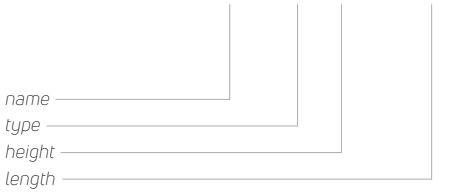
The Plint radiators are also available in a special version with additional corrosion protection.

PLINT P
height 200

PLINT P 44



RADIATOR DESCRIPTION - AN EXAMPLE : PLINT P 44 200 x 1200



length [mm]	temperatures t_z / t_p / t_i	type			
		21 s	22	33	44
400	75/65/20 °C				
	55/45/20 °C				
500	75/65/20 °C				
	55/45/20 °C				
600	75/65/20 °C	330	434	628	803
	55/45/20 °C	168	221	318	405
700	75/65/20 °C	385	507	733	937
	55/45/20 °C	196	258	371	472
800	75/65/20 °C	440	579	838	1071
	55/45/20 °C	224	295	424	539
900	75/65/20 °C	495	652	942	1205
	55/45/20 °C	252	331	477	607
1000	75/65/20 °C	550	724	1047	1339
	55/45/20 °C	280	368	530	674
1100	75/65/20 °C	605	796	1152	1473
	55/45/20 °C	308	405	583	742
1200	75/65/20 °C	660	869	1256	1607
	55/45/20 °C	337	442	636	809
1400	75/65/20 °C	770	1014	1466	1875
	55/45/20 °C	393	515	742	944
1600	75/65/20 °C	880	1158	1675	2142
	55/45/20 °C	449	589	848	1079
1800	75/65/20 °C	990	1303	1885	2410
	55/45/20 °C	505	663	954	1214
2000	75/65/20 °C	1100	1448	2094	2678
	55/45/20 °C	561	736	1059	1348
2300	75/65/20 °C	1265	1665	2408	3080
	55/45/20 °C	645	847	1218	1551
2600	75/65/20 °C	1430	1882	2722	3481
	55/45/20 °C	729	957	1377	1753
3000	75/65/20 °C	1650	2172	3141	4017
	55/45/20 °C	841	1105	1589	2023

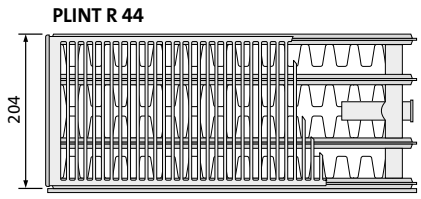
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

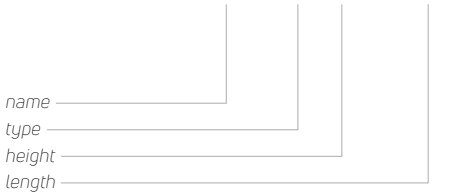
[W/m] 90/70/20 °C	694	914	1325	1697
exponent n	1.3186	1.3238	1.3337	1.3433

PLINT R

height 200

RADIATOR DESCRIPTION - AN EXAMPLE : PLINT R 44 200 x 1200





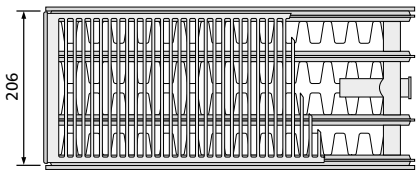
length [mm]	temperatures t_z / t_p / t_i	type			
		21 s	22	33	44
400	75/65/20 °C				
	55/45/20 °C				
500	75/65/20 °C				
	55/45/20 °C				
600	75/65/20 °C	330	434	628	803
	55/45/20 °C	168	221	318	405
700	75/65/20 °C	385	507	733	937
	55/45/20 °C	196	258	371	472
800	75/65/20 °C	440	579	838	1071
	55/45/20 °C	224	295	424	539
900	75/65/20 °C	495	652	942	1205
	55/45/20 °C	252	331	477	607
1000	75/65/20 °C	550	724	1047	1339
	55/45/20 °C	280	368	530	674
1100	75/65/20 °C	605	796	1152	1473
	55/45/20 °C	308	405	583	742
1200	75/65/20 °C	660	869	1256	1607
	55/45/20 °C	337	442	636	809
1400	75/65/20 °C	770	1014	1466	1875
	55/45/20 °C	393	515	742	944
1600	75/65/20 °C	880	1158	1675	2142
	55/45/20 °C	449	589	848	1079
1800	75/65/20 °C	990	1303	1885	2410
	55/45/20 °C	505	663	954	1214
2000	75/65/20 °C	1100	1448	2094	2678
	55/45/20 °C	561	736	1059	1348
2300	75/65/20 °C	1265	1665	2408	3080
	55/45/20 °C	645	847	1218	1551
2600	75/65/20 °C	1430	1882	2722	3481
	55/45/20 °C	729	957	1377	1753
3000	75/65/20 °C	1650	2172	3141	4017
	55/45/20 °C	841	1105	1589	2023

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

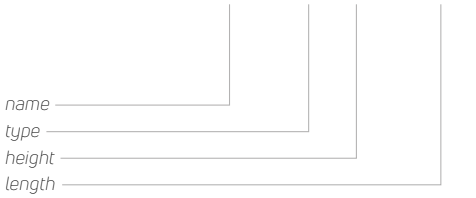
[W/m] 90/70/20 °C	694	914	1325	1697
exponent n	1.3186	1.3238	1.3337	1.3433

PLINT PD
height 200

PLINT PD 44



RADIATOR DESCRIPTION - AN EXAMPLE : PLINT PD 44 200 x 1200



length [mm]	temperatures t_z / t_p / t_i	type			
		21 s	22	33	44
400	75/65/20 °C				
	55/45/20 °C				
500	75/65/20 °C				
	55/45/20 °C				
600	75/65/20 °C	322	430	598	793
	55/45/20 °C	165	219	301	400
700	75/65/20 °C	376	502	697	925
	55/45/20 °C	192	256	351	466
800	75/65/20 °C	430	574	797	1057
	55/45/20 °C	220	293	401	533
900	75/65/20 °C	483	645	896	1189
	55/45/20 °C	247	329	451	600
1000	75/65/20 °C	537	717	996	1321
	55/45/20 °C	275	366	501	666
1100	75/65/20 °C	591	789	1096	1453
	55/45/20 °C	302	402	551	733
1200	75/65/20 °C	644	860	1195	1585
	55/45/20 °C	329	439	601	800
1400	75/65/20 °C	752	1004	1394	1849
	55/45/20 °C	384	512	701	933
1600	75/65/20 °C	859	1147	1594	2114
	55/45/20 °C	439	585	801	1066
1800	75/65/20 °C	967	1291	1793	2378
	55/45/20 °C	494	658	902	1199
2000	75/65/20 °C	1074	1434	1992	2642
	55/45/20 °C	549	732	1002	1333
2300	75/65/20 °C	1235	1649	2291	3038
	55/45/20 °C	631	841	1152	1533
2600	75/65/20 °C	1396	1864	2590	3435
	55/45/20 °C	714	951	1302	1733
3000	75/65/20 °C	1611	2151	2988	3963
	55/45/20 °C	824	1097	1503	1999

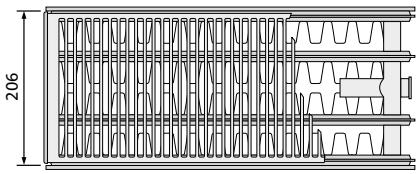
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	677	904	1263	1673
exponent n	1.3136	1.3176	1.3458	1.3396

PLINT RD

height 200

PLINT RD 44



RADIATOR DESCRIPTION - AN EXAMPLE : PLINT RD 44 200 x 1200

name
type
height
length

length [mm]	temperatures t_z / t_p / t_i	type			
		21 s	22	33	44
400	75/65/20 °C				
	55/45/20 °C				
500	75/65/20 °C				
	55/45/20 °C				
600	75/65/20 °C	322	430	598	793
	55/45/20 °C	165	219	301	400
700	75/65/20 °C	376	502	697	925
	55/45/20 °C	192	256	351	466
800	75/65/20 °C	430	574	797	1057
	55/45/20 °C	220	293	401	533
900	75/65/20 °C	483	645	896	1189
	55/45/20 °C	247	329	451	600
1000	75/65/20 °C	537	717	996	1321
	55/45/20 °C	275	366	501	666
1100	75/65/20 °C	591	789	1096	1453
	55/45/20 °C	302	402	551	733
1200	75/65/20 °C	644	860	1195	1585
	55/45/20 °C	329	439	601	800
1400	75/65/20 °C	752	1004	1394	1849
	55/45/20 °C	384	512	701	933
1600	75/65/20 °C	859	1147	1594	2114
	55/45/20 °C	439	585	801	1066
1800	75/65/20 °C	967	1291	1793	2378
	55/45/20 °C	494	658	902	1199
2000	75/65/20 °C	1074	1434	1992	2642
	55/45/20 °C	549	732	1002	1333
2300	75/65/20 °C	1235	1649	2291	3038
	55/45/20 °C	631	841	1152	1533
2600	75/65/20 °C	1396	1864	2590	3435
	55/45/20 °C	714	951	1302	1733
3000	75/65/20 °C	1611	2151	2988	3963
	55/45/20 °C	824	1097	1503	1999

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	677	904	1263	1673
exponent n	1.3136	1.3176	1.3458	1.3396

VERTICAL

The PURMO Vertical panel radiators are a vertical variant intended for installation on narrow and tall fragments of walls. The radiators are equipped with convection fins (except for the 10 and 20C types) and side covers (except for the 10 type). They have no top grille. Four bottom and two top G ½ " threaded female connectors allow for bottom (including central) or side connection. The radiator is not equipped with a built-in thermostatic valve insert.

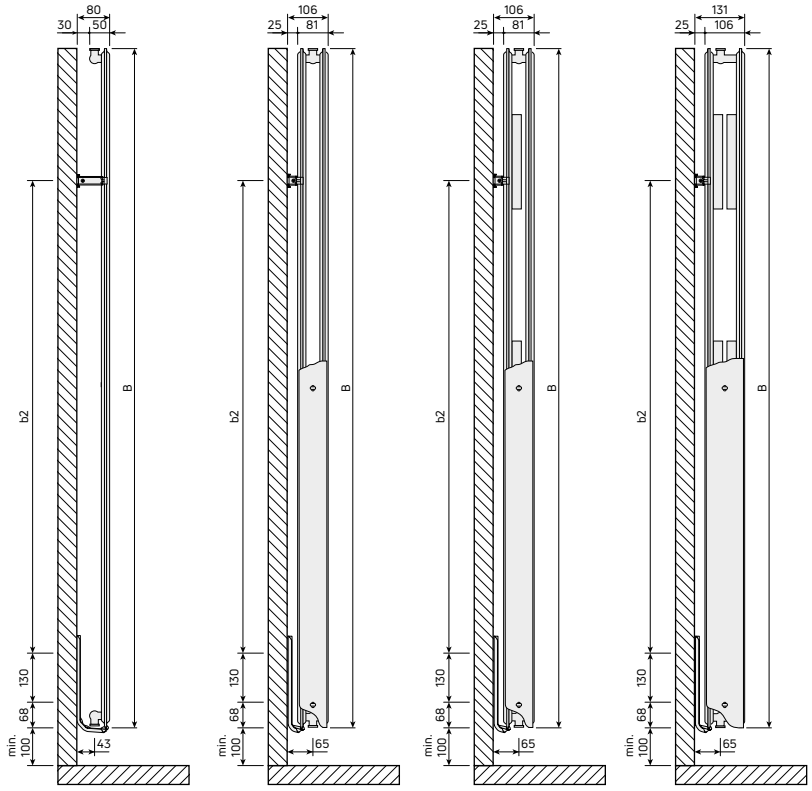
technical specifications

- Material : high quality, deep-drawing, low-carbon, cold rolled steel sheet in accordance with EN 10130.
- Spacing of vertical water channels : 50 mm
- Connections : 4 x G ½ " bottom, 2 x G ½ " top connectors – for the installation of a plug and an air vent.
- Working pressure : 6 bar

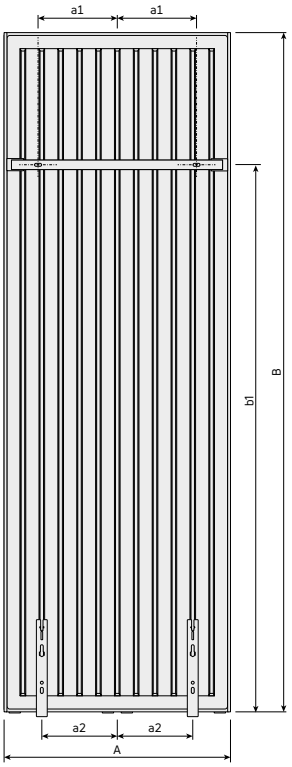
- Maximal temperature : 99 °C
- Test pressure : 8 bar
- Colour : RAL 9016 white, other colours from the RAL colour chart are available on request.
- Accessories bundled with the radiator : brackets, plug, air vent.

VERTICAL

side views



rear view



mounting distances

B [mm]	1500	1800	1950	2100	2300
b1 [mm]	1150	1450	1600	1750	1950
b2 [mm]	952	1252	1402	1552	1752

A [mm]	300	450	600	750
a1 [mm]	60	135	210	285
a2 [mm]	75	125	200	250

water volume and weight

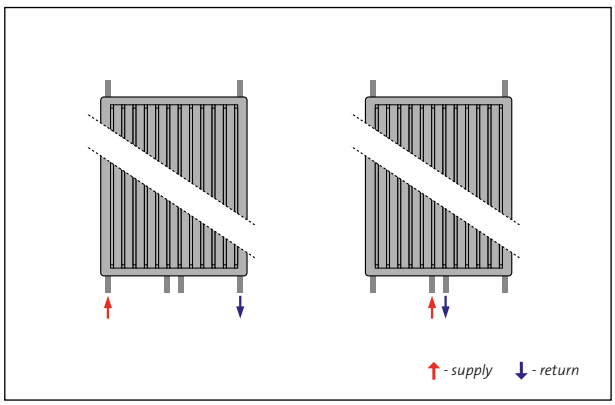
water volume : l/m

type \ height	1500	1800	1950	2100	2300
10	9.83	10.13	11.07	12.00	-
20C	-	21.83	23.78	25.65	-
21C	-	21.47	24.13	25.47	-
22C	-	21.60	23.13	24.67	26.67

weight : kg/m

type \ height	1500	1800	1950	2100	2300
10	31.33	37.47	38.67	40.13	-
20C	-	71.33	77.07	81.73	-
21C	-	78.20	83.98	89.53	-
22C	-	84.09	87.64	96.11	103.58

recommended connections



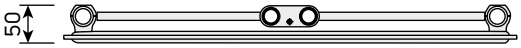
VERTICAL

type 10

RADIATOR DESCRIPTION - AN EXAMPLE : VERTICAL 10 1800 x 600

name
type
height
width

VERTICAL 10



Note! Pictorial drawing. The Vertical 10 has no side covers.

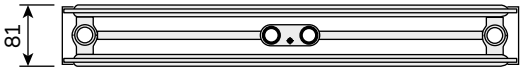
width [mm]	temperatures t_z / t_p / t_i	height [mm]			
		1500	1800	1950	2100
300	75/65/20 °C				
	55/45/20 °C				
450	75/65/20 °C	650	765	819	876
	55/45/20 °C	335	389	413	439
600	75/65/20 °C	867	1020	1092	1168
	55/45/20 °C	447	518	551	586
750	75/65/20 °C		1275	1365	1460
	55/45/20 °C		648	689	732
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.					
	[W/m] 90/70/20 °C	1831	2164	2323	2490
	exponent n	1.2976	1.3246	1.3381	1.3516

type 20C

RADIATOR DESCRIPTION - AN EXAMPLE : VERTICAL 20C 1800 x 600

name
type
height
width

VERTICAL 20C



width [mm]	temperatures t_z / t_p / t_i	height [mm]			
			1800	1950	2100
300	75/65/20 °C		819	877	935
	55/45/20 °C		420	448	477
450	75/65/20 °C		1229	1315	1403
	55/45/20 °C		629	672	716
600	75/65/20 °C		1638	1753	1870
	55/45/20 °C		839	896	954
750	75/65/20 °C		2048	2192	2338
	55/45/20 °C		1049	1120	1193
Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.					
	[W/m] 90/70/20 °C		3466	3713	3963
	exponent n		1.3094	1.3135	1.3176

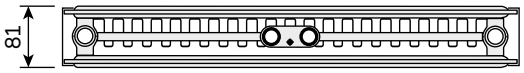
VERTICAL

type 21C

RADIATOR DESCRIPTION - AN EXAMPLE : VERTICAL 21C 1800 x 600

name
type
height
width

VERTICAL 21C



width [mm]	temperatures t_z / t_p / t_i	height [mm]			
			1800	1950	2100
300	**75/65/20 °C**		**963**	**1020**	**1081**
	55/45/20 °C		486	514	546
450	**75/65/20 °C**		**1445**	**1530**	**1621**
	55/45/20 °C		729	771	819
600	**75/65/20 °C**		**1926**	**2040**	**2162**
	55/45/20 °C		972	1028	1092
750	**75/65/20 °C**		**2408**	**2550**	**2702**
	55/45/20 °C		1215	1285	1365

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

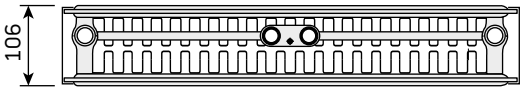
[W/m] 90/70/20 °C		**4097**	**4343**	**4598**
exponent n		**1.3384**	**1.3422**	**1.3371**

type 22C

RADIATOR DESCRIPTION - AN EXAMPLE : VERTICAL 22C 1800 x 600

name
type
height
width

VERTICAL 22C



The Vertical 22 type has all connectors positioned asymmetrically in reference to radiator panels.

width [mm]	temperatures t_z / t_p / t_i	height [mm]			
		1800	1950	2100	2300
300	**75/65/20 °C**	**1132**	**1192**	**1252**	**1332**
	55/45/20 °C	566	593	623	662
450	**75/65/20 °C**	**1698**	**1788**	**1877**	**1998**
	55/45/20 °C	849	889	934	993
600	**75/65/20 °C**	**2264**	**2384**	**2503**	**2663**
	55/45/20 °C	1132	1186	1245	1324
750	**75/65/20 °C**	**2830**	**2980**	**3129**	**3329**
	55/45/20 °C	1415	1482	1556	1656

Thermal output of the radiators [W] in accordance with EN 442 for parameters 75/65/20 °C and 55/45/20 °C.

[W/m] 90/70/20 °C	**4833**	**5093**	**5353**	**5696**
exponent n	**1.3566**	**1.3619**	**1.3672**	**1.3671**

Correction factors

heating medium temperature [°C]		value of the factor for selecting the heat output of the radiator at temperatures other than 75/65/20 °C							
		t_i air temperature in the heated room [°C]							
t_z	t_p	5	8	12	16	18	20	22	24
95	90	0.48	0.50	0.54	0.57	0.59	0.61	0.64	0.66
	85	0.50	0.52	0.56	0.60	0.62	0.64	0.67	0.70
	80	0.52	0.55	0.59	0.63	0.65	0.68	0.70	0.73
	75	0.54	0.57	0.61	0.66	0.69	0.72	0.75	0.78
	70	0.57	0.60	0.65	0.70	0.73	0.76	0.79	0.83
90	85	0.52	0.55	0.58	0.63	0.65	0.67	0.70	0.73
	80	0.54	0.57	0.61	0.66	0.68	0.71	0.74	0.77
	75	0.57	0.60	0.64	0.69	0.72	0.75	0.78	0.82
	70	0.59	0.63	0.67	0.73	0.76	0.80	0.83	0.87
	65	0.62	0.66	0.71	0.77	0.81	0.85	0.89	0.93
85	80	0.56	0.59	0.64	0.69	0.72	0.75	0.78	0.81
	75	0.59	0.62	0.67	0.72	0.75	0.79	0.82	0.86
	70	0.62	0.65	0.70	0.77	0.80	0.84	0.88	0.92
	65	0.65	0.69	0.75	0.81	0.85	0.89	0.94	0.99
	60	0.68	0.73	0.79	0.87	0.91	0.96	1.01	1.07
80	75	0.61	0.65	0.70	0.76	0.79	0.83	0.87	0.91
	70	0.64	0.68	0.74	0.81	0.84	0.88	0.93	0.97
	65	0.68	0.72	0.78	0.86	0.90	0.94	0.99	1.05
	60	0.72	0.76	0.83	0.91	0.96	1.01	1.07	1.13
	55	0.76	0.81	0.89	0.98	1.04	1.10	1.16	1.24
75	70	0.67	0.72	0.78	0.85	0.89	0.94	0.98	1.04
	65	0.71	0.75	0.82	0.90	0.95	**1.00**	1.05	1.12
	60	0.75	0.80	0.88	0.97	1.02	1.08	1.14	1.21
	55	0.80	0.85	0.94	1.04	1.10	1.17	1.24	1.32
	50	0.85	0.91	1.01	1.13	1.20	1.28	1.37	1.47
70	65	0.75	0.79	0.87	0.96	1.01	1.07	1.13	1.19
	60	0.79	0.84	0.93	1.03	1.08	1.15	1.22	1.30
	55	0.84	0.90	0.99	1.11	1.17	1.25	1.33	1.42
	50	0.89	0.96	1.07	1.20	1.28	1.37	1.47	1.58
65	60	0.83	0.89	0.98	1.10	1.16	1.23	1.31	1.40
	55	0.88	0.95	1.05	1.18	1.26	1.34	1.43	1.54
	50	0.94	1.02	1.14	1.29	1.37	1.47	1.59	1.71
60	55	0.94	1.01	1.13	1.27	1.36	1.45	1.56	1.68
	50	1.00	1.08	1.22	1.39	1.48	1.60	1.73	1.87
	45	1.08	1.17	1.33	1.53	1.65	1.78	1.94	2.13
55	50	1.07	1.16	1.31	1.50	1.62	1.75	1.90	2.07
	45	1.15	1.26	1.43	1.66	1.80	**1.96**	2.15	2.37
	40	1.25	1.37	1.59	1.86	2.03	2.24	2.48	2.78
50	45	1.23	1.36	1.56	1.82	1.98	2.17	2.40	2.67
	40	1.34	1.48	1.73	2.05	2.25	2.50	2.79	3.15
	35	1.47	1.65	1.94	2.36	2.63	2.96	3.38	3.92
45	40	1.45	1.62	1.90	2.28	2.53	2.83	3.19	3.66
	35	1.60	1.80	2.15	2.64	2.96	3.37	3.89	4.58
40	35	1.75	1.98	2.40	3.00	3.41	3.93	4.62	5.54
	30	1.96	2.25	2.79	3.61	4.21	5.01	6.14	7.87

The table has been prepared for n = 1.3

example:

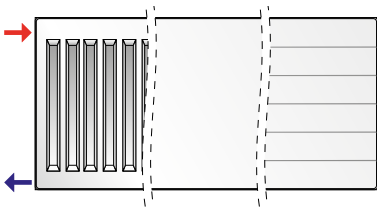
The calculated room heat demand is 800 W. For the supply water the designed temperature is 55 °C, and for the return water it is 45°C. The designed air temperature in the room is 20 °C. For the values of parameters 55/45/20 °C, the correction factor value of 1.96 is red off.

As a result of multiplying heat demand (800 W) by the correction factor (1.96), the value of heat output (800 W) by the correction factor (1.96), the value of heat output is found (1568 W). This value is used for selection of the radiator for the values of parameters 75/65/20 °C.

Connection methods

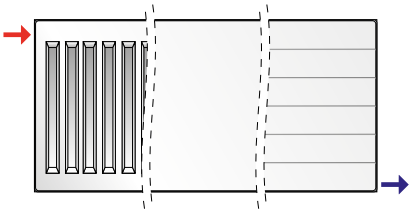
side connection

The most popular solution allowing for connecting radiators on either the right or the left side. The supply line should be connected to the top and the return line to the bottom connector pipe of the radiator. Reversed connection will cause a drop in the heat output of over 30%. This side connection method can be used in the side-supplied radiators as well as in the bottom-supplied radiators after the removal of a thermostatic valve insert. Next pages contain tables with the heat output of the radiators for the one-side connection.



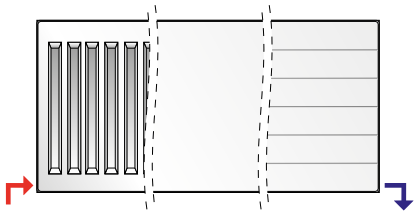
flow-through connection

Recommended for the radiators of length exceeding 2000 mm and also for the radiators of length exceeding four times their height.
These connections provide even distribution of temperature over the entire length of the radiator. The supply line should be connected to the left or right connector pipe and the return line should be connected to the opposite, bottom connector pipe. Reversed connection will cause a drop in the heat output of over 30%.
This flow-through connection method can be used in the side-supplied radiators as well as in the bottom-supplied radiators after the removal of a thermostatic valve insert.



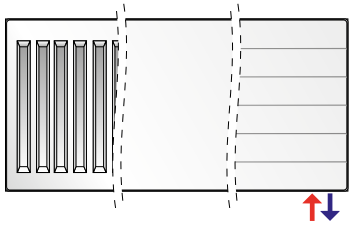
opposite ends connection

With this connection method, the heat output of the radiators will be approximately 10% lower than the rated heat output. This type of connection method is most commonly used with the side-supplied radiators when the heating system piping is distributed in skirting boards above the floor. It can also be used with the bottom-supplied radiators after the removal of a thermostatic valve insert.



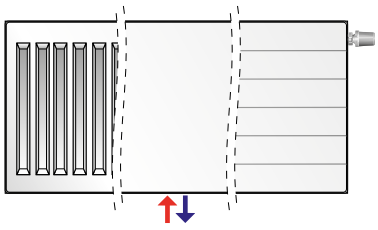
bottom connection

This connection method is used with the bottom-supplied radiators. The supply and return line axes are always located, respectively, 80 mm and 30 mm from the side edge of the radiator. Reversed connection will cause a drop in the heat output of over 30%.



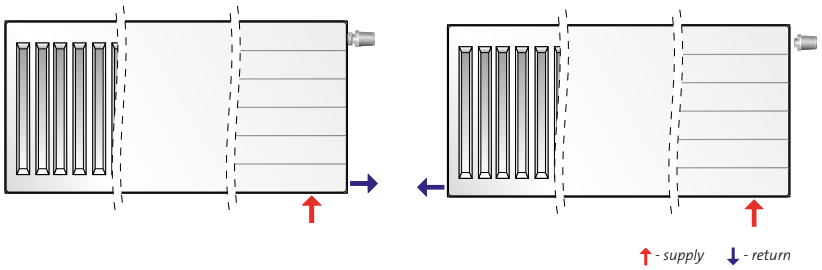
mid-bottom connection

This connection method is used with the bottom-supplied radiators. The advantage of the central bottom connection relies of the fact that regardless of the length, height and depth of the radiator, the layout of heating system connections can be defined at the building shell stage and it will not change as a result of the selection of a specific size and type of the radiator. Reversed connection will cause a drop in the heat output of over 30%.



intermediate connection

The bottom-supplied radiators can be connected simultaneously with the side and bottom connections. Possible are intermediate solutions presented at the drawings: side and flow-through. These solutions correspond to the side and flow-through connections described above.



Hydraulic characteristics

The value of pressure drop in the radiator depends on the mass flow of water flowing through.

For the single panel radiators, the value of pressure drop in the radiator can be determined with the following formula:

$\Delta p = 0.0160 \times q^2$ kv = 2.5 m^3/h

For the multiple panel radiators, the value of pressure drop in the radiator can be determined with the following formula:

$\Delta p = 0.0105 \times q^2$ kv = 3.1 m^3/h

where:

Δp - the drop of water flowing through the radiator in pascals [Pa]

q - the mass flow of water flowing through the radiator in kilograms per hour [kg/h]

For the bottom-supplied radiators equipped with a built-in valve insert, the hydraulic characteristics is determined for a set consisting of the radiator and the valve insert.

Starting from January 2011 all the bottom-supplied PURMO panel radiators are equipped with new valve Oventrop inserts with factory preset setpoint ranging from 2 to 6 depending on the size (heat output) of the particular radiator.

In order to provide an easy, visual distinction of the applied valve insert, colour coding of regulatory elements of the valve inserts was implemented.

preset setpoint	kv [m3/h]	colour	catalogue no.
2	0.13	white	165 11 62
3	0.27	black	165 11 63
4	0.42	green	165 11 64
5	0.56	blue	165 11 65
6	0.70	red	165 11 66

The hydraulic characteristics of these new valve inserts are very similar to the old type (catalogue no. 101 80 80).

Should a need arise, the setpoint of every new valve insert can be changed, just like in the case of the old type inserts.

Total length of the new valve inserts was modified due to an improved sealing, therefore they cannot be used in the radiators manufactured prior to January 2011 and equipped with the old-type of valve inserts.

old-type insert

new-type insert

series of new-type inserts

Hydraulic characteristics

example of preset setpoint selection

given:

heat demand

Q_c = 1160 W

temperature difference

Δt = 20 K (np: 80/60 °C)

pressure drop

Δp = 6 kPa = 6000 Pa

calculation constant

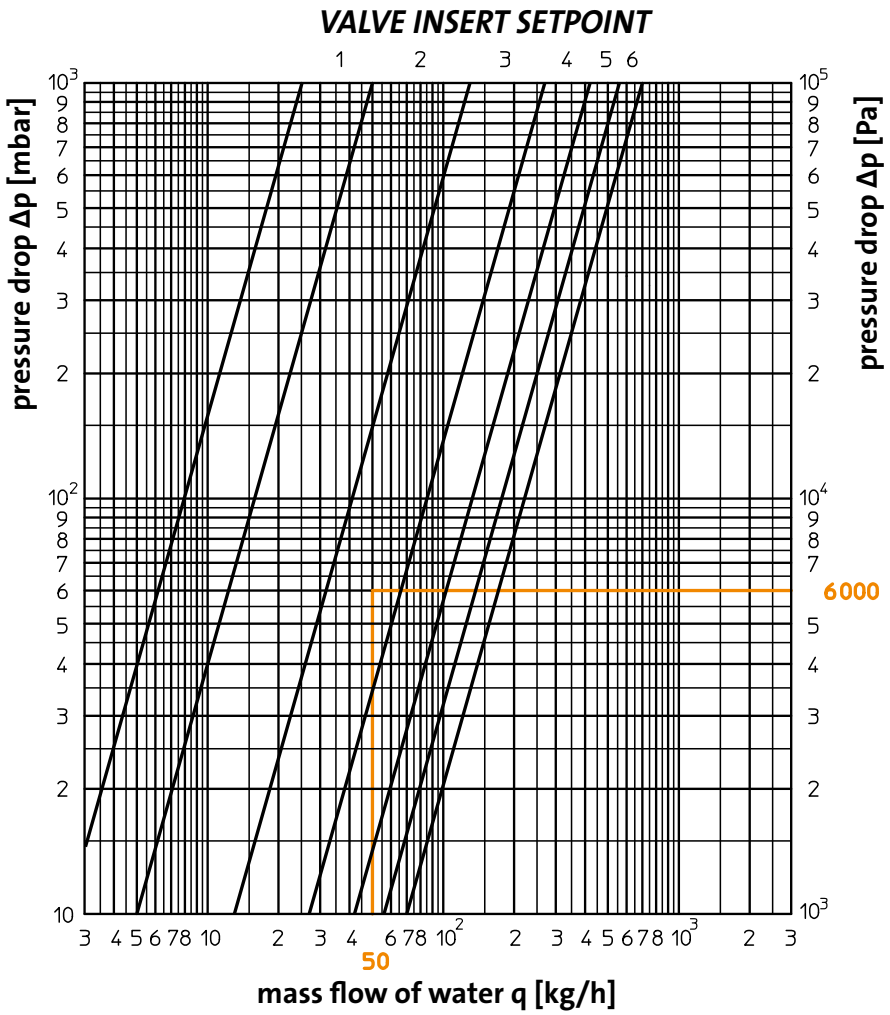
C = 1.163

calculations:

mass flow of water

$$q = \frac{Q_c}{C \times \Delta t} = \frac{1160}{1.163 \times 20} = 50 \text{ kg/h}$$

For the flow q = 50 kg/h and the pressure flow 6000 Pa the preset setpoint value 3 is red off the nomogram.



proportionality deviation	2K					
preset setpoint	1	2	3	4	5	6
kv [m³/h]	0.05	0.13	0.27	0.42	0.56	0.70

Hydraulic characteristics of a bottom-supplied radiator with the Oventrop valve insert

Thermostatic heads for radiators

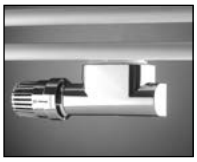
For proper operation, the panel radiators with a built-in valve insert require an appropriate thermostatic head.
Examples of types and manufacturers of thermostatic heads compatible with the new Oventrop valve inserts.

MANUFACTURER	CATALOGUE NUMBER
Purmo Sensor	AZ02HESENSOM3030
Purmo Evosense (white)	AZ02HE5010283000
Purmo Evosense (black)	AZ02HE5050283000
Comap Senso RI	100 100
Danfoss RAW-K 5135	013G5135
Heimeier K	6000-00.500, 6020-00.500 6040-00.500
Heimeier DX	6700-00.500
Heimeier D	6850-00.500
Heimeier B	2500-00.500, 2502-00.500
Heimeier WK	7300-00.500
Heimeier VD	7400-00.500
Herz Classic „H"	1 7260 98, 1 9260 98, 1 7330 98, 1 9330 98
Herz Mini „H"	1 9200 68, 1 9200 38

MANUFACTURER	CATALOGUE NUMBER
Herz Herzcules „H"	1 9860 98
Honeywell Thera 2	T9001H(...), T9001W(...), T9001 08, T9001 20, T9001 50
Honeywell Thera 3	T6001H(...), T6001W(...), T6001 08, T6001 20, T6001 50
Honeywell Thera 4	T3001, T2001
Oventrop UNI XH	101 1365
Oventrop UNI LH	101 1465, 67, 68, 69
Oventrop UNI CH	101 1265
Oventrop UNI DH	101 1065
Oventrop UNI SH	101 2065
Schlosser Diamant	6001 00001
Schlosser Brillant	6002 0000 (...)
Valvex GZ 05A	4440010, 4440410
Valvex GZ 07A	4445000

The PURMO Vertical radiators are not equipped with any valve insert. They can be connected through special combined thermostatic valve assemblies with 50 mm spacing.
Examples of types and manufacturers are presented in the table.

MANUFACTURER	CATALOGUE NUMBER	
	VALVE	HEAD
Danfoss VHX-DUO + RAX	013G4281 – white finishing RAL9016 013G4279 – chromium plated finishing	
Heimeier Multilux	3851-02.000 3850-02.000	as for the panel radiators with a valve insert
Herz	1 3692 91 1 3694 91	1 9260 06, 1 7260 06, 1 9200 60, 1 7260 40
Honeywell Therafix	V2474YE0015 V2474YD0015	as for the panel radiators with a valve insert
Oventrop Multiblock T	118 40 83 118 40 84	as for the panel radiators with a valve insert
Schlosser Duo-plex	6021 00001, 6021 00003, 6021 00005, 6021 00007	as for the panel radiators with a valve insert

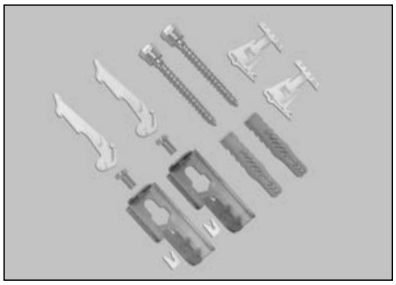


mounting distances

The distances from the radiator to the floor and to the cill board should be at least 100 mm. If maintaining these distances is not possible, they can be reduced to 70-100 mm from the floor and the cill board, provided the heat output of the radiator is increased by 5-10%. If these distances are smaller than 70 mm, lower height radiators must be used. The radiator must be installed in its factory packaging. If the heating system is used for heating during finishing works or for drying, the radiator should stay in its packaging. If the packaging was destroyed, the radiator must be protected from fouling in some other way. It is recommended to remove the packaging after the completion of all finishing works. Pipe branches should be shaped in a manner preventing any stress from occurring after connecting and fastening of fittings. Bending of the pipe branch with a radiator installed, heating the radiator with a burner or a blowtorch and performing other activities imposing a risk of deformation of the radiator or its paint coating is not allowable.

Accessories

description

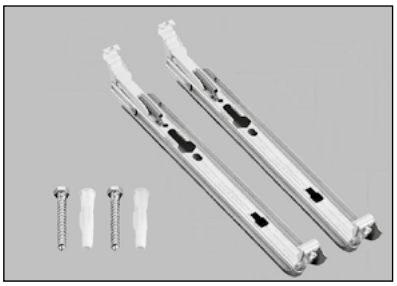


a set of brackets for the panel radiators with hanging lugs and the height of 300 - 900 mm - types:
C 11, C 21s, C 22, C 33 · CV 11 · CVM 11 · FC 11, FC 21s, FC 22, FC 33
FCV 11 · FCVM 11 · RC 11, RC 21s, RC 22, RC 33 · RCV 11 · RCVM 11

Radiator-to-wall distance – 30 mm.
Maximal load of a single bracket:
vertically – 120 kg
pulling – 60 kg

Bundled with the radiator

panel radiator length mm	quantity of brackets
400 - 1600	2
1800 - 3000	3

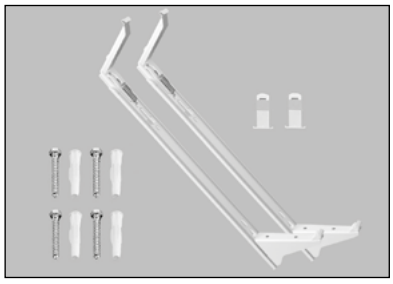


a set of the Monclac MCA-D rail brackets for the panel radiators without hanging lugs and the height of 300 - 900 mm - types:
CV 21s, CV 22, CV 33 · CVM 21s, CVM 22, CVM 33
FCV 21s, FCV 22, FCV 33 · FCVM 21s, FCVM 22, FCVM 33
RCV 21s, RCV 22, RCV 33 · RCVM 21s, RCVM 22, RCVM 33

Radiator-to-wall distance – 25 mm.
Maximal load of a single bracket:
vertically – 180 kg
pulling – 35 kg

Bundled with the radiator

panel radiator length mm	quantity of brackets
400 - 1600	2
1800 - 3000	3



a set of the Monclac MCK-108 for the panel radiators - types:

H 10, H 20, H 30 • HV 10, HV 20, HV 30 • FH 10, FH 20, FH 30
FHV 10, FHV 20, FHV 30

Outreach of the MONCLAC MCK type bracket – 108 mm.
Maximal load of a single bracket MONCLAC MCK – 108:
vertically – 125 kg
pulling – 35 kg

To be ordered separately

floor brackets for the 21s, 22, 33 type panel radiators and the height of 300 - 900 mm:

Radiator-to-wall distance: any.
Maximal load of a single column:
vertically – 180 kg
pulling – 35 kg

order code: **AZ02BS1WEM817H01** (1 pc)

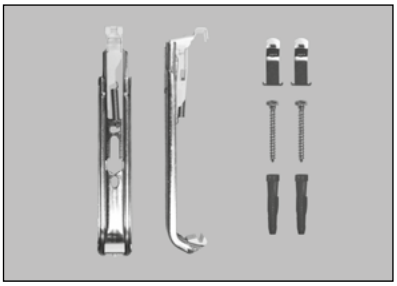
height 300 - 600 mm		height 900 mm	
panel radiator length mm	quantity of floor brackets	panel radiator length mm	quantity of floor brackets
400 - 1800	2	400 - 1200	2
2000 - 2300	3	1400 - 1800	3
2600 - 3000	4	2000 - 3000	4

the PURMO-AIR ventilation set for the panel radiators with convection fins:

AIR 21 - ventilation set casing (use with the 21 type)
order code: **AZ28VVAIR2100000**
AIR 22 - ventilation set casing (use with the 22 and 33 type)
order code: **AZ28VVAIR2200000**
AIRF 200 - F9 class air filter. Matches every casing type
order code: **AZ28VVAIRF200000**
Ventilation set must contain a casing appropriate for the radiator + a filter.
NOTE! Do not use with the mid-connection panel radiators.

Accessories

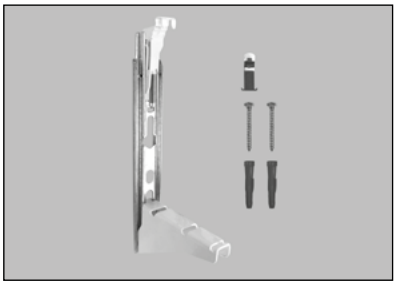
description



a set of the Monclac MCA-D rail brackets for the panel radiators without hanging lugs and the height of 200 mm - types: 21s and 22 (Plint, Plint P, Plint R)

order code:
AZ02BW2MC2002201
(2 pcs in a set)
and
order code:
AZ02BW3MC2002201
(3 pcs in a set)

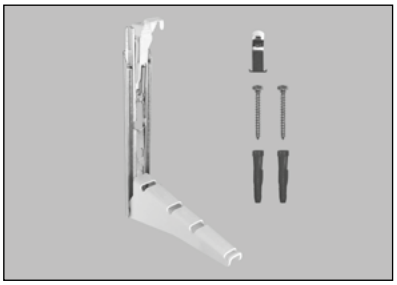
height 200 mm	
panel radiator length mm	quantity of brackets
600 - 1600	2
1800 - 2300	3
2600 - 3000	4



the Monclac MCA-Q type 33 for the panel radiators without hanging lugs and the height of 200 mm – types: 33 (Plint, Plint P, Plint R)

order code:
AZ02BW1MC2003301 (1 pc)

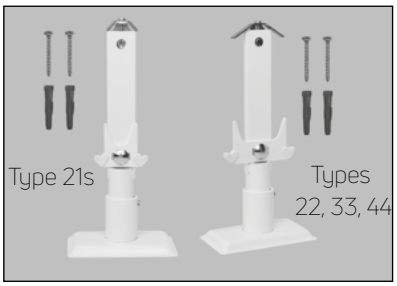
height 200 mm	
panel radiator length mm	quantity of brackets
600 - 1600	2
1800 - 2300	3
2600 - 3000	4



the Monclac MCA-Q type 44 for the panel radiators without hanging lugs and the height of 200 mm – types: 44 (Plint, Plint P, Plint R)

order code:
AZ02BW1MC2004401 (1 pc)

height 200 mm	
panel radiator length mm	quantity of brackets
600 - 1600	2
1800 - 2300	3
2600 - 3000	4



order code:
AZ02BS120021S001

order code:
AZ02BS1200224401

the floor brackets for the panel radiators of height 200 mm: 21s, 22, 33, 44 (Plint, Plint P, Plint R, Plint PD, Plint RD)

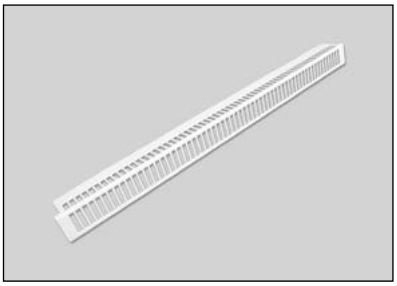
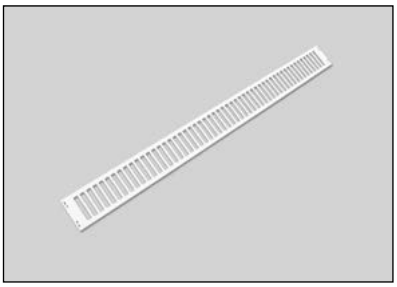
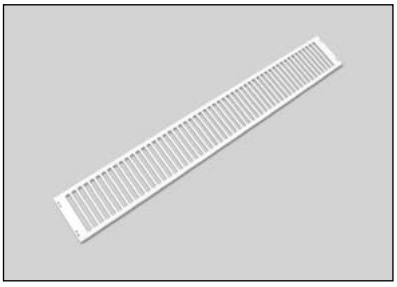
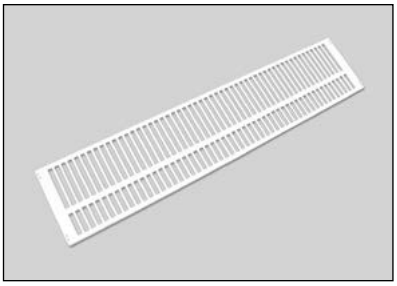
Radiator-to-wall distance: any.
Maximal load of a single column:
vertically – 200 kg
pulling – 35 kg

height 200 mm	
panel radiator length mm	quantity of floor brackets
600 - 1600	2
1800 - 2300	3
2600 - 3000	4

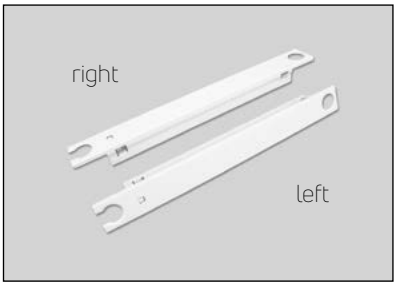
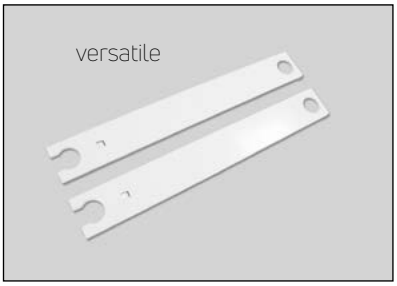
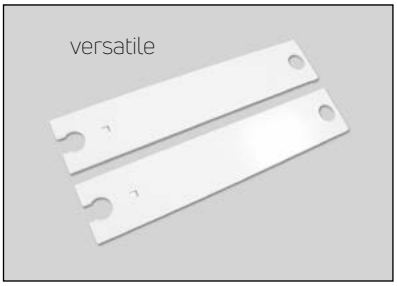
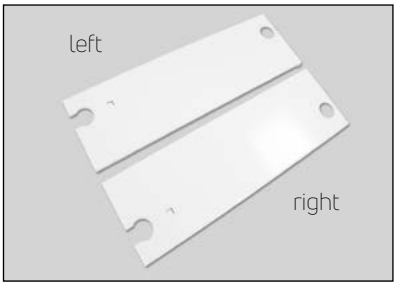
application range of wall and floor brackets for the panel radiators of height 200 mm:

panel radiator	type 21s		type 22		type 33		type 44	
	wall-mounted	floor-mounted	wall-mounted	floor-mounted	wall-mounted	floor-mounted	wall-mounted	floor-mounted
Plint	x	x	x	x	x	x	x	x
Plint P	x	x	x	x	x	x	x	x
Plint R	x	x	x	x	x	x	x	x
Plint PD		x		x		x		x
Plint RD		x		x		x		x

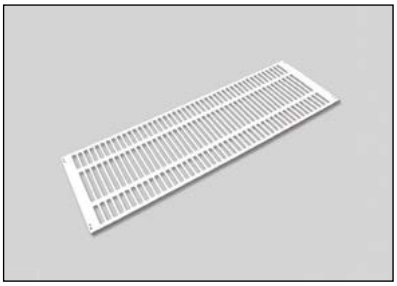
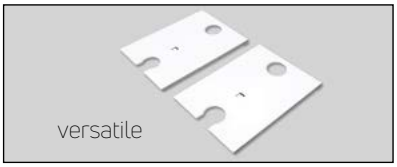
Accessories

	description	order code
	**Purmo top grille for type 11**	
	40 cm	A06110000401TG00
	50 cm	A06110000501TG00
	60 cm	A06110000601TG00
	70 cm	A06110000701TG00
	80 cm	A06110000801TG00
	90 cm	A06110000901TG00
	100 cm	A06110001001TG00
	110 cm	A06110001101TG00
	120 cm	A06110001201TG00
	140 cm	A06110001401TG00
	160 cm	A06110001601TG00
	180 cm	A06110001801TG00
	200 cm	A06110002001TG00
	230 cm	A06110002301TG00
	260 cm	A06110002601TG00
	300 cm	A06110003001TG00
	**Purmo top grille for type 21s**	
	40 cm	A06210000403TG00
	50 cm	A06210000503TG00
	60 cm	A06210000603TG00
	70 cm	A06210000703TG00
	80 cm	A06210000803TG00
	90 cm	A06210000903TG00
	100 cm	A06210001003TG00
	110 cm	A06210001103TG00
	120 cm	A06210001203TG00
	140 cm	A06210001403TG00
	160 cm	A06210001603TG00
	180 cm	A06210001803TG00
	200 cm	A06210002003TG00
	230 cm	A06210002303TG00
	260 cm	A06210002603TG00
	300 cm	A06210003003TG00
	**Purmo top grille for type 22**	
	40 cm	A06220000401TG00
	50 cm	A06220000501TG00
	60 cm	A06220000601TG00
	70 cm	A06220000701TG00
	80cm	A06220000801TG00
	90 cm	A06220000901TG00
	100 cm	A06220001001TG00
	110 cm	A06220001101TG00
	120 cm	A06220001201TG00
	140 cm	A06220001401TG00
	160 cm	A06220001601TG00
	180 cm	A06220001801TG00
	200 cm	A06220002001TG00
	230 cm	A06220002301TG00
	260 cm	A06220002601TG00
	300 cm	A06220003001TG00
	**Purmo top grille for type 33**	
	40 cm	A06330000401TG00
	50 cm	A06330000501TG00
	60 cm	A06330000601TG00
	70 cm	A06330000701TG00
	80 cm	A06330000801TG00
	90 cm	A06330000901TG00
	100 cm	A06330001001TG00
	110 cm	A06330001101TG00
	120 cm	A06330001201TG00
	140 cm	A06330001401TG00
	160 cm	A06330001601TG00
	180 cm	A06330001801TG00
	200 cm	A06330002001TG00
	230 cm	A06330002301TG00
	260 cm	A06330002601TG00
	300 cm	A06330003001TG00

Accessories

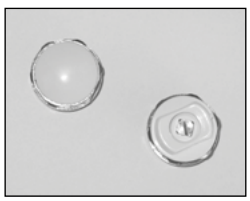
	description	order code
	**Purmo side panel for type 11**	
	30 cm right	A06110300001SP00
	30 cm left	A06110300001SP10
	40 cm right	A06110400001SP00
	40 cm left	A06110400001SP10
	45 cm right	A06110450001SP00
	45 cm left	A06110450001SP10
	50 cm right	A06110500001SP00
	50 cm left	A06110500001SP10
	55 cm right	A06110550001SP00
	55 cm left	A06110550001SP10
	60 cm right	A06110600001SP00
	60 cm left	A06110600001SP10
	90 cm right	A06110900001SP00
	90 cm left	A06110900001SP10
	**Purmo side panel for type 21s**	
	20 cm	A06210200003SP00
	30 cm	A06210300003SP00
	40 cm	A06210400003SP00
	45 cm	A06210450003SP00
	50 cm	A06210500003SP00
	55 cm	A06210550003SP00
	60 cm	A06210600003SP00
	90 cm	A06210900003SP00
	**Purmo side panel for type 22**	
	20 cm	A06220200001SP00
	30 cm	A06220300001SP00
	40 cm	A06220400001SP00
	45 cm	A06220450001SP00
	50 cm	A06220500001SP00
	55 cm	A06220550001SP00
	60 cm	A06220600001SP00
	90 cm	A06220900001SP00
	**Purmo side panel for type 33**	
	20 cm right	A06330200001SP00
	20 cm left	A06330200001SP10
	30 cm right	A06330300001SP00
	30 cm left	A06330300001SP10
	40 cm right	A06330400001SP00
	40 cm left	A06330400001SP10
	45 cm right	A06330450001SP00
	45 cm left	A06330450001SP10
	50 cm right	A06330500001SP00
	50 cm left	A06330500001SP10
	55 cm right	A06330550001SP00
	55 cm left	A06330550001SP10
	60 cm right	A06330600001SP00
	60 cm left	A06330600001SP10
	90 cm right	A06330900001SP00
	90 cm left	A06330900001SP10

Accessories

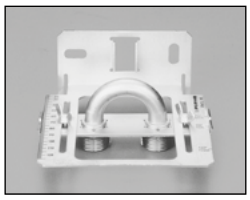
	description	order code
	**Purmo top grille for type 44** 60 cm 70 cm 80 cm 90 cm 100 cm 110 cm 120 cm 140 cm 160 cm 180 cm 200 cm 230 cm 260 cm 300 cm	 A06440000601TG00 A06440000701TG00 A06440000801TG00 A06440000901TG00 A06440001001TG00 A06440001101TG00 A06440001201TG00 A06440001401TG00 A06440001601TG00 A06440001801TG00 A06440002001TG00 A06440002301TG00 A06440002601TG00 A06440003001TG00
	**Purmo side panel for type 44** 20 cm	 A06440200001SP00

	description	dimensions	order code
	**Thermostatic head Purmo Sensor**	**M30x1.5**	AZ02HESENSOM3030
	**Thermostatic head Purmo evosense** white black	**M30x1.5**	 AZ02HE5010283000 AZ02HE5050283000
	**Electronic thermostatic radiator head TempCo TH E3** **Battery power supply 2xAA**		FAWBANC0CNN31000
	**radiator connection valve** double, straight, nickel plated **radiator connection valve** double, angle, nickel plated	¾" by ½" ¾" by ½"	AZ03TP004001300SNICK AZ03TP004001290SNICK

Accessories

	description	dimensions	order code
	**valve insert - new model (no: 165 11 62)** for panel radiators with bottom connections - production started from the beginning of 2011 **Colour: white** Initial presetting:: 2 (kv=0.13) Presseting range: 1 - 6 (kv=0.05 to 0.70)		AZ02VEOV013WHI00
	**valve insert - new model (no: 165 11 63)** for panel radiators with bottom connections - production started from the beginning of 2011 **Colour: black** Initial presetting:: 3 (kv=0.27) Presseting range: 1 - 6 (kv=0.05 to 0.70)		AZ02VEOV027BLA00
	**valve insert - new model (no: 165 11 64)** for panel radiators with bottom connections - production started from the beginning of 2011 **Colour: green** Initial presetting:: 4 (kv=0.42) Presseting range: 1 - 6 (kv=0.05 to 0.70)		AZ02VEOV042GRE00
	**valve insert - new model (no: 165 11 65)** for panel radiators with bottom connections - production started from the beginning of 2011 **Colour: blue** Initial presetting:: 5 (kv=0.56) Presseting range: 1 - 6 (kv=0.05 to 0.70)		AZ02VEOV056BLU00
	**valve insert - new model (no: 165 11 66)** for panel radiators with bottom connections - production started from the beginning of 2011 **Colour: red** Initial presetting:: 6 (kv=0.70) Presseting range: 1 - 6 (kv=0.05 to 0.70)		AZ02VEOV070RED00
	**valve insert - former model (no: 101 80 80)** for panel radiators with bottom connections - production stopped at the end of 2010, **Colour: black** Initial presetting:: 6 (kv=0.70) Presseting range: 1 - 6 (kv=0.05 to 0.70) ***NOTE: The new models of valve inserts cannot be replaced by the former ones (and vice versa) due to some construction differences of their bodies,***		AZ02VEO101808000
	**key for pre-setting**		AZ02ZZKLUNASOV00
	**blind plug and air-vent**		AZ02PLP400000000

Accessories

	description	dimensions	order code
	**key for air-vent**		QWR2MGGEU4BRELOK
	**assembly set for bottom connected radiators**		AZ02ZZSZABLONG01
	**touch up paint RAL 9016**		AZ03PA0070901630
	**spray RAL 9016**		AZ02PASPRAYWHI0R9016

	description	type	dimensions	order code
	**towel rail** for the PURMO Vertical radiators, Colour: RAL 9016 white,	20C, 21C, 22C	300 mm	AZ04TRV590300000
			450 mm	AZ04TRV590450000
			600 mm	AZ04TRV590600000
			750 mm	AZ04TRV590750000

Special version radiators

Conditions for using the PURMO steel panel radiators contained in technical files and warranty conditions expressly and clearly specify the types of spaces for installation of regularly protected panel radiators without the loss of warranty.

For rooms where standard panel radiators are not recommended due to adverse conditions which would cease the warranty, special versions of radiators are available.

These are **Purmo Compact (C), Purmo Ventil Compact (CV), Purmo Ventil Compact M (CVM), Purmo Hygiene (H), Purmo Ventil Hygiene (HV)** and **Plint** with additional corrosion protection applied to the radiator before final painting and intended primarily for rooms with increased moisture content, such as: bathrooms, public toilets and others where there may be harmful effects moisture in the air and other corrosive substances. **NOTE:** They are not intended to use at swimming pools areas.

The surface protection process is based on the galvanizing process, which is one of the most important processes in the entire production cycle of the radiator.

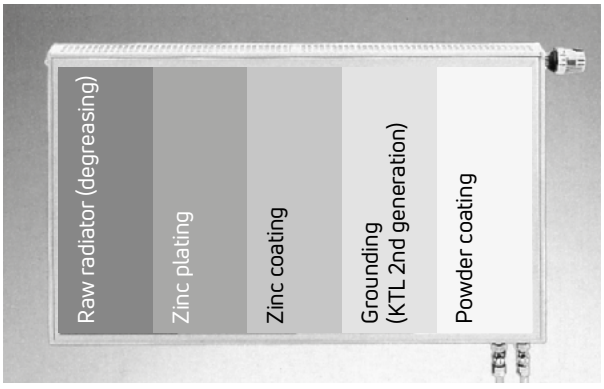
It consists in applying a fine-crystalline layer of zinc on the surface of the radiator and then it is additionally phosphated with zinc. Such a coating guarantees excellent adhesion of the next layer applied, i.e. the cataphoretic priming coat, but most importantly, it provides very good protection of the substrate against corrosion in the event of damage to external varnish coatings.

The radiators **Purmo Compact (C), Purmo Ventil Compact (CV), Purmo Ventil Compact M (CVM), Purmo Hygiene (H), Purmo Ventil Hygiene (HV)** in a version with additional corrosion protection are available on request in the same range of heights, i.e. from 300 to 900 mm and lengths from 400 to 3000 mm. **Plint** radiators in the version with additional corrosion protection are available on request 200 mm of height and 600 mm of length to 3000 mm. Suspensions for radiators in a special version are also made with additional corrosion protection.

The special, galvanized models of radiators are available for additional surcharge in comparison to the same size standard versions.

Heat output of these radiators is the same regardless of version: standard or with the additional protection.

The special versions of radiators installed in spaces with increased moisture content are covered by a **6 year warranty**.



Radiator surface preparation

About our company

The integrated quality and environmental management system in accordance with ISO 9001 and ISO 14001 implemented in our company are certified by the British Standards Institution.

bsi.

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that: Purmo Group Poland Sp. z o.o.
ul. Przemysłowa 11
Rybnik
44-203
Poland

Holds Certificate No: **FM 32533**

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Production, sales and delivery of steel radiators for central heating.

For and on behalf of BSI:

Andrew Launn, EMEA Systems Certification Director

Original Registration Date: 1995-10-13
Latest Revision Date: 2021-09-29

Effective Date: 2021-10-08
Expiry Date: 2024-10-07

Page: 1 of 1

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

bsi.

Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that: Purmo Group Poland Sp. z o.o.
ul. Przemysłowa 11
Rybnik
44-203
Poland

Holds Certificate No: **EMS 75685**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

Production, sales and delivery of steel radiators for central heating.

For and on behalf of BSI:

Andrew Launn, EMEA Systems Certification Director

Original Registration Date: 2003-10-30
Latest Revision Date: 2021-09-29

Effective Date: 2021-10-08
Expiry Date: 2024-10-07

Page: 1 of 1

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

Purmo Group.

This company of the Finnish origin is the biggest manufacturer of radiators in Poland and Europe. High quality materials and a partnership backed by actions are the key to our company success. Our radiators proved themselves in the tough climate of Northern Scandinavia. Throughout 50 years of our operation we have earned recognition on the European markets as well as in countries on other continents.

This allows us to provide services for small undertakings with commitment as high as for large ones. The Purmo Group company owes its image to the Polish managers and engineers. Experienced and highly qualified regional managers maintain constant contact with sales units, designers, fitters and investors while caring for the top quality of customer service.

In Poland, we currently employ over 750 employees. We invest in our future staff by cooperating with academic centres in the country. We organize training for designers and fitters. All of this we do, because we care for the satisfaction of our customer who can always count on us.

Purmo Group colour palette

STANDARD COLOUR

RAL 9016 Traffic white

RAL COLOURS

RAL 1004 Golden yellow	RAL 1012 Lemon yellow	RAL 1023 Traffic yellow	RAL 1027 Curry yellow	RAL 1033 Dahlia yellow	RAL 2003 Pastel orange	RAL 2004 Pure orange	RAL 3000 Flame red
RAL 3005 Wine red	RAL 3014 Antique pink	RAL 3015 Light pink	RAL 4002 Red violet	RAL 4007 Purple violet	RAL 4008 Signal violet	RAL 4009 Pastel violet	RAL 5001 Green blue
RAL 5002 Ultramarine blue	RAL 5009 Azure blue	RAL 5014 Pigeon blue	RAL 5015 Sky blue	RAL 5017 Traffic blue	RAL 5022 Night blue	RAL 6004 Blue green	RAL 6019 Pastel green
RAL 6033 Mint turquoise	RAL 6034 Pastel turquoise	RAL 7001 Silver grey	RAL 7013 Brown grey	RAL 7015 Slate grey	RAL 7016 Anthracite grey	RAL 7021 Black grey	RAL 7024 Graphite grey
RAL 7030 Stone grey	RAL 7035 Light grey	RAL 7037 Dusty grey	RAL 7040 Window grey	RAL 8017 Chocolate brown	RAL 8019 Grey brown	RAL 9001 Cream	RAL 9005 Jet black
RAL 9006 White aluminium	RAL 9007 Grey aluminium	RAL 9010 Pure White	RAL 040 80 05 Caffé Latte (S0222)	RAL 120 70 70 E-Green (S0221)	RAL 120 80 60 Modern green (S0220)	RAL 150 60 60 Green Apple (S0219)	RAL 250-2 Lemon Glow (S0182)
RAL 290 40 45 Mystic Purple (S0185)	RAL 290 70 20 Mauve Haze (S0178)						

SPECIAL COLOURS

S0075 Jasmine	S0077 Magnolia	S0084 Anemone	S0087 Bahama beige	S0088 Manhatten	S0091 Pergamon	S0094 Natura	S0164 Banana
S0102 Metal Grey [2]	S0104 Metal Black [2]	S0141 Black Textured [1]	S0142 White Textured [1]	S0143 Light Grey	S0144 Brown Grey	S0145 Creme White	S0146 Anodic Bronze
S0147 Anodic Brown	S0148 Anodic Black	S0149 Anodic Natura	S0201 Metal Alu [2]				

[1] textured colour
[2] metallic colour

Colours presented here should be considered as demonstrative. Before purchase, the colours should be selected based on the original colour chart only. The manufacturer is not responsible for the selection of colours based on materials printed or displayed on a computer display.

NOTE!!! Different types of radiators can have different shades of the same colour.

In case of a radiator in a color other than RAL9016, the air vent, the plug(s), the plastic clip on the side cover and the upper grill fixing element is in silver color RAL9006. This also applies to the upper part of the Monclac wall brackets (change to be effective from the first half of 2022).

PURMO_catalogue_PR_10_2021_EN_PL

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PURMO