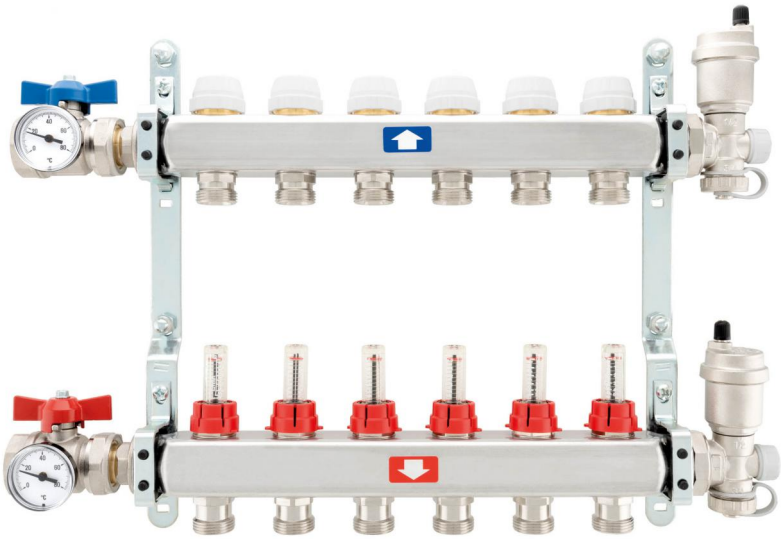
TECHNICAL CATALOGUE

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



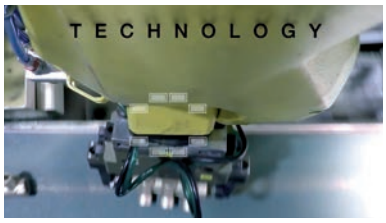
ITAP AT A GLANCE

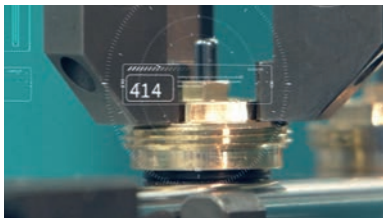
THE COMPANY

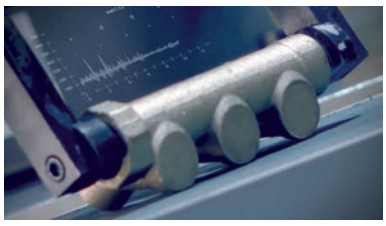
ITAP SpA, founded in Lumezzane (Brescia) in 1972, is currently one of the leading production companies in Italy of **valves, fittings and distribution manifolds** for plumbing and heating systems.

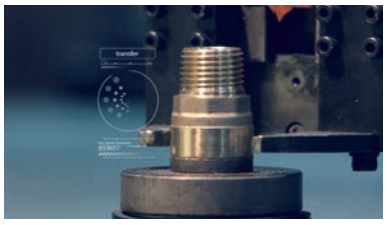
Thanks to a fully automated production process, with 85 transfer machines and 55 assembly lines, it is capable of producing 400,000 pieces per day.

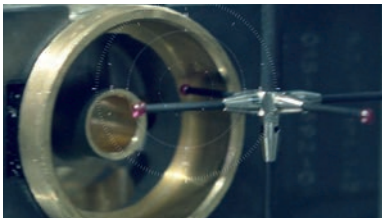
Our innate pursuit for innovation and observance of technical regulations is supported by the company certification ISO 9001. The company has always considered its focus on quality as the main tool to obtain significant business results: today ITAP SpA is proud to offer products bearing the approval of numerous international certifying bodies.









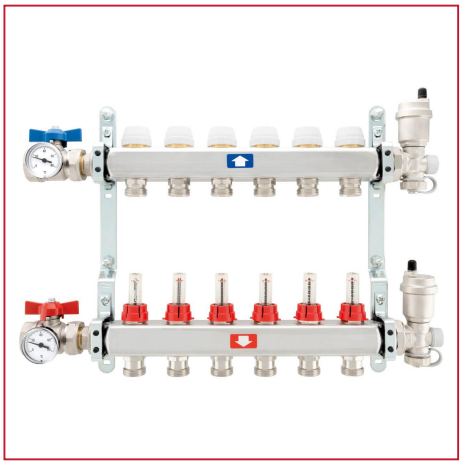


ITAP products have obtained approvals by more than 30 certification bodies from all over the world.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

907C Complete pre-assembled manifold, with flow meters

100% TESTED



907C

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9070010002034C	1/1
1"x3/4"x3	6bar/87psi	9070010003034C	1/1
1"x3/4"x4	6bar/87psi	9070010004034C	1/1
1"x3/4"x5	6bar/87psi	9070010005034C	1/1
1"x3/4"x6	6bar/87psi	9070010006034C	1/1
1"x3/4"x7	6bar/87psi	9070010007034C	1/1
1"x3/4"x8	6bar/87psi	9070010008034C	1/1
1"x3/4"x9	6bar/87psi	9070010009034C	1/1
1"x3/4"x10	6bar/87psi	9070010010034C	1/1
1"x3/4"x11	6bar/87psi	9070010011034C	1/1
1"x3/4"x12	6bar/87psi	9070010012034C	1/1
1"x3/4"x13	6bar/87psi	9070010013034C	1/1

90780C

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9078010002034C	1/1
1"x3/4"x3	6bar/87psi	9078010003034C	1/1
1"x3/4"x4	6bar/87psi	9078010004034C	1/1
1"x3/4"x5	6bar/87psi	9078010005034C	1/1
1"x3/4"x6	6bar/87psi	9078010006034C	1/1
1"x3/4"x7	6bar/87psi	9078010007034C	1/1
1"x3/4"x8	6bar/87psi	9078010008034C	1/1
1"x3/4"x9	6bar/87psi	9078010009034C	1/1
1"x3/4"x10	6bar/87psi	9078010010034C	1/1
1"x3/4"x11	6bar/87psi	9078010011034C	1/1
1"x3/4"x12	6bar/87psi	9078010012034C	1/1
1"x3/4"x13	6bar/87psi	9078010013034C	1/1

90790C

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9079010002034C	1/1
1"x3/4"x3	6bar/87psi	9079010003034C	1/1
1"x3/4"x4	6bar/87psi	9079010004034C	1/1
1"x3/4"x5	6bar/87psi	9079010005034C	1/1
1"x3/4"x6	6bar/87psi	9079010006034C	1/1
1"x3/4"x7	6bar/87psi	9079010007034C	1/1
1"x3/4"x8	6bar/87psi	9079010008034C	1/1
1"x3/4"x9	6bar/87psi	9079010009034C	1/1
1"x3/4"x10	6bar/87psi	9079010010034C	1/1
1"x3/4"x11	6bar/87psi	9079010011034C	1/1
1"x3/4"x12	6bar/87psi	9079010012034C	1/1
1"x3/4"x13	6bar/87psi	9079010013034C	1/1

CERTIFICATIONS

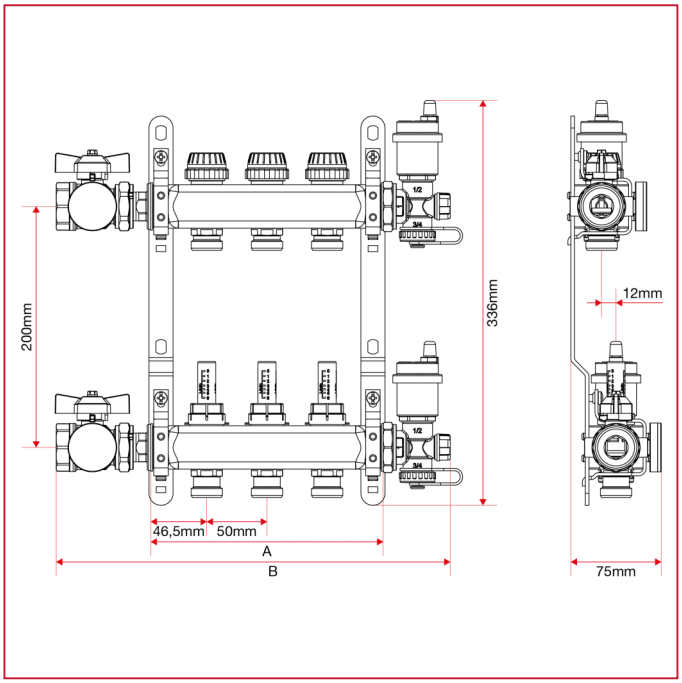
TECHNICAL SPECIFICATIONS

Consisting of:
- 1 return manifold in stainless steel AISI 304L with shut-off valves preset for electrothermal actuators
- 1 flow manifold in stainless steel AISI 304L with flow meters
- 2 complete metal brackets
- 2 shut-off ball valves with thermometers
- 2 end pieces with air vent valve and drain cock

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

Available sizes: 1”.
Maximum working pressure: 6 bar (10 bar for installation test).
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.
In case of use of electric actuators Art. 891M and 891MR, it is suggested to use the off-centre by-pass kit Art. 860BY.
ATTENTION: manifolds will be supplied mounted on the brackets; accessories will be supplied separately, inside the same box.

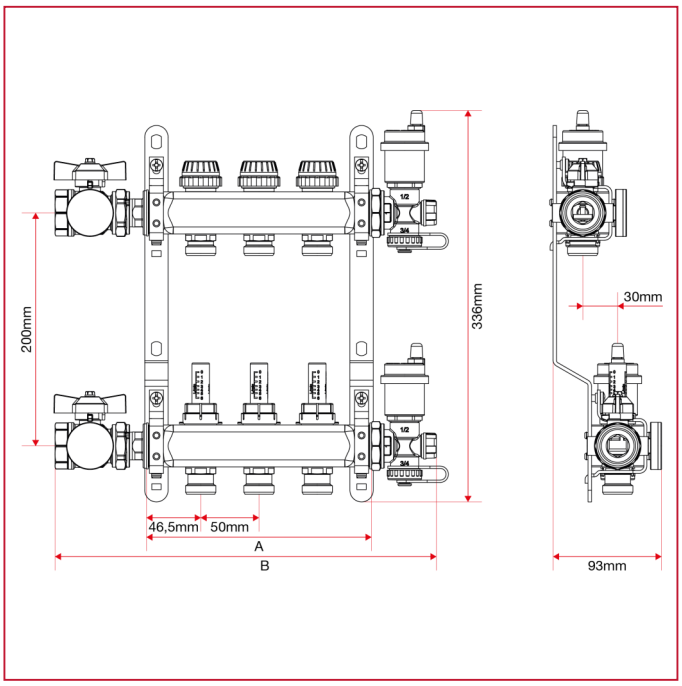
OVERALL DIMENSIONS art.907C



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	277	327	377	427	477	527	577	627	677	727	777	827
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

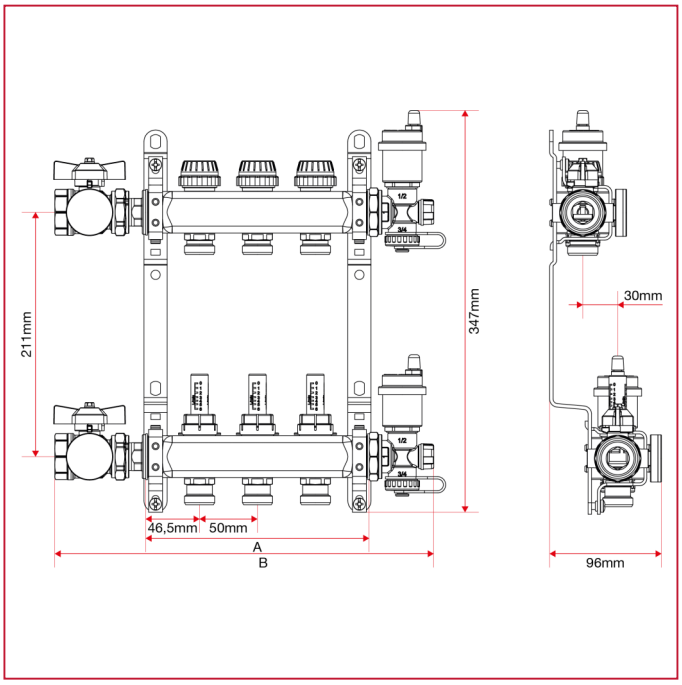
OVERALL DIMENSIONS art.90780C



90780C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	277	327	377	427	477	527	577	627	677	727	777	827
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.90790C

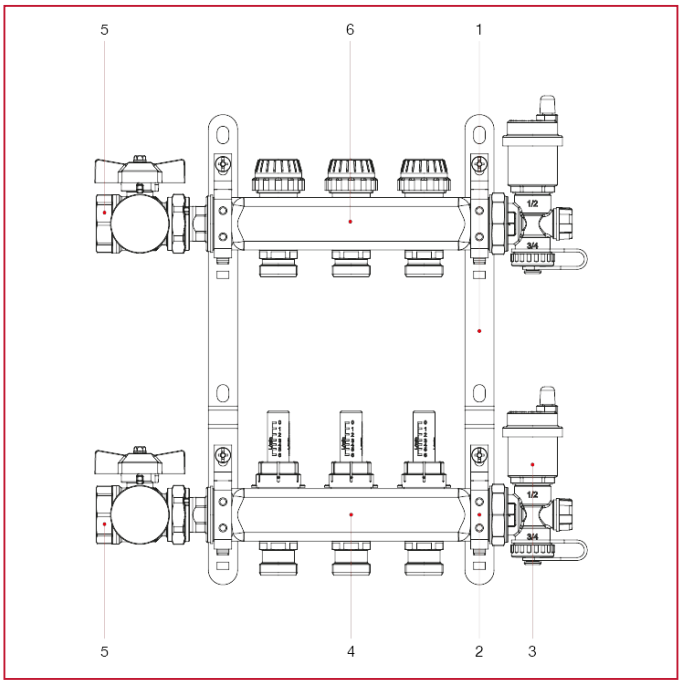


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

90790C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	277	327	377	427	477	527	577	627	677	727	777	827
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

MATERIALS



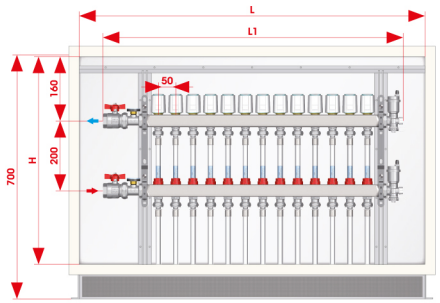
POS.	DESCRIPTION	N.	MATERIAL
1	Mounted bracket in steel	2	Steel P11
2	Mounted collar	4	Steel P11
3	Automatic air vent group	2	Nickel-plated brass CW617N
4	Single manifold in stainless with flow meters	1	Stainless steel AISI 304L
5	IDEAL ball valve kit for manifolds	1	Nickel-plated brass CW617N
6	Single manifold in stainless steelwith shut-off valves	1	Stainless steel AISI 304L

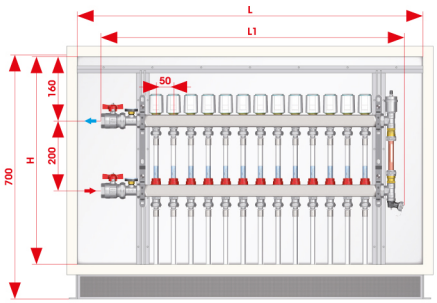
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

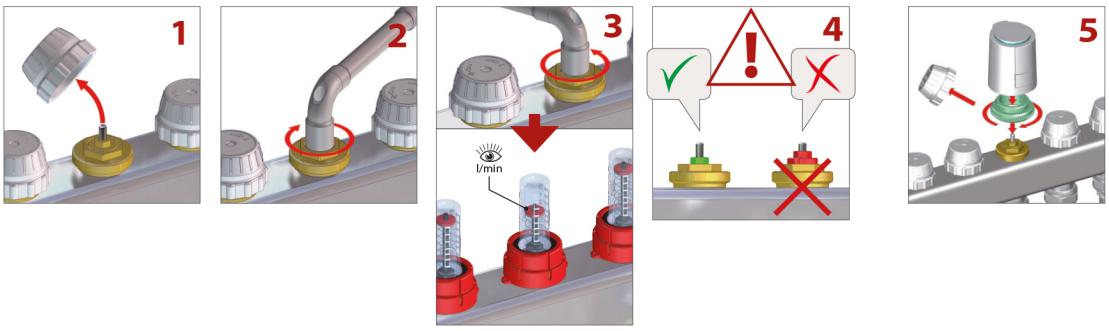
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

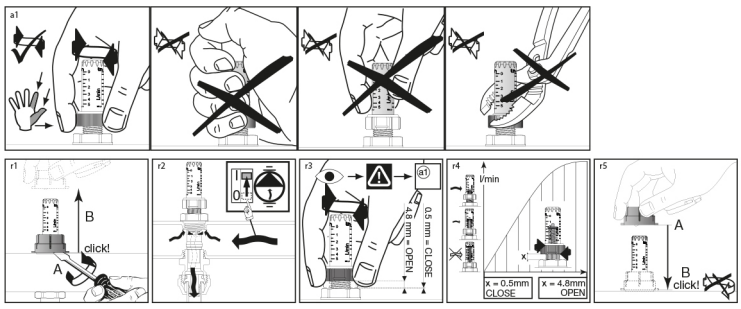
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

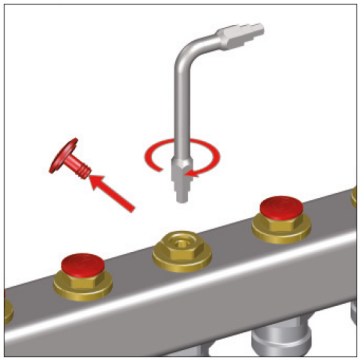
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



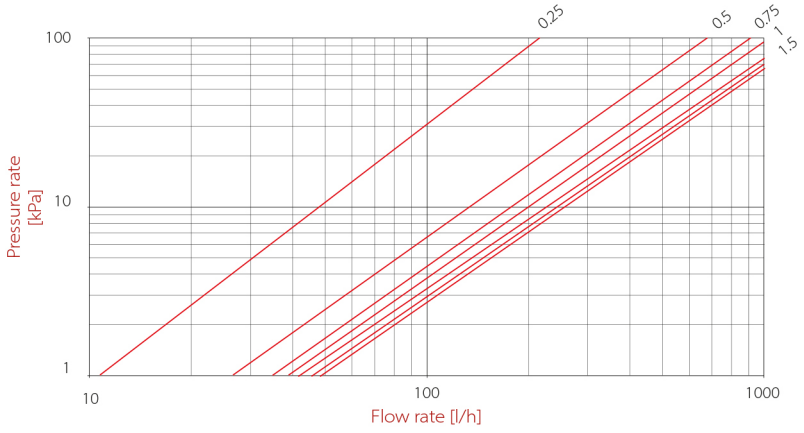
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



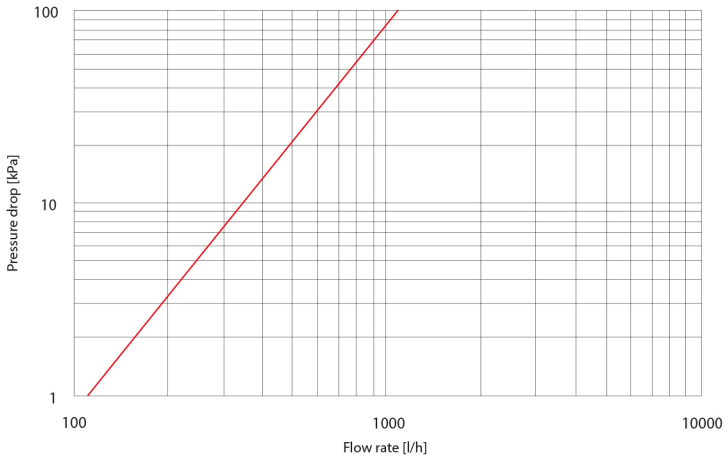
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

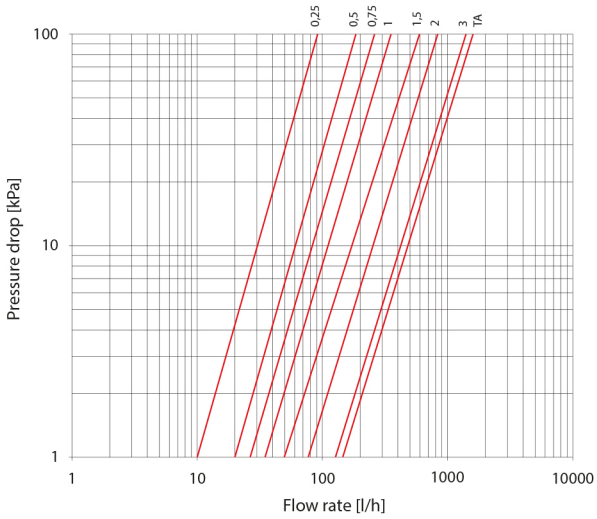
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

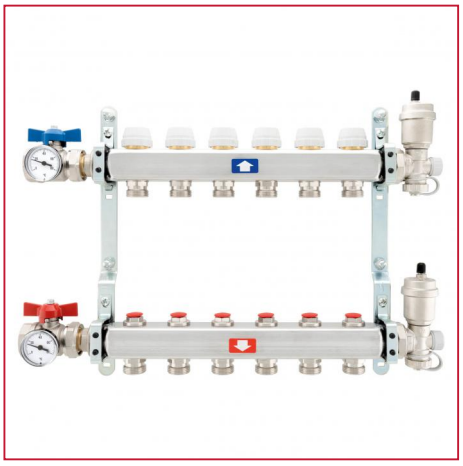
Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

912C Complete pre-assembled manifold, with lockshields

100% TESTED



912C

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9120010002034C	1/1
1"x3/4"x3	10bar/145psi	9120010003034C	1/1
1"x3/4"x4	10bar/145psi	9120010004034C	1/1
1"x3/4"x5	10bar/145psi	9120010005034C	1/1
1"x3/4"x6	10bar/145psi	9120010006034C	1/1
1"x3/4"x7	10bar/145psi	9120010007034C	1/1
1"x3/4"x8	10bar/145psi	9120010008034C	1/1
1"x3/4"x9	10bar/145psi	9120010009034C	1/1
1"x3/4"x10	10bar/145psi	9120010010034C	1/1
1"x3/4"x11	10bar/145psi	9120010011034C	1/1
1"x3/4"x12	10bar/145psi	9120010012034C	1/1
1"x3/4"x13	10bar/145psi	9120010013034C	1/1

91280C

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9128010002034C	1/1
1"x3/4"x3	10bar/145psi	9128010003034C	1/1
1"x3/4"x4	10bar/145psi	9128010004034C	1/1
1"x3/4"x5	10bar/145psi	9128010005034C	1/1
1"x3/4"x6	10bar/145psi	9128010006034C	1/1
1"x3/4"x7	10bar/145psi	9128010007034C	1/1
1"x3/4"x8	10bar/145psi	9128010008034C	1/1
1"x3/4"x9	10bar/145psi	9128010009034C	1/1
1"x3/4"x10	10bar/145psi	9128010010034C	1/1
1"x3/4"x11	10bar/145psi	9128010011034C	1/1
1"x3/4"x12	10bar/145psi	9128010012034C	1/1
1"x3/4"x13	10bar/145psi	9128010013034C	1/1

91290C

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9129010002034C	1/1
1"x3/4"x3	10bar/145psi	9129010003034C	1/1
1"x3/4"x4	10bar/145psi	9129010004034C	1/1
1"x3/4"x5	10bar/145psi	9129010005034C	1/1
1"x3/4"x6	10bar/145psi	9129010006034C	1/1
1"x3/4"x7	10bar/145psi	9129010007034C	1/1
1"x3/4"x8	10bar/145psi	9129010008034C	1/1
1"x3/4"x9	10bar/145psi	9129010009034C	1/1
1"x3/4"x10	10bar/145psi	9129010010034C	1/1
1"x3/4"x11	10bar/145psi	9129010011034C	1/1
1"x3/4"x12	10bar/145psi	9129010012034C	1/1
1"x3/4"x13	10bar/145psi	9129010013034C	1/1

CERTIFICATIONS

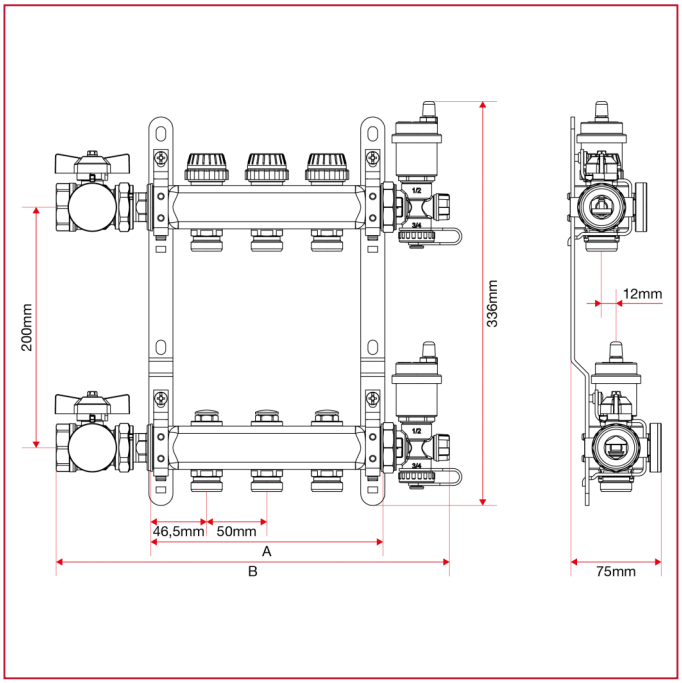
TECHNICAL SPECIFICATIONS

Consisting of:
- 1 return manifold in stainless steel AISI 304L with shut-off valves preset for electrothermal actuators
- 1 flow manifold in stainless steel AISI 304L with lockshields
- 2 complete metal brackets
- 2 shut-off ball valves with thermometers
- 2 end pieces with air vent valve and drain cock

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.
In case of use of electric actuators Art. 891M and 891MR, it is suggested to use the off-centre by-pass kit Art. 860BY.
ATTENTION: manifolds will be supplied mounted on the brackets; accessories will be supplied separately, inside the same box.

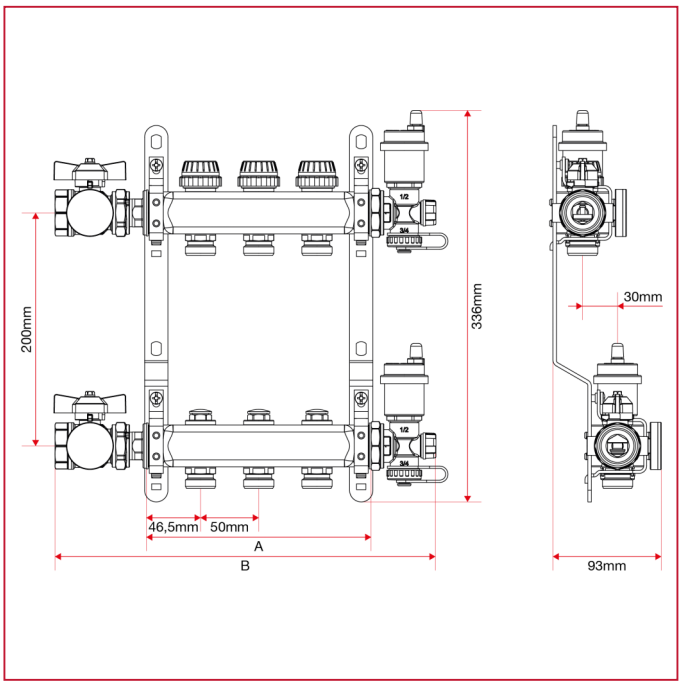
OVERALL DIMENSIONS art.912C



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	277	327	377	427	477	527	577	627	677	727	777	827
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

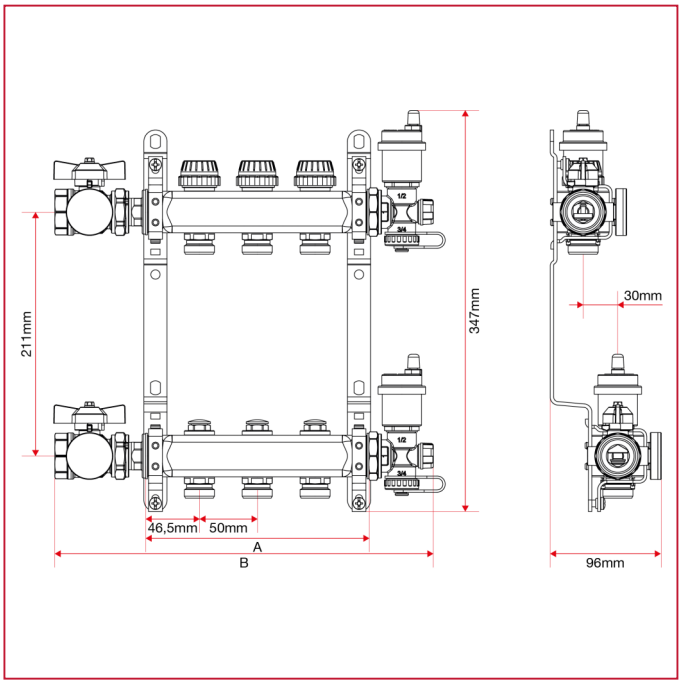
OVERALL DIMENSIONS art.91280C



91280C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	277	327	377	427	477	527	577	627	677	727	777	827
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

OVERALL DIMENSIONS art.91290C

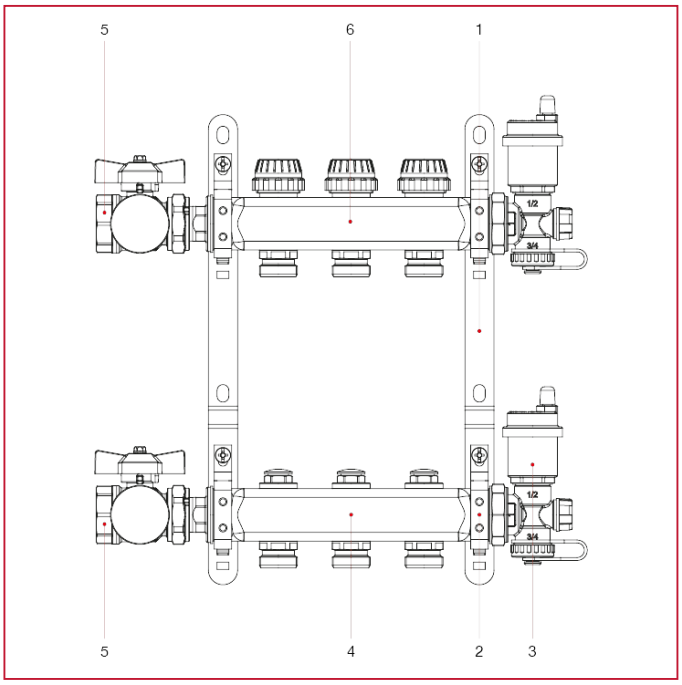


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

91290C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	277	327	377	427	477	527	577	627	677	727	777	827
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

MATERIALS



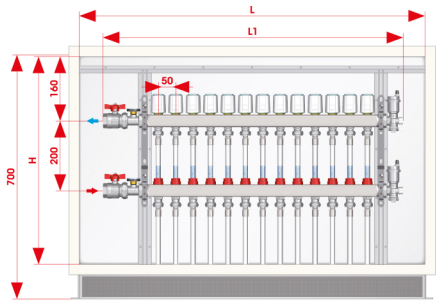
POS.	DESCRIPTION	N.	MATERIAL
1	Mounted bracket in steel	2	Steel P11
2	Mounted collar	4	Steel P11
3	Automatic air vent group	2	Nickel-plated brass CW617N
4	Single manifold in stainless steel with lockshields	1	Stainless steel AISI 304L
5	IDEAL ball valve kit for manifolds	1	Nickel-plated brass CW617N
6	Single manifold in stainless steelwith shut-off valves	1	Stainless steel AISI 304L

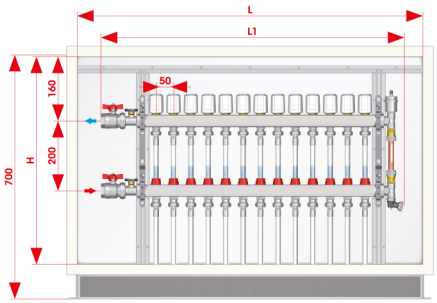
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

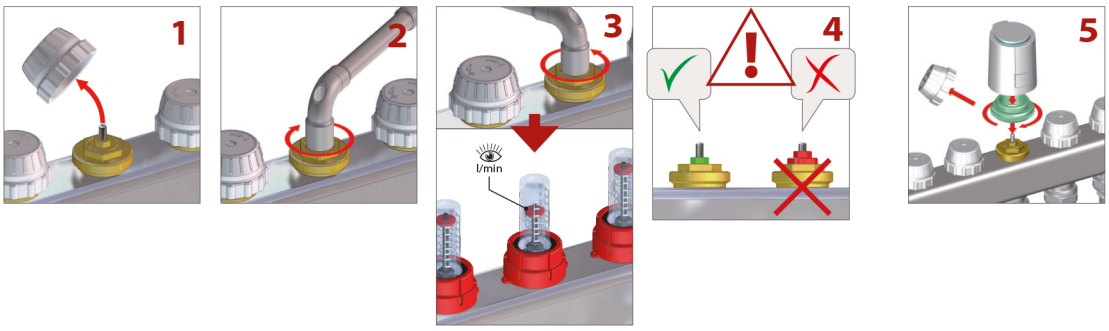
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

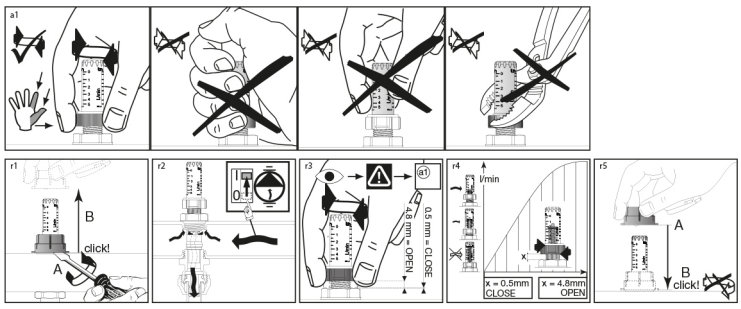
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

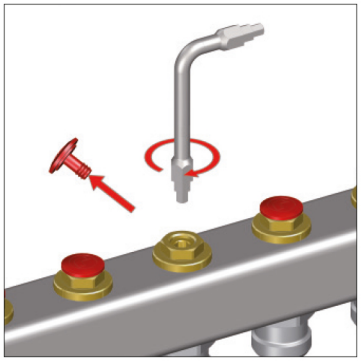
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



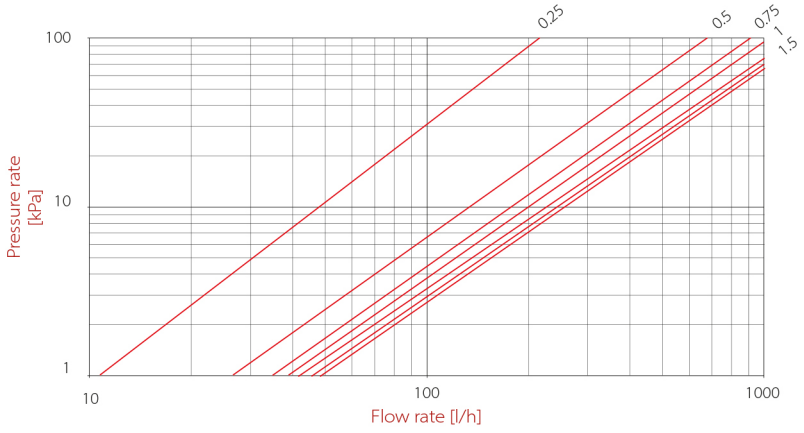
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



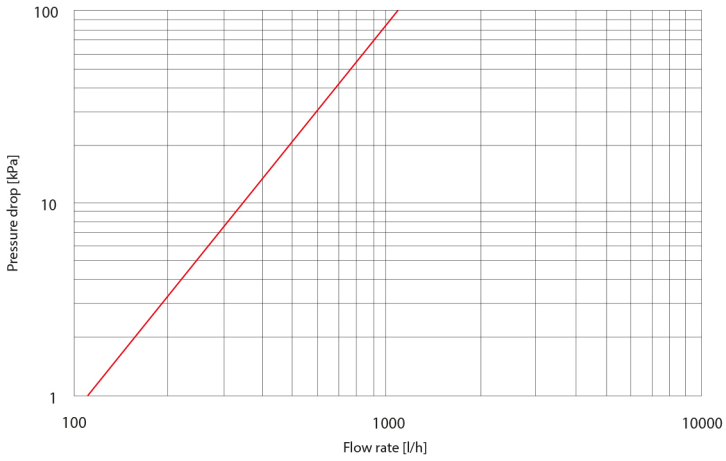
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

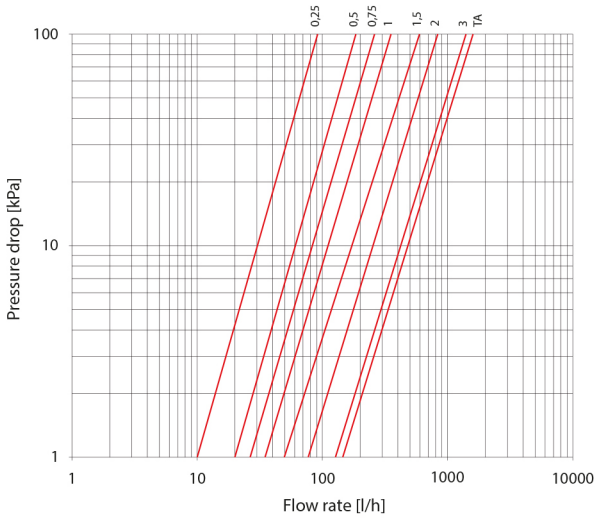
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

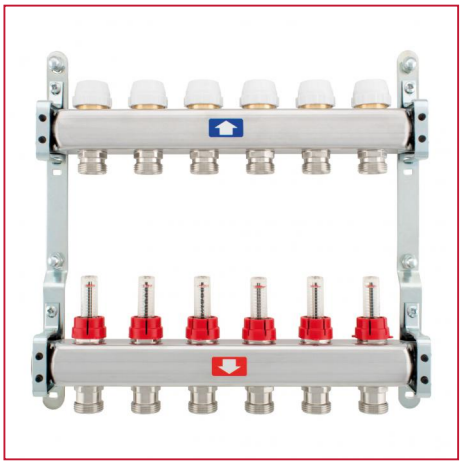
Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

917C Pre-assembled manifold with flow meters

100% TESTED



917C

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9170010002034C	1/1
1"x3/4"x3	6bar/87psi	9170010003034C	1/1
1"x3/4"x4	6bar/87psi	9170010004034C	1/1
1"x3/4"x5	6bar/87psi	9170010005034C	1/1
1"x3/4"x6	6bar/87psi	9170010006034C	1/1
1"x3/4"x7	6bar/87psi	9170010007034C	1/1
1"x3/4"x8	6bar/87psi	9170010008034C	1/1
1"x3/4"x9	6bar/87psi	9170010009034C	1/1
1"x3/4"x10	6bar/87psi	9170010010034C	1/1
1"x3/4"x11	6bar/87psi	9170010011034C	1/1
1"x3/4"x12	6bar/87psi	9170010012034C	1/1
1"x3/4"x13	6bar/87psi	9170010013034C	1/1

91780C

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9178010002034C	1/1
1"x3/4"x3	6bar/87psi	9178010003034C	1/1
1"x3/4"x4	6bar/87psi	9178010004034C	1/1
1"x3/4"x5	6bar/87psi	9178010005034C	1/1
1"x3/4"x6	6bar/87psi	9178010006034C	1/1
1"x3/4"x7	6bar/87psi	9178010007034C	1/1
1"x3/4"x8	6bar/87psi	9178010008034C	1/1
1"x3/4"x9	6bar/87psi	9178010009034C	1/1
1"x3/4"x10	6bar/87psi	9178010010034C	1/1
1"x3/4"x11	6bar/87psi	9178010011034C	1/1
1"x3/4"x12	6bar/87psi	9178010012034C	1/1
1"x3/4"x13	6bar/87psi	9178010013034C	1/1

91790C

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9179010002034C	1/1
1"x3/4"x3	6bar/87psi	9179010003034C	1/1
1"x3/4"x4	6bar/87psi	9179010004034C	1/1
1"x3/4"x5	6bar/87psi	9179010005034C	1/1
1"x3/4"x6	6bar/87psi	9179010006034C	1/1
1"x3/4"x7	6bar/87psi	9179010007034C	1/1
1"x3/4"x8	6bar/87psi	9179010008034C	1/1
1"x3/4"x9	6bar/87psi	9179010009034C	1/1
1"x3/4"x10	6bar/87psi	9179010010034C	1/1
1"x3/4"x11	6bar/87psi	9179010011034C	1/1
1"x3/4"x12	6bar/87psi	9179010012034C	1/1
1"x3/4"x13	6bar/87psi	9179010013034C	1/1

CERTIFICATIONS

TECHNICAL SPECIFICATIONS

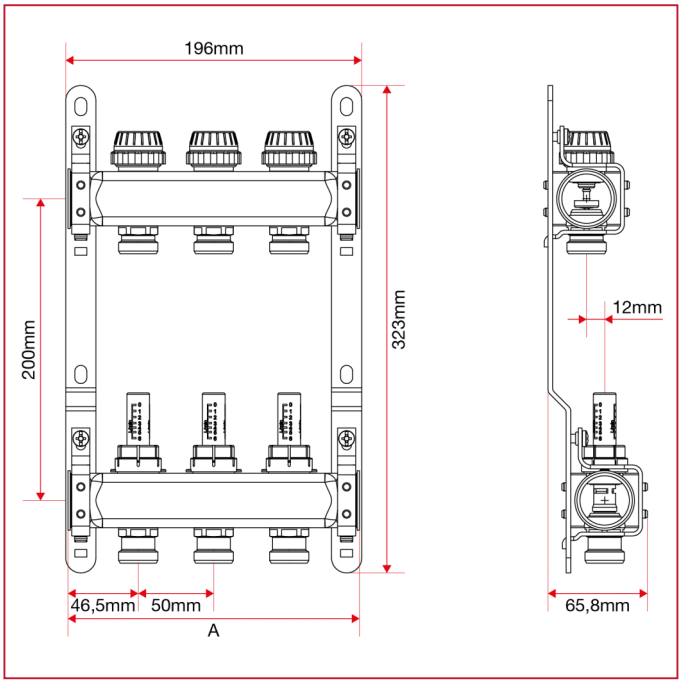
Consisting of:
- 1 return manifold in stainless steel AISI 304L with shut-off valves preset for electrothermal actuators
- 1 flow manifold in stainless steel AISI 304L with flow meters
- 2 complete metal brackets

Available sizes: 1”.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

Maximum working pressure: 6 bar (10 bar for installation test).
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4" Eurokonus.
Outlet centre distance: mm.50.
In case of use of electric actuators Art. 891M and 891MR, it is suggested to use the off-centre by-pass kit Art. 860BY.
ATTENTION: manifolds will be supplied mounted on the brackets.

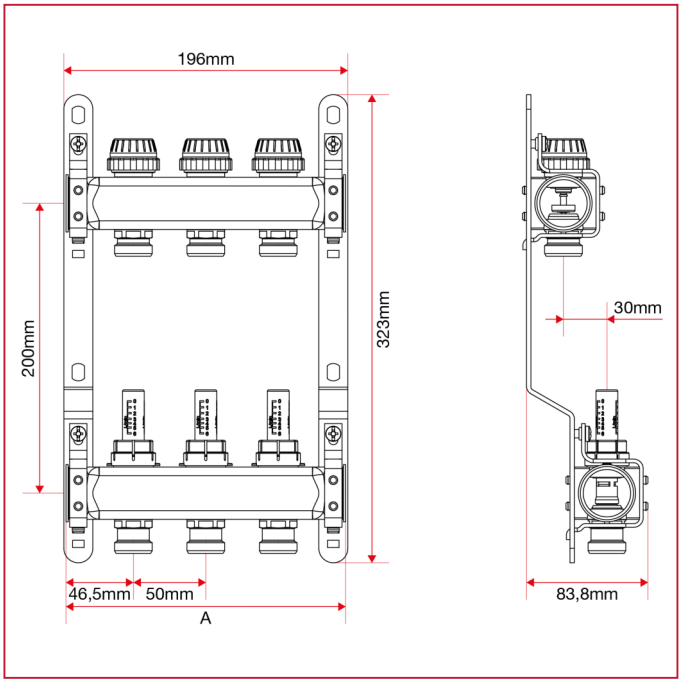
OVERALL DIMENSIONS art.917C



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

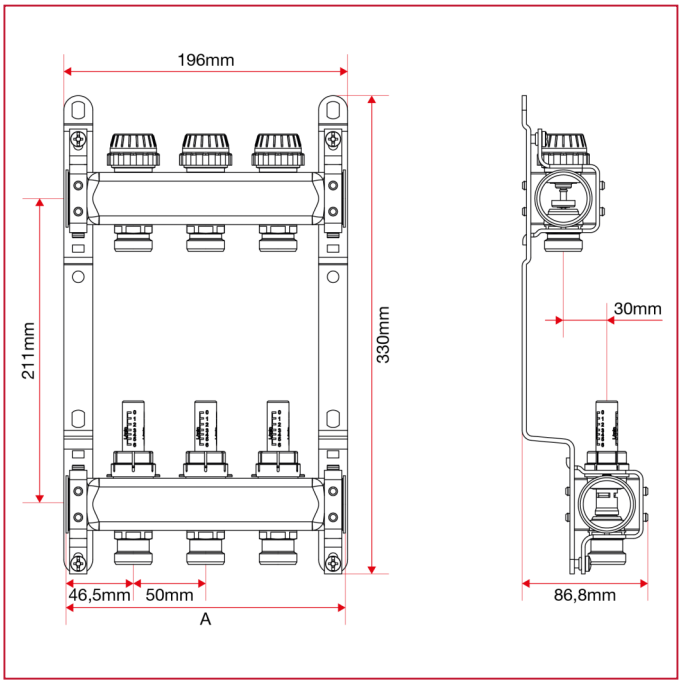
OVERALL DIMENSIONS art.91780C



91780C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.91790C

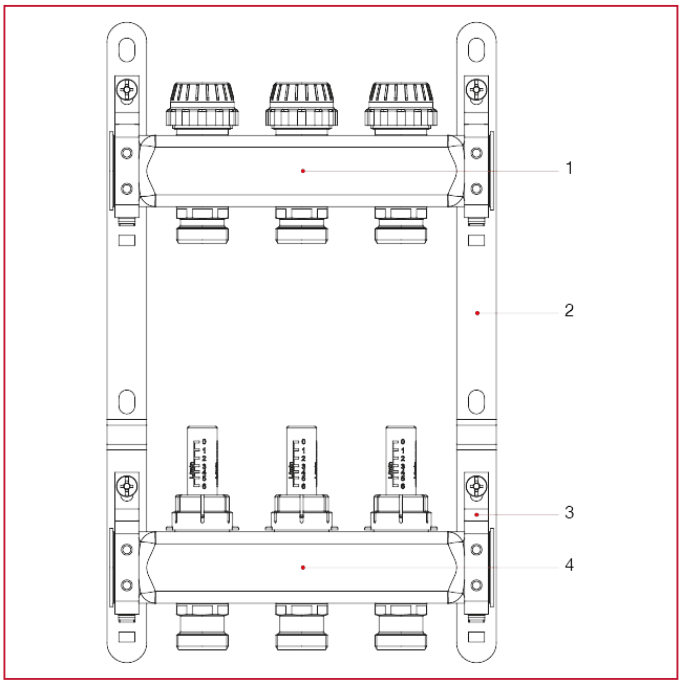


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

91790C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

MATERIALS



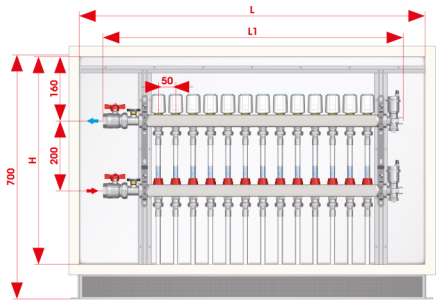
POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold in stainless steel with shut-off valves	1	Stainless steel AISI 304L
2	Mounted bracket in steel	2	Steel P11
3	Mounted collar	4	Steel P11
4	Single manifold in stainless with flow meters	1	Stainless steel AISI 304L

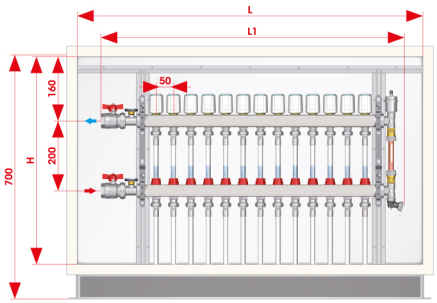
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

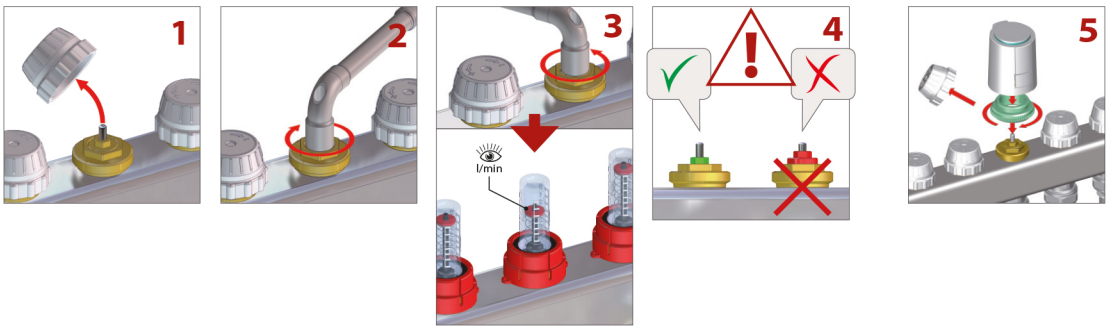
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

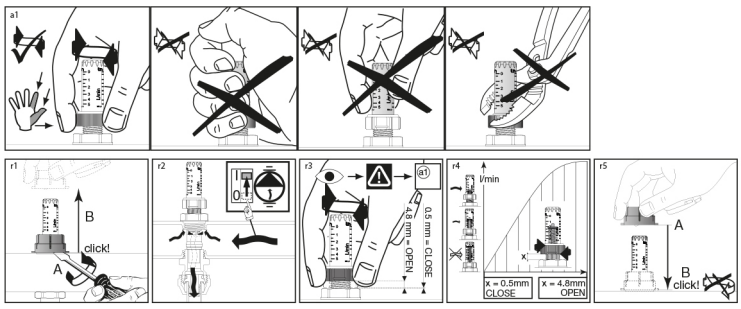
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

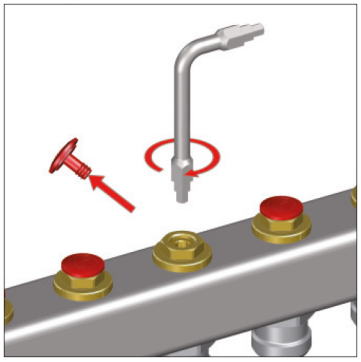
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



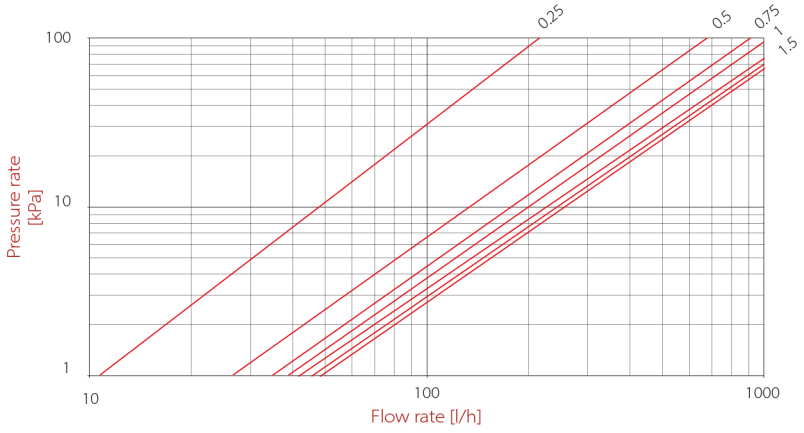
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



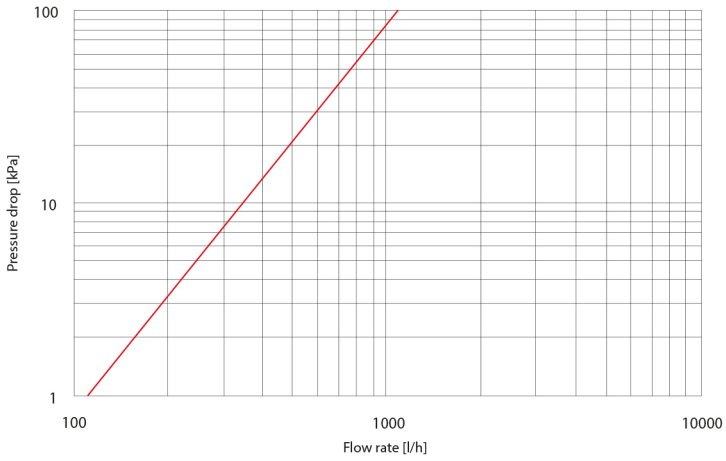
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

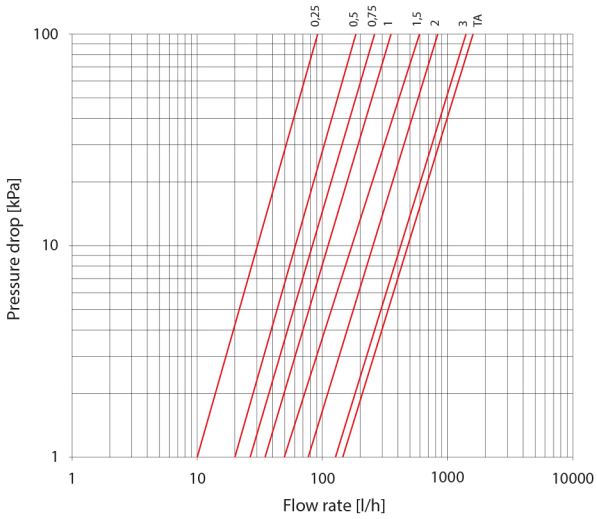
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

917CDE Pre-assembled manifold with flow meters, air vent valve and drain cock

100% TESTED

917CDE

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9170010002034CDE	1/1
1"x3/4"x3	6bar/87psi	9170010003034CDE	1/1
1"x3/4"x4	6bar/87psi	9170010004034CDE	1/1
1"x3/4"x5	6bar/87psi	9170010005034CDE	1/1
1"x3/4"x6	6bar/87psi	9170010006034CDE	1/1
1"x3/4"x7	6bar/87psi	9170010007034CDE	1/1
1"x3/4"x8	6bar/87psi	9170010008034CDE	1/1
1"x3/4"x9	6bar/87psi	9170010009034CDE	1/1
1"x3/4"x10	6bar/87psi	9170010010034CDE	1/1
1"x3/4"x11	6bar/87psi	9170010011034CDE	1/1
1"x3/4"x12	6bar/87psi	9170010012034CDE	1/1

91780CDE

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9178010002034CDE	1/1
1"x3/4"x3	6bar/87psi	9178010003034CDE	1/1
1"x3/4"x4	6bar/87psi	9178010004034CDE	1/1
1"x3/4"x5	6bar/87psi	9178010005034CDE	1/1
1"x3/4"x6	6bar/87psi	9178010006034CDE	1/1
1"x3/4"x7	6bar/87psi	9178010007034CDE	1/1
1"x3/4"x8	6bar/87psi	9178010008034CDE	1/1
1"x3/4"x9	6bar/87psi	9178010009034CDE	1/1
1"x3/4"x10	6bar/87psi	9178010010034CDE	1/1
1"x3/4"x11	6bar/87psi	9178010011034CDE	1/1
1"x3/4"x12	6bar/87psi	9178010012034CDE	1/1

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9179010002034C DE	1/1
1"x3/4"x3	6bar/87psi	9179010003034C DE	1/1
1"x3/4"x4	6bar/87psi	9179010004034C DE	1/1
1"x3/4"x5	6bar/87psi	9179010005034C DE	1/1
1"x3/4"x6	6bar/87psi	9179010006034C DE	1/1
1"x3/4"x7	6bar/87psi	9179010007034C DE	1/1
1"x3/4"x8	6bar/87psi	9179010008034C DE	1/1
1"x3/4"x9	6bar/87psi	9179010009034C DE	1/1
1"x3/4"x10	6bar/87psi	9179010010034C DE	1/1
1"x3/4"x11	6bar/87psi	9179010011034C DE	1/1
1"x3/4"x12	6bar/87psi	9179010012034C DE	1/1

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

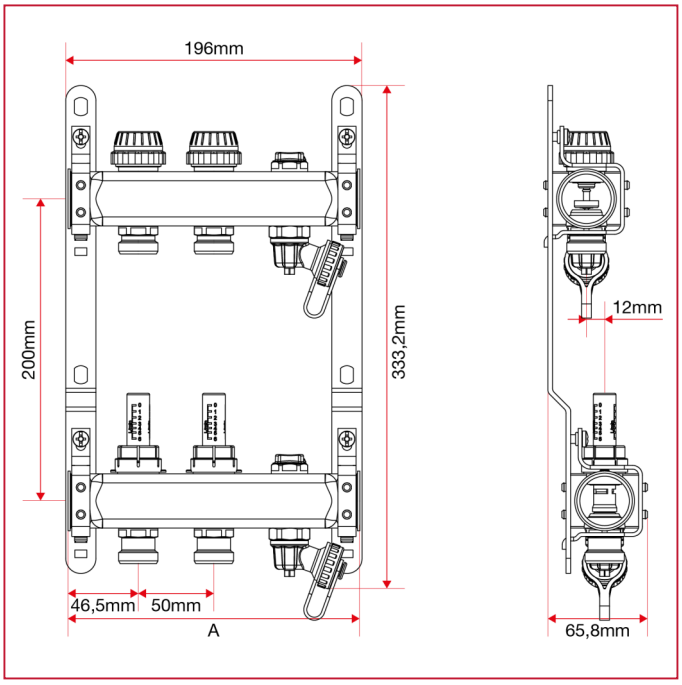
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Consisting of:
- 1 return manifold in stainless steel AISI 304L with shut-off valves preset for electrothermal actuators
- 1 flow manifold in stainless steel AISI 304L with flow meters
- 2 complete metal brackets
- 2 drain cocks
- 2 air vent valves

Available sizes: 1”.
Maximum working pressure: 6 bar (10 bar for installation test).
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 12, 3/4” Eurokonus.
Outlet centre distance: mm.50.
In case of use of electric actuators Art. 891M and 891MR, it is suggested to use the off-centre by-pass kit Art. 860BY.
ATTENTION: manifolds will be supplied mounted on the brackets.

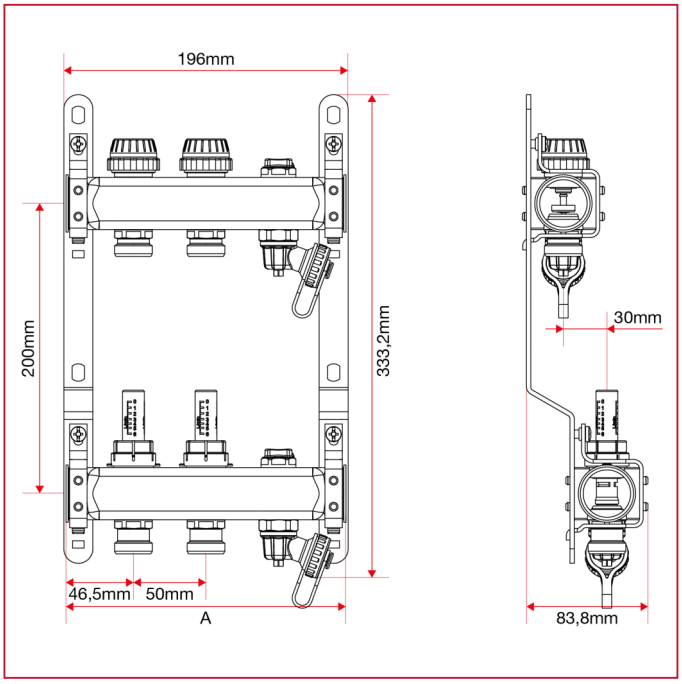
OVERALL DIMENSIONS art.917CDE



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

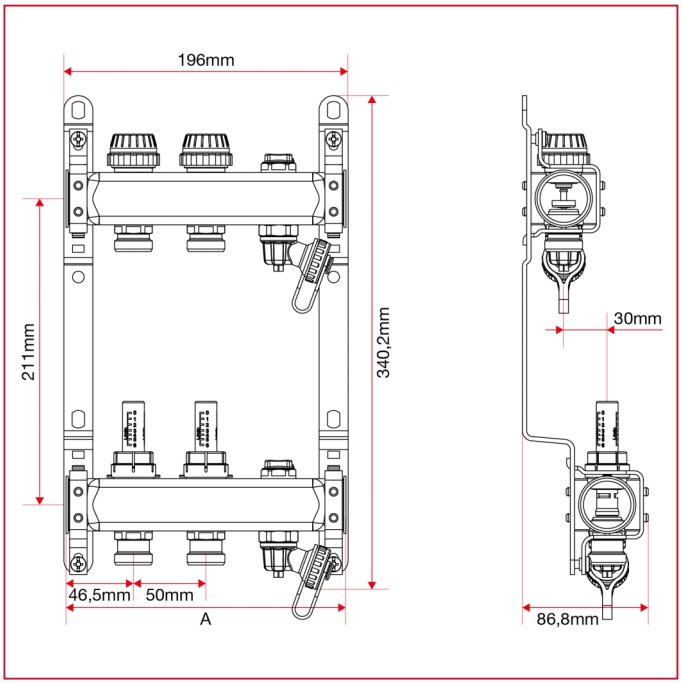
OVERALL DIMENSIONS art.91780CDE



91780CDE

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.91790CDE

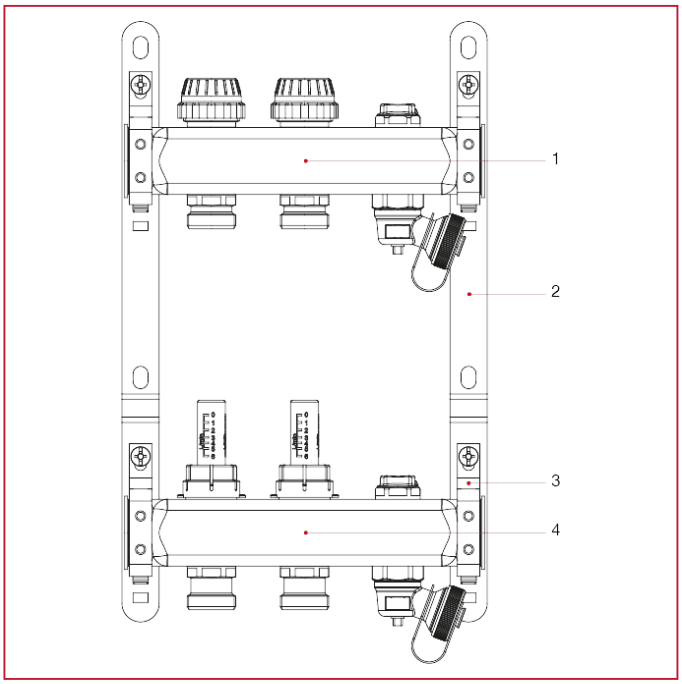


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

91790CDE

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87

MATERIALS



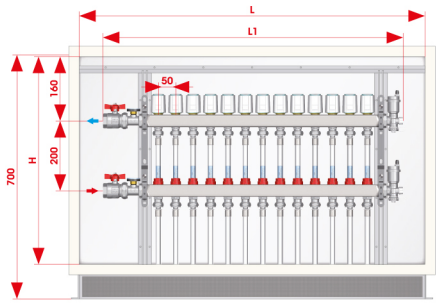
POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold in stainless steel with shut-off valves	1	Stainless steel AISI 304L
2	Mounted bracket in steel	2	Steel P11
3	Mounted collar	4	Steel P11
4	Single manifold in stainless steel with flow meters	1	Stainless steel AISI 304L

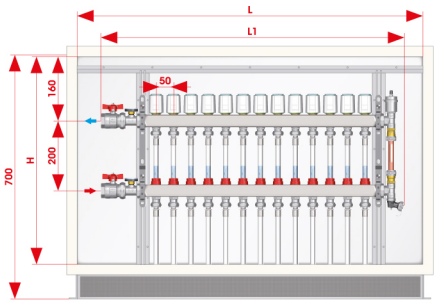
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

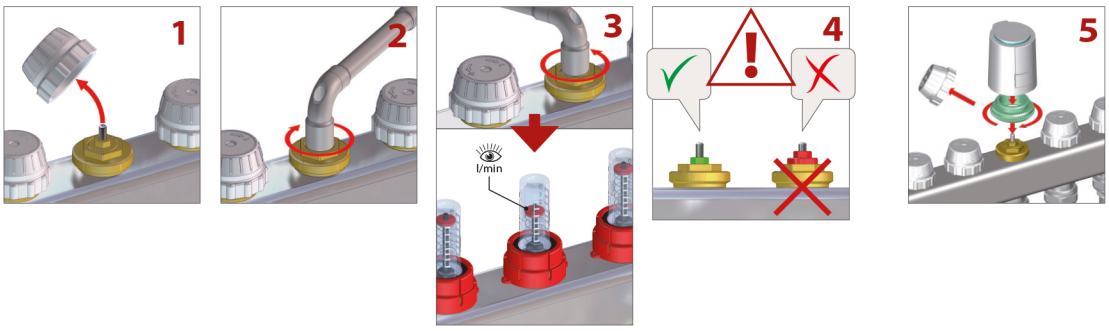
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

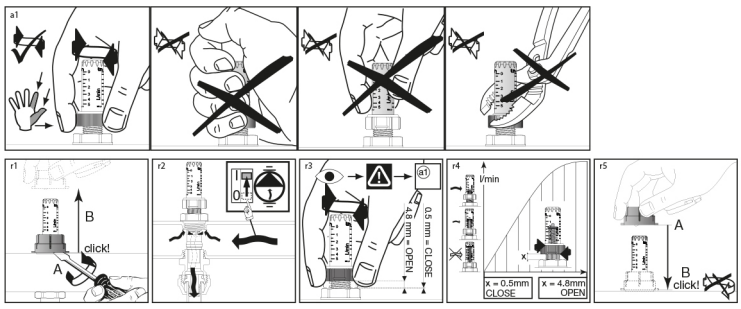
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

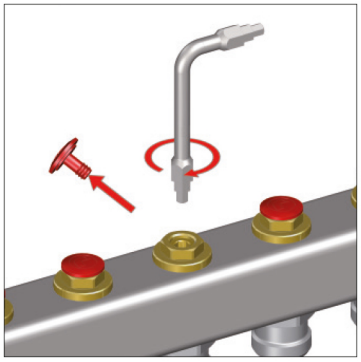
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



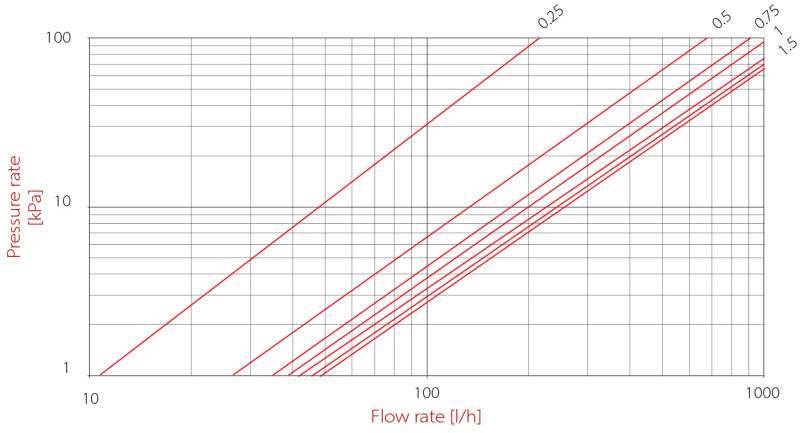
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



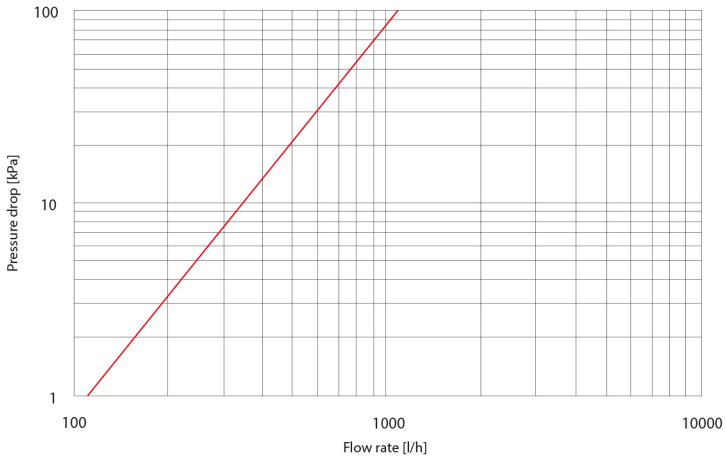
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

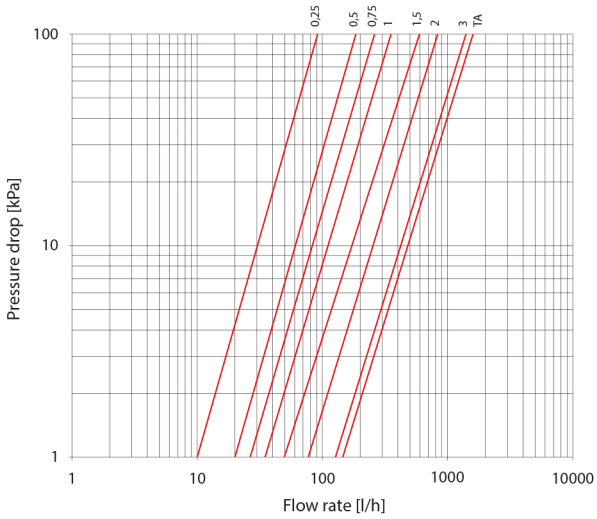
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

918C Pre-assembled manifold with flow meters, air vent valve and drain cock

100% TESTED

918C

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9180010002034C	1/1
1"x3/4"x3	6bar/87psi	9180010003034C	1/1
1"x3/4"x4	6bar/87psi	9180010004034C	1/1
1"x3/4"x5	6bar/87psi	9180010005034C	1/1
1"x3/4"x6	6bar/87psi	9180010006034C	1/1
1"x3/4"x7	6bar/87psi	9180010007034C	1/1
1"x3/4"x8	6bar/87psi	9180010008034C	1/1
1"x3/4"x9	6bar/87psi	9180010009034C	1/1
1"x3/4"x10	6bar/87psi	9180010010034C	1/1
1"x3/4"x11	6bar/87psi	9180010011034C	1/1
1"x3/4"x12	6bar/87psi	9180010012034C	1/1
1"x3/4"x13	6bar/87psi	9180010013034C	1/1

91880C

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9188010002034C	1/1
1"x3/4"x3	6bar/87psi	9188010003034C	1/1
1"x3/4"x4	6bar/87psi	9188010004034C	1/1
1"x3/4"x5	6bar/87psi	9188010005034C	1/1
1"x3/4"x6	6bar/87psi	9188010006034C	1/1
1"x3/4"x7	6bar/87psi	9188010007034C	1/1
1"x3/4"x8	6bar/87psi	9188010008034C	1/1
1"x3/4"x9	6bar/87psi	9188010009034C	1/1
1"x3/4"x10	6bar/87psi	9188010010034C	1/1
1"x3/4"x11	6bar/87psi	9188010011034C	1/1
1"x3/4"x12	6bar/87psi	9188010012034C	1/1
1"x3/4"x13	6bar/87psi	9188010013034C	1/1

91890C

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9189010002034C	1/1
1"x3/4"x3	6bar/87psi	9189010003034C	1/1
1"x3/4"x4	6bar/87psi	9189010004034C	1/1
1"x3/4"x5	6bar/87psi	9189010005034C	1/1
1"x3/4"x6	6bar/87psi	9189010006034C	1/1
1"x3/4"x7	6bar/87psi	9189010007034C	1/1
1"x3/4"x8	6bar/87psi	9189010008034C	1/1
1"x3/4"x9	6bar/87psi	9189010009034C	1/1
1"x3/4"x10	6bar/87psi	9189010010034C	1/1
1"x3/4"x11	6bar/87psi	9189010011034C	1/1
1"x3/4"x12	6bar/87psi	9189010012034C	1/1
1"x3/4"x13	6bar/87psi	9189010013034C	1/1

CERTIFICATIONS

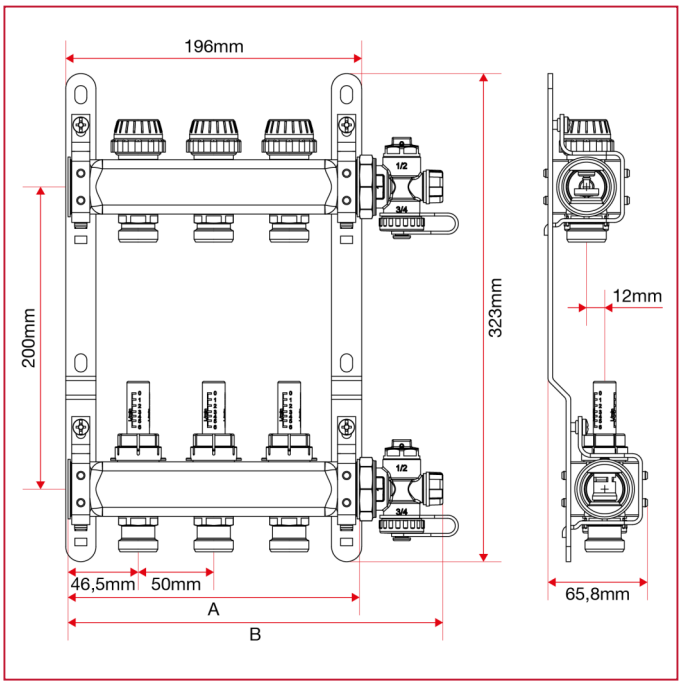
TECHNICAL SPECIFICATIONS

Consisting of:
- 1 return manifold in stainless steel AISI 304L with shut-off valves preset for electrothermal actuators
- 1 flow manifold in stainless steel AISI 304L with flow meters
- 2 adjustable end pieces with drain valve and manual air vent valve
- 2 complete metal brackets

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

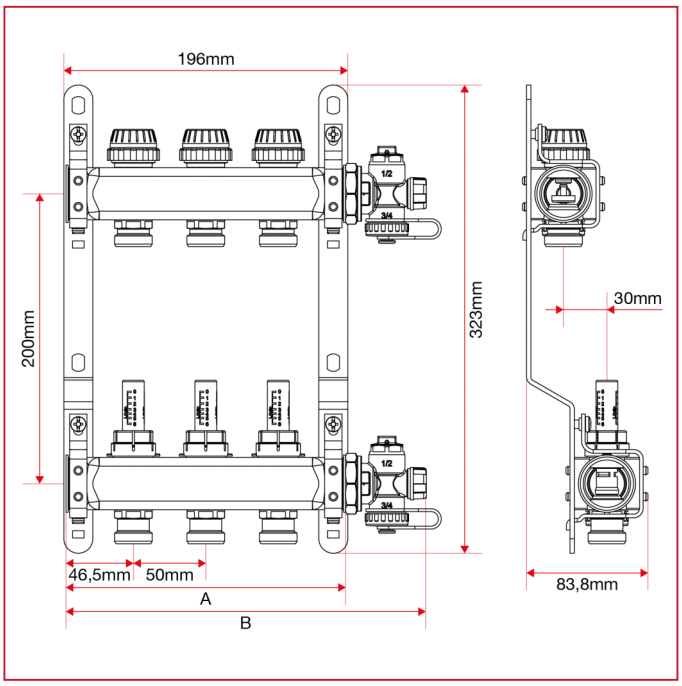
Available sizes: 1”.
Maximum working pressure: 6 bar (10 bar for installation test).
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.
In case of use of electric actuators Art. 891M and 891MR, it is suggested to use the off-centre by-pass kit Art. 860BY.
ATTENTION: manifolds will be supplied mounted on the brackets.

OVERALL DIMENSIONS art.918C



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	199	249	299	349	399	449	499	549	599	649	699	749
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

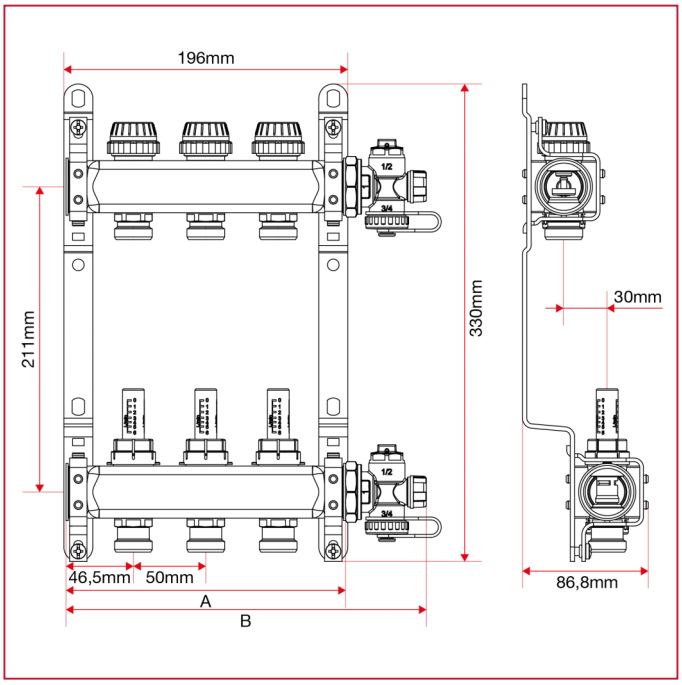
OVERALL DIMENSIONS art.91880C



91880C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	199	249	299	349	399	449	499	549	599	649	699	749
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.91890C

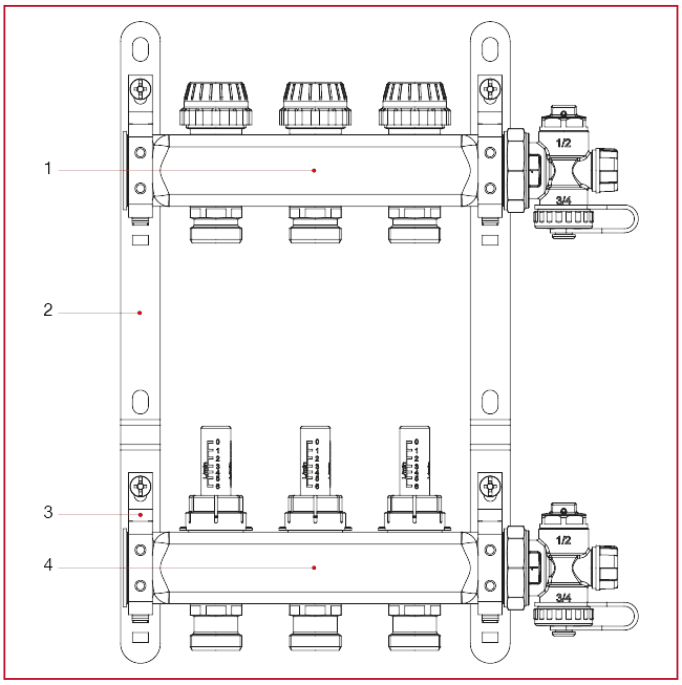


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

91890C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	199	249	299	349	399	449	499	549	599	649	699	749
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

MATERIALS



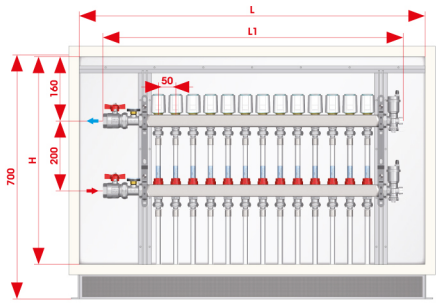
POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold in stainless steel with shut-off valves	1	Stainless steel AISI 304L
2	Mounted bracket in steel	2	Steel P11
3	Mounted collar	4	Steel P11
4	Single manifold in stainless with flow meters	1	Stainless steel AISI 304L

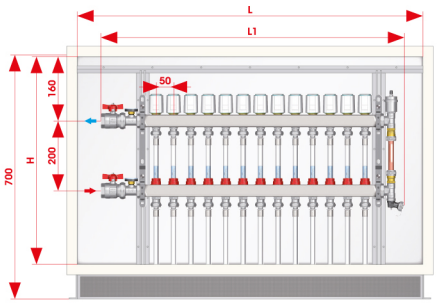
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

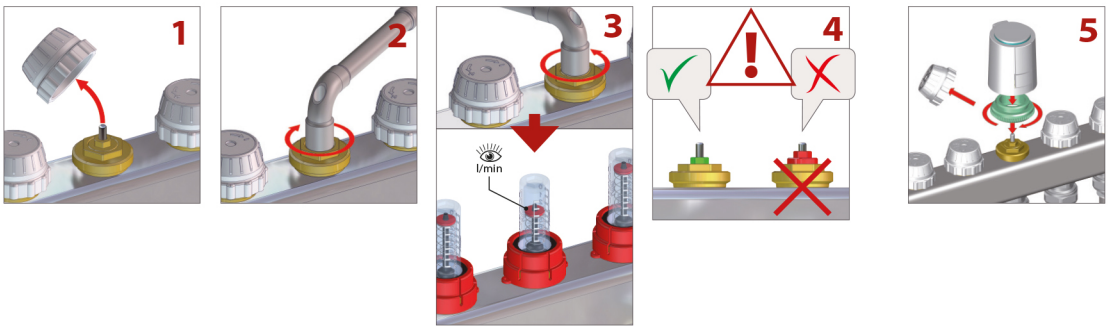
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

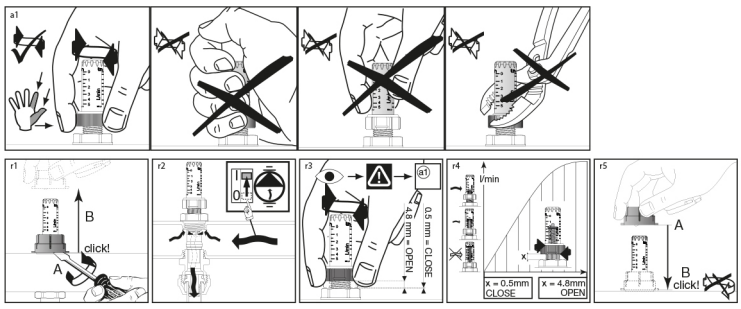
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

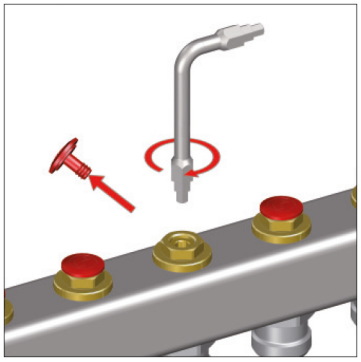
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



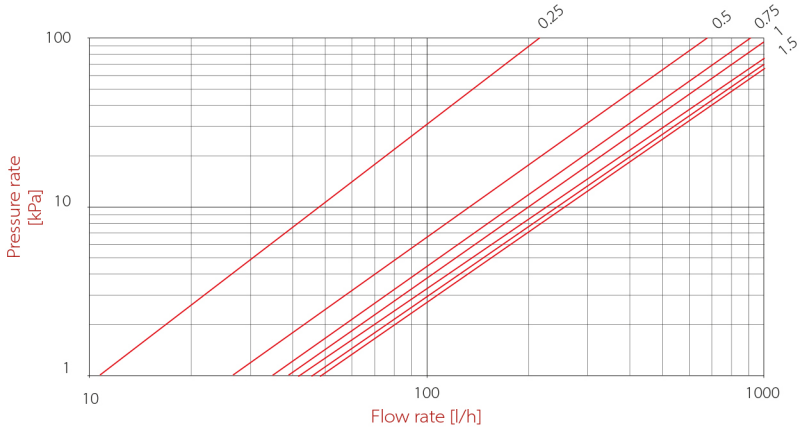
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



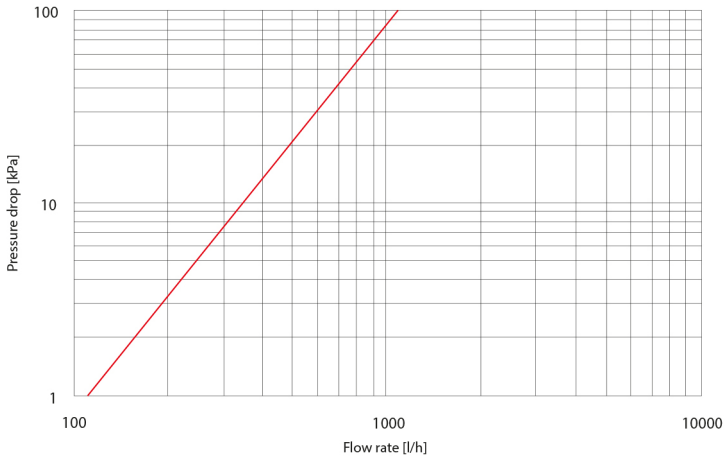
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

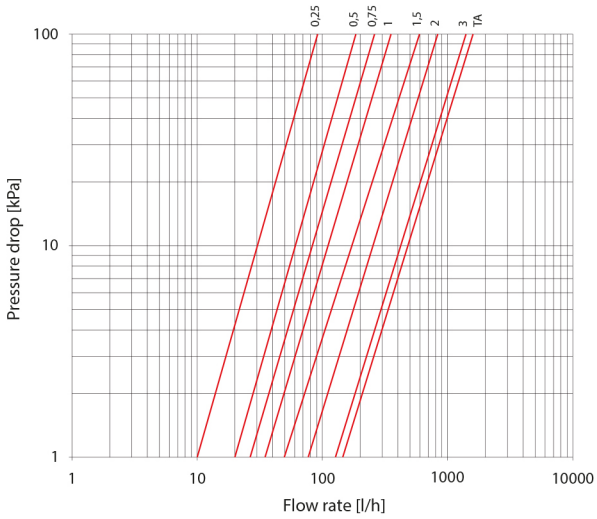
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

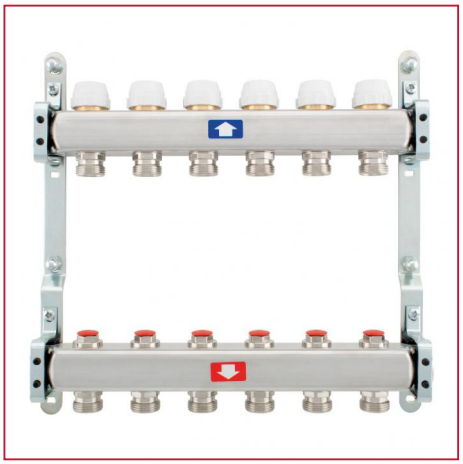
Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

922C Pre-assembled manifold with lockshields

100% TESTED



922C

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9220010002034C	1/1
1"x3/4"x3	10bar/145psi	9220010003034C	1/1
1"x3/4"x4	10bar/145psi	9220010004034C	1/1
1"x3/4"x5	10bar/145psi	9220010005034C	1/1
1"x3/4"x6	10bar/145psi	9220010006034C	1/1
1"x3/4"x7	10bar/145psi	9220010007034C	1/1
1"x3/4"x8	10bar/145psi	9220010008034C	1/1
1"x3/4"x9	10bar/145psi	9220010009034C	1/1
1"x3/4"x10	10bar/145psi	9220010010034C	1/1
1"x3/4"x11	10bar/145psi	9220010011034C	1/1
1"x3/4"x12	10bar/145psi	9220010012034C	1/1
1"x3/4"x13	10bar/145psi	9220010013034C	1/1

92280C

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9228010002034C	1/1
1"x3/4"x3	10bar/145psi	9228010003034C	1/1
1"x3/4"x4	10bar/145psi	9228010004034C	1/1
1"x3/4"x5	10bar/145psi	9228010005034C	1/1
1"x3/4"x6	10bar/145psi	9228010006034C	1/1
1"x3/4"x7	10bar/145psi	9228010007034C	1/1
1"x3/4"x8	10bar/145psi	9228010008034C	1/1
1"x3/4"x9	10bar/145psi	9228010009034C	1/1
1"x3/4"x10	10bar/145psi	9228010010034C	1/1
1"x3/4"x11	10bar/145psi	9228010011034C	1/1
1"x3/4"x12	10bar/145psi	9228010012034C	1/1
1"x3/4"x13	10bar/145psi	9228010013034C	1/1

92290C

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9229010002034C	1/1
1"x3/4"x3	10bar/145psi	9229010003034C	1/1
1"x3/4"x4	10bar/145psi	9229010004034C	1/1
1"x3/4"x5	10bar/145psi	9229010005034C	1/1
1"x3/4"x6	10bar/145psi	9229010006034C	1/1
1"x3/4"x7	10bar/145psi	9229010007034C	1/1
1"x3/4"x8	10bar/145psi	9229010008034C	1/1
1"x3/4"x9	10bar/145psi	9229010009034C	1/1
1"x3/4"x10	10bar/145psi	9229010010034C	1/1
1"x3/4"x11	10bar/145psi	9229010011034C	1/1
1"x3/4"x12	10bar/145psi	9229010012034C	1/1
1"x3/4"x13	10bar/145psi	9229010013034C	1/1

CERTIFICATIONS

TECHNICAL SPECIFICATIONS

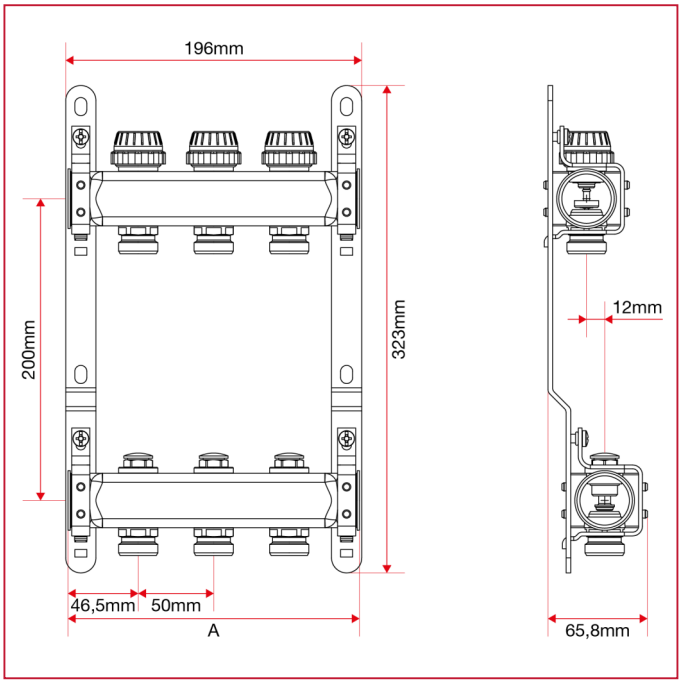
Consisting of:
- 1 return manifold in stainless steel AISI 304L with shut-off valves preset for electrothermal actuators
- 1 flow manifold in stainless steel AISI 304L with lockshields
- 2 complete metal brackets

Available sizes: 1”.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4" Eurokonus.
Outlet centre distance: mm.50.
In case of use of electric actuators Art. 891M and 891MR, it is suggested to use the off-centre by-pass kit Art. 860BY.
ATTENTION: manifolds will be supplied mounted on the brackets.

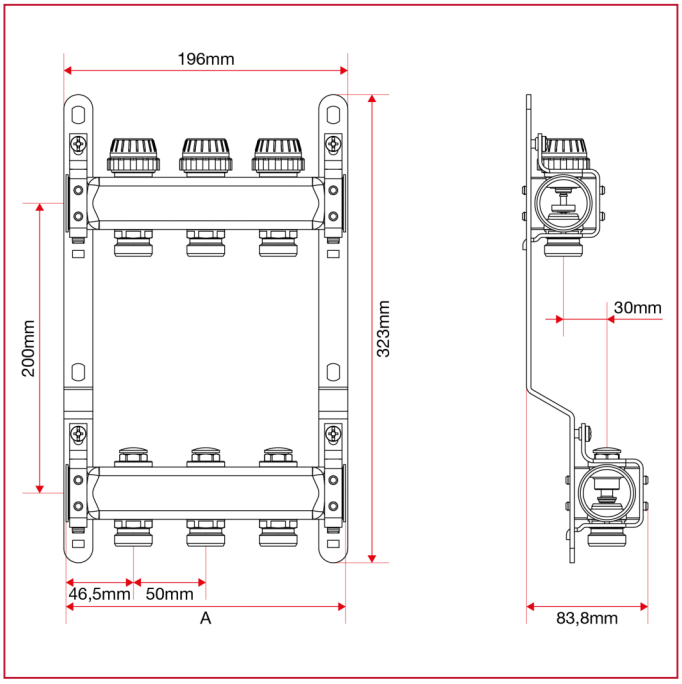
OVERALL DIMENSIONS art.922C



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

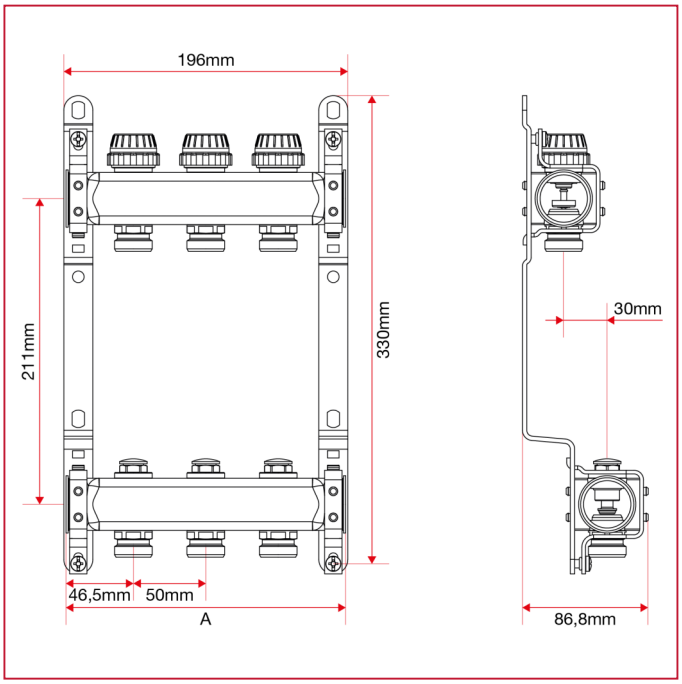
OVERALL DIMENSIONS art.92280C



92280C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

OVERALL DIMENSIONS art.92290C

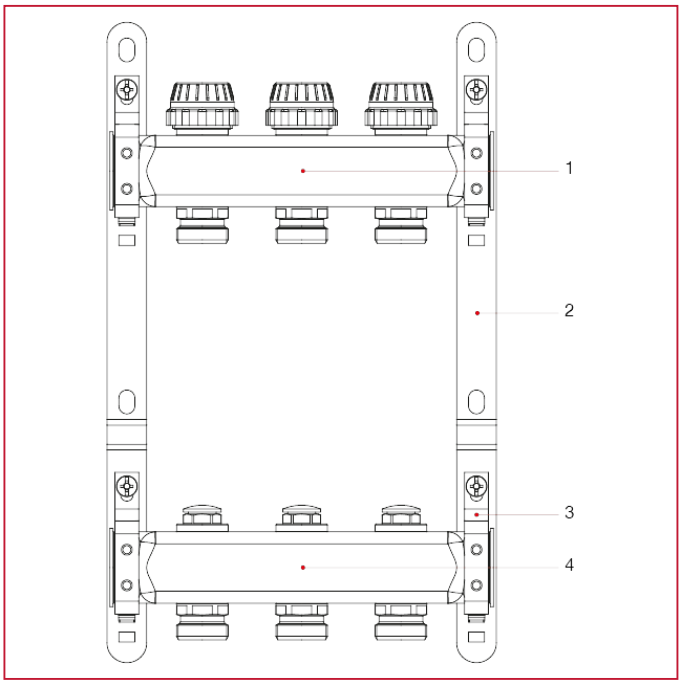


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

92290C

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

MATERIALS



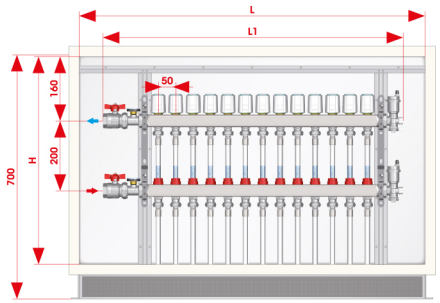
POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold in stainless steel with shut-off valves	1	Stainless steel AISI 304L
2	Mounted bracket in steel	2	Steel P11
3	Mounted collar	4	Steel P11
4	Single manifold in stainless steel with lockshields	1	Stainless steel AISI 304L

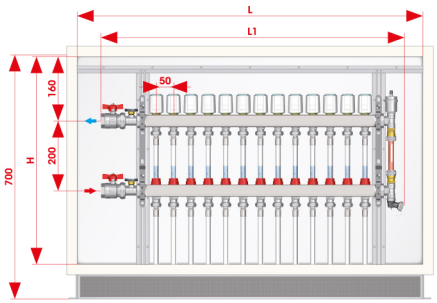
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

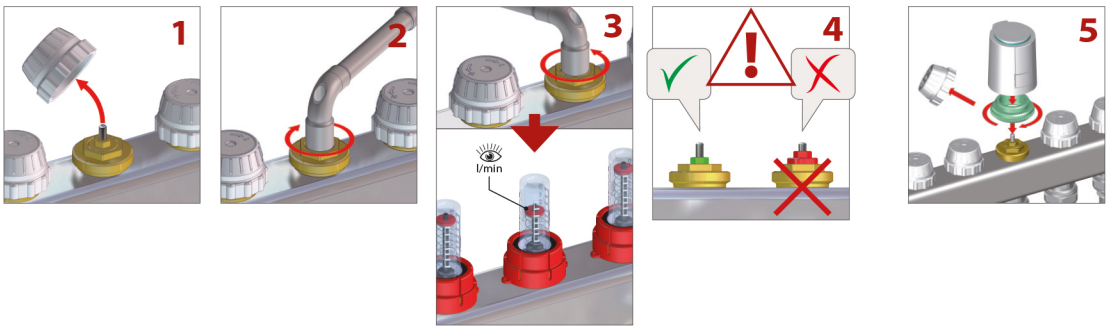
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

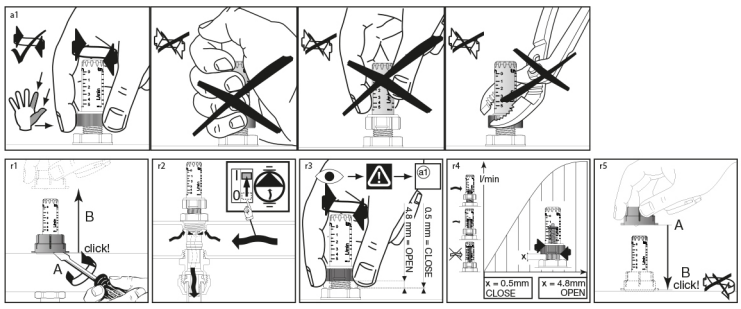
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

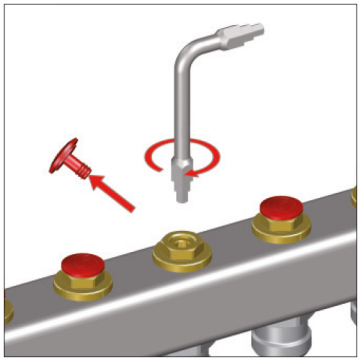
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



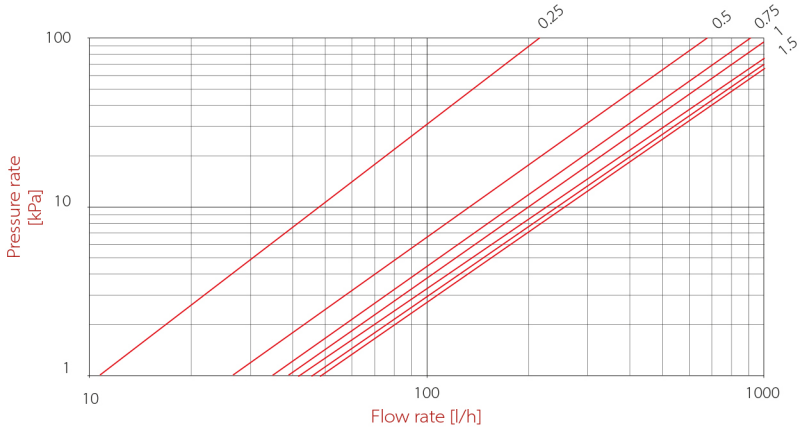
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



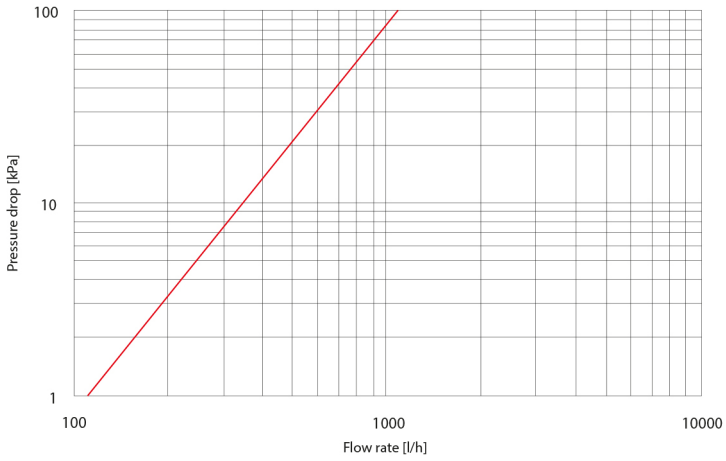
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

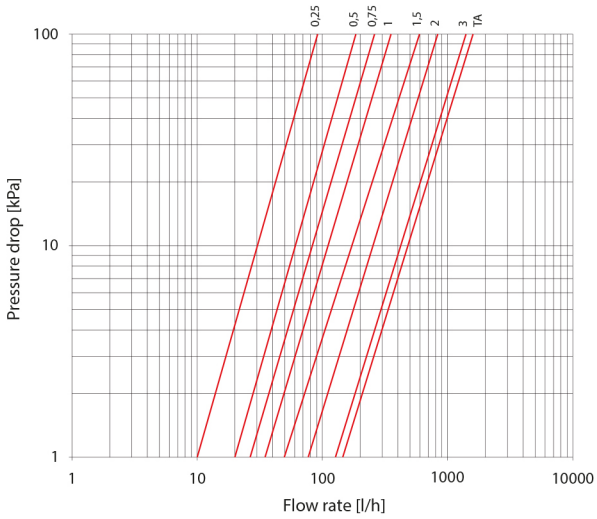
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)

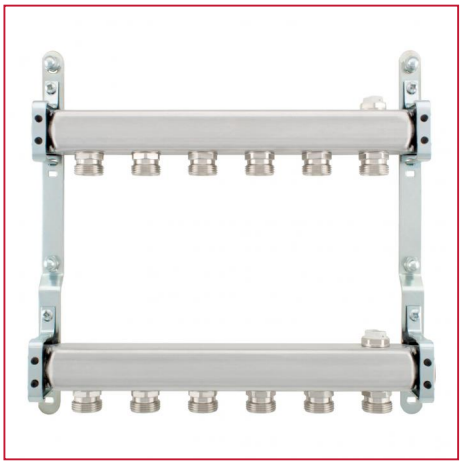


Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

922MO Pre-assembled manifold with air-vent valves

100% TESTED



922MO

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9220010002034 MO	1/1
1"x3/4"x3	10bar/145psi	9220010003034 MO	1/1
1"x3/4"x4	10bar/145psi	9220010004034 MO	1/1
1"x3/4"x5	10bar/145psi	9220010005034 MO	1/1
1"x3/4"x6	10bar/145psi	9220010006034 MO	1/1
1"x3/4"x7	10bar/145psi	9220010007034 MO	1/1
1"x3/4"x8	10bar/145psi	9220010008034 MO	1/1
1"x3/4"x9	10bar/145psi	9220010009034 MO	1/1
1"x3/4"x10	10bar/145psi	9220010010034 MO	1/1
1"x3/4"x11	10bar/145psi	9220010011034 MO	1/1
1"x3/4"x12	10bar/145psi	9220010012034 MO	1/1

92280MO

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9228010002034 MO	1/1
1"x3/4"x3	10bar/145psi	9228010003034 MO	1/1
1"x3/4"x4	10bar/145psi	9228010004034 MO	1/1
1"x3/4"x5	10bar/145psi	9228010005034 MO	1/1
1"x3/4"x6	10bar/145psi	9228010006034 MO	1/1
1"x3/4"x7	10bar/145psi	9228010007034 MO	1/1
1"x3/4"x8	10bar/145psi	9228010008034 MO	1/1
1"x3/4"x9	10bar/145psi	9228010009034 MO	1/1
1"x3/4"x10	10bar/145psi	9228010010034 MO	1/1
1"x3/4"x11	10bar/145psi	9228010011034 MO	1/1
1"x3/4"x12	10bar/145psi	9228010012034 MO	1/1

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9229010002034 MO	1/1
1"x3/4"x3	10bar/145psi	9229010003034 MO	1/1
1"x3/4"x4	10bar/145psi	9229010004034 MO	1/1
1"x3/4"x5	10bar/145psi	9229010005034 MO	1/1
1"x3/4"x6	10bar/145psi	9229010006034 MO	1/1
1"x3/4"x7	10bar/145psi	9229010007034 MO	1/1
1"x3/4"x8	10bar/145psi	9229010008034 MO	1/1
1"x3/4"x9	10bar/145psi	9229010009034 MO	1/1
1"x3/4"x10	10bar/145psi	9229010010034 MO	1/1
1"x3/4"x11	10bar/145psi	9229010011034 MO	1/1
1"x3/4"x12	10bar/145psi	9229010012034 MO	1/1

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

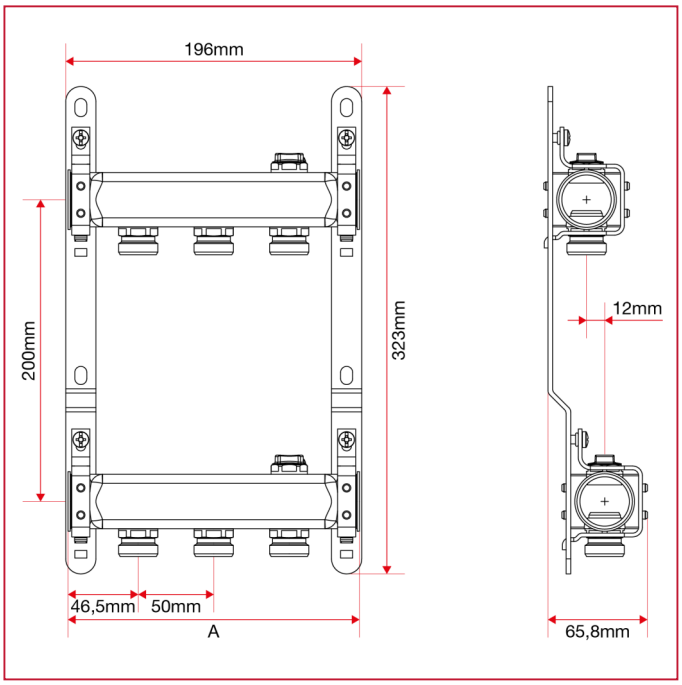
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Consisting of:
- 1 return manifold in stainless steel AISI 304L with air vent valve
- 1 flow manifold in stainless steel AISI 304L with air vent valve
- 2 complete metal brackets

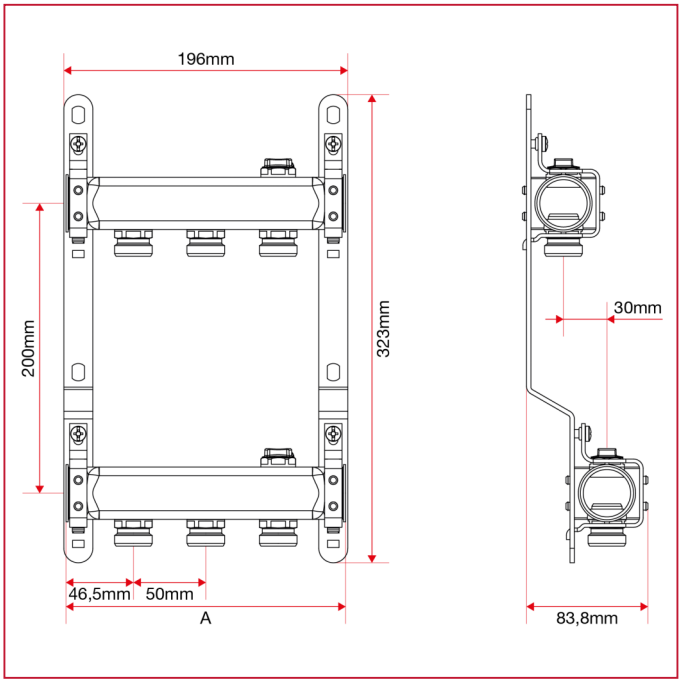
Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 12, 3/4” Eurokonus.
Outlet centre distance: mm.50.
ATTENTION: manifolds will be supplied mounted on the brackets.

OVERALL DIMENSIONS art.922MO



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	143	193	243	293	343	393	443	493	543	593	643
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145

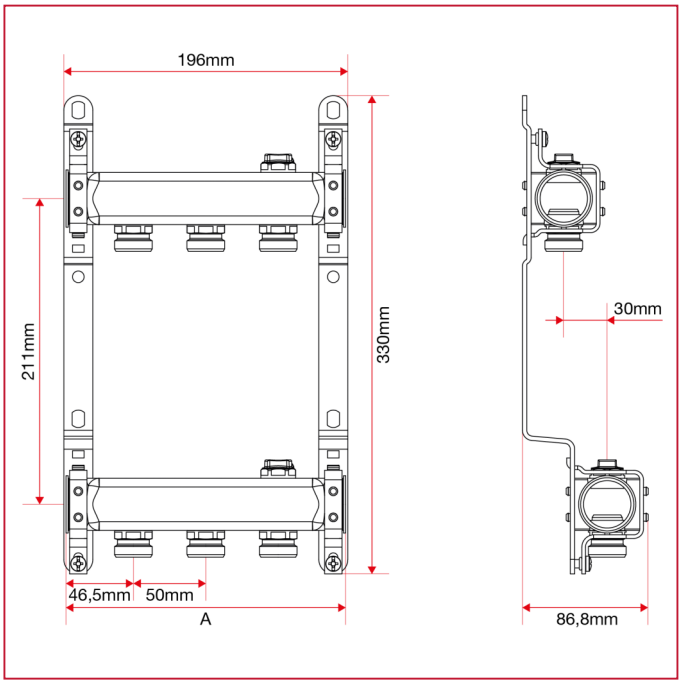
OVERALL DIMENSIONS art.92280MO



92280MO

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	143	193	243	293	343	393	443	493	543	593	643
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145

OVERALL DIMENSIONS art.92290MO

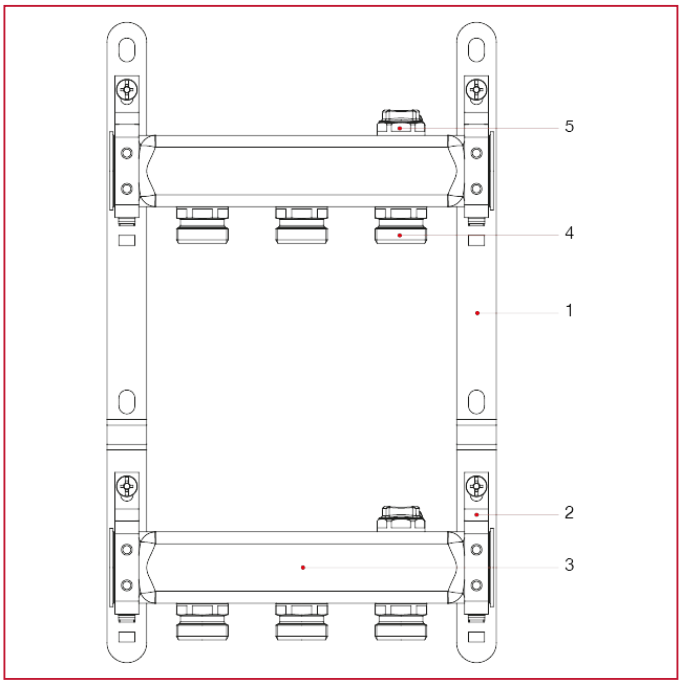


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

92290MO

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	143	193	243	293	343	393	443	493	543	593	643
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145

MATERIALS



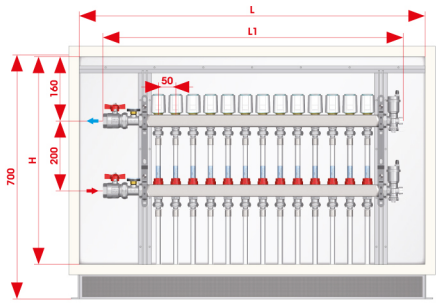
POS.	DESCRIPTION	N.	MATERIAL
1	Mounted bracket in steel	2	Steel P11
2	Mounted collar	4	Steel P11
3	Manifold in stainless steel	2	Stainless steel AISI 304L
4	Male adapter	6-26	Nickel-plated brass CW614N
5	Adjustable air vent valve	2	Nickel-plated brass CW614N

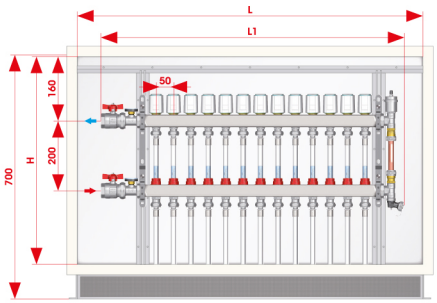
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

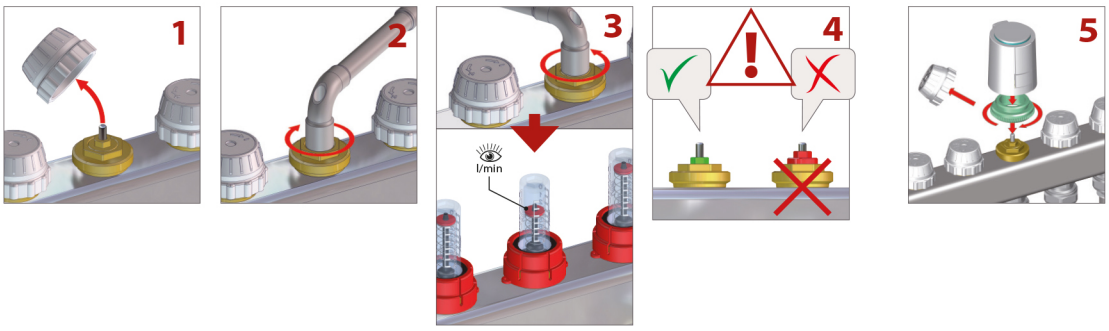
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

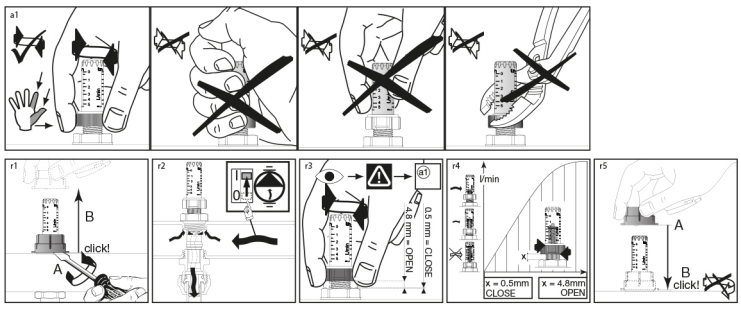
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

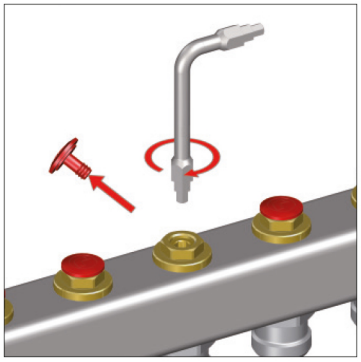
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



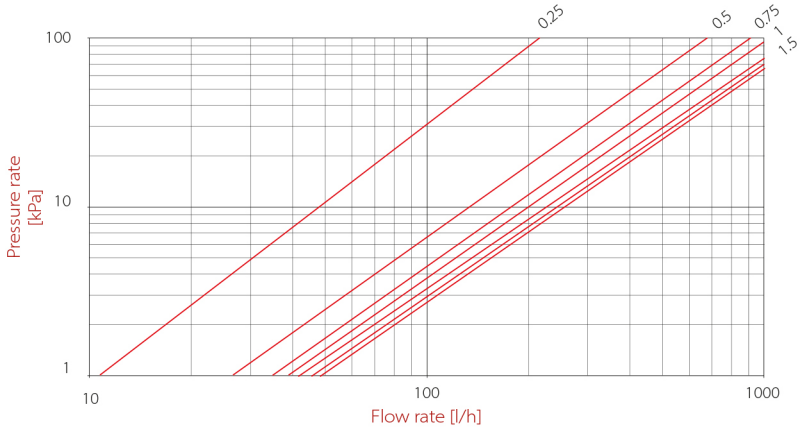
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



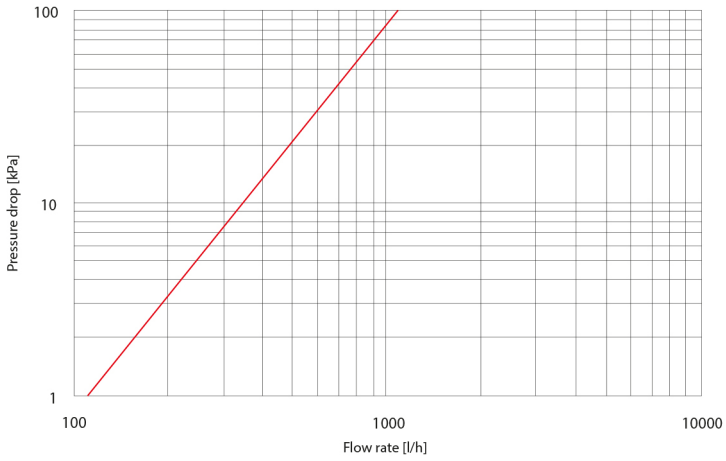
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

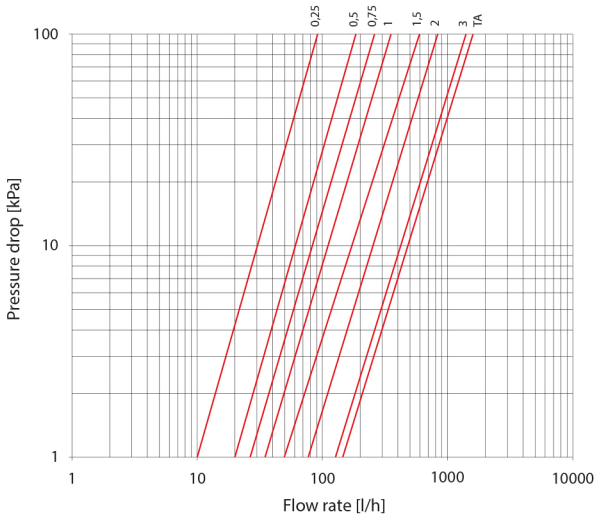
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)

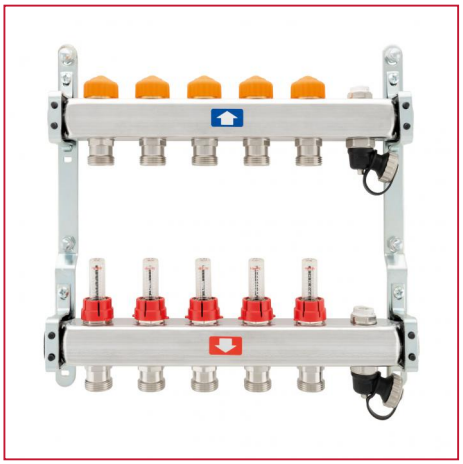


Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

917CDEB Pre-assembled manifold with flow meters, air vent valve and drain cock – Automatic flow control

100% TESTED



917CDEB

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9170010002034C DEB	1/1
1"x3/4"x3	6bar/87psi	9170010003034C DEB	1/1
1"x3/4"x4	6bar/87psi	9170010004034C DEB	1/1
1"x3/4"x5	6bar/87psi	9170010005034C DEB	1/1
1"x3/4"x6	6bar/87psi	9170010006034C DEB	1/1
1"x3/4"x7	6bar/87psi	9170010007034C DEB	1/1
1"x3/4"x8	6bar/87psi	9170010008034C DEB	1/1
1"x3/4"x9	6bar/87psi	9170010009034C DEB	1/1
1"x3/4"x10	6bar/87psi	9170010010034C DEB	1/1
1"x3/4"x11	6bar/87psi	9170010011034C DEB	1/1
1"x3/4"x12	6bar/87psi	9170010012034C DEB	1/1

91780CDEB

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9178010002034C DEB	1/1
1"x3/4"x3	6bar/87psi	9178010003034C DEB	1/1
1"x3/4"x4	6bar/87psi	9178010004034C DEB	1/1
1"x3/4"x5	6bar/87psi	9178010005034C DEB	1/1
1"x3/4"x6	6bar/87psi	9178010006034C DEB	1/1
1"x3/4"x7	6bar/87psi	9178010007034C DEB	1/1
1"x3/4"x8	6bar/87psi	9178010008034C DEB	1/1
1"x3/4"x9	6bar/87psi	9178010009034C DEB	1/1
1"x3/4"x10	6bar/87psi	9178010010034C DEB	1/1
1"x3/4"x11	6bar/87psi	9178010011034C DEB	1/1
1"x3/4"x12	6bar/87psi	9178010012034C DEB	1/1

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9179010002034C DEB	1/1
1"x3/4"x3	6bar/87psi	9179010003034C DEB	1/1
1"x3/4"x4	6bar/87psi	9179010004034C DEB	1/1
1"x3/4"x5	6bar/87psi	9179010005034C DEB	1/1
1"x3/4"x6	6bar/87psi	9179010006034C DEB	1/1
1"x3/4"x7	6bar/87psi	9179010007034C DEB	1/1
1"x3/4"x8	6bar/87psi	9179010008034C DEB	1/1
1"x3/4"x9	6bar/87psi	9179010009034C DEB	1/1
1"x3/4"x10	6bar/87psi	9179010010034C DEB	1/1
1"x3/4"x11	6bar/87psi	9179010011034C DEB	1/1
1"x3/4"x12	6bar/87psi	9179010012034C DEB	1/1

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

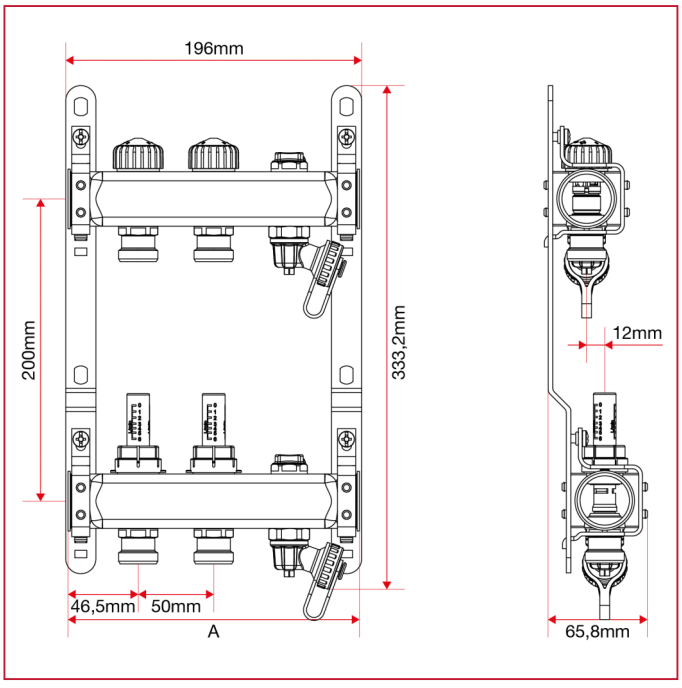
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Consisting of:
- 1 stainless steel AISI 304L return manifold with thermostatic insert Heimeier Eclipse®
- 1 flow manifold in stainless steel AISI 304L with flow meters
- 2 complete metal brackets
- 2 drain cocks
- 2 air vent valves

Available sizes: 1”.
Maximum operating pressure: 6 bar.
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 12, 3/4” Eurokonus.
Outlet centre distance: mm.50.
ATTENTION: manifolds will be supplied mounted on the brackets.

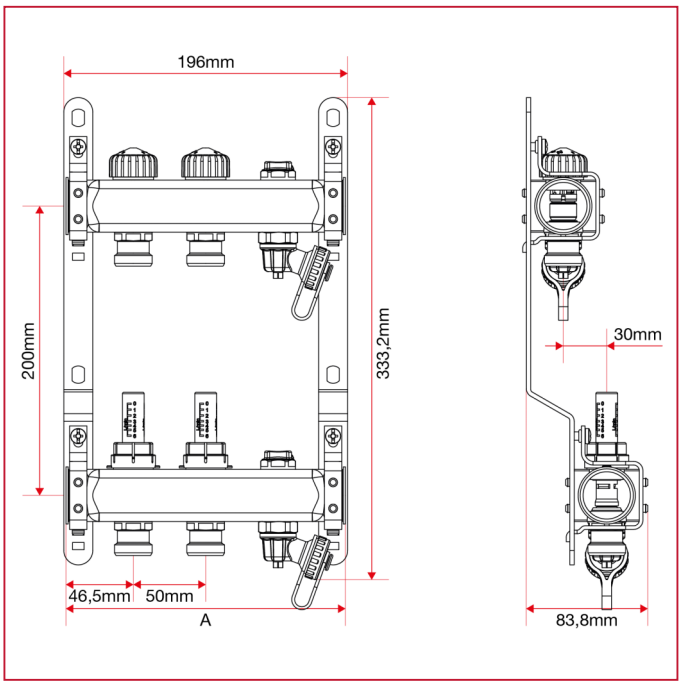
OVERALL DIMENSIONS art.917CDEB



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

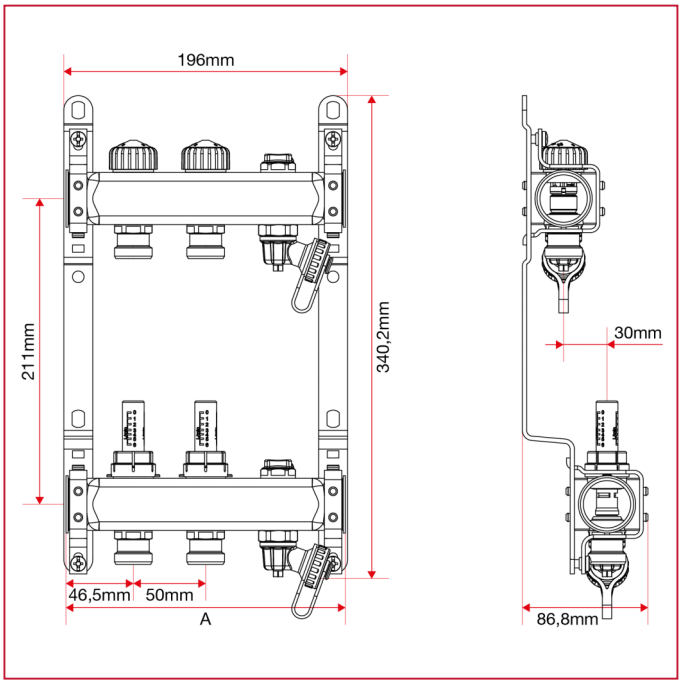
OVERALL DIMENSIONS art.91780CDEB



91780CDEB

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.91790CDEB

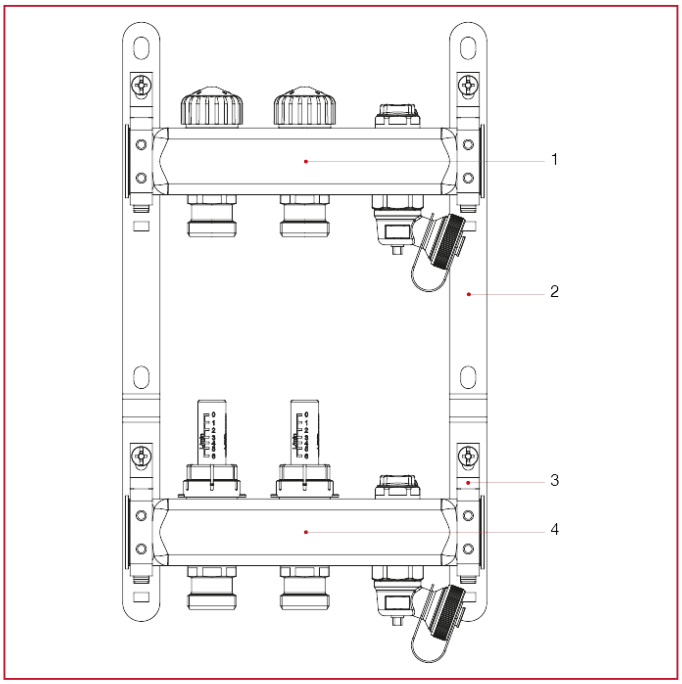


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

91790CDEB

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12
A	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87

MATERIALS



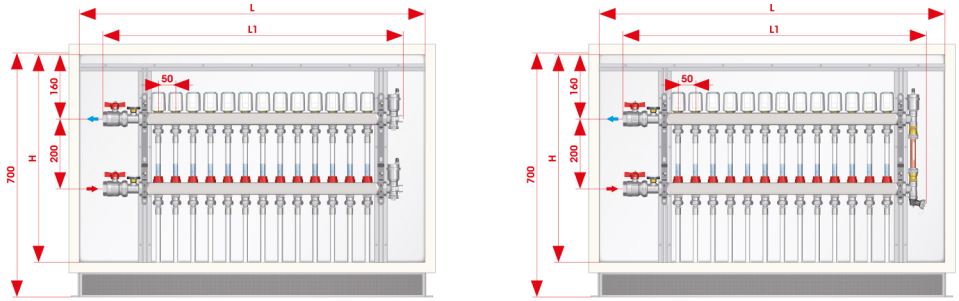
POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold in stainless steel with balancing control spindle	1	Stainless steel AISI 304L
2	Mounted bracket in steel	2	Steel P11
3	Mounted collar	4	Steel P11
4	Single manifold in stainless steel with flow meters	1	Stainless steel AISI 304L

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

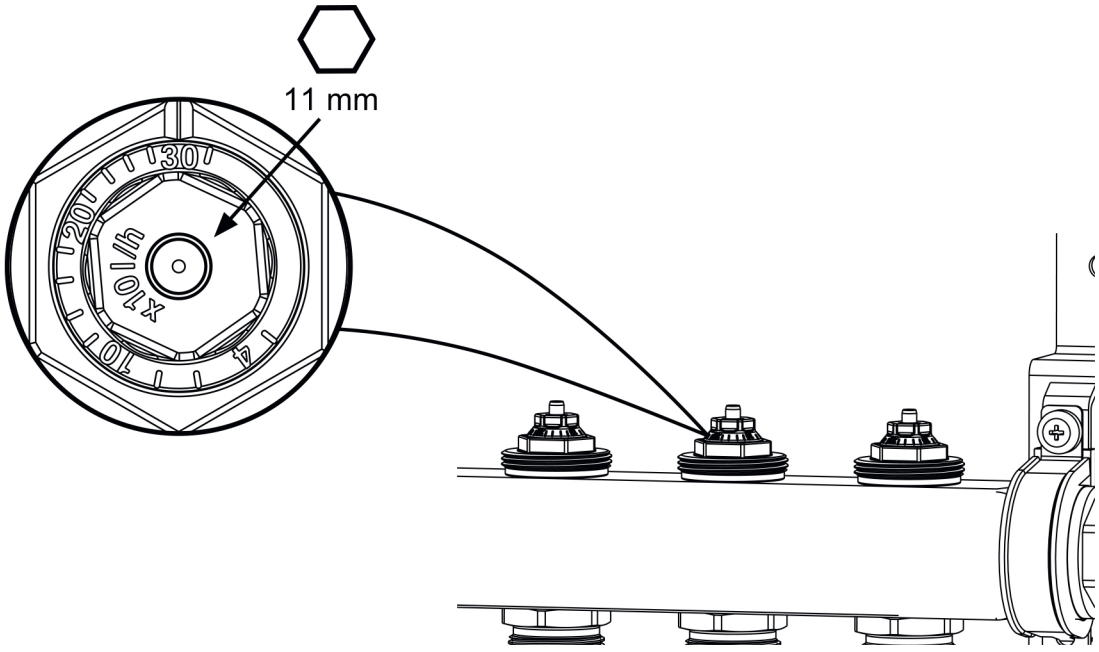
Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES



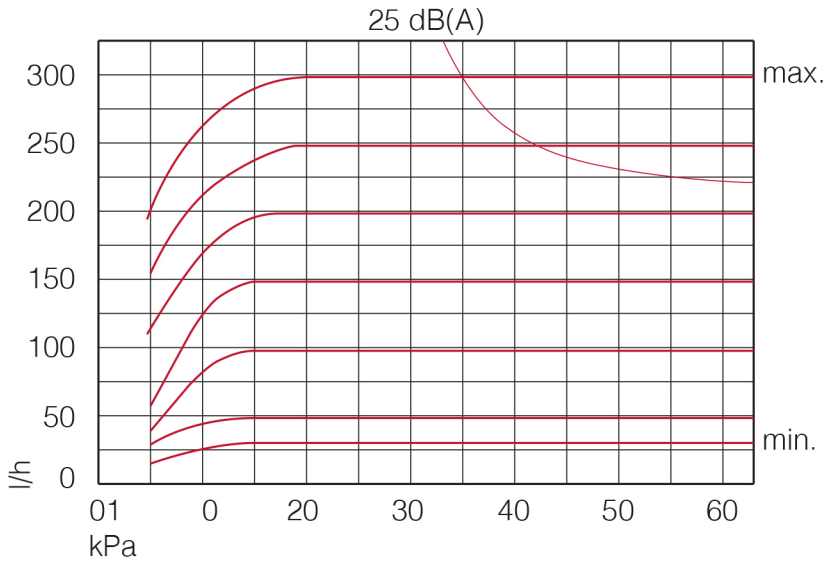
CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

HOW TO ADJUST THE FLOW RATE
Return manifold supplied with thermostatic insert DYNACON ECLIPSE.



SETTING TURNS AND FLOW RATE DIAGRAM

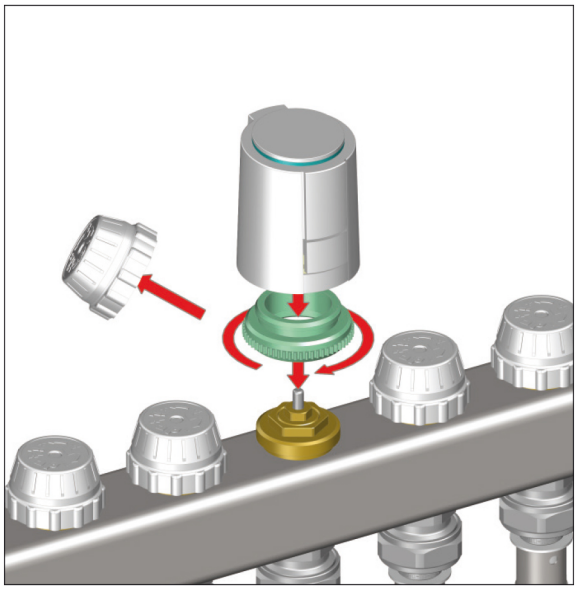
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



DYNACON ECLIPSE	|	4	|	|	10	|	|	|	|	20	|	|	|	|	30
l/h	30	40	60	80	100	120	140	160	180	200	220	240	260	280	300

TECHNICAL NOTE
the flowmeter is not to be used as a balancing valve, but just to read the required flow rate of each individual circuit directly and precisely.

INSTALLATION OF ELECTROTHERMAL ACTUATOR



Electrothermal actuator:
- Normally closed, on-off operation.
- Power supply: 230V.
- Power consumption: 1W.
- Minimum and maximum working ambient temperatures: 0°C, 60°C.

- Maximum differential pressure: 1,5bar.
- Length of the power supply cable: m.1.
- Class of protection IP54.

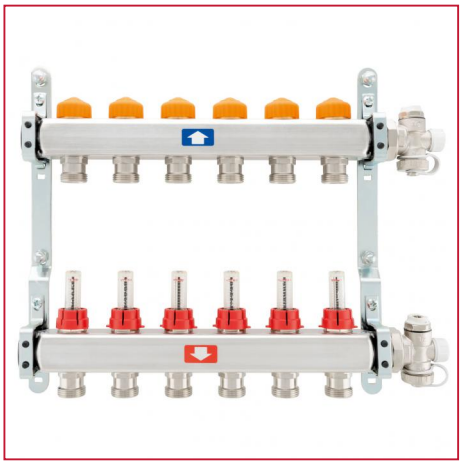
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

- Available with 2 cables or 4 cables with an auxiliary microswitch.
- Capacity of the auxiliary connection: 300mA.
- CE marked.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

918CB Pre-assembled manifold with flow meters, air vent valve and drain cock – Automatic flow control

100% TESTED



918CB

With standard mounting bracket 498STK: centres distance mm. 200, offset: 12mm.
Suitable for outlets pipe up to 20mm.

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9180010002034CB	1/1
1"x3/4"x3	6bar/87psi	9180010003034CB	1/1
1"x3/4"x4	6bar/87psi	9180010004034CB	1/1
1"x3/4"x5	6bar/87psi	9180010005034CB	1/1
1"x3/4"x6	6bar/87psi	9180010006034CB	1/1
1"x3/4"x7	6bar/87psi	9180010007034CB	1/1
1"x3/4"x8	6bar/87psi	9180010008034CB	1/1
1"x3/4"x9	6bar/87psi	9180010009034CB	1/1
1"x3/4"x10	6bar/87psi	9180010010034CB	1/1
1"x3/4"x11	6bar/87psi	9180010011034CB	1/1
1"x3/4"x12	6bar/87psi	9180010012034CB	1/1
1"x3/4"x13	6bar/87psi	9180010013034CB	1/1

91880CB

With deeper mounting bracket 498STKM: centres distance mm. 200, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9188010002034CB	1/1
1"x3/4"x3	6bar/87psi	9188010003034CB	1/1
1"x3/4"x4	6bar/87psi	9188010004034CB	1/1
1"x3/4"x5	6bar/87psi	9188010005034CB	1/1
1"x3/4"x6	6bar/87psi	9188010006034CB	1/1
1"x3/4"x7	6bar/87psi	9188010007034CB	1/1
1"x3/4"x8	6bar/87psi	9188010008034CB	1/1
1"x3/4"x9	6bar/87psi	9188010009034CB	1/1
1"x3/4"x10	6bar/87psi	9188010010034CB	1/1
1"x3/4"x11	6bar/87psi	9188010011034CB	1/1
1"x3/4"x12	6bar/87psi	9188010012034CB	1/1
1"x3/4"x13	6bar/87psi	9188010013034CB	1/1

91890CB

With deeper mounting bracket 498STKMB: centres distance mm. 211, offset: 30mm.
Suitable for outlets pipe up to 25mm.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9189010002034CB	1/1
1"x3/4"x3	6bar/87psi	9189010003034CB	1/1
1"x3/4"x4	6bar/87psi	9189010004034CB	1/1
1"x3/4"x5	6bar/87psi	9189010005034CB	1/1
1"x3/4"x6	6bar/87psi	9189010006034CB	1/1
1"x3/4"x7	6bar/87psi	9189010007034CB	1/1
1"x3/4"x8	6bar/87psi	9189010008034CB	1/1
1"x3/4"x9	6bar/87psi	9189010009034CB	1/1
1"x3/4"x10	6bar/87psi	9189010010034CB	1/1
1"x3/4"x11	6bar/87psi	9189010011034CB	1/1
1"x3/4"x12	6bar/87psi	9189010012034CB	1/1
1"x3/4"x13	6bar/87psi	9189010013034CB	1/1

CERTIFICATIONS

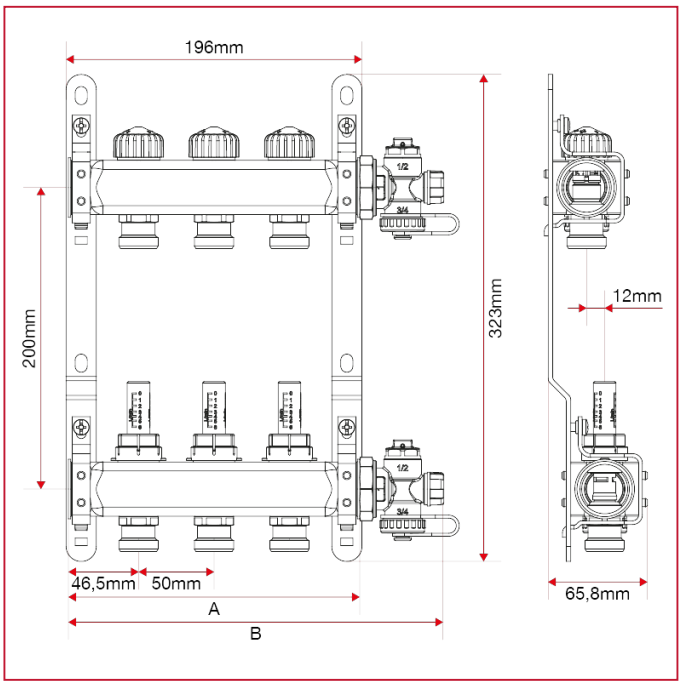
TECHNICAL SPECIFICATIONS

Consisting of:
- 1 stainless steel AISI 304L return manifold with thermostatic insert Heimeier Eclipse®
- 1 flow manifold in stainless steel AISI 304L with flow meters
- 2 adjustable end pieces with drain valve and manual air vent valve
- 2 complete metal brackets

Available sizes: 1”.
Maximum operating pressure: 6 bar.
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.
ATTENTION: manifolds will be supplied mounted on the brackets.

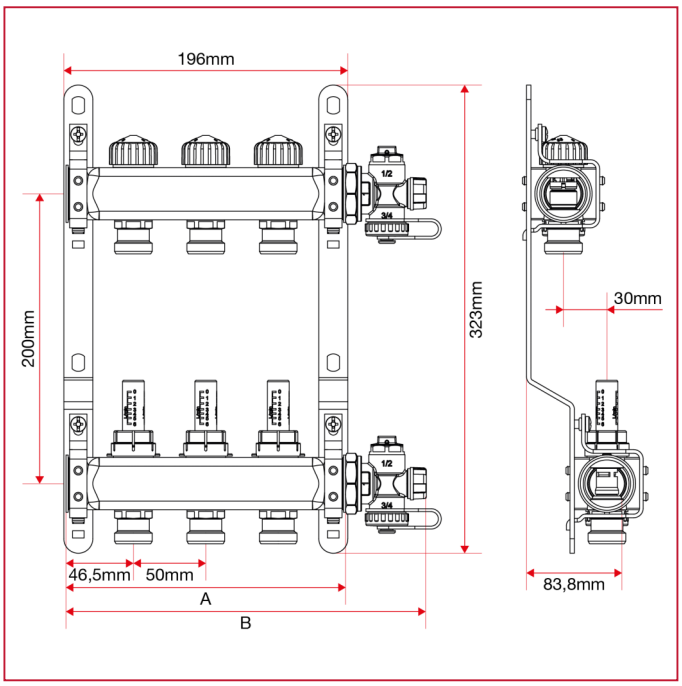
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

OVERALL DIMENSIONS art.918CB



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	199	249	299	349	399	449	499	549	599	649	699	749
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.91880CB

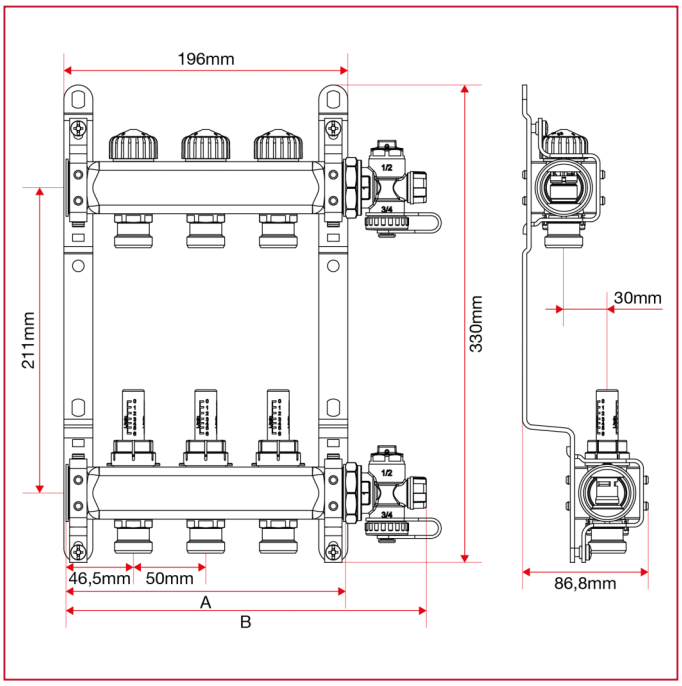


PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

91880CB

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	199	249	299	349	399	449	499	549	599	649	699	749
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

OVERALL DIMENSIONS art.91890CB

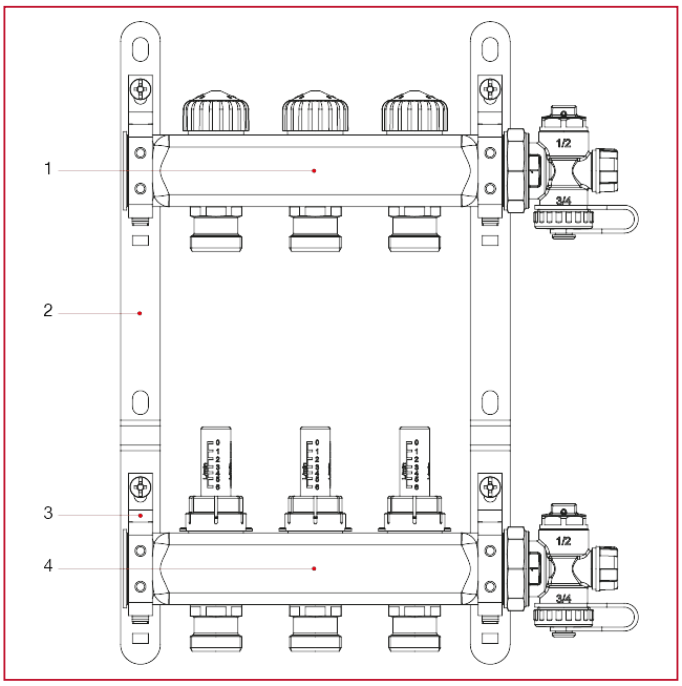


91890CB

	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	143	193	243	293	343	393	443	493	543	593	643	693
B	199	249	299	349	399	449	499	549	599	649	699	749
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MATERIALS



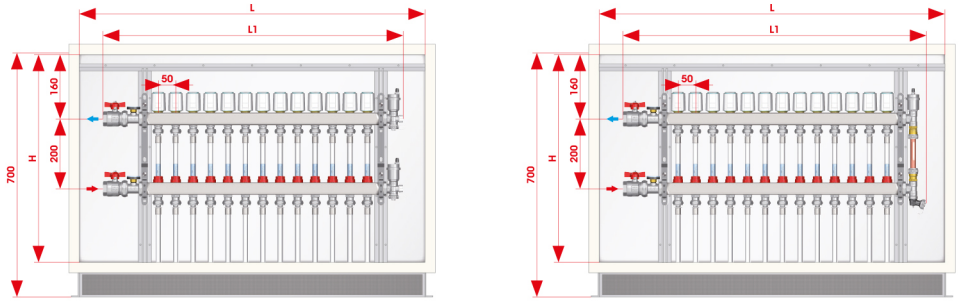
POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold in stainless steel with balancing control spindle	1	Stainless steel AISI 304L
2	Mounted bracket in steel	2	Steel P11
3	Mounted collar	4	Steel P11
4	Single manifold in stainless with flow meters	1	Stainless steel AISI 304L

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

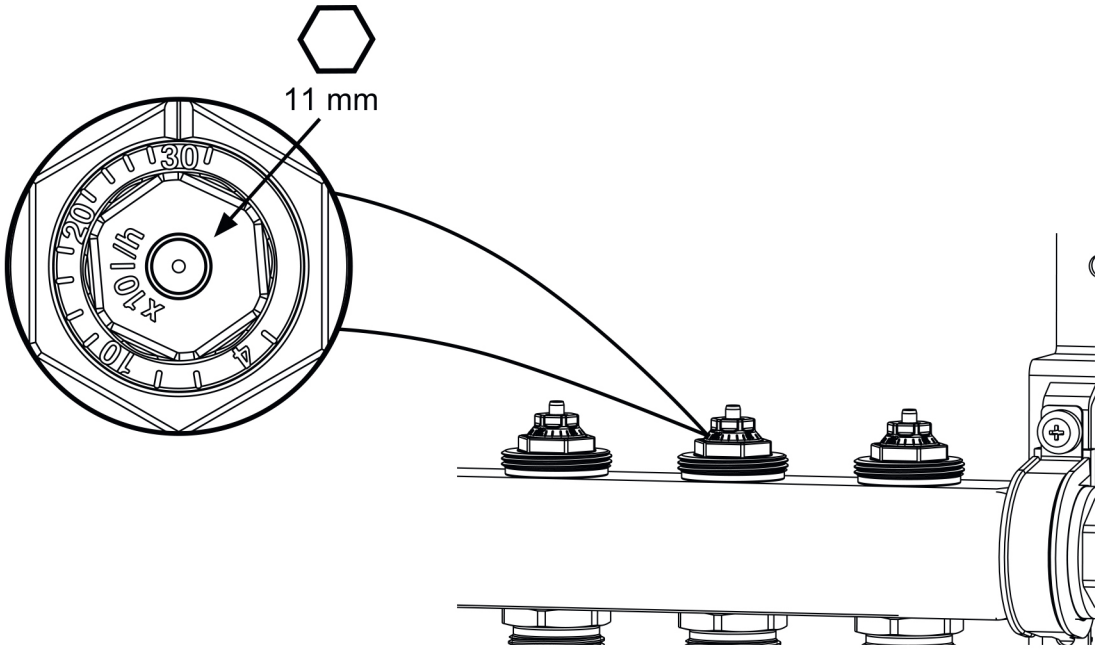
Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES



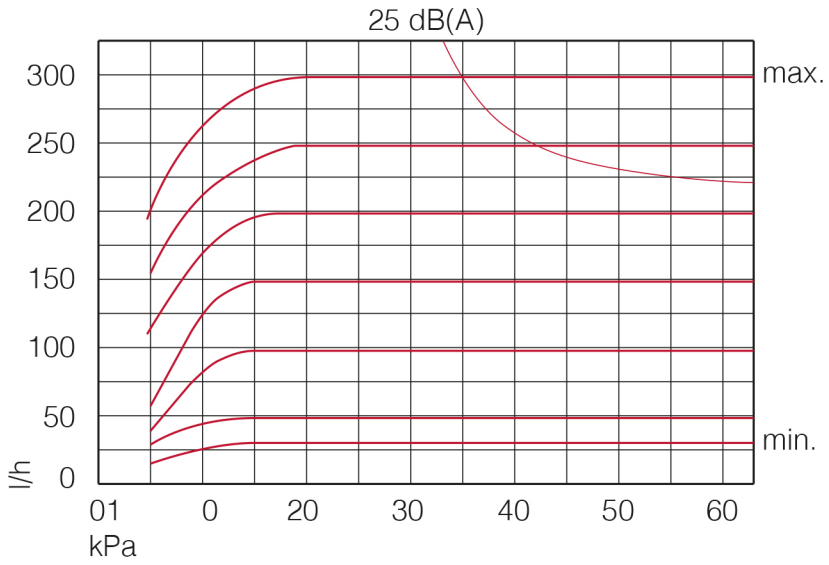
CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

HOW TO ADJUST THE FLOW RATE
Return manifold supplied with thermostatic insert DYNACON ECLIPSE.



SETTING TURNS AND FLOW RATE DIAGRAM

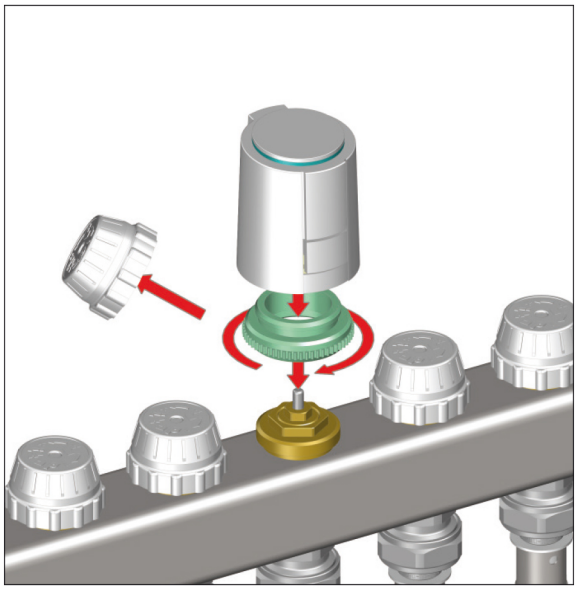
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



DYNACON ECLIPSE	|	4	|	|	10	|	|	|	|	20	|	|	|	|	30
l/h	30	40	60	80	100	120	140	160	180	200	220	240	260	280	300

TECHNICAL NOTE
the flowmeter is not to be used as a balancing valve, but just to read the required flow rate of each individual circuit directly and precisely.

INSTALLATION OF ELECTROTHERMAL ACTUATOR



Electrothermal actuator:
- Normally closed, on-off operation.
- Power supply: 230V.
- Power consumption: 1W.
- Minimum and maximum working ambient temperatures: 0°C, 60°C.

- Maximum differential pressure: 1,5bar.
- Length of the power supply cable: m.1.
- Class of protection IP54.

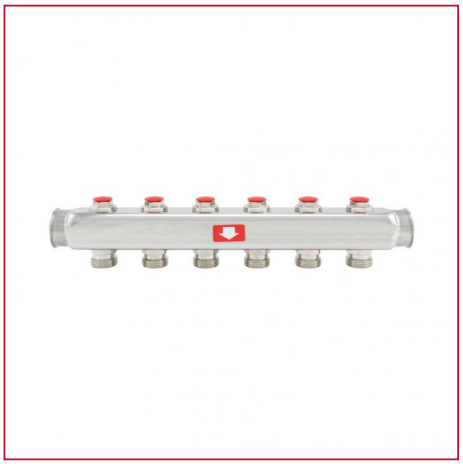
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

- Available with 2 cables or 4 cables with an auxiliary microswitch.
- Capacity of the auxiliary connection: 300mA.
- CE marked.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

927 Single manifold with lockshields

100% TESTED



MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9270010002034	1/12
1"x3/4"x3	10bar/145psi	9270010003034	1/12
1"x3/4"x4	10bar/145psi	9270010004034	1/8
1"x3/4"x5	10bar/145psi	9270010005034	1/8
1"x3/4"x6	10bar/145psi	9270010006034	1/8
1"x3/4"x7	10bar/145psi	9270010007034	1/3
1"x3/4"x8	10bar/145psi	9270010008034	1/2
1"x3/4"x9	10bar/145psi	9270010009034	1/2
1"x3/4"x10	10bar/145psi	9270010010034	1/2
1"x3/4"x11	10bar/145psi	9270010011034	1/2
1"x3/4"x12	10bar/145psi	9270010012034	1/2
1"x3/4"x13	10bar/145psi	9270010013034	1/2

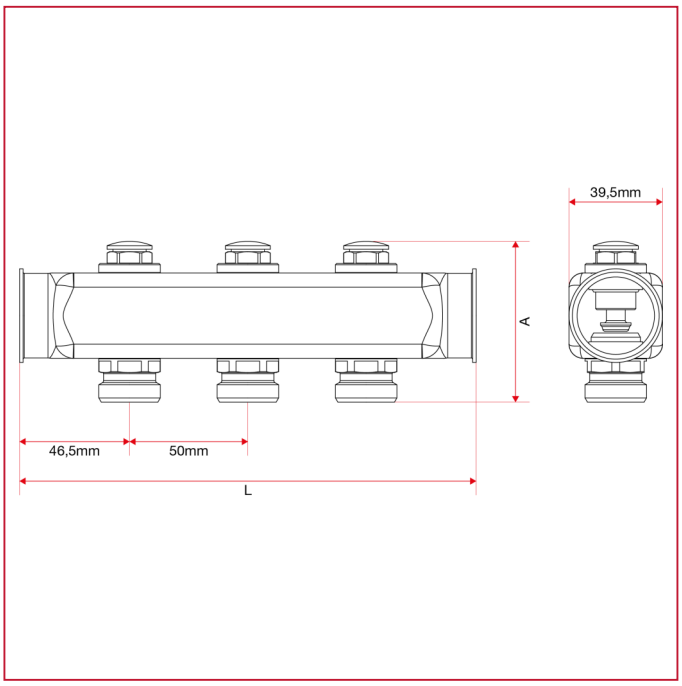
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Distribution manifold in stainless steel AISI 304L.
Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

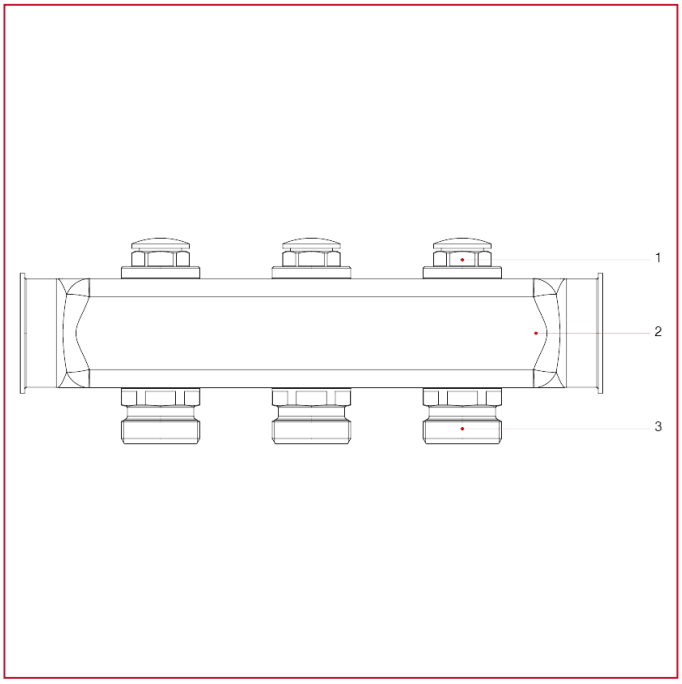
OVERALL DIMENSIONS



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	68	68	68	68	68	68	68	68	68	68	68	68
L	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MATERIALS



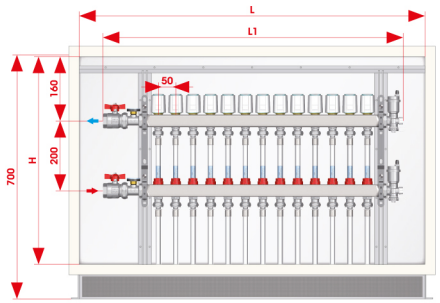
POS.	DESCRIPTION	N.	MATERIAL
1	Lockshield	2-13	Brass CW614N
2	Manifold in stainless steel	1	Stainless steel AISI 304 L
3	Male/male adapter	2-13	Nickel-plated brass CW614N

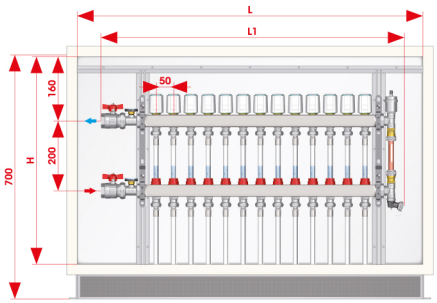
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

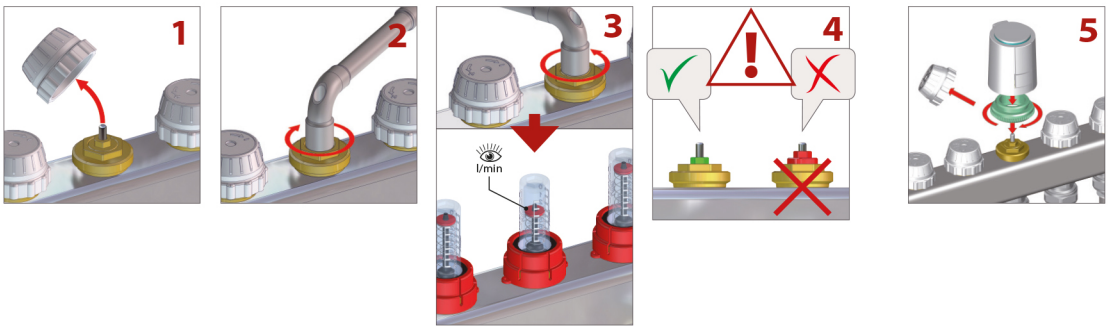
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

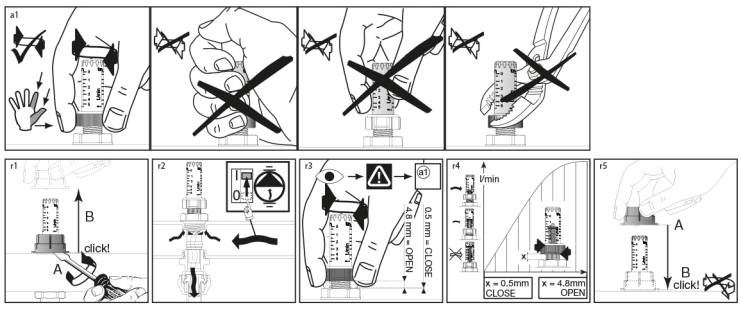
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

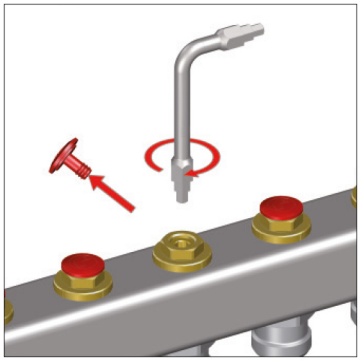
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



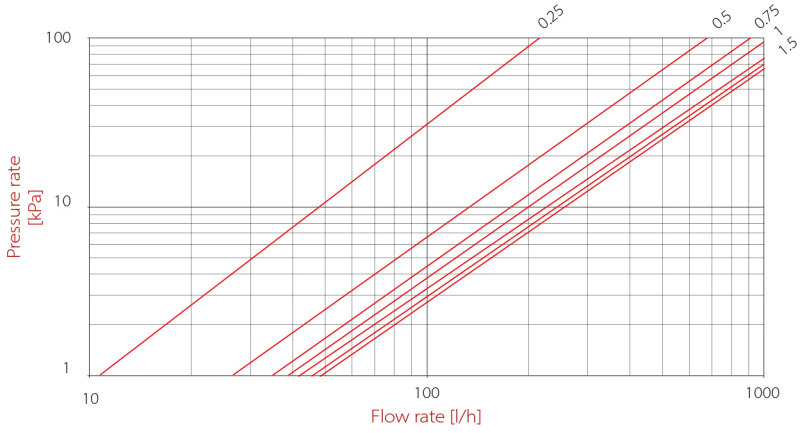
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



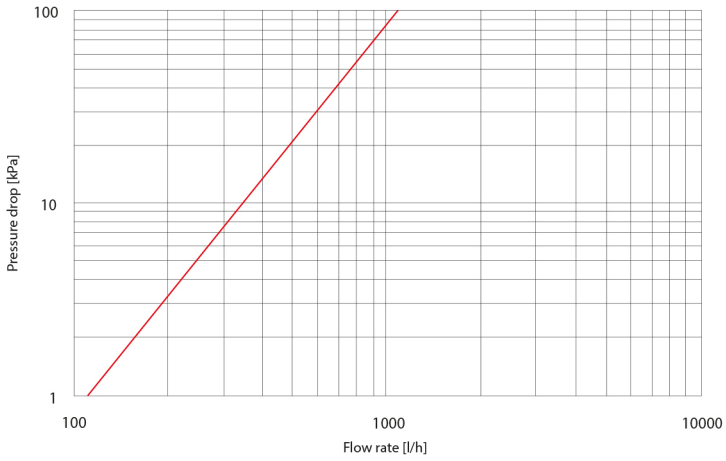
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

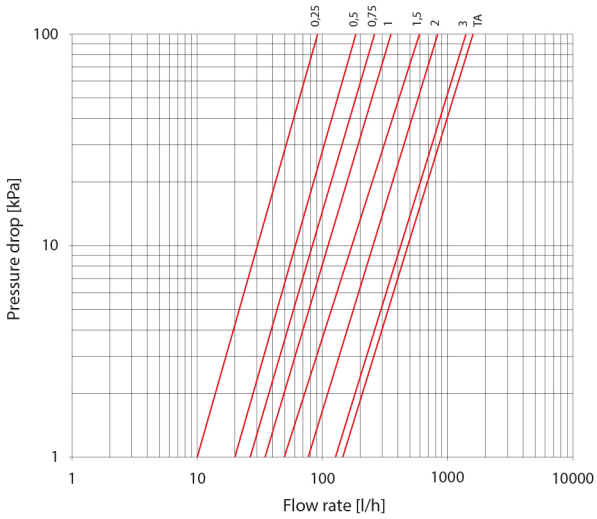
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

932 Single manifold with flow meters

100% TESTED

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	6bar/87psi	9320010002034	1/12
1"x3/4"x3	6bar/87psi	9320010003034	1/12
1"x3/4"x4	6bar/87psi	9320010004034	1/8
1"x3/4"x5	6bar/87psi	9320010005034	1/8
1"x3/4"x6	6bar/87psi	9320010006034	1/8
1"x3/4"x7	6bar/87psi	9320010007034	1/3
1"x3/4"x8	6bar/87psi	9320010008034	1/2
1"x3/4"x9	6bar/87psi	9320010009034	1/2
1"x3/4"x10	6bar/87psi	9320010010034	1/2
1"x3/4"x11	6bar/87psi	9320010011034	1/2
1"x3/4"x12	6bar/87psi	9320010012034	1/2
1"x3/4"x13	6bar/87psi	9320010013034	1/2

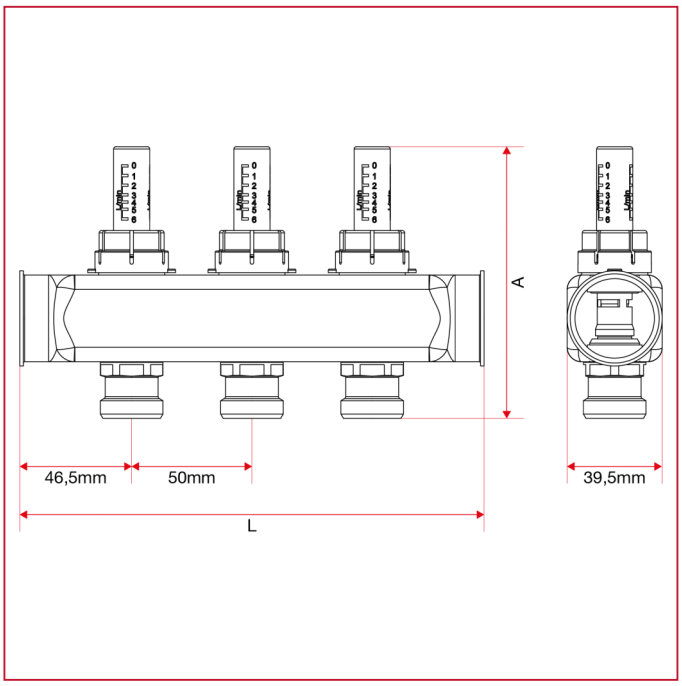
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Distribution manifold in stainless steel AISI 304L.
Available sizes: 1”.
Maximum working pressure: 6 bar (10 bar for installation test).
Maximum working temperature: 70°C
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

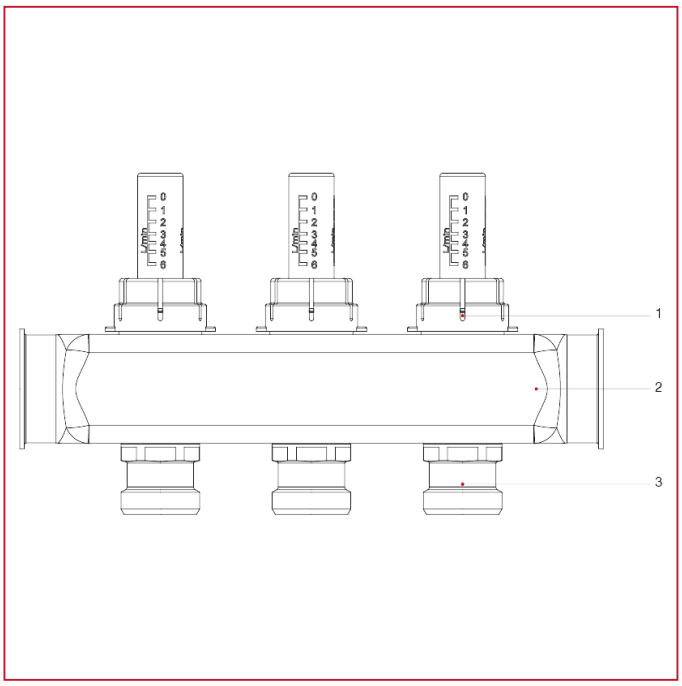
OVERALL DIMENSIONS



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	113	113	113	113	113	113	113	113	113	113	113	113
L	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	6	6	6	6	6	6	6	6	6	6	6	6
LBS - psi	87	87	87	87	87	87	87	87	87	87	87	87

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MATERIALS



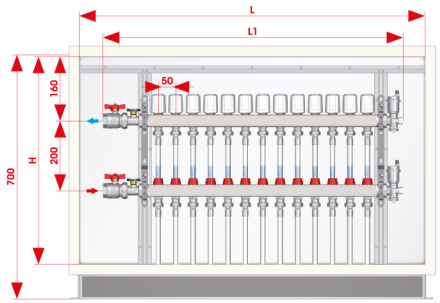
POS.	DESCRIPTION	N.	MATERIAL
1	Flowmeter	2-13	Brass CW614N
2	Manifold in stainless steel	1	Stainless steel AISI 304 L
3	Adapter for flow meters	2-13	Nickel-plated brass CW614N

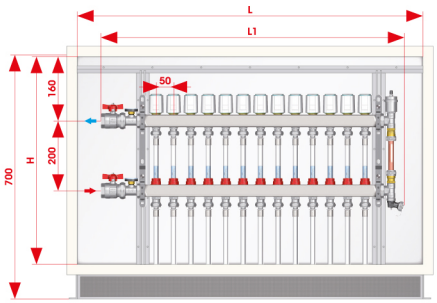
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

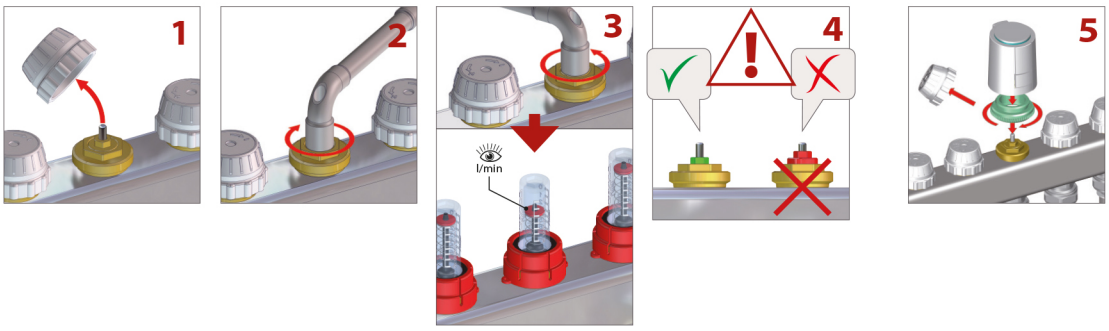
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

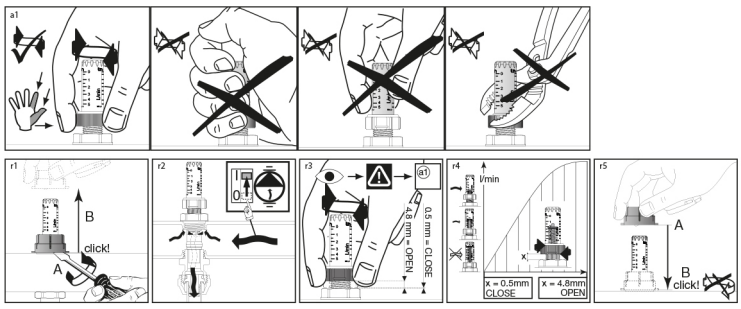
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

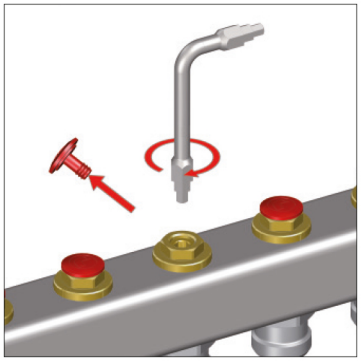
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



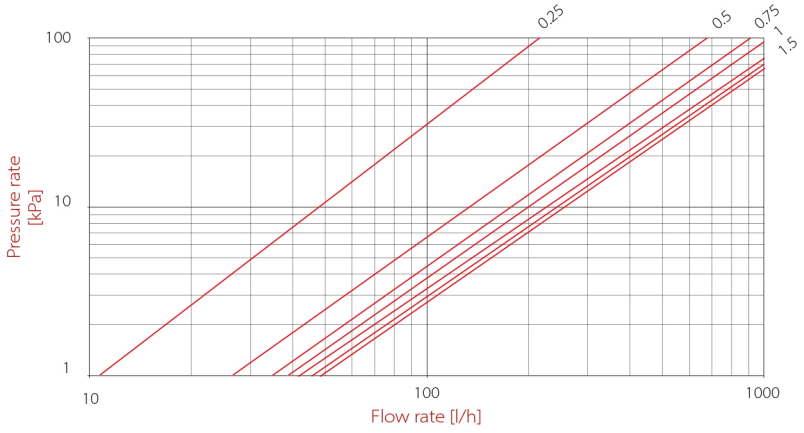
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



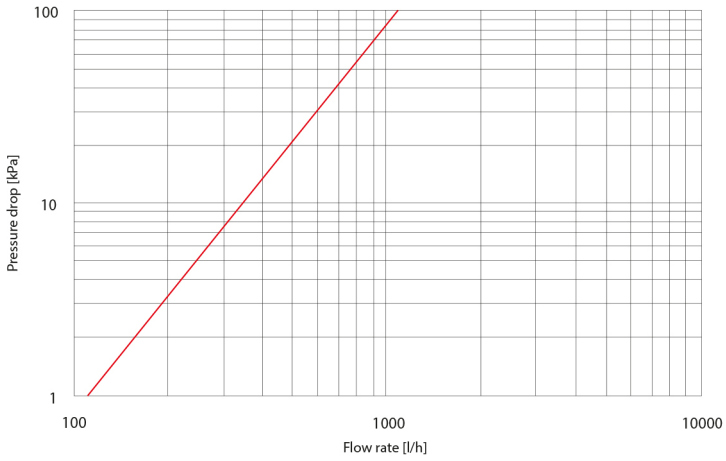
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

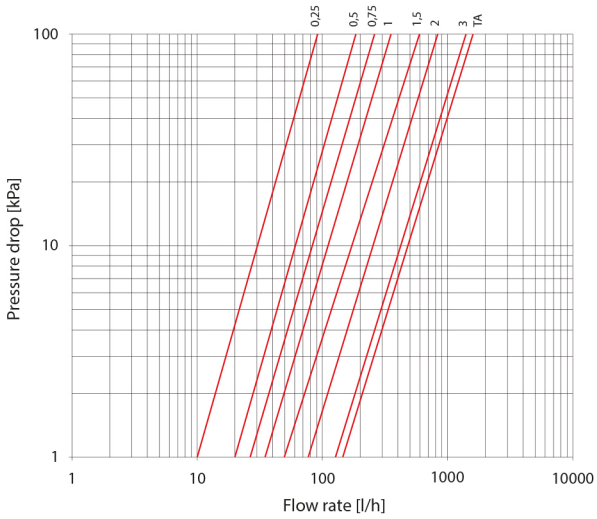
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

937 Single manifold, with shut-off valves preset for electrothermal actuators - with handles

100% TESTED

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9370010002034	1/12
1"x3/4"x3	10bar/145psi	9370010003034	1/12
1"x3/4"x4	10bar/145psi	9370010004034	1/8
1"x3/4"x5	10bar/145psi	9370010005034	1/8
1"x3/4"x6	10bar/145psi	9370010006034	1/8
1"x3/4"x7	10bar/145psi	9370010007034	1/3
1"x3/4"x8	10bar/145psi	9370010008034	1/2
1"x3/4"x9	10bar/145psi	9370010009034	1/2
1"x3/4"x10	10bar/145psi	9370010010034	1/2
1"x3/4"x11	10bar/145psi	9370010011034	1/2
1"x3/4"x12	10bar/145psi	9370010012034	1/2
1"x3/4"x13	10bar/145psi	9370010013034	1/2

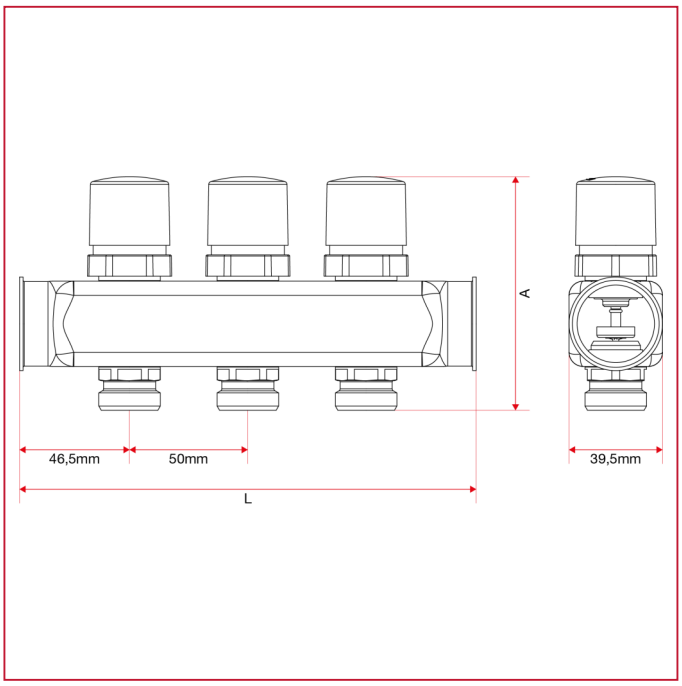
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Distribution manifold in stainless steel AISI 304L.
Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.
Shut-off valves preset for electrothermal actuators.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

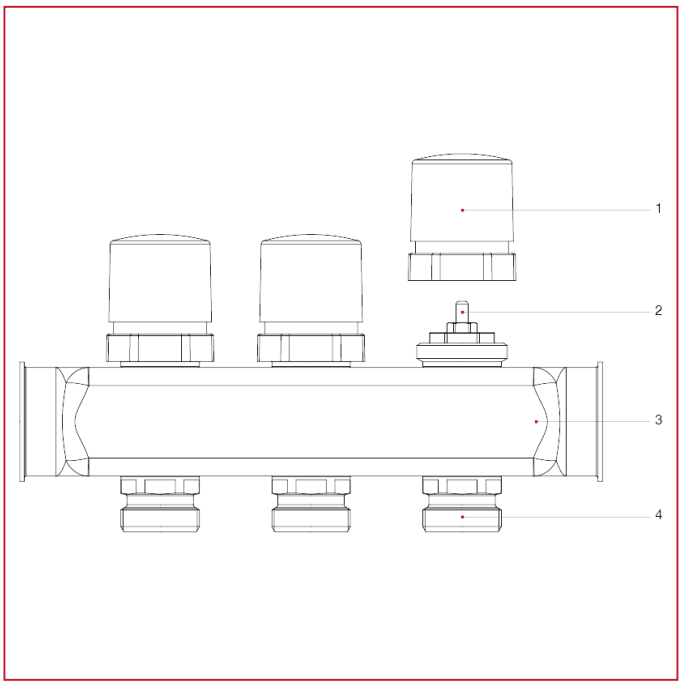
OVERALL DIMENSIONS



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	98,5	98,5	98,5	98,5	98,5	98,5	98,5	98,5	98,5	98,5	98,5	98,5
L	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MATERIALS



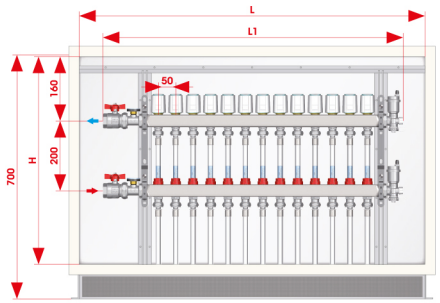
POS.	DESCRIPTION	N.	MATERIAL
1	Handwheel	2-13	ABS
2	Bonnet	2-13	Brass CW614N
3	Manifold in stainless steel	1	Stainless steel AISI 304L
4	Male/male adapter	2-13	Nickel-plated brass CW614N

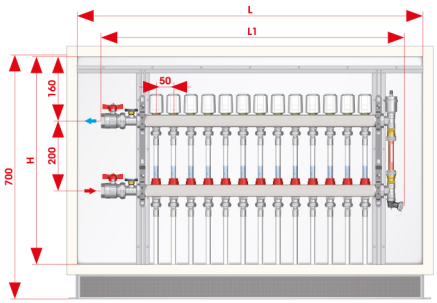
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

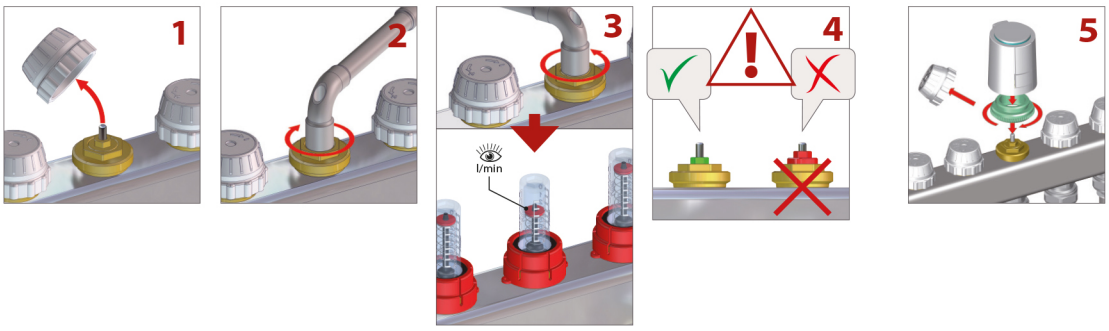
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

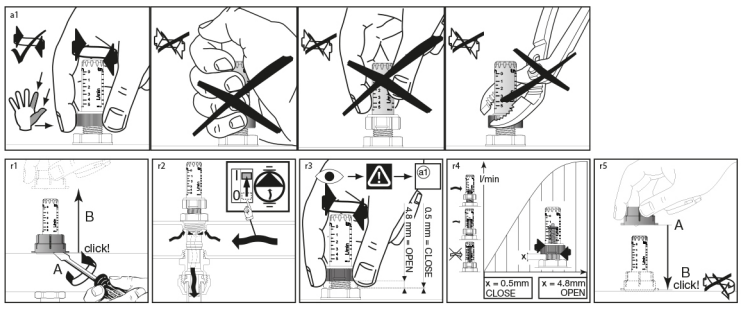
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

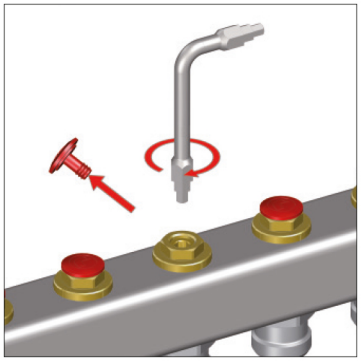
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



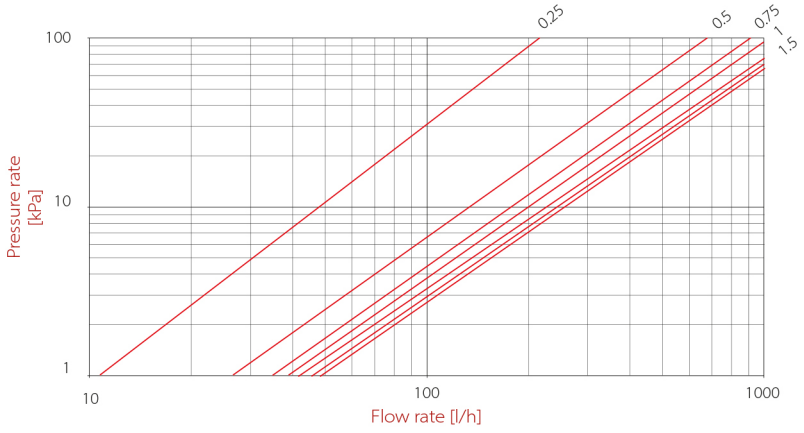
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



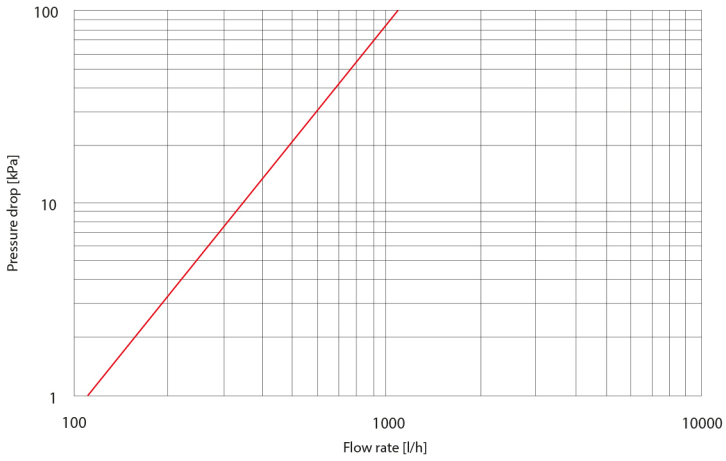
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

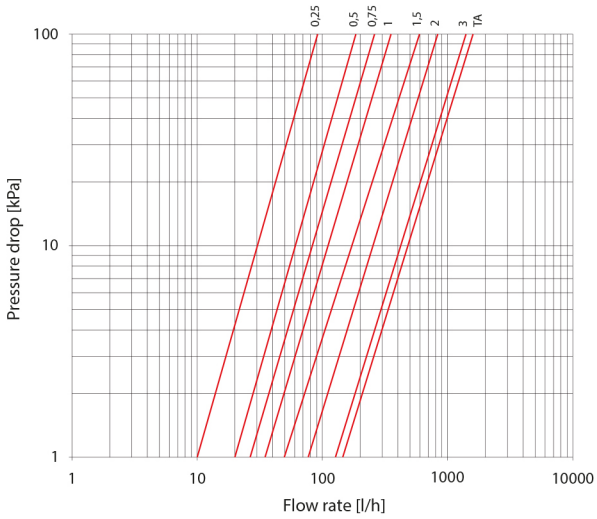
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)

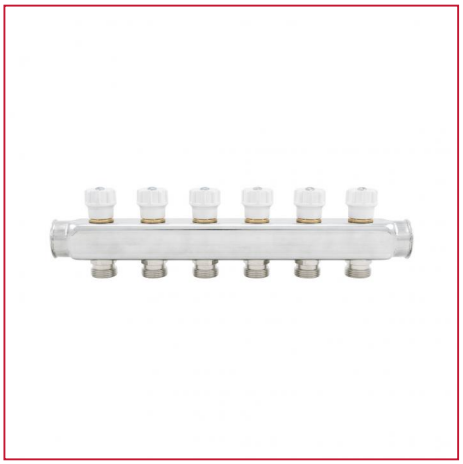


Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

937M Single manifold, with manual shut-off valves with handles

100% TESTED



MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9370010002034 M	1/12
1"x3/4"x3	10bar/145psi	9370010003034 M	1/12
1"x3/4"x4	10bar/145psi	9370010004034 M	1/8
1"x3/4"x5	10bar/145psi	9370010005034 M	1/8
1"x3/4"x6	10bar/145psi	9370010006034 M	1/8
1"x3/4"x7	10bar/145psi	9370010007034 M	1/3
1"x3/4"x8	10bar/145psi	9370010008034 M	1/2

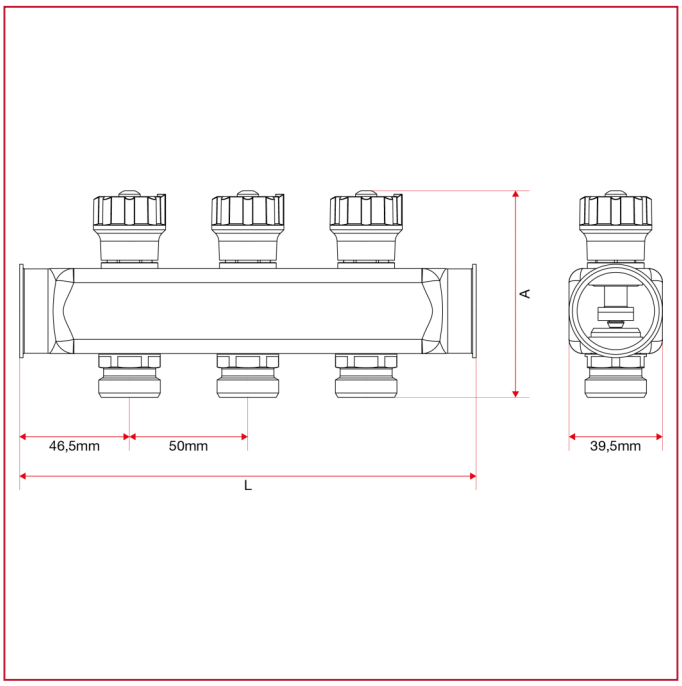
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Distribution manifold in stainless steel AISI 304L.
Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 8, 3/4” Eurokonus.
Outlet centre distance: mm.50.
Equipped with manual shut-off valves.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

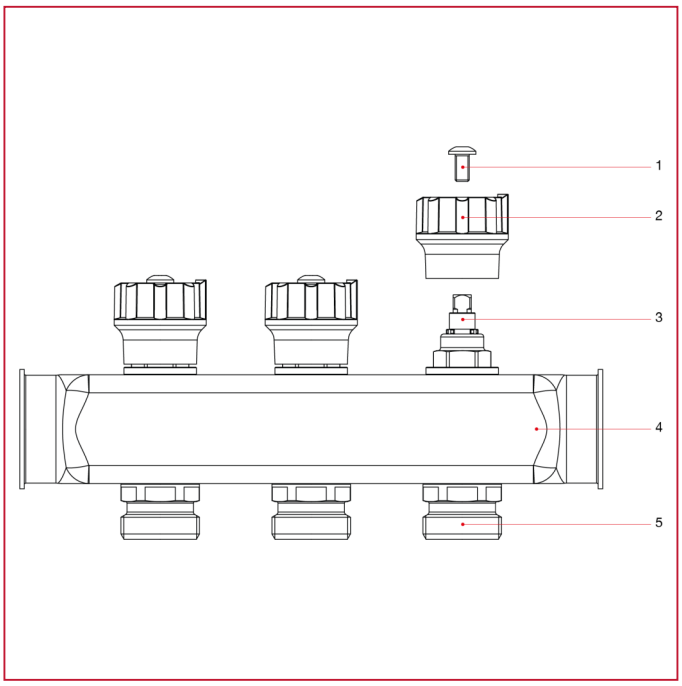
OVERALL DIMENSIONS



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8
A	87,4	87,4	87,4	87,4	87,4	87,4	87,4
L	143	193	243	293	343	393	443
Kg/cm2 bar	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MATERIALS



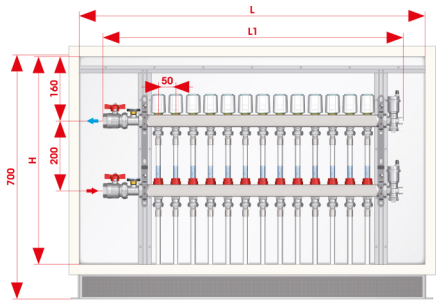
POS.	DESCRIPTION	N.	MATERIAL
1	Screw	1	Zinc-plated steel C4C
2	Handle	1	ABS
3	Bonnet	2-8	Brass CW617N
4	Manifold in stainless steel	1	Stainless steel AISI 304L
5	Male/male adapter	2-8	Nickel-plated brass CW614N

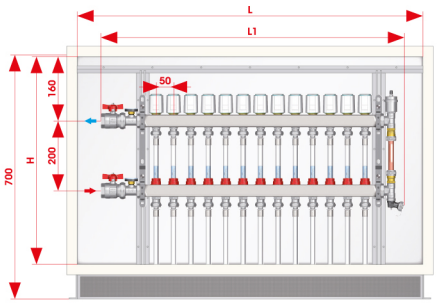
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

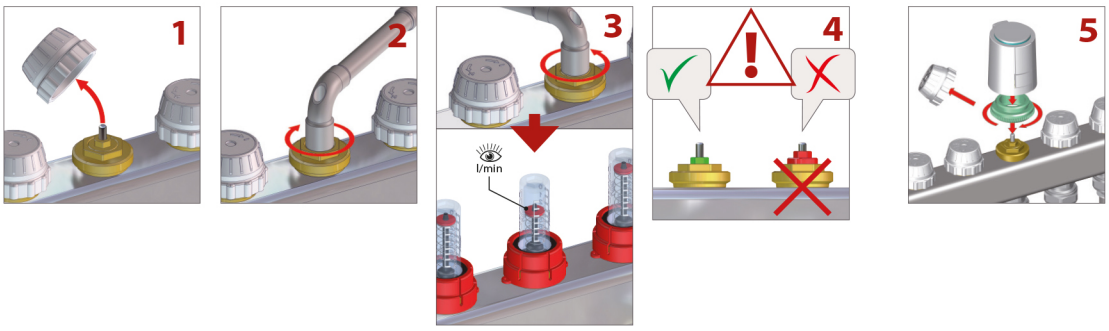
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

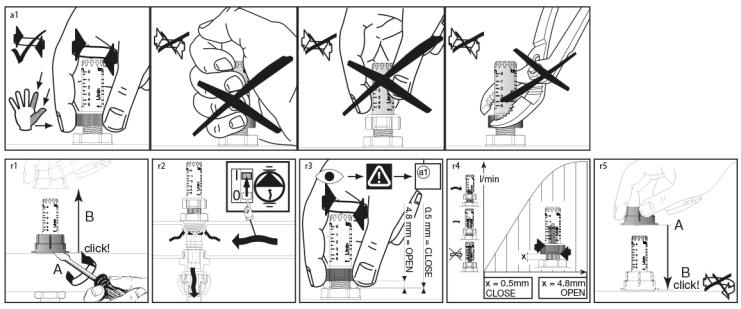
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

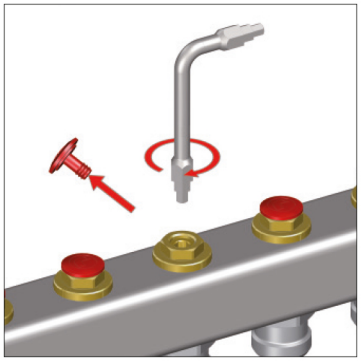
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



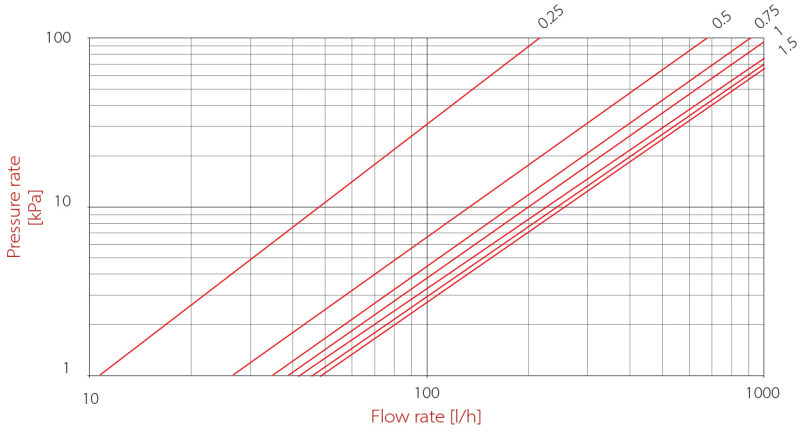
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



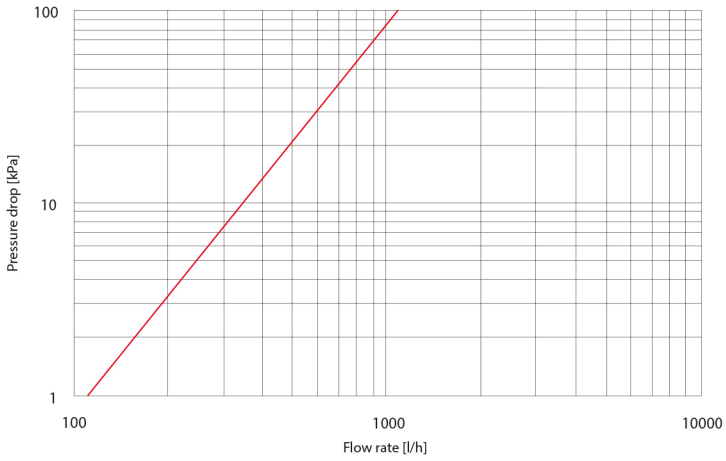
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

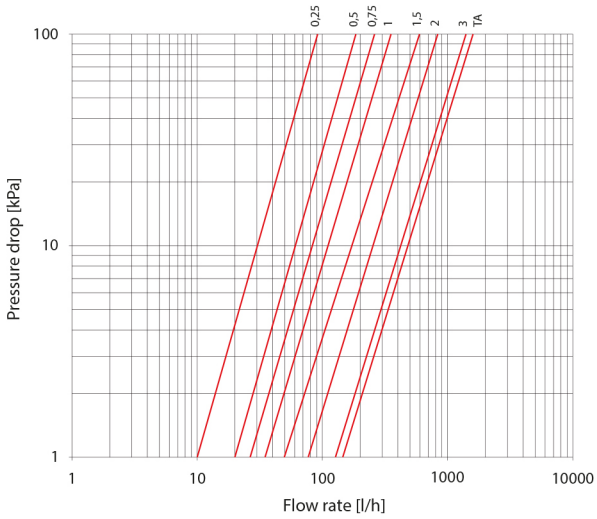
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

942 Single manifold with shut-off valves preset for electrothermal actuators - with caps

100% TESTED

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9420010002034	1/12
1"x3/4"x3	10bar/145psi	9420010003034	1/12
1"x3/4"x4	10bar/145psi	9420010004034	1/8
1"x3/4"x5	10bar/145psi	9420010005034	1/8
1"x3/4"x6	10bar/145psi	9420010006034	1/8
1"x3/4"x7	10bar/145psi	9420010007034	1/3
1"x3/4"x8	10bar/145psi	9420010008034	1/2
1"x3/4"x9	10bar/145psi	9420010009034	1/2
1"x3/4"x10	10bar/145psi	9420010010034	1/2
1"x3/4"x11	10bar/145psi	9420010011034	1/2
1"x3/4"x12	10bar/145psi	9420010012034	1/2
1"x3/4"x13	10bar/145psi	9420010013034	1/2

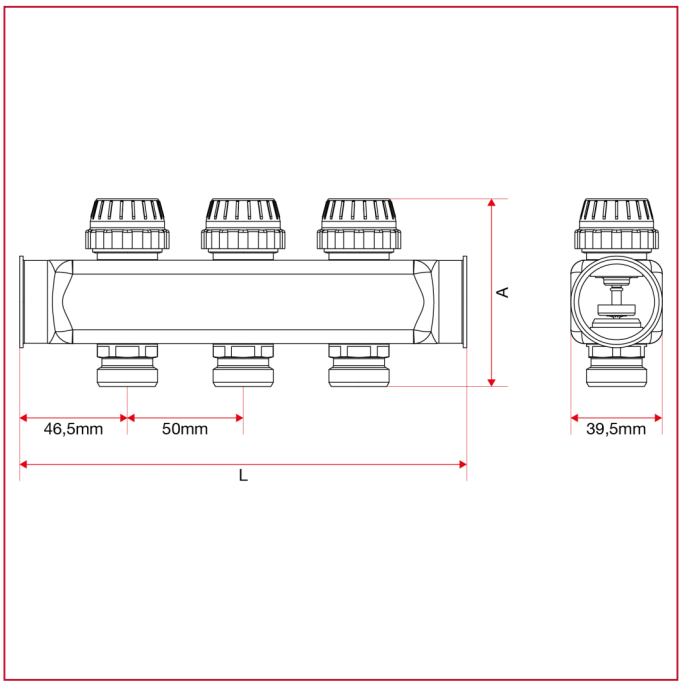
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Distribution manifold in stainless steel AISI 304L.
Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.
Shut-off valves preset for electrothermal actuators.

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

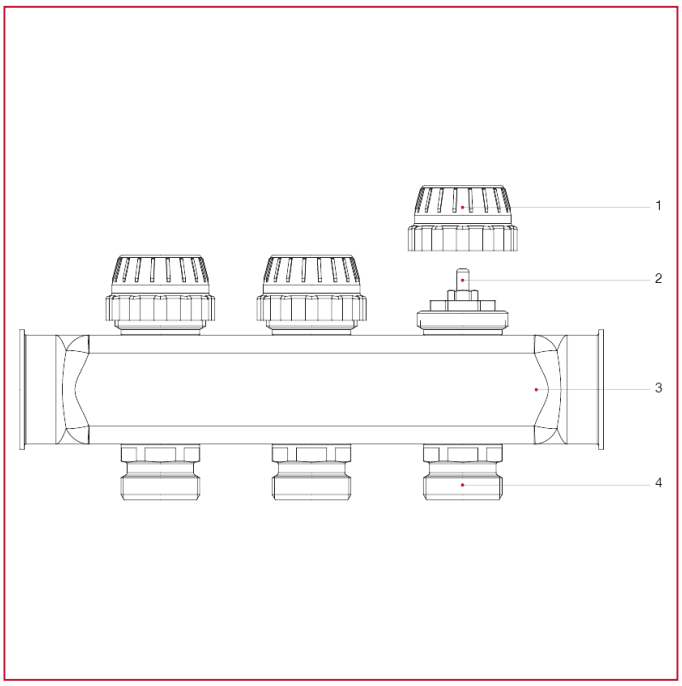
OVERALL DIMENSIONS



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	81	81	81	81	81	81	81	81	81	81	81	81
L	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

MATERIALS



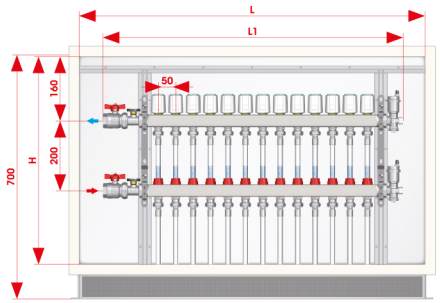
POS.	DESCRIPTION	N.	MATERIAL
1	Cap	2-13	ABS
2	Bonnet	2-13	Brass CW614N
3	Manifold in stainless steel	1	Stainless steel AISI 304L
4	Male/male adapter	2-13	Nickel-plated brass CW614N

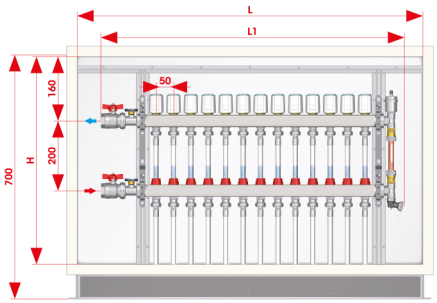
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

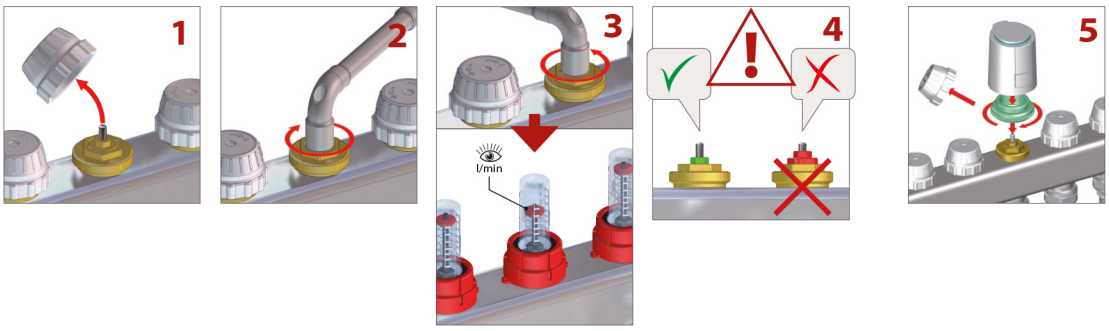
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

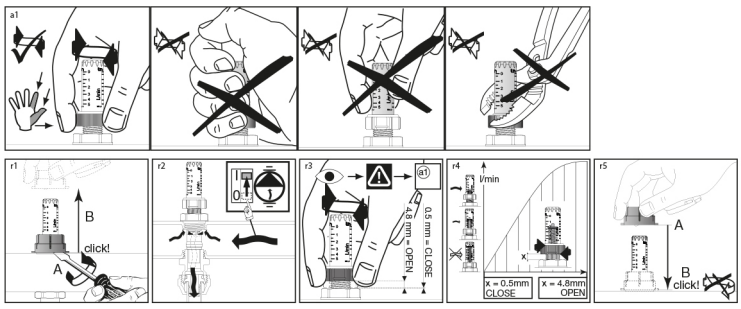
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

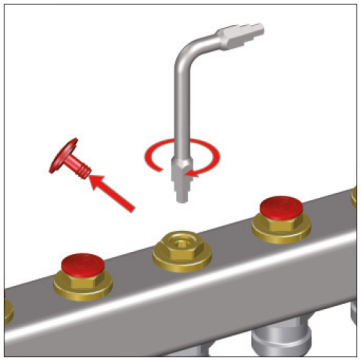
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



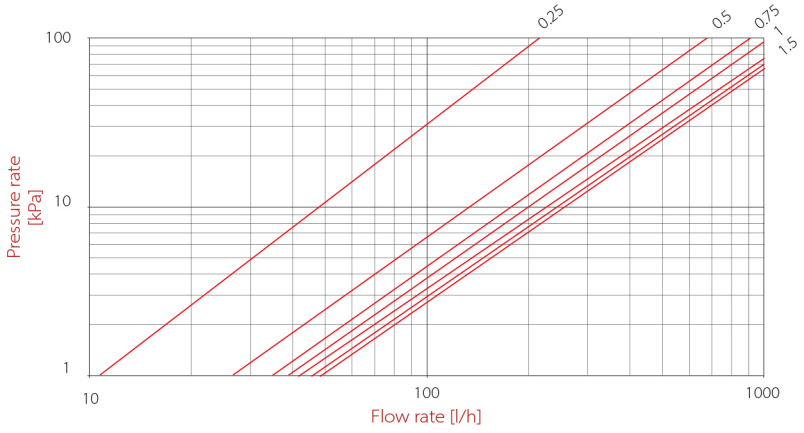
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



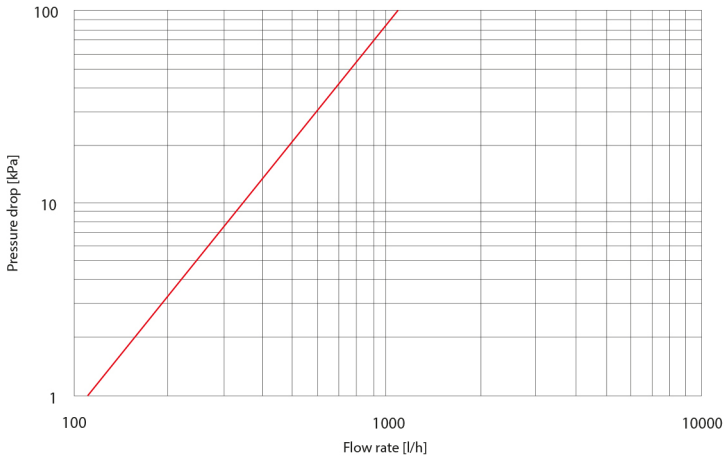
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

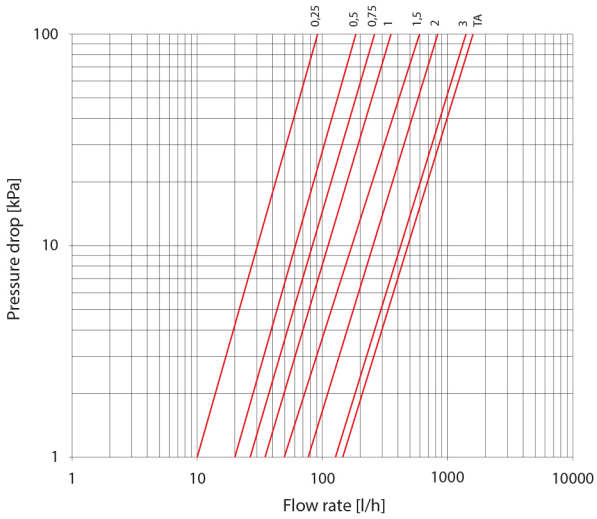
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

947 Single manifold, with 3/4” Eurokonus outlets

100% TESTED

MEASURE	PRESSURE	CODE	PACKING
1"x3/4"x2	10bar/145psi	9470010002034	2/24
1"x3/4"x3	10bar/145psi	9470010003034	2/24
1"x3/4"x4	10bar/145psi	9470010004034	2/16
1"x3/4"x5	10bar/145psi	9470010005034	2/16
1"x3/4"x6	10bar/145psi	9470010006034	2/16
1"x3/4"x7	10bar/145psi	9470010007034	2/6
1"x3/4"x8	10bar/145psi	9470010008034	2/4
1"x3/4"x9	10bar/145psi	9470010009034	2/4
1"x3/4"x10	10bar/145psi	9470010010034	2/4
1"x3/4"x11	10bar/145psi	9470010011034	2/4
1"x3/4"x12	10bar/145psi	9470010012034	2/4
1"x3/4"x13	10bar/145psi	9470010013034	2/4

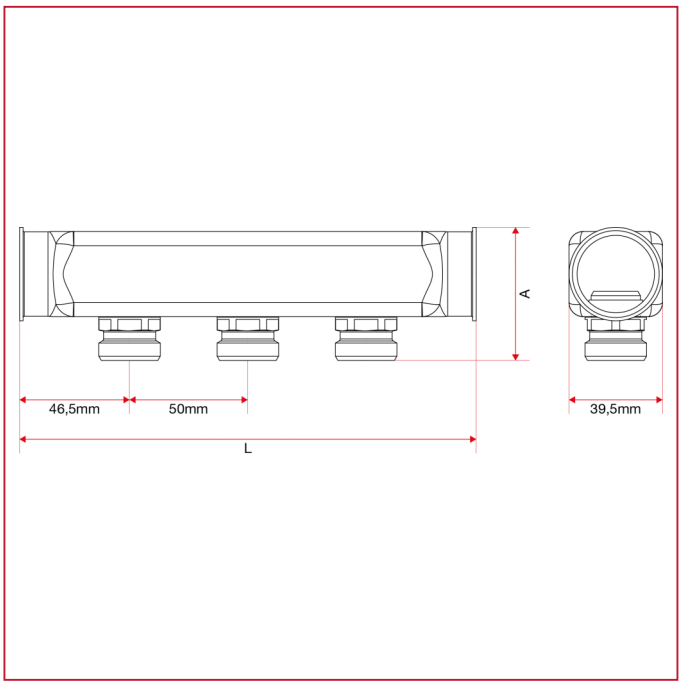
CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Distribution manifold in stainless steel AISI 304L.
Available sizes: 1”.
Maximum working pressure: 10 bar.
Maximum working temperature: 80°C.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 2 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50.

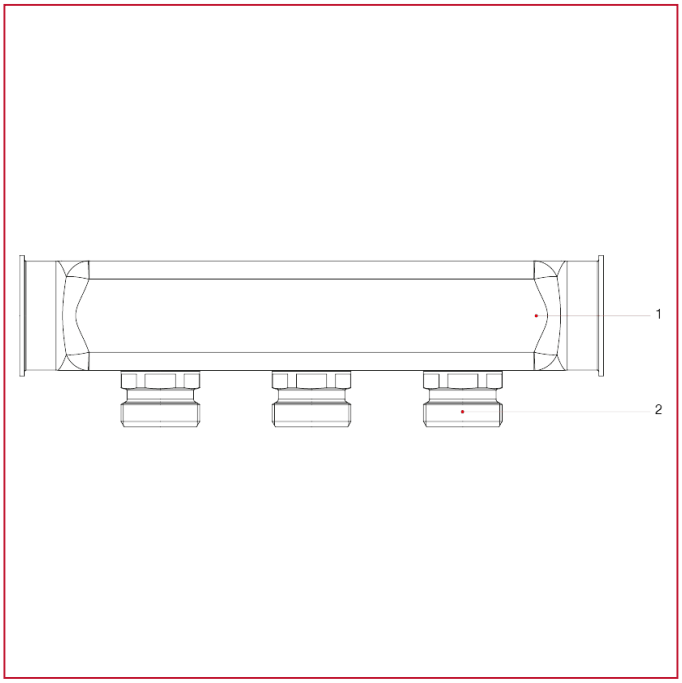
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

OVERALL DIMENSIONS



	1"x3/4"x 2	1"x3/4"x 3	1"x3/4"x 4	1"x3/4"x 5	1"x3/4"x 6	1"x3/4"x 7	1"x3/4"x 8	1"x3/4"x 9	1"x3/4"x 10	1"x3/4"x 11	1"x3/4"x 12	1"x3/4"x 13
A	54,5	54,5	54,5	54,5	54,5	54,5	54,5	54,5	54,5	54,5	54,5	54,5
L	143	193	243	293	343	393	443	493	543	593	643	693
Kg/cm2 bar	10	10	10	10	10	10	10	10	10	10	10	10
LBS - psi	145	145	145	145	145	145	145	145	145	145	145	145

MATERIALS



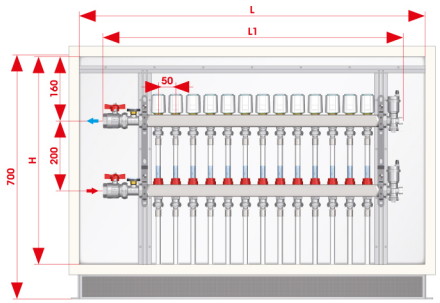
POS.	DESCRIPTION	N.	MATERIAL
1	Manifold	1	Stainless steel AISI 304 L
2	Male/male adapter	2-13	Nickel-plated brass CW614N

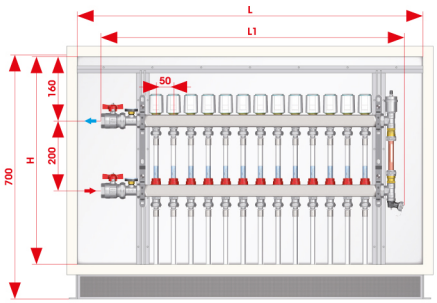
PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS

INSTRUCTIONS ON INSTALLATION, USE AND MAINTENANCE

Technical specifications:
Available sizes: 1”
Maximum operating pressure with installed flow meters: 6 bar (10 bar for installation test)
Maximum operating pressure with installed lockshields: 10 bar
Maximum working temperature: 70°C (with flow meters), 80°C (with lockshields).
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Outlets: from 3 to 13, 3/4” Eurokonus.
Outlet centre distance: mm.50

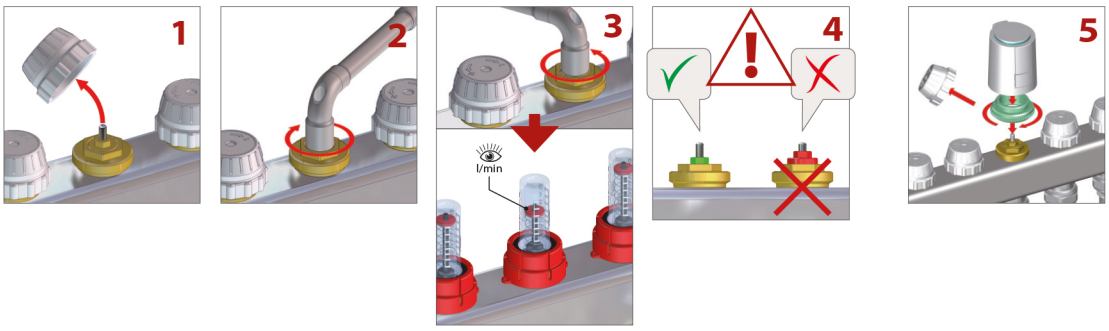
POSITIONING THE STAINLESS STEEL MANIFOLDS INTO METAL BOXES





CODICE / *CODE* / CODE / *CÓDIGO* / TEILENUMMER / *КОД*	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
L x H (mm)	500x600	600x600	700x600	800x600	1000x600
N° vie / *outlet* / voies / *vias* / Wege / *ходов*	3-4	5-6	7-8	9-10	11-12-13
COLLETTORE / *MANIFOLD* / COLLECTEUR / *COLECTOR* / VERTEILER / *КОЛЛЕКТОР*	1”				
L1	386	486	586	686	836

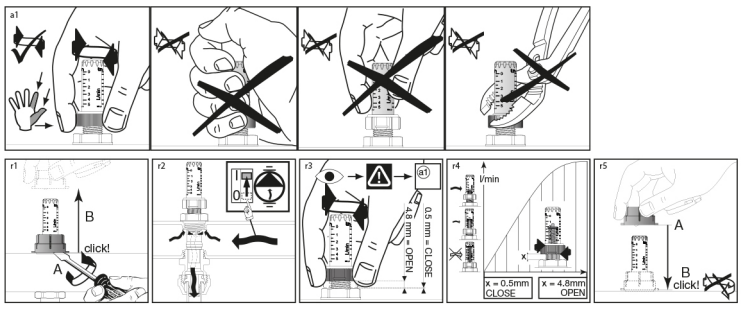
HOW TO ADJUST THE FLOW RATE



1. Remove the plastic cap from the valve, installed on return manifold.
2. The valve, equipped with a pre-setting insert, is normally supplied with the spindle completely open. Please, close each valve by means of a 8 mm key tool, by turning the insert clockwise.
3. Adjust the flow rate of each circuit by turning the insert anti-clockwise till you read, on the flowmeter installed on the flow manifold, the required flow rate.
4. The fine thread of the pre-setting valve must not be seen above the edge of its hexagonal seat: the insert is totally open (full flow) when you have turned it anti-clockwise at approximately 2.5 turns.
5. Once you have adjusted the flow rate, the valve has to be protected from dust and dirt by screwing back the plastic cap of by installing an electrothermal actuator.

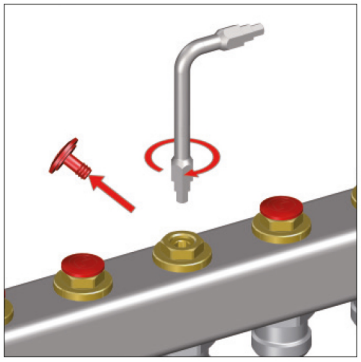
FLOWMETER ADJUSTMENT

PRE-ASSEMBLED STAINLESS STEEL MANIFOLDS



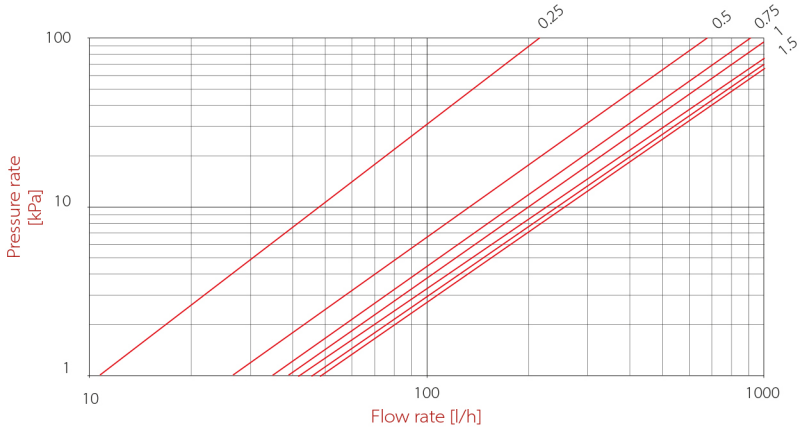
- The pre-setting valve works as a regular valve (ON-OFF operation), if it is used in its totally open position.

LOCKSHIELD ADJUSTMENT



- Starting from a totally closed position, open the lockshield according to the enclosed chart, in order to achieve the desired flow rate. The adjustment has to be done by means of a hexagonal key in the size of 6 mm

SETTING TURNS AND FLOW RATE DIAGRAM



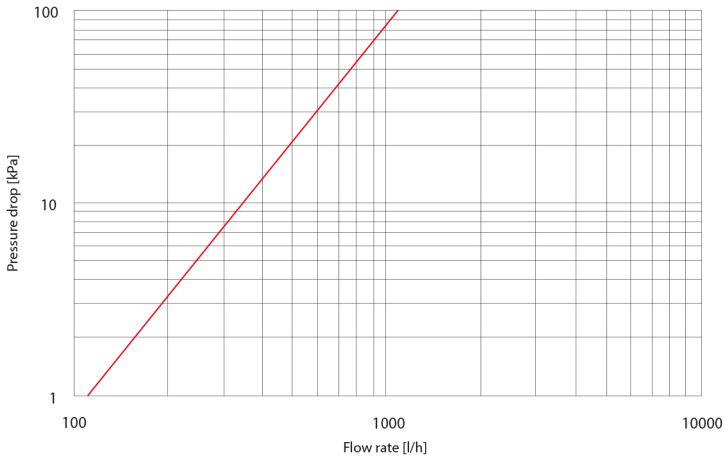
REGOLAZIONE (giri) - *REGULATION (rpm)* - RÉGLAGE (tours) - *REGULACIÓN (revoluciones)* - EINSTELLUNG (Undrehungen) - *Регулировка (обороты)*	0.25	0.5	0.75	1	1.5	2	2.5
Kv	0.22	0.68	0.91	1.05	1.22	1.30	1.35

TECHNICAL NOTE:
In case of installation of manifolds equipped with pre-setting valves, the flowmeter has not to be used as a balancing valve, but

just to read the required flow rate. In any case, if you prefer to balance the flow rate by means of flowmeter, this is possible also in case of use of a pre-setting valve. In fact, as it is supplied in its totally open position, you can adjust the flow rate of each circuit as usual (please, see the following specification), by turning the flowmeter and leaving pre-setting valve completely open.

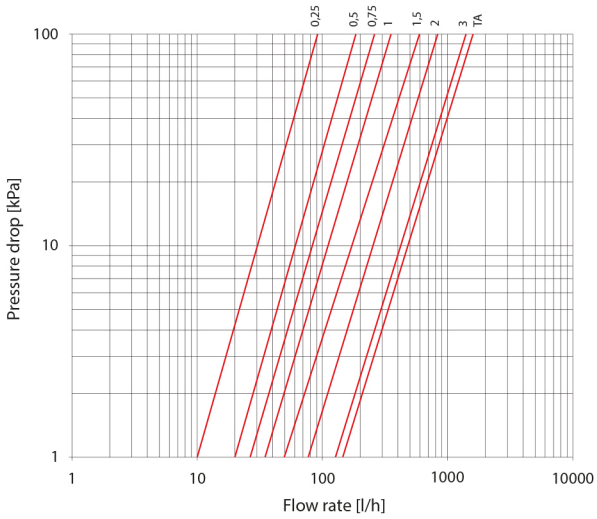
DIAGRAMS
- Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1” connections.

Diagram of flow meter fully open (flow manifold)



Kv = 1,1 m3/h

Regulation lockshield diagram (flow manifold)



Regolazione (giri) *Regulation (rpm)* Réglage (tours) *Regulación (revoluciones)* Einstellung (Undrehungen) *Регулировка (обороты)*	Kv [m³/h]
0,25	0,09
0,5	0,19
0,75	0,27
1	0,36
1,5	0,60
2	0,83
3	1,45
TA (*open* - Vollöffnung - *открыто*)	1,65

ITAP S.p.A.
Via Ruca 19
25065 Lumezzane
Brescia (ITALY)
Tel 030 8927011
Fax 030 8921990
www.itap.it - info@itap.it

rev. 20250409