Manifolds for heating and cooling



LOKI

LOKI data sheet

Modular manifolds for radiant systems

GENERAL FITTINGS
YOUNIQUE · ITALIAN

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LINE 6M00

Brass modular distribution manifolds



DESCRIPTION

The 6M00 SERIES manifolds called Loki with ¾" Eurocone outlets are the ideal solution for the distribution of water in radiant heating and cooling systems. The extreme flexibility offered by the ability to assemble them at will offers multiple combinations and helps reduce warehouse stock.
The self-seal thread and O-Ring seal allow quick assembly and alignment of the connectors without the aid of any equipment and a guaranteed seal without the use of plumber's hemp or Teflon.
A wide range of accessories makes it possible to assemble the manifold with all the necessary components for the proper functioning of the system: brackets, shut-off ball valves, venting valves and input-output taps.

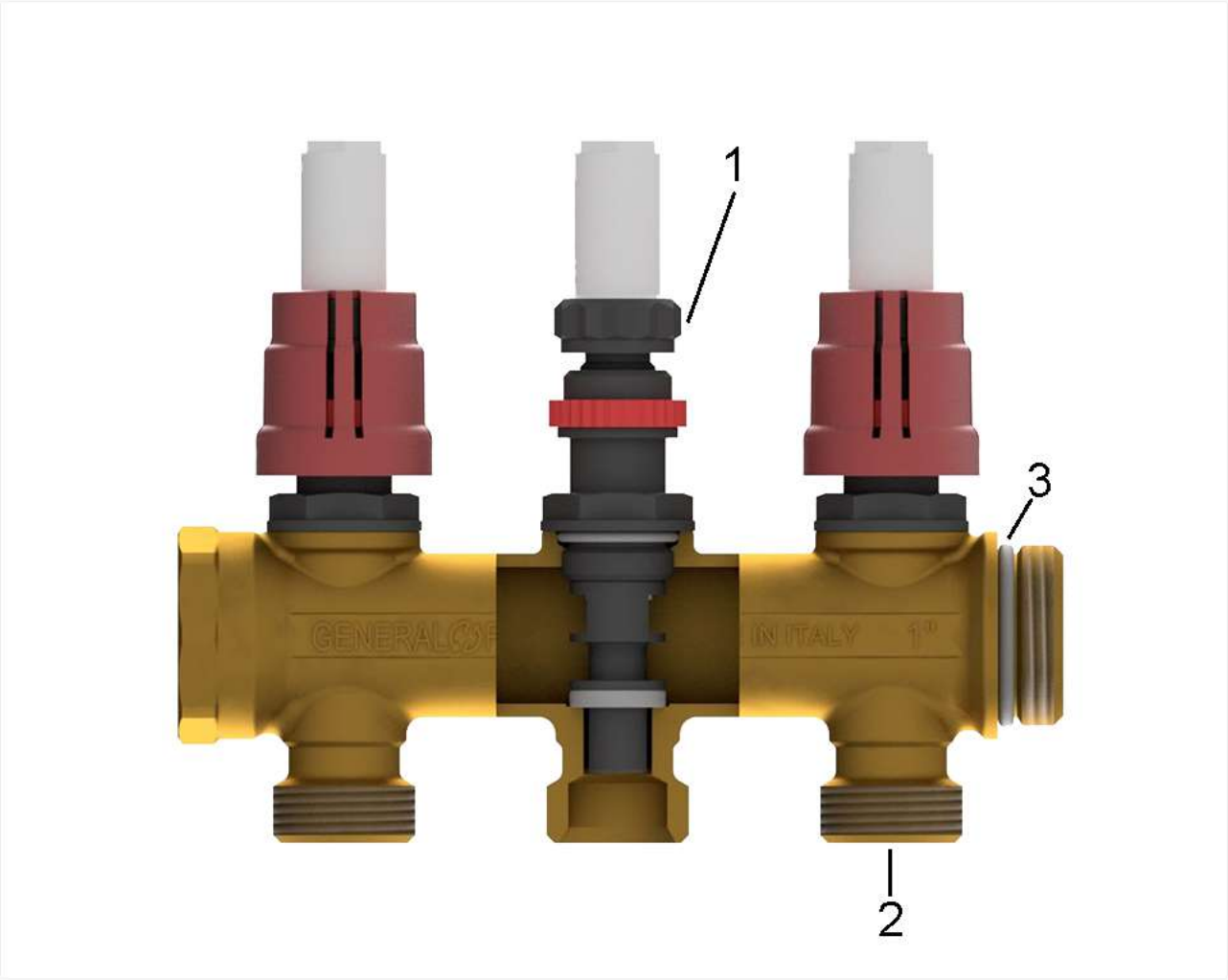
ADVANTAGES

- Stock reduction
- Maximum flexibility and easy configuration. Self aligning granting the correct and quick aligning of the coupled manifolds
- No unnecessary waste
- Suitable both for high and low temperature installations
- CONSTANT CENTER DISTANCE 50mm
- PERFECTLY TIGHT: thanks to the O-Ring the coupling is tight without using any additional means, such as Teflon tape or hemp, for a faster installation
- High-quality raw materials (UBA LIST)
- Suitable for plastic, metal and metal-plastic pipes
- Product traceability guaranteed by the date stamped on the body of the manifold
- Balancing of each loop

FIELDS OF APPLICATION

APPLICATIONS		T. min. with mechanical screw	T. min. with flow meter	T. max with mechanical screw	T. max with flow meter	Press. max with mechanical screw	Press. max with flow meter	Flow rate with flow meter
	low temperature heating (floor)	-20°C	-7°C	+95°C	+65°C	10 bar	6 bar	0-5 lt/min
	low temperature heating (wall)	-20°C	-7°C	+95°C	+65°C	10 bar	6 bar	0.5 lt/min
	low temperature heating (ceiling)	-20°C	-7°C	+95°C	+65°C	10 bar	6 bar	0-5 lt/min
	heating	-20°C	-7°C	+95°C	+65°C	10 bar	6 bar	0-5 lt/min
	cooling	-20°C	-7°C	+95°C	+65°C	10 bar	6 bar	0-5 lt/min
	-20°C: only with antifreeze liquid (glycol) in % max of 30%							

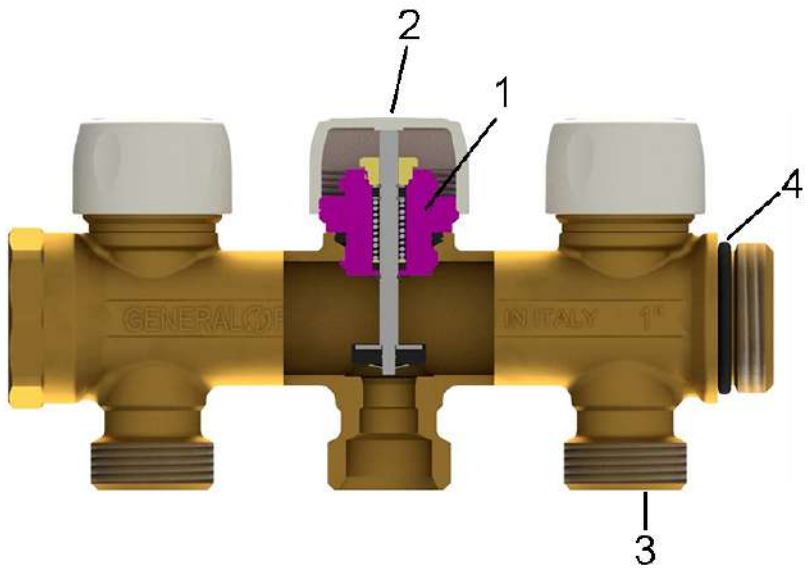
COMPONENTS AND MATERIALS 6M00.88



LEGEND	COMPONENTS	MATERIALS
1	Flowmeter	Plastic
2	Manifold	CW617N – UNI EN 12165
3	O-Ring	Elastomer

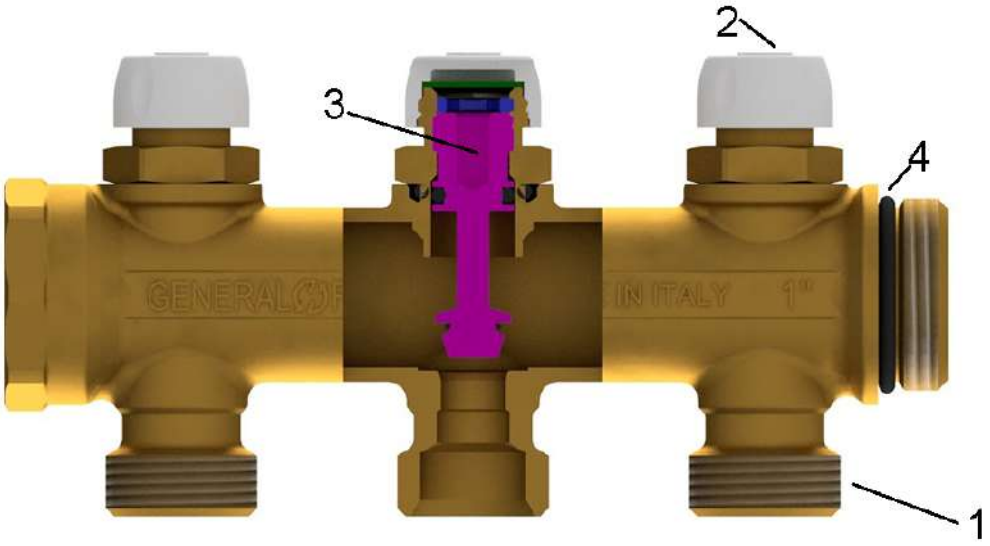
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COMPONENTS AND MATERIALS 6M00.90



LEGEND	COMPONENTS	MATERIALS
1	Mechanical balancing screw	Brass CW617N - UNI EN 12164
2	Knob	ABS
3	Manifold	Brass CW617N - UNI EN 12165
4	O-Ring	Elastomer

COMPONENTS AND MATERIALS 6M00.99



LEGEND	COMPONENTS	MATERIALS
1	Manifold	CW617N – UNI EN 12165
2	Knob	ABS
3	Headwork	CW617N – UNI EN 12164
4	O-Ring	Elastomer

CERTIFICATIONS

COUNTRY	CERTIFICATION	COUNTRY	CERTIFICATION	COUNTRY	CERTIFICATION
					

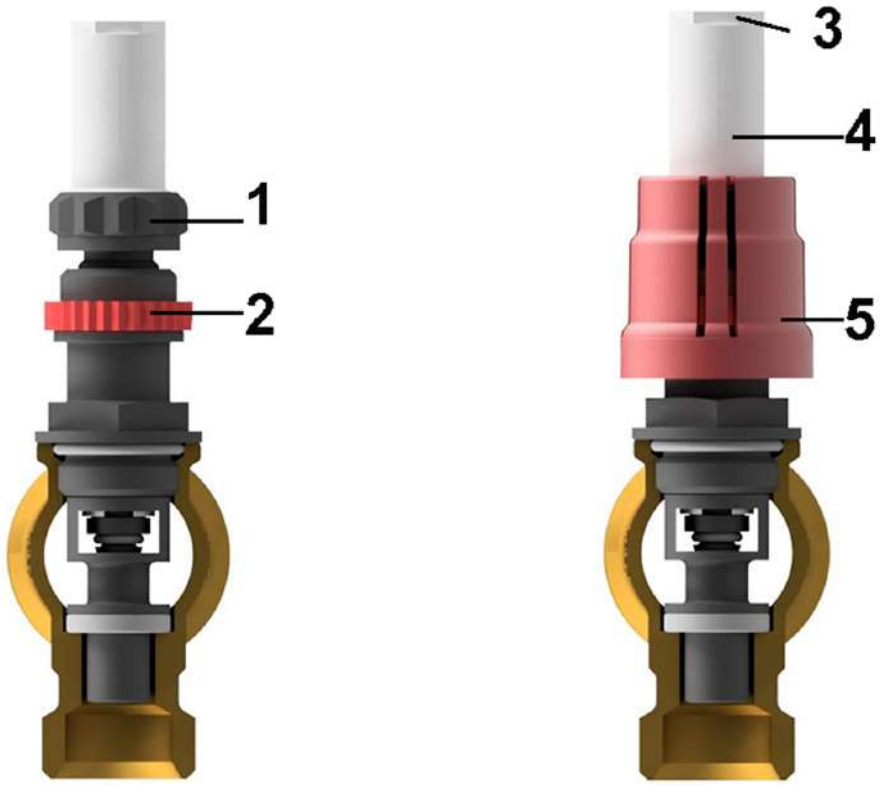
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REGULATIONS

• UNI EN ISO 228-1
Threads complies with UNI EN ISO 228-1:2003 law: “Piping thread for coupling not with thightness on the thread"

FLOWMETER “MEMORY - STOP” FUNCTION

Memory stop function.
Blocking system of the opening grade of the flowmeter which allows, once the system is reopened, the stopping of the run at its initial setting (project value).



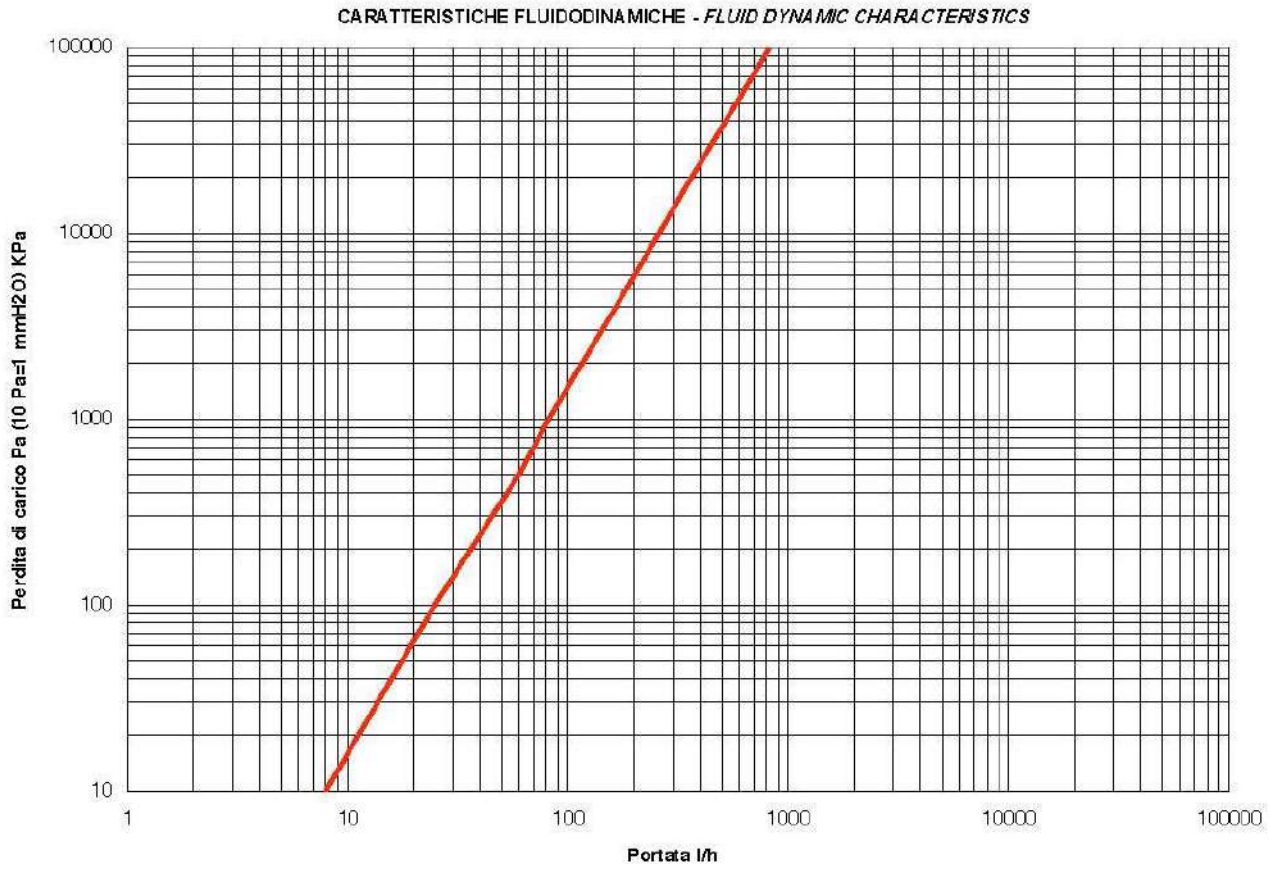
LEGEND	COMPONENTS
1	Regulation ring
2	Memory stop ring
3	Glass hexagon part
4	Glass
5	Control

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1) Set the Flowmeter control to the design value. The control wheel must be removed during this operation.
2) Turn the “Memory stop” ferrule anticlockwise (left-hand thread) to the end of its travel.
3) Put the control wheel back on. The individual circuit can be closed by turning the wheel clockwise. By turning it the other way up to the stop it is possible to reopen the circuit to the set design value.
Using the two holes in the control wheel it is possible to seal the Flowmeter so as to prevent tampering with the setting.
Warning: do NOT use any tools to turn/manipulate the Flowmeter, as to do so could stop it working properly.

FLOWMETER 0-5 L		
ΔP Pa	ΔP kpa	Q l/h
10	0.01	8
100	0.1	25
500	0.5	60
1000	1	82
5000	5	185
10000	10	260
20000	20	365
30000	30	450
40000	40	520
50000	50	585
60000	60	640
70000	70	690
80000	80	740
90000	90	785
100000	100	825

FLUID DYNAMIC CHARACTERISTICS



MAINTENANCE INSTRUCTIONS

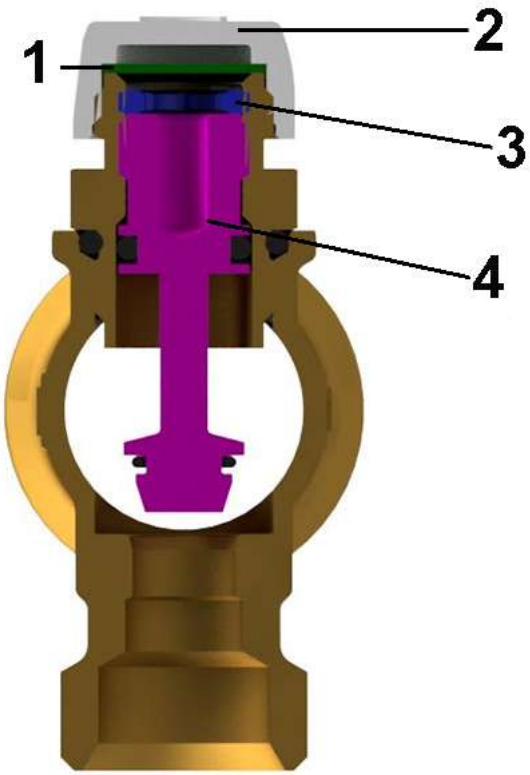
The glass can be disassembled in order to check its cleanliness, even when the installation is working.
1) Close the flow meter turning the ring, but not before than having recorded the installation balancing (l/min)
2) With the help of a hexagonal wrench, unscrew the glass by acting on the hexagonal structure of the glass
3) Clean the glass
4) Re-insert the glass in its original position,balancing again the installation

MECHANICAL BALANCING OF THE INSTALLATION

Flow measuring devices (flow meters) are located on the delivery circuit, making it possible to establish the theoretical flow value of the hydraulic system through the adjustment of the meters/regulators, which will be carried out by the installation technician.
You have to adjust it when the valve is in the back-draft position and completely open.
Given that the flow of each plumbing circuit causes a loose in installation capacity, for each ring of the flow meter is basic that the adjustment are made by hand until you reach flow value in litre/minutes decided by the plan.

LOCKSHIELDS (mechanical memory stem)

Calibration instructions for manifolds with lockshields:
- Unscrew the cap
- Using a hex key, tighten the cut-off valve until it's completely closed
- The lockshield is ready to be adjusted as per the chart below
- Use the closing ring to create a mechanical stop, tightening it down to the cut-off valve once the desired flow has been set. By so doing, the cut-off valve can be opened and closed without altering the set calibration.



LEGEND	COMPONENTS
1	Gasket
2	Cap
3	Closing ring
4	Cut off valve

Position	N° turns	Kvs
1	1/2	0.09
2	1	0.27
3	1+1/2	0.73
4	2	0.91
5	2+1/2	1.08
6	3	1.26
7	3+1/2	1.41

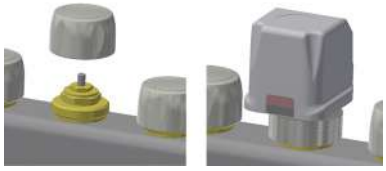
Position	N° turns	Kvs
8	4	1.53
9	4+1/2	1.65
10	5	1.76
11	5+1/2	1.85
12	completely open	1.92

PROTECTING HYDRAULIC BALANCING FROM TAMPERING

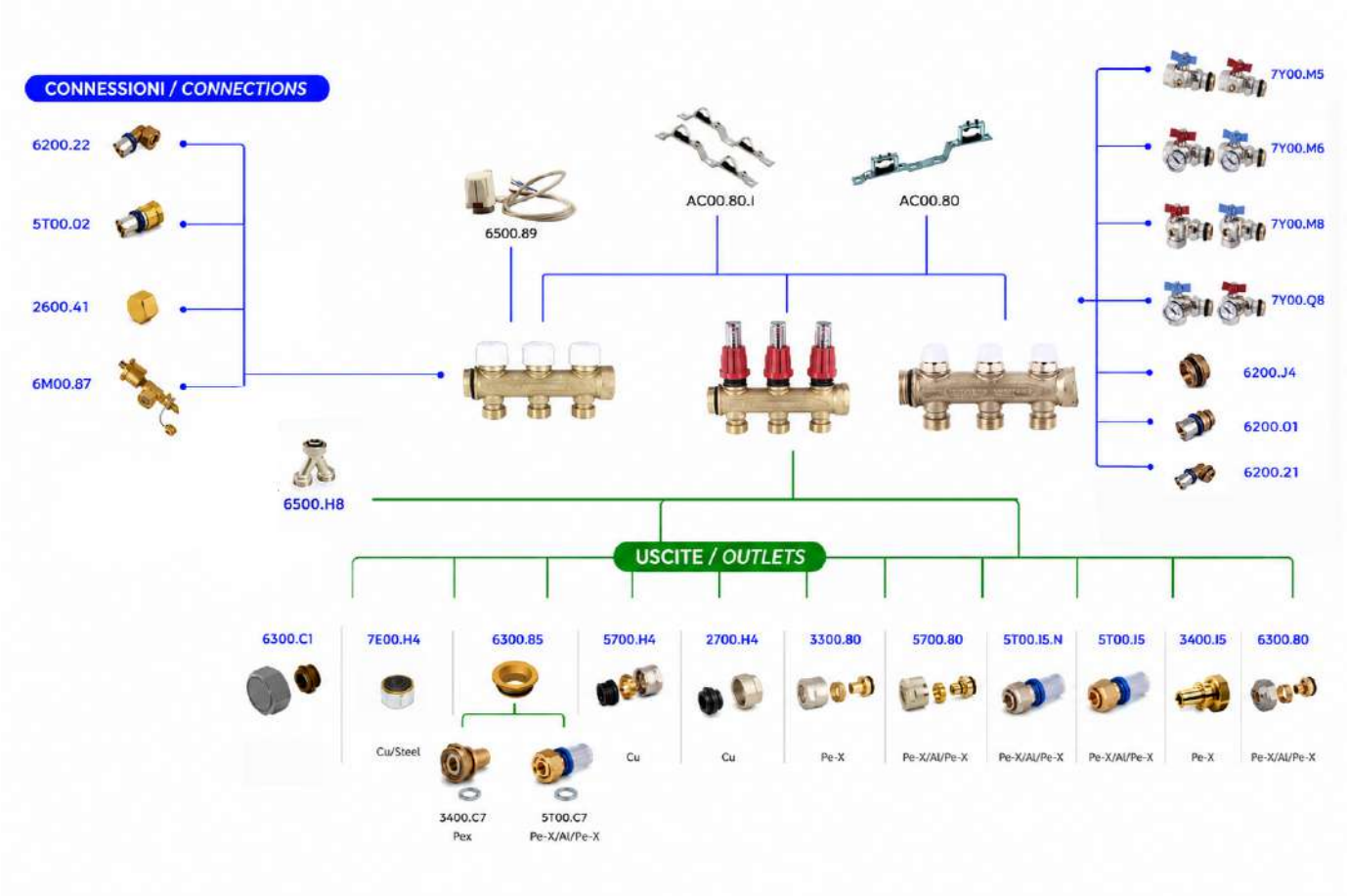
Adjustment of the flow regulators and meters can be blocked by a protective cover, sealed if necessary.

Pre-set shut-off valves for electrothermal command

1. Unscrew the protection handle
2. Place the electrothermal head on the valve
3. Tighten the metal closing ring by hand (threading: M30x1.5)
4. Complete the electrical connections



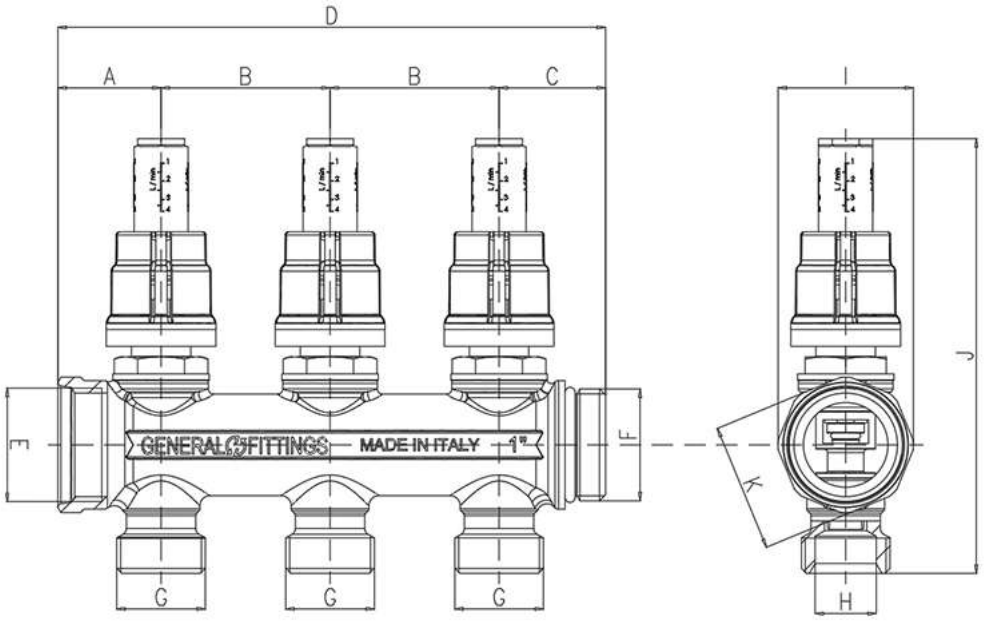
CONNECTIONS:



INSERTS AND FITTINGS		
CODE	DESCRIPTION	PIPE
7Y00.M5	Compact ball valve coupling with butterfly, without thermometer	
7Y00.M6	Compact ball valve coupling with butterfly and thermometer	
7Y00.M8	Compact angle ball valve coupling with butterfly, without thermometer	
7Y00.Q8	Compact 90 degree ball valve coupling with butterfly and thermometer	
6200.J4	Male cap with O-ring	
6200.01	Straight male fitting with O-ring	

INSERTS AND FITTINGS		
6200.21	Self-sealed male elbow with O-ring	
6200.22	Self-sealed female elbow with O-ring	
5T00.02	Female straight fitting	
2600.41	Female cap	
6M00.87	Terminal for Loki modular manifolds	
6500.89	Electrothermic control	
AC00.80	Brackets for manifolds	
AC00.80.I	Brackets for manifolds	
6300.85	Eurocone flat seal adapter	
7E00.H4	Adapter	Copper/Steel pipe
6300.C1	Eurocone cap with o-ring - for manifolds	
3400.C7	Straight fitting with loose nut and flat washer	Pe-X pipe
5T00.C7	Straight fitting with loose nut and flat washer	Multilayer pipe
5700.H4	Nickel plated nut with assembled ring and gasket	Copper pipe
2700.H4	Nickel plated nut with assembled ring and gasket	Copper pipe
3300.80	Nickel plated nut, olive and insert eurocone	Pe-X pipe
5700.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
6300.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
5T00.I5	Straight fitting with loose nut and eurocone	Multilayer pipe
3400.I5	Straight fitting with loose nut and eurocone connection	Pe-X pipe

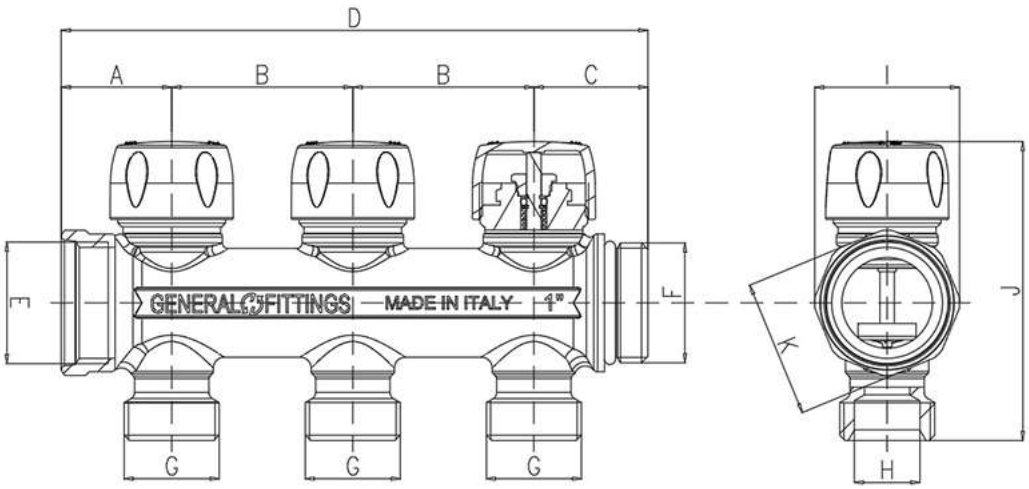
DIMENSIONS 6M00.88



CODE	A	B	C	D	E	F	G	H	I	J	K
6M0088H100502A	30.5	50	31.5	112	G 1"	G1"	G 3/4"	Ø 18,1	40	128.5	38
6M0088H100503A	30.5	50	31.5	162	G1"	G 1"	G 3/4"	Ø 18,1	40	128.5	38
6M0088H100504A	30.5	50	31.5	212	G1"	G 1"	G 3/4"	Ø 18,1	40	128.5	38

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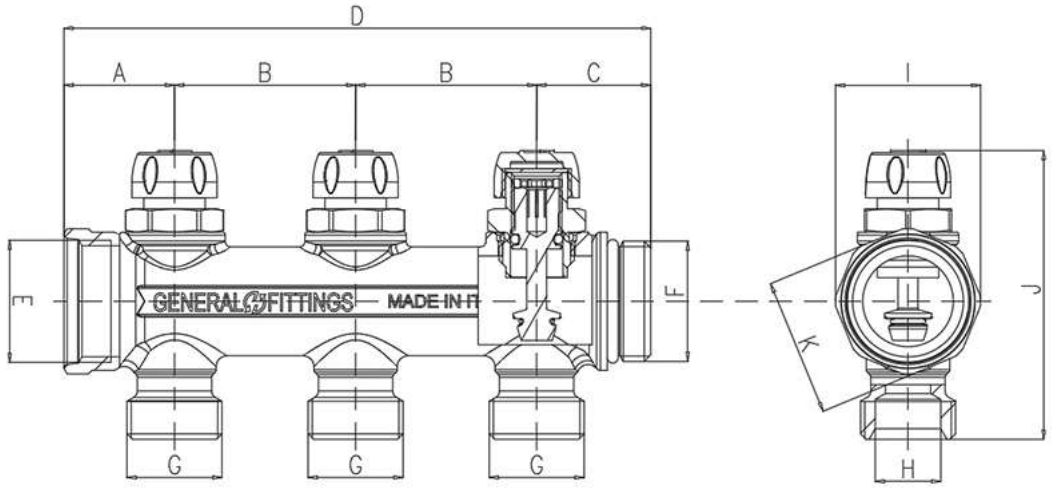
DIMENSIONS 6M00.90



CODE	A	B	C	D	E	F	G	H	I	J	K
6M0090H100502A	30.5	50	31.5	112	G 1"	G1"	G 3/4"	Ø 18,1	40	82.5	38
6M0090H100503A	30.5	50	31.5	162	G 1"	G1"	G 3/4"	Ø 18,1	40	82.5	38
6M0090H100504A	30.5	50	31.5	212	G1"	G 1"	G 3/4"	Ø 18,1	40	82.5	38

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DIMENSIONS 6M00.99



CODE	A	B	C	D	E	F	G	H	I	J	K
6M0099H100502A	30.5	50	31.5	112	G 1"	G1"	G 3/4"	Ø 18,1	40	79.5	38
6M0099H100503A	30.5	50	31.5	162	G 1"	G1"	G 3/4"	Ø 18,1	40	79.5	38
6M0099H100504A	30.5	50	31.5	212	G 1"	G1"	G 3/4"	Ø 18,1	40	79.5	38

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