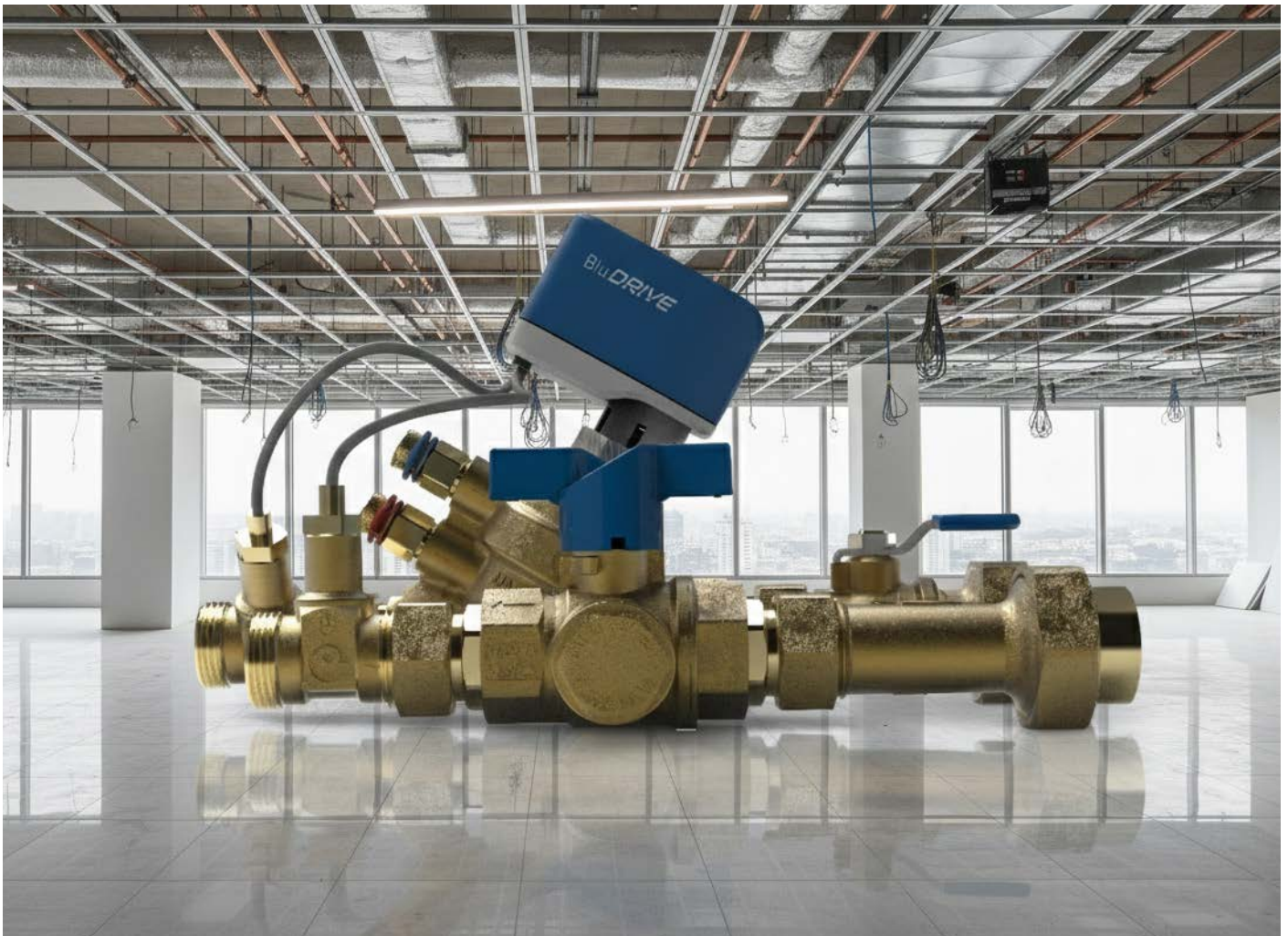


HVAC | WATER distribution



HVAC / WATER distribution
Catalog
2026

V1 Mar 2026

ENGINEERED **FLOW, BALANCE & CONTROL**

Pettinaroli is an international engineering and manufacturing company developing **HVAC, plumbing and gas solutions** designed to perform within complex, real-world environments.

From flow control and balancing to energy efficiency and system integration, each solution is developed to **ensure stable performance, long-term reliability and efficient operation**. The focus goes beyond individual products, addressing how solutions contribute to consistent system performance across different applications.

Combining in-house design expertise, advanced manufacturing and application knowledge, **Pettinaroli supports OEMs, designers and installers worldwide** with solutions built for consistency, control and performance over time.



GLOBAL INDUSTRIAL EXPERTISE

A structured international presence that combines know-how, manufacturing capability and market proximity.



SOLUTION-DRIVEN APPROACH

Solutions developed with a strong application focus, designed to perform within real operating conditions.



INTEGRATED PRODUCTION

From tooling development to final assembly, processes are managed internally to ensure quality, repeatability and control.



BUILT TO **PERFORM** IN **COMPLEX SYSTEM**

Pettinaroli solutions are **developed in close collaboration with OEMs, designers and installers** working across HVAC, plumbing and gas systems.

Each solution is **conceived to support real project requirements** simplifying integration, ensuring stable operation and delivering consistent performance over time.

Through continuous technical dialogue and application expertise, **Pettinaroli helps partners translate design intent into reliable system behaviour**, from initial selection to commissioning and long-term operation.

APPLICATION FOCUS

Solutions developed around system requirements, operating parameters and project constraints, helping engineers define the right approach from the earliest project stages.

INSTALLATION-DRIVEN DESIGN

Design choices that simplify sizing, selection and commissioning, supporting installers and system integrators in managing complex installations with confidence.

PERFORMANCE CONSISTENCY

Flow stability, control accuracy and energy efficiency aligned with operational demands, ensuring predictable behaviour across different system conditions.

LONG-TERM OPERABILITY

Reliable performance maintained over time through design choices focused on durability, stability and ease of maintenance.

WHERE **RELIABILITY** TAKES SHAPE

Reliability is built long before a product reaches the field, through a **vertically integrated manufacturing process** that connects tooling development, precision machining, controlled assembly and final validation.

By **managing every critical phase in-house**, we ensure dimensional accuracy, process traceability and consistent performance across complex applications.

VERTICAL PROCESS

TOOLING

In-house tool design and production, ensuring exclusive geometries, dimensional accuracy and full control over critical tolerances.

MACHINING

Advanced brass processing and CNC machining delivering repeatable precision, surface quality and material traceability.

ASSEMBLY

Controlled assembly processes — automated and manual — designed to guarantee consistency, functional accuracy and operational reliability.

TESTING

Functional and performance validation under simulated operating conditions, verifying flow stability, sealing integrity and long-term durability.



GLOBAL PRESENCE, LOCAL EXPERTISE

Pettinaroli operates through an **international network of branches, production facilities and partners** supporting hydronic, HVAC and gas applications across multiple markets.

Local presence, combined with shared engineering standards and coordinated logistics, allows projects to be followed with continuity from specification to commissioning and long-term operation.

As part of the **Pettinaroli Group**, customers benefit from global manufacturing capabilities, regional technical expertise and a consistent approach to **service, distribution and support worldwide**.

GLOBAL SUPPORT NETWORK

HEADQUARTERS & PRODUCTION

Fratelli Pettinaroli, San Maurizio d'Opaglio – Italy
TSM Galvanocromo, Gozzano – Italy

COMMERCIAL DESK + WAREHOUSE

Pettinaroli Iberica & Latin America, Barcelona - Spain

EUROPEAN BRANCHES

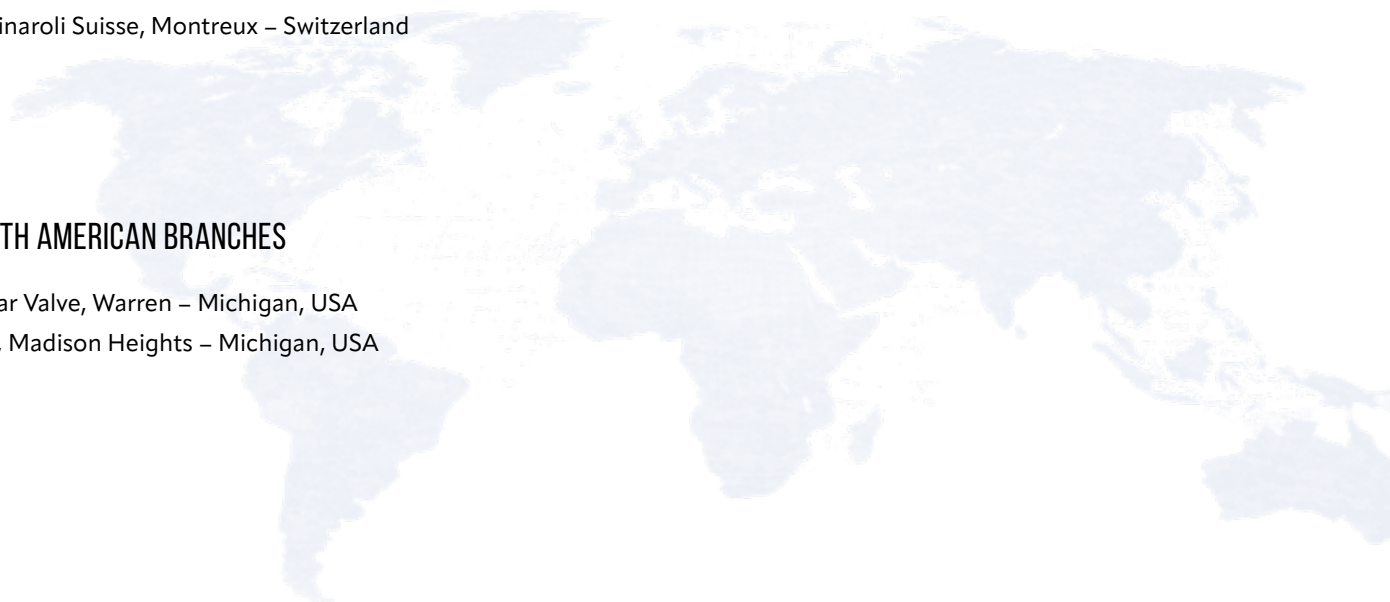
Pettinaroli France, Carmaux – France
Pettinaroli Northern Europe, Middelfart – Denmark
Pettinaroli UK, Birmingham – United Kingdom
Pettinaroli Suisse, Montreux – Switzerland

COMMERCIAL DESK

Pettinaroli Middle East, Dubai - UAE
Pettinaroli South East Asia, Bangkok - Thailand

NORTH AMERICAN BRANCHES

Jomar Valve, Warren – Michigan, USA
HCI, Madison Heights – Michigan, USA



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PICV

pressure independent
control valves

DYNASTY

EvoPICV
Pressure Independent Control Valve

EvoPICVR
Rotary Pressure Independent Control Valve



DYNASTY

The new **Dynasty** range of PICV has been designed to give all the advantages of the existing PICV valve range with the added benefit of **operating in heavily contaminated water**.

The valve has a **Linear characteristic** and it has also been **designed to allow the internals to be removed, clean and replaced** without effecting the performance of the valve.



PATENT
IT1428884
US9910447 B2
EP3067772 B1



FEATURES AND ADVANTAGES

✓ **LOW MINIMUM PRESSURE** required for start-up

✓ **THERMAL ACTUATORS** and **ELECTRO MECHANICAL ACTUATORS** available

✓ **DIRT RESISTANT DIAPHRAGM**

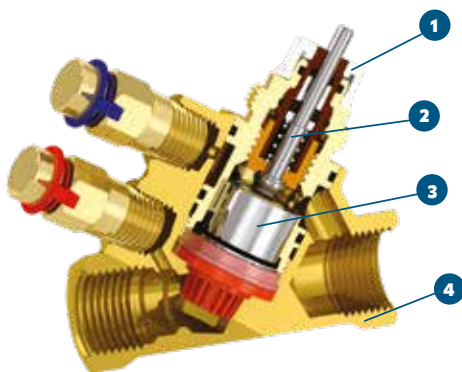
life-tested according to proprietary **test with dirty water**, constantly contaminated by **900 PPM of Iron Oxide Fe₂O₃ (5 microns)**.

✓ **COMPACT** size

✓ **LINEAR** and Equalpercentage characteristic thru actuator

✓ **EASY** maintenance

TECHNICAL SPECIFICATIONS



	Material list
Regulating valve (2)	High performance polymer, stainless steel
Pre-setting knob (1)	ABS + Polycarbonate
Membrane based diaphragm (3)	High performance polymer, WMQ silicon, stainless steel, HNBR
Body (4)	Corrosion resistant brass CW602N
O-rings	EPDM-x

✓ **INTERNAL PRESETTING**
with strike reduction of the control valve

✓ **ACCESSIBLE**
diaphragm for easy maintenance



92 DYNASTY



Dynasty Pressure independent balancing and control valve with linear characteristic.

Connections: F x F
 Patent: IT1428884 - US9910447 B2 - EP3067772 B1
 Insulating case: Available

Size		Code
92VL 1/2"	1	3701592010C
92L 1/2"	1	3701592000C
92H 1/2"	1	3701592210C
92L 3/4"	1	3702092000C
92H 3/4"	1	3702092080C
92L 1"	1	3702592040C
92H 1"	1	3702592030C
92H 1 1/4"	1	3703292010C
92H 1 1/2"	1	3704092000C
92H 2"	1	3705092000C

Size		Code
92VLN 1/2" NPT	1	3701592005C
92LN 1/2" NPT	1	3701592015C
92HN 1/2" NPT	1	3701592220C
92LN 3/4" NPT	1	3702092015C
92HN 3/4" NPT	1	3702092090C
92LN 1" NPT	1	3702592070C
92HN 1" NPT	1	3702592050C
92HN 1 1/4" NPT	1	3703292011C
92HN 1 1/2" NPT	1	3704092010C
92HN 2" NPT	1	3705092020C

92_1 DYNASTY



EvoPICV Pressure independent balancing and control valve with linear characteristic. With predisposition of pressure ports.

Connections: F x F
 PATENT IT1428884 - US9910447 B2 - EP3067772 B1
 Insulating case: Available

Size		Code
92VL1 1/2"	1	3701592110C
92L1 1/2"	1	3701592100C
92H1 1/2"	1	3701592180C
92L1 3/4"	1	3702092100C
92H1 3/4"	1	3702092180C
92L1 1"	1	3702592100C
92H1 1"	1	3702892180C
92H1 1 1/4"	1	3703292020C
92H1 1 1/2"	1	3704092070C
92H1 2"	1	3705092040C

Size		Code
92VL1N 1/2" NPT	1	3701592115C
92L1N 1/2" NPT	1	3701592105C
92H1N 1/2" NPT	1	3701592250C
92L1N 3/4" NPT	1	3702092105C
92H1N 3/4" NPT	1	3702092200C
92L1N 1" NPT	1	
92H1N 1" NPT	1	
92H1N 1 1/4" NPT	1	3703292031C
92H1N 1 1/2" NPT	1	3704092020C
92H1N 2" NPT	1	

	92VL 1/2"	92L 1/2"	92H 1/2"	92L 3/4"	92H 3/4"	92L 1"	92H 1"	92H 1 1/4"	92H 1 1/2"	92H 2"
	92VL1 1/2"	92L1 1/2"	92H1 1/2"	92L1 3/4"	92H1 3/4"	92L1 1"	92H1 1"	92H1 1 1/4"	92H1 1 1/2"	92H1 2"
Flow rate max.	150 l/h 0,66 GPM	450 l/h 1,98 GPM	850 l/h 3,74 GPM	1000 l/h 4,40 GPM	1850 l/h 8,15 GPM	2500 l/h 11,01 GPM	3300 l/h 14,53 GPM	5200 l/h 22,89 GPM	9000 l/h 39,63 GPM	14000 l/h 61,70 GPM
Start-up max	3,63 psi 0,25 bar	5,08 psi 0,35 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar	5,80 psi 0,40 bar	5,80 psi 0,40 bar
Connections	Rp 1/2" F EN 10226-1	Rp 1/2" F EN 10226-1	Rp 1/2" F EN 10226-1	Rp 3/4" F EN 10226-1	Rp 3/4" F EN 10226-1	Rp 1" union F EN 10226-1	Rp 1" union F EN 10226-1	Rc 1 1/4" union F EN 10226-1	Rp 1 1/2" F EN 10226-1	Rp 2" F EN 10226-1
	92VLN 1/2"	92LN 1/2"	92HN 1/2"	92LN 3/4"	92HN 3/4"	92LN 1"	92HN 1"	92HN 1 1/4"	92HN 1 1/2"	92HN 2"
	92VL1N 1/2"	92L1N 1/2"	92H1N 1/2"	92L1N 3/4"	92H1N 3/4"	92L1N 1"	92H1N 1"	92H1N 1 1/4"	92H1N 1 1/2"	92H1N 2"
Connections	F 1/2" NPT	F 1/2" NPT	F 1/2" NPT	F 3/4" NPT	F 3/4" NPT	1" NPT union F	1" NPT union F	1 1/4" NPT union F	F 1 1/2" NPT	F 2" NPT


General technical specifications	
Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	362,59 psi / 25 bar
Stroke 1/2" - 3/4"	3 mm
Stroke 1" - 1 1/4"	6 mm
Stroke 1 1/2" - 2"	7,5 mm

92X/2 DYNASTY



EvoPICV Pressure independent balancing and control valve with linear characteristic.

Connections: M x M
 PATENT IT1428884 - US9910447 B2 - EP3067772 B1

Size		Code
92XVL/2 - 1/2" - 150 l/h	1	3701592230C
92XL/2 - 1/2" - 450 l/h	1	3701592240C
92XVL/2 - 3/4" - 150 l/h	1	3702092240C
92XL/2 - 3/4" - 450 l/h	1	3702092250C
92XVL/2 - 3/4" - 850 l/h	1	3702092260C
92XVL/2 - 1" - 850 l/h	1	3702592230C
92XL/2 - 1" - 1000 l/h	1	3702592240C
92XH/2 - 1" - 1850 l/h	1	3702092230C

General technical specifications	
Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	362,59 psi / 25 bar
Stroke	3 mm

	92XVL/2 1/2"	92XL/2 1/2"	92XVL/2 3/4"	92XL/2 3/4"	92XVL/2 3/4"	92XVL/2 1"	92XL/2 1"	92XH/2 1"
Flow rate max.	150 l/h 0,66 GPM	450 l/h 1,98 GPM	150 l/h 0,66 GPM	450 l/h 1,98 GPM	850 l/h 3,74 GPM	850 l/h 3,74 GPM	1000 l/h 4,40 GPM	1850 l/h 8,15 GPM
Start-up max	3,63 psi 0,25 bar	5,08 psi 0,35 bar	3,63 psi 0,25 bar	5,08 psi 0,35 bar	3,63 psi 0,25 bar	3,63 psi 0,25 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar
Connections	G 1/2" M ISO 228-1	G 1/2" M ISO 228-1	G 3/4" M ISO 228-1	G 3/4" M ISO 228-1	G 3/4" M ISO 228-1	G 1" M ISO 228-1	G 1" M ISO 228-1	G 1" M ISO 228-1

EvoPICV

Pressure Independent Control Valve

The EvoPICV Pressure Independent Control Valve "PICV" is a combined constant flow limiter and full stroke, full authority equal percentage temperature control valve.

The EvoPICV is suitable for use in variable and constant temperature systems and may be used as a constant flow limiter in constant volume systems (without an actuator head) or as a true PICV in variable volume systems.

OPERATING PRINCIPLES

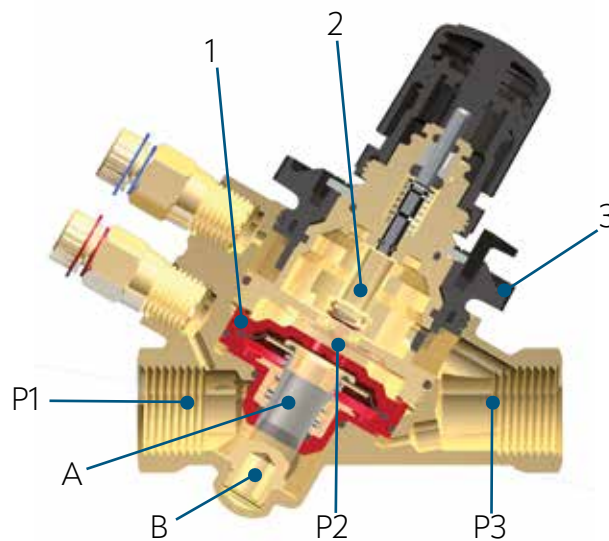
EvoPICV valve is made up of three main parts:

1. differential pressure regulator
2. regulating valve for flow adjustment
3. flow pre-setting knob

DIFFERENTIAL PRESSURE REGULATOR

The differential pressure regulator is the heart of the pressure independent control valve. By keeping a constant differential pressure across the valve seats constant flow and full authority temperature control can be achieved.

Incoming pressure P1 is transmitted to the top face of the diaphragm, outgoing pressure P3 is transmitted to the underside of this same diaphragm. A constant effective differential pressure is maintained between P2 and P3. As P1 increases relative to P3 it acts on the diaphragm closing the shutter (A) against a seat (B) thereby lowering the effective differential pressure. As P1 decreases relative to P3 the diaphragm acts to open the shutter (A) from the seat (B) thus increasing the effective differential pressure. The diaphragm acts against a spring in order to balance the pressure control and stop the diaphragm oscillating.



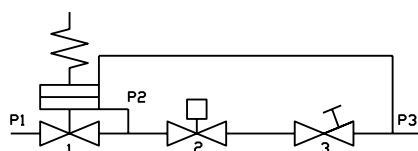
REGULATION VALVE

Water flow through a valve varies as a function of the area of passage and the pressure differential across that valve. Due to the incorporation of the differential pressure regulator the differential pressure across the valve seats P2 – P3 is constant meaning that flow is now only a function of area of passage.

Setting any flow rate value and maintaining it is also possible. The regulation valve presents an equal percentage characteristic.

ADJUSTMENT KNOB

The maximum value of the flow can be preset, choking the outlet section of the control valve, using the graduated adjustment knob. The percentage value, indicated on the scale, matches the maximum flow rate percentage. This value can be changed turning the adjustment knob until it reaches the selected position (matching the percentage indicated on the scale). A locking mechanism stops the valve set values from being changed inadvertently.



Functional schematic

91 EvoPICV





EPD
INTERNATIONAL EPD SYSTEM

BIM
READY

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic.

Connections: F x F
Patent: EP 2488994 B1 - US 8,985,140 B2
Insulating case: Available

Size		Code
91VL 1/2"	1	3701590220C
91L 1/2"	1	3701590070C
91H 1/2"	1	3701590090C
91L 3/4"	1	3702090080C
91H 3/4"	1	3702090100C
91H 1"	1	3702890090C

Size		Code
91VL 1/2" NPT	1	
91L 1/2" NPT	1	3701590130C
91H 1/2" NPT	1	3701690090C
91L 3/4" NPT	1	3702090130C
91H 3/4" NPT	1	3702290100C
91H 1" NPT	1	


91_1 EvoPICV




EPD
INTERNATIONAL EPD SYSTEM

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic. With predisposition of pressure ports.

Connections: F x F
Patent: EP 2488994 B1 - US 8,985,140 B2
Insulating case: Available

Size		Code
91VL1 1/2"	1	3701590250C
91L1 1/2"	1	3701590280C
91H1 1/2"	1	3701590190C
91L1 3/4"	1	3702090280C
91H1 3/4"	1	3702090190C
91H1 1"	1	3702890190C

Size		Code
91VL1 1/2" NPT	1	
91L1 1/2" NPT	1	3701690280C
91H1 1/2" NPT	1	
91L1 3/4" NPT	1	
91H1 3/4" NPT	1	3702290190C
91H1 1" NPT	1	

General technical specifications

Accuracy $0 \div 1$ bar	$\pm 5\%$
ΔP max.	87,02 psi / 6 bar
Temperature	$-10 \div 120$ °C
Working pressure max.	362,59 psi / 25 bar
Stroke	3 mm

	91VL 1/2"	91L 1/2"	91H 1/2"	91L 3/4"	91H 3/4"	91H 1"
	91VL1 1/2"	91L1 1/2"	91H1 1/2"	91L1 3/4"	91H1 3/4"	91H1 1"
Flow rate max.	150 l/h 0,66 GPM	600 l/h 2,64 GPM	780 l/h 3,43 GPM	1000 l/h 4,40 GPM	1500 l/h 6,60 GPM	1500 l/h 6,60 GPM
Start-up max	2,9 psi 0,20 bar	3,63 psi 0,25 bar	5,08 psi 0,35 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar	5,08 psi 0,35 bar
Connections	Rp 1/2" F EN 10226-1	Rp 1/2" F EN 10226-1	Rp 1/2" F EN 10226-1	Rp 3/4" F EN 10226-1	Rp 3/4" F EN 10226-1	Rp 1" union F EN 10226-1
	91VL 1/2" NPT 91VL1 1/2" NPT	91L 1/2" NPT 91L1 1/2" NPT	91H 1/2" NPT 91H1 1/2" NPT	91L 3/4" NPT 91L1 3/4" NPT	91H 3/4" NPT 91H1 3/4" NPT	91H 1" NPT 91H1 1" NPT
Connections	1/2" NPT	1/2" NPT	1/2" NPT	3/4" NPT	3/4" NPT	1" NPT

91X EvoPICV



EPD
INTERNATIONAL EPD SYSTEM

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic. Without pressure ports.

Connections: F x F
Patent: EP 2488994 B1 - US 8,985,140 B2
Insulating case: Available

Size		Code
91XVL 1/2"	1	3701590320C
91XL 1/2"	1	3701610170C
91XH 1/2"	1	3701590310C

Size		Code
91XVL 1/2" NPT	1	
91XL 1/2" NPT	1	
91XH 1/2" NPT	1	3701511310C

91X/2 EvoPICV



EPD
INTERNATIONAL EPD SYSTEM

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic. Without pressure ports.

Connections: M x M flat seat
Patent: EP 2488994 B1 - US 8,985,140 B2
Insulating case: Available

Size		Code
91XVL/2 1/2"	1	
91XL/2 1/2"	1	3701410170C
91XL/2 3/4"	1	3702010170C
91XH/2 3/4"	1	3702090320C

General technical specifications

Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	362,59 psi / 25 bar
Stroke	3 mm

	91XVL 1/2"	91XL 1/2"	91XH 1/2"
Flow rate max.	150 l/h 0,66 GPM	600 l/h 2,64 GPM	900 l/h 3,96 GPM
Start-up max	2,9 psi 0,20 bar	3,63 psi 0,25 bar	4,35 psi 0,30 bar
Connections	Rp 1/2" F EN 10226-1	Rp 1/2" F EN 10226-1	Rp 1/2" F EN 10226-1
	91XVL 1/2" NPT	91XL 1/2" NPT	91XH 1/2" NPT
Connections	1/2" NPT	1/2" NPT	1/2" NPT

	91XVL/2 1/2"	91XL/2 1/2"	91XL/2 3/4"	91XH/2 3/4"
Flow rate max.	150 l/h 0,66 GPM	600 l/h 2,64 GPM	600 l/h 2,64 GPM	900 l/h 3,96 GPM
Start-up max	2,9 psi 0,20 bar	3,63 psi 0,25 bar	3,63 psi 0,25 bar	4,35 psi 0,30 bar
Connections	G 1/2" M EN 10226-1	G 1/2" M EN 10226-1	G 3/4" M EN 10226-1	G 3/4" M EN 10226-1

91X/3 EvoPICV



EvoPICV Pressure independent balancing and control valve with equal percentage characteristic. Without pressure ports.

Connections: F x Union ends
 Patent: EP 2488994 B1 - US 8,985,140 B2
 Insulating case: Available

Size		Code
91XVL/3 1/2" F x 1/2" M	1	3701610291C
91XL/3 1/2" F x 1/2" M	1	3701610271C
91XH/3 1/2" F x 1/2" M	1	3701610281C

91X3S EvoPICV



EvoPICV Pressure independent balancing and control valve with equal percentage characteristic. Without pressure ports.

Connections: F x M BS5250
 Patent: EP 2488994 B1 - US 8,985,140 B2
 Insulating case: Available

Size		Code
91XVL3S 1/2" F x 3/4" M	1	
91XL3S 1/2" F x 3/4" M	1	3701610270C
91XH3S 1/2" F x 3/4" M	1	

General technical specifications

Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	362,59 psi / 25 bar
Stroke	3 mm

	91XVL/3 1/2"x 1/2"	91XL/3 1/2"x 1/2"	91XH/3 1/2"x 1/2"
Flow rate max.	150 l/h 0,66 GPM	600 l/h 2,64 GPM	900 l/h 3,96 GPM
Start-up max	2,9 psi 0,20 bar	3,63 psi 0,25 bar	4,35 psi 0,30 bar
Connections	1/2" F x 1/2" union M EN 10226-1	1/2" F x 1/2" union M EN 10226-1	1/2" F x 1/2" union M EN 10226-1

	91XVL3S 1/2"x 3/4"	91XL3S 1/2"x 3/4"	91XH3S 1/2"x 3/4"
Flow rate max.	150 l/h 0,66 GPM	600 l/h 2,64 GPM	900 l/h 3,96 GPM
Start-up max	2,9 psi 0,20 bar	3,63 psi 0,25 bar	4,35 psi 0,30 bar
Connections	1/2" F x 3/4" M BS5250 60° EN 10226-1	1/2" F x 3/4" M BS5250 60° EN 10226-1	1/2" F x 3/4" M BS5250 60° EN 10226-1

93 EvoPICV





EPD
INTERNATIONAL EPD SYSTEM

BIM
READY

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic.

Connections: Union end F x F
Patent: EP 2488994 B1 - US 8,985,140 B2
Insulating case: Available

Size		Code
93L 3/4"	1	3702090090C
93H 3/4"	1	3702090180C
93L 1"	1	3702590090C
93H 1"	1	3702590180C
93L 1 1/4"	1	3703290090C
93H 1 1/4"	1	3703290180C

Size		Code
93L 3/4" NPT	1	3702290090C
93H 3/4" NPT	1	3702090220C
93L 1" NPT	1	3702690090C
93H 1" NPT	1	3702591220C
93L 1 1/4" NPT	1	
93H 1 1/4" NPT	1	3703290220C


93_1 EvoPICV




EPD
INTERNATIONAL EPD SYSTEM

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic. With predisposition of pressure ports.

Connections: F x F Union end
Patent: EP 2488994 B1 - US 8,985,140 B2
Insulating case: Available

Size		Code
93L1 3/4"	1	3702290140C
93H1 3/4"	1	3702290350C
93L1 1"	1	3702590140C
93H1 1"	1	3702890350C
93L1 1 1/4"	1	3703290150C
93H1 1 1/4"	1	3703290350C

Size		Code
93L1 3/4" NPT	1	3702290150C
93H1 3/4" NPT	1	
93L1 1" NPT	1	
93H1 1" NPT	1	
93L1 1 1/4" NPT	1	
93H1 1 1/4" NPT	1	

General technical specifications

Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	362,59 psi / 25 bar
Stroke	6 mm

	93L 3/4"	93H 3/4"	93L 1"	93H 1"	93L 1 1/4"	93H 1 1/4"
	93L1 3/4"	93H1 3/4"	93L1 1"	93H1 1"	93L1 1 1/4"	93H1 1 1/4"
Flow rate max.	2200 l/h 9,69 GPM	2700 l/h 11,89 GPM	2200 l/h 9,69 GPM	2700 l/h 11,89 GPM	2700 l/h 11,89 GPM	3000 l/h 13,21 GPM
Start-up max	3,63 psi 0,25 bar	4,35 psi 0,30 bar	3,63 psi 0,25 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar
Connections	Rc 3/4" union F EN 10226-1	Rc 3/4" union F EN 10226-1	Rc 1" union F EN 10226-1	Rc 1" union F EN 10226-1	Rc 1 1/4" union F EN 10226-1	Rc 1 1/4" union F EN 10226-1
	93L 3/4" NPT 93L1 3/4" NPT	93H 3/4" NPT 93H1 3/4" NPT	93L 1" NPT 93L1 1" NPT	93H 1" NPT 93H1 1" NPT	93L 1 1/4" NPT 93L1 1 1/4" NPT	93H 1 1/4" NPT 93H1 1 1/4" NPT
Connections	3/4" NPT	3/4" NPT	1" NPT	1" NPT	1 1/4" NPT	1 1/4" NPT

EvoPICV^R

Rotary Pressure Independent Control Valve

81



EvoPICV Pressure independent balancing and control valve with equal percentage characteristic for rotary actuator.
Connections: F x F BSP

81_JP: suitable for Pettinaroli and JCI actuators

81_SP: suitable for Sauter and Siemens actuators

Size		Code
81VLJP 1/2"	1	3701590210C
81LJP 1/2"	1	3701590100C
81HJP 1/2"	1	3701590260C
81LJP 3/4"	1	3702090210C
81HJP 3/4"	1	3702090260C

Size		Code
81VLSP 1/2"	1	3701590720C
81LSP 1/2"	1	3701590700C
81HSP 1/2"	1	3701590290C
81LSP 3/4"	1	
81HSP 3/4"	1	3702090270C

83



EvoPICV Pressure independent balancing and control valve with equal percentage characteristic for rotary actuator.
Connections: Union end F x F BSP

83_JP: suitable for Pettinaroli and JCI actuators

83_SP: suitable for Sauter and Siemens actuators

Size		Code
83HJP 3/4" DN25	1	3702090151C
83LJP 1" DN25	1	
83HJP 1" DN25	1	3702590071C
83LJP 1 1/4" DN25	1	
83HJP 1 1/4" DN25	1	3703290250C

Size		Code
83HSP 3/4" DN25	1	
83LSP 1" DN25	1	
83HSP 1" DN25	1	
83LSP 1 1/4" DN25	1	
83HSP 1 1/4" DN25	1	

General technical specifications	
Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	362,59 psi / 25 bar
Stroke	90°

81	81VLSP 1/2"	81LSP 1/2"	81HSP 1/2"	81LSP 3/4"	81HSP 3/4"
	81VLJP 1/2"	81LJP 1/2"	81HJP 1/2"	81LJP 3/4"	81HJP 3/4"
Flow rate max.	360 l/h 1,59 GPM	700 l/h 3,08 GPM	1000 l/h 4,40 GPM	780 l/h 3,43 GPM	1150 l/h 5,06 GPM
Start-up max	2,9 psi 0,20 bar	2,9 psi 0,20 bar	2,9 psi 0,20 bar	3,63 psi 0,25 bar	3,63 psi 0,25 bar


83	83HSP 3/4"	83LSP 1"	83HSP 1"	83LSP 1 1/4"	83HSP 1 1/4"
	83HJP 3/4"	83LJP 1"	83HJP 1"	83LJP 1 1/4"	83HJP 1 1/4"
Flow rate max.	2200 l/h 9,69 GPM	2200 l/h 9,69 GPM	2700 l/h 11,89 GPM	3000 l/h 13,21 GPM	4000 l/h 17,61 GPM
Start-up max	4,35 psi 0,30 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar




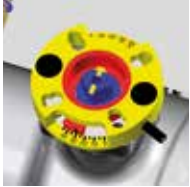
EPD
INTERNAZIONALE EPD SYSTEM

BIM
READY

EvoPICV Pressure independent balancing and control valve with equal percentage characteristic for rotary actuator.
Connections: F x F Union end
Patent: EP2.841.853.B1 - US9383033B2
Features: With Presetting device 081PR1
Insulating case: Available

Size		Code
83HPR1 1 1/4" DN40	1	3704240160C
83LPR1 1 1/2" DN40	1	3704040140C
83HPR1 1 1/2" DN40	1	3704040160C
83VLPR1 2" DN40	1	3704040230C
83LPR1 2" DN50	1	3705040130C
83HPR1 2" DN50	1	3705040180C

Size		Code
83HPR1 1 1/4" NPT DN40	1	3704540160C
83LPR1 1 1/2" NPT DN40	1	3704240140C
83HPR1 1 1/2" NPT DN40	1	3704240100C
83VLPR1 2" NPT DN40	1	3704540230C
83LPR1 2" NPT DN50	1	3705440130C
83HPR1 2" NPT DN50	1	3705440080C



General technical specifications


Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar
Temperature	-10 ÷ 120 °C
Working pressure max.	232,06 psi / 16 bar
Stroke	90°

	83HPR1 1 1/4"	83LPR1 1 1/2"	83HPR1 1 1/2"	83VLPR1 2"	83LPR1 2"	83HPR1 2"
Flow rate max.	6000 l/h 26,42 GPM	6000 l/h 26,42 GPM	9000 l/h 39,63 GPM	11000 l/h 48,43 GPM	12000 l/h 52,83 GPM	18000 l/h 79,25 GPM
Start-up max	4,35 psi 0,30 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar	5,80 psi 0,40 bar	5,08 psi 0,35 bar	5,08 psi 0,35 bar
Connections	Rc 1 1/4" union F EN 10226-1	Rc 1 1/2" union F EN 10226-1	Rc 1 1/2" union F EN 10226-1	Rc 2" union F EN 10226-1	Rc 2" union F EN 10226-1	Rc 2" union F EN 10226-1
	83HPR1 1 1/4" NPT	83LPR1 1 1/2" NPT	83HPR1 1 1/2" NPT	83VLPR1 2" NPT	83LPR1 2" NPT	83HPR1 2" NPT
Connections	1 1/4" NPT	1 1/2" NPT	1 1/2" NPT	2" NPT	2" NPT	2" NPT



EvoPICV Pressure independent balancing and control valve.

Connections: Flanged
 Features: Smart actuator included
 Insulating case: Available

Size		Code
94FH 2" DN50	1	3705040600C
94FL 2 1/2" DN65	1	3706540610C
94FH 2 1/2" DN65	1	3706540600C
94FL 3" DN80	1	3708040610C
94FL 4" DN100	1	3710040610C
94FL 5" DN125	1	3712540610C
94FH 5" DN125	1	3712540600C
94FH 6" DN150	1	3715040600C
94FL 8" DN200	1	3720040310C
94FH 8" DN200	1	3725040310C
94FH 10" DN250	1	3725040300C

General technical specifications	
Accuracy 0 ÷ 1 bar	± 5%
ΔP max.	87,02 psi / 6 bar from 2" to 6" 58,02 psi / 4 bar from 8" to 10"
Temperature	-10 ÷ 120 °C
Working pressure max.	232,06 psi / 16 bar


	94FH 2"	94FL 2 1/2"	94FH 2 1/2"	94FL 3"	94FL 4"	94FL 5"	94FH 5"
Flow rate max.	20000 l/h 88,06 GPM	20000 l/h 88,06 GPM	30000 l/h 132,09 GPM	30000 l/h 132,09 GPM	55000 l/h 242,16 GPM	90000 l/h 396,26 GPM	120000 l/h 528,34 GPM
Start-up max	5,80 psi 0,40 bar	5,80 psi 0,40 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar	5,08 psi 0,35 bar
Connections	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2

	94FH 6"	94FL 8"	94FH 8"	94FH 10"
Flow rate max.	150000 l/h 660,43 GPM	200000 l/h 880,57 GPM	300000 l/h 1320,86 GPM	500000 l/h 2201,43 GPM
Start-up max	7,25 psi 0,50 bar	5,80 psi 0,40 bar	5,80 psi 0,40 bar	9,43 psi 0,65 bar
Connections	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2	Flanged EN 1092-2



EvoPICV Pressure independent balancing and control valve.

Connections: ANSI Flanged
Features: Smart actuator included
Insulating case: Available

Size		Code
95FH 2" DN50	1	3705040630C
95FH 2 1/2" DN65	1	3706540630C
95FL 3" DN65	1	3708040620C
95FL 4" DN100	1	3710040620C
95FL 6" DN150	1	3715040620C
95FH 6" DN150	1	3715040630C

General technical specifications

Accuracy $0 \div 1$ bar	$\pm 5\%$
ΔP max.	87,02 psi / 6 bar
Temperature	$-10 \div 120$ °C
Working pressure max.	232,06 psi / 16 bar

	95FH 2"	95FH 2 1/2"	95FL 3"	95FL 4"	95FL 6"	95FH 6"
Flow rate max.	20000 l/h 88,06 GPM	30000 l/h 132,09 GPM	30000 l/h 132,09 GPM	55000 l/h 242,16 GPM	90000 l/h 396,26 GPM	150000 l/h 660,43 GPM
Start-up max	5,80 psi 0,40 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	4,35 psi 0,30 bar	5,08 psi 0,35 bar	7,25 psi 0,50 bar
Connections	Flanged 2" ANSI B16.42 EN 558 (face to face)	Flanged 2 1/2" ANSI B16.42 EN 558 (face to face)	Flanged 3" ANSI B16.42 EN 558 (face to face)	Flanged 4" ANSI B16.42 EN 558 (face to face)	Flanged 6" ANSI B16.42 EN 558 (face to face)	Flanged 6" ANSI B16.42 EN 558 (face to face)

ACTUATORS

and thermostat



Blu *DRIVE*

Compact, **SMART**, user-friendly

BluDRIVE is the **smart all-in-one actuator** designed to balance, manage, and **maximize the efficiency** of your HVAC system. It automatically **optimizes the flow rate** of the system, keeping the Delta T constantly stable and ensuring the **highest level of comfort and energy savings**.

A **simple** and **cost-effective** solution (compared to a fully electronic valve).

It fits all Pettinaroli threaded PICVs and fan coil valves

Integrated display for stand-alone management

Delta T control function

IP54 protection

Remote commissioning
(with BMS – Modbus RTU protocol)



Blu *DRIVE*

The **most compact** electronic actuator on the market, featuring **unique technical characteristics**

THE RIGHT CHOICE FOR EVERY USER

The **BluDRIVE** range fits all Pettinaroli threaded PICVs and fan coil valves, as well as many other models available on the market, providing **scalable solutions** designed to meet the specific requirements of every user.

The series includes the following versions: **ON/OFF and Floating**, Proportional with **Feedback**, Proportional with **Feedback and Fail Safe**, and Proportional with **Delta T Control**.

BluDRIVE also enables **remote commissioning** (with BMS via **Modbus RTU** protocol).

The **integrated display**, available on the proportional versions, allows independent configuration and management of readings.

In its complete configuration, the BluDRIVE actuator is equipped with **two digital temperature sensors** with M10 connection.

It can **detect and exchange** temperature data, estimate flow rate and energy consumption, detect possible system leaks, and includes a **Delta T control** function.

VT19203




100-240V electromotive floating (3 points) or ON/OFF (2 points) actuator to drive pressure independent control valve - PICV. Max stroke 9 mm; nominal force 200 N. Suitable for all axial Pettinaroli PICV (91, 92 and 93). Connection M30x1.5, adapted to Pettinaroli standards through OA7010 (not included).

Size		Code
100-240V - Floating and On/Off - 9 mm	1	6400800480C

VT192P5




100-240 V electromotive proportional actuator with feedback, valve selection + flow rate setting through the screen and manual override. With screen. Max stroke 9 mm. Suitable for all axial Pettinaroli PICV (91, 92 and 93). Connection M30x1.5, adapted to Pettinaroli standards through OA7010 (not included).

Size		Code
100-240V - (0-10V) - 9 mm	1	6400800510C

VT19403



24V electromotive floating (3 points) or ON/OFF (2 points) actuator to drive pressure independent control valve - PICV. Max stroke 9 mm; nominal force 200 N. Suitable for all axial Pettinaroli PICV (91, 92 and 93). Connection M30x1.5, adapted to Pettinaroli standards through OA7010 (not included).

Size		Code
24 V - Floating and On/Off - 9 mm	1	6400800490C

VT194P4



24 V electromotive proportional actuator with feedback, valve selection + flow rate setting through the screen and manual override. With screen. Max stroke 9 mm. Suitable for all axial Pettinaroli PICV (91, 92 and 93). Connection M30x1.5, adapted to Pettinaroli standards through OA7010 (not included).

Size		Code
24 V - (0-10V) - 9 mm	1	6400800450C

VT194P4FS



24 V electromotive proportional actuator with electric fail safe, feedback, valve selection + flow rate setting through the screen and manual override. With screen. Max stroke 9 mm. Suitable for all axial Pettinaroli PICV (91, 92 and 93). Connection M30x1.5, adapted to Pettinaroli standards through OA7010 (not included).

Size		Code
24 V - (0-10V) - Fail safe - 9 mm	1	6400800500C

VT194DT5



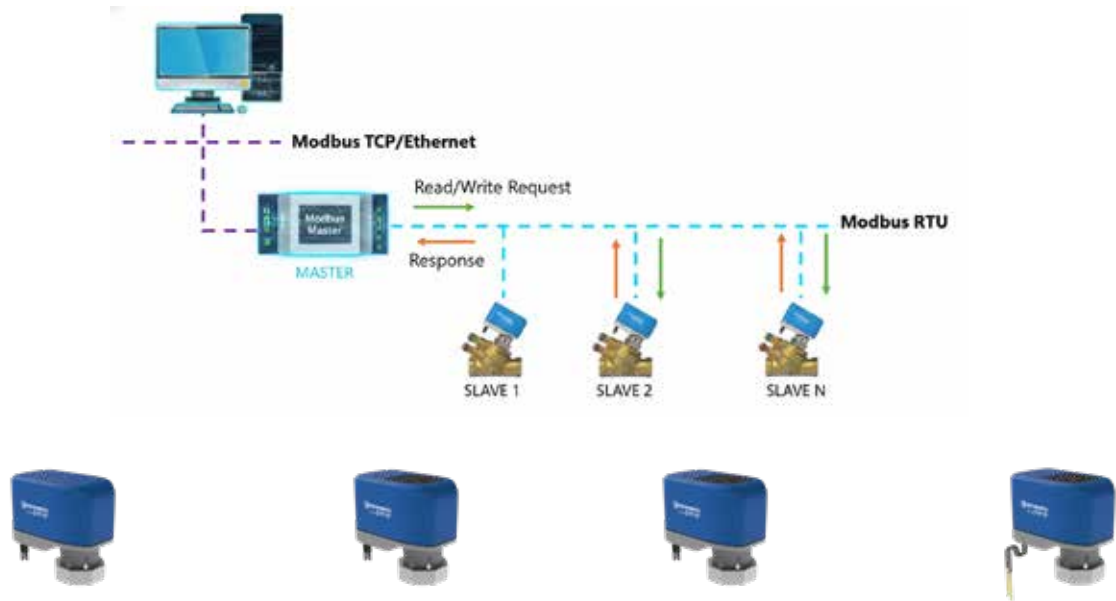
24 V electromotive proportional actuator with two NTS1001 digital temperature sensors for DeltaT control, valve selection + flow rate setting through the screen and manual override. The actuator can also control based on Return temperature only. With screen. Max stroke 9 mm. Suitable for all axial Pettinaroli PICV (91, 92 and 93). Connection M30x1.5, adapted to Pettinaroli standards through OA7010 (not included).

Size		Code
24 V - (0-10V) - Delta T - 9 mm	1	6400800470C

DELTA T AND EFFICIENCY UNDER CONTROL

Low Delta T syndrome is one of the most common signs of **inefficiency** in hydronic HVAC systems. The **BluDRIVE + Dynasty** combination solves this issue by keeping the temperature difference between supply and return constant, **optimizing system performance and reducing energy consumption** of the pump.

Through the **Modbus RTU** connection, **BluDRIVE** allows **real time remote monitoring and adjustment** of all key parameters from the BMS supervision system. Flow rate, temperature, Delta T, valve status, and system leaks are **constantly under control** ensuring continuous and precise control.




	Product code VT19403 (24V) VT19203 (230V)	Product code VT194P4 (24V) VT192P5 (230V)	Product code VT194P4FS (24V)	Product code VT194DT5 (24V)
✓	Features ON-OFF and Floating	Features Proportional with Feedback	Features Feedback & Fail Safe	Features Proportional with DeltaT control
⊗	-	Electrical Manual Override	Electrical Manual Override	Electrical Manual Override
↔	-	-	-	Protocolo Modbus RTU
△	-	-	-	Delta T control
📄	-	Display for setting and configuration	Display for setting and configuration	Display for setting and configuration
⚠	-	-	Fail Safe (Electric return)	-
🗨	-	Feedback 0-10VDC / 0-20mA	Feedback 0-10VDC / 0-20mA	Feedback Position data through protocol
🔧	-	Linear / Eq%	Linear / Eq%	Linear / Eq%
📡	-	Analog Input 0(2)-10VDC / 4(0)-20mA	Analog Input 0(2)-10VDC / 4(0)-20mA	Analog Input 0(2)-10VDC / 4(0)-20mA
🛡	Protection IP54	Protection IP54	Protection IP54	Protection IP54
⚙	Max. Mechanical Stroke 9 mm	Max. Mechanical Stroke 9 mm	Max. Mechanical Stroke 9 mm	Max. Mechanical Stroke 9 mm
🕒	Running Time 12 sec/mm, not adjustable (On-Off & Floating fixed running time)	Running Time 12 sec/mm, adjustable (On-Off & Floating fixed running time)	Running Time 12 sec/mm, adjustable (On-Off & Floating fixed running time)	Running Time 12 sec/mm, adjustable (On-Off & Floating fixed running time)
⬆	Force 200N	Force 200N	Force 200N	Force 200N
🔌	Power Supply 24V AC/DC or 100-240V AC	Power Supply 24V AC/DC or 100-240V AC	Power Supply 24V AC/DC	Power Supply 24V AC/DC

V54202



Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 230V, with adapter VA64. For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m.

Size		Code
230 V - ON/OFF PWM - 4 mm - VA64	100/1	V542020001C

V54402



Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 24V, with adapter VA64. For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m.

Size		Code
24 V - ON/OFF PWM - 4 mm - VA64	100/1	V544020001C

A54202




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 230V, with adapter VA64. For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m.

Size		Code
230 V - ON/OFF PWM - 4 mm - VA64	100/1	A542020001C

A54402




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 24V, with adapter VA64. For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m.

Size		Code
24 V - ON/OFF PWM - 4 mm - VA64	100/1	A544020001C

A54204




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 230V, with adapter VA64. For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m. Features: With micro aux. 4 wires

Size		Code
230 V - ON/OFF PWM - 4 mm - VA64	1	A542040001C

A54404




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 24V, with adapter VA64. For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m. Features: With micro aux 4 wires

Size		Code
24 V - ON/OFF PWM - 4 mm - VA64	1	A544040001C

MT54102




Thermo-electric actuator ON-OFF N.C. (normally closed) - 120V, with adapter 0A7010, For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm.

Size		Code
120 V - ON/OFF - 4 mm	100/1	MT54102001C

A56102




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 120V, with adapter VA64. For 93 series and 92 (1" - 1 1/4") series. Stroke 6,5 mm. Cable 1 m.

Size		Code
120 V - ON/OFF PWM - 6,5 mm - VA64	100/1	A561020001C

A56202




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 230V, with adapter VA64. For 93 series and 92 (1" - 1 1/4") series. Stroke 6,5 mm. Cable 1 m.

Size		Code
230 V - ON/OFF PWM - 6,5 mm - VA64	100/1	A562020001C

A56402




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed) 24V, with adapter VA64. For 93 series and 92 (1" - 1 1/4") series. Stroke 6,5 mm. Cable 1 m.

Size		Code
24 V - ON/OFF PWM - 6,5 mm - VA64	100/1	A564020001C

A544P3



Thermo-electric actuator 24 VAC with VA64 adapter. Proportional 0-10V (normally closed). For 91 series and 92 (1/2" - 3/4") series. Stroke 4 mm. Cable 1 m.

Size		Code
24 V AC - (0-10V) - 4 mm - VA64	1	A544P30001C

A564P3



Thermo-electric actuator 24 VAC with VA64 adapter. Proportional 0-10V (normally closed). For 93 series and 92 (1" - 1 1/4") series. Stroke 6,5 mm. Cable 1 m.

Size		Code
24 V AC - (0-10V) - 6,5 mm - VA64	1	A564P30001C

VA7493HF



Electromotive actuator for all axial PICV (91 - 92 - 92X - 93 Series). Proportional version 0 - 10 V. Equipped with valve stroke detection system and feedback (0-10V DC) to verify the position of the actuator at every moment. Adaptor included

Size		Code
24V - (0-10V) - max 8.7 mm - IP54	1	6400800430C

VA7484



Electric actuator for balancing valve 91 - 92 - 93 Series. Proportional version, auto-stroke with feedback and fail safe.

Features: Configurator for specific setup art. OC7484 (not included)
Adaptor art. OA7010 for 91 Series / 92 (1/2" - 3/4") Series (not included)
Adaptor art. OA748X for 93 Series / 92 (1" - 1 1/4") Series (not included)

Size		Code
24V - (0-10V) - max 6.3 mm - IP54	1	6400800360C

OC7484



Encoder for configuration change of VA7484

		Code
	1	6400000000C

RVAZ2



Electromotive actuator floating (3 points) or ON/OFF actuator to drive Pettinaroli PICV 92 series. Equipped with stroke detection system. Features: Adaptor not included. Art. OA748X for 92 Series

Size		Code
24V - max 8.5 mm - IP54	1	6400800390C
120V-230V - max 8.5 mm - IP54	1	6400800370C

OA7010



Adaptor for 91 series and 92 series.

Size		Code
M28 x M30	1	7403110030C

OA748X




Adaptor for 92 and 93 series

Size		Code
M28 x M30	1	7403110040C

SN08




Electromotive actuator for EvoPICV 81 - 83 Series, floating control version.
Features: linkage bracket included.
8 Nm operating torque

Size		Code
24 V	1	6402410000C
230 V - 110 V	1	6402410010C

VA9208




Electromotive actuator for 83 series.
Features: ON/OFF control. Spring return option

Size		Code
24 V	1	6400800250C
230 V	1	6400800260C

M94F2




Actuator for EvoPICV 94F / 95F 2" - 10".

Size		Code
M94F2 - 2" 20000 l/h	1	6405000301C
M94F2 - 2 1/2" 20000 l/h	1	6407100301C
M94F2 - 2 1/2" 30000 l/h	1	6407000301C
M94F2 - 3" 30000 l/h	1	6408000301C
M94F2 - 4" 55000 l/h	1	6410000301C
M94F2 - 5" 90000 l/h	1	6412500301C
M94F2 - 5" 120000 l/h	1	6412600301C
M94F2 - 6" 90000 l/h	1	6415000301C
M94F2 - 6" 150000 l/h	1	6415100301C
M94F2 - 8" 200000 l/h	1	6420000301C
M94F2 - 8" 300000 l/h	1	6420100301C
M94F2 - 10" 300000 l/h	1	6425000301C
M94F2 - 10" 500000 l/h	1	6425100301C

SN08CC



Electromotive actuator for EvoPICV 81 - 83 series, proportional control version.
Features: linkage bracket included.
8 Nm operating torque

Size		Code
24 V - (0-10V)	1	6402410020C
100...240 V - (0-10V)	1	6402410040C

VA9208C



Electromotive actuator for EvoPICV 83 Series.
Features: Proportional control 0 -10V. Spring return option

Size		Code
24 V - (0-10V)	1	6400800270C

M94FC



Fail safe device for M94F2 actuator. Battery not included

Size		Code
	1	8000000200C

THERMOELECTRIC ACTUATORS



Code	Voltage	Stroke	for PICV series	Note
V542O2	230V	4 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included
V544O2	24V	4 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included



Code	Voltage	Stroke	for PICV series	Note
A54202	230V	4 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included
A54204	230V	4 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included Micro auxiliary 4-wire
A54402	24V	4 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included
A54404	24V	4 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included Micro auxiliary 4-wire
A55102	120V	5 mm	91 / 92 (1/2"-3/4") / 92X	with adapter and 1 meter long cable included
A56102	120V	6,5 mm	93 / 92 (1" y 1 1/4")	with adapter and 1 meter long cable included
A56202	230V	6,5 mm	93 / 92 (1" y 1 1/4")	with adapter and 1 meter long cable included
A56402	24V	6,5 mm	93 / 92 (1" y 1 1/4")	with adapter and 1 meter long cable included



Code	Voltage	Stroke	for PICV series	Note
A544P3	24V AC 0-10V	4 mm	91 / 92 (1/2"-3/4") / 92X	Proportional actuator 24V (0-10V) with adapter and 1 meter long cable included
A564P3	24V AC 0-10V	6,5 mm	93 / 92 (1" y 1 1/4")	Proportional actuator 24V (0-10V) with adapter and 1 meter long cable included



Code	Voltage	Stroke	for PICV series	Note
MT54102	115V	4 mm	91 / 92 (1/2"-3/4") / 92X	adapter included

ELECTROMECHANICAL ACTUATORS

Blu **DRIVE**



Code	Voltage	Stroke	for PICV series	Note
VT192O3	230V	9 mm	91 / 92 / 92X / 93	Floating (3 points) or ON/OFF (2 points) Adaptor not included Art. 0A7010
VT194O3	24V	9 mm	91 / 92 / 92X / 93	Floating (3 points) or ON/OFF (2 points) Adaptor not included Art. 0A7010



Code	Voltage	Stroke	for PICV series	Note
VT194P4	24V 0-10V	9 mm	91 / 92 / 92X / 93	Proportional actuator with feedback, valve selection + flow rate setting. Adaptor not included Art. 0A7010
VT192P5	230V 0-10V	9 mm	91 / 92 / 92X / 93	Proportional actuator with feedback, valve selection + flow rate setting. Adaptor not included Art. 0A7010
VT194P4FS	24V 0-10V	9 mm	91 / 92 / 92X / 93	Proportional actuator with electric fail safe, feedback, valve selection + flow rate setting Adaptor not included Art. 0A7010
VT194DT5	24V 0-10V	9 mm	91 / 92 / 92X / 93	Proportional actuator with two NTS1001 digital temperature sensors for DeltaT control, valve selection + flow rate setting. Adaptor not included Art. 0A7010



Code	Voltage	Stroke	for PICV series	Note
VA7484	0-10V	6,3 mm	91 / 92X / 93 92 (except 1 1/2" - 2")	Electric actuator, proportional. Adapter not included Art. 0A7010 for 91 / 92 series (1/2" - 3/4") / 92X Art. 0A748X for 92 (1" - 1 1/4") - 93 series
VA7493HF	0-10V	8,7 mm	91 / 92 / 92X / 93	Electric actuator, proportional. Adapter included



Code	Voltage	Stroke	for PICV series	Note
RVAZ2	24V	8,7 mm	92 (from 1/2" to 2")	Electromotive actuator floating (3 points) or ON/OFF actuator to drive Pettinaroli PICV 92 series. Equipped with stroke detection system. Adaptor not included. Art. 0A748X for 92 Series
RVAZ2	120V - 230V	8,7 mm	92 (from 1/2" to 2")	Electromotive actuator floating (3 points) or ON/OFF actuator to drive Pettinaroli PICV 92 series. Equipped with stroke detection system. Adaptor not included. Art. 0A748X for 92 Series



Code	Voltage	Stroke	for PICV series	Note
SN08	24V	0° - 90°	81 / 83	Electromechanical rotary actuator with 3-point floating control. Support included - Nm 8. With flow reduction through angular limiting system.
SN08	230-110V	0° - 90°	81 / 83	Electromechanical rotary actuator with 3-point floating control. Support included - Nm 8. With flow reduction through angular limiting system.
SN08CC	24 V - (0-10V)	0° - 90°	81 / 83	Electromechanical rotary actuator with 3-point floating control. Support included - Nm 8. With flow reduction through angular limiting system.
SN08CC	100...240V (0-10V)	0° - 90°	81 / 83	Electromechanical rotary actuator with 3-point floating control. Support included - Nm 8. With flow reduction through angular limiting system.



Code	Voltage	Stroke	for PICV series	Note
VA9208	24V	0° - 95°	81 / 83	Electromechanical rotary actuator. On/off control. Spring return
VA9208	230V	0° - 95°	81 / 83	Electromechanical rotary actuator. On/off control. Spring return
VA9208C	24 V - (0-10V)	0° - 95°	81 / 83	Electromechanical rotary actuator. On/off control. Spring return. Proportional control.

TF20B




220V AC flush mounted thermostat with LCD screen for temperature control. Suitable for 2/4 pipe system applications with 3-speed fan-coil terminal units (heating and cooling). 24V AC/DC available upon request.

Size		Code
220 V	1	TF20B36P00C

TFF4PBM



24V AC/DC flush mounted thermostat with LCD screen for temperature control. Suitable for 2 pipe system applications with 3-speed fan-coil terminal units (heating and cooling). 230V AC/DC available upon request.

Size		Code
24 V	1	TF4PB32PM0C

HYDRONIC kits

PCS

Pettinaroli Commissioning Solutions





Pettinaroli Commissioning Solutions

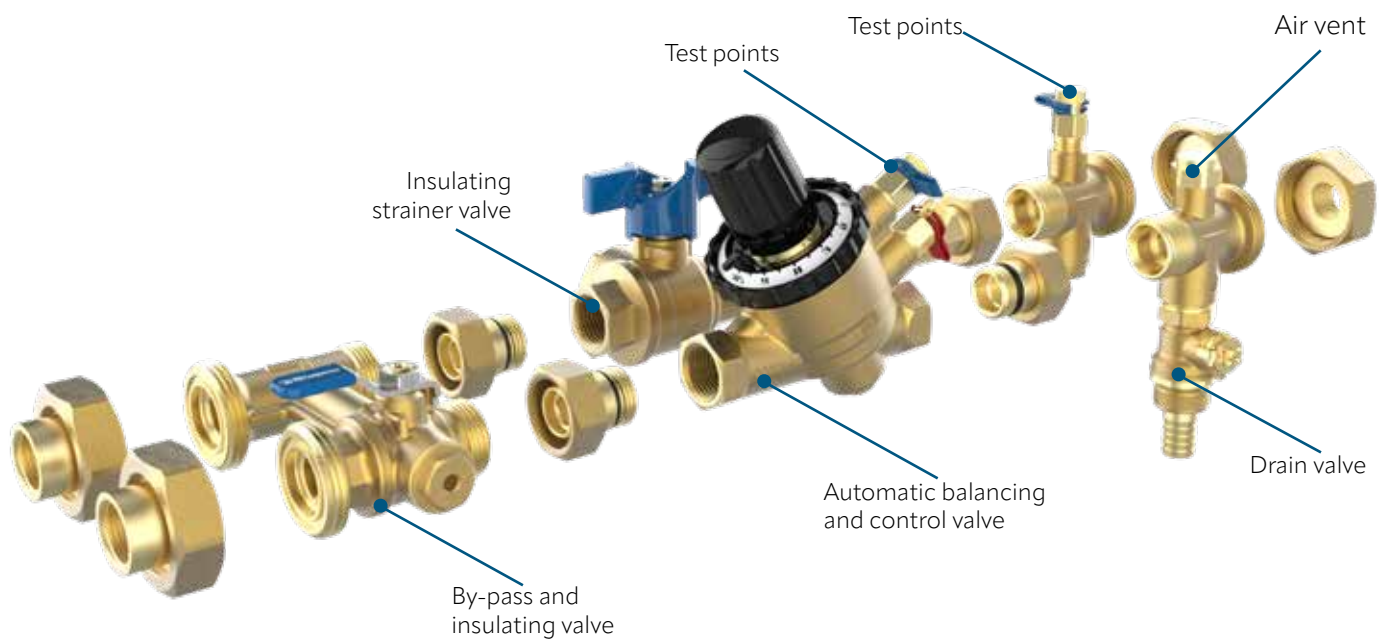
Pettinaroli's versatile range of **valve assemblies for fan coils, chilled beams and other hydronic terminal units** offers significant **benefits over standard products** - for consultants, contractors, commissioning engineers and building operators / owners.

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.

TECHNICAL SPECIFICATIONS



✓ **CONNECTING KIT FOR TERMINAL UNITS** (fan-coils, chilled beams and air handling units)

✓ **REDUCED ON-SITE LABOUR TIME**

✓ **FACTORY TESTED FOR MINIMUM LEAKAGE RISK**

✓ **100% MADE IN ITALY WITH PATENTED TECHNOLOGY**

✓ **FLEXIBLE AND BESPOKEN CONFIGURATION** (automatic, manual balancing)

✓ **NO FLUSHING THRU CONTROL VALVE** (100% safe)

XT600

PCS Flushing by-pass (60 mm / 40 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve.
Insulating case: Available

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510011C
1/2" X 600 l/h (2,64 GPM)	1	6201510010C
1/2" X 780 l/h (3,43 GPM)	1	6201510012C

Available in NPT version

XT601

PCS preassembled valve kit, flushing by-pass (60 mm / 40 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve.
Features: coil connection set with drain-off valve and additional PT port included. Insulating case: Available

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510002C
1/2" X 600 l/h (2,64 GPM)	1	6201510000C
1/2" X 780 l/h (3,43 GPM)	1	6201510001C

Available in NPT version

XT600G

PCS Flushing by-pass (60 mm / 40 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve.
Insulating case: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510019C
1/2" X 600 l/h (2,64 GPM)	1	6201510017C
1/2" X 780 l/h (3,43 GPM)	1	6201510018C

Available in NPT version

XT601G

PCS preassembled valve kit, flushing by-pass (60 mm / 40 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve.
Features: coil connection set with drain-off valve and additional PT port included. Insulating case: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 600 l/h (2,64 GPM)	1	6201510013C
1/2" X 780 l/h (3,43 GPM)	1	

Available in NPT version

General technical specifications

Pipe centres	60/40 mm
Nominal flow rate from	150 l/h to 780 l/h
Connections	1/2" F x 1/2" F
Filtering capacity	700 µm


General technical specifications

Pipe centres	60/40 mm
Nominal flow rate from	150 l/h to 780 l/h
Connections	1/2" double union end connections x 1/2" F
Filtering capacity	700 µm

XT700



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with EvoPICV 91 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Available


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510710C
1/2" X 600 l/h (2,64 GPM)	1	6201510700C
1/2" x 780 l/h (3,43 GPM)	1	6201510720C
3/4" x 1000 l/h (4,40 GPM)	1	6202210700C
3/4" x 1500 l/h (6,60 GPM)	1	6202210710C

Available in NPT version

XT701



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with EvoPICV 91 Series PICV, FilterBall strainer / shut-off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510790C
1/2" X 600 l/h (2,64 GPM)	1	6201510730C
1/2" x 780 l/h (3,43 GPM)	1	6201510740C
3/4" x 1000 l/h (4,40 GPM)	1	6202010780C
3/4" x 1500 l/h (6,60 GPM)	1	6202010780C

Available in NPT version

XT700G



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with EvoPICV 91 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Included


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510711C
1/2" X 600 l/h (2,64 GPM)	1	6201510701C
1/2" x 780 l/h (3,43 GPM)	1	6201510721C
3/4" x 1000 l/h (4,40 GPM)	1	6202210701C
3/4" x 1500 l/h (6,60 GPM)	1	6202210711C

Available in NPT version

XT701G



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with EvoPICV 91 Series PICV, FilterBall strainer / shut-off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510791C
1/2" X 600 l/h (2,64 GPM)	1	6201510731C
1/2" x 780 l/h (3,43 GPM)	1	6201510741C
3/4" x 1000 l/h (4,40 GPM)	1	6202010780C
3/4" x 1500 l/h (6,60 GPM)	1	6202011000C

Available in NPT version

General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h to 1500 l/h
Connections	1/2" F x 1/2" union end connections 3/4" F x 3/4" union end connections
Filtering capacity	700 µm


General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h to 1500 l/h
Connections	1/2" double union end connections 3/4" double union end connections
Filtering capacity	700 µm

XT702



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Available


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510750C
1/2" X 450 l/h (1,98 GPM)	1	6201510760C
1/2" X 850 l/h (3,74 GPM)	1	6201510770C
3/4" X 1000 l/h (4,40 GPM)	1	6202010750C
3/4" X 1850 l/h (8,15 GPM)	1	6202010760C
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	6202510830C
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	6202510770C

Available in NPT version

XT704



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV and FilterBall shut off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 450 l/h (1,98 GPM)	1	6201510820C
1/2" X 850 l/h (3,74 GPM)	1	6201510870C
3/4" X 1000 l/h (4,40 GPM)	1	
3/4" X 1850 l/h (8,15 GPM)	1	
1" X 2500 l/h (11,01 GPM)	1	
1" X 3300 l/h (14,53 GPM)	1	

Available in NPT version

XT702G



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Included


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510751C
1/2" X 450 l/h (1,98 GPM)	1	6201510762C
1/2" X 850 l/h (3,74 GPM)	1	6201510772C
3/4" X 1000 l/h (4,40 GPM)	1	6202010752C
3/4" X 1850 l/h (8,15 GPM)	1	6202010762C
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	6202510831C
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	6202510771C

Available in NPT version

XT704G



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV and FilterBall shut off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510991C
1/2" X 450 l/h (1,98 GPM)	1	6201510821C
1/2" X 850 l/h (3,74 GPM)	1	6201510871C
3/4" X 1000 l/h (4,40 GPM)	1	6202011011C
3/4" X 1850 l/h (8,15 GPM)	1	6202010871C
1" X 2500 l/h (11,01 GPM)	1	6202510921C
1" X 3300 l/h (14,53 GPM)	1	6202510931C

Available in NPT version

General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h to 3300 l/h
Connections	1/2" F x 1/2" union end connections 3/4" F x 3/4" union end connections 3/4" F x 1" union end connections
Filtering capacity	700 µm


General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h to 3300 l/h
Connections	1/2" double union end connections 3/4" double union end connections 1" double union end connections
Filtering capacity	700 µm

XT702P




PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	6201510752C
1/2" X 450 l/h (1,98 GPM)	1	6201510763C
1/2" X 850 l/h (3,74 GPM)	1	6201510773C
3/4" X 1000 l/h (4,40 GPM)	1	6202010753C
3/4" X 1850 l/h (8,15 GPM)	1	6202010763C

X702PA



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case and flexible hoses: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 450 l/h (1,98 GPM)	1	0000000470C
1/2" X 850 l/h (3,74 GPM)	1	0000000478C
3/4" X 1000 l/h (4,40 GPM)	1	0000000476C
3/4" X 1850 l/h (8,15 GPM)	1	0000000477C


General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h a 1850 l/h
Connections	1/2" F x 1/2" union end connections 3/4" F x 3/4" union end connections
Filtering capacity	700 µm
X702PA Flexible Male X Female length	300 mm from 150 l/h to 1850 l/h

X702GA



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case and flexible hoses: Included


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	0000000364C
1/2" X 450 l/h (1,98 GPM)	1	0000000356C
1/2" X 850 l/h (3,74 GPM)	1	0000000365C
3/4" X 1000 l/h (4,40 GPM)	1	0000000355C
3/4" X 1850 l/h (8,15 GPM)	1	0000000366C
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	0000000384C
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	0000000386C

General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h to 3300 l/h (0,66 GPM to 14,53 GPM)
Connections	1/2" F x 1/2" union end connections 3/4" F x 3/4" union end connections 3/4" F x 1" union end connections
Filtering capacity	700 µm
Flexible Male X Female length	300 mm from 150 l/h to 1850 l/h 350 mm from 2500 l/h to 3300 l/h


XT722

PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve and 2 M10 temperature sensor fittings to fit VT194DT5 sensors.
Insulating case: Available upon request

Size		Code
1/2" M x 1/2" F X 150 l/h (0,66 GPM)	1	
1/2" M x 1/2" F X 450 l/h (1,98 GPM)	1	
1/2" M x 1/2" F X 850 l/h (3,74 GPM)	1	
3/4" M x 3/4" F X 1000 l/h (4,40 GPM)	1	
3/4" M x 3/4" F X 1850 l/h (8,15 GPM)	1	6202011310C
3/4" M x 1" F X 2500 l/h (11,01 GPM)	1	
3/4" M x 1" F X 3300 l/h (14,53 GPM)	1	

XT722G

PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve and 2 M10 temperature sensor fittings to fit VT194DT5 sensors.
Insulating case: Included

Size		Code
1/2" M x 1/2" F X 150 l/h (0,66 GPM)	1	
1/2" M x 1/2" F X 450 l/h (1,98 GPM)	1	
1/2" M x 1/2" F X 850 l/h (3,74 GPM)	1	
3/4" M x 3/4" F X 1000 l/h (4,40 GPM)	1	
3/4" M x 3/4" F X 1850 l/h (8,15 GPM)	1	
3/4" M x 1" F X 2500 l/h (11,01 GPM)	1	
3/4" M x 1" F X 3300 l/h (14,53 GPM)	1	

General technical specifications

Pipe centres	70 mm
Nominal flow rate from	150 l/h to 3300 l/h (0,66 GPM to 14,53 GPM)
Connections	1/2" M x 1/2" union end connections 3/4" M x 3/4" union end connections 3/4" M x 1" union end connections
Filtering capacity	700 µm


DYNASTY + Blu DRIVE



XT716




PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve, venturi adapter and pressure ports

Size		Code
1/2" X 150 l/h (0,66 GPM) - Kvs 0,37	1	
1/2" X 450 l/h (1,98 GPM) - Kvs 1,38	1	
1/2" X 850 l/h (3,74 GPM) - Kvs 2,28	1	
3/4" X 1000 l/h (4,40 GPM) - Kvs 3,37	1	
3/4" X 1850 l/h (8,15 GPM) - Kvs 4,7	1	
1" X 3/4" X 2500 l/h (11,01 GPM) - Kvs 6	1	

XT716G



PCS preassembled valve kit, flushing by-pass (70 mm centre-to-centre) with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve, venturi adapter and pressure ports. Insulating case: Included.

Size		Code
1/2" X 150 l/h (0,66 GPM) - Kvs 0,37	1	
1/2" X 450 l/h (1,98 GPM) - Kvs 1,38	1	
1/2" X 850 l/h (3,74 GPM) - Kvs 2,28	1	0000000463C
3/4" X 1000 l/h (4,40 GPM) - Kvs 3,37	1	
3/4" X 1850 l/h (8,15 GPM) - Kvs 4,7	1	
1" X 3/4" X 2500 l/h (11,01 GPM) - Kvs 6	1	


General technical specifications	
Pipe centres	70 mm
Nominal flow rate from	150 l/h to 2500 l/h (0,66 GPM to 11,01 GPM)
Kvs	0,37 a 6
Filtering capacity	700 µm

XT800



BIM
READY

PCS preassembled valve kit, flushing by-pass (80 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve. Insulating case: Available


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 600 l/h (2,64 GPM)	1	
1/2" X 780 l/h (3,43 GPM)	1	6201510600C
3/4" X 1000 l/h (4,40 GPM)	1	6202010600C
3/4" X 1500 l/h (6,60 GPM)	1	6202010601C

Available in NPT version

XT800G



PCS preassembled valve kit, flushing by-pass (80 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve. Insulating case: Included

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 600 l/h (2,64 GPM)	1	
1/2" X 780 l/h (3,43 GPM)	1	
3/4" X 1000 l/h (4,40 GPM)	1	6202010610C
3/4" X 1500 l/h (6,60 GPM)	1	6202010611C

Available in NPT version


General technical specifications	
Pipe centres	80 mm
Nominal flow rate from	150 l/h to 1500 l/h
Connections	1/2" F x 1/2" union end connections 3/4" F x 3/4" union end connections
Filtering capacity	700 µm

XT801



PCS flushing by-pass (80 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve.

Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available

Size		Code
3/4" X 600 l/h (2,64 GPM)	1	6202010055C
3/4" X 780 l/h (3,43 GPM)	1	6202010056C
3/4" X 1000 l/h (4,40 GPM)	1	6202010050C
3/4" X 1500 l/h (6,60 GPM)	1	6202010051C


Available in NPT version

XT801G



PCS flushing by-pass (80 mm centre-to-centre) with EvoPICV 91 Series and FilterBall strainer / shut-off valve.

Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
3/4" X 600 l/h (2,64 GPM)	1	
3/4" X 780 l/h (3,43 GPM)	1	
3/4" X 1000 l/h (4,40 GPM)	1	6202010054C
3/4" X 1500 l/h (6,60 GPM)	1	6202010052C

Available in NPT version


General technical specifications	
Pipe centres	80 mm
Nominal flow rate from	600 l/h to 1500 l/h
Connections	3/4" double union end connections
Filtering capacity	700 µm

XT850



PCS flushing by-pass (80 mm centre-to-centre) with EvoPICV 93 Series and FilterBall strainer / shut-off valve.

Insulating case: Available

Size		Code
1" X 3/4" X 2200 l/h (9,69 GPM)	1	6202510651C
1" X 3/4" X 2700 l/h (11,89 GPM)	1	6202510652C
1" X 3/4" X 3000 l/h (13,21 GPM)	1	6202510653C


Available in NPT version

XT850G



PCS flushing by-pass (80 mm centre-to-centre) with EvoPICV 93 Series and FilterBall strainer / shut-off valve.

Insulating case: Included

Size		Code
1" X 3/4" X 2200 l/h (9,69 GPM)	1	
1" X 3/4" X 2700 l/h (11,89 GPM)	1	
1" X 3/4" X 3000 l/h (13,21 GPM)	1	

Available in NPT version


General technical specifications	
Pipe centres	80 mm
Nominal flow rate from	2200 l/h to 3000 l/h
Connections	1" F x 3/4" union end connection
Filtering capacity	700 µm

XT851



PCS flushing by-pass (80 mm centre-to-centre) with EvoPICV 93 Series and FilterBall strainer / shut-off valve.

Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available

Size		Code
1" X 1" 2200 l/h (9,69 GPM)	1	6202510701C
1" X 1" 2700 l/h (11,89 GPM)	1	6202510700C
1" X 1" 3000 l/h (13,21 GPM)	1	6202510702C


Available in NPT version

XT851G



PCS flushing by-pass (80 mm centre-to-centre) with EvoPICV 93 Series and FilterBall strainer / shut-off valve.

Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
1" X 1" 2200 l/h (9,69 GPM)	1	6202510711C
1" X 1" 2700 l/h (11,89 GPM)	1	6202510710C
1" X 1" 3000 l/h (13,21 GPM)	1	6202510705C

Available in NPT version


General technical specifications	
Pipe centres	80 mm
Nominal flow rate from	2200 l/h to 3000 l/h
Connections	1" double union end connection
Filtering capacity	700 µm

XT1300



PCS preassembled valve kit (130 mm centre-to-centre) flushing by-pass, EvoPICV 91 Series PICV, FilterBall strainer / shut-off valve.

Insulating case: Available on request


Size		Code
1/2" X 1/2" X 150 l/h (0,66 GPM)	1	6201510110C
1/2" X 1/2" X 600 l/h (2,64 GPM)	1	6201510100C
1/2" X 1/2" X 780 l/h (3,43 GPM)	1	
3/4" X 3/4" X 1000 l/h (4,40 GPM)	1	
3/4" X 3/4" X 1500 l/h (6,60 GPM)	1	
1" X 3/4" X 2200 l/h (9,69 GPM)	1	
1" X 3/4" X 2700 l/h (11,89 GPM)	1	
1" X 3/4" X 3000 l/h (13,21 GPM)	1	

XT1303



PCS preassembled valve kit (130 mm centre-to-centre) flushing by-pass, EvoPICV 91 Series PICV, FilterBall strainer / shut-off valve.


Insulating case: Available on request

Size		Code
1/2" X 1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 1/2" X 600 l/h (2,64 GPM)	1	6201710400C
1/2" X 1/2" X 780 l/h (3,43 GPM)	1	6201810400C
3/4" X 3/4" X 1000 l/h (4,40 GPM)	1	
3/4" X 3/4" X 1500 l/h (6,60 GPM)	1	
1" X 3/4" X 2200 l/h (9,69 GPM)	1	
1" X 3/4" X 2700 l/h (11,89 GPM)	1	
1" X 3/4" X 3000 l/h (13,21 GPM)	1	

General technical specifications	
Pipe centres	130 mm
Nominal flow rate from	150 l/h to 3000 l/h
Connections	1/2" x 1/2" - 3/4" x 3/4" - 1" x 3/4"
Filtering capacity	700 µm


XT1313

PCS preassembled valve kit (130 mm centre-to-centre) flushing by-pass, DYNASTY 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Available on request

Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 450 l/h (1,98 GPM)	1	6201610410C
1/2" X 850 l/h (3,74 GPM)	1	6201510450C
3/4" X 1000 l/h (4,40 GPM)	1	6202110410C
3/4" X 1850 l/h (8,15 GPM)	1	6202110420C
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	

XT1313G

PCS preassembled valve kit (130 mm centre-to-centre) flushing by-pass, DYNASTY 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Included


Size		Code
1/2" X 150 l/h (0,66 GPM)	1	
1/2" X 450 l/h (1,98 GPM)	1	
1/2" X 850 l/h (3,74 GPM)	1	
3/4" X 1000 l/h (4,40 GPM)	1	
3/4" X 1850 l/h (8,15 GPM)	1	
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	

General technical specifications

Pipe centres	130 mm
Nominal flow rate from	150 l/h to 3300 l/h
Connections	1/2" x 1/2" - 3/4" x 3/4" - 1" x 3/4"
Filtering capacity	700 µm


XT1314

PCS preassembled valve kit with motorized 3-way control valve for bypass, DYNASTY dynamic balancing valve, Pettinaroli Filter-Ball (ball valve with integrated filter), and bypass for terminal unit isolation and cleaning.
Insulating case: Available on request

Size		Code
3/4" X 1000 l/h (4,40 GPM)	1	
3/4" X 1850 l/h (8,15 GPM)	1	
1" X 2500 l/h (11,01 GPM)	1	
1" X 3300 l/h (14,53 GPM)	1	

XT1314G

PCS preassembled valve kit with motorized 3-way control valve for bypass, DYNASTY dynamic balancing valve, Pettinaroli Filter-Ball (ball valve with integrated filter), and bypass for terminal unit isolation and cleaning.
Insulating case: Included

Size		Code
3/4" X 1000 l/h (4,40 GPM)	1	6202211010C
3/4" X 1850 l/h (8,15 GPM)	1	6202211040C
1" X 2500 l/h (11,01 GPM)	1	6202511141C
1" X 3300 l/h (14,53 GPM)	1	6202511131C


General technical specifications

Pipe centres	130 mm
Nominal flow rate from	1000 l/h a 3300 l/h (4,40 GPM a 14,53 GPM)
Connections	3/4" F union - 1" F union
Filtering capacity	700 µm

XT880



PCS preassembled valve kit, flushing by-pass (80 mm centre-to-centre) with Dynasty 92 Series DN25 PICV, FilterBall strainer / shut-off valve.
Insulating case: Available


Size		Code
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	6202510656C
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	
1" F X 1" F X 5200 l/h (22,89 GPM)	1	

Available in NPT version

XT881



PCS preassembled valve kit, flushing by-pass (80 mm centre-to-centre) with Dynasty 92 Series DN25 PICV and FilterBall shut off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available


Size		Code
1" F X 1" F X 2500 l/h (11,01 GPM)	1	
1" F X 1" F X 3300 l/h (14,53 GPM)	1	
1" F X 1" F X 5200 l/h (22,89 GPM)	1	

Available in NPT version

XT880G



PCS preassembled valve kit, flushing by-pass (80 mm centre-to-centre) with Dynasty 92 Series DN25 PICV, FilterBall strainer / shut-off valve.
Insulating case: Included


Size		Code
3/4" F X 1" F X 2500 l/h (11,01 GPM)	1	
3/4" F X 1" F X 3300 l/h (14,53 GPM)	1	
1" F X 1" F X 5200 l/h (22,89 GPM)	1	6202510657C

Available in NPT version

XT881G



PCS preassembled valve kit, flushing by-pass (80 mm centre-to-centre) with Dynasty 92 Series DN25 PICV and FilterBall shut off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
1" F X 1" F X 2500 l/h (11,01 GPM)	1	
1" F X 1" F X 3300 l/h (14,53 GPM)	1	
1" F X 1" F X 5200 l/h (22,89 GPM)	1	

Available in NPT version


General technical specifications	
Pipe centres	80 mm
Nominal flow rate from	2500 l/h to 5200 l/h
Connections	3/4" F x 1" union end connections 1" F x 1" union end connections
Filtering capacity	700 µm

General technical specifications	
Pipe centres	80 mm
Nominal flow rate from	2500 l/h to 5200 l/h
Connections	1" double union end connections
Filtering capacity	700 µm

XT1694



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Available


Size		Code
1 1/2" X 1 1/2" x 9000 l/h (39,62 GPM)	1	6204011080C

Available in NPT version

XT1695



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV and FilterBall shut off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available


Size		Code
1 1/2" X 1 1/2" x 9000 l/h (39,62 GPM)	1	

Available in NPT version

XT1694G



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Included

Size		Code
1 1/2" X 1 1/2" x 9000 l/h (39,62 GPM)	1	6204011081C

Available in NPT version

XT1695G



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV and FilterBall shut off valve.
Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
1 1/2" X 1 1/2" x 9000 l/h (39,62 GPM)	1	

Available in NPT version

General technical specifications

Pipe centres	169 mm
Nominal flow rate from	9000 l/h (39,62 GPM)
Connections	1 1/2" F X 1 1/2" F
Filtering capacity	700 µm


General technical specifications

Pipe centres	169 mm
Nominal flow rate from	9000 l/h (39,62 GPM)
Connections	1 1/2" F X 1 1/2" F
Filtering capacity	700 µm

XT2074



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Available

Size		Code
2" X 2" x 14000 l/h (61,70 GPM)	1	


Available in NPT version

XT2075



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV and FilterBall shut off valve.

Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Available


Size		Code
2" X 2" x 14000 l/h (61,70 GPM)	1	

Available in NPT version

XT2074G



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV, FilterBall strainer / shut-off valve.
Insulating case: Included

Size		Code
2" X 2" x 14000 l/h (61,70 GPM)	1	6205011081C

Available in NPT version

XT2075G



PCS preassembled valve kit, flushing by-pass with Dynasty 92 Series PICV and FilterBall shut off valve.

Features: Coil connection set with drain-off valve and additional PT port.
Insulating case: Included

Size		Code
2" X 2" x 14000 l/h (61,70 GPM)	1	620501161C

Available in NPT version

General technical specifications


Pipe centres	207 mm
Nominal flow rate from	14000 l/h (61,70 GPM)
Connections	2" F X 2" F
Filtering capacity	700 µm

General technical specifications

Pipe centres	207 mm
Nominal flow rate from	14000 l/h (61,70 GPM)
Connections	2" F X 2" F
Filtering capacity	700 µm


XT1680

168 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer

Size		Code
1 1/4" X 1 1/4" x 6000 l/h (26,41 GPM)	1	0000000376C


XT1681

168 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer. PT port, air vent and blow down valve.

Size		Code
1 1/4" X 1 1/4" x 6000 l/h (26,41 GPM)	1	

XT1682

168 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer. PT port


Size		Code
1 1/4" X 1 1/4" x 6000 l/h (26,41 GPM)	1	0000000372C

General technical specifications

Pipe centres	168 mm
Nominal flow rate from	6000 l/h (26,41 GPM)
Connections	1 1/4" F X 1 1/4" F
Filtering capacity	700 µm

XT1690

169 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer

Size		Code
1 1/2" X 1 1/2" x 9000 l/h (39,62 GPM)	1	0000000374C

XT1691

168 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer. PT port, air vent and blow down valve.

Size		Code
1 1/2" X 1 1/2" x 9000 l/h (39,62 GPM)	1	


General technical specifications

Pipe centres	169 mm
Nominal flow rate from	9000 l/h (39,62 GPM)
Connections	1 1/2" F X 1 1/2" F
Filtering capacity	700 µm

XT2070



207 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer


Size		Code
2" X 2" x 11000 l/h (48,43 GPM)	1	0000000427C
2" X 2" x 12000 l/h (52,83 GPM)	1	0000000429C
2" X 2" x 18000 l/h (79,25 GPM)	1	0000000430C

Available in NPT version

XT2071



207 mm flushing by-pass with pressure independent control valve 83 series and FilterBall strainer. PT port, air vent and blow down valve.

Size		Code
2" X 2" x 11000 l/h (48,43 GPM)	1	
2" X 2" x 12000 l/h (52,83 GPM)	1	
2" X 2" x 18000 l/h (79,25 GPM)	1	

Available in NPT version

General technical specifications

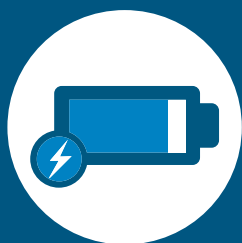
Pipe centres	207 mm
Nominal flow rate from	11000 l/h TO 18000 l/h (48,43 GPM TO 79,25 GPM)
Connections	2" X 2"
Filtering capacity	700 µm

PETTINAROLI

DATA CENTER SOLUTIONS



OUR STRENGTHS



Energy saving

- ✓ Widest range of PICVs:
from 150 l/h up to 500.000 l/h
- ✓ Optimal cooling power control
- ✓ Low start-up pressure
- ✓ Pump head optimisation



Easy system commissioning and maintenance

- ✓ Flushing by-pass for pipes cleaning
- ✓ Easy flow rate setting through the PICV
- ✓ Dry strainer cleaning of Filterball®
- ✓ Improved system reliability
- ✓ Less maintenance required



System control

- ✓ Pressure and Temperature gauges
integrated
- ✓ Valve test points
- ✓ Full authority – always the least flow
rate

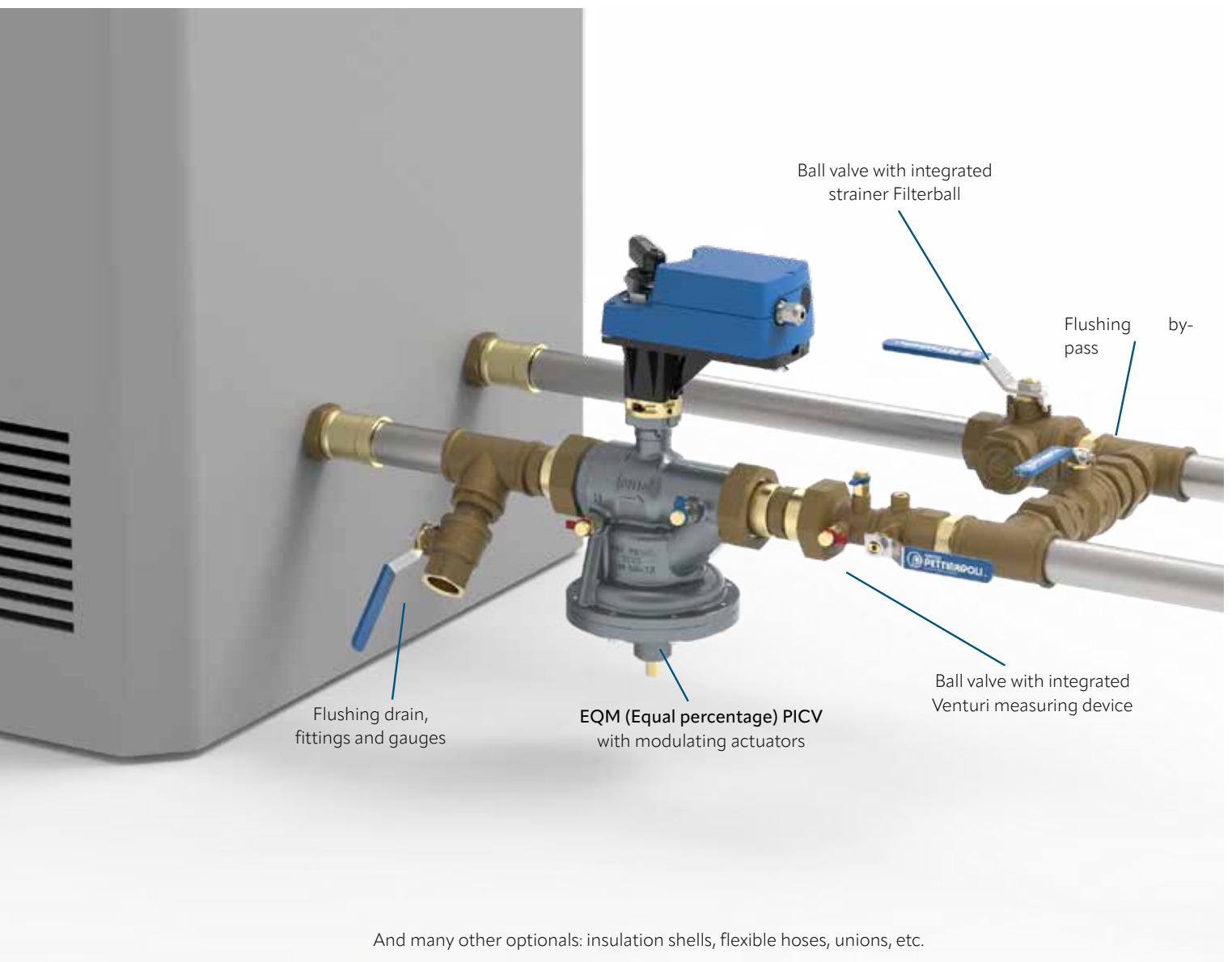
WHAT CAN WE OFFER ?

For small and medium size CRAHU:

- ✓ Pre-fabricated kits with PICV
- ✓ EQM (Equal percentage) PICV
- ✓ Modulating actuators
- ✓ Insulation shells
- ✓ Flexible hoses
- ✓ Venturi devices
- ✓ Non-return valves
- ✓ Unions and fittings

For big size CRAHU:

- ✓ Equalpercentage PICV
- ✓ Modulating actuators
- ✓ Flushing 3-way ball valve
- ✓ DZR ball valve with integrated strainer Filterball
- ✓ Isolation ball valve with integrated Venturi
- ✓ Insulation shells
- ✓ PT gauges
- ✓ Unions and fittings



--- **BIM files and technical support available** ---

ISOLATING CASES


for PICV & KITS



091IHV




Heating insulating case for EvoPICV 91 Series.

Size		Code
1/2" - 3/4"	1	6902010471C
1"	1	6902010770C

091ICV



Cooling insulating case for EvoPICV 91 Series.

Size		Code
1/2" - 3/4"	1	6902010472C
1"	1	6902010780C

091XIHV



Heating insulating case for EvoPICV 91X Series.

Size		Code
1/2" - 3/4"	1	

091XICV




Cooling insulating case for EvoPICV 91X Series.

Size		Code
1/2" - 3/4"	1	6902010570C

092IHV




Heating insulating case for Dynasty PICV 92 Series.

Size		Code
1/2"(92VL - 92L)	1	6902010590C
1/2"-3/4"(92H) - 3/4"(92L)	1	6902010600C
1" - 92L - 92H	1	6902010970C
1 1/4" - 92H	1	6902011250C
1 1/2" - 92H	1	6902011260C
2" - 92H	1	6902011500C

092ICV




Cooling insulating case for Dynasty PICV 92 Series.

Size		Code
1/2"(92VL - 92L)	1	6902010610C
1/2"-3/4"(92H) - 3/4"(92L)	1	6902010620C
1" - 92L - 92H	1	6902011110C
1 1/4" - 92H	1	
1 1/2" - 92H	1	

083IHV




Heating insulating case for EvoPICV 83 Series.

Size		Code
1 1/4" - 1 1/2" - 2" DN40	1	6902010720C
2" DN50	1	6902010760C

093IHV




Heating insulating case for EvoPICV 93 Series.

Size		Code
3/4" - 1" - 1 1/4"	1	6902010531C

094IHV




Heating insulating case for EvoPICV 94F Series.

Size		Code
2" - 94FH / 95FH	1	6902010790C
2 1/2" - 94FH / 95FH	1	6902010800C
3" - 94FL / 95FL	1	6902010840C
4" - 94FL / 95FL	1	6902010810C
5" - 94FL	1	6902010820C
6" - 94FL / 94FH / 95FL / 95FH	1	6902010830C

IHV




Heating insulating case for XT series.

Size		Code
I600HV 1/2" - XT600 series	1	6902010190C
I601HV 1/2" - XT601 series	1	6902010070C
I700HV 1/2" / 3/4" - XT700 series	1	6902010540C
I701HV 1/2" / 3/4" - XT701 series	1	6902010580C
I702HV 1/2" x 150/450 l/h - XT702 series	1	6902010890C
I702HV 1/2" x 850 l/h - XT702 series	1	6902010900C
I702HV 3/4" - XT702 series	1	6902010880C
I702HV 1" x 3/4" - XT702 series	1	6902010990C
I704HV 1/2" x 150/450 l/h - XT704 series	1	6902010850C
I704HV 1/2" x 850 l/h - XT704 series	1	
I704HV 3/4" - XT704 series	1	6902010580C
I704HV 1" - XT704 series	1	
I800HV 3/4" - XT800 series	1	6902010170C
I800HV 1" - XT800 series	1	
I801HV 3/4" - XT801 series	1	6902010080C
I801HV 1" - XT801 series	1	
I850HV 1" - XT850 series	1	6902010160C
I851HV 1" - XT851 series	1	6902010090C
I880HV 1"x 3/4" - XT880 series	1	
I880HV 1" - XT880 series	1	
I881HV 1" 2500-3300 l/h - XT881 series	1	
I881HV 1" 5200 l/h - XT881 series	1	
I1694HV 1 1/2" - XT1694 series	1	
I1695HV 1 1/2" - XT1695 series	1	

ICV



Cooling insulating case for XT series.

Size		Code
I600CV 1/2" - XT600 series	1	6902010210C
I601CV 1/2" - XT601 series	1	6902010230C
I700CV 1/2" / 3/4" - XT700 series	1	
I701CV 1/2" / 3/4" - XT701 series	1	
I702CV 1/2" x 150/450 l/h - XT702 series	1	
I702CV 1/2" x 850 l/h - XT702 series	1	
I702CV 3/4" - XT702 series	1	
I702CV 1" x 3/4" - XT702 series	1	
I704CV 1/2" x 150/450 l/h - XT704 series	1	
I704CV 1/2" x 850 l/h - XT704 series	1	
I704CV 3/4" - XT704 series	1	
I704CV 1" - XT704 series	1	
I800CV 3/4" - XT800 series	1	6902010200C
I800CV 1" - XT800 series	1	
I801CV 3/4" - XT801 series	1	6902010240C
I801CV 1" - XT801 series	1	
I850CV 1" - XT850 series	1	6902010220C
I851CV 1" - XT851 series	1	6902010250C
I880CV 1"x 3/4" - XT880 series	1	
I881CV 1" 2500-3300 l/h - XT881 series	1	

STATIC BALANCING valves

TERMINATOR[®]



TERMINATOR®

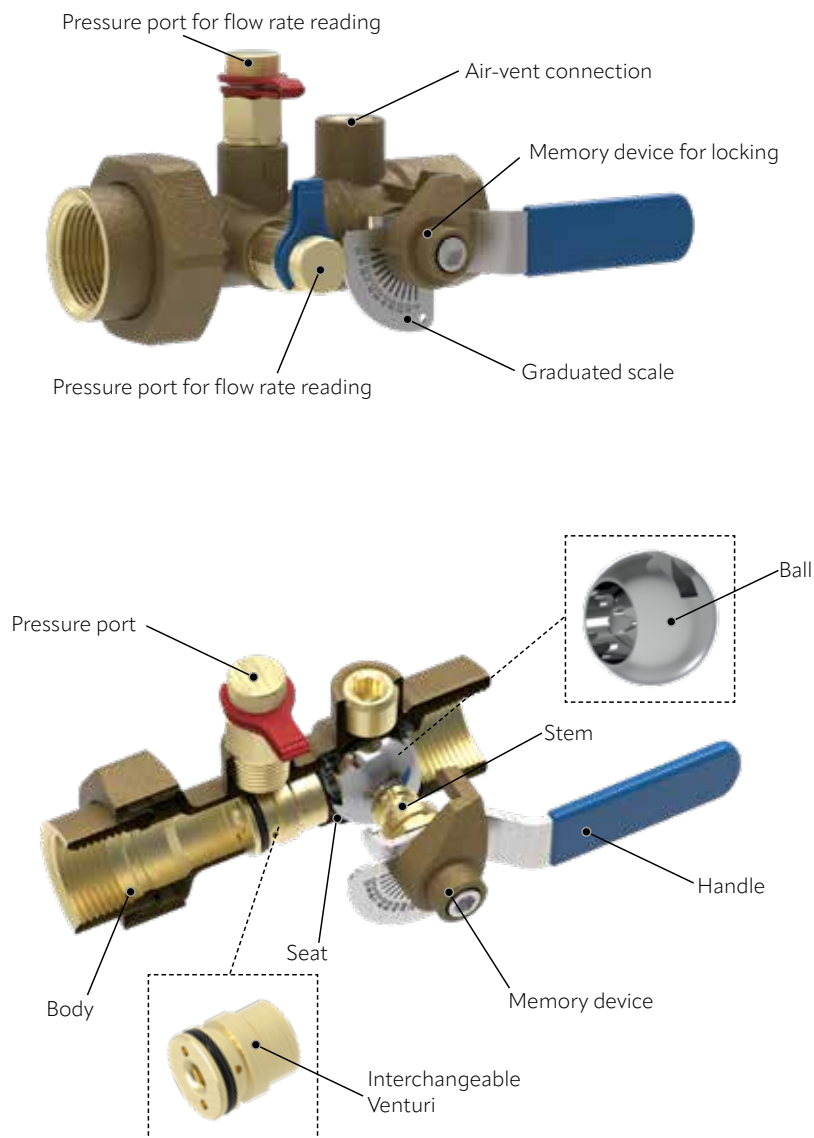
COMMISSIONING

Our **Terminator** is a patented **static balancing valve** with a quarter turn ball and one of its major benefits, apart from having 100% complete shut-off, is the ability to adapt its different components with the possibility of **regulating different flow rates with the same valve body**. Once the valve is set, the required flow rate can be adjusted by moving the hand lever.

The design flow rate should be measured with the Venturi and the digital pressure gauge. Correctly set the pressure gauge indicating the valve type, size and Venturi. Note that the valve has a reduced ball passage. Once the flow rate is set, turn and lock the memory device to the desired percentage.

INTERCHANGEABLE VENTURI

Our **Terminator** range of static balancing valves incorporates a **special patented technology** that allows **flow measurement under all conditions**. The venturi size can be changed so that the ΔP taken from the orifice can always be adjusted for the most accurate calibration possible.




B90TV TERMINATOR®




Terminator® manual balancing valve with memory stop device and interchangeable venturi for flow rate measuring (patent).

Connections: F x F tail

Features: Pressure ports included

Size		Code
1/2" x 3 mm - Kvs 0,36	50/5	3701712750C
1/2" x 4,25 mm - Kvs 0,71	50/5	3701512750C
1/2" x 6 mm - Kvs 1,38	50/5	3701612750C
3/4" x 9 mm - Kvs 3,25	50/5	3702212750C
3/4" x 12 mm - Kvs 6	50/5	3702012750C
1" x 10 mm - Kvs 4,10	30/5	3702612750C
1" x 14,5 mm - Kvs 8,80	30/5	3702512750C
1 1/4" x 13 mm - Kvs 7	16/2	3703312750C
1 1/4" x 19 mm - Kvs 14,70	16/2	3703212750C
1 1/2" x 15 mm - Kvs 9,50	16/2	3704112750C
1 1/2" x 22 mm - Kvs 19,20	16/2	3704012750C
2" x 18 mm - Kvs 12,50	8/2	3705112750C
2" x 31,5 mm - Kvs 42,00	8/2	3705012750C


Size		Code
1/2" NPT x 3 mm - Kvs 0,36	50/5	
1/2" NPT x 4,25 mm - Kvs 0,71	50/5	
1/2" NPT x 6 mm - Kvs 1,38	50/5	
3/4" NPT x 9 mm - Kvs 3,25	50/5	
3/4" NPT x 12 mm - Kvs 6	50/5	3702012710C
1" NPT x 10 mm - Kvs 4,10	30/5	
1" NPT x 14,5 mm - Kvs 8,80	30/5	
1 1/4" NPT x 13 mm - Kvs 7	16/2	
1 1/4" NPT x 19 mm - Kvs 14,70	16/2	3703212710C
1 1/2" NPT x 15 mm - Kvs 9,50	16/2	
1 1/2" NPT x 22 mm - Kvs 19,20	16/2	3704012710C
2" NPT x 18 mm - Kvs 12,50	8/2	
2" NPT x 31,5 mm - Kvs 42,00	8/2	3705012710C

B90T2VL TERMINATOR®



Terminator® balancing valve with memory stop, venturi for flow rate measuring and patented linear low profile ball. DN15.

Connections: 1/2" or 3/4" tail


Size		Code
1/2" x 3 mm - Kvs 0,36	50/5	
1/2" x 4,25 mm - Kvs 0,72	50/5	
1/2" x 6 mm - Kvs 1,45	50/5	
1/2" x 7,5 mm - Kvs 2,20	50/5	

B90T2VH TERMINATOR®



Terminator® balancing valve with memory stop, venturi for flow rate measuring and patented linear high profile ball. DN15.

Connections: Union piece couplings F 1/2" or 3/4" tail

Size		Code
1/2" x 7,5 mm - Kvs 2,20	50/5	
3/4" x 9 mm - Kvs 3,31	50/5	
3/4" x 10 mm - Kvs 4,40	50/5	
3/4" x 12 mm - Kvs 6,26	50/5	3702022170C


General technical specifications

T Min:	- 10 °C
T Max:	+ 120 °C
Maximum working pressure	2500 kPa / 25 bar
Stroke	90°
Permitted fluid	Water / Water+glycol 50%
Connections	ISO 7/1 Rc or NPT

SB1N




Variable orifice static balancing valve for HVAC with double digit regulation handwheel. Through this valve the pre-setting and flow balancing in branch segments or in the general circuit can be carried out. Flanges according to EN 1092-2 PN16.

Size		Code
1 1/2" - DN 40	1	3704041300C
2" - DN 50	1	3705041300C
2 1/2" - DN 65	1	3706541300C
3" - DN 80	1	3708041300C
4" - DN 100	1	3710141300C
5" - DN 125	1	3712541300C
6" - DN 150	1	3715041300C
8" - DN 200	1	3720041300C

SB1NA




Variable orifice static balancing valve for HVAC with double digit regulation handwheel. Through this valve the pre-setting and flow balancing in branch segments or in the general circuit can be carried out. Flanges according to ANSI class 150.

Size		Code
1 1/2" - DN 40	1	
2" - DN 50	1	
2 1/2" - DN 65	1	3706541500C
3" - DN 80	1	3708041500C
4" - DN 100	1	3710041500C
5" - DN 125	1	
6" - DN 150	1	3715041500C
8" - DN 200	1	

SB2V




Static balancing valve with variable orifice for HVAC with threaded connections for test ports (included with the valve). Opening degree shown in double digital. Suitable for both horizontal and vertical installation. Ductile iron body. Suitable for flanges according to EN 1092-2 PN16, RAL 5015 (blue) epoxy coated.

Size		Code
2 1/2" - DN 65	1	3706546060C
3" - DN 80	1	3708046060C
4" - DN 100	1	3710046060C
5" - DN 125	1	3712546060C
6" - DN 150	1	3715046060C
8" - DN 200	1	3720046060C
10" - DN 250	1	3725046060C
12" - DN 300	1	3730046060C
14" - DN 350	1	3735046060C
16" - DN 400	1	3740046060C

SB2VA




Static balancing valve with variable orifice for HVAC with threaded connections for test ports (included with the valve). Opening degree shown in double digital. Suitable for both horizontal and vertical installation. Ductile iron body. Suitable for flanges according to ANSI class 150, RAL 9005 (black) epoxy coated.

Size		Code
2 1/2" - DN 65	1	3706546070C
3" - DN 80	1	3708046070C
4" - DN 100	1	3710046070C
5" - DN 125	1	3712546070C
6" - DN 150	1	3715046070C
8" - DN 200	1	3720046070C
10" - DN 250	1	3725046070C
12" - DN 300	1	3730046070C
14" - DN 350	1	3735046070C
16" - DN 400	1	3740046070C

CV90




Adapter pipe fitting with Venturi.
Connections: M x F

Size		Code
1/2" x 3 mm - Kv 0,37	1	9601510360C
1/2" x 4,25 mm - Kv 0,72	1	9601610360C
1/2" x 6 mm - Kv 1,38	1	9602010360C
1/2" x 7,5 mm - Kv 2,28	1	9601710360C
1/2" x 9 mm - Kv 3,37	1	9601810360C
3/4" x 9 mm - Kv 3,30	1	9602210360C
3/4" x 10,5 mm - Kv 4,10	1	9602310360C
3/4" x 12 mm - Kv 6	1	9602410360C
1" x 10 mm - Kv 4,30	1	9602610360C
1" x 14,5 mm - Kv 9	1	9602510360C
1 1/4" x 13 mm - Kv 7	1	9603210370C
1 1/4" x 19 mm - Kv 15,30	1	9603210360C

OP1ST




Orifice plate, stainless steel, with test ports.
Suitable for flanges according to EN 1092-2 PN16.

Size		Code
2 1/2" - DN 65 - Kv 104	1	8606545000C
3" - DN 80 - Kv 116	1	8608045000C
4" - DN 100 - Kv 213	1	8610045000C
5" - DN 125 - Kv 333	1	8612545000C
6" - DN 150 - Kv 476	1	8615045000C
8" - DN 200 - Kv 768	1	8620045000C
10" - DN 250 - Kv 1153	1	8625045000C
12" - DN 300 - Kv 1743	1	8630045000C
14" - DN 350 - Kv 1798	1	8635045000C
16" - DN 400 - Kv 2338	1	8640045000C

OP1STA



Orifice plate, stainless steel, with test ports.
Suitable for flanges according to ANSI class 150.

Size		Code
2 1/2" - DN 65 - Kv 104	1	8606545010C
3" - DN 80 - Kv 116	1	8608045010C
4" - DN 100 - Kv 213	1	8610045010C
5" - DN 125 - Kv 333	1	8612545010C
6" - DN 150 - Kv 476	1	8615045010C
8" - DN 200 - Kv 768	1	8620045010C
10" - DN 250 - Kv 1153	1	8625045010C
12" - DN 300 - Kv 1743	1	8630045010C
14" - DN 350 - Kv 1798	1	8635045010C
16" - DN 400 - Kv 2338	1	8640045010C

ZONE VALVES

for fancoils




662



2-way zone valve for fan coil units and heating and cooling applications. Use limited by the value of the maximum operating differential pressure, which reduces the flow range.

Connections: M x M

Features: axial movement. Normally open valve

Size		Code
1/2" DN10 - Kv 0.63	1	6401612000C
1/2" DN10 - Kv 1	1	6401712000C
1/2" DN10 - Kv 1.6	1	6401512000C
3/4" DN15 - Kv 2.5	1	6402012000C
1" DN20 - Kv 4.2	1	6402512000C


664



4-way zone valve for fan coil units and heating and cooling applications. Use limited by the value of the maximum operating differential pressure, which reduces the flow range.

Connections: M x M


Features: axial movement. Normally open valve

Size		Code
1/2" DN10 - Kv 1.6	1	6401511000C
3/4" DN15 - Kv 2.5	1	6402011000C
1" DN20 - Kv 4.2	1	6402511000C

A54402S



Electro-thermal ON-OFF-PWM N.C. actuator. (normally closed) - 24V, with adapter and 1 meter cable included, for zone valve. Stroke 4 mm.
For 662 - 663 - 664.

Size		Code
24 V - ON/OFF PWM - 4 mm - VA80	100/1	A54402S001C


663



3-way zone valve for fan coil units and heating and cooling applications. Use limited by the value of the maximum operating differential pressure, which reduces the flow range.

Connections: M x M


Features: axial movement. Normally open valve

Size		Code
1/2" DN10 - Kv 0.63	1	6401613000C
1/2" DN10 - Kv 1	1	6401713000C
1/2" DN10 - Kv 1.6	1	6401513000C
3/4" DN15 - Kv 2.5	1	6402013000C
1" DN20 - Kv 4.2	1	6402513000C

A54202S



Electro-thermal ON-OFF-PWM N.C. actuator. (normally closed) - 230V, with adapter and 1 meter cable included, for zone valve. Stroke 4 mm.
For 662 - 663 - 664.

Size		Code
230 V - ON/OFF PWM - 4 mm - VA80	100/1	A54202S001C


BUTTERFLY VALVES



BF3SE-L




Butterfly valves LUG type for HVAC and water distribution. Ductile iron body with integrated ISO 5211 actuator mounting flange, stainless steel disc and EPDM seat.
Suitable for flanges according to EN 1092-2 PN16, with iron lever (from DN32 to DN150). RAL 5015 (blue) epoxy coated.

Size		Code
1 1/4" - DN 32	1	3703246000C
1 1/2" - DN 40	1	3704046000C
2" - DN 50	1	3705046000C
2 1/2" - DN 65	1	3706546000C
3" - DN 80	1	3708046000C
4" - DN 100	1	3710046000C
5" - DN 125	1	3712546000C
6" - DN 150	1	3715046000C

BF3SEAL




Butterfly valves LUG type for HVAC and water distribution. Ductile iron body with integrated ISO 5211 actuator mounting flange, stainless steel disc and EPDM seat.
Suitable for flanges according to ANSI class 150, with iron lever (from DN32 to DN150). RAL 9005 (black) epoxy coated.

Size		Code
1 1/4" - DN 32	1	3703246010C
1 1/2" - DN 40	1	3704046010C
2" - DN 50	1	3705046010C
2 1/2" - DN 65	1	3706546010C
3" - DN 80	1	3708046010C
4" - DN 100	1	3710046010C
5" - DN 125	1	3712546010C
6" - DN 150	1	3715046010C

BF3SE-G




Butterfly valves LUG type for HVAC and water distribution. Ductile iron body with integrated ISO 5211 actuator mounting flange, stainless steel disc and EPDM seat.
Suitable for flanges according to EN 1092-2 PN16, with gear box (from DN200 to DN600). RAL 5015 (blue) epoxy coated.

Size		Code
8" - DN 200	1	3720046000C
10" - DN 250	1	3725046000C
12" - DN 300	1	3730046000C
14" - DN 350	1	3735046000C
16" - DN 400	1	3740046000C
18" - DN 450	1	3745046000C
20" - DN 500	1	3750046000C
24" - DN 600	1	3760046000C

BF3SEAG



Butterfly valves LUG type for HVAC and water distribution. Ductile iron body with integrated ISO 5211 actuator mounting flange, stainless steel disc and EPDM seat.
Suitable for flanges according to ANSI class 150, with gear box (from DN200 to DN600). RAL 9005 (black) epoxy coated.


Size		Code
8" - DN 200	1	3720046010C
10" - DN 250	1	3725046010C
12" - DN 300	1	3730046010C
14" - DN 350	1	3735046010C
16" - DN 400	1	3740046010C
18" - DN 450	1	3745046010C
20" - DN 500	1	3750046010C
24" - DN 600	1	3760046010C

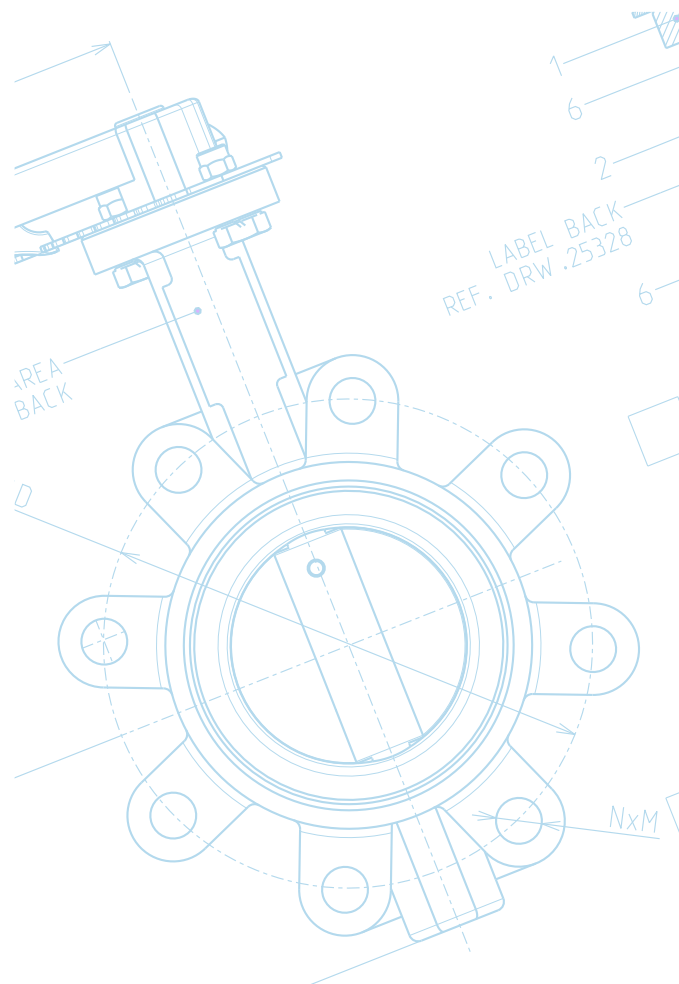
BF4SE-L



Butterfly valves WAFER type for HVAC and water distribution. Ductile iron body with integrated ISO 5211 actuator mounting flange, stainless steel disc and EPDM seat.

Suitable for flanges according to EN 1092-2 PN16 and ANSI class 150, with iron lever (from DN32 to DN150). RAL 5015 (blue) epoxy coated.

Size		Code
1 1/4" - DN 32	1	3703246020C
1 1/2" - DN 40	1	3704046020C
2" - DN 50	1	3705046020C
2 1/2" - DN 65	1	3706546020C
3" - DN 80	1	3708046020C
4" - DN 100	1	3710046020C
5" - DN 125	1	3712546020C
6" - DN 150	1	3715046020C




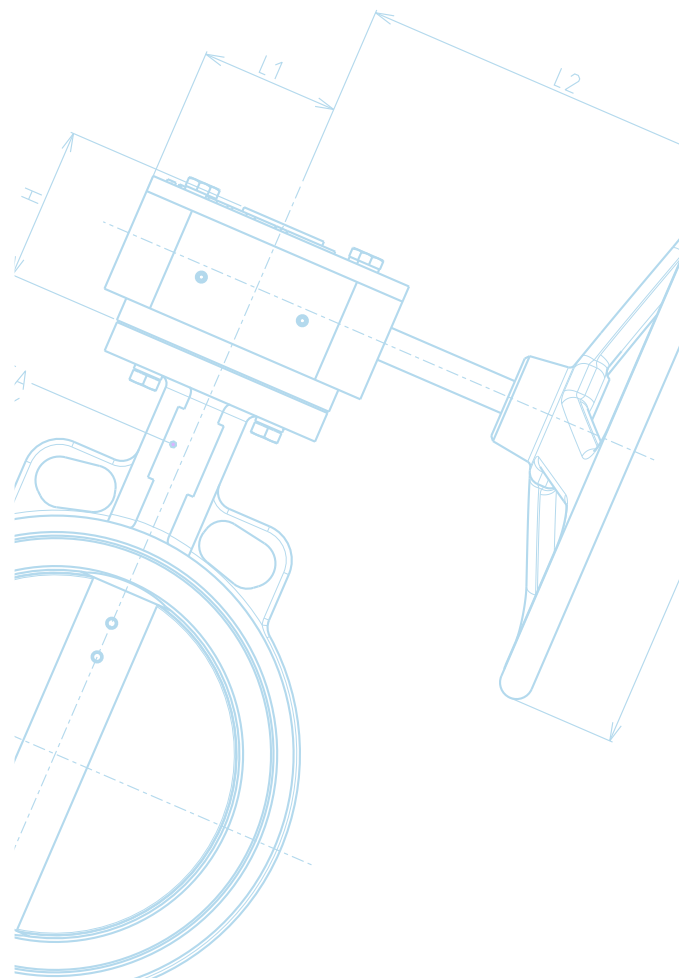
BF4SE-G



Butterfly valves WAFER type for HVAC and water distribution. Ductile iron body with integrated ISO 5211 actuator mounting flange, stainless steel disc and EPDM seat.

Suitable for flanges according to EN 1092-2 PN16 and ANSI class 150, with gear box (from DN200 to DN500). RAL 5015 (blue) epoxy coated.


Size		Code
8" - DN 200	1	3720046020C
10" - DN 250	1	3725046020C
12" - DN 300	1	3730046020C
14" - DN 350	1	3735046020C
16" - DN 400	1	3740046020C
18" - DN 450	1	3745046020C
20" - DN 500	1	3750046020C



EOT



Electromechanical compact actuator for BF3 - BF4 series - IP68 - ON/OFF
Adapters for connection to butterfly valve stem included.

Size		Code
EOT05 - 50 Nm - 220VAC	1	EOT0500220C
EOT10 - 100 Nm - 220VAC	1	EOT1000220C
EOT20 - 200 Nm - 220VAC	1	EOT2000220C
EOT40 - 400 Nm - 220VAC	1	EOT4000220C
EOT05 - 50 Nm - 110VAC	1	EOT0500110C
EOT10 - 100 Nm - 110VAC	1	EOT1000110C
EOT20 - 200 Nm - 110VAC	1	EOT2000110C
EOT40 - 400 Nm - 110VAC	1	EOT4000110C
EOT05 - 50 Nm - 24VAC	1	EOT0500024C
EOT10 - 100 Nm - 24VAC	1	EOT1000024C
EOT20 - 200 Nm - 24VAC	1	EOT2000024C
EOT40 - 400 Nm - 24VAC	1	EOT4000024C

The following options are available upon request:
 - 24 VDC power supply
 - modulating version [4-20mA or 0(2)-10V, including feedback]
 - position transmitter [4-20mA, for ON/OFF version] - not available for 50 Nm version


Actuator selection table for BF3 - BF4 series

	EOT Series	EOM Series
2" - DN 50	EOT05	EOM2
2 1/2" - DN 65	EOT05	EOM2
3" - DN 80	EOT05	EOM2
4" - DN 100	EOT10	EOM2
5" - DN 125	EOT10	EOM2
6" - DN 150	EOT20	EOM3
8" - DN 200	EOT40	EOM3A
10" - DN 250		EOM5
12" - DN 300		EOM6
14" - DN 350		EOM7
16" - DN 400		EOM7A
18" - DN 450		EOM8
20" - DN500		EOM9
24" - DN600		EOM10

EOM



Electromechanical actuator with planetary gear technology for BF3 - BF4 series
 - IP68 - ON/OFF - 5 Year Warranty.
 Adapters for connection to butterfly valve stem included.

Size		Code
EOM2 - 100 Nm - 220VAC	1	EOM2000220C
EOM3 - 200 Nm - 220VAC	1	EOM3000220C
EOM3A - 300 Nm - 220VAC	1	EOM3A00220C
EOM5 - 600 Nm - 220VAC	1	EOM5000220C
EOM6 - 800 Nm - 220VAC	1	EOM6000220C
EOM7 - 1000 Nm - 220VAC	1	EOM7000220C
EOM7A - 1300 Nm - 220VAC	1	EOM7A00220C
EOM8 - 1700 Nm - 220VAC	1	EOM8000220C
EOM9 - 2300 Nm - 220VAC	1	EOM9000220C
EOM10 - 3500 Nm - 220VAC	1	EOM1000220C
EOM2 - 100 Nm - 110VAC	1	EOM2000110C
EOM3 - 200 Nm - 110VAC	1	EOM3000110C
EOM3A - 300 Nm - 110VAC	1	EOM3A00110C
EOM5 - 600 Nm - 110VAC	1	EOM5000110C
EOM6 - 800 Nm - 110VAC	1	EOM6000110C
EOM7 - 1000 Nm - 110VAC	1	EOM7000110C
EOM7A - 1300 Nm - 110VAC	1	EOM7A00110C
EOM8 - 1700 Nm - 110VAC	1	EOM8000110C
EOM9 - 2300 Nm - 110VAC	1	EOM9000110C
EOM10 - 3500 Nm - 110VAC	1	EOM1000110C
EOM2 - 100 Nm - 24VAC	1	
EOM3 - 200 Nm - 24VAC	1	
EOM3A - 300 Nm - 24VAC	1	EOM3A00024C
EOM5 - 600 Nm - 24VAC	1	EOM5000024C
EOM6 - 800 Nm - 24VAC	1	EOM6000024C
EOM7 - 1000 Nm - 24VAC	1	
EOM7A - 1300 Nm - 24VAC	1	
EOM8 - 1700 Nm - 24VAC	1	
EOM9 - 2300 Nm - 24VAC	1	
EOM10 - 3500 Nm - 24VAC	1	

The following options are available upon request:
 - 24 VDC power supply
 - modulating version [4-20mA or 0(2)-10V, including feedback]
 - position transmitter [4-20mA, for ON/OFF version]

ATDA



Pneumatic actuator double action for BF3 - BF4 series
Adapters for connection to butterfly valve stem included.

Size		Code
AT052DA - 25 Nm - 6 bar	1	AT052DA001C
AT063DA - 45 Nm - 6 bar	1	AT063DA001C
AT075DA - 75 Nm - 6 bar	1	AT075DA001C
AT092DA - 140 Nm - 6 bar	1	AT092DA001C
AT105DA - 208 Nm - 6 bar	1	AT105DA001C
AT125DA - 368 Nm - 6 bar	1	AT125DA001C
AT140DA - 554 Nm - 6 bar	1	AT140DA001C
AT160DA - 844 Nm - 6 bar	1	AT160DA001C
AT190DA - 1361 Nm - 6 bar	1	AT190DA001C
AT210DA - 1870 Nm - 6 bar	1	AT210DA001C
AT240DA - 2931 Nm - 6 bar	1	AT240DA001C
AT270DA - 4122 Nm - 6 bar	1	AT270DA001C


Actuator selection table for BF3 - BF4 series

	ATDA Series	ATSR Series
2" - DN 50	AT052DA	AT075SR-12
2 1/2" - DN 65	AT063DA	AT083SR-12
3" - DN 80	AT063DA	AT092SR-12
4" - DN 100	AT075DA	AT105SR-11
5" - DN 125	AT092DA	AT125SR-12
6" - DN 150	AT105DA	AT140SR-12
8" - DN 200	AT125DA	AT160SR-12
10" - DN 250	AT140DA	AT190SR-12
12" - DN 300	AT160DA	AT240SR-10
14" - DN 350	AT160DA	AT240SR-12
16" - DN 400	AT190DA	AT270SR-12
18" - DN 450	AT210DA	AT300SR-12
20" - DN500	AT240DA	AT350SR-10
24" - DN600	AT270DA	AT400SR-10

ATSR



Pneumatic actuator with spring return for BF3 - BF4 series
Adapters for connection to butterfly valve stem included.

Size		Code
AT075SR - 12 - 24 Nm - 6 bar	1	AT075SR120C
AT083SR - 12 - 36 Nm - 6 bar	1	AT083SR120C
AT092SR - 12 - 52 Nm - 6 bar	1	AT092SR120C
AT105SR - 11 - 86 Nm - 6 bar	1	AT105SR110C
AT125SR - 12 - 127 Nm - 6 bar	1	AT125SR120C
AT140SR - 12 - 220 Nm - 6 bar	1	AT140SR120C
AT160SR - 12 - 338 Nm - 6 bar	1	AT160SR120C
AT190SR - 12 - 524 Nm - 6 bar	1	AT190SR120C
AT240SR - 10 - 896 Nm - 6 bar	1	AT240SR100C
AT240SR - 12 - 1018 Nm - 6 bar	1	AT240SR120C
AT270SR - 12 - 1295 Nm - 6 bar	1	AT270SR120C
AT300SR - 12 - 1901 Nm - 6 bar	1	AT300SR120C
AT350SR - 10 - 2408 Nm - 6 bar	1	AT350SR100C
AT400SR - 10 - 3655 Nm - 6 bar	1	AT400SR100C

EV-NAM




Namur solenoid valve for pneumatic actuator

Size		Code
5/2 - 24 VDC	1	EVNAM05024C
3/2 - 24 VDC	1	EVNAM03024C

L-BF3S




Iron lever for butterfly valves BF3S - BF4S series.

Size		Code
DN32 (F05-H=11)	1	8200145000C
DN40÷DN80 (F05-H=9)	1	8200245000C
DN100 (F07-H=11)	1	8200345000C
DN125 (F07-H=14)	1	8200445000C
DN150 (F07-H=14)	1	8200545000C

K-BF3S




Aluminium lever for butterfly valves BF3S - BF4S series.

Size		Code
DN32 (F05-H=11)	1	8200145010C
DN40÷DN80 (F05-H=9)	1	8200245010C
DN100 (F07-H=14)	1	8200345010C
DN125÷DN150 (F07-H=14)	1	8200445010C

G-BF3S




Handwheel with gear box for butterfly valves BF3S - BF4S series.

Size		Code
DN50÷DN80 (F05-H=9)	1	9200145000C
DN100÷DN150 (F07-H=14;11)	1	9200245000C
DN200÷DN250 (F10-H=22;17)	1	9200345000C
DN300÷DN350 (F10-H=22)	1	9200445000C
DN400÷DN450 (F14-H=27)	1	9200545000C
DN500 (F14-H=36)	1	9200645000C
DN600 (F16-H=36)	1	9200745000C

C-BF3S



Chain wheel with gear box for butterfly valves BF3S - BF4S series.

Size		Code
DN50÷DN80 (F05-H=9)	1	9200145010C
DN100÷DN150 (F07-H=14;11)	1	9200245010C
DN200÷DN250 (F10-H=22;17)	1	9200345010C
DN300÷DN350 (F10-H=22)	1	9200445010C
DN400÷DN450 (F14-H=27)	1	9200545010C
DN500 (F14-H=36)	1	9200645010C
DN600 (F16-H=36)	1	9200745010C

DIRECT EXPANSION BALL VALVES


for direct expansion
air conditioning systems



S70




Refrigerant ball valves type HFC / HFO. Bi-directional valve with internal pressure balancing system and sealing cap. Available up to 1 3/8 ".
Connections: ODS copper solder

Size		Code
1/4"	1	3200710000C
3/8"	1	3201010000C
1/2"	1	3201510000C
5/8"	1	3201610000C
3/4"	1	3202010000C
7/8"	1	3202310000C
1 1/8"	1	3202910000C
1 3/8"	1	3203410000C
1 5/8"	1	
2 1/8"	1	

S70S

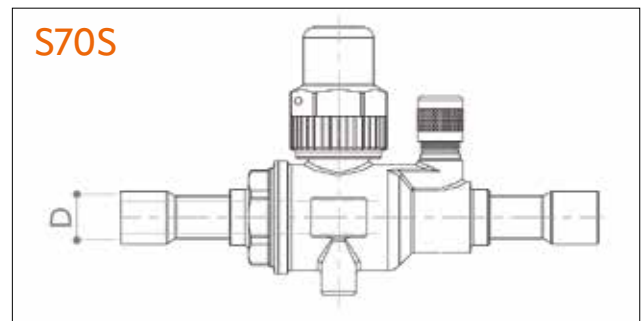
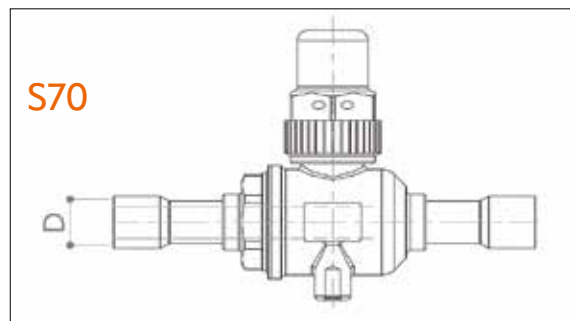


Refrigerant ball valves type HFC / HFO with access port. Bi-directional valve with internal pressure balancing system and sealing cap.
Connections: ODS copper solder
Features: Available up to 1 3/8 ".

Size		Code
1/4"	1	3200720000C
3/8"	1	3201020000C
1/2"	1	3201520000C
5/8"	1	3201620000C
3/4"	1	3202020000C
7/8"	1	3202320000C
1 1/8"	1	3202920000C
1 3/8"	1	3203420000C
1 5/8"	1	3203520000C
2 1/8"	1	

General technical specifications

Refrigerant gas type	HFC - HFO
T Min	- 40 °C
T Max	+ 150 °C
P Max	45 bar / 652,67 psi



D connection standard: imperial	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1 1/8"	1 3/8"	1 5/8"	2 1/8"
ball port	12	12	12	12	20	20	25	32	40	50
Kv	1,1	3,2	6	14,2	18	27,5	40,5	67,5	115	185

D connection standard: metric	10	12	16	18	22	28	35	42	54	64
ball port	12	12	12	20	20	25	32	40	50	50
Kv	3,2	6	14,2	18	27,5	40,5	67,5	115	185	190

ANTIFREEZE VALVES

for Heat Pump Systems

Ice SAFE



AG100/2



Antifreeze valve designed to ensure safe and efficient operation of heat pumps in harsh climatic conditions. The combination of this situation with the failure of the heat pump (damage/fault/lack of electrical power) can lead to situations in which the temperature of the fluid approaches freezing point, thus exposing the system to possible damage. The valve effectively prevents freezing, protecting the system.

Size		Code
1" - DN25 - M x M - Kv 40	1	0102510000C
1 1/4" - DN32 - M x M - Kv 57	1	0103210000C

AG100/5



Antifreeze valve designed to ensure safe and efficient operation of heat pumps in harsh climatic conditions. The combination of this situation with the failure of the heat pump (damage/fault/lack of electrical power) can lead to situations in which the temperature of the fluid approaches freezing point, thus exposing the system to possible damage. The valve effectively prevents freezing, protecting the system.

Size		Code
1" - DN25 - M x F - Kv 40	1	0102510010C
1 1/4" - DN32 - M x F - Kv 57	1	0103210010C

AG100CM



Antifreeze valve designed to ensure safe and efficient operation of heat pumps in harsh climatic conditions. The combination of this situation with the failure of the heat pump (damage/fault/lack of electrical power) can lead to situations in which the temperature of the fluid approaches freezing point, thus exposing the system to possible damage. The valve effectively prevents freezing, protecting the system.

Size		Code
28 mm - copper x copper - Kv 50	1	0102810000C

General technical specifications

Fluid temperature range	0°C ÷ 90°C
Ambient temperature	-30°C ÷ 65°C
Opening temperature	3°C (±0.5°C)
Closing temperature	4°C (±0.5°C)
Max working pressure	10 bar
Body material	Brass CW617N (UNI EN 12165)
Seals	EPDM-X

SIX-WAY valves EvoSix



1 ONE PRODUCT
25 different kv configurations
All interchangeable discs included

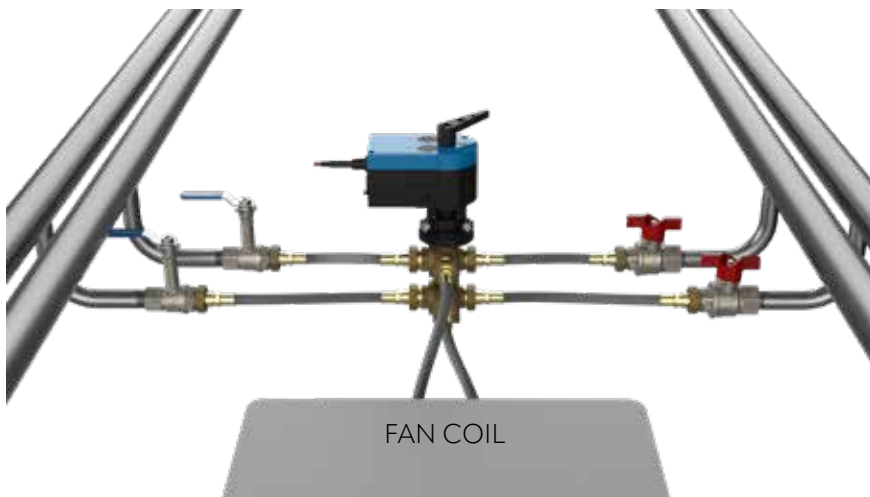
2 DOUBLE
fixing system
Directly on the valve or through 063ZA bracket

3 3/4"
Sphero conical
Direct connection with flexible hoses

4 QUICK ACTUATOR
assembly
With M63 bayonet ring

APPLICATION FIELD

Pettinaroli's **six-way valve (63 series)** was designed keeping in mind our **decade-long experience in big HVAC projects all over Europe**. Four-pipe systems are increasingly more common and managing them automatically is technically and practically difficult. This gave our engineers the input to design a **compact and functional solution** like our Pettinaroli 63/2S six-way ballvalve.



KV VALUES SELECTION

In order to simplify the logistic and the installation on site, **the valve is supplied with the maximum Kv**, or flow rate, configuration on both sides. Through our experience on the field, we know that heating and cooling flow rates are different because they are related to the project's ΔT . Very often, the heating flow rate is smaller than the cooling one whose ΔT is lower. Hence the choice to give a **standard kit together with the valve**: this kit includes 4 couples of interchangeable discs made of PSU.

The final user can select the suitable Kv for each side by changing the disc. **The kit is in the valve box.**

The Kv value is written on the internal side of every disc. The installer, following the designer's guidelines, picks the suitable discs out for both sides. This expedient ensures **high flexibility and practicality**.

DN15 Kv 1.25



Kv 0.25



Kv 0.40



Kv 0.65



Kv 1.00

DN20 Kv 2.8



Kv 0.70



Kv 1.00



Kv 1.6



Kv 2.1

DN20 Kv 4.0




Kv 2.5

63/2S

EvoSIX Six-way ball valve for HVAC 4 pipes applications to automatically carry out the winter-summer changeover or, if needed, the control of radiant ceilings, fan coils and chilled beams. Corrosion resistant.


Connections: G 3/4" M cone 60° BS5200 (for sphero conical fittings)
Insulating case: Available

Size		Code
3/4" DN15 - Kv 1.25	1	6401590601C
3/4" DN20 - Kv 2.8	1	6401790601C
3/4" DN20 HF - Kv 4.0	1	6401790561C

63/2F

EvoSIX Six-way ball valve for HVAC 4 pipes applications to automatically carry out the winter-summer changeover or, if needed, the control of radiant ceilings, fan coils and chilled beams. Corrosion resistant.


Connections: G 3/4" M flat end
Insulating case: Available

Size		Code
3/4" DN15 - Kv 1.25	1	6401590513C
3/4" DN20 - Kv 2.8	1	6401798510C
3/4" DN20 HF - Kv 4.0	1	6401790550C

63

EvoSIX Six-way ball valve for HVAC 4 pipes applications to automatically carry out the winter-summer changeover or, if needed, the control of radiant ceilings, fan coils and chilled beams. Corrosion resistant.


Connections: 1/2" F G - 3/4" F G
Insulating case: Available

Size		Code
1/2" DN15 - Kv 1.25	1	6401690521C
3/4" DN20 - Kv 2.8	1	6401793521C
3/4" DN20 HF - Kv 4.0	1	6401792521C
1/2" NPT DN15 - Kv 1.25	1	6401690531C
3/4" NPT DN20 - Kv 2.8	1	
3/4" NPT DN20 HF - Kv 4.0	1	

63/2E

EvoSIX Six-way ball valve for HVAC 4 pipes applications to automatically carry out the winter-summer changeover or, if needed, the control of radiant ceilings, fan coils and chilled beams. Corrosion resistant.

Connections: G 3/4" M Euroconos – 3/4" x 18mm
Available fittings: 3015 - 3015SCR
Insulating case: Available

Size		Code
3/4" DN15 - Kv 1.25	1	6401590502C
3/4" DN20 - Kv 2.8	1	6401790500C
3/4" DN20 HF - Kv 4.0	1	


General technical specifications

Water temperature	-10 °C +120°C	Total operation angle	90°
Nominal pressure	16 bar	First side operation angle	0 – 32°
Kv DN15	1.25 – 1 – 0.65 – 0.4 – 0.25	"Dead zone" operation angle	32° – 58°
Kv DN20	2.8 – 2.1 – 1.6 – 1 – 0.7	Second side operation angle	58° – 90°
Kv DN20 HF	4.0 - 2.5	Maximum differential pressure	2 bar

M63



24V electric actuator with proportional control mode (0-10V) or 2/3 points, for EvoSIX six-way (63 Series). It enables the automatic winter-summer change-over or it allows the control of radiant ceilings, fan coil units and chilled beams.

Size		Code
24V (0-10) - 2/3 points	1	6400800300C

General technical specifications

Supply voltage	24VAC $\pm 20\%$ - 50 - 60Hz 24VCC -10% \div +20%
Maximum power consumption	4.9 W - 8.7 VA
Running time	120 s / 60 s
Angle of rotation	0° - 90°
Torque	8 Nm (120 s e 60 s)

063GI



Insulating case for EvoSIX 63/2S and 63 series.

Size		Code
DN15	1	9402010300C
DN20	1	9402010380C

063ZA



Fastening angle bracket with two buttonholes on the vertical side. Valve can be fixed on the horizontal part using the specific screws.
Features: M4 screws included in the angle bracket packing

		Code
	1	8201045000C

091SOS



Pilers for Kv management.

		Code
	1	9400000070C

1007



Union fitting.
Connections: 3/4" F (cone 60° BS5200) x 1/2" M with sealant

Size		Code
3/4" F x 1/2" M	1	9602010100C

1007K



Union piece fitting.
Connections: 3/4" F (cone 60° BS5200) x 1/2" M - Features: With o-ring

Size		Code
3/4" F x 1/2" M	1	9601500420C

1007BOA



Union fitting.
Connections: 3/4" F (cone 60° BS5200) x 1/2" M

Size		Code
3/4" F x 1/2" M	1	9601510210C

1007MSC

Weld Union fitting.
Connections: 3/4" F (cone 60° BS5200) x 22 mm

Size		Code
3/4" F x 22 mm	1	9602611020C

1007MS

Weld union fitting.
Connections: 3/4" F (cone 60° BS5200) x 15 mm

Size		Code
3/4" F x 15 mm	1	9601510190C


1007MC

Union fitting.
Connections: 3/4" F (cone 60° BS5200) x 3/4" M flat seat

Size		Code
3/4" F x 3/4" M	1	9602011210C


1007WFP

Union fitting.
Connections: 3/4" F (cone 60° BS5200) x 3/4" F flat seat

Size		Code
3/4" F x 3/4" F	1	9602010520C


1007M

Union fitting.
Connections: 3/4" F (cone 60° BS5200) x 1/2" M

Size		Code
3/4" F x 1/2" M - L 44 mm	1	9601510470C
3/4" F x 1/2" M - L 52 mm	1	9601510450C
3/4" F x 1/2" M - L 58 mm	1	9601510440C
3/4" F x 3/4" M - L 80 mm	1	9602010090C

1007WFC


Union fitting.
Connections: F x F

Size		Code
1/2" F x 3/4" F (cone 60° BS5200)	1	9601510520C
3/4" F x 3/4" F (cone 60° BS5200)	1	9602010500C

AL52/3R




Full port ball valve with red butterfly handle.
Connections: F x M cone 60° BS5200.
Features: PN 25. Usage + 100°

Size		Code
1/2" F x 3/4" M sphericoconical	1	9701538680C
3/4" F x 3/4" M sphericoconical	1	9702018060C
3/4" F x 1" M sphericoconical	1	9702038680C

AL52/3B



Full port ball valve with blue butterfly handle.
Connections: F x M cone 60° BS5200.
Features: PN 25. Usage + 100°

Size		Code
1/2" F x 3/4" M sphericoconical	1	9701568680C
3/4" F x 3/4" M sphericoconical	1	9702018080C
3/4" F x 1" M sphericoconical	1	

51LL/3B



Full port ball valve with extended shaft. Blue steel lever.
Connections: F x M cone 60° BS5200
Features: PN 30. Corrosion resistant alloy and TEA coated.

Size		Code
1/2" F x 3/4" M sphericoconical	1	3701594200C

52TEUGM



Ball valve.
Connections: F x 12 mm Male push fitting

Size		Code
1/2" F x 12 mm	1	3701504210C
3/4" F x 12 mm	1	3702004210C

63/2S APPLICATION DIAGRAM



703RSFQ

Compact manifold with integrated ball valve and red handle.

Connections: 1/2" F x 3/4" M (BS5200 60°) with 3 x 12 mm Male push fitting outlets. Features : Available with blue handle (703BSFQ)

Size		Code
3/4" M BS5200 60° x 1/2" F	1	9612310100C

703RFSQ

Compact manifold with integrated ball valve and red handle.

Connections: 1/2" F x 3/4" M (BS5200 60°) with 3 x 12 mm Male push fitting outlets. Features : Available with blue handle (703BFsq)

Size		Code
1/2" F X 3/4" M BS5200 60°	1	9612310110C

704RSFQ

Compact manifold with integrated ball valve and red handle.

Connections: 1/2" F x 3/4" M (BS5200 60°) with 4 x 12 mm Male push fitting outlets. Features : Available with blue handle (704BSFQ)

Size		Code
3/4" M BS5200 60° x 1/2" F	1	9612400020C

704RFSQ

Compact manifold with integrated ball valve and red handle.

Connections: 1/2" F x 3/4" M (BS5200 60°) with 4 x 12 mm Male push fitting outlets. Features : Available with blue handle (704BFsq)

Size		Code
1/2" F X 3/4" M BS5200 60°	1	9612400000C

703RSFM

Compact manifold with integrated ball valve and red handle.

Connections: 3/4" M (BS5200 60°) x 1/2" F with 3 1/2" M flat seat outlets. Features : Available with blue handle (703BSFM)

Size		Code
3/4" M BS5200 60° x 1/2" F	1	9612310090C

703RFSM

Compact manifold with integrated ball valve and red handle.

Connections: 1/2" F x 3/4" M (BS5200 60°) with 3 1/2" M flat seat outlets. Features : Available with blue handle (703BFsm)


Size		Code
1/2" F X 3/4" M BS5200 60°	1	9612310130C

704RSFM



Compact manifold with integrated ball valve and red handle.

Connections: 3/4" M (BS5200 60°) x 1/2" F with 4 1/2" M flat seat outlets.
Features : Available with blue handle (703BSFM)


Size		Code
3/4" M BS5200 60° x 1/2" F	1	9612400010C

704RFSM



Compact manifold with integrated ball valve and red handle.

Connections: 1/2" F x 3/4" M (BS5200 60°) with 4 1/2" M flat seat outlets.
Features : Available with blue handle (703BFSM)

Size		Code
1/2" F X 3/4" M BS5200 60°	1	

EVOFLEX

All the flexible hoses available for this type of solution are listed in detail in the dedicated chapter.



FILTERS

and dirt separators

FILTERBALL

EvoMAGic
MAGNETIC DIRT SEPARATOR FILTER



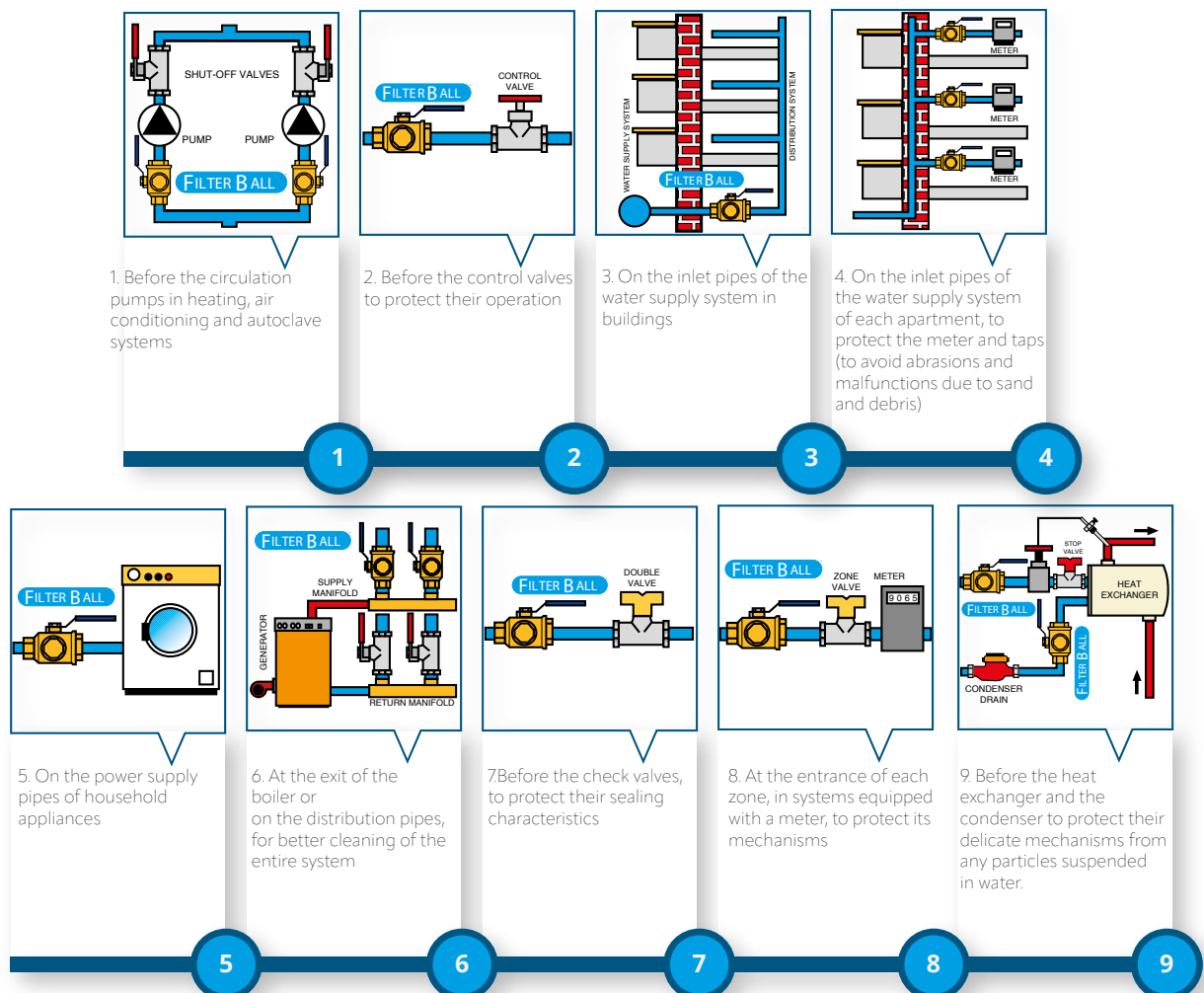


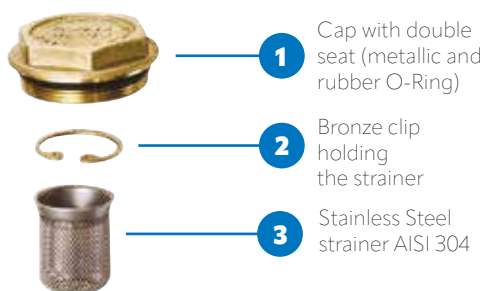
The Pettinaroli **FilterBall** valve is a **shut-off ball valve**, housing an interchangeable cylindrical **strainer**, easy to inspect and change during maintenance operations.

A simple valve therefore has **two important functions**:

- the **perfect sealing** of the ball valves
- the **careful filtration** of the liquid, and this is its great reliability protecting all the components of the plant

Compared to the traditional use of two components, apart from the obvious **advantage in terms of cost, installation and space**, the **FilterBall** valve means **much lower pressure losses**, which practically match those of the single filter.





TECHNICAL SPECIFICATIONS

Ballvalve with integrated strainer easy to inspect and clean made of corrosion resistant brass alloy CW602N, threaded ends.

Stem with triple safety (2-O-Rings, PTFE ring), fitted from inside to prevent tampering extraction or bursting.

Double tightening in the joint between body and end-connection.

Movable stuffing box.

Solid spheres are made using diamond tools and chromium plated to the required thickness.

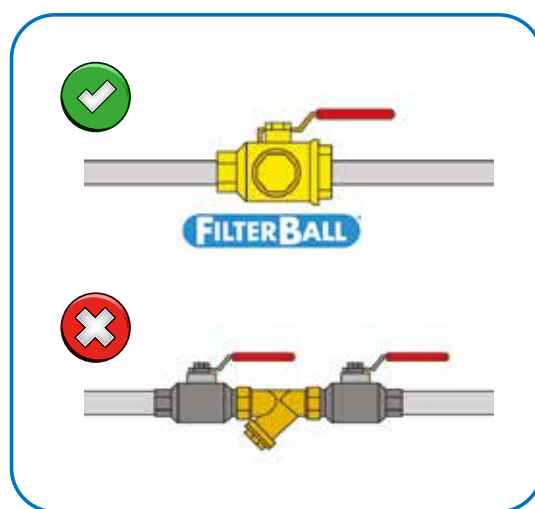
Reversible handle. (Art. 51F)

FM			
Type	Mesh	Filtering capacity	Casing
FM28	28	Ø 700 µm (0.7 mm)	simple
FM40	40	Ø 300 µm (0.3 mm)	simple
FM60	60	Ø 230 µm (0.23 mm)	double
FM80	80	Ø 180 µm (0.18 mm)	double
FM100	100	Ø 150 µm (0.15 mm)	double

Stainless steel strainer for Art. 51F - 52F

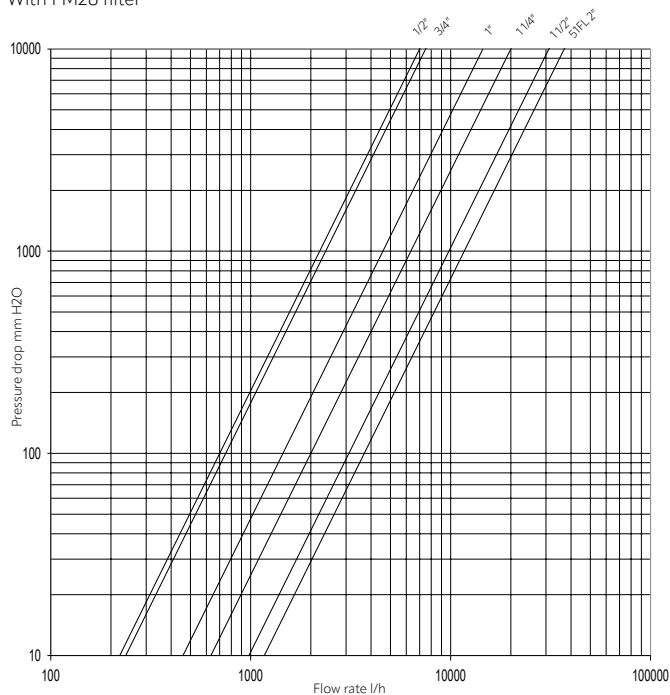
NOTE: The FilterBall valve compared with a Y standard strainer allows **more than a double flow**, assuming same load losses and suitable maintenance.

These features make it suitable for all uses, in particular **hygiene and sanitary uses**, even when normal water purification additives are present.



PRESSURE DROP DIAGRAM

* With FM28 filter




Working pressure and temperature
 16 bar - 100°C (250 psi - 210°F - non shock)
 10 bar - 150°C (150 psi - 300°F - non shock)

51F




FilterBall ball valve with integrated strainer type FM 28. Blue steel lever.
Connections: F x F
Features: made of non dezincifiable alloy CW602N.

Size		Code
1/2"	16/4	3901510000C
3/4"	16/4	3902010000C
1"	12/3	3902510000C
1 1/4"	8/4	3903210000C
1 1/2"	4/2	3904010000C
2" (51FL)	2	3905091000C
2" (51FH)	2	3905010000C

52F



FilterBall ball valve with integrated strainer type FM 28. Blue butterfly handle.
Connections: F x F
Features: made of non dezincifiable alloy CW602N.

Size		Code
1/2"	16/4	3901510010C
3/4"	16/4	3902010010C
1"	12/3	3902510010C

56F/2




FilterBall ball valve with integrated strainer type FM 28.
15 mm square head.
Connections: M x M

Size		Code
1"	16/4	3902510310C

51FG



FilterBall ball valve with integrated strainer type FM 28. Green steel lever.
Connections: F x F
Features: made of non dezincifiable and lead-free alloy CW511L.

Size		Code
1/2"	16/4	3901592000C
3/4"	16/4	3902092000C
1"	12/3	3902592000C
1 1/4"	8/4	3903292000C
1 1/2"	4/2	3904092000C
2" (51FGL)	2	3905092000C

52F/1



FilterBall ball valve with integrated strainer type FM 28. Blue butterfly handle.
Connections: F x M
Features: made of non dezincifiable alloy CW602N.


Size		Code
3/4"	16/4	3902091020C


FM




Y-filter in brass with internal metal mesh (BSP female threads)


Size 51F - 52F - 56F	Selection of available filters				
1/2" (From lot 1237 inclusive)	FM028N	FM040N	FM060N	FM080N	FM100N
3/4" (From lot 1237 inclusive)	FM028N	FM040N	FM060N	FM080N	FM100N
1" (From lot 2426 inclusive)	FM028N	FM040N			FM100N
1 1/4" (From lot 2426 inclusive)	FM028N	FM040N			FM100N
1 1/2"	FM028N	FM040N	FM060	FM080	FM100
2" (51FL - 51FGL) (From lot 2002 inclusive)	FM028N	FM040N	FM060	FM080	FM100
2" (51FH)	FM028	FM040	FM060	FM080	FM100

Size - FM028N		Code
1/2" - 3/4"	250/25	9401645070C
1"	200/20	9402445070C
1 1/4"	150/15	9402945070C
1 1/2" - 2" (51FL - 51FGL)	80/8	9403845070C


Size - FM028		Code
2" (51FH)	40/4	9404745000C

Size - FM040N		Code
1/2" - 3/4"	250/25	9401645030C
1"	200/20	9402445100C
1 1/4"	150/15	9402945100C
1 1/2" - 2" (51FL - 51FGL)	80/8	9403945030C


Size - FM040		Code
2" (51FH)	40/4	9404745010C


Size - FM060N		Code
1/2" - 3/4"	250/25	9401645060C

Size - FM060		Code
1 1/2" - 2" (51FL - 51FGL)	80/8	9403845020C
2" (51FH)	40/4	9404745020C

Size - FM080N		Code
1/2" - 3/4"	250/25	9401645020C

Size - FM080		Code
1 1/2" - 2" (51FL - 51FGL)	80/8	9403845030C
2" (51FH)	40/4	9404745030C


Size - FM100N		Code
1/2" - 3/4"	250/25	9401645090C
1"	200/20	9402445130C
1 1/4"	150/15	9402945130C

Size - FM100		Code
1 1/2" - 2" (51FL - 51FGL)	80/8	9403845040C
2" (51FH)	40/4	9404745040C

168/O




Brass Y pattern filter.
Stainless steel strainer.

Size		Code
3/8"	120/12	1001010000C
1/2"	120/12	1001510000C
3/4"	100/10	1002010000C
1"	60/6	1002510000C
1 1/4"	30/5	1003210000C
1 1/2"	18/3	1004010000C
2"	12/2	1005010000C

170



Bronze Y pattern filter. For water and water+glycol (max 30%).
Stainless steel strainer.

Size		Code
2 1/2"	2	1007030000C
3"	2	1008030000C
4"	1	1010030000C


ST2D



Filter screens even with different meshes are available upon request.

Strainer Y type for HVAC and water distribution, with threaded connections for drain and test ports. Suitable for both horizontal and vertical installation. Ductile iron body, stainless steel screen.

Suitable for flanges according to EN 1092-2 PN16, RAL 5015 (blue) epoxy coated.

Size		Code
2" - DN 50	1	3705046030C
2 1/2" - DN 65	1	3706546030C
3" - DN 80	1	3708046030C
4" - DN 100	1	3710046030C
5" - DN 125	1	3712546030C
6" - DN 150	1	3715046030C
8" - DN 200	1	3720046030C
10" - DN 250	1	3725046030C
12" - DN 300	1	3730046030C
14" - DN 350	1	3735046030C
16" - DN 400	1	3740046030C
18" - DN 450	1	3745046030C
20" - DN 500	1	3750046030C
24" - DN 600	1	3760046030C


ST2DA



Filter screens even with different meshes are available upon request.

Strainer Y type for HVAC and water distribution, with threaded connections for drain and test ports. Suitable for both horizontal and vertical installation. Ductile iron body, stainless steel screen.

Suitable for flanges according to ANSI class 150, RAL 9005 (black) epoxy coated.

Size		Code
2" - DN 50	1	3705046040C
2 1/2" - DN 65	1	3706546040C
3" - DN 80	1	3708046040C
4" - DN 100	1	3710046040C
5" - DN 125	1	3712546040C
6" - DN 150	1	3715046040C
8" - DN 200	1	3720046040C
10" - DN 250	1	3725046040C
12" - DN 300	1	3730046040C
14" - DN 350	1	3735046040C
16" - DN 400	1	3740046040C
18" - DN 450	1	3745046040C
20" - DN 500	1	3750046040C
24" - DN 600	1	3760046040C

EvoMAGic

MAGNETIC DIRT SEPARATOR FILTER



HIGH-PERFORMANCE WATER FILTRATION

01

The dirt water flows through the shut off valve into the **body filter**

Magnetic metallic debris are attracted by the **hi-power magnets**

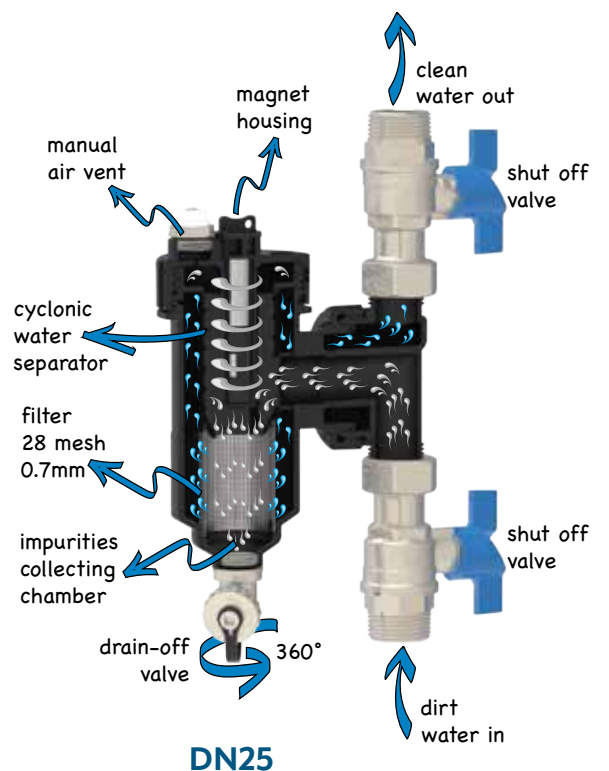
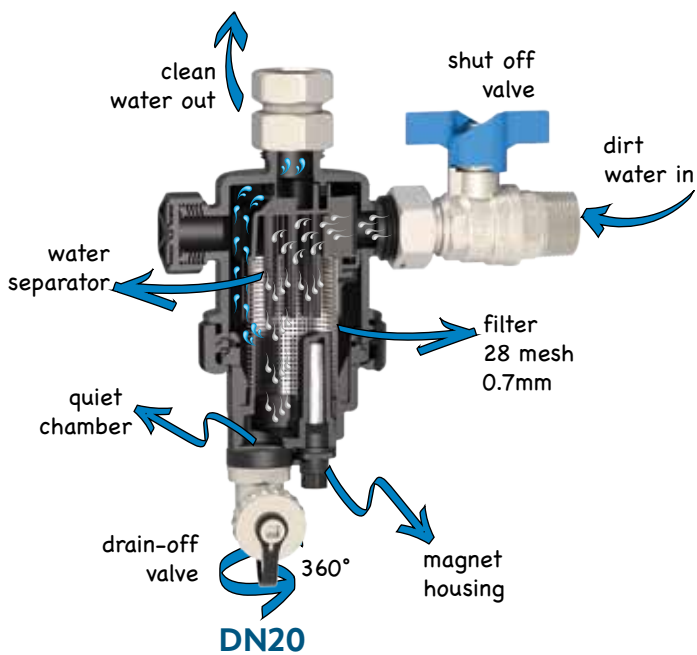
02

03

Other impurities are blocked by the **28 mesh (0,7 mm) filter**

Clean water reaches the boiler ensuring its **constant protection and correct operation**

04



102V




EvoMAGic magnetic dirt separator filter for vertical installation.
3/4" M x 3/4" M flat end

Size		Code
DN20 Vertical - 3/4" M x 3/4" M	1	1010210000C

102H



EvoMAGic magnetic dirt separator filter for horizontal installation.
3/4" M x 3/4" M flat end

Size		Code
DN20 Horizontal - 3/4" M x 3/4" M	1	1010220000C

K102V/1



EvoMAGic magnetic dirt separator filter for vertical installation.
Features: with M 3/4" ball valve and F 3/4" joint

Size		Code
DN20 Vertical - 3/4" M x 3/4" F	1	1010210010C

K102H/1



EvoMAGic magnetic dirt separator filter for horizontal installation.
Features: with M 3/4" ball valve and F 3/4" joint

Size		Code
DN20 Horizontal - 3/4" M x 3/4" F	1	1010220010C

K102V/2




Magnetic dirt separator filter for vertical installation.
Features: with 2 x M 3/4" ball valves

Size		Code
DN20 Vertical - 3/4" M x 3/4" M	1	1010210020C

K102H/2



Magnetic dirt separator filter for horizontal installation.
Features: with 2 x M 3/4" ball valves

Size		Code
DN20 Horizontal - 3/4" M x 3/4" M	1	1010220020C

Description	DN	PN (max)	T° (max)	Kvs
102V - K102V/1 - K102V/2 Vertical 90° flow direction	20	4 bar	90 °C	5,5
102V - K102V/1 - K102V/2 Vertical linear flow direction	20	4 bar	90 °C	6,0
102H - K102H/1 - K102H/2 Horizontal	20	4 bar	90 °C	6,0

103

XL



EvoMAGic XL magnetic dirt separator filter with 360° rotating fitting.
1" M x 1" M flat end


Size		Code
DN25 - 1" M x 1" M	1	1010310000C

K103/2

XL



Magnetic dirt separator filter with 360° rotating fitting.

Size		Code
DN25 - 1" M x 1" M	1	1010310020C
DN25 - 1" M x 3/4" M	1	1010310050C

Description	DN	PN (max)	T° (max)	Kvs
103 XL 360° rotating fitting	25	4 bar	90 °C	10
K103/2 XL 360° rotating fitting	25	4 bar	90 °C	8

THERMOSTATIC BALANCING VALVES

TBV
Thermostatic Balancing Valve



TBV
Thermostatic Balancing Valve

TBV PLUS
Thermostatic Balancing Valve

TBV ULTRA
Thermostatic Balancing Valve



For use in domestic hot water recirculation systems.



Ensures equal balance and temperature in all sections of the pipeline



Designed to house a sensor for remote temperature control



TBV PLUS is equipped with anti-legionella thermal disinfection function through a second thermostatic cartridge



TBV ULTRA is equipped with an actuator-controlled disinfection function

OPERATING PRINCIPLE

Pettinaroli TBV valves are the new thermal balancing valves for hot water recirculation systems made by lead free corrosion resistant brass conform to European (UBA-List & 4 MS) and USA (NSF) standard requirements.

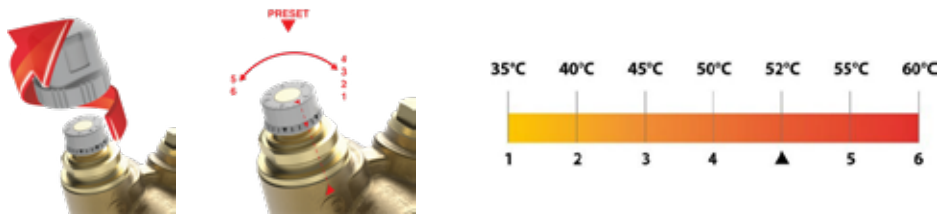
The TBV Pettinaroli thermal balancing valves represent a valid solution to the problem of management and balancing of centralized domestic hot water (DHW) production and distribution systems equipped with recirculation. It is not so rare that the utilities furthest from the generator are very disadvantaged and consequently are supplied with domestic hot water that does not reach the minimum desired temperature value and these situations are perceived by users as a malfunction of the system itself. The presence of a thermo-sensitive element (which constitutes the heart of the valve itself) allows the flow in the recirculation network to be automatically balanced depending on whether or not the water temperature exceeds the pre-established value.

Having previously established an equal delivery temperature value for all installed thermostatic balancing valves (for example 52°C), it follows that all distribution columns will be provided with domestic hot water at the desired temperature. Thanks to the presence of an external presetting device external to the valve, the user will be able to configure the desired temperature value that ranges from 35° - 60°C (the factory preset is 52°C).

Pettinaroli's TBV thermal balancing valves are available in the FxF version and are classified into 3 different families: TBV, TBV PLUS (with anti-legionella thermal disinfection function) and TBV ULTRA (with anti-legionella thermal disinfection function controlled by an actuator).

PRESETTING OPERATION

TBV valves has factory presetting at 52°C (corresponding to position ▼ on the selector), the user can change the presetting by following the instructions:



This is a simple but important operation for the proper functioning of the system.



Material
antidezincification
low-lead brass



Nominal
pressure
16 bar

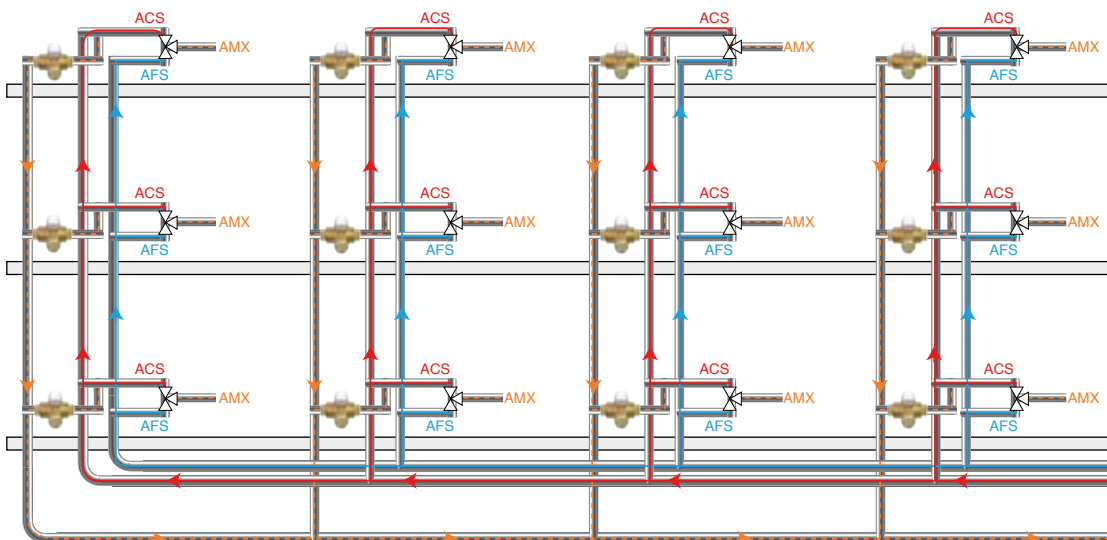
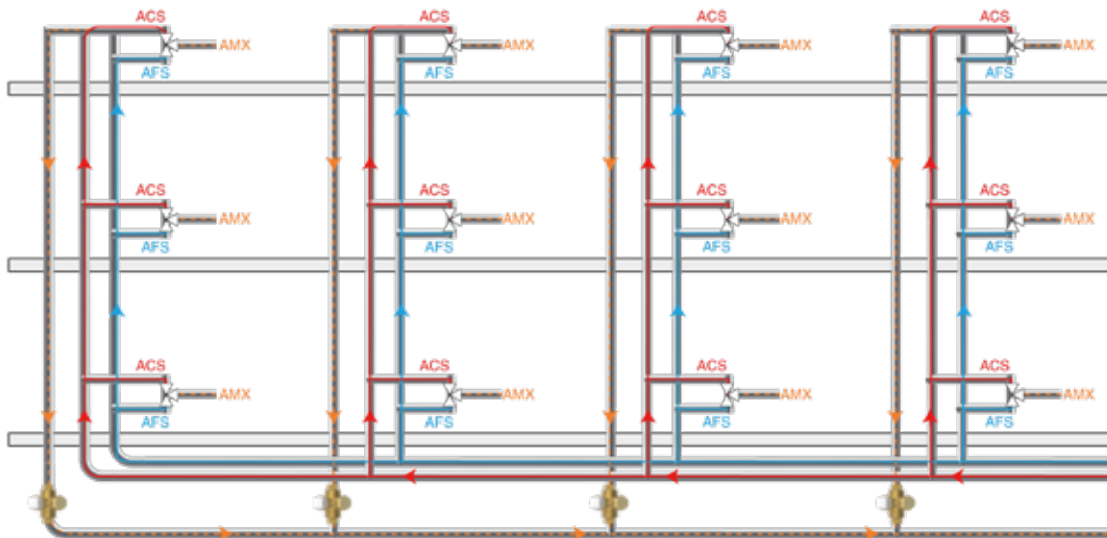


Adjustment
range
35 - 60°C



Disinfection
Temperature
70°C

INSTALLATION EXAMPLES



TB20



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass.
PN16, Max working temperature 90°C. Temperature setting range: 35° - 60°C.
Kv max: 1,80.
Connections F x F

Size		Code
1/2" F x 1/2" F	1	3701591510C
3/4" F x 3/4" F	1	3702091510C

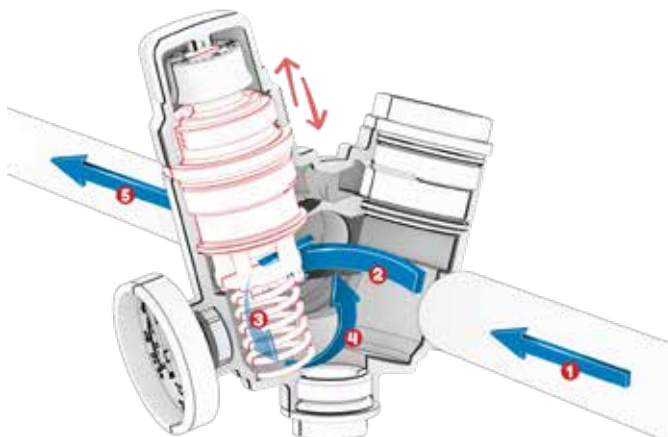
Available in NPT version

TB20/2



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass.
PN16, Max working temperature 90°C. Temperature setting range: 35° - 60°C.
Kv max: 1,80.
Connections M x M

Size		Code
3/4" M x 3/4" M	1	3702091520C



TB30



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass.
Equipped with Thermal element for automatic anti legionella treatment.
PN16, Max working temperature: 90°C. Temperature setting range: 35° - 60°C.
Disinfection Temperature: 70°C - Kv max: 1,80.
Connections F x F

Size		Code
1/2" F x 1/2" F	1	3701591520C
3/4" F x 3/4" F	1	3702091530C

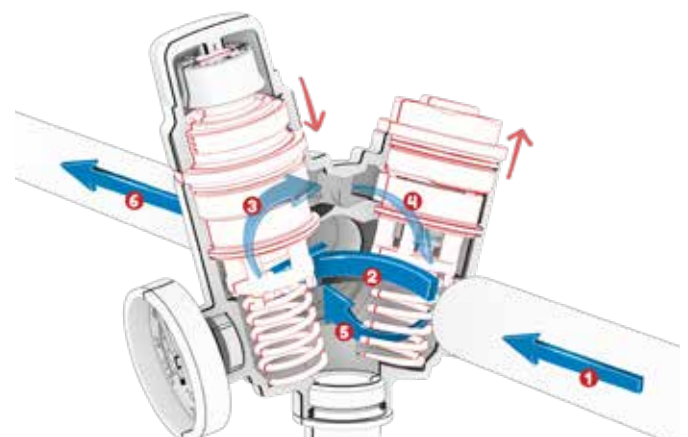
Available in NPT version

TB30/2



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass.
Equipped with Thermal element for automatic anti legionella treatment.
PN16, Max working temperature: 90°C. Temperature setting range: 35° - 60°C.
Disinfection Temperature: 70°C - Kv max: 1,80.
Connections M x M

Size		Code
3/4" M x 3/4" M	1	3702091540C





TB50



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass.
Equipped with Antilegionella Disinfection device by thermoelectrical actuator. PN16, Max working temperature: 90°C. Temperature setting range: 35° - 60°C. Disinfection Temperature: >=70°C - Kv max: 1,80.
Connections F x F

Size		Code
1/2" F x 1/2" F	1	3701591530C
3/4" F x 3/4" F	1	3702091550C

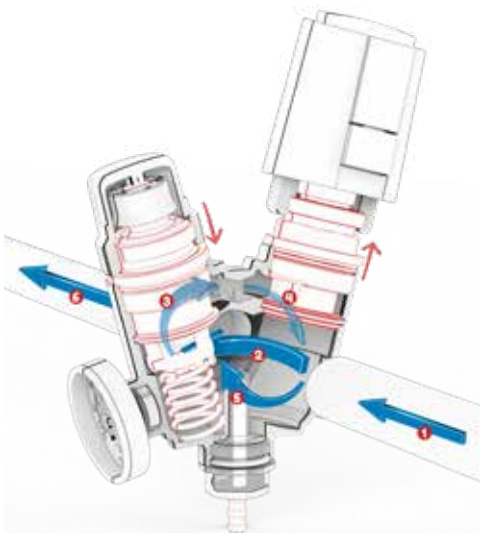
Available in NPT version

TB50/2



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass.
Equipped with Antilegionella Disinfection device by thermoelectrical actuator. PN16, Max working temperature: 90°C. Temperature setting range: 35° - 60°C. Disinfection Temperature: >=70°C - Kv max: 1,80.
Connections M x M

Size		Code
3/4" M x 3/4" M	1	3702091560C



TB05



Adjustable thermal balancing valve for sanitary hot water recirculation systems, made by lead free corrosion resistant brass conform to European (UBA-List & 4 MS) and USA (NSF) standard requirements. Equipped with Thermal element for automatic anti legionella treatment.
Connections F x F

Size		Code
1" F x 1" F	1	3702591120C
1 1/4" F x 1 1/4" F	1	3703291120C

Available in NPT version

A54202 - A54402



Thermo-electric actuator ON-OFF-PWM N.C. (normally closed), with adapter VA64. For TB50 series. Stroke 4 mm. Cable 1 m.

Size		Code
A54202 - 230 V - ON/OFF PWM - VA64	100/1	A542020001C
A54402 - 24 V - ON/OFF PWM - VA64	100/1	A544020001C

A54204 - A54404




Thermo-electric actuator ON-OFF-PWM N.C. (normally closed), with adapter VA64. For TB50 series. Stroke 4 mm. Cable 1 m. With micro aux. 4 wires.

Size		Code
A54204 - 230 V - ON/OFF PWM - VA64	1	A542040001C
A54404 - 24 V - ON/OFF PWM - VA64	1	A544040001C

TB100



Union Ball valve DN20 to be used upstream the TB20/2 - TB30/2 - TB50/2

Size		Code
1/2" F x 3/4" F swivel nut	1	3701590180C
3/4" F x 3/4" F swivel nut	1	3702090630C

Available in NPT version

TB100CK



Union Ball valve DN20 with integrated check valve to be used downstream the TB20/2 - TB30/2 - TB50/2.

Size		Code
1/2" F x 3/4" F swivel nut	1	3701590620C
3/4" F x 3/4" F swivel nut	1	3702090640C

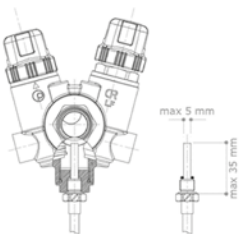
Available in NPT version

OTB02



Adaptor/reduction 1/2" M x (M10x1) for probe to monitoring the water temperature.

Size		Code
1/2" M x M10 F	1	9601590220C




TB Series has a drywell (1/2") that could be used (through an optional reduction OTB02), to install a probe for remote monitoring of the water temperature.

52FG/5R



FilterBall ball valve with integrated strainer type FM 28. Red butterfly handle. Connections: F x F
Features: made of non dezincifiable and lead-free alloy CW511.

Size		Code
1/2" F x 3/4" F swivel nut	1	3902292010C
3/4" F x 3/4" F swivel nut	1	3902392010C

Available in NPT version

OTB00CK



Check valve MxF to be used downstream the TB Series


Size		Code
1/2" M x 1/2" F	1	1801591420C
3/4" M x 3/4" F	1	1802091420C

Available in NPT version

T39P/80



Thermometer double scale 0-80°C / 32°-176°F

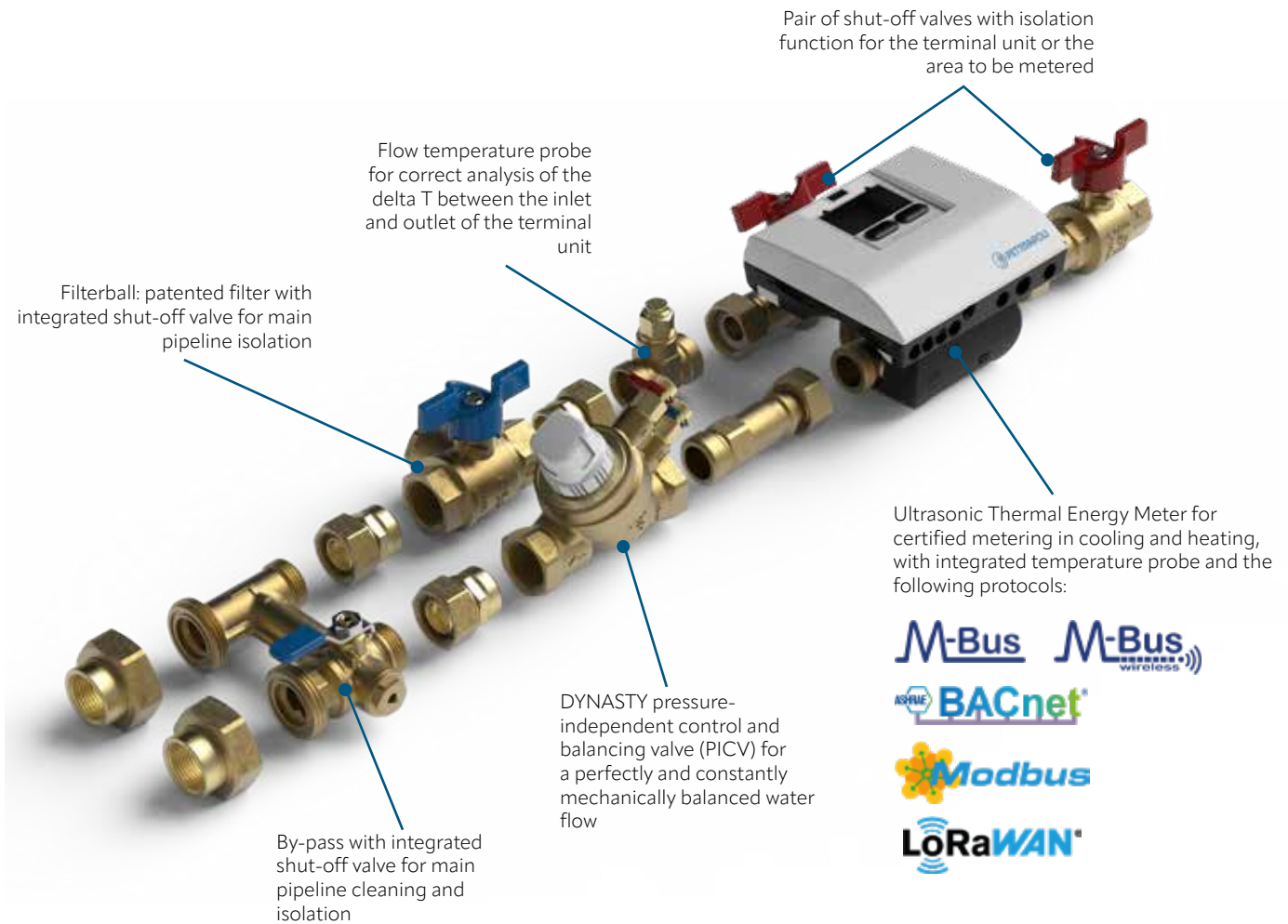
Size		Code
0-80°C	100/10	9403900001C

WATER METERING

Energy **SAVER** Opti**METER** Energy **METER**



Energy SAVER PLUS



SELECTION TABLE

The selection of the Energy SAVER Plus kit size and the corresponding thermal energy meter must be based on the design flow rate value. Having defined this value as **Q**, the selection must fulfill the following two conditions:

1. The nominal flow rate of the kit must be greater than the design flow rate **Q**.
2. The nominal flow rate of the thermal energy meter must be greater than the design flow rate **Q**.


Based on these conditions, if the Energy SAVER Plus kit is to be paired with a Pettinaroli EM403 energy meter, the combinations to be used are shown in the following table:

Flow rate range	Kit Energy SAVER Plus	Energy METER
$Q < 150$ l/h (0,66 GPM)	KCX700PE – ½" x ½" – 150 l/h (0,66 GPM)	600 l/h (2,64 GPM) – ¾" x 110 mm
150 l/h (0,66 GPM) < $Q < 450$ l/h (1,98 GPM)	KCX700PE – ½" x ½" – 450 l/h (1,98 GPM)	600 l/h (2,64 GPM) – ¾" x 110 mm
450 l/h (1,98 GPM) < $Q < 600$ l/h (2,64 GPM)	KCX700PE – ½" x ½" – 850 l/h (3,74 GPM)	600 l/h (2,64 GPM) – ¾" x 110 mm
600 l/h (2,64 GPM) < $Q < 850$ l/h (3,74 GPM)	KCX700PE – ½" x ½" – 850 l/h (3,74 GPM)	1500 l/h (6,60 GPM) – ¾" x 110 mm
850 l/h (3,74 GPM) < $Q < 1000$ l/h (4,40 GPM)	KCX700PE – ¾" x ¾" – 1000 l/h (4,40 GPM)	1500 l/h (6,60 GPM) – ¾" x 110 mm
1000 l/h (4,40 GPM) < $Q < 1500$ l/h (6,60 GPM)	KCX700PE – ¾" x ¾" – 1850 l/h (8,15 GPM)	1500 l/h (6,60 GPM) – ¾" x 110 mm
1500 l/h (6,60 GPM) < $Q < 1850$ l/h (8,15 GPM)	KCX700PEH – ¾" x ¾" – 1850 l/h (8,15 GPM)	2500 l/h (11,01 GPM) – 1" x 130 mm
1850 l/h (8,15 GPM) < $Q < 2500$ l/h (11,01 GPM)	KCX700PE – ¾" x 1" – 2500 l/h (11,01 GPM)	2500 l/h (11,01 GPM) – 1" x 130 mm
2500 l/h (11,01 GPM) < $Q < 3300$ l/h (14,53 GPM)	KCX800PE – 1" x 1" – 3300 l/h (14,53 GPM)	3500 l/h (15,41 GPM) – 1 ¼" x 260 mm
3300 l/h (14,53 GPM) < $Q < 5200$ l/h (22,89 GPM)	KCX800PE – 1" x 1" – 5200 l/h (22,89 GPM)	6000 l/h (26,42 GPM) – 1 ¼" x 260 mm
5200 l/h (22,89 GPM) < $Q < 9000$ l/h (39,63 GPM)	KCX169PE – 1 ½" x 1 ½" – 9000 l/h (39,63 GPM)	10000 l/h (44,03 GPM) – 2" x 300 mm
9000 l/h (39,63 GPM) < $Q < 14000$ l/h (61,70 GPM)	KCX207PE – 2" x 2" – 14000 l/h (61,70 GPM)	10000 l/h (44,03 GPM) – 2" x 300 mm


ENERGY SAVER PLUS



Pettinaroli "Energy Saver PLUS" Kit for thermal energy metering and billing in water-based systems for air conditioning and heating. The kit includes the "DYNASTY" PICV with pressure test points, suitable for hard water and easy maintenance, Pettinaroli FilterBall (shut-off valve with integrated filter), by-pass for main pipeline cleaning with shut-off valves, and a flow temperature probe. Tested and guaranteed by Pettinaroli. Available in BSP or NPT versions.

	Size		Code
KCX700PE	1/2" x 1/2" x 150 l/h	1	
KCX700PE	1/2" x 1/2" x 450 l/h	1	
KCX700PE	1/2" x 1/2" x 850 l/h	1	
KCX700PE	3/4" x 3/4" x 1000 l/h	1	
KCX700PE	3/4" x 3/4" x 1850 l/h	1	6202020191C
KCX700PEH	3/4" x 3/4" x 1850 l/h	1	
KCX700PE	3/4" x 1" x 2500 l/h	1	
KCX800PE	1" x 1" x 3300 l/h	1	
KCX800PE	1" x 1" x 5200 l/h	1	
KCX169PE	1 1/2" x 1 1/2" x 9000 l/h	1	
KCX207PE	2" x 2" x 14000 l/h	1	


Versión NPT

	Size		Code
KCX700PE	1/2" x 1/2" x 0,66 GPM - NPT	1	
KCX700PE	1/2" x 1/2" x 1,98 GPM - NPT	1	
KCX700PE	1/2" x 1/2" x 3,74 GPM - NPT	1	
KCX700PE	3/4" x 3/4" x 4,40 GPM - NPT	1	
KCX700PE	3/4" x 3/4" x 8,15 GPM - NPT	1	
KCX700PEH	3/4" x 3/4" x 8,15 GPM - NPT	1	
KCX700PE	3/4" x 1" x 11,01 GPM - NPT	1	
KCX800PE	1" x 1" x 14,53 GPM - NPT	1	
KCX800PE	1" x 1" x 22,89 GPM - NPT	1	
KCX169PE	1 1/2" x 1 1/2" x 39,63 GPM - NPT	1	
KCX207PE	2" x 2" x 61,70 GPM - NPT	1	


ENERGY SAVER PLUS



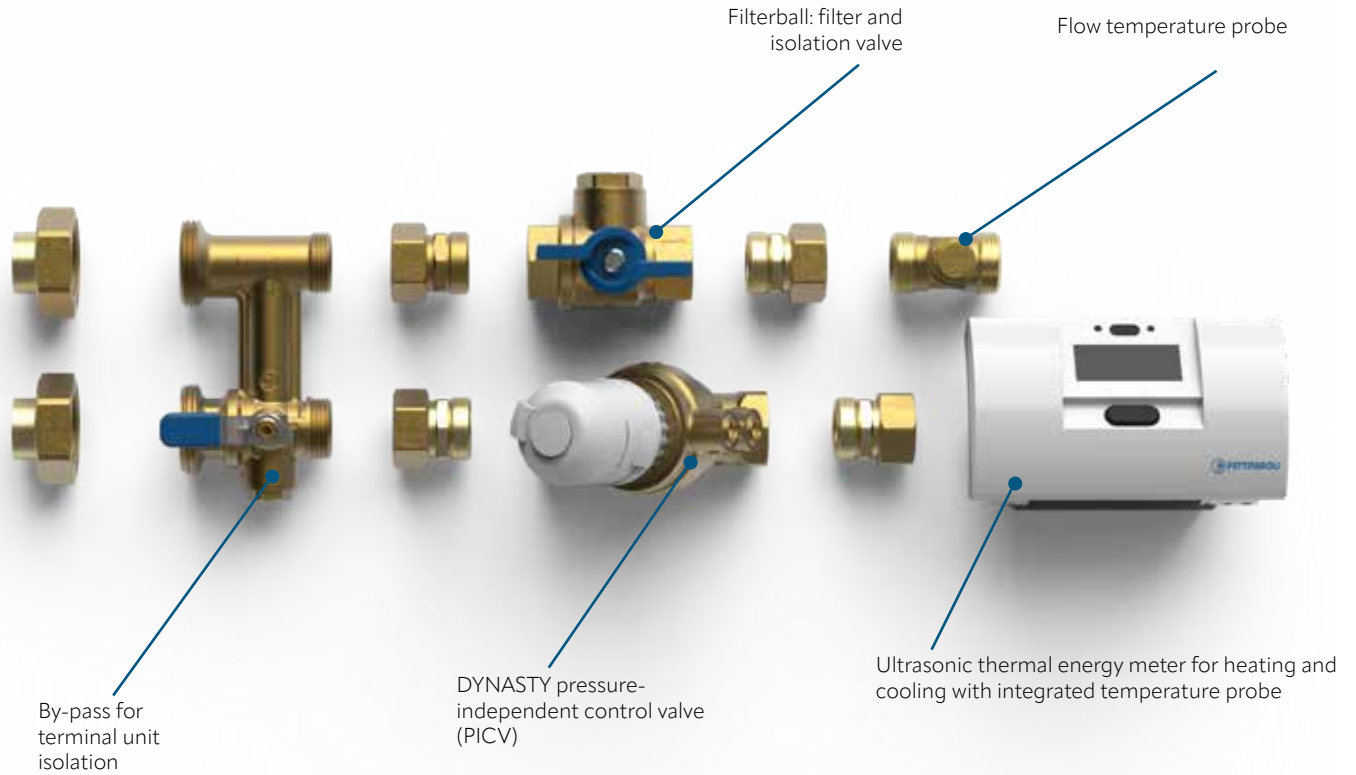
Pettinaroli "Energy Saver Compact" Kit for thermal energy metering and billing in water-based systems for air conditioning and heating. The kit includes the "DYNASTY" PICV with pressure test points, suitable for hard water and easy maintenance, Pettinaroli FilterBall (shut-off valve with integrated filter), by-pass for main pipeline cleaning with shut-off valves, flow temperature probe, and full insulation included for "Energy Saver Compact". Tested and guaranteed by Pettinaroli.

	Size		Code
KCX700PEG	1/2" x 1/2" x 150 l/h	1	
KCX700PEG	1/2" x 1/2" x 450 l/h	1	
KCX700PEG	1/2" x 1/2" x 850 l/h	1	
KCX700PEG	3/4" x 3/4" x 1000 l/h	1	
KCX700PEG	3/4" x 3/4" x 1850 l/h	1	6202020190C
KCX700PEHG	3/4" x 3/4" x 1850 l/h	1	
KCX700PEG	3/4" x 1" x 2500 l/h	1	
KCX800PEG	1" x 1" x 3300 l/h	1	
KCX800PEG	1" x 1" x 5200 l/h	1	6202520030C
KCX169PEG	1 1/2" x 1 1/2" x 9000 l/h	1	6204020020C
KCX207PEG	2" x 2" x 14000 l/h	1	0000000502C

Versión NPT

	Size		Code
KCX700PEG	1/2" x 1/2" x 0,66 GPM - NPT	1	
KCX700PEG	1/2" x 1/2" x 1,98 GPM - NPT	1	6201520110C
KCX700PEG	1/2" x 1/2" x 3,74 GPM - NPT	1	6201520100C
KCX700PEG	3/4" x 3/4" x 4,40 GPM - NPT	1	
KCX700PEG	3/4" x 3/4" x 8,15 GPM - NPT	1	6202020170C
KCX700PEHG	3/4" x 3/4" x 8,15 GPM - NPT	1	6202020120C
KCX700PEG	3/4" x 1" x 11,01 GPM - NPT	1	6202520050C
KCX800PEG	1" x 1" x 14,53 GPM - NPT	1	6202520040C
KCX800PEG	1" x 1" x 22,89 GPM - NPT	1	6202520060C
KCX169PEG	1 1/2" x 1 1/2" x 39,63 GPM - NPT	1	6204020030C
KCX207PEG	2" x 2" x 61,70 GPM - NPT	1	0000000503C


Energy SAVER COMPACT



ENERGY SAVER COMPACT




Pettinaroli "Energy Saver Compact" hydronic kit for thermal energy metering and billing in water-based systems for air conditioning and heating. The kit includes the "DYNASTY" PICV with pressure test points, suitable for hard water and easy maintenance, Pettinaroli FilterBall (shut-off valve with integrated filter), by-pass for main pipeline cleaning with shut-off valves, and a flow temperature probe. Tested and guaranteed by Pettinaroli.

	Size		Code
KCX700CD	1/2" x 3/4" x 450 l/h (1,98 GPM)	1	
KCX700CD	1/2" x 3/4" x 850 l/h (3,74 GPM)	1	
KCX700CD	1/2" x 3/4" x 1000 l/h (4,40 GPM)	1	
KCX700CD	1/2" x 3/4" x 1850 l/h (8,15 GPM)	1	
KCX700CDH	1/2" x 3/4" x 1850 l/h (8,15 GPM)	1	
KCX700CD	3/4" x 3/4" x 2500 l/h (11,01 GPM)	1	

ENERGY SAVER COMPACT



Pettinaroli "Energy Saver Compact" hydronic kit for thermal energy metering and billing in water-based systems for air conditioning and heating. The kit includes the "DYNASTY" PICV with pressure test points, suitable for hard water and easy maintenance, Pettinaroli FilterBall (shut-off valve with integrated filter), by-pass for main pipeline cleaning with shut-off valves, flow temperature probe, and full insulation included for the "Energy Saver Compact" kit. Tested and guaranteed by Pettinaroli.


	Size		Code
KCX700CDG	1/2" x 3/4" x 450 l/h (1,98 GPM)	1	
KCX700CDG	1/2" x 3/4" x 850 l/h (3,74 GPM)	1	6201520090C
KCX700CDG	1/2" x 3/4" x 1000 l/h (4,40 GPM)	1	6201520060C
KCX700CDG	1/2" x 3/4" x 1850 l/h (8,15 GPM)	1	6201520080C
KCX700CDHG	1/2" x 3/4" x 1850 l/h (8,15 GPM)	1	6201520070C
KCX700CDG	3/4" x 3/4" x 2500 l/h (11,01 GPM)	1	6202020160C

Energy **SAVER** SWITCH

ENERGY SAVER SWITCH




Pettinaroli "Energy Saver Switch" hydronic kit for thermal energy metering and billing in water-based systems for centralized air conditioning and heating systems. The kit includes two "DYNASTY" PICVs with pressure test points, suitable for hard water and easy maintenance, Pettinaroli FilterBall (shut-off valve with integrated filter), a double manifold for inlet water storage (with temperature probe) and return, and shut-off valves. Tested and guaranteed by Pettinaroli.

Size		Code
KCD04/08DF 1/2" x 450/850 l/h	1	6201520020C
KCD08/08DF 1/2" x 850/850 l/h	1	6201520050C
KCD04/10DF 1/2" x 3/4" x 450/1000 l/h	1	6201520040C
KCD08/10DF 1/2" x 3/4" x 850/1000 l/h	1	6201520030C
KCD08/18DF 1/2" x 3/4" x 850/18500 l/h	1	6201520120C

ENERGY SAVER SWITCH

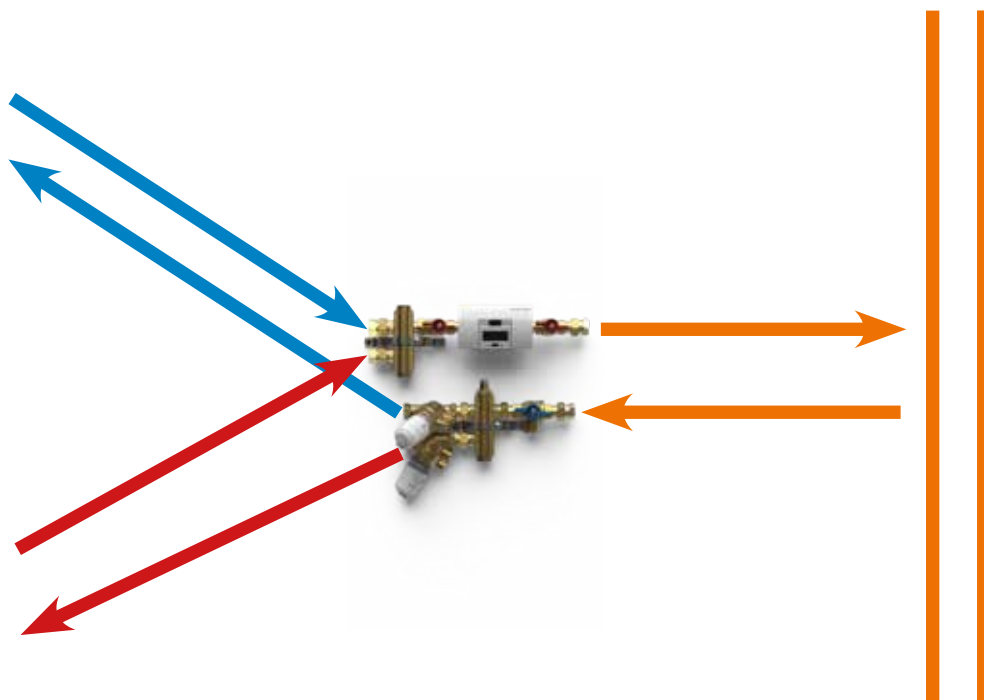
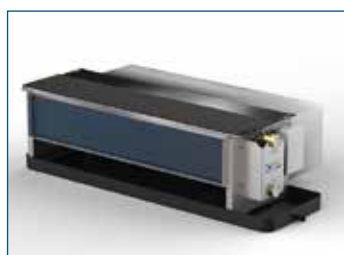


Pettinaroli "Energy Saver Switch" hydronic kit for thermal energy metering and billing in water-based systems for centralized air conditioning and heating systems. The kit includes two "DYNASTY" PICVs with pressure test points, suitable for hard water and easy maintenance, Pettinaroli FilterBall (shut-off valve with integrated filter), a double manifold for inlet water storage (with temperature probe) and return, shut-off valves, and full insulation included for the "Energy Saver Switch" kit. Tested and guaranteed by Pettinaroli.

Size		Code
1/2" x 450/850 l/h	1	
1/2" x 850/850 l/h	1	
1/2" x 3/4" x 450/1000 l/h	1	
1/2" x 3/4" x 850/1000 l/h	1	
1/2" x 3/4" x 850/18500 l/h	1	

Energy Saver SWITCH is the ideal solution for centralized water-based cooling and heating systems with a single riser, as it allows for the flow control of two terminal units (one for heating and one for cooling) within each dwelling, thanks to the presence of two different Dynasty PICVs included in the same kit.

Certified thermal energy metering and perfect balancing at the same time for every need!



Energy METER

Pettinaroli Energy METER is an ultrasonic thermal energy meter for cooling and heating applications, certified according to the **MID** (Measuring Instruments Directive—the mandatory European reference directive for measuring instruments).

The system consists of three core elements:

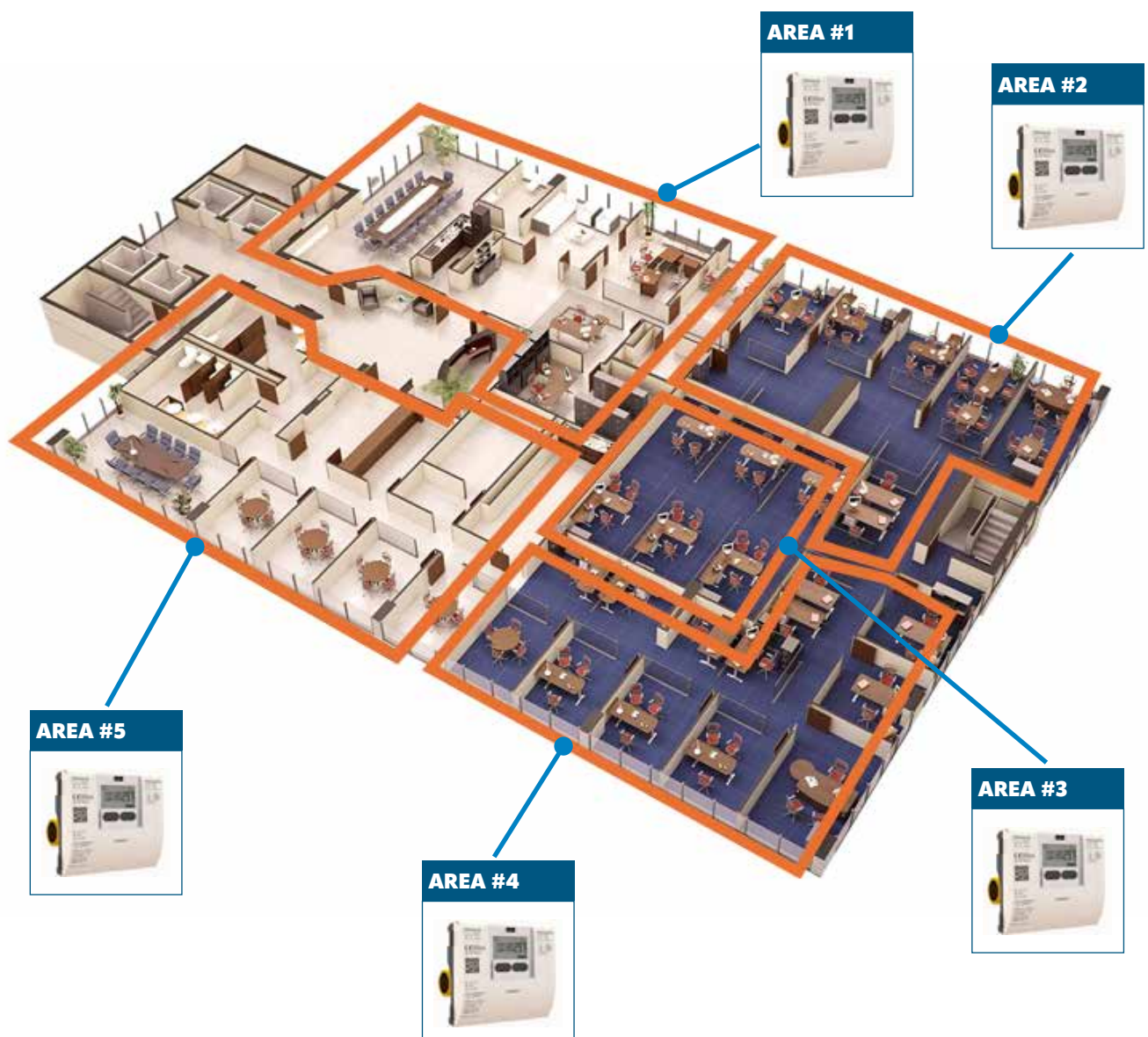
- Ultrasonic Flow Meter: Measures the flow rate without moving parts, ensuring high reliability even in dirty water.
- Electronic Display Unit (Integrator): Processes data and allows configuration of parameters such as installation direction, units of measure, and communication settings.
- Paired Temperature Probes: Measures the temperature differential ΔT between the flow and return pipes to calculate certified energy consumption.

Technical Features & Reliability

- Construction: made of **CW602N dezincification-resistant brass**, designed to withstand harsh water conditions.
- Operating Limits: Rated **PN25** and approved for temperatures up to **+130°C**.
- **Data Security**: Features an **internal memory** (EEPROM) that stores historical measurement data. This ensures that even if the communication protocol fails, your billing data is never lost.
- **Power Options**: Integrated battery with a 16-year lifespan or external power supply (24V AC/DC or 230V AC).
- Connections: Male threaded connections with a flat seat for easy installation.

Communication Protocols

The Energy Meter is highly versatile, supporting a wide range of Building Management System (BMS) and IoT integration options: **BACnet IP, BACnet MS/TP, MODBUS TCP/IP, MODBUS RTU, M-bus, LoraWAN or Wireless M-bus**.



EM403



Pettinaroli ultrasonic thermal energy meter for cooling and heating, modular with different packages. Power supply: 24VAC, 230VAC or batteries. Available in the following communication protocols: BACnet, M-bus, MODBUS, LoRaWan or Wireless M-bus. With incorporated pair of temperature probes and certified according to MID regulations (European directive). Male threaded connections with flat seat

General technical specifications	
Protection class of the meter	IP68
Protection class of the calculator	IP54
Type of fluid	Water
Nominal pressure	PN25
Communication protocol	M-bus via cable, M-bus Wireless, MODBUS RTU, MODBUS TCP/IP, LoRaWan, BACnet MS/TP, BACnet IP,

Description	Cut-off [l/h]	Flow rate min. [l/h]	Flow rate	Flow rate max.[l/h]	Dynamic range	Flow sensor length [mm]	Connections
EM403	3	6	600 l/h - 2,64 GPM	1200	100:1	110	¾" M Flat seat
EM403	3	15	1500 l/h - 6,60 GPM	3000	100:1	110	¾" M Flat seat
EM403	5	25	2500 l/h - 11,01 GPM	5000	100:1	130	1" M Flat seat
EM403	7	35	3500 l/h - 15,41 GPM	6000	100:1	260	1 ¼" M Flat seat
EM403	12	60	6000 l/h - 26,42 GPM	12000	100:1	260	1 ¼" M Flat seat
EM403	20	100	10000 l/h - 44,03 GPM	20000	100:1	300	2" M Flat seat



Selection table EM403

	Size	Protocol	Power supply	Temperature probe	Code
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	M-bus	Battery	By immersion	EM4MB06BIOC
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	M-bus	Battery	By immersion	EM4MB15BIOC
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus	Battery	By immersion	EM4MB25BIOC
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	M-bus	Battery	By immersion	EM4MB35BIOC
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	M-bus	Battery	By immersion	EM4MB6BIOC
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	M-bus	Battery	Pocket (pockets included)	EM4MB10BPOC
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	M-bus	24V AC/DC	By immersion	EM4MB064IOC
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	M-bus	24V AC/DC	By immersion	EM4MB154IOC
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus	24V AC/DC	By immersion	EM4MB254IOC
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	M-bus	24V AC/DC	By immersion	EM4MB354IOC
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	M-bus	24V AC/DC	By immersion	EM4MB64IOC
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	M-bus	24V AC/DC	Pocket (pockets included)	EM4MB104POC
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	M-bus	230V AC	By immersion	EM4MB062IOC
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	M-bus	230V AC	By immersion	EM4MB152IOC
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus	230V AC	By immersion	EM4MB252IOC
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	M-bus	230V AC	By immersion	EM4MB352IOC
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	M-bus	230V AC	By immersion	EM4MB62IOC
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	M-bus	230V AC	Pocket (pockets included)	EM4MB102POC
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	M-bus Wireless	Battery	By immersion	EM4MW06BIOC
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	M-bus Wireless	Battery	By immersion	EM4MW15BIOC
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus Wireless	Battery	By immersion	EM4MW25BIOC
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	M-bus Wireless	Battery	By immersion	EM4MW35BIOC
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	M-bus Wireless	Battery	By immersion	EM4MW6BIOC
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	M-bus Wireless	Battery	Pocket (pockets included)	EM4MW10BPOC
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	M-bus Wireless	24V AC/DC	By immersion	EM4MW064IOC
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	M-bus Wireless	24V AC/DC	By immersion	EM4MW154IOC
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus Wireless	24V AC/DC	By immersion	EM4MW254IOC
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	M-bus Wireless	24V AC/DC	By immersion	EM4MW354IOC
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	M-bus Wireless	24V AC/DC	By immersion	EM4MW64IOC
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM4MW104POC

	Size	Protocol	Power supply	Temperature probe	Code
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	M-bus Wireless	230V AC	By immersion	EM4MW06210C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	M-bus Wireless	230V AC	By immersion	EM4MW15210C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus Wireless	230V AC	By immersion	EM4MW25210C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	M-bus Wireless	230V AC	By immersion	EM4MW35210C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	M-bus Wireless	230V AC	By immersion	EM4MW62100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	M-bus Wireless	230V AC	Pocket (pockets included)	EM4MW102P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	LoRaWan	Battery	By immersion	EM4LO06B10C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	LoRaWan	Battery	By immersion	EM4LO15B10C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	LoRaWan	Battery	By immersion	EM4LO25B10C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	LoRaWan	Battery	By immersion	EM4LO35B10C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	LoRaWan	Battery	By immersion	EM4LO6B100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	LoRaWan	Battery	Pocket (pockets included)	EM4LO10BP0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	MODBUS RTU	24V AC/DC	By immersion	EM4MO06410C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	MODBUS RTU	24V AC/DC	By immersion	EM4MO15410C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	MODBUS RTU	24V AC/DC	By immersion	EM4MO25410C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	MODBUS RTU	24V AC/DC	By immersion	EM4MO35410C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	MODBUS RTU	24V AC/DC	By immersion	EM4MO64100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	MODBUS RTU	24V AC/DC	Pocket (pockets included)	EM4MO104P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	MODBUS RTU	230V AC	By immersion	EM4MO06210C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	MODBUS RTU	230V AC	By immersion	EM4MO15210C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	MODBUS RTU	230V AC	By immersion	EM4MO25210C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	MODBUS RTU	230V AC	By immersion	EM4MO35210C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	MODBUS RTU	230V AC	By immersion	EM4MO62100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	MODBUS RTU	230V AC	Pocket (pockets included)	EM4MO102P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	MODBUS TCP/IP	24V AC/DC	By immersion	EM4MI06410C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	MODBUS TCP/IP	24V AC/DC	By immersion	EM4MI15410C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	MODBUS TCP/IP	24V AC/DC	By immersion	EM4MI25410C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	MODBUS TCP/IP	24V AC/DC	By immersion	EM4MI35410C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	MODBUS TCP/IP	24V AC/DC	By immersion	EM4MI64100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	MODBUS TCP/IP	24V AC/DC	Pocket (pockets included)	EM4MI104P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	MODBUS TCP/IP	230V AC	By immersion	EM4MI06210C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	MODBUS TCP/IP	230V AC	By immersion	EM4MI15210C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	MODBUS TCP/IP	230V AC	By immersion	EM4MI25210C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	MODBUS TCP/IP	230V AC	By immersion	EM4MI35210C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	MODBUS TCP/IP	230V AC	By immersion	EM4MI62100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	MODBUS TCP/IP	230V AC	Pocket (pockets included)	EM4MI102P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	BACnet MS/TP	24V AC/DC	By immersion	EM4BA06410C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	BACnet MS/TP	24V AC/DC	By immersion	EM4BA15410C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	BACnet MS/TP	24V AC/DC	By immersion	EM4BA25410C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	BACnet MS/TP	24V AC/DC	By immersion	EM4BA35410C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	BACnet MS/TP	24V AC/DC	By immersion	EM4BA64100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM4BA104P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	BACnet MS/TP	230V AC	By immersion	EM4BA06210C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	BACnet MS/TP	230V AC	By immersion	EM4BA15210C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	BACnet MS/TP	230V AC	By immersion	EM4BA25210C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	BACnet MS/TP	230V AC	By immersion	EM4BA35210C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	BACnet MS/TP	230V AC	By immersion	EM4BA62100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	BACnet MS/TP	230V AC	Pocket (pockets included)	EM4BA102P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	BACnet IP	24V AC/DC	By immersion	EM4BI06410C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	BACnet IP	24V AC/DC	By immersion	EM4BI15410C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	BACnet IP	24V AC/DC	By immersion	EM4BI25410C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	BACnet IP	24V AC/DC	By immersion	EM4BI35410C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	BACnet IP	24V AC/DC	By immersion	EM4BI64100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	BACnet IP	24V AC/DC	Pocket (pockets included)	EM4BI104P0C
EM403	600 l/h - 2,64 GPM - ¾" x 110 mm	BACnet IP	230V AC	By immersion	EM4BI06210C
EM403	1500 l/h - 6,60 GPM - ¾" x 110 mm	BACnet IP	230V AC	By immersion	EM4BI15210C
EM403	2500 l/h - 11,01 GPM - 1" x 130 mm	BACnet IP	230V AC	By immersion	EM4BI25210C
EM403	3500 l/h - 15,41 GPM - 1 ¼" x 260 mm	BACnet IP	230V AC	By immersion	EM4BI35210C
EM403	6000 l/h - 26,42 GPM - 1 ¼" x 260 mm	BACnet IP	230V AC	By immersion	EM4BI62100C
EM403	10000 l/h - 44,03 GPM - 2" x 300 mm	BACnet IP	230V AC	Pocket (pockets included)	EM4BI102P0C

EM603



Pettinaroli ultrasonic thermal energy meter for cooling and heating, modular with different packages. Power supply: 24VAC, 230VAC or batteries. Available in the following communication protocols: BACnet, M-bus, MODBUS, LoRaWAN or Wireless M-bus. With incorporated pair of temperature probes and certified according to MID regulations (European directive). Available with male threaded connections with flat seat from 1/2" to 2" and ISO FLANGES from DN65 to DN300.

Description	Cut-off [l/h]	Flow rate min. [l/h]	Flow rate	Flow rate max.[l/h]	Dynamic range	Flow sensor length [mm]	Connections
EM603	3	15	1,5 m³/h - 6,60 GPM	3	100:1	110 mm	¾"
EM603	5	25	2,5 m³/h - 11,01 GPM	5	100:1	130 mm	1"
EM603	7	35	3,5 m³/h - 14,41 GPM	7	100:1	260 mm	1 ¼"
EM603	12	60	6 m³/h - 26,42 GPM	12	100:1	260 mm	1 ¼"
EM603	20	100	10 m³/h - 44,03 GPM	20	100:1	300 mm	2"
EM603	30	150	15 m³/h - 66,04 GPM	30	100:1	270 mm	DN50
EM603	50	250	25 m³/h - 110,07 GPM	50	100:1	300 mm	DN65
EM603	80	400	40 m³/h - 176,11 GPM	80	100:1	300 mm	DN80
EM603	120	600	60 m³/h - 264,17 GPM	120	100:1	360 mm	DN100
EM603	200	1000	100 m³/h - 440,29 GPM	200	100:1	360 mm	DN125
EM603	500	2500	250 m³/h - 1100,72 GPM	500	100:1	500 mm	DN150
EM603	800	4000	400 m³/h - 1761,15 GPM	800	100:1	500 mm	DN200
EM603	1200	6000	600 m³/h - 2641,72 GPM	1200	100:1	600 mm	DN250
EM603	2000	10000	1000 m³/h - 4402,87 GPM	2000	100:1	500 mm	DN300

General technical specifications

	¾" → DN125	DN150 → DN250	DN300
Protection class of the meter	IP65	IP65	IP65
Protection class of the calculator	IP68	IP67	IP67
Type of fluid	Water	Water	Water
Nominal pressure	PN25	PN25	PN16
Communication protocol	M-bus via cable, M-bus Wireless, MODBUS RTU, MODBUS TCP/IP, LoRaWan, BACnet MS/TP, BACnet IP,		

Possibility to supply the device with 4 wires temperature probes to increase the wiring length (up to 100 m).



Selection table EM603

	Size	Protocol	Power supply	Temperature probe	Code
EM603	0,6 m3/h - ¾" x 110 mm	M-bus	Battery	By immersion	EM6MB06BI0C
EM603	1,5 m3/h - ¾" x 110 mm	M-bus	Battery	By immersion	EM6MB15BI0C
EM603	2,5 m3/h - 1" x 130 mm	M-bus	Battery	By immersion	EM6MB25BI0C
EM603	3,5 m3/h - 1 ¼" x 260 mm	M-bus	Battery	By immersion	EM6MB35BI0C
EM603	6 m3/h - 1 ¼" x 260 mm	M-bus	Battery	By immersion	EM6MB6BI00C
EM603	10 m3/h - 2" x 300 mm	M-bus	Battery	Pocket (pockets included)	EM6MB10BP0C
EM603	15 m3/h - DN50	M-bus	Battery	Pocket (pockets included)	EM6MBF15BPC
EM603	25 m3/h - DN65	M-bus	Battery	Pocket (pockets included)	EM6MBF25BPC
EM603	40 m3/h - DN80	M-bus	Battery	Pocket (pockets included)	EM6MBF04BPC
EM603	60 m3/h - DN100	M-bus	Battery	Pocket (pockets included)	EM6MBF06BPC
EM603	100 m3/h - DN125	M-bus	Battery	Pocket (pockets included)	EM6MBF01BPC
EM603	250 m3/h - DN150	M-bus	Battery	Pocket (pockets included)	EM6MBF26BPC
EM603	400 m3/h - DN200	M-bus	Battery	Pocket (pockets included)	EM6MBF40BPC
EM603	600 m3/h - DN250	M-bus	Battery	Pocket (pockets included)	EM6MBF60BPC
EM603	1000 m3/h - DN300	M-bus	Battery	Pocket (pockets included)	EM6MBF10BPC
EM603	0,6 m3/h - ¾" x 110 mm	M-bus	24V AC/DC	By immersion	EM6MB064I0C
EM603	1,5 m3/h - ¾" x 110 mm	M-bus	24V AC/DC	By immersion	EM6MB154I0C
EM603	2,5 m3/h - 1" x 130 mm	M-bus	24V AC/DC	By immersion	EM6MB254I0C
EM603	3,5 m3/h - 1 ¼" x 260 mm	M-bus	24V AC/DC	By immersion	EM6MB354I0C
EM603	6 m3/h - 1 ¼" x 260 mm	M-bus	24V AC/DC	By immersion	EM6MB64I00C
EM603	10 m3/h - 2" x 300 mm	M-bus	24V AC/DC	Pocket (pockets included)	EM6MB104P0C
EM603	15 m3/h - DN50	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF154PC
EM603	25 m3/h - DN65	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF254PC
EM603	40 m3/h - DN80	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF044PC
EM603	60 m3/h - DN100	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF064PC
EM603	100 m3/h - DN125	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF014PC
EM603	250 m3/h - DN150	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF264PC

	Size	Protocol	Power supply	Temperature probe	Code
EM603	400 m3/h - DN200	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF404PC
EM603	600 m3/h - DN250	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF604PC
EM603	1000 m3/h - DN300	M-bus	24V AC/DC	Pocket (pockets included)	EM6MBF104PC
EM603	0,6 m3/h - ¾" x 110 mm	M-bus	230V AC	By immersion	EM6MB06210C
EM603	1,5 m3/h - ¾" x 110 mm	M-bus	230V AC	By immersion	EM6MB15210C
EM603	2,5 m3/h - 1" x 130 mm	M-bus	230V AC	By immersion	EM6MB25210C
EM603	3,5 m3/h - 1 ¼" x 260 mm	M-bus	230V AC	By immersion	EM6MB35210C
EM603	6 m3/h - 1 ¼" x 260 mm	M-bus	230V AC	By immersion	EM6MB62100C
EM603	10 m3/h - 2" x 300 mm	M-bus	230V AC	Pocket (pockets included)	EM6MB102P0C
EM603	15 m3/h - DN50	M-bus	230V AC	Pocket (pockets included)	EM6MBF152PC
EM603	25 m3/h - DN65	M-bus	230V AC	Pocket (pockets included)	EM6MBF252PC
EM603	40 m3/h - DN80	M-bus	230V AC	Pocket (pockets included)	EM6MBF042PC
EM603	60 m3/h - DN100	M-bus	230V AC	Pocket (pockets included)	EM6MBF062PC
EM603	100 m3/h - DN125	M-bus	230V AC	Pocket (pockets included)	EM6MBF012PC
EM603	250 m3/h - DN150	M-bus	230V AC	Pocket (pockets included)	EM6MBF262PC
EM603	400 m3/h - DN200	M-bus	230V AC	Pocket (pockets included)	EM6MBF402PC
EM603	600 m3/h - DN250	M-bus	230V AC	Pocket (pockets included)	EM6MBF602PC
EM603	1000 m3/h - DN300	M-bus	230V AC	Pocket (pockets included)	EM6MBF102PC
EM603	0,6 m3/h - ¾" x 110 mm	M-bus Wireless	Battery	By immersion	EM6MW06B10C
EM603	1,5 m3/h - ¾" x 110 mm	M-bus Wireless	Battery	By immersion	EM6MW15B10C
EM603	2,5 m3/h - 1" x 130 mm	M-bus Wireless	Battery	By immersion	EM6MW25B10C
EM603	3,5 m3/h - 1 ¼" x 260 mm	M-bus Wireless	Battery	By immersion	EM6MW35B10C
EM603	6 m3/h - 1 ¼" x 260 mm	M-bus Wireless	Battery	By immersion	EM6MW6B100C
EM603	10 m3/h - 2" x 300 mm	M-bus Wireless	Battery	Pocket (pockets included)	EM6MW10BPC
EM603	15 m3/h - DN50	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF15BPC
EM603	25 m3/h - DN65	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF25BPC
EM603	40 m3/h - DN80	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF04BPC
EM603	60 m3/h - DN100	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF06BPC
EM603	100 m3/h - DN125	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF01BPC
EM603	250 m3/h - DN150	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF26BPC
EM603	400 m3/h - DN200	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF40BPC
EM603	600 m3/h - DN250	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF60BPC
EM603	1000 m3/h - DN300	M-bus Wireless	Battery	Pocket (pockets included)	EM6MWF10BPC
EM603	0,6 m3/h - ¾" x 110 mm	M-bus Wireless	24V AC/DC	By immersion	EM6MW06410C
EM603	1,5 m3/h - ¾" x 110 mm	M-bus Wireless	24V AC/DC	By immersion	EM6MW15410C
EM603	2,5 m3/h - 1" x 130 mm	M-bus Wireless	24V AC/DC	By immersion	EM6MW25410C
EM603	3,5 m3/h - 1 ¼" x 260 mm	M-bus Wireless	24V AC/DC	By immersion	EM6MW35410C
EM603	6 m3/h - 1 ¼" x 260 mm	M-bus Wireless	24V AC/DC	By immersion	EM6MW64100C
EM603	10 m3/h - 2" x 300 mm	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MW104P0C
EM603	15 m3/h - DN50	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF154PC
EM603	25 m3/h - DN65	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF254PC
EM603	40 m3/h - DN80	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF044PC
EM603	60 m3/h - DN100	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF064PC
EM603	100 m3/h - DN125	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF014PC
EM603	250 m3/h - DN150	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF264PC
EM603	400 m3/h - DN200	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF404PC
EM603	600 m3/h - DN250	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF604PC
EM603	1000 m3/h - DN300	M-bus Wireless	24V AC/DC	Pocket (pockets included)	EM6MWF104PC
EM603	0,6 m3/h - ¾" x 110 mm	M-bus Wireless	230V AC	By immersion	EM6MW06210C
EM603	1,5 m3/h - ¾" x 110 mm	M-bus Wireless	230V AC	By immersion	EM6MW15210C
EM603	2,5 m3/h - 1" x 130 mm	M-bus Wireless	230V AC	By immersion	EM6MW25210C
EM603	3,5 m3/h - 1 ¼" x 260 mm	M-bus Wireless	230V AC	By immersion	EM6MW35210C
EM603	6 m3/h - 1 ¼" x 260 mm	M-bus Wireless	230V AC	By immersion	EM6MW62100C
EM603	10 m3/h - 2" x 300 mm	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MW102P0C
EM603	15 m3/h - DN50	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF152PC
EM603	25 m3/h - DN65	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF252PC
EM603	40 m3/h - DN80	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF042PC
EM603	60 m3/h - DN100	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF062PC
EM603	100 m3/h - DN125	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF012PC
EM603	250 m3/h - DN150	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF262PC
EM603	400 m3/h - DN200	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF402PC
EM603	600 m3/h - DN250	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF602PC
EM603	1000 m3/h - DN300	M-bus Wireless	230V AC	Pocket (pockets included)	EM6MWF102PC
EM603	0,6 m3/h - ¾" x 110 mm	LoRaWan	Battery	By immersion	EM6LO06B10C
EM603	1,5 m3/h - ¾" x 110 mm	LoRaWan	Battery	By immersion	EM6LO15B10C
EM603	2,5 m3/h - 1" x 130 mm	LoRaWan	Battery	By immersion	EM6LO25B10C

	Size	Protocol	Power supply	Temperature probe	Code
EM603	3,5 m3/h - 1 1/4" x 260 mm	LoRaWan	Battery	By immersion	EM6LO35B10C
EM603	6 m3/h - 1 1/4" x 260 mm	LoRaWan	Battery	By immersion	EM6LO6B100C
EM603	10 m3/h - 2" x 300 mm	LoRaWan	Battery	Pocket (pockets included)	EM6LO10BPOC
EM603	15 m3/h - DN50	LoRaWan	Battery	Pocket (pockets included)	EM6LOF15BPC
EM603	25 m3/h - DN65	LoRaWan	Battery	Pocket (pockets included)	EM6LOF25BPC
EM603	40 m3/h - DN80	LoRaWan	Battery	Pocket (pockets included)	EM6LOF04BPC
EM603	60 m3/h - DN100	LoRaWan	Battery	Pocket (pockets included)	EM6LOF06BPC
EM603	100 m3/h - DN125	LoRaWan	Battery	Pocket (pockets included)	EM6LOF01BPC
EM603	250 m3/h - DN150	LoRaWan	Battery	Pocket (pockets included)	EM6LOF26BPC
EM603	400 m3/h - DN200	LoRaWan	Battery	Pocket (pockets included)	EM6LOF40BPC
EM603	600 m3/h - DN250	LoRaWan	Battery	Pocket (pockets included)	EM6LOF60BPC
EM603	1000 m3/h - DN300	LoRaWan	Battery	Pocket (pockets included)	EM6LOF10BPC
EM603	0,6 m3/h - 3/4" x 110 mm	Modbus RTU	24V AC/DC	By immersion	EM6MO06410C
EM603	1,5 m3/h - 3/4" x 110 mm	Modbus RTU	24V AC/DC	By immersion	EM6MO15410C
EM603	2,5 m3/h - 1" x 130 mm	Modbus RTU	24V AC/DC	By immersion	EM6MO25410C
EM603	3,5 m3/h - 1 1/4" x 260 mm	Modbus RTU	24V AC/DC	By immersion	EM6MO35410C
EM603	6 m3/h - 1 1/4" x 260 mm	Modbus RTU	24V AC/DC	By immersion	EM6MO64100C
EM603	10 m3/h - 2" x 300 mm	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MO104POC
EM603	15 m3/h - DN50	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF154PC
EM603	25 m3/h - DN65	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF254PC
EM603	40 m3/h - DN80	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF044PC
EM603	60 m3/h - DN100	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF064PC
EM603	100 m3/h - DN125	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF014PC
EM603	250 m3/h - DN150	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF264PC
EM603	400 m3/h - DN200	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF404PC
EM603	600 m3/h - DN250	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF604PC
EM603	1000 m3/h - DN300	Modbus RTU	24V AC/DC	Pocket (pockets included)	EM6MOF104PC
EM603	0,6 m3/h - 3/4" x 110 mm	Modbus RTU	230V AC	By immersion	EM6MO06210C
EM603	1,5 m3/h - 3/4" x 110 mm	Modbus RTU	230V AC	By immersion	EM6MO15210C
EM603	2,5 m3/h - 1" x 130 mm	Modbus RTU	230V AC	By immersion	EM6MO25210C
EM603	3,5 m3/h - 1 1/4" x 260 mm	Modbus RTU	230V AC	By immersion	EM6MO35210C
EM603	6 m3/h - 1 1/4" x 260 mm	Modbus RTU	230V AC	By immersion	EM6MO62100C
EM603	10 m3/h - 2" x 300 mm	Modbus RTU	230V AC	Pocket (pockets included)	EM6MO102POC
EM603	15 m3/h - DN50	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF152PC
EM603	25 m3/h - DN65	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF252PC
EM603	40 m3/h - DN80	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF042PC
EM603	60 m3/h - DN100	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF062PC
EM603	100 m3/h - DN125	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF012PC
EM603	250 m3/h - DN150	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF262PC
EM603	400 m3/h - DN200	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF402PC
EM603	600 m3/h - DN250	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF602PC
EM603	1000 m3/h - DN300	Modbus RTU	230V AC	Pocket (pockets included)	EM6MOF102PC
EM603	0,6 m3/h - 3/4" x 110 mm	Modbus TCP/IP	24V AC/DC	By immersion	EM6MI06410C
EM603	1,5 m3/h - 3/4" x 110 mm	Modbus TCP/IP	24V AC/DC	By immersion	EM6MI15410C
EM603	2,5 m3/h - 1" x 130 mm	Modbus TCP/IP	24V AC/DC	By immersion	EM6MI25410C
EM603	3,5 m3/h - 1 1/4" x 260 mm	Modbus TCP/IP	24V AC/DC	By immersion	EM6MI35410C
EM603	6 m3/h - 1 1/4" x 260 mm	Modbus TCP/IP	24V AC/DC	By immersion	EM6MI64100C
EM603	10 m3/h - 2" x 300 mm	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MI104POC
EM603	15 m3/h - DN50	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF154PC
EM603	25 m3/h - DN65	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF254PC
EM603	40 m3/h - DN80	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF044PC
EM603	60 m3/h - DN100	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF064PC
EM603	100 m3/h - DN125	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF014PC
EM603	250 m3/h - DN150	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF264PC
EM603	400 m3/h - DN200	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF404PC
EM603	600 m3/h - DN250	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF604PC
EM603	1000 m3/h - DN300	Modbus TCP/IP	24V AC/DC	Pocket (pockets included)	EM6MIF104PC
EM603	0,6 m3/h - 3/4" x 110 mm	Modbus TCP/IP	230V AC	By immersion	EM6MI06210C
EM603	1,5 m3/h - 3/4" x 110 mm	Modbus TCP/IP	230V AC	By immersion	EM6MI15210C
EM603	2,5 m3/h - 1" x 130 mm	Modbus TCP/IP	230V AC	By immersion	EM6MI25210C
EM603	3,5 m3/h - 1 1/4" x 260 mm	Modbus TCP/IP	230V AC	By immersion	EM6MI35210C
EM603	6 m3/h - 1 1/4" x 260 mm	Modbus TCP/IP	230V AC	By immersion	EM6MI62100C
EM603	10 m3/h - 2" x 300 mm	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MI102POC
EM603	15 m3/h - DN50	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF152PC
EM603	25 m3/h - DN65	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF252PC
EM603	40 m3/h - DN80	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF042PC

	Size	Protocol	Power supply	Temperature probe	Code
EM603	60 m3/h - DN100	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF062PC
EM603	100 m3/h - DN125	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF012PC
EM603	250 m3/h - DN150	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF262PC
EM603	400 m3/h - DN200	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF402PC
EM603	600 m3/h - DN250	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF602PC
EM603	1000 m3/h - DN300	Modbus TCP/IP	230V AC	Pocket (pockets included)	EM6MIF102PC
EM603	0,6 m3/h - ¾" x 110 mm	BACnet MS/TP	24V AC/DC	By immersion	EM6BA06410C
EM603	1,5 m3/h - ¾" x 110 mm	BACnet MS/TP	24V AC/DC	By immersion	EM6BA15410C
EM603	2,5 m3/h - 1" x 130 mm	BACnet MS/TP	24V AC/DC	By immersion	EM6BA25410C
EM603	3,5 m3/h - 1 ¼" x 260 mm	BACnet MS/TP	24V AC/DC	By immersion	EM6BA35410C
EM603	6 m3/h - 1 ¼" x 260 mm	BACnet MS/TP	24V AC/DC	By immersion	EM6BA64100C
EM603	10 m3/h - 2" x 300 mm	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BA104P0C
EM603	15 m3/h - DN50	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF154PC
EM603	25 m3/h - DN65	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF254PC
EM603	40 m3/h - DN80	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF044PC
EM603	60 m3/h - DN100	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF064PC
EM603	100 m3/h - DN125	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF014PC
EM603	250 m3/h - DN150	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF264PC
EM603	400 m3/h - DN200	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF404PC
EM603	600 m3/h - DN250	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF604PC
EM603	1000 m3/h - DN300	BACnet MS/TP	24V AC/DC	Pocket (pockets included)	EM6BAF104PC
EM603	0,6 m3/h - ¾" x 110 mm	BACnet MS/TP	230V AC	By immersion	EM6BA06210C
EM603	1,5 m3/h - ¾" x 110 mm	BACnet MS/TP	230V AC	By immersion	EM6BA15210C
EM603	2,5 m3/h - 1" x 130 mm	BACnet MS/TP	230V AC	By immersion	EM6BA25210C
EM603	3,5 m3/h - 1 ¼" x 260 mm	BACnet MS/TP	230V AC	By immersion	EM6BA35210C
EM603	6 m3/h - 1 ¼" x 260 mm	BACnet MS/TP	230V AC	By immersion	EM6BA62100C
EM603	10 m3/h - 2" x 300 mm	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BA102P0C
EM603	15 m3/h - DN50	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF152PC
EM603	25 m3/h - DN65	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF252PC
EM603	40 m3/h - DN80	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF042PC
EM603	60 m3/h - DN100	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF062PC
EM603	100 m3/h - DN125	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF012PC
EM603	250 m3/h - DN150	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF262PC
EM603	400 m3/h - DN200	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF402PC
EM603	600 m3/h - DN250	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF602PC
EM603	1000 m3/h - DN300	BACnet MS/TP	230V AC	Pocket (pockets included)	EM6BAF102PC
EM603	0,6 m3/h - ¾" x 110 mm	BACnet IP	24V AC/DC	By immersion	EM6BI06410C
EM603	1,5 m3/h - ¾" x 110 mm	BACnet IP	24V AC/DC	By immersion	EM6BI15410C
EM603	2,5 m3/h - 1" x 130 mm	BACnet IP	24V AC/DC	By immersion	EM6BI25410C
EM603	3,5 m3/h - 1 ¼" x 260 mm	BACnet IP	24V AC/DC	By immersion	EM6BI35410C
EM603	6 m3/h - 1 ¼" x 260 mm	BACnet IP	24V AC/DC	By immersion	EM6BI64100C
EM603	10 m3/h - 2" x 300 mm	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BI104P0C
EM603	15 m3/h - DN50	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF154PC
EM603	25 m3/h - DN65	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF254PC
EM603	40 m3/h - DN80	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF044PC
EM603	60 m3/h - DN100	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF064PC
EM603	100 m3/h - DN125	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF014PC
EM603	250 m3/h - DN150	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF264PC
EM603	400 m3/h - DN200	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF404PC
EM603	600 m3/h - DN250	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF604PC
EM603	1000 m3/h - DN300	BACnet IP	24V AC/DC	Pocket (pockets included)	EM6BIF104PC
EM603	0,6 m3/h - ¾" x 110 mm	BACnet IP	230V AC	By immersion	EM6BI06210C
EM603	1,5 m3/h - ¾" x 110 mm	BACnet IP	230V AC	By immersion	EM6BI15210C
EM603	2,5 m3/h - 1" x 130 mm	BACnet IP	230V AC	By immersion	EM6BI25210C
EM603	3,5 m3/h - 1 ¼" x 260 mm	BACnet IP	230V AC	By immersion	EM6BI35210C
EM603	6 m3/h - 1 ¼" x 260 mm	BACnet IP	230V AC	By immersion	EM6BI62100C
EM603	10 m3/h - 2" x 300 mm	BACnet IP	230V AC	Pocket (pockets included)	EM6BI102P0C
EM603	15 m3/h - DN50	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF152PC
EM603	25 m3/h - DN65	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF252PC
EM603	40 m3/h - DN80	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF042PC
EM603	60 m3/h - DN100	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF062PC
EM603	100 m3/h - DN125	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF012PC
EM603	250 m3/h - DN150	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF262PC
EM603	400 m3/h - DN200	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF402PC
EM603	600 m3/h - DN250	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF602PC
EM603	1000 m3/h - DN300	BACnet IP	230V AC	Pocket (pockets included)	EM6BIF102PC


EM303



Pettinaroli ultrasonic thermal energy meter for heating and cooling with integrated M-Bus communication protocol via cable or Wireless M-Bus, certified according to MID regulations (European directive). Male threaded connections with flat seat.

General technical specifications	
Protection class of the meter	IP68
Protection class of the calculator	IP65
Type of fluid	Water
Nominal pressure	PN25
Communication protocol	M-bus via cable / M-bus Wireless



Size	
3/4" M - 600 l/h - 2,64 GPM	1
3/4" M - 1500 l/h - 6,60 GPM	1
1" M - 2500 l/h - 11,01 GPM	1


Selection table EM303

	Size	Protocol	Power supply	Temperature probe	Code
EM303	600 l/h - 2,64 GPM - 3/4" x 110 mm	M-bus	Battery	By immersion	EM3MB06BI0C
EM303	1500 l/h - 6,60 GPM - 3/4" x 110 mm	M-bus	Battery	By immersion	EM3MB15BI0C
EM303	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus	Battery	By immersion	EM3MB25BI0C
EM303	600 l/h - 2,64 GPM - 3/4" x 110 mm	M-bus Wireless	Battery	By immersion	EM3MW06BI0C
EM303	1500 l/h - 6,60 GPM - 3/4" x 110 mm	M-bus Wireless	Battery	By immersion	EM3MW15BI0C
EM303	2500 l/h - 11,01 GPM - 1" x 130 mm	M-bus Wireless	Battery	By immersion	EM3MW25BI0C

OEMTS




T-piece probe holder for meter intake with BSP thread

Size		Code
1/2" - BSP	1	6001610000C
3/4" - BSP	1	6002210000C
1" - BSP	1	6002610000C
1 1/2" - BSP	1	6004210000C

OEMTS NPT



Probe-holder T-piece for meter connection with NPT thread

Size		Code
1/2" - NPT	1	
3/4" - NPT	1	
1" - NPT	1	
1 1/2" - NPT	1	

General technical specifications	
1/2"	for EM303 up to 1,5 m3/h for EM403 up to 1,5 m3/h
3/4"	for EM303 up to 2,5 m3/h for EM403 up to 2,5 m3/h
1"	for EM403 3,5 and 6 m3/h
1 1/2"	for EM403 10 m3/h

OptiMETER

UC/FC KIT - D.H.W. and D.C.W. METERING UNIT

OptiMETER pre-assembled hydraulic kit for Domestic Hot Water (DHW) and Domestic Cold Water (DCW) metering, consisting of two shut-off valves, two shut-off valves with integrated check valves, a coplanar manifold, complete insulation for the unit, and energy meters (not included in the kit).

Thanks to the presence of the coplanar manifold in each metering unit, both hot and cold water meters can be installed; furthermore, due to its modular design, several kits can be assembled in-line for each manifold assembly (battery).

The kit is suitable for centralized installations.

FEATURES & ADVANTAGES

- ✓ UC/FC Kit factory-assembled and **100% pressure tested**, fully insulated
- ✓ **Reduced installation time** and elimination of costly assembly errors. Installation costs are significantly reduced.
- ✓ **Very simple installation** and customization according to project specifications



COMPONENTS

- Pettinaroli coplanar manifold with 2 main 1-1/4" outlets and 2 x 3/4" branches (ref. 8090)
- 52MET ball valve with 3/4" x 1/2" swivel nut (2 units)
- 42MET ball valve with 3/4" x 3/4" swivel nut and integrated check valve (2 units)
- Wall-mounting bracket included
- Insulation included

UC/FC



UC/FC Kit for Domestic Hot Water (DHW) and Domestic Cold Water (DCW) metering in centralized systems. The kit consists of: two shut-off valves, two shut-off valves with integrated check valves, and a 1-1/4" coplanar manifold.

Size		Code
1 1/4" x 3/4"	1	

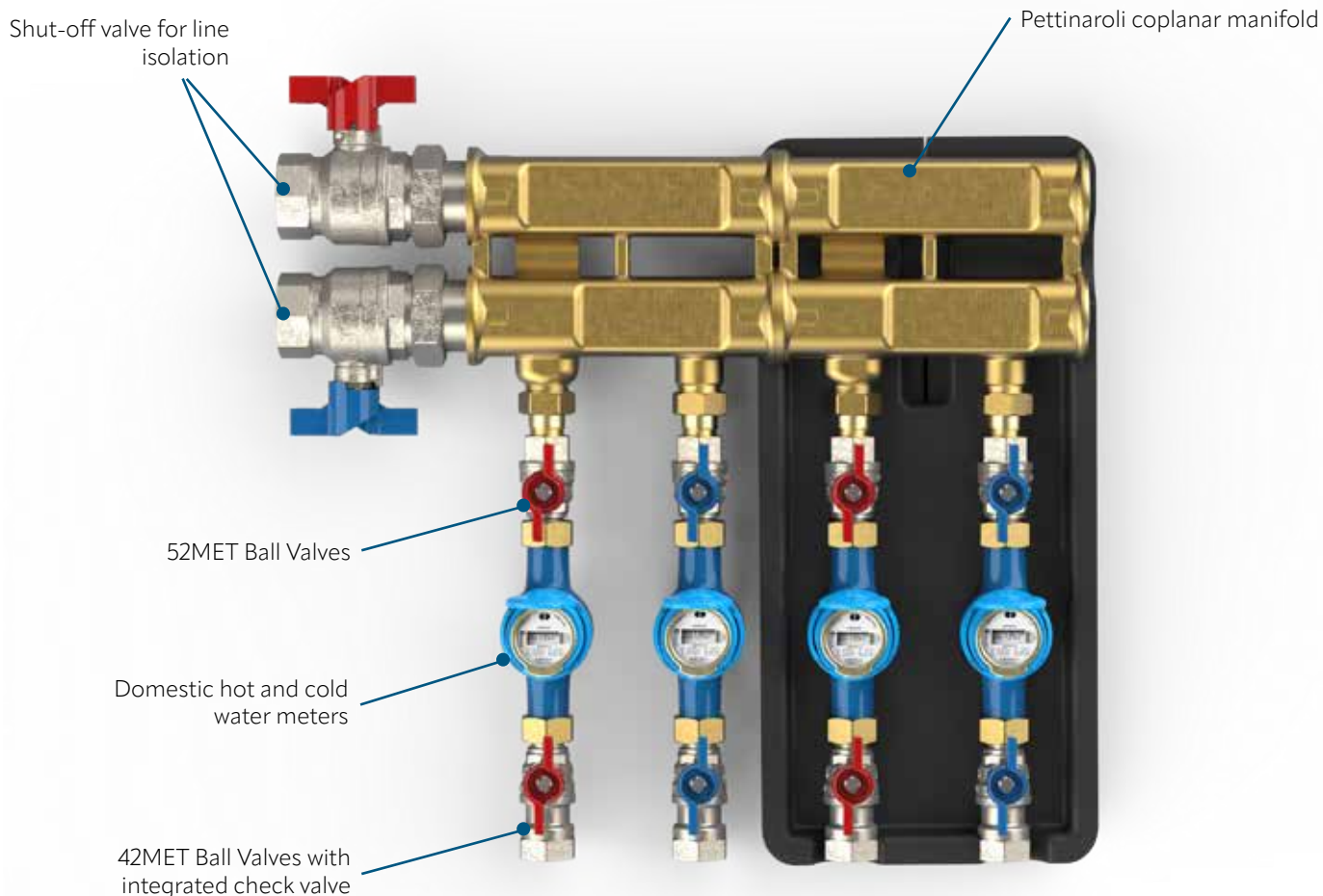
UC/FCI



UC/FCI Kit for Domestic Hot Water (DHW) and Domestic Cold Water (DCW) metering in centralized systems. The kit consists of: two shut-off valves, two shut-off valves with integrated check valves, a 1-1/4" coplanar manifold, and complete insulation.

Size		Code
1 1/4" x 3/4"	1	6203220040C

APPLICATION



OptiMETER

UC/H (D.H.W.) - UC/C (D.C.W.) KIT - METERING UNIT

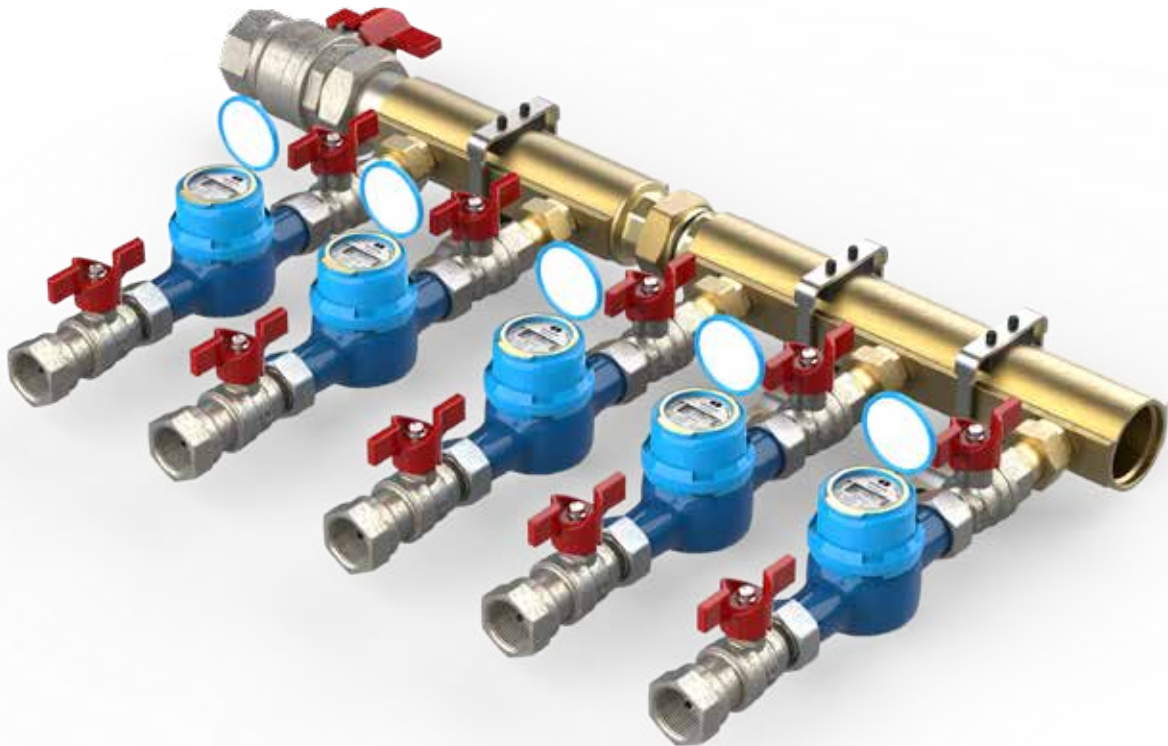
OptiMETER is the pre-assembled Pettinaroli hydraulic kit with a "made in Italy" guarantee for battery metering of domestic hot water (D.H.W.) or domestic cold water (D.C.W.). It is a perfect solution to separately measure and record the hot water consumption of each home in a centralized heating system (codes: UC/C2 and UC/C3 with red handles) or domestic cold water (codes: UC/F2 and UC /F3 with blue levers).

The kits are modular and can be 2 or 3 homes, modular according to project needs and can be adapted according to the needs of each building. Perfect modularity is always achieved through the dedicated 1.1/4" collectors that are coupled together through the specific 1.1/4" "OUC/C" unions.

Completely insulated kit that allows heat loss to be reduced with always 100% guaranteed safety thanks to the presence of ball valves with built-in non-return valves that prevent the accidental return of contaminated water to the main distribution network. Very simple maintenance thanks to the presence of shut-off valves that ensure total isolation for replacing the water meter or any other operation on the floor.

FEATURES & BENEFITS

- ✓ Optimeter UC/C and UC/F hydraulic kits assembled and tested in the factory, 100% completely isolated
- ✓ Reduced installation time and elimination of costly assembly errors. Installation costs are significantly reduced.
- ✓ Very simple and personalized installation according to the characteristics of the project
- ✓ Simplified maintenance thanks to the presence of Pettinaroli insulation that is easy to dismantle



COMPONENTS

- 1 manifold cod. 7036M - 1.1/4"
- 52MET ball valve with 1/2" x 3/4" swivel nut (2 units in the 2-outlet version and 3 units in the 3-outlet kit)
- 42MET ball valve with 3/4" x 3/4" swivel nut with built-in non-return valve (2 units in the 2-outlet version and 3 units in the 3-outlet kit)
- Wall bracket included
- Insulation included
- Plastic extenders

UC/C



UC/FC kit for metering for domestic hot water (DHW) in centralized systems with 2 and 3 outlets. The kit consists of: two shut-off valves, two shut-off valves with non-return valves and a 1 1/4" manifold. Assembly between kits can be done with the "OUC/C" union

Size		Code
UC/C2 - 2 outlet - 1 1/4" x 3/4"	1	
UC/C3 - 3 outlet - 1 1/4" x 3/4"	1	

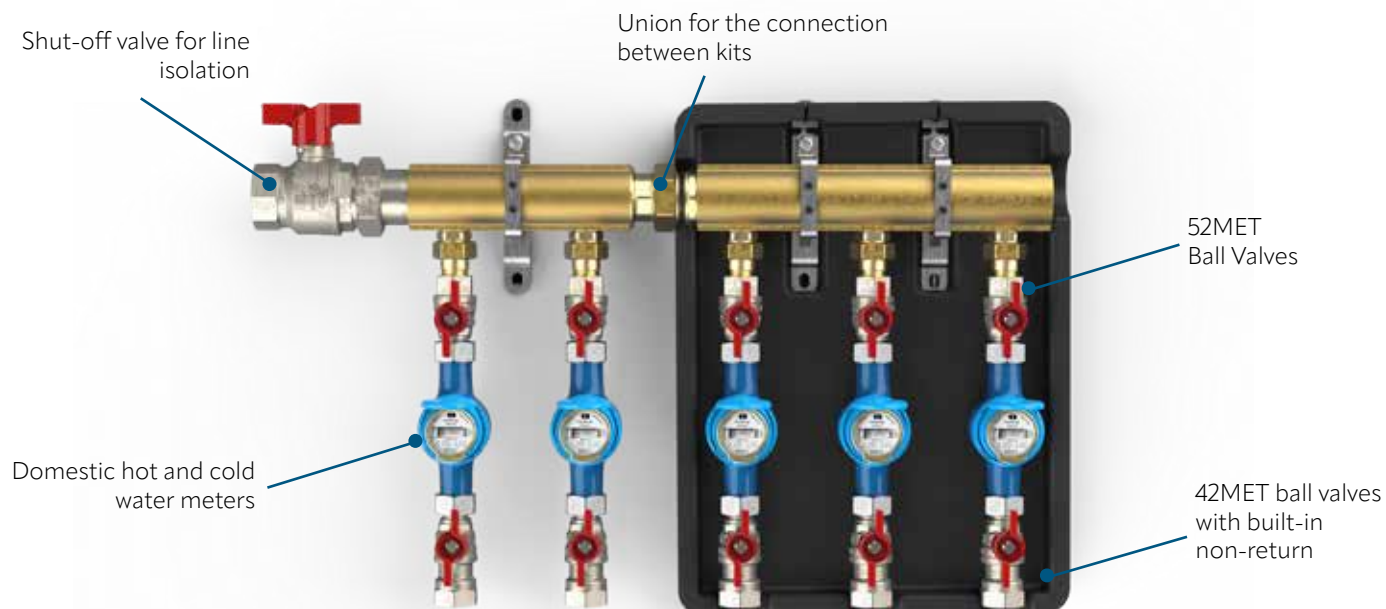
UC/F



UC/FC kit for metering for domestic cold water (DHW) in centralized systems with 2 and 3 outlets. The kit consists of: two shut-off valves, two shut-off valves with non-return valves and a 1 1/4" manifold. Assembly between kits can be done with the "OUC/C" union

Size		Code
UC/F2 - 2 outlet - 1 1/4" x 3/4"	1	
UC/F3 - 3 outlet - 1 1/4" x 3/4"	1	


APPLICATION EXAMPLE



UC/CI




UC/FC kit for metering for domestic hot water (DHW) in centralized systems with 2 and 3 outlets. The kit consists of: two shut-off valves, two shut-off valves with non-return valves and a 1 1/4" manifold. Assembly between kits can be done with the "OUC/C" union
Insulating case: Included

Size		Code
UC/C2I - 2 outlet - 1 1/4" x 3/4"	1	6203220040C
UC/C3I - 3 outlet - 1 1/4" x 3/4"	1	

UC/FI



UC/FC kit for metering for domestic cold water (DHW) in centralized systems with 2 and 3 outlets. The kit consists of: two shut-off valves, two shut-off valves with non-return valves and a 1 1/4" manifold. Assembly between kits can be done with the "OUC/C" union.
Insulating case: Included

Size		Code
UC/F2I - 2 outlet - 1 1/4" x 3/4"	1	6203220040C
UC/F3I - 3 outlet - 1 1/4" x 3/4"	1	

Kit KCH for CENTRALIZED SYSTEMS WATER METERING

The **KCH Pettinaroli kit with EVOPICV 91** valve allows a **precise regulation of the flow rate** of each house and incorporates the provision for a metering system of the energy actually consumed. This translates into energy savings and maximum comfort!

The kit enhances the benefits of centralized heating: it ensures the lowest energy consumption, improves system efficiency and guarantees the freedom of an individual installation. **It reduces losses and improves comfort.**

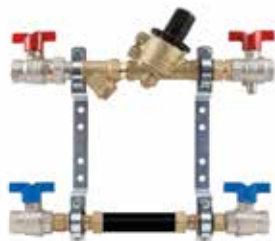
Incorporating an energy meter, together with the EVOPICV valve, allows the accounting of the energy actually consumed and at the same time a **fair distribution of the costs** of centralized heating among all users.

The pressure independent dynamic balancing valve **EVOPICV 91 keeps the flow rate in the house constant** and is at the same time a zone valve (when connected to a room thermostat and an on/off actuator) or a regulation and control valve (when connected to a room thermostat and a proportional actuator).


ADVANTAGES

- √ Automatic balancing:
 - **User:** the total flow rate entering the dwelling is always kept constant
 - **Installer:** no need to balance uprights and strands
- √ Adjustment of flow rate and housing temperature **with a single valve.**
- √ **Quick installation:** strainer, shut-off valves, flow sensor housing, flow control valve and zone valve in one product, ready to install
- √ Temperature control with **a room thermostat for the whole house.**
- √ **Reduced size** due to valve with integrated flow temperature sensor housing.
- √ **Energy metering:** the 110 mm plastic pipe can be removed and replaced by a suitable energy meter, thanks to the two detachable 3/4" fittings.
- √ **Wide range of flow rates** (from 15 l/h to 1500 l/h) depending on model

KCH_AY




KCH Pettinaroli metering kit for individual centralized heating applications with EVOPICV 91-1 dynamic balancing valve.

Size		Code
KCH01AY - 150 l/h	1	6202020050C
KCH06AY - 600 l/h	1	6202020010C
KCH08AY - 780 l/h	1	
KCH10AY - 1000 l/h	1	6202020070C
KCH15AY - 1500 l/h	1	6202020080C

KCH_BF



KCH Pettinaroli metering kit for individual centralized heating applications with EVOPICV 91 dynamic balancing valve and Filterball.

Size		Code
KCH01BF - 150 l/h	1	
KCH06BF - 600 l/h	1	6202020020C
KCH08BF - 780 l/h	1	
KCH10BF - 1000 l/h	1	
KCH15BF - 1500 l/h	1	6202020090C


General technical specifications

Nominal pressure	10 bar	Fluid	water or water with glycol 50%
Maximum water temperature	90°C	Filtering capacity	Ø 500 µm (KCH_AY) Ø 700 µm (KCH_BF)
Minimum differential pressure	from 25 kPa to 35 kPa	Joints and connections	G 3/4" F
Maximum differential pressure	600 kPa	Temperature measurement	M10 F
Energy meter center-to-center distance	110 mm	Connection for energy meter	3/4" flat seat

52MET




F x F (free nut, flat seat) ball valve for water meter connection. T.E.A. Plus plated. Anti-Legionella ball with an additional bore on the bottom to avoid water stagnation between in the space between the ball and the body. Blue butterfly handle.

Size		Code	PN
1/2" x 1/2"	80/20	3701504030C	16
3/4" x 1/2"	100/10	3702024030C	16
3/4" x 3/4"	100/10	3702224030C	16
1" x 3/4"	80/8	3702504020C	16
1" x 1"	80/8	3702804020C	16

52MET/1




M x F (free nut, flat seat) ball valve for water meter connection. T.E.A. Plus plated. Anti-Legionella ball with an additional bore on the bottom to avoid water stagnation between in the space between the ball and the body. Blue butterfly handle.

Size		Code	PN
3/4" x 1/2"	100/10	3702024000C	16
3/4" x 3/4"	100/10	3702224000C	16
1" x 3/4"	80/8	3702524000C	16
1" x 1"	80/8	3702824000C	16

52METR




F x F (free nut, flat seat) ball valve for water meter connection. T.E.A. Plus plated. Anti-Legionella ball with an additional bore on the bottom to avoid water stagnation between in the space between the ball and the body. Red butterfly handle.

Size		Code	PN
1/2" x 1/2"	80/20	3701504130C	16
3/4" x 1/2"	100/10	3702024040C	16
3/4" x 3/4"	100/10	3702224040C	16
1" x 3/4"	80/8	3702504030C	16
1" x 1"	80/8	3702804030C	16

52METR1



M x F (free nut, flat seat) ball valve for water meter connection. T.E.A. Plus plated. Anti-Legionella ball with an additional bore on the bottom to avoid water stagnation between in the space between the ball and the body. Red butterfly handle.

Size		Code	PN
3/4" x 1/2"	100/10	3702024060C	16
3/4" x 3/4"	100/10	3702224060C	16
1" x 3/4"	80/8	3702524060C	16
1" x 1"	80/8	3702824060C	16

209B



F (free nut) x F angle ballvalve for water meter. Anti-legionella ball with additional bore on the bottom to avoid water stagnation in the space between the ball and the body.
Blue butterfly handle. Nickel plated.

Size		Code	PN
DN15 - 3/4"x 1/2"	48/12	3701514230C	16
DN15 - 3/4"x 3/4"	48/12	3702014230C	16

209



F (free nut) x F angle ballvalve for water meter. Anti-legionella ball with additional bore on the bottom to avoid water stagnation in the space between the ball and the body.
Red butterfly handle. Nickel plated.

Size		Code	PN
DN15 - 3/4"x 1/2"	48/12	3701514210C	16
DN15 - 3/4"x 3/4"	48/12	3702014210C	16

209/1B



F (free nut) x M angle ballvalve for water meter. Anti-legionella ball with additional bore on the bottom to avoid water stagnation in the space between the ball and the body.
Blue butterfly handle. Nickel plated.

Size		Code	PN
DN15 - 3/4"x 1/2"	80/8	3701514220C	16
DN15 - 3/4"x 3/4"	48/12	3702014220C	16

209/1



F (free nut) x M angle ballvalve for water meter. Anti-legionella ball with additional bore on the bottom to avoid water stagnation in the space between the ball and the body.
Red butterfly handle. Nickel plated.

Size		Code	PN
DN15 - 3/4"x 1/2"	80/8	3701514200C	16
DN15 - 3/4"x 3/4"	48/12	3702014200C	16

BALL VALVE FOR WATER METER CONNECTION WITH NON-RETURN DEVICE

42MET



F x F (free nut, flat seat) ball valve for water meter connection; with non-return device. T.E.A. Plus plated.
Anti-Legionella ball with an additional bore on the bottom to avoid water stagnation in the space between the ball and the body.
Blue butterfly handle.

Size		Code	PN
3/4" x 1/2"	100/10	3702034000C	16
3/4" x 3/4"	100/10	3702034010C	16

42MET/1




M x F (free nut, flat seat) ball valve for water meter connection; with non-return device. T.E.A. Plus plated.
Anti-Legionella ball with an additional bore on the bottom to avoid water stagnation in the space between the ball and the body.
Blue butterfly handle.

Size		Code	PN
3/4" x 1/2"	100/10	3701514000C	16
3/4" x 3/4"	100/10	3702214000C	16
1" x 3/4"	80/8	3702514280C	16

52CES




F x F full-flow ballvalve with female M10 probe housing for temperature sensor, loop for anti-extraction seal, with bore anti-tempering seal. Nickel plated. Red butterfly handle.

Size		Code	PN
1/2"	80/20	3701508020C	28
3/4"	48/12	3702008020C	28
1"	28/7	3702508020C	28
1 1/4"	20/5	3703208020C	20

52CESB




F x F full-flow ballvalve with female M10 probe housing for temperature sensor; loop for anti-extraction seal, with bore anti-tempering seal. Nickel plated. Blue butterfly handle.

Size		Code	PN
1/2"	80/20		28
3/4"	48/12	3702008030C	28
1"	28/7		28
1 1/4"	20/5		20

51CES




F x F full-flow ballvalve with female M10 probe housing for temperature sensor, loop for anti-extraction seal, with bore anti-tempering seal. Nickel plated. Red steel handle

Size		Code	PN
1 1/2"		3704008030C	20
2"		3705008030C	20

52CEST



F x F full-flow ballvalve with female M10 probe housing for temperature sensor, loop for anti-extraction seal, with bore anti-tempering seal. Nickel plated. "Long neck" T-handle in black plastic to allow operation even with insulation.


Size		Code	PN
1/2"	60/15	3701508030C	28
3/4"	32/8	3702008010C	28
1"	20/5	3702508030C	28
1 1/4"			20

BALL VALVES

51



F x F heavy duty full-flow ball valve. Nickel plated.
Reversible red steel handle.
Conform to EN 13828

Size		Code	PN
1/4"	120/12	3700715050C	42
3/8"	120/12	3701015050C	42
1/2"	120/12	3701515050C	42
3/4"	48/12	3702015050C	42
1"	36/6	3702515050C	35
1 1/4"	24/4	3703215050C	35
1 1/2"	16/2	3704015050C	35
2"	12/2	3705015050C	35
2 1/2"	3	3707015050C	28
3"	2	3708015050C	28
4"	1	3710015050C	28


T100NEV



MSS SP-110
ANSI B1.20.1



F x F heavy duty full-flow ball valve.
Reversible green steel handle with higher anti-corrosion capability.
The handle has a special anti-corrosion coating and increased thickness.
All threads are conform to NPT standards

Size		Code
1/4"	120/12	3700711450C
3/8"	120/12	3701011450C
1/2"	120/12	3701511450C
3/4"	48/12	3702011450C
1"	36/6	3702511450C
1 1/4"	24/4	3703211450C
1 1/2"	16/2	3704011450C
2"	12/2	3705011450C
2 1/2"	3	3707011450C
3"	2	3708011450C




ANSI Z21.15 (.5 PSIG) (1/4" - 3")
ASME B16.33 (125 PSIG) (1/2" - 2")
ASME B16.38 (125 PSIG) (2 1/2" - 2")
CGA 316 (125 psi) (1/4" - 3")
CGA 9.2 (125 psi) (1/4" - 3")
Delta C (3/8" - 3/4")

51CE




F x F end "Extra Compact" full port ball valve
Red steel lever.
Conform to EN 13828

Size		Code	PN
1/2"	96/24	3701515980C	28
3/4"	48/12	3702015980C	28
1"	48/8	3702515980C	28
1 1/4"	30/5	3703215980C	20
1 1/2"	24/3	3704015980C	20
2"	16/2	3705015980C	20

188




Horizontal and vertical brass check valve "Glory" type.

Size		Code	PN
3/8"	160/16	1801010010C	25
1/2"	160/16	1801510010C	25
3/4"	100/10	1802010010C	25
1"	40/4	1802510010C	25
1 1/4"	20/2	1803210010C	18
1 1/2"	20/2	1804010010C	18
2"	10/1	1805010010C	18
2 1/2"	15	1807010010C	8
3"	12	1808010010C	8
4"	5	1810010010C	8

CK2WD




Dual plate wafer check valve for HVAC and water distribution, with lifting ring (for DN200 and above). Suitable for both horizontal and vertical installation. Ductile iron body, stainless steel plates and EPDM seat. Suitable for flanges according to EN 1092-2 PN16 and ANSI class 150, RAL 5015 (blue) epoxy coated.

Size		Code
2" - DN 50	1	
2 1/2" - DN 65	1	3706546050C
3" - DN 80	1	3708046050C
4" - DN 100	1	3710046050C
5" - DN 125	1	3712546050C
6" - DN 150	1	3715046050C
8" - DN 200	1	3720046050C
10" - DN 250	1	3725046050C
12" - DN 300	1	3730046050C
14" - DN 350	1	3735046050C
16" - DN 400	1	3740046050C
18" - DN 450	1	3745046050C
20" - DN 500	1	3750046050C
24" - DN 600	1	3760046050C

500




F x F pressure reducer for cold water, 50°C max.

Size		Code
1/2"	20/1	3501520000C
3/4"	10/1	3502020000C
1"	10/1	3502520000C
1 1/4"	6/1	3503220000C
1 1/2"	6/1	3504020000C
2"	4/1	3505020000C

503




F x F pressure reducer with pressure compensation system.
T max of water 80°C. Yellow finish.

Size		Code	PN
1/2"	1	3501520030C	25
3/4"	1	3502020030C	25
1"	1	3502520030C	25
1 1/4"	1	3503220030C	25
1 1/2"	1	3504020030C	25
2"	1	3505020030C	25
2 1/2"	1	3507020030C	25
3"	1	3508020030C	25
4"	1	3510020030C	25

502



F x F pressure reducer for hot water, 95°C max.

Size		Code
1/2"	20/1	3501520020C
3/4"	10/1	3502020020C
1"	10/1	3502520020C
1 1/4"	6/1	3503220020C
1 1/2"	6/1	3504020020C
2"	4/1	3505020020C

FLEXIBLE hoses



EVOFLEX

CONNECTIONS	SIZE	DN13	DN15	DN19	DN25	DN32
M	3/8"	√				
	1/2"	√	√			
	3/4"	√	√	√		
	1"			√	√	
	1 1/4"					√
UC	3/4"		√			
UP	1/2"	√	√			
	3/4"	√	√	√		
	1"				√	
	1 1/4"					√
UM	1/2"	√	√			
	3/4"	√	√	√		
	1"				√	
UF	1"			√		
US	3/4"	√	√	√		
	1"			√	√	
GF	JG 10		√			
	JG 12	√	√			
	JG 15	√	√			
GFC	JG 10	√				
	JG 15		√			
GM	JG 12	√				
	JG 15		√			

Codification of flexible hoses	
FX	Flexible
X	Left connection
Y	Right connection
Z	Thermal insulation

FX - X - Y - Z			
FX	X	Y	Z
			I = Thermal insulation
			M = Male
			US = Union female cone 60°
			UC = Union female cone 60° elbow
			UP = Union female flat end
			GF = Push female
			GM = Push male
			UM = Union male
			UF = Union female
			M = Male
			US = Union female cone 60°
			UP = Union female flat end
			GF = Push female
			GFC = Push female elbow
			GM = Push male
			UM = Union male
			UF = Union female
			FX = Flexible hoses

FXMUM



Flexible hose Male by Union by Male.

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXMUMI

With thermal insulation (thick. 9-13-19 mm on demand)

FXUPUS



Flexible hose Union Female (flat) by Union Female (cone 60° - BS5200).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXUPUSI

With thermal insulation (thick. 9-13-19 mm on demand)

FXMUP



Flexible hose Male by Union Female (flat).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 - 25 - 32 lenght
min 250 - max 2000 mm

FXMUPI

With thermal insulation (thick. 9-13-19 mm on demand)

FXMUS



Flexible hose Male by Union Female (cone 60°- BS5200).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXMUSI

With thermal insulation (thick. 9-13-19 mm on demand)

FXUPUP



Flexible hose Union Female (flat) by Union Female (flat).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 - 25 - 32 lenght
min 250 - max 2000 mm

FXUPUPI

With thermal insulation (thick. 9-13-19 mm on demand)

FXUSUS



Flexible hose Union Female (cone 60°- BS5200) by Union Female (cone 60°- BS5200).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXUSUSI

With thermal insulation (thick. 9-13-19 mm on demand)

FXMM



Flexible hose Male by Male.

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 - 25 - 32 lenght
min 250 - max 2000 mm

FXMMI

With thermal insulation (thick. 9-13-19 mm on demand)

FXMUF



Flexible hose Male by Union Female.

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXMUFI

With thermal insulation (thick. 9-13-19 mm on demand)

FXUSGF



Flexible hose Union Female (cone 60°- BS5200) by push Female (JG).
DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm
FXUSGFI
With thermal insulation (thick. 9-13-19 mm on demand)

FXMGF



Flexible hose Male by push Female (JG).
DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm
FXMGFI
With thermal insulation (thick. 9-13-19 mm on demand)

FXUPGM



Flexible hose Union Female (Flat) by push Male (JG).
DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm
FXUPGMI
With thermal insulation (thick. 9-13-19 mm on demand)

FXUSGM



Flexible hose Union Female (cone 60°- BS5200) by push Male (JG).
DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm
FXUSGMI
With thermal insulation (thick. 9-13-19 mm on demand)

FXUPGF



Flexible hose Union Female (Flat) by push Female (JG).
DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm
FXUPGFI
With thermal insulation (thick. 9-13-19 mm on demand)

FXGFGF



Flexible hose push Female (JG) by push Female (JG).
DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm
FXGFGFI
With thermal insulation (thick. 9-13-19 mm on demand)

FXMGM



Flexible hose Male by push Male (JG).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXMGMI

With thermal insulation (thick. 9-13-19 mm on demand)

FXMGFC



Flexible hose Male by push Male elbow 90°

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXMGFCI

With thermal insulation (thick. 9-13-19 mm on demand)

FXUSUC



Flexible hose Union Female (cone 60° BS5200) by Union Female (cone 60° BS5200) elbow 90°

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXUSUCI

With thermal insulation (thick. 9-13-19 mm on demand)

FXGMGM



Flexible hose push Male (JG) by push Male (JG).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXGMGMI

With thermal insulation (thick. 9-13-19 mm on demand)

FXGFGM



Flexible hose push Female (JG) by push Male (JG).

DN 13 -15 lenght
min 200 - max 2000 mm
DN 19 -25 lenght
min 250 - max 2000 mm

FXGFGMI

With thermal insulation (thick. 9-13-19 mm on demand)

EVOFLEX NPT

TXMUM NPT



Flexible M NPT x M joint NPT.
Lenght min 305 - max 1200 mm


Size		Code
DN13 - 1/2" M NPT x 1/2" M NPT - 305 mm	1	8501300305C
DN13 - 1/2" M NPT x 1/2" M NPT - 610 mm	1	8501300610C
DN13 - 1/2" M NPT x 1/2" M NPT - 915 mm	1	8501300915C
DN13 - 1/2" M NPT x 1/2" M NPT - 1200 mm	1	
DN13 - 1/2" M NPT x 1/2" M NPT - 2000 mm	1	
DN19 - 3/4" M NPT x 3/4" M NPT - 305 mm	1	8501900305C
DN19 - 3/4" M NPT x 3/4" M NPT - 610 mm	1	8501900610C
DN19 - 3/4" M NPT x 3/4" M NPT - 915 mm	1	8501900915C
DN19 - 3/4" M NPT x 3/4" M NPT - 1200 mm	1	8501901200C
DN19 - 3/4" M NPT x 3/4" M NPT - 2000 mm	1	
DN25 - 1" M NPT x 1" M NPT - 305 mm	1	8502500305C
DN25 - 1" M NPT x 1" M NPT - 610 mm	1	8502500610C
DN25 - 1" M NPT x 1" M NPT - 915 mm	1	8502500915C
DN25 - 1" M NPT x 1" M NPT - 1200 mm	1	8502501200C
DN25 - 1" M NPT x 1" M NPT - 200 mm	1	
DN32 - 1 1/4" M NPT x 1 1/4" M NPT - 305 mm	1	
DN32 - 1 1/4" M NPT x 1 1/4" M NPT - 610 mm	1	
DN32 - 1 1/4" M NPT x 1 1/4" M NPT - 915 mm	1	
DN32 - 1 1/4" M NPT x 1 1/4" M NPT - 1200 mm	1	
DN32 - 1 1/4" M NPT x 1 1/4" M NPT - 2000 mm	1	
DN40 - 1 1/2" M NPT x 1 1/2" M NPT - 305 mm	1	
DN40 - 1 1/2" M NPT x 1 1/2" M NPT - 610 mm	1	
DN40 - 1 1/2" M NPT x 1 1/2" M NPT - 915 mm	1	
DN40 - 1 1/2" M NPT x 1 1/2" M NPT - 1200 mm	1	8504001200C
DN40 - 1 1/2" M NPT x 1 1/2" M NPT - 2000 mm	1	
DN50 - 2" M NPT x 2" M NPT - 305 mm	1	8505000305C
DN50 - 2" M NPT x 2" M NPT - 610 mm	1	
DN50 - 2" M NPT x 2" M NPT - 915 mm	1	
DN50 - 2" M NPT x 2" M NPT - 1200 mm	1	8505001200C
DN50 - 2" M NPT x 2" M NPT - 2000 mm	1	

CONNECTIONS	SIZE	DN13	DN19	DN25	DN32	DN40	DN50
M x M joint	1/2"	√					
	3/4"		√				
	1"			√			
	1 1/4"				√		
	1 1/2"					√	
	2"						√

GF1C




Single sphere flexible joint for HVAC and water distribution, designed for the reduction of vibrations and compensation of thermal expansion in piping systems. Polyamide wired reinforced EPDM body, ductile iron floating flanges. Suitable for flanges according to EN 1092-2 PN16. Control rods are available upon request.

Size		Code
1 1/4" - DN 32	1	6003246000C
1 1/2" - DN 40	1	6004046000C
2" - DN 50	1	6005046000C
2 1/2" - DN 65	1	6006546000C
3" - DN 80	1	6008046000C
4" - DN 100	1	6010046000C
5" - DN 125	1	6012546000C
6" - DN 150	1	6015046000C
8" - DN 200	1	6020046000C
10" - DN 250	1	6025046000C
12" - DN 300	1	6030046000C
14" - DN 350	1	6035046000C
16" - DN 400	1	6040046000C
18" - DN 450	1	6045046000C
20" - DN 500	1	6050046000C
24" - DN 600	1	6060046000C

GF1CA



Single sphere flexible joint for HVAC and water distribution, designed for the reduction of vibrations and compensation of thermal expansion in piping systems. Polyamide wired reinforced EPDM body, ductile iron floating flanges. Suitable for flanges according to ANSI class 150. Control rods are available upon request.

Size		Code
1 1/4" - DN 32	1	6003246010C
1 1/2" - DN 40	1	6004046010C
2" - DN 50	1	6005046010C
2 1/2" - DN 65	1	6006546010C
3" - DN 80	1	6008046010C
4" - DN 100	1	6010046010C
5" - DN 125	1	6012546010C
6" - DN 150	1	6015046010C
8" - DN 200	1	6020046010C
10" - DN 250	1	6025046010C
12" - DN 300	1	6030046010C
14" - DN 350	1	6035046010C
16" - DN 400	1	6040046010C
18" - DN 450	1	6045046010C
20" - DN 500	1	6050046010C
24" - DN 600	1	6060046010C


ACCESSORIES



091D




Differential pressure regulator diaphragm for EvoPICV 81 - 83 - 91 - 93 Series.

Size		Code
360 l/h - 81 Series	1	8301510023C
700 l/h - 81 Series	1	8301510003C
780 l/h - 81 Series	1	8301510005C
1000 l/h - 81 Series	1	8301510004C
1150 l/h - 81 Series	1	8301510006C
150 l/h - 91 Series	1	8301510020C
600 l/h - 91 Series	1	8301510000C
780 l/h - 91 Series	1	8302010000C
1000 l/h - 91 Series	1	8302010003C
1500 l/h - 91 Series	1	8302010004C
2200 l/h - 3/4" - 83 Series	1	8302510000C
2200 l/h - 1" - 83 Series	1	8302510004C
2700 l/h - 83 Series	1	8302510010C
3000 l/h - 83 Series	1	8303210010C
4000 l/h - 83 Series	1	8302510013C
2200 l/h - 93 Series	1	8302510003C
2700 l/h - 93 Series	1	8302510014C
3000 l/h - 93 Series	1	8303210013C

092D




Differential pressure regulator diaphragm for Dynasty PICV 92 series.

Size		Code
1/2" - 150 l/h - 92 Series	1	9301511094C
1/2" - 450 l/h - 92 Series	1	9301511084C
1/2" - 850 l/h - 92 Series	1	9301511200C
3/4" - 1000 l/h - 92 Series	1	9302011094C
3/4" - 1850 l/h - 92 Series	1	9302011084C
1" - 2500 l/h - 92 Series	1	9302511220C
1" - 3300 l/h - 92 Series	1	
1 1/4" - 5200 l/h - 92 Series	1	
1 1/2" - 9000 l/h - 92 Series	1	
2" - 14000 l/h - 92 Series	1	

091CV




Control valve headwork for EvoPICV 91 Series.

Size		Code
150 l/h	1	9301511110C
600 l/h	1	9301511020C
780 l/h	1	
1000 l/h	1	
1500 l/h	1	

093CV




Control valve headwork for EvoPICV 93 Series.

Size		Code
2200 l/h	1	
2700 l/h	1	
3000 l/h	1	

081PR1




Presetting device for EvoPICV 83 series.

Size		Code
081PR1 - 6000 l/h DN40	1	9605010130C
081PR1 - 9000 l/h DN40	1	9605010140C
081PR1 - 11000 l/h DN40	1	9605010150C
081PR1 - 12000 l/h DN50	1	9605010110C
081PR1 - 18000 l/h DN50	1	9605010120C

V90

Venturi flow rate measurement device.

Size		Code
3 mm x 1/2" - 3/4"	1	9600311150C
4,25 mm x 1/2" - 3/4"	1	9600411150C
6 mm x 1/2" - 3/4"	1	9600611150C
7,5 mm x 1/2" - 3/4"	1	9600711150C
9 mm x 1/2" - 3/4"	1	9600910150C
10 mm x 1"	1	9601010150C
10,5 mm x 1/2" - 3/4"	1	9601010160C
12 mm x 1/2" - 3/4"	1	9601210150C
13 mm x 1 1/4"	1	9601210160C
14,5 mm x 1"	1	9601510150C
15 mm x 1 1/2"	1	9601510160C
18 mm x 2"	1	9601810150C
19 mm x 1 1/4"	1	9601910150C
22 mm x 1 1/2"	1	9602210150C
25 mm x 2"	1	9602510150C
31,5 mm x 2"	1	9603210150C

T90RB

Pressure ports.

Size		Code
1/4"	1	6000715000C

TAP93

Cap for EvoPICV 83 - 93 Series.

	Code
1	9402510090C

TAP81

Cap for 81 Series

	Code
1	9401590070C

XT4L



By-pass valve for X4 series. 40 mm C2C distance. Double ball valve.
Long tail connection
Connections: Euroconus Patent: EP2990702B1 - US9683677 B2

Size		Code
XT4LHR	1	
XT4LCB	1	

XT4/



By-pass valve for X4 series. 40 mm C2C distance. Double ball valve.
Connections: Euroconus
Patent: EP2990702B1 - US9683677 B3

Size		Code
XT4/HRP (3/4" x 18) x (3/4" x 18)	1	
XT4/CBP (3/4" x 18) x (3/4" x 18)	1	

XT4N




By-pass valve (40 mm C2C distance).
Connections: euroconus

Size		Code
XT4N (3/4" x 18) x (3/4" x 18)	1	2902090520C

XT3



By-pass valve (40 mm C2C distance) for XT600 series.
Connections: 3/4" M x euroconus

Size		Code
XT3BP - 3/4" x 3/4"	1	2902010540C

XT3/1




By-pass valve (40 mm C2C distance) for XT600 series.
Connections: 3/4" F x euroconus

Size		Code
XT3B/1 - (3/4" x 18) x 1/2"	1	2902010410C

XT3BP




By-pass valve (80 mm C2C distance) for XT800 series.
Connections: 1 1/8" flat seat. Features: To be used with BXT3 or BXT3/2

Size		Code
1 1/8"	1	2902510540C

XT7BP




Flushing by-pass valve (70 mm C2C distance) for XT700 Series. Connections: 3/4" M Euroconus x 1 1/8" with OR seat. Features: To be used with B90CIL

Size		Code
3/4" M (3/4" x 18) x 1 1/8"	1	2902090800C


BXT3

Union flat seat nut and tail fittings, with washer for Art. XT3BP.
Connections: F

Size		Code
1/2" F x 11/8" F	1	9603211110C
3/4" F x 11/8" F	1	9603211120C
1" F x 11/8" F	1	9602511120C


B90CIL

Female union nut and tail for XT7BP and all terminal sides with o-rings.

Size		Code
1/2" F x 11/8" F	1	9603211180C
3/4" F x 11/8" F	1	9603291170C
1" F x 11/8" F	1	9603990000C


B91

Union nut and tail fittings for EvoPICV 93 - 83 Series.
Connections: F

Size		Code
3/4" - DN25 - serie 93 - 83	1	9604111090C
1" - DN25 - serie 93 - 83	1	9604111080C
1 1/4" - DN25 - serie 93 - 83	1	9605011080C
1 1/4" - DN40 - serie 83	1	9605711020C
1 1/2" - DN40 - serie 83	1	9605711010C
1 1/2" - DN50 - serie 83	1	9607211080C
2" - DN40 - serie 83	1	9606811010C
2" - DN50 - serie 83	1	9607211010C


BXT3/2

Union flat seat nut and tail fittings, with washer for Art. XT3BP.
Connections: M

Size		Code
1/2" M x 11/8" F	1	9603211130C
3/4" M x 11/8" F	1	9603211140C


1020B

Union and cap fittings for XT Series kit (terminal side) with o-rings.
Connections: M Union

Size		Code
1/2" M x 11/8" F	1	9603211100C
3/4" M x 11/8" F	1	9603211090C

B91/2

Union nut and tail fittings for EvoPICV 93 - 83 Series.
Connections: M

Size		Code
3/4"	1	9604111110C
1"	1	9604111100C
1 1/4"	1	

0760W




Shut-off handwheel for 91 - 93 series.

	Code
1	8203505060C

092



Shut-off handwheel for 92 Dynasty series.

Size		Code
1/2" - 3/4"	1	
1" - 1 1/4" - 1 1/2" - 2"	1	

MDPS2




Digital manometer for start-up verification on PICV / Terminator and for flow reading on venturi's orifice devices.
Features: App Available for Android Smartphones.

	Code
1	8000000080C

MDP



Digital differential pressure meter.
Pressure range: 0 - 6,9 bar

	Code
1	6400000380C

091SETP



Maintenance kit for EvoPICV 91 - 93 Series.
The box includes:
- tools for valve opening / closing
- tools for diaphragm extraction

	Code
1	6400000410C

DEMOKIT



Working demo kit for PICV.
Includes circulation pump, PICV, manual balancing valve, visual flow meters, by-pass and accessories.

	Code
1	



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