






# VONARIS-M CENTRAL-CONNECTION RADIATOR



**DIE neue WÄRME**

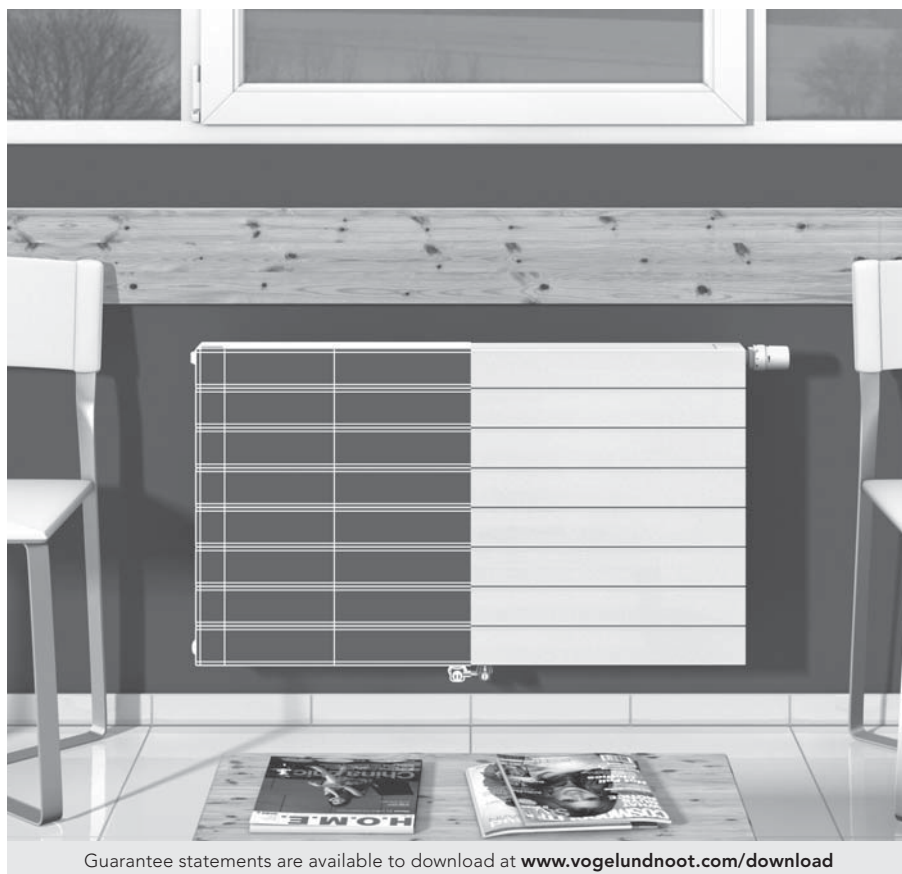
**Connections:**  
Horizontal design: 2 x external thread G 3/4", bottom centre

Vertical design: 2 x external thread G 3/4", bottom centre

**5 bar max.** **Maximum positive operating pressure**  
Standard design: **5 bar**

**8 bar max.** **Maximum positive operating pressure:**  
High-pressure design: **8 bar**

**110°C max.** **Maximum operating temperature: 110° C**



Guarantee statements are available to download at [www.vogelundnoot.com/download](http://www.vogelundnoot.com/download)

**VONARIS:** the central-connection radiator in a fully welded horizontal design, with from 1 to 4 layers of steel rectangular water-flow pipes, arranged one-behind-the-other, each layer consisting of from 2 to 11 pipes arranged one-above-the-other. Vertical design with 1 or 2 layers of steel rectangular water-flow pipes, arranged one-behind-the-other, each layer consisting of from 3 to 12 steel pipes, arranged side-by-side.

A 2 mm space between the heating pipes guarantees additional resistance to corrosion. **VONARIS** central-connection radiators are equipped with a built-in valve set, suitable for either double-pipe or single-pipe operation, using a one-pipe manifold, with a factory-fitted valve (already installed) and protective cap.

Vertical central-connection radiators are delivered with a connection set, including a factory-fitted valve, a protective cap and a cover. Depending on the customer's preferences they will also be ready for double-pipe or

single-pipe operation and for angled or through-flow connection. **VONARIS** central-connection radiators are usually delivered with side panels. The horizontal design also comes equipped with a top cover. With the **VONARIS** central-connection radiators, brackets are not included as a matter of course (exception: VHV-M 11, where brackets are included).

The **VONARIS** central-connection radiator comes with a drain plug and a pivoting vent plug (with the vertical design, also two dummy plugs), all of them factory-sealed. **VONARIS** central-connection radiators are Design radiators that are ready to connect.

**Standard design:** rectangular steel pipes, 70 x 11 x 1.5 mm

**High-pressure design:** rectangular steel pipes, 70 x 11 x 2.0 mm

**Dimensions:**

Horizontal design: overall lengths between 500 mm and 1400 mm are available (at increments of 100 mm), and between 1600 mm and 2400 mm

(at increments of 200 mm)

Horizontal design: the available overall heights are 142, 214, 286, 358, 430, 502, 574, 646 and 790 mm

Vertical design: overall lengths between 214 mm and 862 mm are available

(at increments of 72 mm)

Vertical design: overall heights of 1600, 1800 and 2000 mm are available.

**Coatings:**

1. Undercoat: electrophoretic, using water-soluble paints, conforming to DIN 55900 part 1, stoved at 165° C;
2. Finish: electrostatic powder coating, conforming to DIN 55900 part 2, in a state-of-the-art facility. (On request, and at a supplementary charge, a range of RAL and sanitary ware colours can be offered.) This particularly robust coating is stoved at an object temperature of 180° C.

- Packaging:**
1. Cardboard packaging
  2. Edge protection
  3. Shrink foil



LOW-E2

Profile panel radiators

Plan panel radiators

Vertical radiators



General information

Preformed plate system

Stapler system

Special systems



Towel warmers

Design radiators



Standard Column radiators

Centrally connected Column radiators

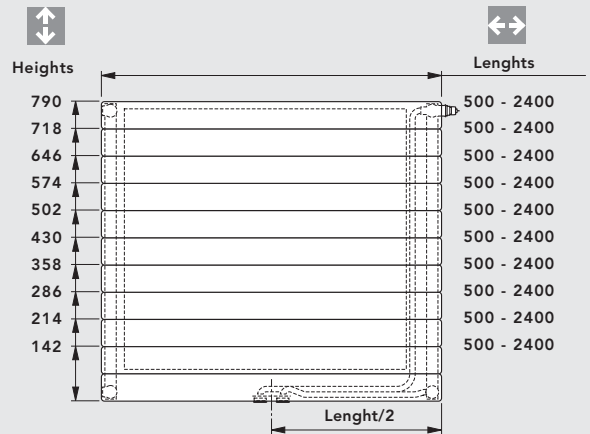
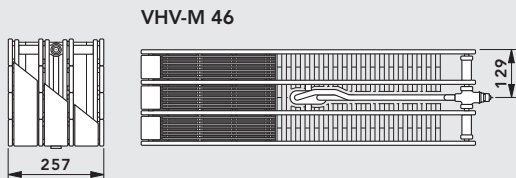
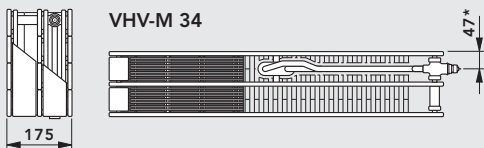
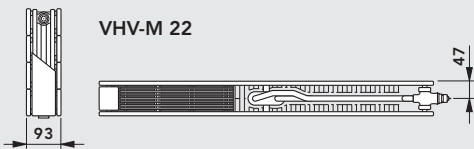
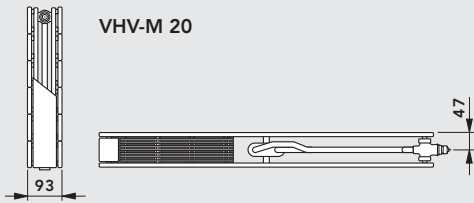
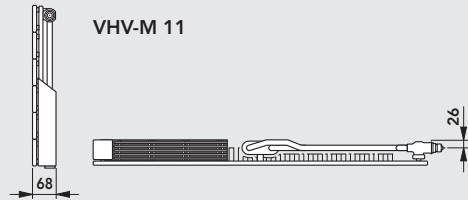
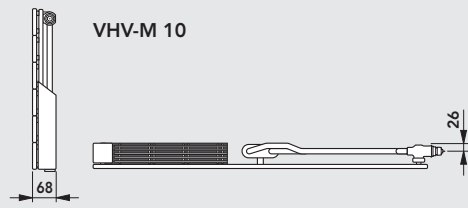
Architecture Column radiators



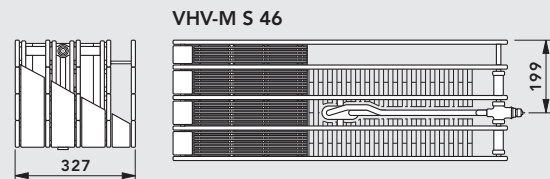
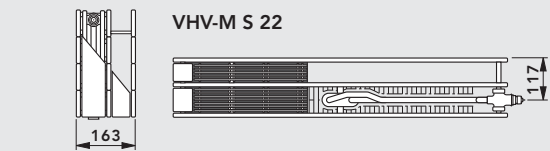
VONARIS

VONARIS-M

**Horizontal design, VHV-M models**



**Horizontal design, VHV-M S models**



The WVO version with factory-welded, not water-bearing radiation shield through convection between radiator and radiation shield back the majority of the otherwise lost heat in the room.

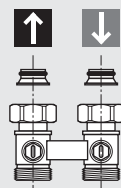
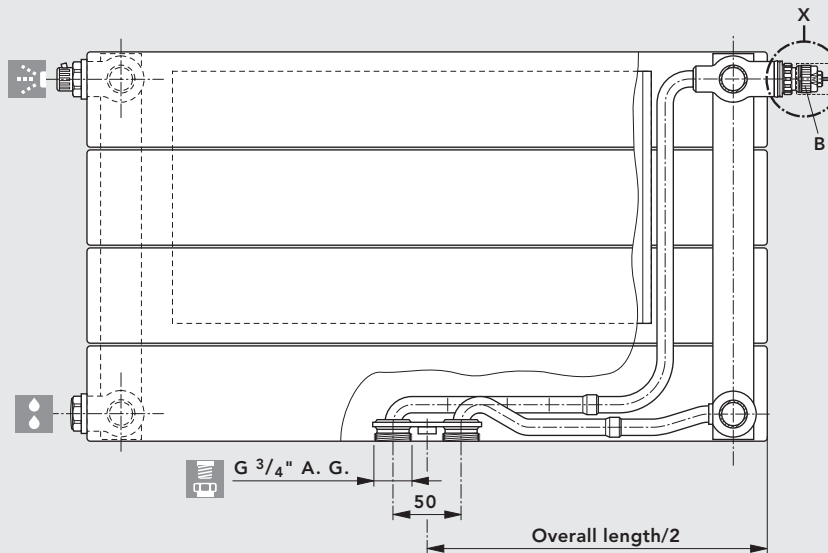
Schematic diagram

\* Note: if the VHV-M 34 model is turned around so that the valve is located to the left, the distance between the **VONARIS** rear panel and the connection point is **129 mm**.

Model	VHV-M 10			VHV-M 11			VHV-M 20			VHV-M 22			VHV-M S 22		VHV-M 34		VHV-M 46		VHV-M S 46		
Overall height	358	430	502	358	430	502	358	430	502	214	286	358	214	286	142	214	142	214	142	214	
[mm]	574	646	718	574	646	718	574	646	718	430	502	574			286		286		286		
	790			790			790			646	718	790									
Overall length	500 - 2400 mm																				
[mm]																					
Increments	100 mm (for an overall length of 1400 mm and greater: 200 mm)																				

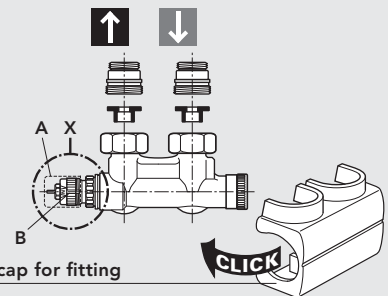
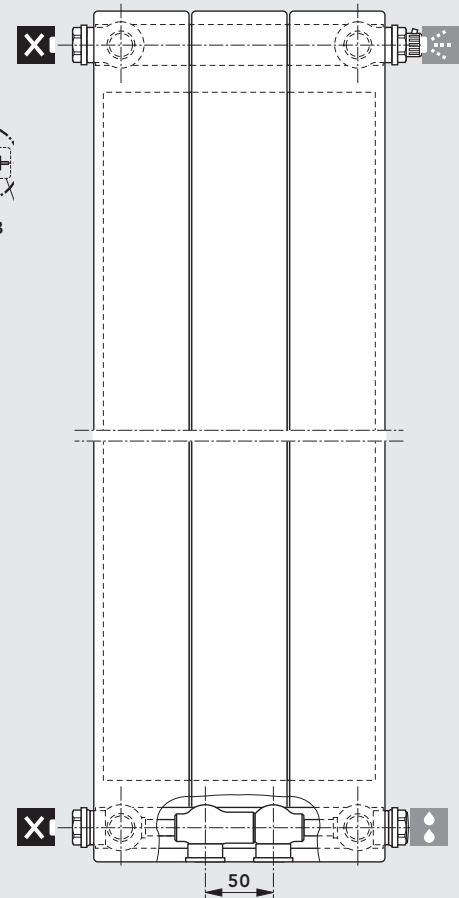
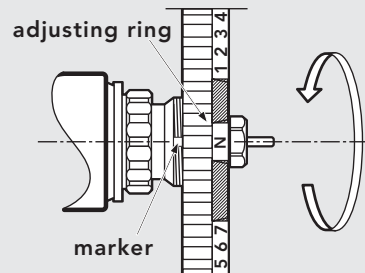
## Horizontal and vertical designs

It is easy to set the precise values required **without** using any special tools (see drawings).



Detail „X”

**Note:**  
Settings in the hatched area must be avoided.



Schematic diagram

The radiator will be delivered with a fitted protective cap. After removing the protective cap (item A), the following thermostat heads can be installed directly onto the built-in valve (item B): „RA 2000”, or „RAW” from Danfoss, „VK” from Heimeier, „D” from Herz, „thera DA” from MNG, and „UNI XD” from Oventrop.

**Adjustment tips:**

- Remove protective cap and sensor
- Lift the adjusting ring and turn it anti-clockwise, to the setting required – the set value (1, 2, ...7, N) needs to be directly in line with the marker.
- Presetting is possible in steps of 0.5 between 1 and 7. The „N” setting, cancels all presetting.

Horizontal design

Guideline values for default settings

Basis:

Supply temperature **70 °C**

Return temperature **55 °C**

Room temperature **20 °C**

Default setting 1  $k_v = 0.13$   
For radiators up to about 500 W

Default setting 2  $k_v = 0.21$   
For radiators up to about 800 W

Default setting 3  $k_v = 0.26$   
For radiators up to about 1000 W

Default setting 4  $k_v = 0.31$   
For radiators up to about 1200 W

Default setting 5  $k_v = 0.41$   
For radiators up to about 1600 W

Default setting 6  $k_v = 0.52$   
For radiators up to about 2000 W

Default setting 7  $k_v = 0.63$   
For radiators up to about 2400 W

Default setting N  $k_v = 0.75$   
For radiators of more than 2400 W

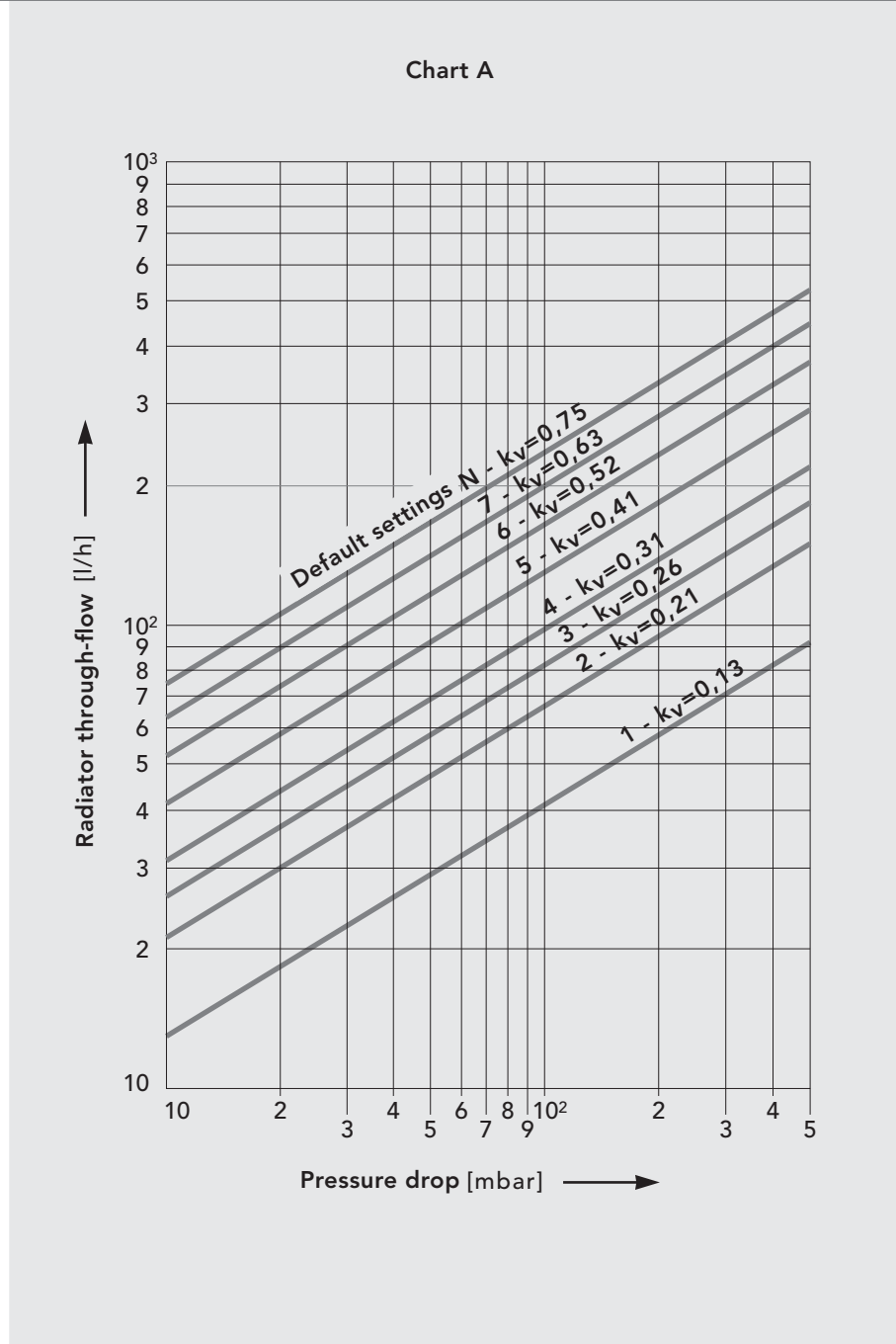


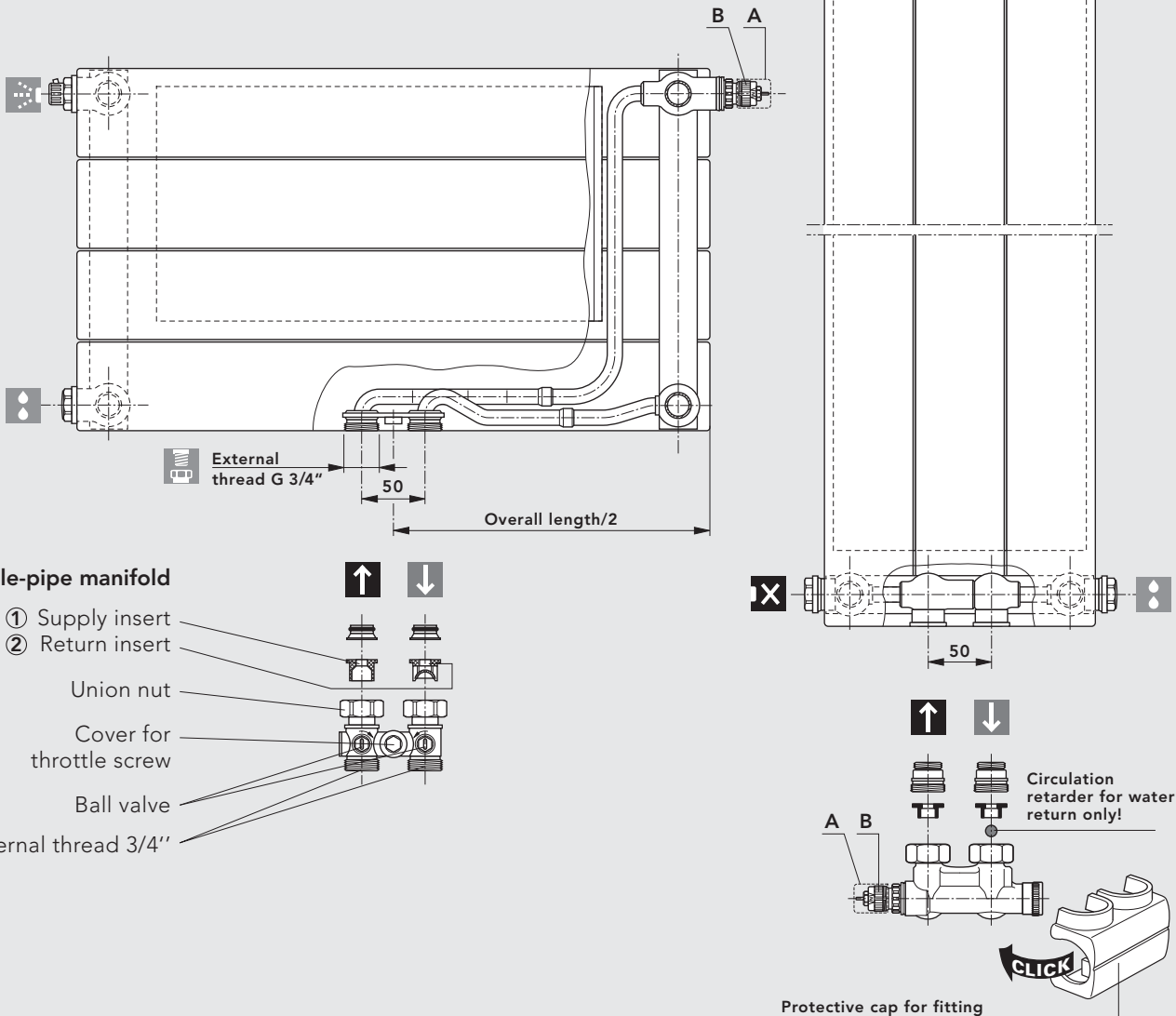
Chart A:

Pressure drop [mbar] – double-pipe operation at 2K proportional offset.

It is of course possible to adjust the valve default setting, whilst there is pressure in the heating system.

Horizontal and vertical design

For VHV-M models no valve default setting is necessary, as the valve is delivered factory-adjusted (default setting **N**).



Schematic diagram

The radiator valve (VHV-M models) and the connection set (VSV-M models) will both be delivered with a fitted protective cap. After removing the protective cap (item A), the following thermostat heads can be installed directly onto the built-in valve (item B): „RA 2000“, or „RAW“ from Danfoss, „VK“ from Heimeier, „D“ from Herz, „thera DA“ from MNG, and „UNI XD“ from Oventrop.

**Please note!**

**Horizontal design:**

During the installation of the single-pipe manifold ensure that the return insert ② is installed in the water return, and the supply insert ① in the water supply.

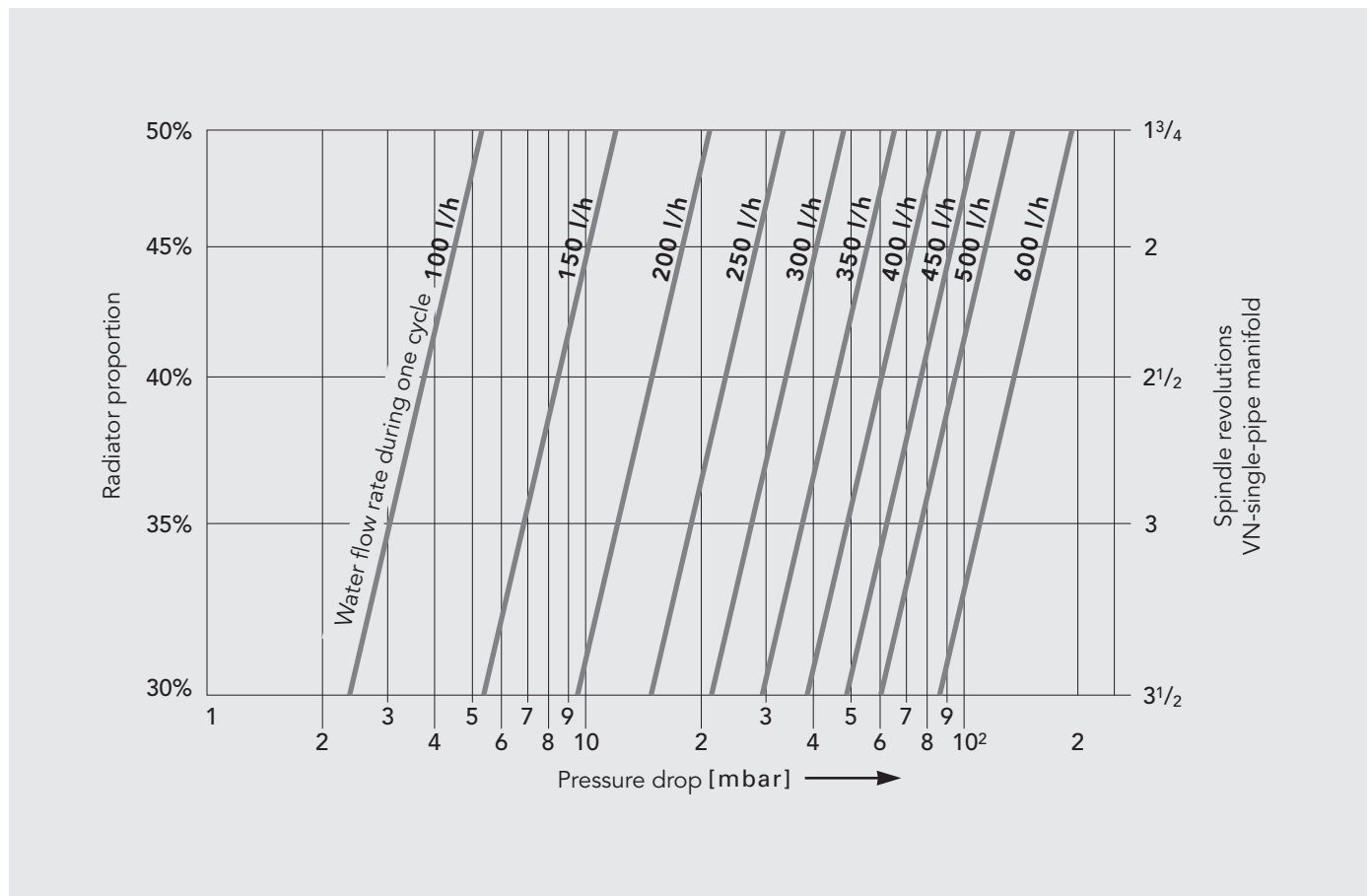
**Vertical design:**

When fitting the single-pipe operation connection set, ensure that the **circulation retarder** is installed in the water return.

**Horizontal design**

Default setting when using a single-pipe manifold: radiator proportion 40 % --- 2.50 revolutions\*  
 radiator proportion 30 % --- 3.50 revolutions\*  
 radiator proportion 35 % --- 3 revolutions\*  
 radiator proportion 45 % --- 2 revolutions\*  
 radiator proportion 50 % --- 1.75 revolutions\*

\*... before starting, turn the bypass spindle of the single-pipe manifold to the **right as far as it will go**.



**Diagram:**

Pressure drop [mbar] – single-pipe operation with a proportional deviation of 2K.

It is of course possible to change the radiator proportion, whilst there is pressure in the heating system.


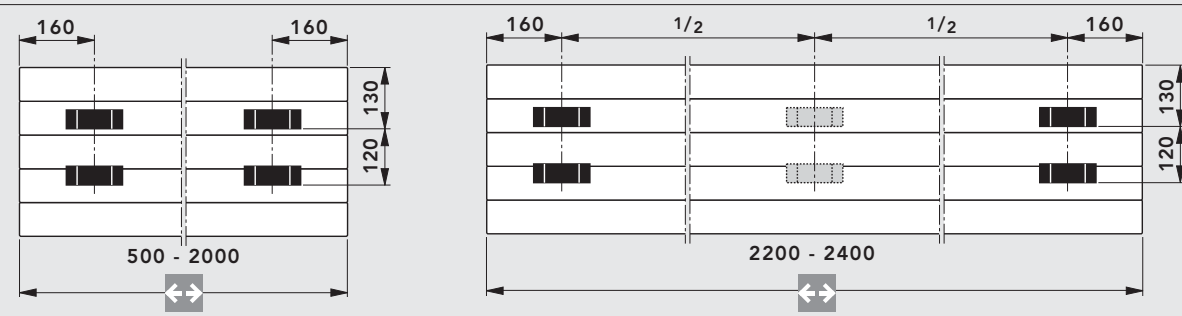

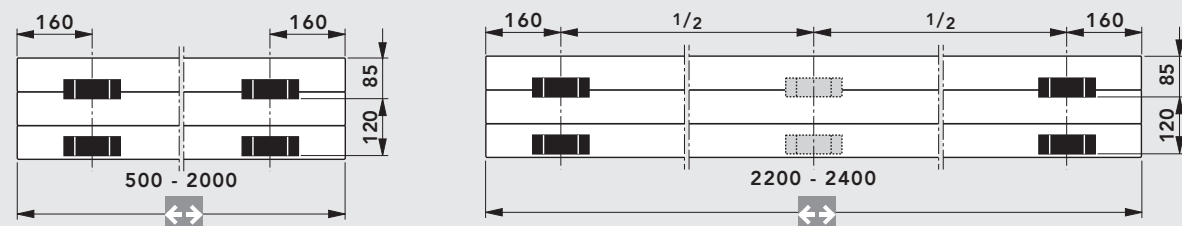

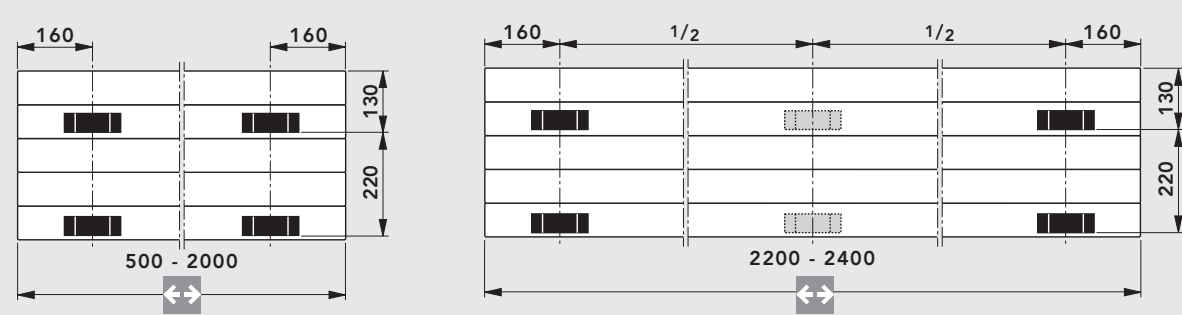

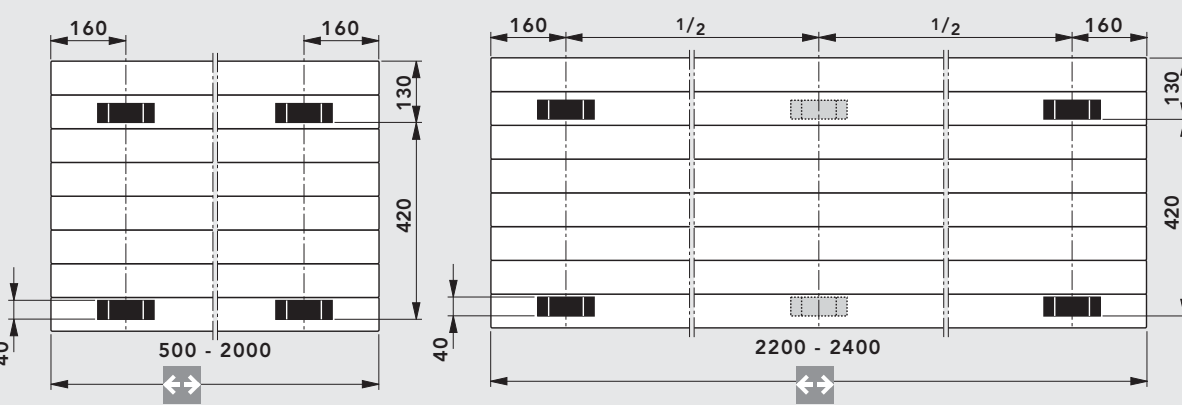
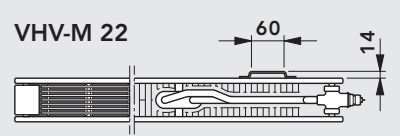
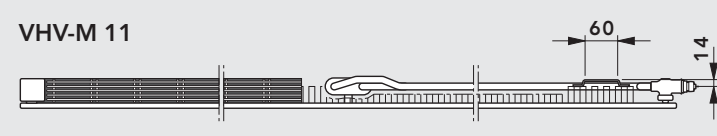
Please take account of the maximum power per cycle (for single-pipe installations) of about 10 kW:  
 $\Delta T = T_1 - T_2 = 20 \text{ K}$  (at  $T_1 = 90 \text{ }^\circ\text{C}$ ).

**Vertical design**

The connection set radiator proportion comes preset at 40 %.

Please take account of the maximum power per cycle (for single-pipe installations) of about 10 kW:  
 $\Delta T = T_1 - T_2 = 20 \text{ K}$  (at  $T_1 = 90 \text{ }^\circ\text{C}$ ).

welded bracket positions

Wall mounting WA 11 for models VHV-M 10, VHV-M 11, VHV-M 20, VHV-M 22 and VHV-M 34	
<b>Model</b>	<b>VHV-M 10 / 11 for wall mounting WA 11</b>
Overall height  358 mm	
	<b>VHV-M 22 or rather VHV-M 34 for wall mounting WA 11</b>
Overall height  214 mm and 286 mm	
	<b>VHV-M 10 / 11, VHV-M 20/22 for wall mounting WA 11</b>
Overall height  430 mm to 574 mm VHV-M 10/11, 358 mm to 502 mm VHV-M 20/22	
	<b>VHV-M 10 / 11, VHV-M 20/22 for wall mounting WA 11</b>
Overall height  646 mm to 790 mm VHV-M 10/11, 574 mm to 790 mm VHV-M 20/22	
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <b>VHV-M 22</b>   </div> <div style="text-align: center;"> <b>VHV-M 11</b>   </div> </div>
Schematic diagram	

**Attention!** With the horizontal design only the models VHV-M 10/11 (OH 358 - 790 mm) are by default supplied with brackets. If the models VHV-M 20 (OH 358 - 790 mm), VHV-M 22 (OH 214 - 790) and VHV-M 34 (142 - 286 mm) are wall-mounted using wall mounting WA 11, you are required to order these models as a special version, equipped with brackets.

## 274 VONARIS-M Wall mounting WA 11

drilling measurements and wall-clearance


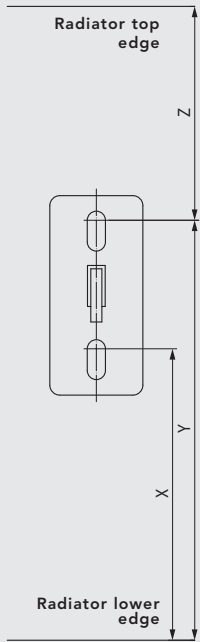
### Wall mounting WA 11 for models VHV-M 10, VHV-M 11, VHV-M 20, VHV-M 22 und VHV-M 34

**Wall mounting WA 11** is suitable for the horizontal versions of the following models: VHV-M 10 (OH 358 - 790 mm), VHV-M 11 (OH 358 - 790 mm), VHV-M 20 (BH 358 - 790 mm), VHV-M 22 (OH 214 - 790 mm) and VHV-M 34 (OH 214 and 286 mm) equipped with brackets. It ensures easy, rapid and robust mounting of the VONARIS central-connection radiators still in the packaging.

### Wall mounting WA 11 for OH 214 - 790


#### Drilling measurements for the Wandaufhängung WA 11

From an overall length of 2200 mm: 3 consoles

Model	 VHV-M Overall height [mm]	Value X [mm]	Value Y [mm]	Value Z [mm]	Wall mounting WA 11
VHV-M 22, 34	214	<b>104</b>	<b>162</b>	<b>52</b>	
VHV-M 22, 34	286	<b>176</b>	<b>234</b>	<b>52</b>	
VHV-M 10, 11	358	<b>203</b>	<b>261</b>	<b>97</b>	
VHV-M 20, 22	358	<b>203</b>	<b>261</b>	<b>97</b>	
VHV-M 10, 11, 20, 22	430	<b>275</b>	<b>333</b>	<b>97</b>	
VHV-M 10, 11, 20, 22	502	<b>347</b>	<b>405</b>	<b>97</b>	
VHV-M 10, 11	574	<b>419</b>	<b>477</b>	<b>97</b>	
VHV-M 20, 22	574	<b>419</b>	<b>477</b>	<b>97</b>	
VHV-M 10, 11, 20, 22	646	<b>491</b>	<b>549</b>	<b>97</b>	
VHV-M 10, 11, 20, 22	718	<b>563</b>	<b>621</b>	<b>97</b>	
VHV-M 10, 11, 20, 22	790	<b>635</b>	<b>693</b>	<b>97</b>	

Schematic diagram

### Connection – wall clearance

	Horizontal design model	Overall height [mm] 	Value <b>W</b> [mm]
	VHV-M 10	358 - 790	<b>45</b>
VHV-M 11	358 - 790	<b>45</b>	
VHV-M 20	358 - 790	<b>89</b>	
VHV-M 22	214 - 790	<b>89</b>	
VHV-M 34	214 / 286	<b>89</b>	

Schematic diagram

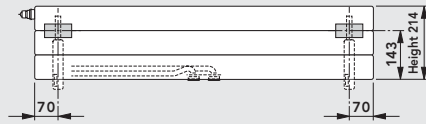


bracket positioning for insertion (push-in) brackets

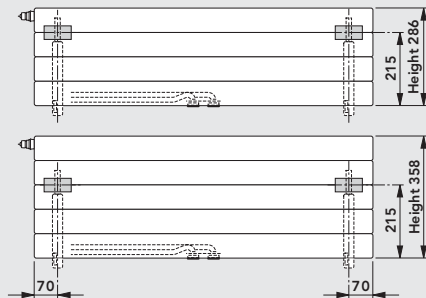
## VONOFIX rapid-installation console for the VHV-M models

VHV-M 10 models: OH 358 - 790 mm, VHV-M 20 models: OH 358 - 790 mm,  
 VHV-M 22 models: OH 214 - 790 mm and VHV-M 34 models: OH 214 and 286 mm

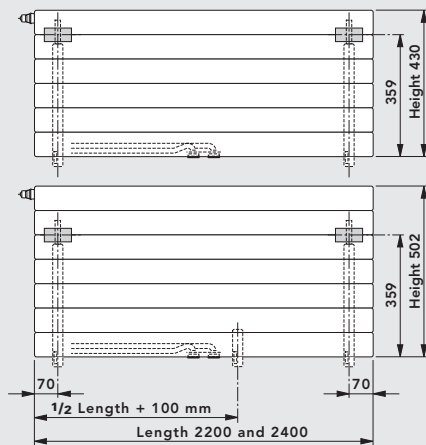
OH 214: for **VONOFIX 1**



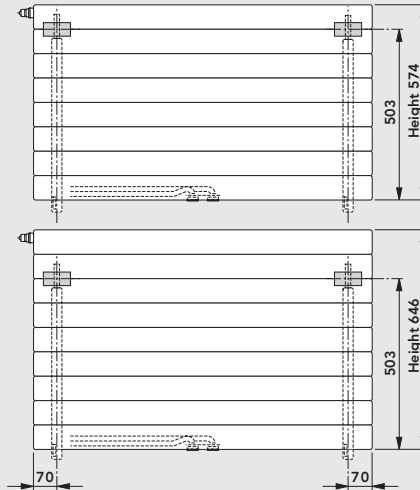
OH 286 and 358: for **VONOFIX 2**



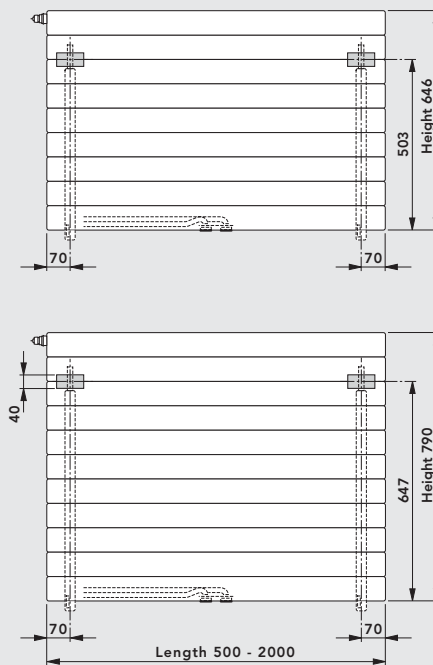
OH 430 and 502: for **VONOFIX 3**



OH 574 and 646: for **VONOFIX 4**



OH 718 and OH 790: for **VONOFIX 5**



**Note!** for an overall length of 2200 mm and greater an additional piece of foot console must be used!

Schematic diagram

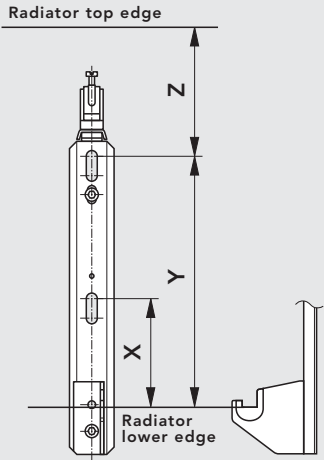

**Important:** the installation of VHV-M models with insertion (push-in) brackets is only feasible when using the **VONOFIX** rapid-installation console!

**VONOFIX rapid-installation console for the VHV-M models**

The **VONARIS** central connection radiator can be installed easily, quickly and securely. This is made possible by the **VONOFIX** rapid-installation console for the horizontal designs of the VHV-M 20 (OH 358 - 790 mm), VHV-M 22 (OH 214 - 790 mm) and the VHV-M 34 (OH 214 and 286 mm) models.

**Wall rails for OH 214 – 790 mm**

**Drilling measurements for the VONOFIX 1 - 5**

	Overall radiator height [mm] 	Value X [mm]	Value Y [mm]	Value Z [mm]
	214	-	125	89
286	100	197	89	
358	100	197	161	
430	100	341	89	
502	100	341	161	
574	100	485	89	
646	100	485	161	
718	100	629	89	
790	100	629	161	

Schematic diagram

The **VONOFIX** rapid-installation console consists of:

- 2 wall consoles (zinc-plated), with sound-proofing filters, screws and dowels
- 2 stabilising brackets
- 2 insertion (push-in) brackets
- (For an overall length of 2200 mm and greater, 1 additional piece of foot console)

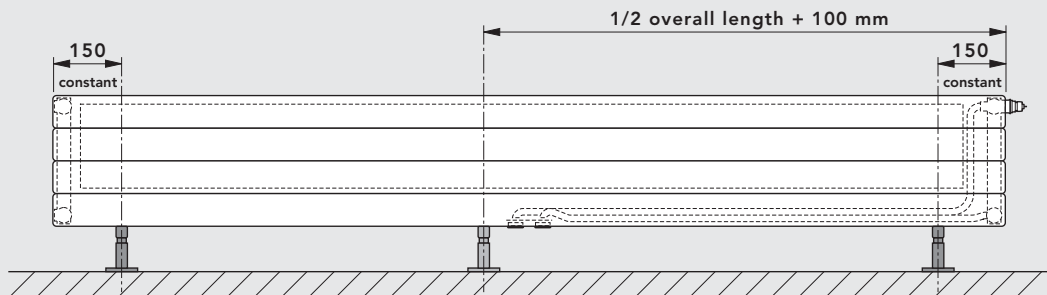
**Connection – wall clearance**

	Horizontal design model	Overall height [mm] 	Value W [mm]
	VHV-M 20	358 – 790	91
VHV-M 22	214 – 790	91	
VHV-M 34	214 – 286	91*	

\* **Note:** if the **VHV-M 34** is turned round and used as a left-hand design model, the measurement **W** is **172 mm**.

Schematic diagram

**SK 12 – 17 stand consoles: positioning with the VHV-M models (up to an overall height of 286 mm)**

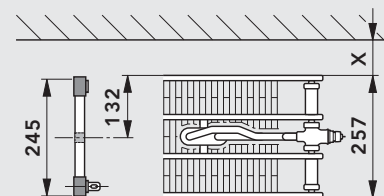
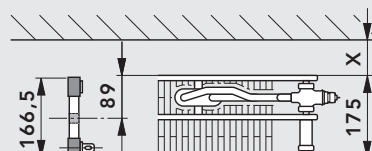
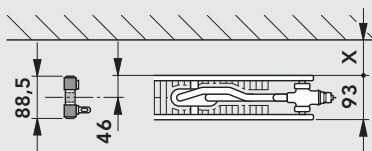


**Note:** for an overall length of **2200 mm** and greater, a 3rd stand console must be used!

**SK 12 / SK 13**  
**VHV-M 22**

**SK 14 / SK 15**  
**VHV-M 34**

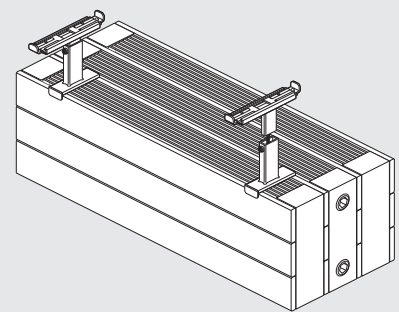
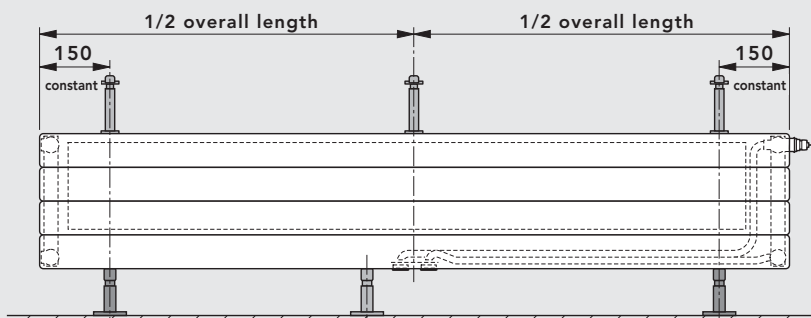
**SK 16 / SK 17**  
**VHV-M 46**



Schematic diagram

**FBT 20 window sill support: positioning for the VHV-M models (up to an overall height of 286 mm)**

Window sill support for subsequent installation with the **VHV-M 22 – 46 models** of the **VONARIS-M** central connection radiator (up to an overall height of 286 mm)



**Note:** for an overall length of more than **2200 mm**, a 3rd window sill support must be used!

Schematic diagram