91BY

Valve for HVAC Terminal Units Mounting

Via Circonvallazione, 10
13018 Valduggia (VC), Italy
Tel: +39 0163 47891
Fax: +39 0163 47895
www.vironline.com

Valve for HVAC terminal units mounting (fan coils, heat exchangers and so on)
Threaded M/M for union end (ISO 228/1) on coil side
Threaded F/F (ISO 7/1 Rp) on pipe side
Air testing according to EN12266-1
Standard center to center 80mm, customizable
Blow-out proof stems
TR CU 010 compliant

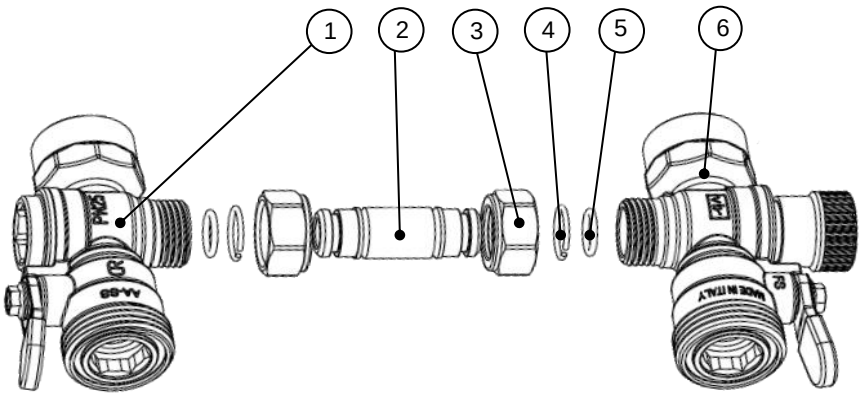
PN25 (Max 25bar up to 100°C, max 20bar at 130°C)
Free of CE marking (cat. according to Art. 4.3 Dir. 2014/68/EU)

Working conditions

- Suitable for: water, -10°C to +130°C
  below 0°C only for water with added antifreeze fluids
  over 100°C only for water with added anti-boiling fluids
- Not suitable for: gases group 1 & 2, liquids group 1 (Dir. 2014/68/UE)

PARTLIST

N.	Part	Material	Norm
1	By-pass valve	DZR Brass	EN12165 CW602N
2	Spacer	DZR Brass	EN12164 CW602N
3	Nut	Brass	EN12165 CW617N
4	Seeger ring	Acciaio inox	AISI 302
5	O-ring	EPDM Perox	-
6	By-pass valve	DZR Brass	EN12165 CW602N

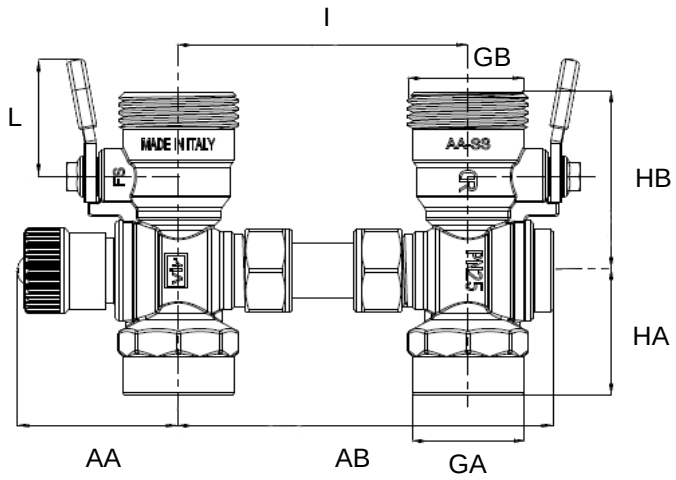


220601a

DIMENSIONS

DN	GA	GB	AA[1] [mm]	AB [mm]	HA [mm]	HB [mm]	L [mm]	I [mm]	Weight [g]
015	½"	1"	44,5	103,5	33,7	51,6	34	80	758
020	¾"	1"	47,0	101,0	38,1	58,9	34	80	760
025	1"	1¼"	47,0	106,0	42,9	58,9	34	80	1124

[1]With extended handweel it increases by 4,5mm



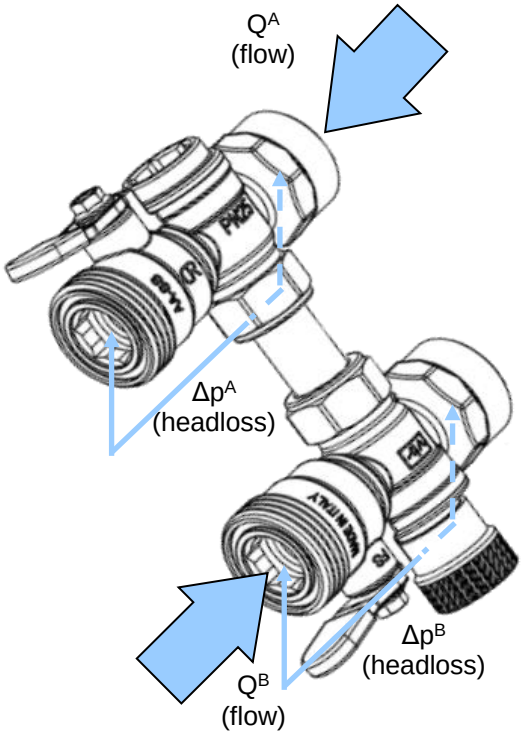
HEADLOSS CALCULATION

$$\Delta p = \left(\frac{36 \cdot Q}{K_V} \right)^2$$

Formula linking flow Q (in l/s) and theoretical valve headloss Δp (in kPa).
Supposing to have a close-circuit heat exchanger (Q^A=Q^B=Q, closed by-pass) and with Kv values as per below table:

$$\Delta p^A = \left(\frac{36 \cdot Q^A}{K_v^A} \right)^2 \quad \Delta p^B = \left(\frac{36 \cdot Q^B}{K_v^B} \right)^2 \rightarrow \Delta p^{tot} = \Delta p^A + \Delta p^B = \left(\frac{36 \cdot Q^A}{K_v^A} \right)^2 + \left(\frac{36 \cdot Q^B}{K_v^B} \right)^2 \quad or \quad \Delta p^{tot} = \left(\frac{36 \cdot Q}{K_v^{tot}} \right)^2$$

DN	K_v^A [m³/h]	K_v^B [m³/h]	K_v^{tot} [m³/h]
015_{080}	13,6	9,1	7,6
020_{080}	27,8	20,1	16,3



Via Circonvallazione, 10
13018 Valduggia (VC), Italy
Tel: +39 0163 47891
Fax: +39 0163 47895
www.vironline.com