See our Full Range online at www.vip-ltd.co.uk

VIP Product Code
00/0235 - 80mm Centres
00/0689 - 40mm Centres



VIP Flushing Manifold for Terminal Units, Available with 40mm or 80mm Centres

Description

- Valve for HVAC terminal units mounting such as fan coils, heat exchangers etc
- Air testing according to BS EN12266-1
- Available in 40mm or 80mm centre to centre version
- One piece body with integral bypass isolating valve
- Blow-out proof stems

Working Conditions

- Below 0°C only for water with glycol additive
- Over 100°C only for water with anti-boiling additive
- PN25 (Max 25bar up to 100°C, max 20bar at 130°C)

Options Available

- **Ends:** BSP Male I BSP Female/ Compression
- **Valves:** Manual Balancing Valve
  Manual Fixed Orifice Balancing Valve
  Automatic Balancing Valve
  PICV - Danfoss / Belimo / T +A and others
- **Extras:** Strainer
  Air Vents - Manual / Automatic
  Test Points
  Metering Station
  Drain
  Hose
  Extension Kit

Available With 40mm & 80mm Centres

VIP carry all stock, meaning the Warrior Flushing Bypass Manifold For Terminal Units can be assembled and tested quickly.

The VIP Warrior Manifold is available with 40mm centres or 80mm centres.

- Huge savings on labour and installation costs.
- Lower Leak Potential due to fewer joints with 3 integral isolating valves.
- Flexible Configuration with 4 union ends
- Every unit individually pressure tested and tagged according to your schedule.
- Simplified terminal unit maintenace, permitting disassembly without having to empty the entire system.
- Each unit can be sized according to your flow rates and pressure.
- Flow regulation within the terminal unit itself, bespoke to your requirements with commissiong sets or PICV of your choice.

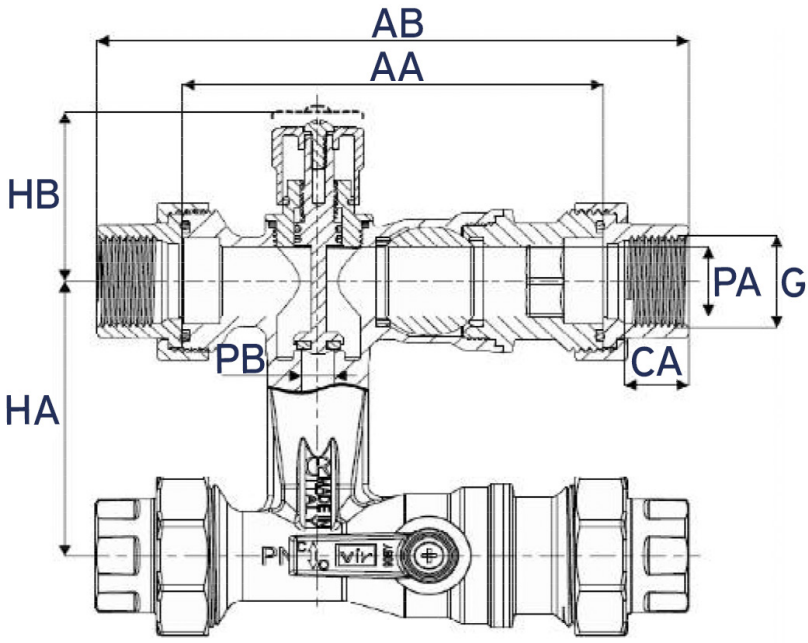
Product Info

Users of the new 3 valve flushing Bypass Manifold are reaping the benefits of a new more condensed unit. Designed to be installed on HVAC terminal units such as fancoils, heat exchangers and so on, this impressive solution boasts great flexibility in its configuration. It allows simplified terminal unit maintenance, permitting its dismantling without having to empty the entire system. The original design had 80mm centres, this has now been complemented with the addition of a 40mm centre unit which was recently launched by Valves Instruments Plus (VIP.)

VIP undertook extensive research into ways of improving their successful 80mm design and developed the 40mm unit with market leading unique O ring sealed union ends, both live side & unit ends, consequently allowing different configurations to be easily achieved. This also allows for an easier routine cleaning of the terminal unit independently from the line's regular working conditions.

The key behind the success of the VIP Flushing Bypass Manifold For Terminal Units is the simplicity of maintenance, the significantly lower risk of leaking, and most importantly the cost savings for on-site labour - all of which have made it a real hit in the marketplace.

Dimensions (mm)										
DN	G	AA (mm)	AB (mm)	CA (mm)	CB (mm)	PA (mm)	PB (mm)	HA (mm)	HB (mm)	Weight (g)
015 $_{40}$	1/2"	99	149	15.0	17.5	15	9	40	46.8	1050
015 $_{80}$	1/2"	114	154	16.0	17.5	20	9	80	49.1	1840
020 $_{40}$	3/4"	99	161	15.0	16.5	15	9	40	46.8	1170
020 $_{80}$	3/4"	114	160	16.0	17.5	20	9	80	49.1	1950
025	1"	114	184	19.5	19.5	20	9	80	49.1	2140



Please Note
On the 40mm unit we can only put 3/4" BSP unions on in male.

LONDON
Incorporating HEVAC Industrial
Unit 8, Hounslow Trade Park
Hounslow, TW3 3FW
T: 020 8577 7667
E: londonsales@vip-ltd.co.uk

VALUE IS PARAMOUNT

MANCHESTER
Incorporating F Ashton Ltd
VIP House, Chaddock Lane
Astley, M29 7JT
T: 01942 885 700
E: sales@vip-ltd.co.uk

Headloss Calculation

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

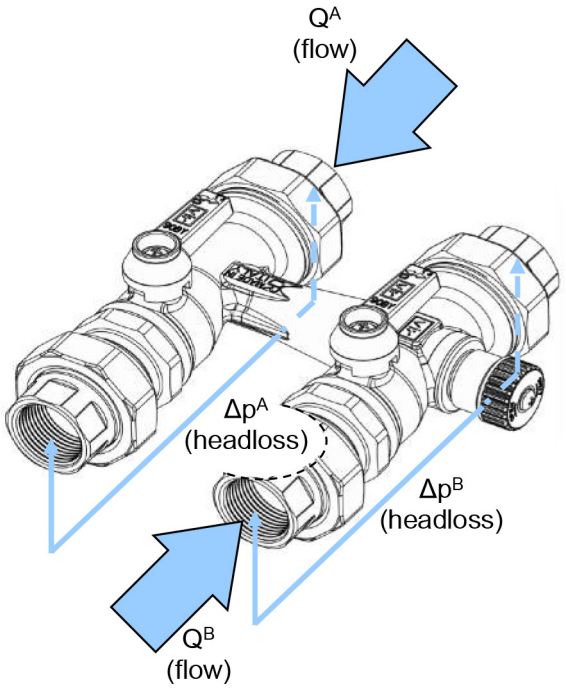
Formula linking flow Q (in l/s) and theoretical valve headloss Δp (in kPa).
Supposing to have a close-circuit heat exchanger ($Q^A=Q^B=Q$, closed by-pass) and with Kv values as per below table:

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

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

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

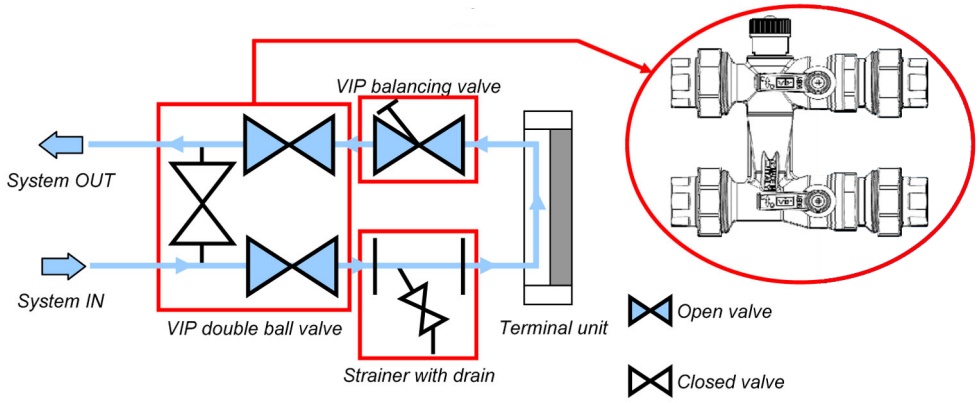
DN	Kv^A (m^3/h)	Kv^B (m^3/h)	Kv^{tot} (m^3/h)
015_{40} / 020_{40}	7.5	6.5	4.9
015_{80} / 020_{80} / 025	20.5	16.6	12.9



LONDON
Incorporating HEVAC Industrial
Unit 8, Hounslow Trade Park
Hounslow, TW3 3FW
T: 020 8577 7667
E: londonsales@vip-ltd.co.uk

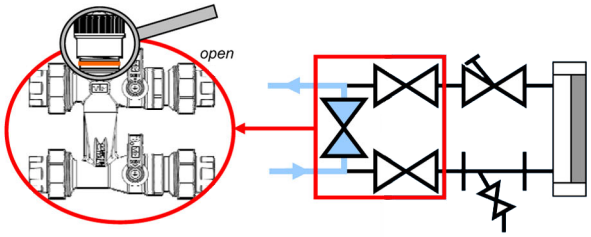
VALUE IS PARAMOUNT

MANCHESTER
Incorporating F Ashton Ltd
VIP House, Chaddock Lane
Astley, M29 7JT
T: 01942 885 700
E: sales@vip-ltd.co.uk



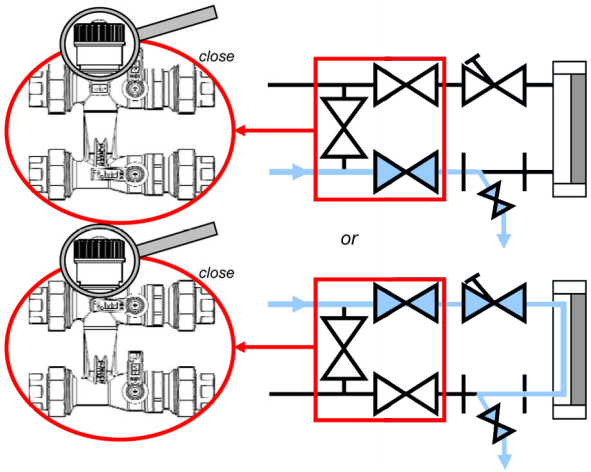
Terminal Unit Maintenance

By closing the In and Out valves and by opening the bypass valve, the terminal unit is isolated from the system. It is now possible to drain and disconnect it for maintenance.

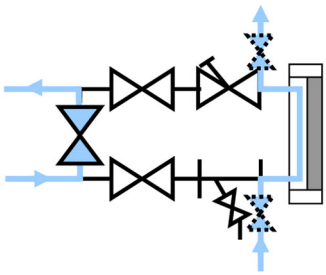


Flushing

By closing the bypass valve and the Out valve it is possible to perform a "Forward Flushing" of the strainer. By closing the bypass valve and In valve (and with clean fluid in the system) it is also possible to perform a "Back Flushing" of the system, by forcing the flow of the fluid back into the terminal unit before it is drained through the strainer.



By using drain test points on both strainer and balancing valve it is possible to clean the terminal unit independently from the system's regular working conditions.





VIP Test Point with Drain

LONDON
Incorporating HEVAC Industrial
Unit 8, Hounslow Trade Park
Hounslow, TW3 3FW
T: 020 8577 7667
E: londonsales@vip-ltd.co.uk

VALUE IS PARAMOUNT

MANCHESTER
Incorporating F Ashton Ltd
VIP House, Chaddock Lane
Astley, M29 7JT
T: 01942 885 700
E: sales@vip-ltd.co.uk