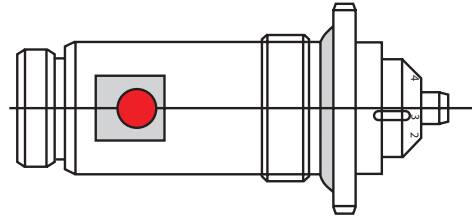




KORATHERM® GENERAL INFORMATION - HORIZONTAL VKM

Twin-pipe heating system

When installing KORATHERM HORIZONTAL VKM flat panel radiators, it is necessary to preset the valve to such a position that the radiator will perform as calculated. It is the responsibility of the installer to make sure this has been done. At the factory the valve is preset at level 6 and after rinsing and before the start of the heating test it must be set by a special key to the desired position.



Level 3 presetting

Example of calculation

Solution to: level of presetting

Given: heat output
cooling of water
pressure loss of radiator with valve
heat capacity of water

$$\begin{aligned}
 Q &= 960 \text{ W} \\
 t_1 - t_2 &= 15 \text{ K (70/55 °C)} \\
 \Delta p &= 65 \text{ mbar} \\
 c &= 1,163 \text{ Wh/kg.K}
 \end{aligned}$$

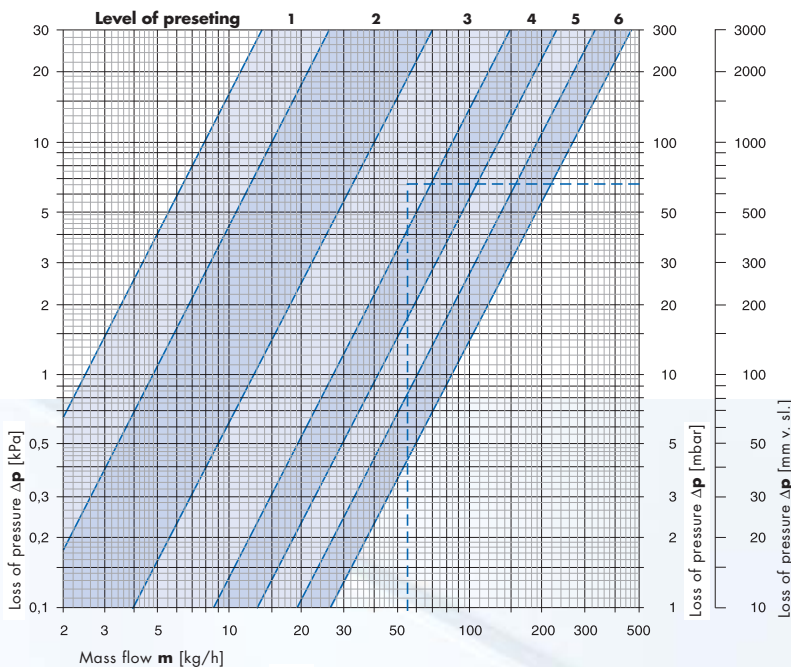
Solution: weight flow

level of presetting (see diagram):

$$m = \frac{Q}{c \cdot (t_1 - t_2)} = \frac{960}{1,163 \cdot 15} = 55 \text{ kg/h}$$

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Twin-pipe heating system



Table

HORIZONTAL VKM Radiators without connecting fittings			Level of valve presetting					
			1	2	3	4	5	6
Valve with presetting at six levels and with thermostatic head	k_v [m³/h]	min ÷ max	0,025 ÷ 0,047	>0,047 ÷ 0,126	>0,126 ÷ 0,269	>0,269 ÷ 0,417	>0,417 ÷ 0,600	>0,600 ÷ 0,840
	k_{vs} [m³/h]		0,051	0,133	0,294	0,430	0,630	0,980