VORTEX 4

VALVE **ASSEMBLIES**



Engineered terminal unit connection sets for the flow limitation and temperature control of terminal units in heating and chilled water systems





Commissioning kits for terminal units

Pettinaroli's versatile range of valve assemblies for fan coils, chilled beams and other hydronic terminal units offers significant benefits over standard products - for specifiers, installers, commissioning engineers and building operators/ owners.

The valve assembly is a **modular approach** to meeting the flushing, flow balancing, isolation, and temperature control requirements of each terminal unit.

Pettinaroli's pre-fabricated valve assemblies ensure that **everything required** for a successful connection is **supplied in one package**. Furthermore, off-site assembly and testing **reduces site time and virtually eliminates costly failures**.

Units are available in manual/automatic/pressure independent characterised control valves, offering different levels of functionality to meet the needs and budgets of each project, whilst sharing the high quality that is synonymous with the Pettinaroli name.

DESIGNERS & SPECIFIERS

Fewer components for each project.

Flexibility in the type of pipe specified.

Choice of valve location, close coupled with terminal unit, or mounted in pipework.

INSTALLERS

Everything required for a successful connection assembly to a terminal unit is supplied in one package.

Fewer components to be ordered for each project.

Each unit can be tagged and individually identified to each terminal unit.

The unit may be orientated in the **horizontal or vertical** plane on site.

Euroconus connections allow various pipe types and diameters to be used for the runs connecting terminal units.

COMMISSIONING & MAINTENANCE

All valves required for commissioning of the terminal unit are in one location.

Insulation boxes (available on request) can be opened and re-sealed in seconds with no damage to pipe lagging.

Automatic balancing valves reduce commissioning time to flushing and verification.

Pressure independent valves offer full authority temperature control and maximum flow rate limiting.

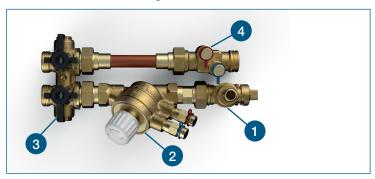
BENEFITS

- √ CONNECTING KIT FOR TERMINAL UNITS (fan-coils, chilled beams and air handling units)
- √ REDUCED ON-SITE LABOUR TIME
- √ FACTORY TESTED FOR MINIMUM LEAKEAGE RISK
- √ MADE IN UK WITH ITALIAN TECHNOLOGY AND ENGINEERING
- √ FLEXIBLE AND BESPOKE CONFIGURATIONS (automatic, manual balancing)
- $\sqrt{}$ NO FLUSHING THRU CONTROL VALVE (100% safe)

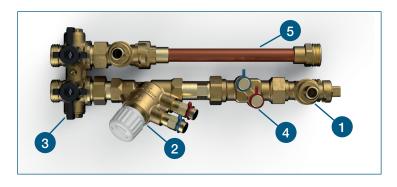
FEATURES

- \checkmark **AVAILABLE** IN **BG 29** AND **COMPACT** VARIETIES
- √ DIRT RESISTANT PIC VALVE AS STANDARD
- \checkmark HIGHEST KVS AND LOWEST RESISTANCE FLUSHING BYPASS ON THE UK MARKET AS STANDARD
- √ COMPONENTS DESIGN FOR **OPTIMAL MAINTENANCE**, **CHANGEABLE** AND **REUSABILITY**
- \checkmark FEATURES A **FULL BORE DRAIN** TO ENSURE **HIGH FLUSHING VELOCITY** AS STANDARD
- √ ADDITIONAL OPTIONS AVAILABLE (AIR VENT, STRAINERS ETC)

VORTEX 4 Compact



VORTEX 4 29









2 Dirty resistant PICV



High Kvs Flushing Bypass



4
On site cleanable Venturi
Metering Station



5

Copper pipe with Tee and Bypass at similar free area as the pipe diameter

FLUSHING OF MAIN PIPE LINE



FULL CLOSE



FORWARD FLUSHING



READY FOR COMMISSIONING

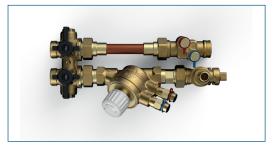


VORTEX 4

VORTEX4 RANGE CONFIGURATOR

VORTEX 4 Compact Series





VORTEX 4 29 Series





VX4 D 1 RCLA 0

VALVE SET OPTIONS

- 0 Standard
- D Double drain & Y strainer
- E Double drain
- G Added test points, double drain & Y strainer
- I Added test points, double drain, AAV & Y strainer
- J Double drain, strainer & AAV
- K AV & Strainer
- M Manual air vent
- P Double drain & additional test point
- Q Double drain & manual AV
- S Y strainer

VENTURI SIZE

- 0 No Venturi
- A 3 mm
- B 4.25 mm
- C 6 mm
- D 7.5 mm
- E 9 mm
- F 10.5 mm

UNIT HANDLING

- L Left
- R Right
- H Horizontal left (Handles upwards)
- K Horizontal right (Handles upwards)
- M Horizontal left (Handles downwards)
- N Horizontal right (Handles downwards)

SERVICE TYPE

- C Cooling (Blue)
- H Heating (Red)

VALVE SET CONFIGURATION

- R PICV in return, TICV on opposite leg
- F PICV in flow, TICV on opposite leg
- A PICV in return, TICV after
- B PICV in return, TICV before

VALVE LINE SIZE AND FLOW TYPE

- 1 VL.04
- 2 L.04
- 3 H.04
- 4 L.06
- 5 H.06

VALVE TYPE

- B 91 PICV
- D 92 PICV
- **40 MM VX4 UNIT**



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