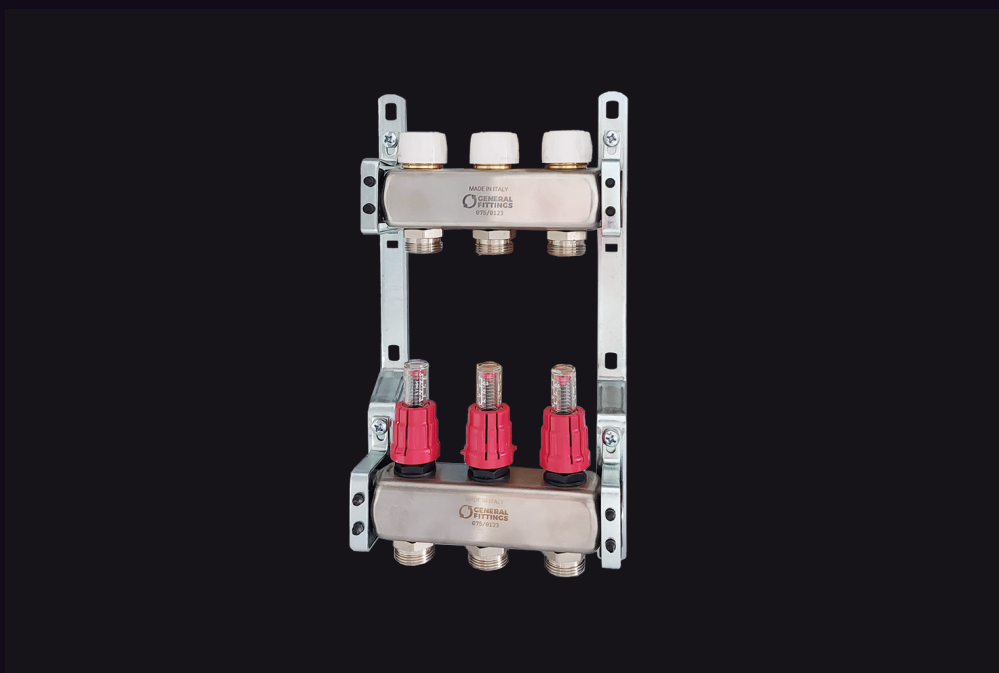


STAINLESS STEEL MANIFOLDS FOR RADIANT SYSTEMS



Datasheet THOR LINE 6A00

Stainless steel manifolds for radiant systems

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Datasheet THOR (6A00 LINE)

Pre-assembled stainless steel manifolds for radiant systems with 3/4" outlets



DESCRIPTION

THOR (6A00 SERIES) manifolds with 3/4" Eurocone outlets are the ideal solution for the distribution of water in radiant heating and cooling systems.








These manifolds are pre-assembled on brackets and are available with 1" delivery and return flow rods. They can be housed in metal cases and placed within partition walls.

A wide range of accessories makes it possible to complete the manifold with all the necessary components for the proper functioning of the system: shut-off ball valves, venting valves, bypass valves and input/output taps.

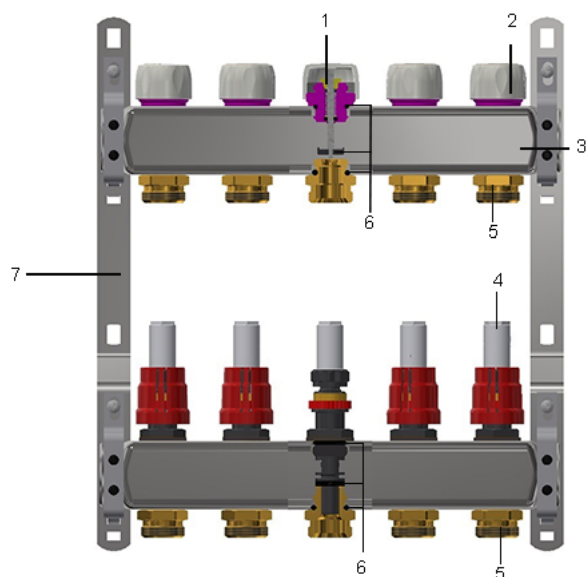
ADVANTAGES

- Balancing of each loop
- No unnecessary waste
- High technical comfort
- Suitable both for high and low temperature installations
- Mechanical resistance
- High lightness
- No tension corrosion
- No electrolytic corrosion
- High flow rate

FIELDS OF APPLICATION

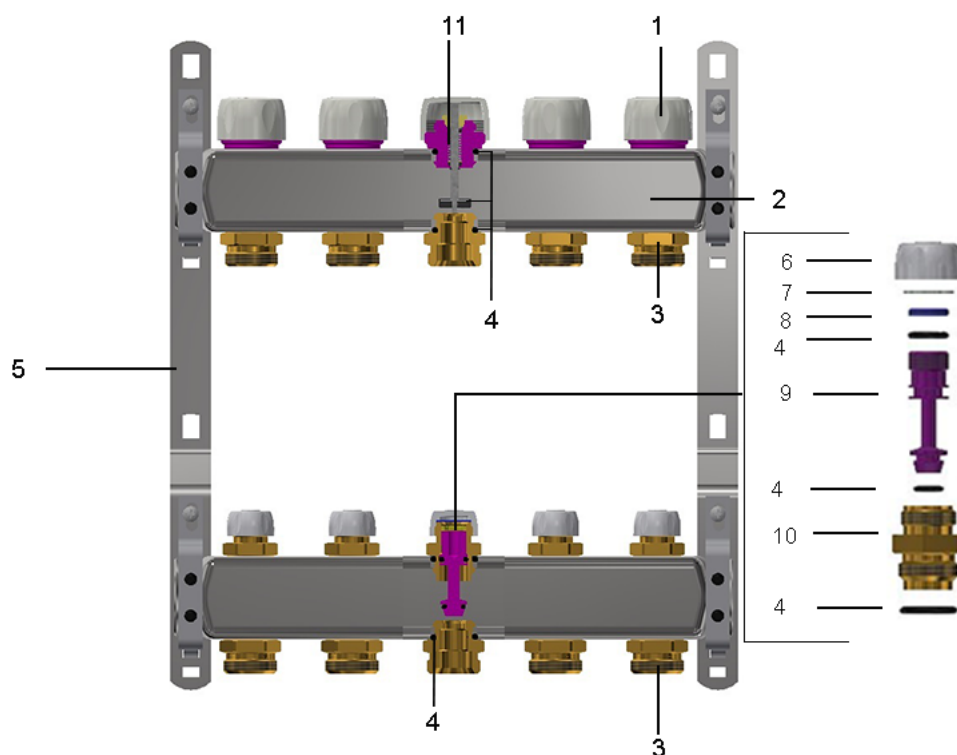
APPLICATIONS		T.min. with control stem	T.min. with flow meter	T.max with control stem	T.max with flow meter	Max press. with control stem	Max press. with flow meter	Flow rate with flow meter
	floor heating	-20°C	-7°C	+95°C	+65°C	10 bar	6 bar	0.5 lt/min
	low temperature heating (floor)	-20°C	-7°C	+95°C	+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
	radiators	-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 6A00.71



LEGEND	COMPONENTS	MATERIALS
1	Control stem	Brass CW617N - UNI EN 12164
2	Knob	ABS
3	Manifold	AISI 304 - EN 1.4301
4	Flow meter	PLASTIC PA66
5	Connecting Nipples	Brass CW617N - UNI EN 12164
6	O-Ring/Gaskets	Elastomer
7	Brackets	FE ZNB

COMPONENTS AND MATERIALS 6A00.93



LEGEND	COMPONENTS	MATERIALS
1	Knob	ABS
2	Manifold	AISI 304 - EN 1.4301
3	Connecting Nipples	Brass CW617N - UNI EN 12164
4	O-Ring/Gaskets	Elastomer
5	Brackets	FE ZNB
6	Cap	ABS
7	Flat gasket	FASIT 205
8	Closing ring	Brass CW617N - UNI EN 12164
9	Cut-off valve	Brass CW617N - UNI EN 12164
10	Lockshield	Brass CW617N - UNI EN 12164
11	Headwork	Brass CW617N - UNI EN 12164

CERTIFICATIONS

COUNTRY	CERTIFICATION	COUNTRY	CERTIFICATION	COUNTRY	CERTIFICATION
					

REGULATIONS

- UNI EN ISO 228-1:2003

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

MECHANICAL BALANCING OF THE SYSTEM

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.

The aforementioned calibration must be done with the valve in a completely open return position.

If it is ascertained that the flow rates of each hydraulic circuit result in a system pressure drop, it is essential for the adjustments to be carried out manually for all the rings of the meters, until reaching the flow values in l/min established by the project's design.

'MEMORY-STOP' FLOW METER OPERATION

System to block the aperture of the flow meter which, when the circuit is reopened, allows for the flow in the initial setting (as calculated by the system designer) to be stopped.



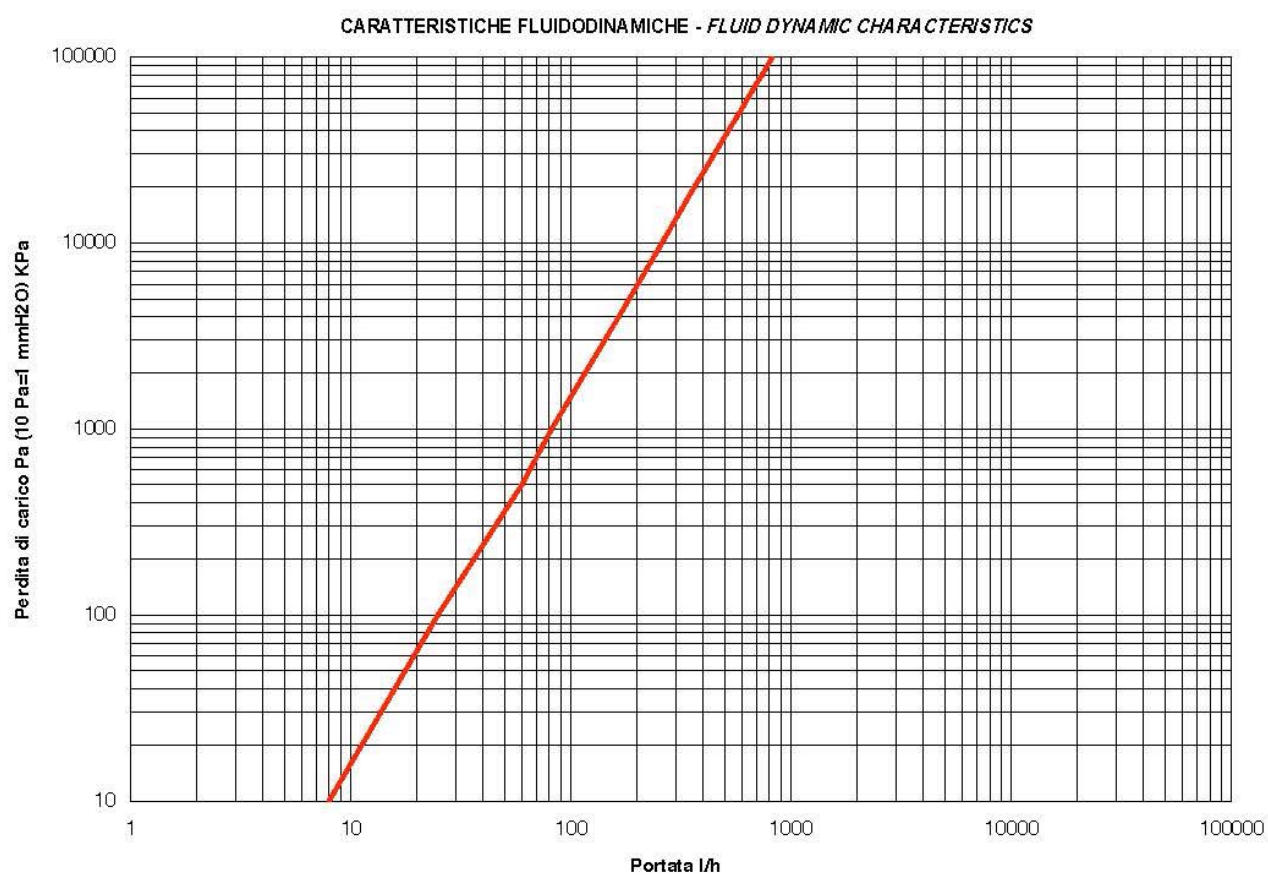
- 1) Set the flow meter to the design setting. The control wheel must be removed during this operation;
- 2) Turn the Memory Stop closing ring anti-clockwise (left-hand threading) until it stops
- 3) Reposition the control wheel. The individual circuit can be closed by turning the control wheel (clockwise). By turning the control wheel anti-clockwise until it stops, the circuit can be re-opened up to the set design value

Use the two openings on the control wheel to seal the flow meter, to prevent tampering with the setting.

Warning: Do NOT use tools to turn/adjust the flow meter, as they may inhibit the proper functioning of the flow meter itself.

FLOWMETER 0.5 L		
DP Pa	DP 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 DYNAMICS



MAINTENANCE INSTRUCTIONS

The glass can be removed and inspected for cleaning, even with the system in operation.

- 1) After recording the system's balancing (l/min), close the flow meter by rotating the ring
- 2) Using a hex wrench, unscrew the glass via its hexagonal element.
- 3) Clean the glass
- 4) Screw the glass back into its original position, balancing the system once again.

PROTECTING HYDRAULIC BALANCING FROM TAMPERING

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

LOCKSHIELDS (mechanical memory stem)

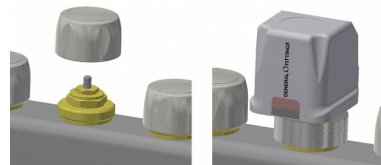
Calibration instructions for manifolds with lockshields:

- 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.

Position	N° turns	Kvs (m3/h)
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
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

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



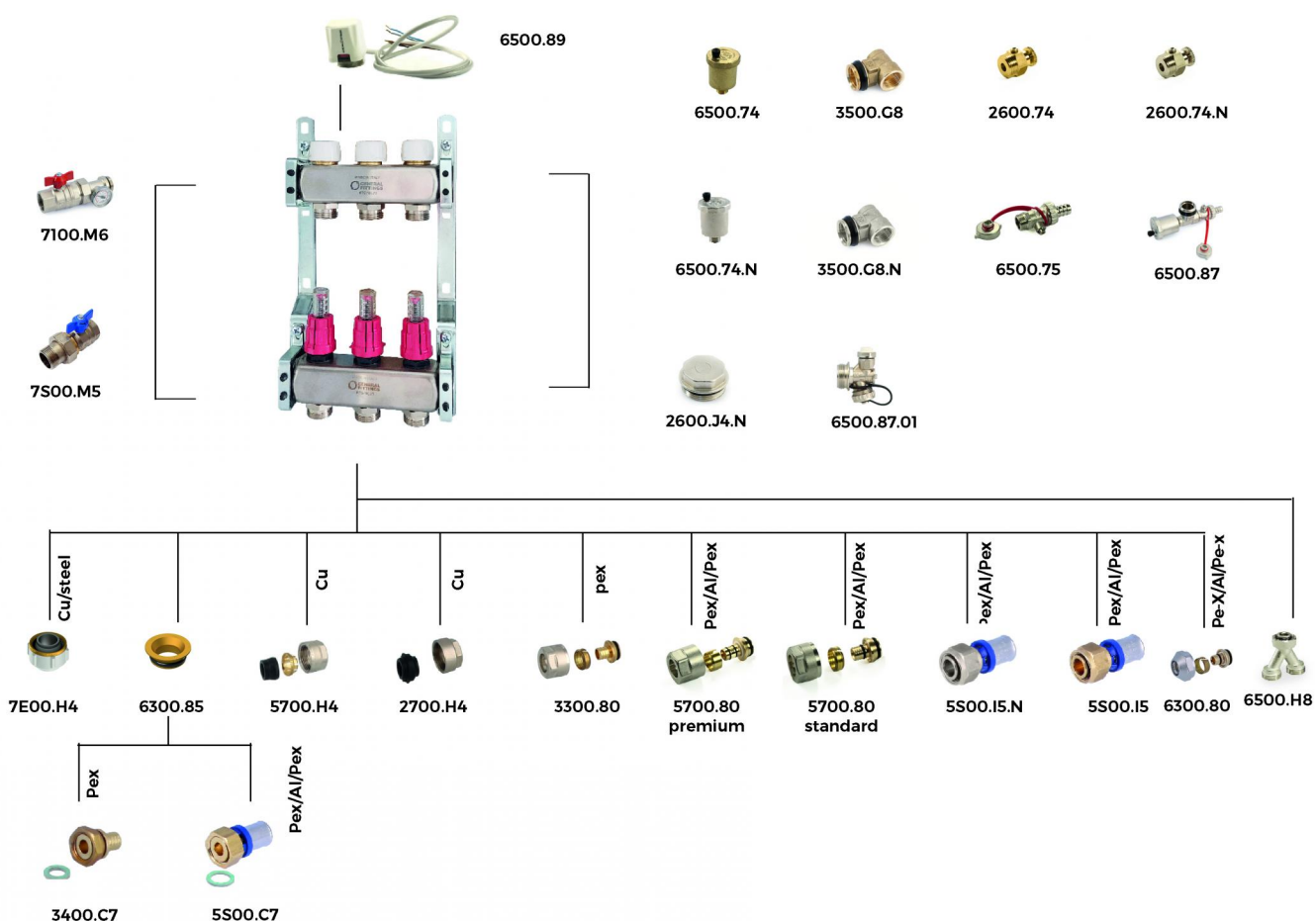
COMPONENTS: 6A00.71

Manifold composed of

- Delivery manifold complete with flow meters and nipples with 3/4" Eurocone connectors
- Return manifold complete with pre-arranged shut-off valves for electrothermal command
- 3/4" Eurocone adapters
- Brackets



CONNECTIONS 6A00.71

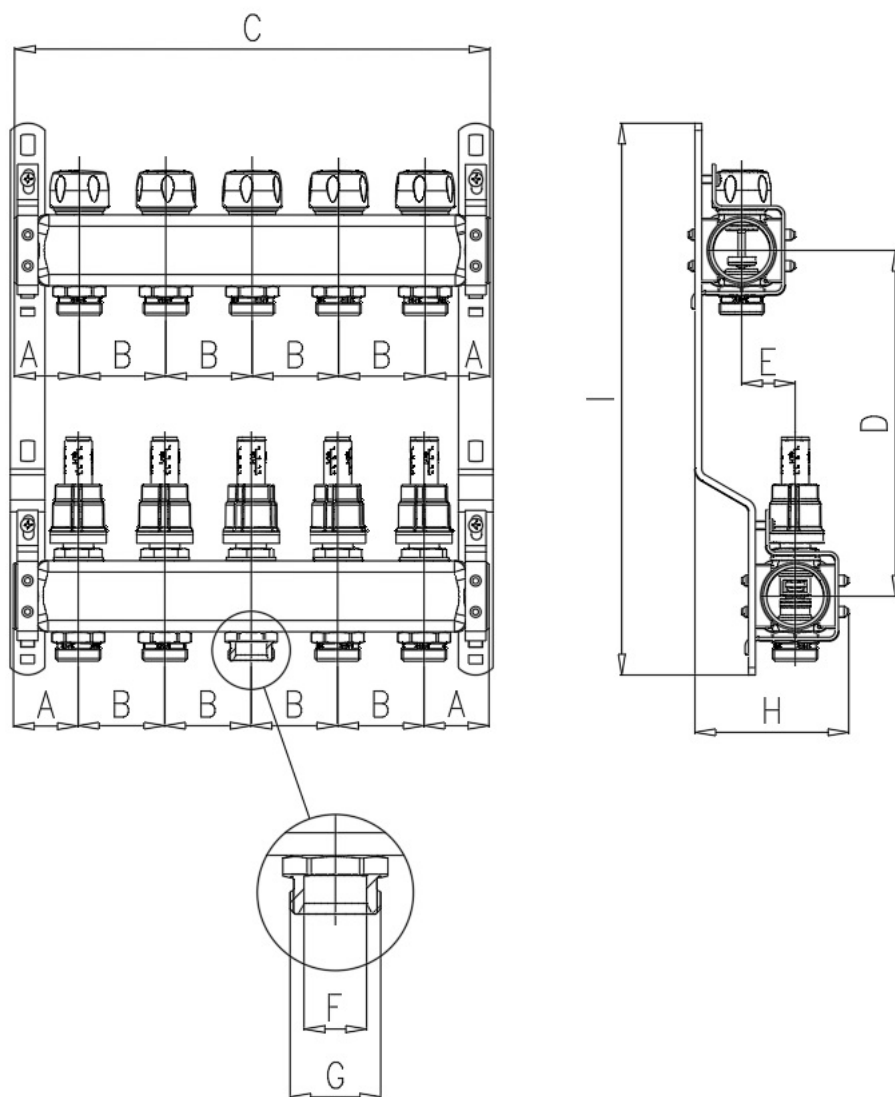


INSERTS AND FITTINGS

CODE	DESCRIPTION	PIPE
6500.74	Automatic air vent valve	
6500.74.N	Nickel plated automatic air vent valve	
3500.G8	End piece for manifold	
3500.G8.N	Nickel plated end piece for manifold	
2600.74	Air outlet valve with O-Ring	
2600.74.N	Nickel plated air outlet valve with O-Ring	
6500.75	Charge/Discharge valve	
6500.87	Automatic manifold terminal kit	
6500.87.01	Manual manifold terminal kit	
2600.J4	Male cup with O-Ring	
7100.M6	Ball valve with thermometer	
7500.M5	Manifold ball valve	
6300.85	Eurocone flat seal adapter	

INSERTS AND FITTINGS		
7E00.H4	Adapter	Copper/Steel pipe
6300.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
3400.C7	Straight fitting with loose nut and flat washer	Pe-X pipe
5S00.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 PREMIUM	Nickel plated nut, olive and insert eurocone	Multilayer pipe
5700.80 STANDARD	Nickel plated nut, olive and insert eurocone	Multilayer pipe
5S00.I5	Straight fitting with loose nut and eurocone	Multilayer pipe
5S00.I5.N	Nickel plated straight fitting with loose and eurocone	Multilayer pipe
6500.H8	Eurocone nickel plated splitter	

DIMENSIONS 6A00.71



CODE	A	B	C	D	E	F	G	H (staff a stan dard) *	H (staff a opzi onale) **	I	VIE	MISU RE TUBO
6A0071I100502A	37.5	50	125	200	31	Ø18,1	3/4"	89	76	319	2	1"-3/4" Ek.
6A0071I100503A	37.5	50	175	200	31	Ø18,1	3/4"	89	76	319	3	1"-3/4" Ek.
6A0071I100504A	37.5	50	225	200	31	Ø18,1	3/4"	89	76	319	4	1"-3/4" Ek.
6A0071I100505A	37.5	50	275	200	31	Ø18,1	3/4"	89	76	319	5	1"-3/4" Ek.
6A0071I100506A	37.5	50	325	200	31	Ø18,1	3/4"	89	76	319	6	1"-3/4" Ek.

CODE	A	B	C	D	E	F	G	H (staff a stan- dard) *	H (staff a opzi- onale) **	I	VIE	MISU RE TUBO
6A00711100507A	37.5	50	375	200	31	Ø18,1	3/4"	89	76	319	7	1"-3/4" Ek.
6A00711100508A	37.5	50	425	200	31	Ø18,1	3/4"	89	76	319	8	1"-3/4" Ek.
6A00711100509A	37.5	50	475	200	31	Ø18,1	3/4"	89	76	319	9	1"-3/4" Ek.
6A00711100510A	37.5	50	525	200	31	Ø18,1	3/4"	89	76	319	10	1"-3/4" Ek.
6A00711100511A	37.5	50	575	200	31	Ø18,1	3/4"	89	76	319	11	1"-3/4" Ek.
6A00711100512A	37.5	50	625	200	31	Ø18,1	3/4"	89	76	319	12	1"-3/4" Ek.
6A00711100513A	37.5	50	675	200	31	Ø18,1	3/4"	89	76	319	13	1"-3/4" Ek.

* standard bracket already assembled (H=89 for manifolds of 1") for use with 110 depth cases
(AC0080I500000A / AC0080I700000A / AC0080I100000A)

** optional bracket included with the set (H=76 for manifolds of 1") for use with 90 depth cases
(AC0080I550090A / AC0080I700090A / AC0080I850090A / AC0080I100090A) and with 110 depth cases
(AC0080I500000A / AC0080I700000A / AC0080I100000A)

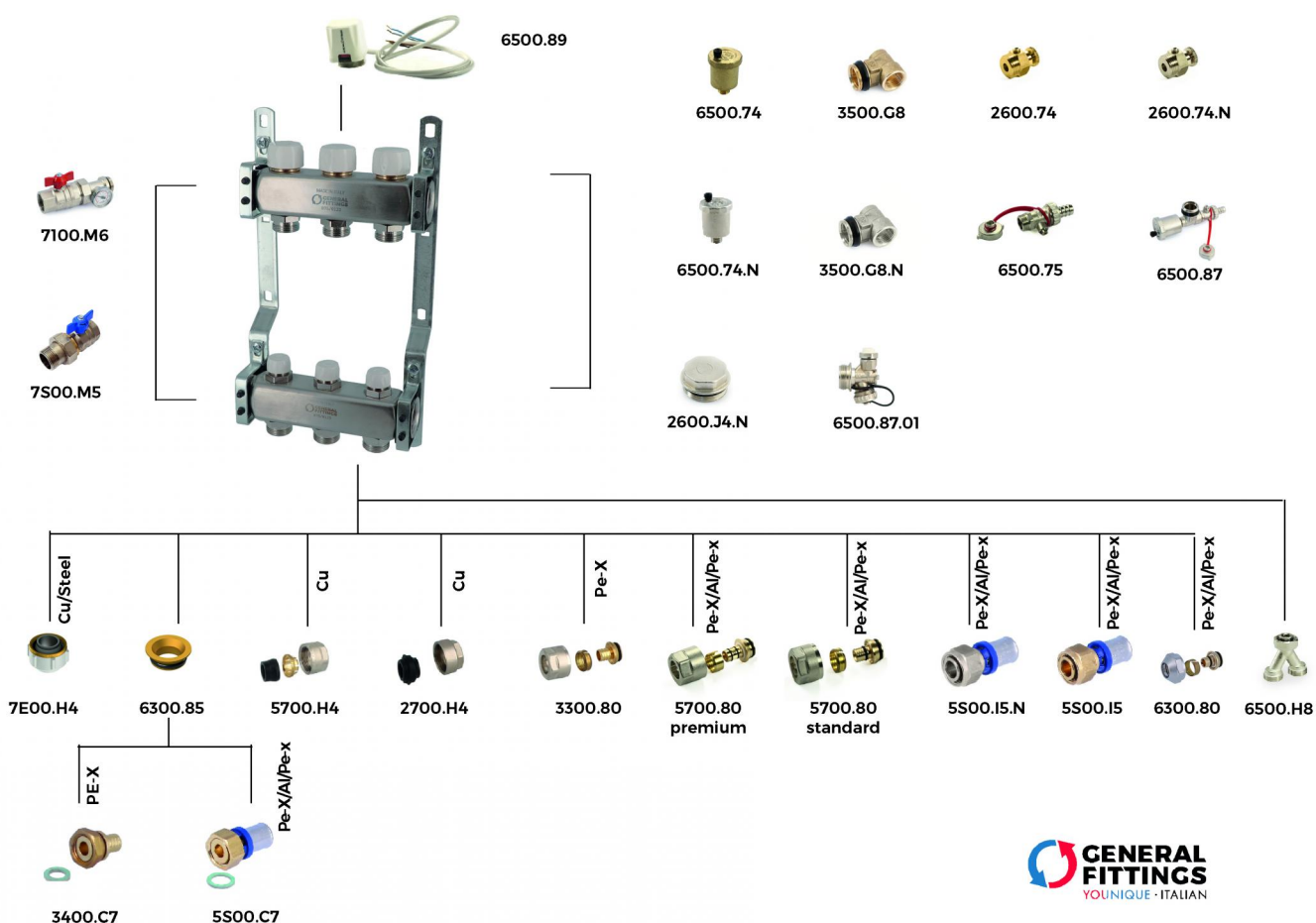
COMPONENTS 6A00.93

Manifold composed of:

- Delivery manifold complete with mechanical memory stems
- Return manifold complete with pre-arranged shut-off valves for electrothermal command
- 3/4" Eurocone adapters
- Brackets



CONNECTIONS 6A00.93

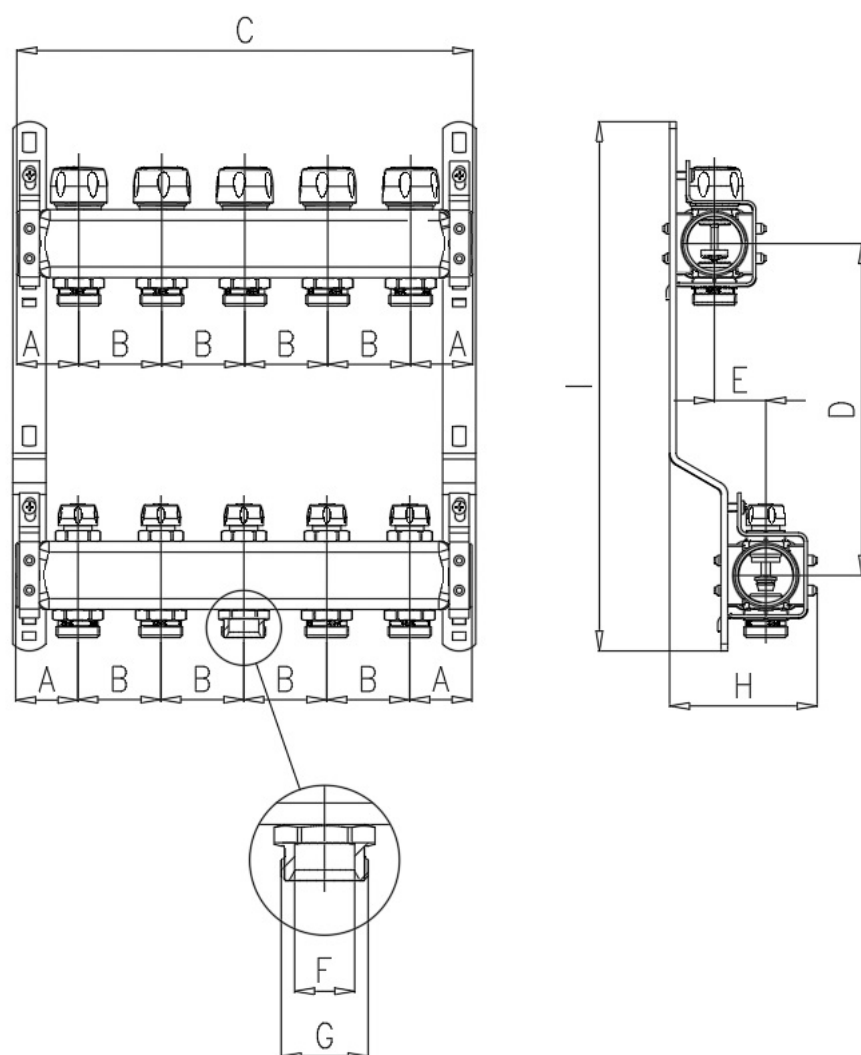


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2600.J4	Male cup with O-Ring	
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DIMENSIONS 6A00.93



CODE	A	B	C	D	E	F	G	H (staff a stan- dard) *	H (staff a opzi- onale) **	I	VIE	MISU- RE TUBO
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6A0093I100511A	37.5	50	575	200	31	Ø18,1	3/4"	89	76	319	11	1"-3/4" Ek.
6A0093I100512A	37.5	50	625	200	31	Ø18,1	3/4"	89	76	319	12	1"-3/4" Ek.
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