

► Pressure Drop Charts for Brunata Thermostatic Radiator Valves

Flow rate and pressure drop charts

The charts show the flow rate and pressure drop characteristics for a thermostat valve. For this function the characteristic is seen as the straight lines –1K and –2K

The normal flow rate qmN equals –2K without using the presetting device.

The straight line (marked MAX) shows the flow rate through a fully open valve.

The charts are only valid when no presetting of the valves has been made.

Calculation of pressure drop:

If calculations are preferred in order to know the pressure drop Δp (kPa), given the flow rate (l/h) and the Kv value of the valve, the following formula may be used:

$$\Delta p = \left(\frac{0,01 * q}{K_{vn}} \right)^2$$

The pressure drop of a thermostat valve using the combination 131U 3/8" + 148 at a flow rate of 80 l/h equals:

$$\Delta p = \left(\frac{0,01 * 80}{0,68} \right)^2 = 1,38 \text{ kPa}$$



Kv value for angular valve type 130 and thermostat type 148

Part	Diameter	Kvn	qmN (l/h)
130U + 148	3/8"	0,73	233
130U + 148	1/2"	0,74	236
130U + 148	3/4"	0,79	251



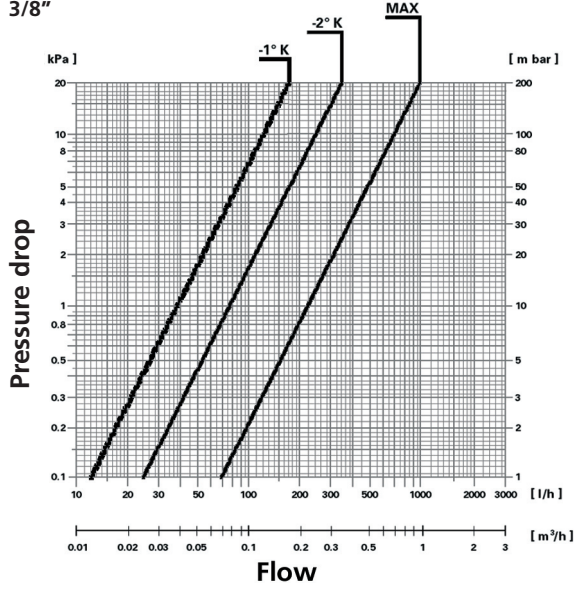
Kv value for straight valve type 131 and thermostat type 148

Part	Diameter	Kvn	qmN (l/h)
131U + 148	3/8"	0,68	215
131U + 148	1/2"	0,74	235
131U + 148	3/4"	0,78	246

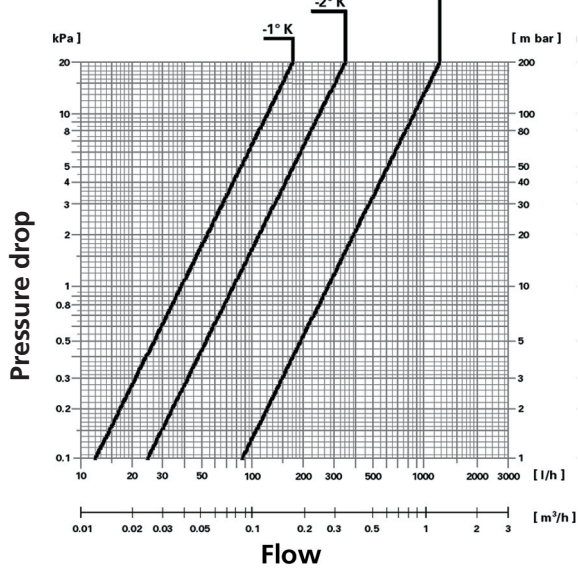
Brunata is a 100 % Danish owned company. We have more than 85 years experience within developing and producing heat cost allocators and heating accounts. Brunata has implemented a quality system in accordance with EN ISO 9001. Please contact us for further information on our products!

Angular valves

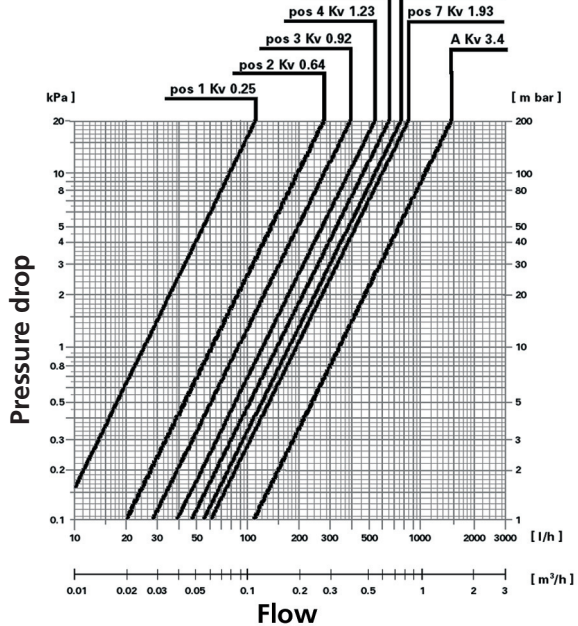
3/8"



1/2"

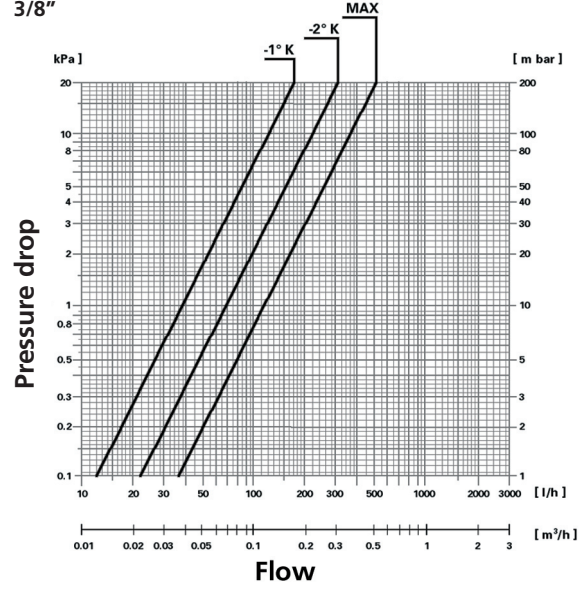


3/4"

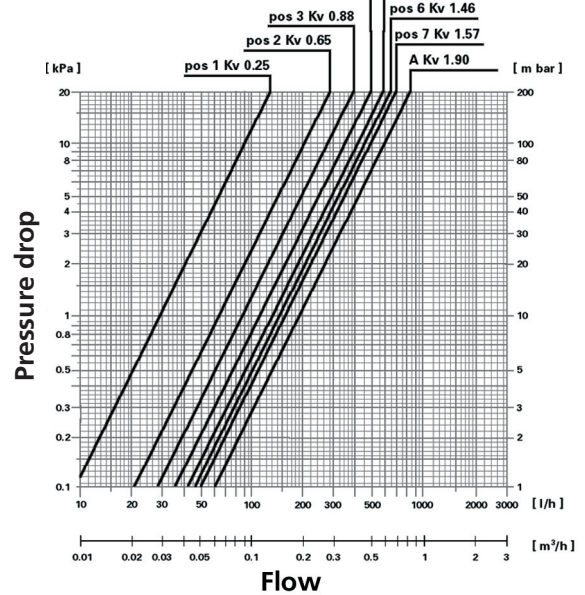


Straight valves

3/8"



1/2"



3/4"

