Manifolds for heating and cooling



THOR

Datasheet THOR

Stainless steel manifolds for radiant systems

GENERAL FITTINGS
YOUNIQUE · ITALIAN

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LINE 6A00

Stainless steel distribution manifolds

THOR



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

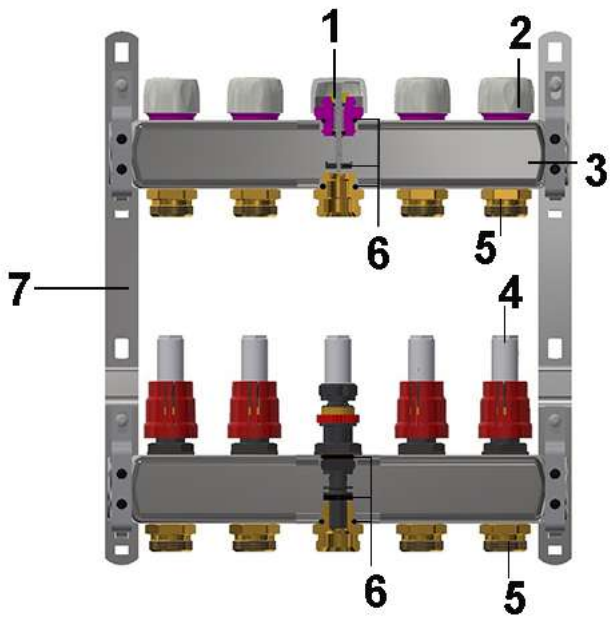
- Balancing of each loop
- No unnecessary waste
- High technical comfort
- Suitable both for high and low temperature installations
- Mechanical resistance
- High lightness
- No tension corrosion
- No electrolytic corrosion
- High flow rate

FIELDS OF APPLICATION

APPLICATIONS		T.min. with control stem	T.min. with flow meter	T.max with control stem	T.max with flow meter	Press. max with mechanical screw	Press. max 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 (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%							

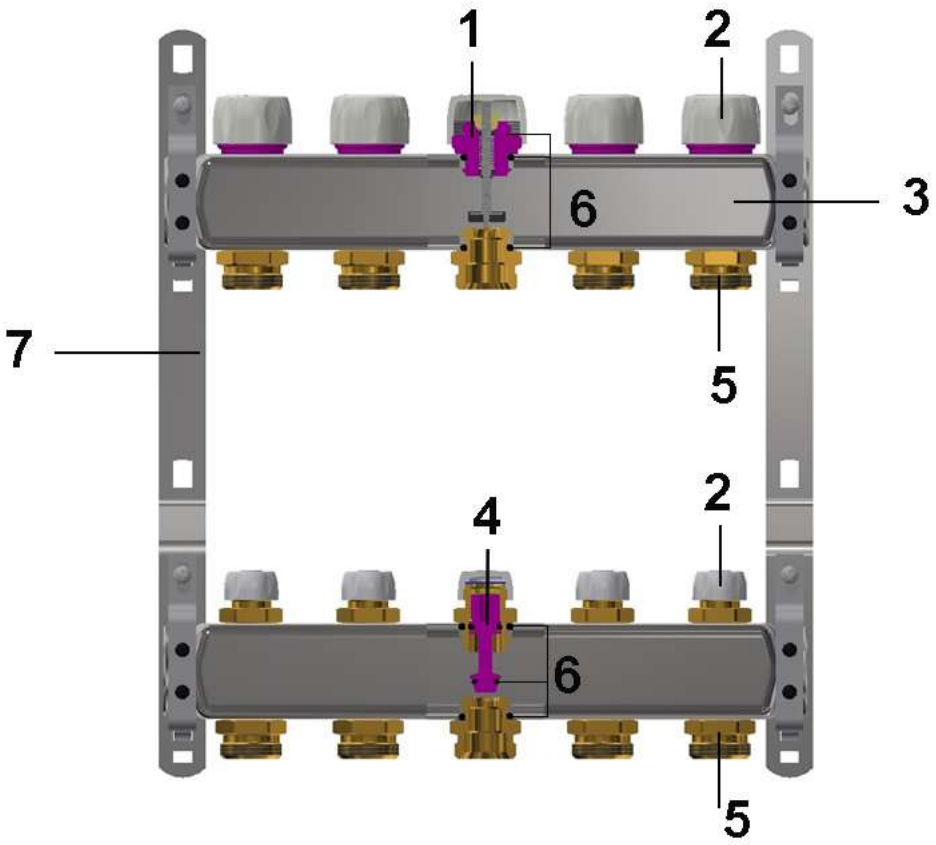
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COMPONENTS AND MATERIALS 6A00.71



LEGEND	COMPONENTS	MATERIALS
1	Mechanical balancing screw	Brass CW617N - UNI EN 12164
2	Knob	ABS
3	Manifold	AISI 304 - EN 1.4301
4	Flow meter	PLASTIC
5	Connecting Nipples	Brass CW617N - UNI EN 12165
6	O-Ring (tighting)	Elastomer
7	Brackets	FE ZNB

COMPONENTS AND MATERIALS 6A00.93



LEGEND	COMPONENTS	MATERIALS
1	Headwork	CW617N-UNI EN 12164
2	Knob	ABS
3	Manifold	AISI 304 - EN 1430
4	Lockshield	Brass CW617N - UNI EN 12164
5	Connecting Nipples	CW617N-UNI EN 12165
6	O-Ring	Elastomer
7	Brackets	FE ZNB

CERTIFICATIONS

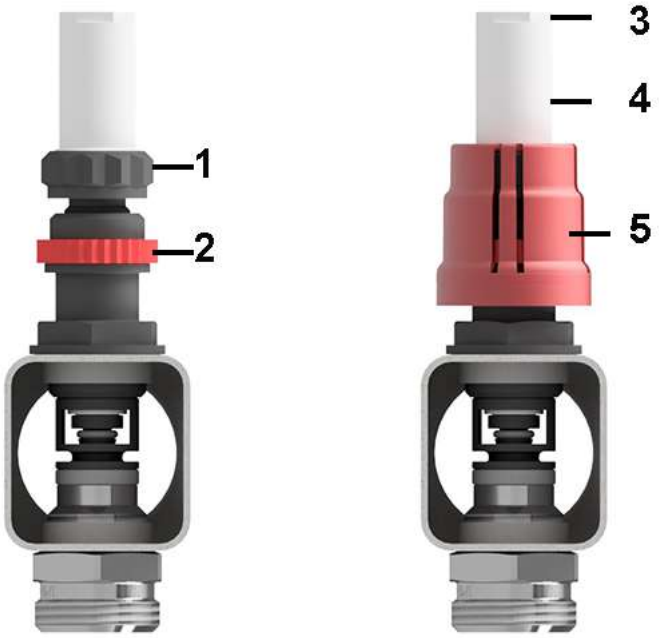
COUNTRY	CERTIFICATION	COUNTRY	CERTIFICATION	COUNTRY	CERTIFICATION
					

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).



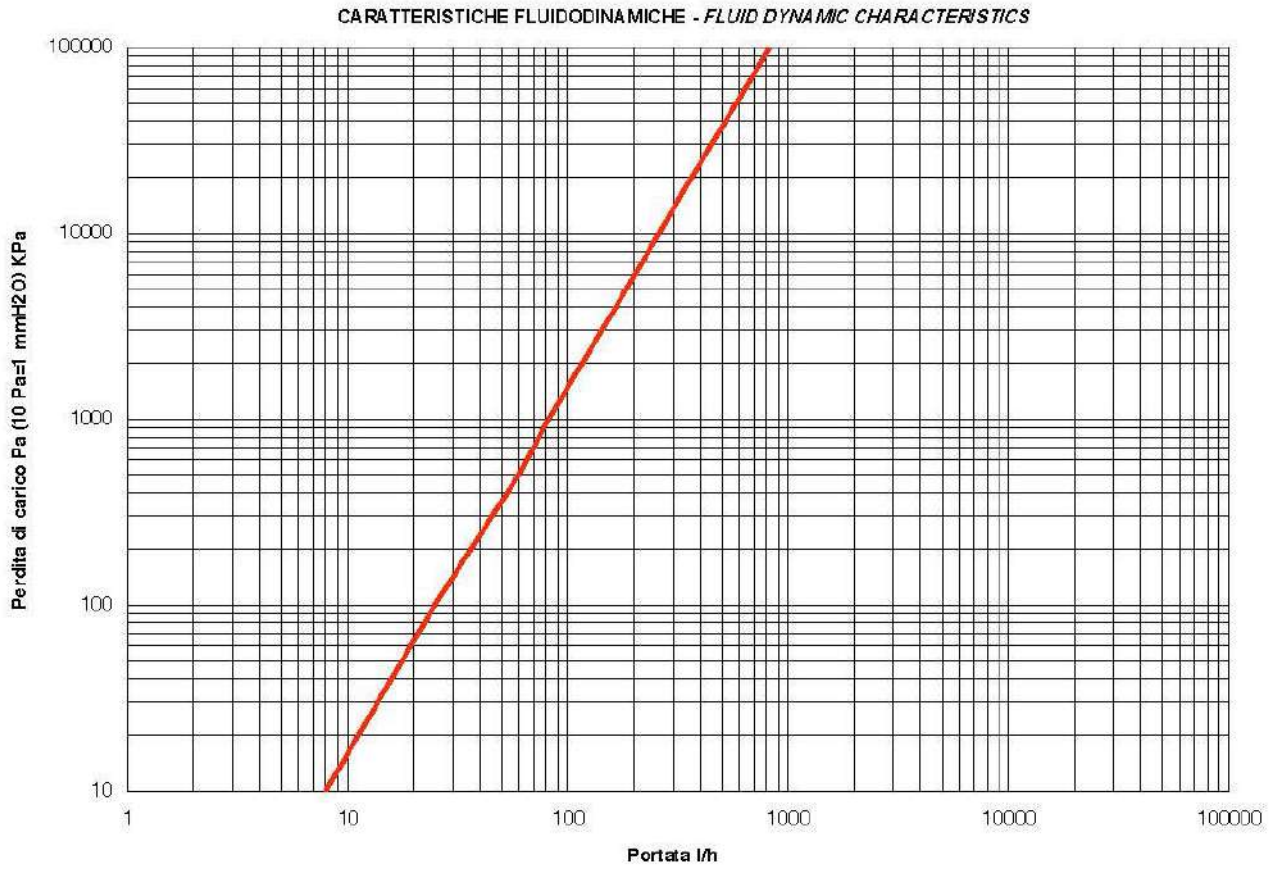
LEGEND	COMPONENTS
1	Regulation ring
2	Memory stop ring
3	Glass hexagon part
4	Glass
5	Control

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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

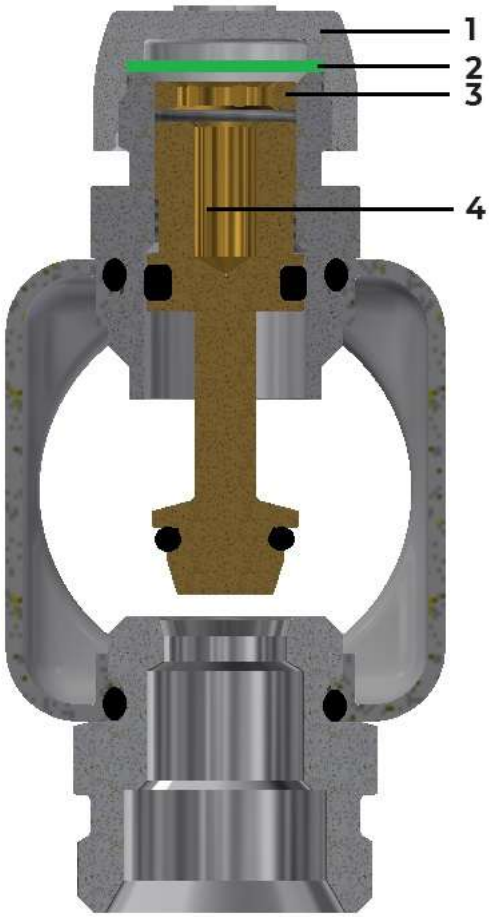
The glass can be disassembled in order to check its cleanliness, even when the installation is working.
1) Close the flow meter turning the ring, but not before than having recorded the installation balancing (l/min)
2) With the help of a hexagonal wrench, unscrew the glass by acting on the hexagonal 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	Cap
2	Gasket
3	Closing ring
4	Cut off valve

Posizione /Position	N° giri / 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

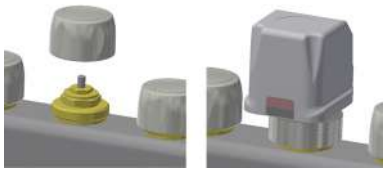
Posizione /Position	N° giri / turns	Kvs
6	3	1.26
7	3+1/2	1.41
8	4	1.53
9	4+1/2	1.65
10	5	1.76
11	5+1/2	1.85
12	completely open	1.92

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

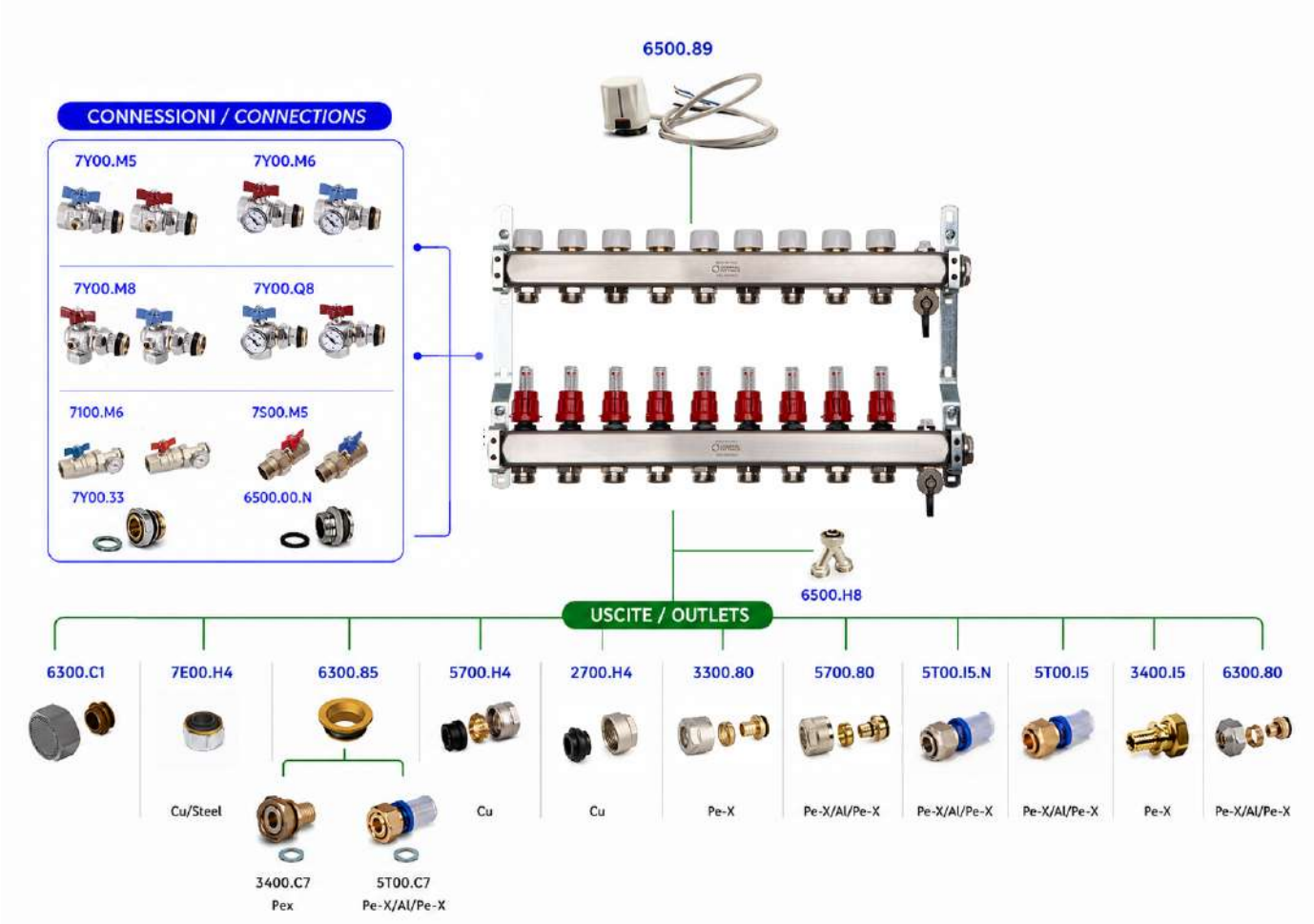


COMPONENTS:6A00.55

Manifold composed of:
-Delivery manifold complete with flow meters and nipples with 3/4” Eurocone connectors
- Return manifold complete with shut-off valves arranged for electrothermal control and 3/4" eurocone niples
- Brackets
- Manual vent valve, fill/drain tap and cap



CONNECTIONS 6A00.55

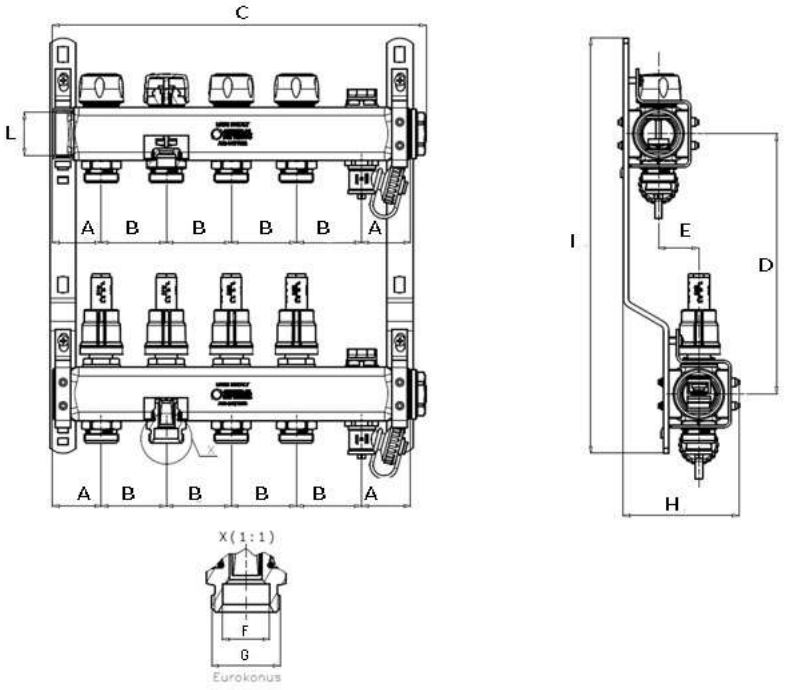


INSERTS AND FITTINGS

CODE	DESCRIPTION	PIPE
7Y00.M5	Compact ball valve coupling with butterfly, without thermometer	
7Y00.M6	Compact 90-degree ball valve coupling with butterfly and thermometer	
7Y00.M8	Compact 90-degree ball valve coupling with butterfly, no thermometer	
7Y00.Q8	Compact 90-degree ball valve coupling with butterfly, no thermometer	
7Y00.33	Nickel-plated manifold fitting	
7100.M6	Ball valve with thermometer	

INSERTS AND FITTINGS		
7S00.M5	Manifold ball valve	
6300.85	Eurocone flat seal adapter	
7E00.H4	Adapter	Copper/Steel pipe
6300.C1	Eurocone cap with o-ring - for manifolds	
6300.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
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
5T00.I5	Straight fitting with loose nut and eurocone	Multilayer pipe
5T00.I5.N	Nickel plated straight fitting with loose and eurocone	Multilayer pipe
3400.I5	Straight fitting with loose nut and eurocone connection	Pe-X pipe
6500.H8	Eurocone nickel plated splitter	
6500.00.N	Male fitting with o-ring and flat gasket	

DIMENSIONS 6A00.55



CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUBO Ø
6A0055I100502A	37.5	50	187	200	18/31	18.1	3/4"	76	89	323	2	1"-3/4" Ek.
6A0055I100503A	37.5	50	237	200	18/31	18.1	3/4"	76	89	323	3	1"-3/4" Ek.
6A0055I100504A	37.5	50	287	200	18/31	18.1	3/4"	76	89	323	4	1"-3/4" Ek.
6A0055I100505A	37.5	50	337	200	18/31	18.1	3/4"	76	89	323	5	1"-3/4" Ek.
6A0055I100506A	37.5	50	387	200	18/31	18.1	3/4"	76	89	323	6	1"-3/4" Ek.
6A0055I100507A	37.5	50	437	200	18/31	18.1	3/4"	76	89	323	7	1"-3/4" Ek.
6A0055I100508A	37.5	50	487	200	18/31	18.1	3/4"	76	89	323	8	1"-3/4" Ek.
6A0055I100509A	37.5	50	537	200	18/31	18.1	3/4"	76	89	323	9	1"-3/4" Ek.
6A0055I100510A	37.5	50	587	200	18/31	18.1	3/4"	76	89	323	10	1"-3/4" Ek.

CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUB O Ø
6A0055I100511A	37.5	50	637	200	18/31	18.1	3/4“	76	89	323	11	1“-3/4 “ Ek.
6A0055I100512A	37.5	50	687	200	18/31	18.1	3/4“	76	89	323	12	1“-3/4 “ Ek.

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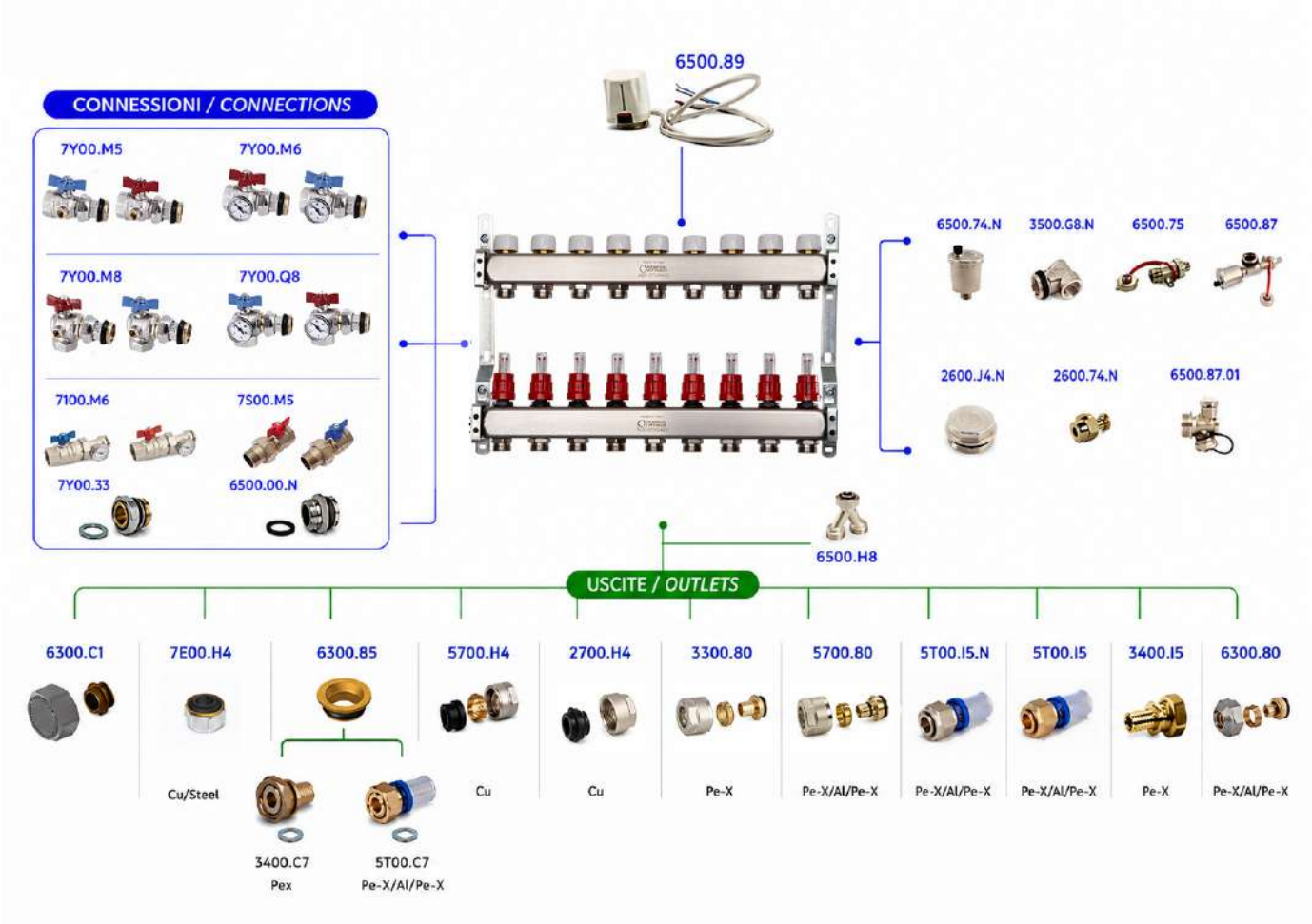
* optional bracket (H89), available to purchase separated, for use with 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
**standard bracket (H76), already assembled, for use with 90 depth case (AC0080I550090A / AC0080I700090A / AC0080I850090A /AC0080I100090A) and 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
***standard/optional bracket

COMPONENTS: 6A00.71

Manifold composed of:
-Delivery manifold complete with flow meters and nipples with 3/4” Eurocone connectors
- Return manifold complete with shut-off valves arranged for electrothermal control and 3/4" eurocone niples
- Brackets



CONNECTIONS 6A00.71



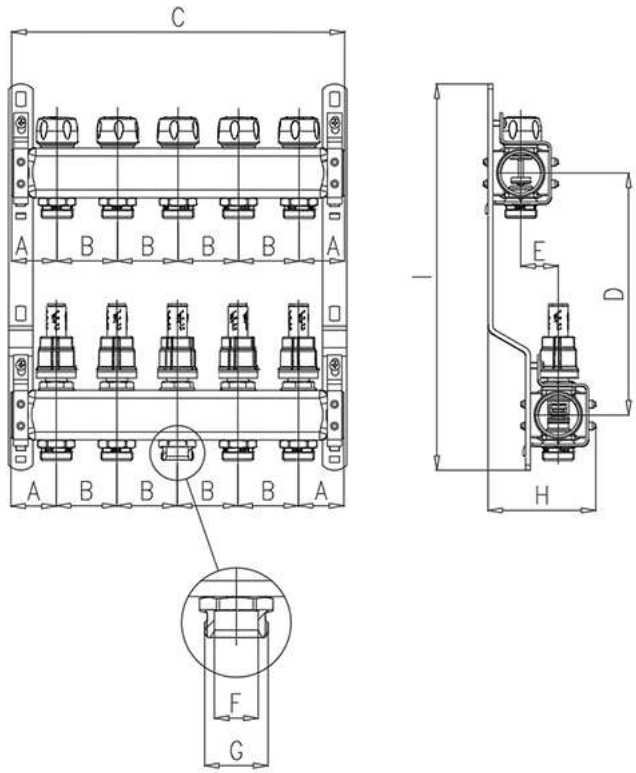
INSERTS AND FITTINGS

CODE	DESCRIPTION	PIPE
7Y00.M5	Compact ball valve coupling with butterfly, without thermometer	
7Y00.M6	Compact 90-degree ball valve coupling with butterfly and thermometer	
7Y00.M8	Compact 90-degree ball valve coupling with butterfly, no thermometer	
7Y00.Q8	Compact 90-degree ball valve coupling with butterfly, no thermometer	
7Y00.33	Nickel-plated manifold fitting	
7S00.M5	Manifold ball valve	

INSERTS AND FITTINGS		
7100.M6	Ball valve with thermometer	
6500.74.N	Nickel plated automatic air vent valve	
3500.G8.N	Nickel plated end piece for manifold	
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	
6300.85	Eurocone flat seal adapter	
7E00.H4	Adapter	Copper/Steel pipe
6300.C1	Eurocone cap with o-ring - for manifolds	
6300.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
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
5T00.I5	Straight fitting with loose nut and eurocone	Multilayer pipe
5T00.I5.N	Nickel plated straight fitting with loose and eurocone	Multilayer pipe
3400.I5	Straight fitting with loose nut and eurocone connection	Pe-X pipe
6500.H8	Eurocone nickel plated splitter	

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DIMENSIONS 6A00.71



CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUBO Ø
6A0071I100502A	37.5	50	125	200	18/31	Ø18,1	3/4"	76	89	323	2	1"-3/4 "Ek.
6A0071I100503A	37.5	50	175	200	18/31	Ø18,1	3/4"	76	89	323	3	1"-3/4 "Ek.
6A0071I100504A	37.5	50	225	200	18/31	Ø18,1	3/4"	76	89	323	4	1"-3/4 "Ek.
6A0071I100505A	37.5	50	275	200	18/31	Ø18,1	3/4"	76	89	323	5	1"-3/4 "Ek.
6A0071I100506A	37.5	50	325	200	18/31	Ø18,1	3/4"	76	89	323	6	1"-3/4 "Ek.
6A0071I100507A	37.5	50	375	200	18/31	Ø18,1	3/4"	76	89	323	7	1"-3/4 "Ek.
6A0071I100508A	37.5	50	425	200	18/31	Ø18,1	3/4"	76	89	323	8	1"-3/4 "Ek.
6A0071I100509A	37.5	50	475	200	18/31	Ø18,1	3/4"	76	89	323	9	1"-3/4 "Ek.
6A0071I100510A	37.5	50	525	200	18/31	Ø18,1	3/4"	76	89	323	10	1"-3/4 "Ek.

CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUB O Ø
6A0071I100511A	37.5	50	575	200	18/31	Ø18,1	3/4"	76	89	323	11	1"-3/4 "Ek.
6A0071I100512A	37.5	50	625	200	18/31	Ø18,1	3/4"	76	89	323	12	1"-3/4 "Ek.
6A0071I100513A	37.5	50	675	200	18/31	Ø18,1	3/4"	76	89	323	13	1"-3/4 "Ek.

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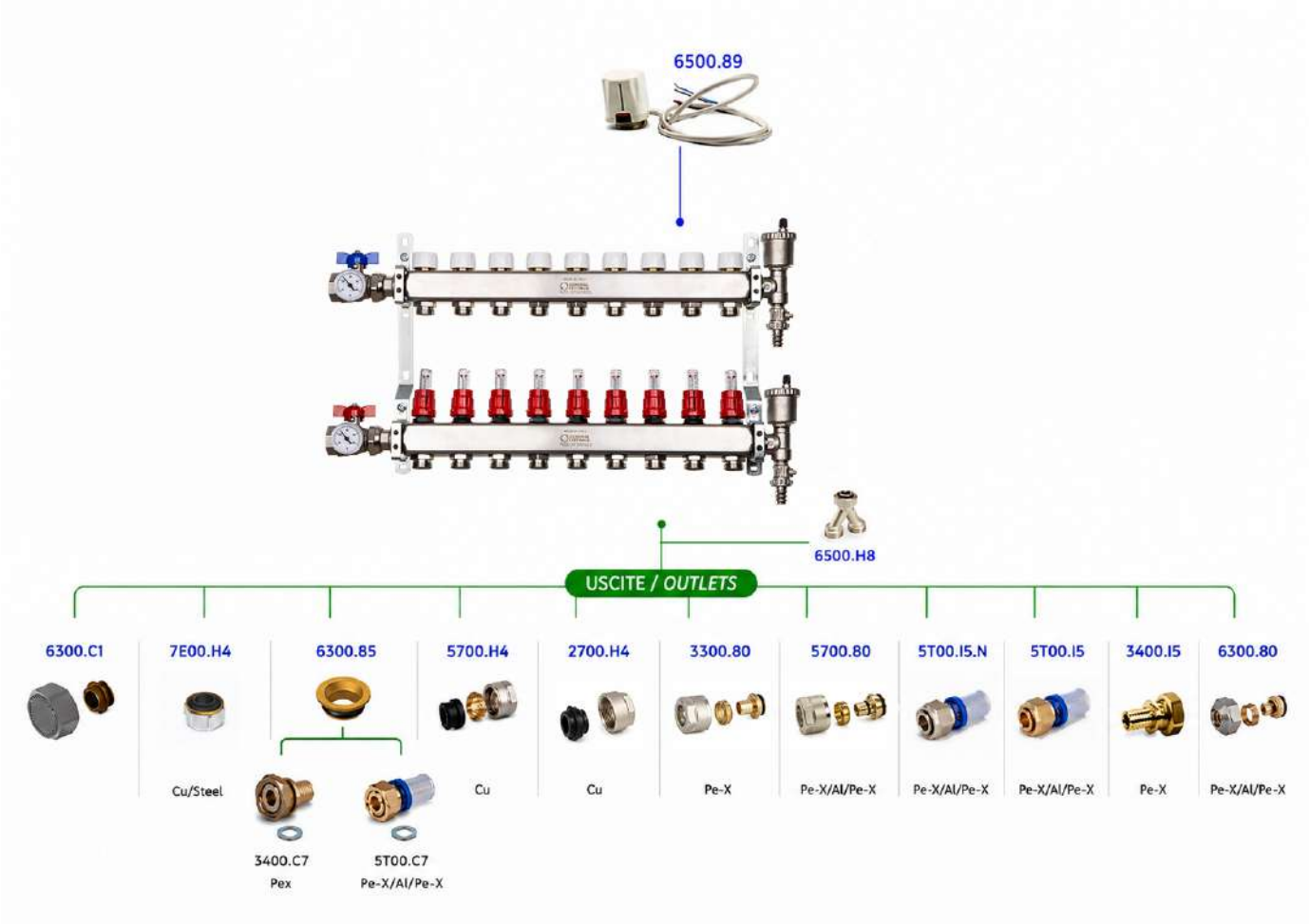
* optional bracket (H89), available to purchase separated, for use with 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
**standard bracket (H76), already assembled, for use with 90 depth case (AC0080I550090A / AC0080I700090A / AC0080I850090A /AC0080I100090A) and 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
***standard/optional bracket

COMPONENTS: 6A00.72

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
- Manifold termination kit
- Compact 90-degree ball valve coupling with butterfly and thermometer



CONNECTIONS 6A00.72

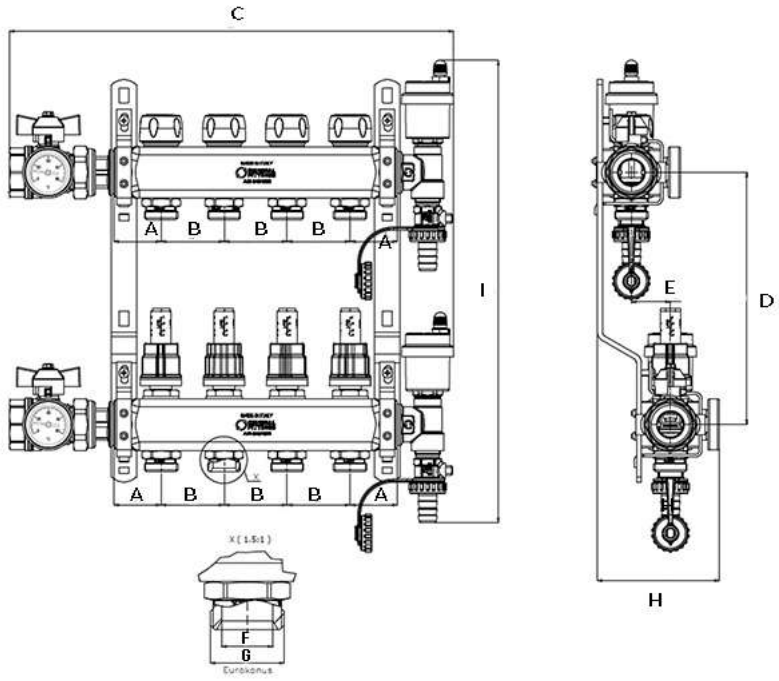


INSERTS AND FITTINGS		
CODE	DESCRIPTION	PIPE
6300.85	Eurocone flat seal adapter	
7E00.H4	Adapter	Copper/Steel pipe
6300.C1	Eurocone cap with o-ring - for manifolds	
6300.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
3400.C7	Straight fitting with loose nut and flat washer	Pe-X pipe
5T00.C7	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

INSERTS AND FITTINGS		
3300.80	Nickel plated nut, olive and insert eurocone	Pe-X pipe
5700.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
5T00.I5	Straight fitting with loose nut and eurocone	Multilayer pipe
5T00.I5.N	Nickel plated straight fitting with loose and eurocone	Multilayer pipe
3400.I5	Straight fitting with loose nut and eurocone connection	Pe-X pipe
6500.H8	Eurocone nickel plated splitter	

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DIMENSIONS 6A00.72



CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUBO Ø
6A0072I100502A	37.5	50	252	200	18/31	18.1	3/4"	84	97	370	2	1"-3/4" Ek.
6A0072I100503A	37.5	50	302	200	18/31	18.1	3/4"	84	97	370	3	1"-3/4" Ek.
6A0072I100504A	37.5	50	352	200	18/31	18.1	3/4"	84	97	370	4	1"-3/4" Ek.
6A0072I100505A	37.5	50	402	200	18/31	18.1	3/4"	84	97	370	5	1"-3/4" Ek.
6A0072I100506A	37.5	50	452	200	18/31	18.1	3/4"	84	97	370	6	1"-3/4" Ek.
6A0072I100507A	37.5	50	502	200	18/31	18.1	3/4"	84	97	370	7	1"-3/4" Ek.
6A0072I100508A	37.5	50	552	200	18/31	18.1	3/4"	84	97	370	8	1"-3/4" Ek.
6A0072I100509A	37.5	50	602	200	18/31	18.1	3/4"	84	97	370	9	1"-3/4" Ek.
6A0072I100510A	37.5	50	652	200	18/31	18.1	3/4"	84	97	370	10	1"-3/4" Ek.

CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUB O Ø
6A0072I100511A	37.5	50	702	200	18/31	18.1	3/4"	84	97	370	11	1"-3/4 " Ek.
6A0072I100512A	37.5	50	752	200	18/31	18.1	3/4"	84	97	370	12	1"-3/4 " Ek.
6A0072I100513A	37.5	50	802	200	18/31	18.1	3/4"	84	97	370	13	1"-3/4 " Ek.

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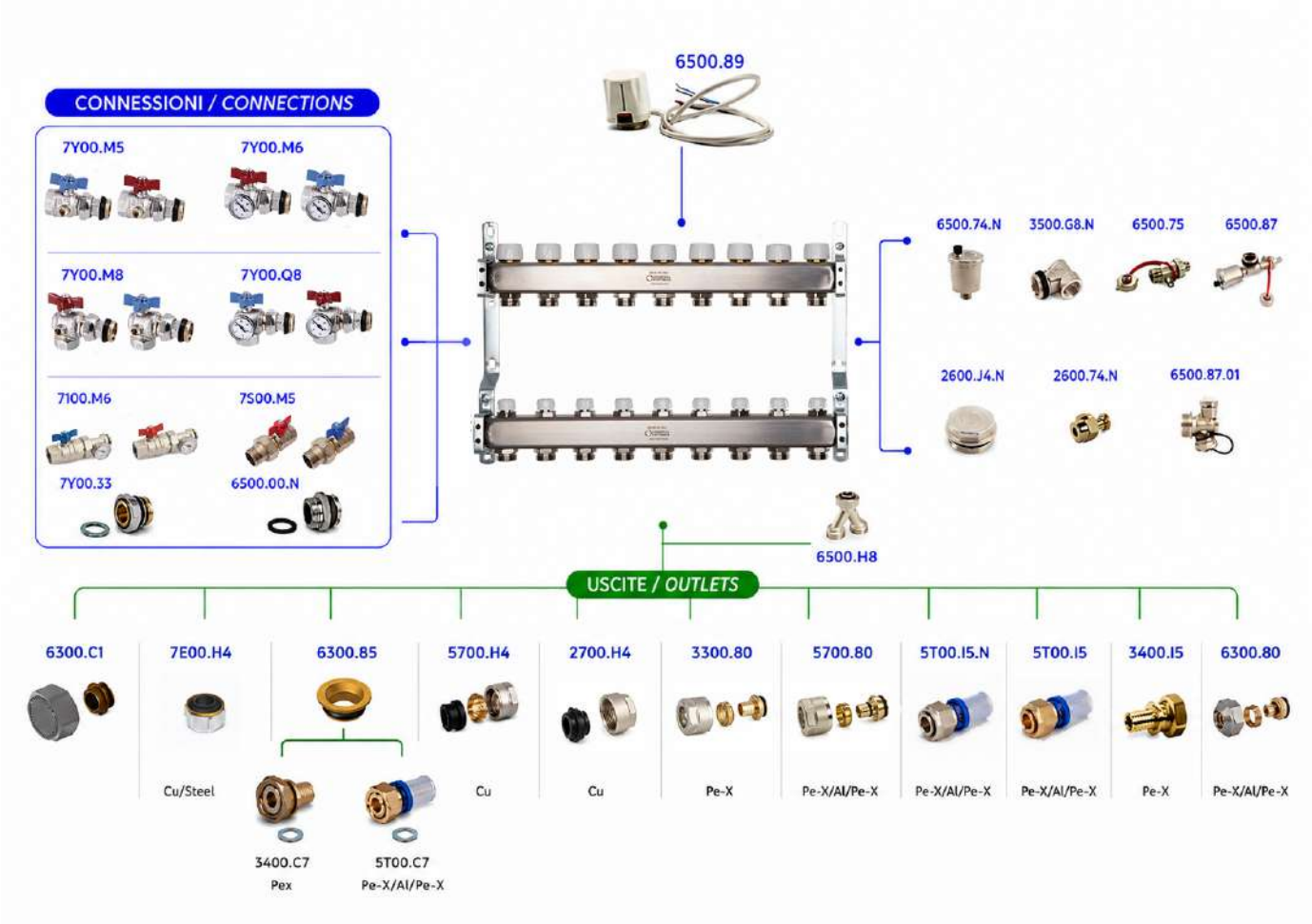
* optional bracket (H97), available to purchase separated, for use with 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
**standard bracket (H84), already assembled, for use with 90 depth case (AC0080I550090A / AC0080I700090A / AC0080I850090A /AC0080I100090A) and 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
***standard/optional bracket

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



INSERTS AND FITTINGS

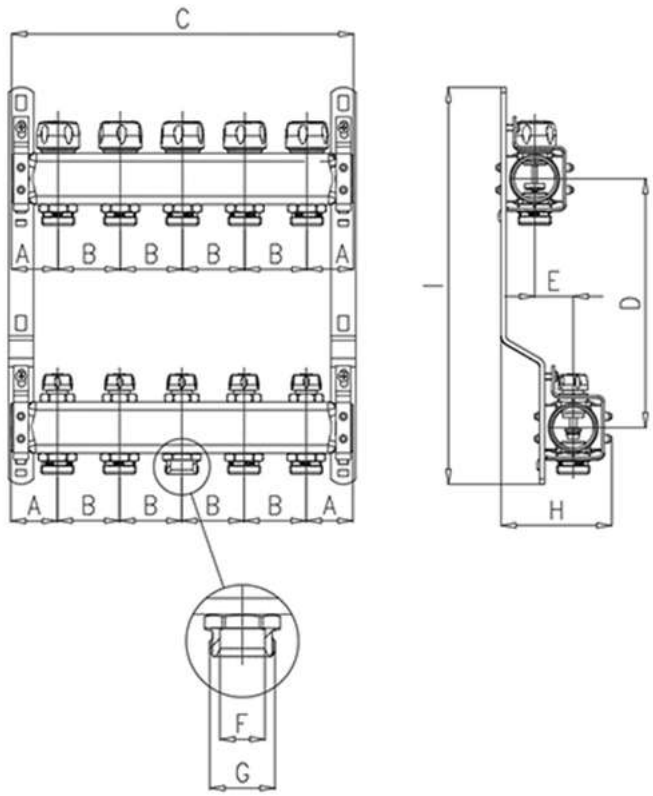
CODE	DESCRIPTION	PIPE
7Y00.M5	Compact ball valve coupling with butterfly, without thermometer	
7Y00.M6	Compact 90-degree ball valve coupling with butterfly and thermometer	
7Y00.M8	Compact 90-degree ball valve coupling with butterfly, no thermometer	
7Y00.Q8	Compact 90-degree ball valve coupling with butterfly, no thermometer	
7Y00.33	Nickel-plated manifold fitting	

INSERTS AND FITTINGS		
6500.74.N	Nickel plated automatic air vent valve	
7S00.M5	Manifold ball valve	
7100.M6	Ball valve with thermometer	
3500.G8.N	Nickel plated end piece for manifold	
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	
6300.85	Eurocone flat seal adapter	
7E00.H4	Adapter	Copper/Steel pipe
6300.C1	Eurocone cap with o-ring - for manifolds	
6300.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
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
6500.00.N	Male fitting with o-ring and flat gasket	
5700.80	Nickel plated nut, olive and insert eurocone	Multilayer pipe
5T00.I5	Straight fitting with loose nut and eurocone	Multilayer pipe
5T00.I5.N	Nickel plated straight fitting with loose and eurocone	Multilayer pipe

INSERTS AND FITTINGS		
3400.I5	Straight fitting with loose nut and eurocone connection	Pe-X pipe
6500.H8	Eurocone nickel plated splitter	

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DIMENSIONS 6A00.93



CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUBO Ø
6A0093I100502A	37.5	50	125	200	18/31	Ø18,1	3/4"	76	89	323	2	1"-3/4 "Ek.
6A0093I100503A	37.5	50	175	200	18/31	Ø18,1	3/4"	76	89	323	3	1"-3/4 "Ek.
6A0093I100504A	37.5	50	225	200	18/31	Ø18,1	3/4"	76	89	323	4	1"-3/4 "Ek.
6A0093I100505A	37.5	50	275	200	18/31	Ø18,1	3/4"	76	89	323	5	1"-3/4 "Ek.
6A0093I100506A	37.5	50	325	200	31/18	Ø18,1	3/4"	76	89	323	6	1"-3/4 "Ek.
6A0093I100507A	37.5	50	375	200	18/31	Ø18,1	3/4"	76	89	323	7	1"-3/4 "Ek.
6A0093I100508A	37.5	50	425	200	18/31	Ø18,1	3/4"	76	89	323	8	1"-3/4 "Ek.
6A0093I100509A	37.5	50	475	200	18/31	Ø18,1	3/4"	76	89	323	9	1"-3/4 "Ek.
6A0093I100510A	37.5	50	525	200	18/31	Ø18,1	3/4"	76	89	323	10	1"-3/4 "Ek.

CODE	A	B	C	D	E***	F	G	H**	H*	I	VIE	TUB O Ø
6A0093I100511A	37.5	50	575	200	18/31	Ø18,1	3/4"	76	89	323	11	1"-3/4 "Ek.
6A0093I100512A	37.5	50	625	200	18/31	Ø18,1	3/4"	76	89	323	12	1"-3/4 "Ek.
6A0093I100513A	37.5	50	675	200	18/31	Ø18,1	3/4"	76	89	323	13	1"-3/4 "Ek.

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* optional bracket (H89), available to purchase separated, for use with 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
**standard bracket (H76), already assembled, for use with 90 depth case (AC0080I550090A / AC0080I700090A / AC0080I850090A /AC0080I100090A) and 110 depth case (AC0080I500000A / AC0080I700000A / AC0080I100000A)
***standard/optional bracket

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