# HVAC Products



Pettinaroli Commissioning Solutions







### 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**

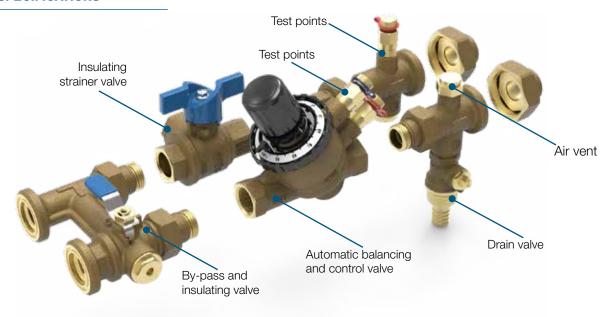
The Filterball® strainer is easily accessed without drain down.

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.

### **TECHNICAL SPECIFICATIONS**



- $\sqrt{}$  CONNECTING KIT FOR TERMINAL UNITS (fan-coils, chilled beams and air handling units)
- √ REDUCED ON-SITE LABOUR TIME
- $\checkmark$  FACTORY TESTED FOR **MINIMUM LEAKEAGE RISK**
- $\sqrt{100\%}$  made in Italy with patented technology
- $\sqrt{\ }$  **FLEXIBLE AND BESPOKEN** CONFIGURATION ( automatic, manual balancing )
- $\sqrt{}$  NO FLUSHING THRU CONTROL VALVE ( 100% safe )

### **FLUSHING OF MAIN PIPE LINE**



### REVERSE BACK FLUSHING



### **DIRECT BACK FLUSHING**



### **READY FOR COMMISSIONING**



### **XT600** 60/40mm



Flushing bypass with pressure independent control valve 91 Series and Filterball shut off valve with integrated strainer.

### 60/40 mm pipe centres

Filtering capacity 700 µm

### Ø

1/2" X 150 l/h 1/2" X 600 l/h

1/2" X 780 l/h

### XT601 60/40mm



Flushing bypass with pressure independent control valve 91 Series and Filterball shut off valve. Coil connection set with blow down valve and option port.

### 60/40 mm pipe centres

Filtering capacity 700 µm

### a

1/2" X 150 l/h

1/2" X 600 l/h

1/2" X 780 l/h

### **XT700** 70mm



Flushing bypass with pressure independent control valve 91 Series and Filterball shut off valve with integrated strainer.

### 70 mm pipe centres

Filtering capacity 700 µm

### Ø

1/2" X 150 l/h

1/2" X 600 I/h

1/2" X 780 I/h

3/4" X 1000 l/h

3/4" X 1500 l/h

### **XT701** 70mm



Flushing bypass with pressure independent control valve 91 Series and Filterball shut off valve. Coil connection set with blow down valve and option port.

### 70 mm pipe centres

Filtering capacity 700 µm

### Ø

1/2" X 150 l/h

1/2" X 600 l/h

1/2" X 780 l/h

3/4" X 1000 l/h

3/4" X 1500 l/h

### **XT702** 70mm



Flushing bypass with pressure independent control valve 92 Series and Filterball shut off valve with integrated strainer.

### 70 mm pipe centres

Filtering capacity 700  $\mu m$ 

### Ø

1/2" X 150 l/h

1/2" X 450 l/h

3/4" X 1000 l/h

3/4" X 1850 l/h

### **XT704** 70mm



Flushing bypass with pressure independent control valve 92 Series and Filterball shut off valve. Coil connection set with blow down valve and option port.

### 70 mm pipe centres

Filtering capacity 700 µm

### Ø

1/2" X 150 l/h

1/2" X 450 l/h

3/4" X 1000 l/h

3/4" X 1850 l/h

### **XT800** 80mm



Flushing bypass with pressure independent control valve 91 Series and Filterball shut off valve with integrated strainer.

### 80 mm pipe centres

Filtering capacity 700 µm

### Ø

1/2" X 150 l/h

1/2" X 600 l/h

1/2" X 780 l/h

3/4" X 1000 l/h

3/4" X 1500 l/h 1" X 1000 l/h

1" X 1500 l/h

### **XT801** 80mm



Flushing bypass with pressure independent control valve 91 Series and Filterball shut off valve. Coil connection set with blow down valve and option port.

### 80 mm pipe centres

Filtering capacity 700 µm

### Ø

3/4" X 600 I/h

3/4" X 780 I/h

3/4" X 1000 l/h

3/4" X 1500 l/h

### **XT850** 80mm



Flushing bypass with pressure independent control valve 93 Series and Filterball shut off valve with integrated strainer.

### 80 mm pipe centres

Filtering capacity 700 µm

### Ø

1" X 3/4" X 2200 l/h

1" X 3/4" X 2700 l/h

1" X 3/4" X 3000 l/h

1" X 1" X 2200 l/h 1" X 1" X 2700 l/h

1" X 1" X 3000 l/h

### **XT851** 80mm



Flushing bypass with pressure independent control valve 93 Series and Filterball shut off valve. Coil connection set with blow down valve and option port.

### 80 mm pipe centres

Filtering capacity 700 µm

### Ø

1" X 2200 l/h

1" X 2700 l/h

1 1/4" X 2700 l/h

1 1/4" X 3000 l/h

### THERMO ELECTRIC ACTUATOR



Code	Volt	Stroke	For valves series	Notes
A54202	230V	4 mm	91 / 92	with adapter VA64
A54204	230V	4 mm	91 / 92	with adapter VA64. With micro switch aux. 4 wires
A54402	24V	4 mm	91 / 92	with adapter VA64
A54404	24V	4 mm	91 / 92	with adapter VA64. With micro switch aux. 4 wires
A55102	120V	5 mm	91 / 92	with adapter VA64
A56102	120V	6,5 mm	93	with adapter VA64
A56202	230V	6,5 mm	93	with adapter VA64
A56402	24V	6,5 mm	93	with adapter VA64

### THERMO ELECTRIC ACTUATOR



Code	Volt	Stroke	For valves series	Notes
A544P3	0-10V	4 mm	91 / 92	Proportional version
A564P3	0-10V	6,5 mm	93	Proportional version

### **ELECTROMOTIVE ACTUATOR**



Code	Volt	Stroke	For valves series	Notes
VA7481	24V	6,3 mm	91 / 92 / 93	Floating version. Adaptor not included. Art. 0A7010 for 91 / 92 series Art. 0A748X for 93 series
VA7481	230V	6,3 mm	91 / 92 / 93	Floating version. Adaptor not included. Art. 0A7010 for 91 / 92 series Art. 0A748X for 93 series
VA7482	0-10V	6,3 / 3,2 mm	91 / 92 / 93	Proportional version. Adaptor not included. Art. 0A7010 for 91 / 92 series Art. 0A748X for 93 series

### **ELECTROMOTIVE ACTUATOR**



Code	Volt	Stroke	For valves series	Notes
VM060	0-10V	6,5 mm	91 / 92 / 93	Manual override, valve stroke detection system, failsafe return system, feedback signal options. Adaptor 76TE included.
VM000	0-10V	6,5 mm	91 / 92 / 93	Manual override, valve stroke detection system, feedback signal options. Adaptor 76TE included.

### **INSULATING CASES**

### IHV



Heating insulating case for XT series

### **FLEXIBLE HOSES**

# MULTIPLE CHOICE OF FLEXIBLE HOSES



### ICV



Cooling insulating case for XT series

### **INSTRUMENTS**

# FLOW RATE AND DIFFERENTIAL PRESSURE INSTRUMENT



Wireless data connection - easy download.



# PETTINAROLI GROUP



Jomar Group Warren - USA

Hydronic Components HCI Warren - USA



Pettinaroli UK - Marflow Hydronics Birmingham - UK

TSM Galvanocromo Gozzano - ITA

FRATELLI PETTINAROLI S.Maurizio d'Opaglio - ITA

Pettinaroli Suisse Montreux - SUI

Pettinaroli France Carmaux - FRA



Pettinaroli Middle East Dubai - UAE