



TECHNICAL CATALOGUE

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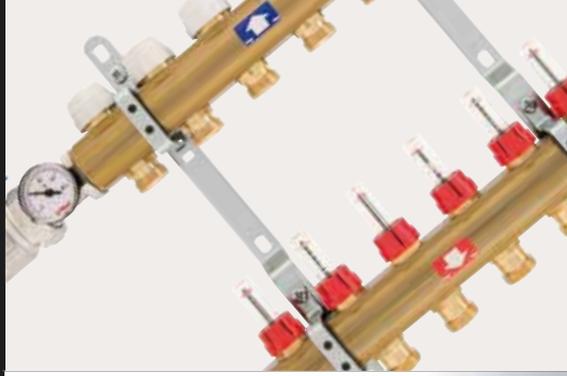
# PRE-ASSEMBLED MANIFOLDS IN BRASS

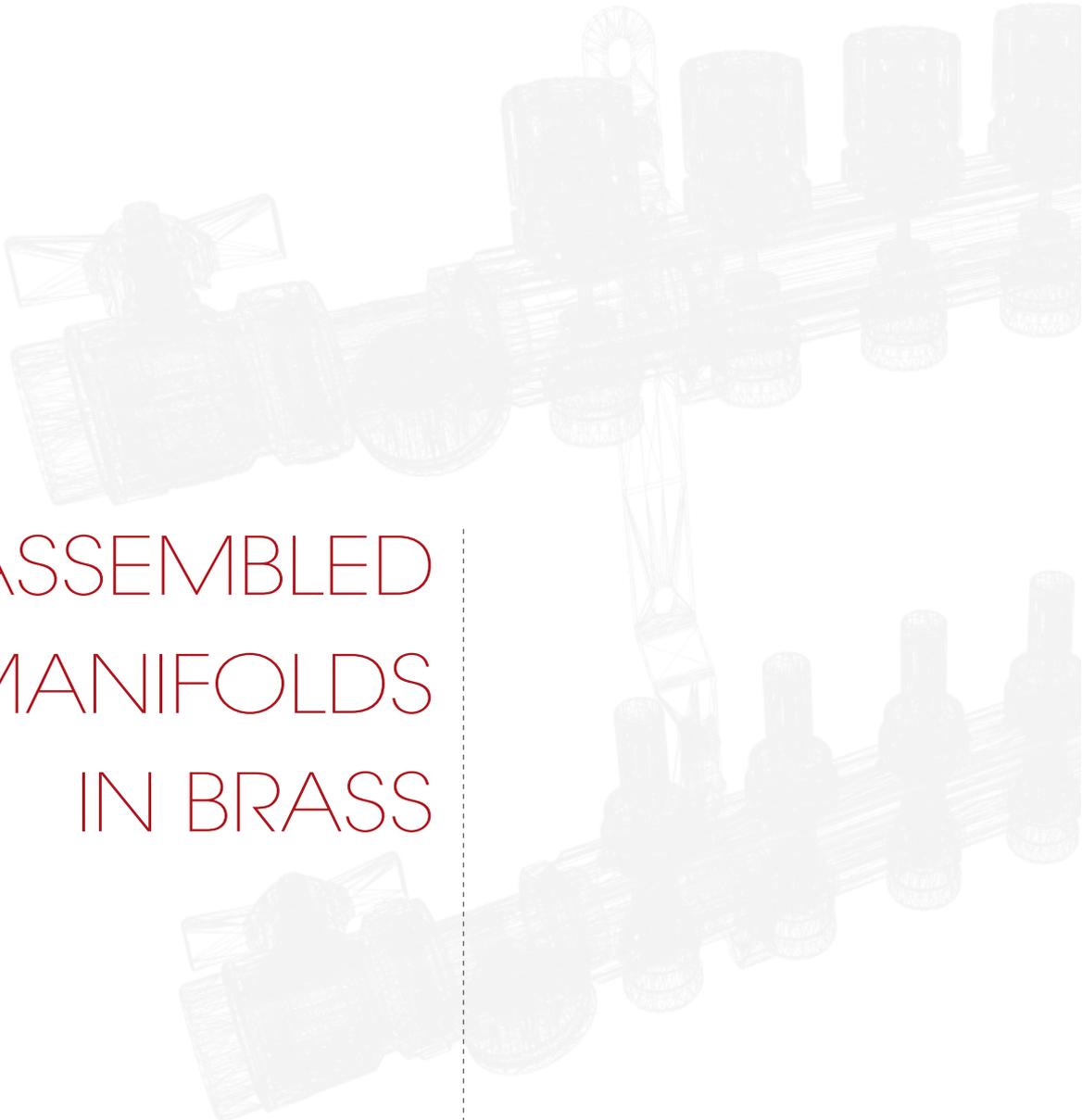




ITAP SpA, founded in Lumezzane (Brescia) in 1972, is currently one of the leading production companies in Italy of valves, fittings and distribution manifolds for plumbing and heating systems. Thanks to fully automated production processes, with 72 tooling machines and 51 assembly lines, we are able to produce 200,000 pieces per day. Our innate pursuit for innovation and observance of technical regulations is supported by the company certification ISO 9001: 2008. 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.

BRASS PRE-ASSEMBLED MANIFOLDS





PRE-ASSEMBLED  
MANIFOLDS  
IN BRASS

## ITAP SpA **PRE-ASSEMBLED MANIFOLDS**

are used to distribute heat-transfer fluid inside a system. They can be used in traditional radiator systems, and innovative under-floor radiant systems. As ITAP SpA manifolds are made with **brass**, they are particularly **suitable for heating systems**. If used in cooling systems, they must be suitably insulated to avoid the formation of condensation on their outer surface. The use of ITAP SpA manifolds also allows all of the project parameters to be controlled, providing the perfect balance of each outlet. This **avoids any unnecessary waste and ensures an elevated level of thermal comfort**. In the complete version, the manifolds are equipped with flow rate regulation valves (flow meters), with preset cut-off valves set-up for electro-thermal actuator-control and with drain and air vent units. The bars, from which the supply- and return-manifolds are made, are thermally processed in order to avoid cracks or breaks as a consequence of mechanical stress. If necessary, a differential by-pass can be installed between the flow and return manifolds: this reduces any overpressure in the circuits to a minimum, protecting the service life of all of the parts and avoiding bothersome noises in the rooms where the heating system is installed. ITAP SpA manifolds, available with 1" and 1"1/4 main connections, can be housed in 90mm-deep metal boxes. This provides an extremely significant advantage: boxes having a similar depth can be positioned not only in the perimeter walls of the building, but also in the inside dividing walls. This translates into maximum freedom of choice for designers and installation technicians.



### 905C

Complete pre-assembled manifold, with flow meters.

Available sizes: 1" and 1"1/4  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)



### 910C

Complete pre-assembled manifold, with lockshields.

Available sizes: 1" and 1"1/4  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)



### 915C

Pre-assembled manifold with flow meters.

Available sizes: 1" and 1"1/4  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)



### 916C

Pre-assembled manifold with flow meters,  
air vent valves and drain cocks.

Available sizes: 1" and 1"1/4  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)

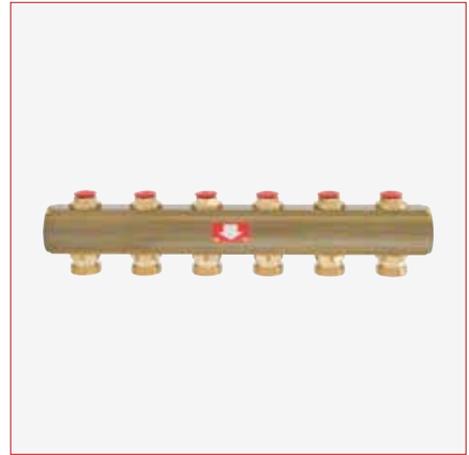


**920C**

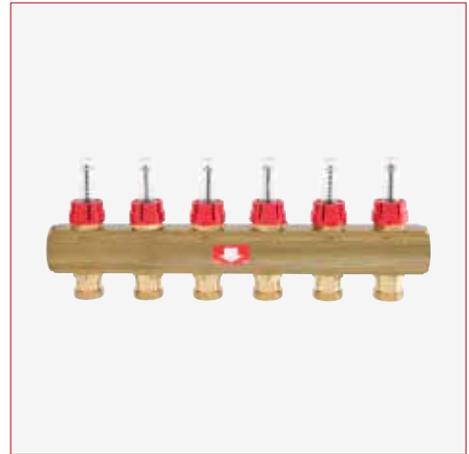
Pre-assembled manifold with lockshields.  
Available sizes: 1" and 1 1/4"  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)

**925**

Single manifold with lockshields.  
Available sizes: 1" and 1 1/4"  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)

**930**

Single manifold with flow meters.  
Available sizes: 1"  
(from 2 to 12 Eurokonus 3/4" outlets)

**935**

Single manifold with shut-off valves preset  
for electrothermal actuators - with handles.  
Available sizes: 1" and 1 1/4"  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)



**940**

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

Available sizes: 1" and 1 1/4"  
(from 3 to 13 1/2" or Eurokonus 3/4" outlets)

**945**

Single manifold, with 3/4" Eurokonus outlets.

Available sizes: 1" and 1 1/4"  
(from 3 to 13 Eurokonus 3/4" outlets)



# 905C

COMPLETE  
PRE-ASSEMBLED  
MANIFOLD,  
WITH FLOW METERS

SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	6bar/87psi	9050010003034C	1/1
1"x3/4"x4	6bar/87psi	9050010004034C	1/1
1"x3/4"x5	6bar/87psi	9050010005034C	1/1
1"x3/4"x6	6bar/87psi	9050010006034C	1/1
1"x3/4"x7	6bar/87psi	9050010007034C	1/1
1"x3/4"x8	6bar/87psi	9050010008034C	1/1
1"x3/4"x9	6bar/87psi	9050010009034C	1/1
1"x3/4"x10	6bar/87psi	9050010010034C	1/1
1"x3/4"x11	6bar/87psi	9050010011034C	1/1
1"x3/4"x12	6bar/87psi	9050010012034C	1/1
1"x3/4"x13	6bar/87psi	9050010013034C	1/1

## TECHNICAL SPECIFICATIONS

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

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 3 to 13, 3/4" Eurokonus

Outlet centre distance: mm.50

Available on demand with deeper mounting brackets art. 498ST without extra charge.

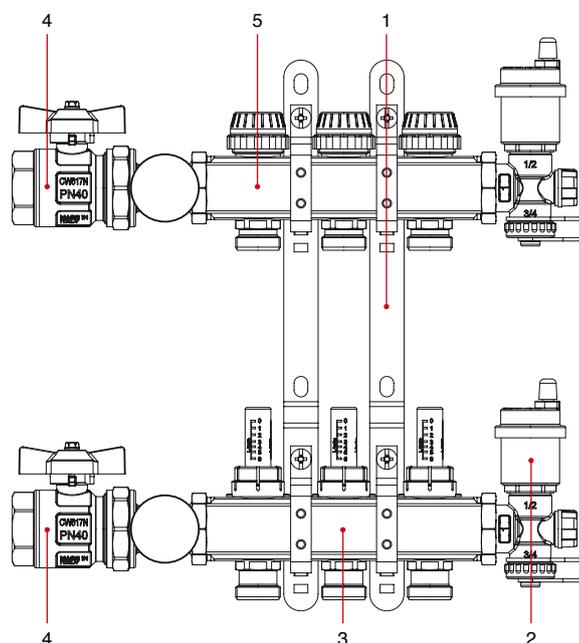
Available on demand with 1/2" outlets.

Available on demand with 1"1/4 side inlets.

**In case of use of electric actuators Art. 891M, 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.

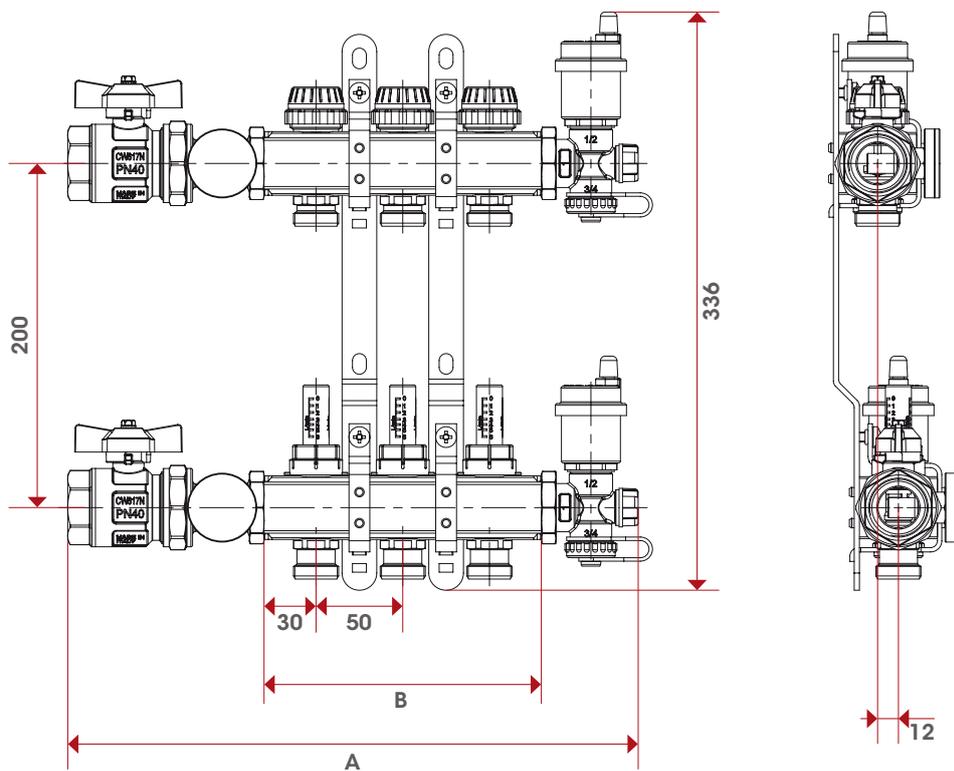
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Mounting brackets	1	Steel P11
2	Automatic air vent group	2	Nickel-plated brass CW617N
3	Single manifold with flow-meters	1	Brass CW603N M-S
4	Kit form manifolds	1	Nickel-plated brass CW617N
5	Single manifold with shut-off valves	1	Brass CW603N M-S



## OVERALL DIMENSIONS



	1" x 3/4"	
	A	B
3	329	160
4	379	210
5	429	260
6	479	310
7	529	360
8	579	410
9	629	460
10	679	510
11	729	560
12	779	610
13	829	660

## CERTIFICATIONS



# 910C

COMPLETE  
PRE-ASSEMBLED  
MANIFOLD, WITH  
LOCKSHIELDS

SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	10bar/145psi	9100010003034C	1/1
1"x3/4"x4	10bar/145psi	9100010004034C	1/1
1"x3/4"x5	10bar/145psi	9100010005034C	1/1
1"x3/4"x6	10bar/145psi	9100010006034C	1/1
1"x3/4"x7	10bar/145psi	9100010007034C	1/1
1"x3/4"x8	10bar/145psi	9100010008034C	1/1
1"x3/4"x9	10bar/145psi	9100010009034C	1/1
1"x3/4"x10	10bar/145psi	9100010010034C	1/1
1"x3/4"x11	10bar/145psi	9100010011034C	1/1
1"x3/4"x12	10bar/145psi	9100010012034C	1/1
1"x3/4"x13	10bar/145psi	9100010013034C	1/1

Consisting of:

- 1 return manifold in brass with shut-off valves preset for electrothermal actuators.
- 1 flow manifold in brass with lockshields.
- 2 complete metal brackets.
- 2 shut-off ball valves.
- 2 unions with thermometer.
- 2 end pieces with air-vent valve and drain cock.

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 3 to 13, 3/4" Eurokonus

Outlet centre distance: mm.50

Available on demand with deeper mounting brackets art. 498ST without extra charge.

Available on demand with 1/2" outlets.

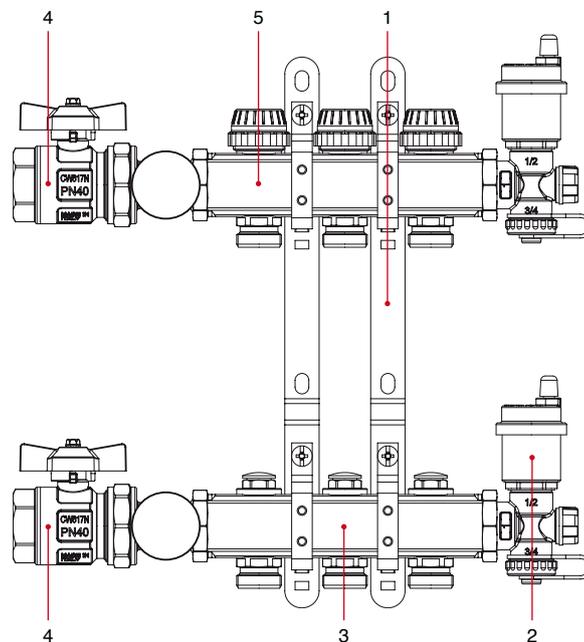
Available on demand with 1"1/4 side inlets.

In case of use of electric actuators Art. 891M, 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.

## TECHNICAL SPECIFICATIONS

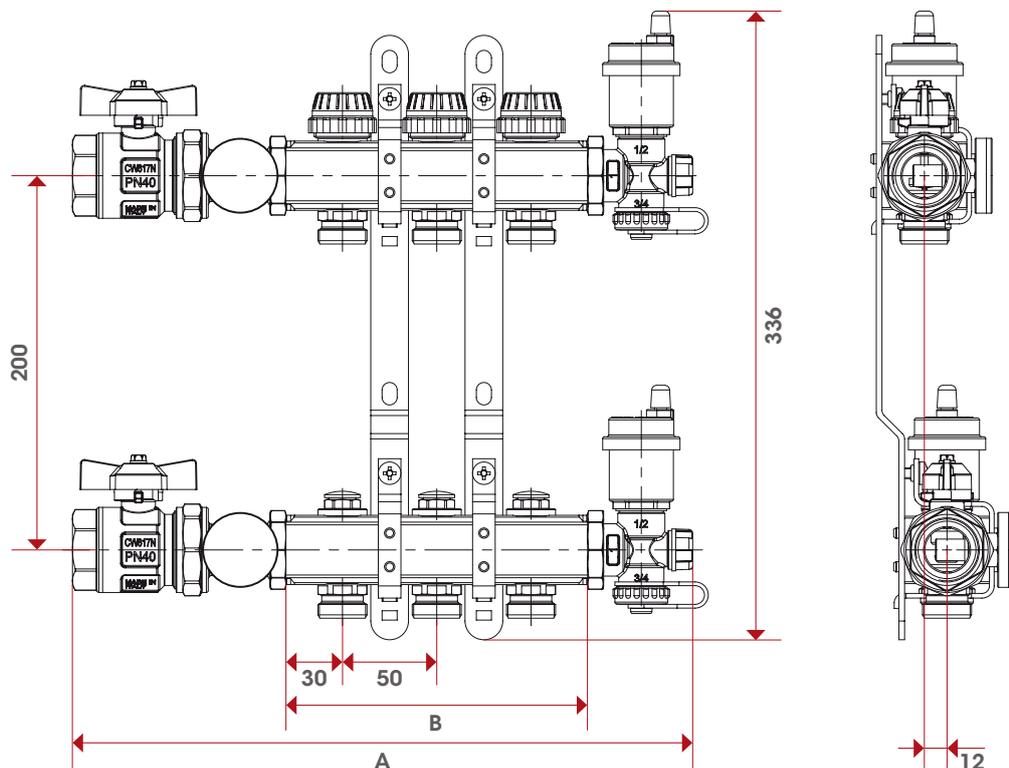
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Mounting brackets	1	Steel P11
2	Automatic air vent group	2	Nickel-plated brass CW617N
3	Single manifold with lockshields	1	Brass CW603N M-S
4	Kit form manifolds	1	Nickel-plated brass CW617N
5	Single manifold with shut-off valves	1	Brass CW603N M-S



## OVERALL DIMENSIONS



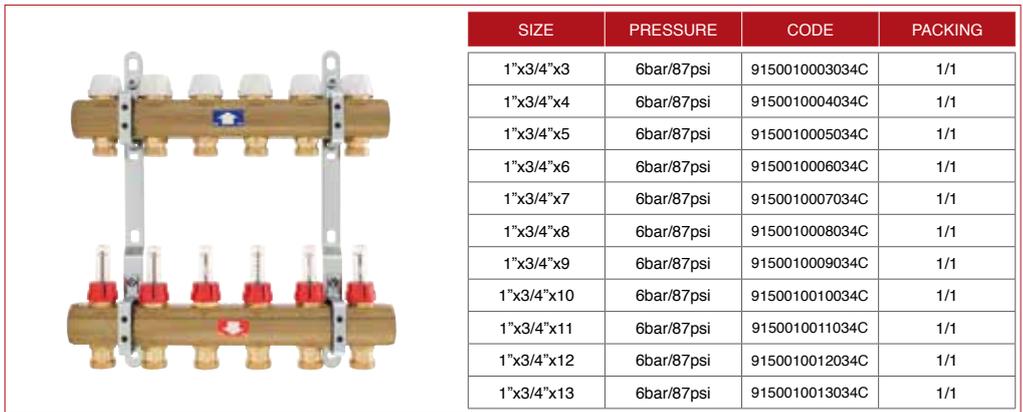
	1" x 3/4"	
	A	B
3	329	160
4	379	210
5	429	260
6	479	310
7	529	360
8	579	410
9	629	460
10	679	510
11	729	560
12	779	610
13	829	660

## CERTIFICATIONS



# 915C

PRE-ASSEMBLED  
MANIFOLD WITH  
FLOW METERS



## TECHNICAL SPECIFICATIONS

Consisting of:

- 1 return manifold in brass with shut-off valves preset for electrothermal actuators.
- 1 flow manifold in brass with flow meters.
- 2 complete metal brackets.

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 3 to 13, 3/4" Eurokonus

Outlet centre distance: mm.50

Available on demand with deeper mounting brackets art. 498ST without extra charge.

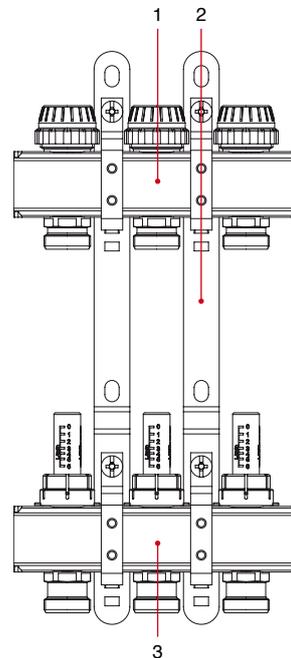
Available on demand with 1/2" outlets.

Available on demand with 1"1/4 side inlets.

**In case of use of electric actuators Art. 891M, it is suggested to use the off-centre by-pass kit Art. 860BY.**

**ATTENTION:** manifolds will be supplied mounted on the brackets.

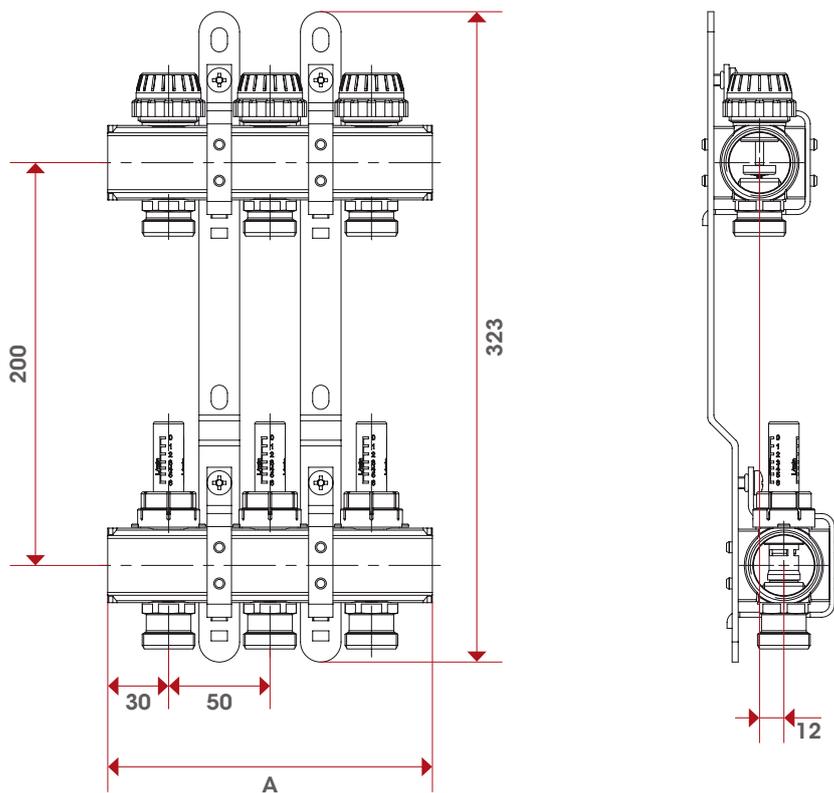
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold with shut-off valves	1	Brass CW603N M-S
2	Mounting brackets	1	Steel P11
3	Single manifold with flow-meters	1	Brass CW603N M-S



OVERALL DIMENSIONS



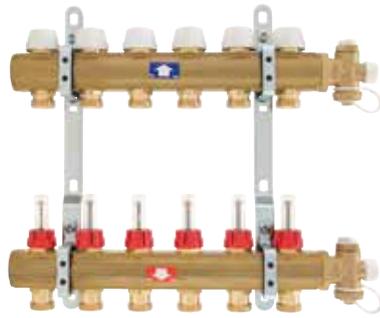
	1" x 3/4"
	A
3	160
4	210
5	260
6	310
7	360
8	410
9	460
10	510
11	560
12	610
13	660

CERTIFICATIONS



# 916C

PRE-ASSEMBLED  
MANIFOLD WITH FLOW  
METERS, AIR VENT VALVES  
AND DRAIN COCK



SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	6bar/87psi	9160010003034C	1/1
1"x3/4"x4	6bar/87psi	9160010004034C	1/1
1"x3/4"x5	6bar/87psi	9160010005034C	1/1
1"x3/4"x6	6bar/87psi	9160010006034C	1/1
1"x3/4"x7	6bar/87psi	9160010007034C	1/1
1"x3/4"x8	6bar/87psi	9160010008034C	1/1
1"x3/4"x9	6bar/87psi	9160010009034C	1/1
1"x3/4"x10	6bar/87psi	9160010010034C	1/1
1"x3/4"x11	6bar/87psi	9160010011034C	1/1
1"x3/4"x12	6bar/87psi	9160010012034C	1/1
1"x3/4"x13	6bar/87psi	9160010013034C	1/1

## TECHNICAL SPECIFICATIONS

Consisting of:

- 1 return manifold in brass with shut-off valves preset for electrothermal actuators
- 1 flow manifold in brass with flow meters
- 2 adjustable end pieces with drain valve and manual air vent valve
- 2 complete metal brackets.

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 3 to 13, 3/4" Eurokonus

Outlet centre distance: mm.50

Available on demand with deeper mounting brackets art. 498ST without extra charge.

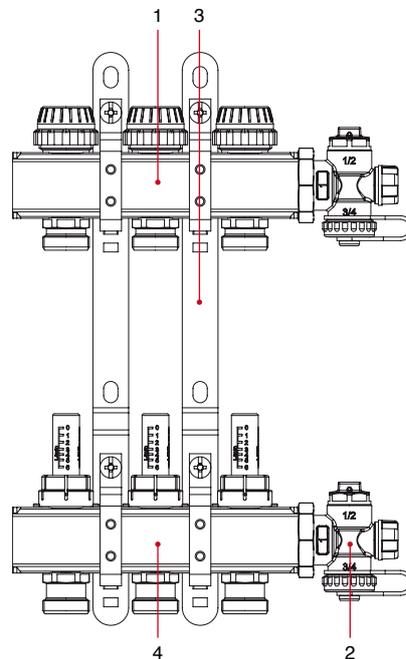
Available on demand with 1/2" outlets.

Available on demand with 1"1/4 side inlets.

In case of use of electric actuators Art. 891M, 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.

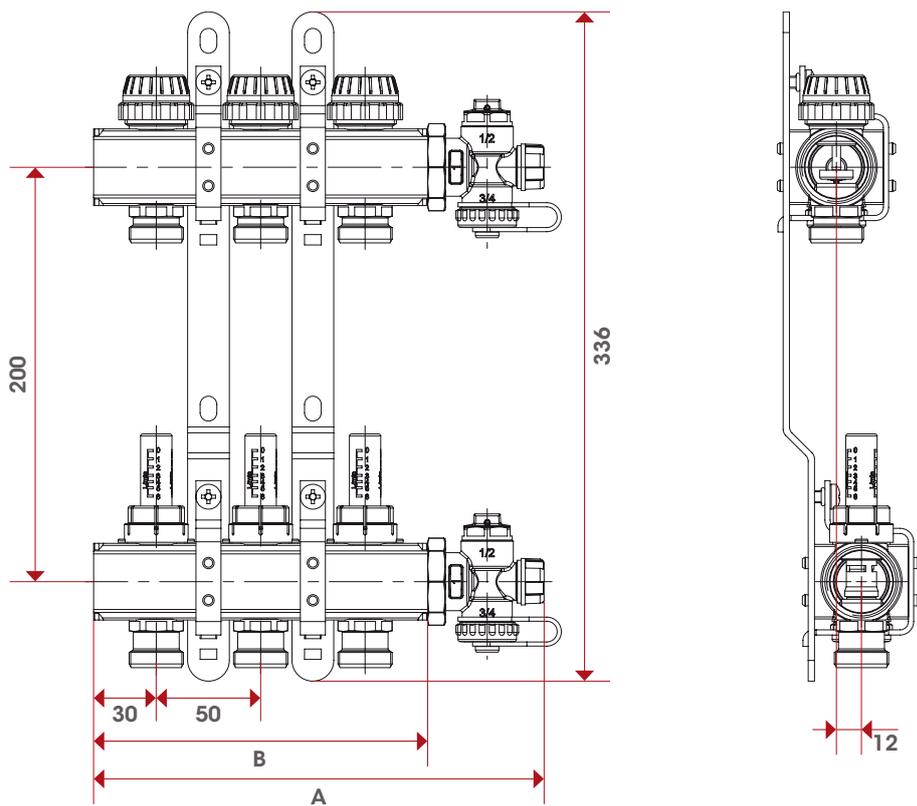
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold with shut-off valves	1	Brass CW603N M-S
2	Manual air vent group	2	Brass CW617N
3	Mounting brackets	1	Steel P11
4	Single manifold with flow-meters	1	Brass CW603N M-S



## OVERALL DIMENSIONS



	1" x 3/4"	
	A	B
3	216	160
4	266	210
5	316	260
6	366	310
7	416	360
8	466	410
9	516	460
10	566	510
11	616	560
12	666	610
13	716	660

## CERTIFICATIONS



# 920C

PRE-ASSEMBLED  
MANIFOLD WITH  
LOCKSHIELDS



SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	10bar/145psi	9200010003034C	1/1
1"x3/4"x4	10bar/145psi	9200010004034C	1/1
1"x3/4"x5	10bar/145psi	9200010005034C	1/1
1"x3/4"x6	10bar/145psi	9200010006034C	1/1
1"x3/4"x7	10bar/145psi	9200010007034C	1/1
1"x3/4"x8	10bar/145psi	9200010008034C	1/1
1"x3/4"x9	10bar/145psi	9200010009034C	1/1
1"x3/4"x10	10bar/145psi	9200010010034C	1/1
1"x3/4"x11	10bar/145psi	9200010011034C	1/1
1"x3/4"x12	10bar/145psi	9200010012034C	1/1
1"x3/4"x13	10bar/145psi	9200010013034C	1/1

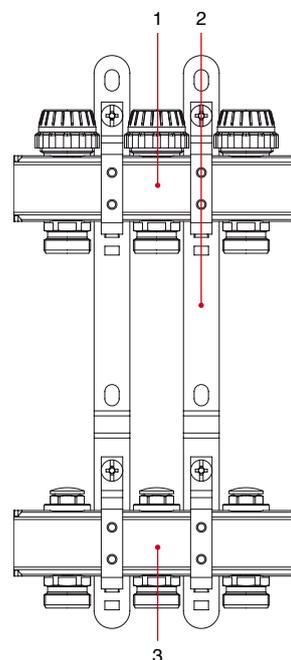
## TECHNICAL SPECIFICATIONS

Consisting of:  
 1 return manifold in brass with shut-off valves preset for electrothermal actuators.  
 1 flow manifold in brass with lockshields.  
 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 3 to 13, 3/4" Eurokonus  
 Outlet centre distance: mm.50  
 Available on demand with deeper mounting brackets art. 498ST without extra charge.  
 Available on demand with 1/2" outlets.  
 Available on demand with 1"1/4 side inlets.

**In case of use of electric actuators Art. 891M, it is suggested to use the off-centre by-pass kit Art. 860BY.**  
**ATTENTION: manifolds will be supplied mounted on the brackets.**

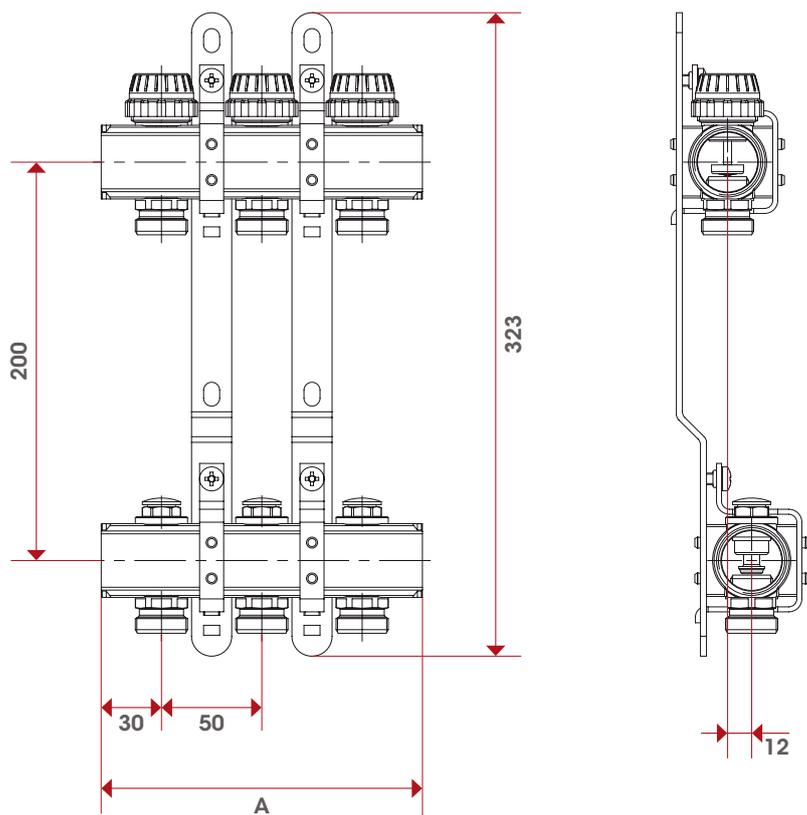
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Single manifold with shut-off valves	1	Brass CW603N M-S
2	Mounting brackets	1	Steel P11
3	Single manifold with lockshields	1	Brass CW603N M-S



## OVERALL DIMENSIONS



	1" x 3/4"
	A
3	160
4	210
5	260
6	310
7	360
8	410
9	460
10	510
11	560
12	610
13	660

## CERTIFICATIONS



# 925

SINGLE MANIFOLD,  
WITH LOCKSHIELDS

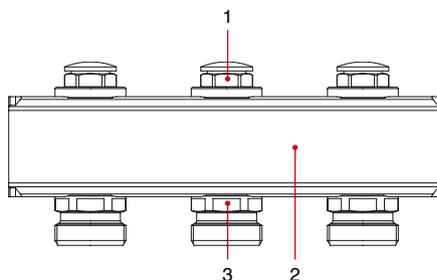


SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	10bar/145psi	9250010003034	1/21
1"x3/4"x4	10bar/145psi	9250010004034	1/21
1"x3/4"x5	10bar/145psi	9250010005034	1/14
1"x3/4"x6	10bar/145psi	9250010006034	1/10
1"x3/4"x7	10bar/145psi	9250010007034	1/10
1"x3/4"x8	10bar/145psi	9250010008034	1/5
1"x3/4"x9	10bar/145psi	9250010009034	1/5
1"x3/4"x10	10bar/145psi	9250010010034	1/5
1"x3/4"x11	10bar/145psi	9250010011034	1/5
1"x3/4"x12	10bar/145psi	9250010012034	1/5
1"x3/4"x13	10bar/145psi	9250010013034	1/4

## TECHNICAL SPECIFICATIONS

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 3 to 13, 3/4" Eurokonus  
 Outlet centre distance: mm.50  
 Available on demand with 1/2" outlets.  
 Available on demand with 1 1/4" side inlets.

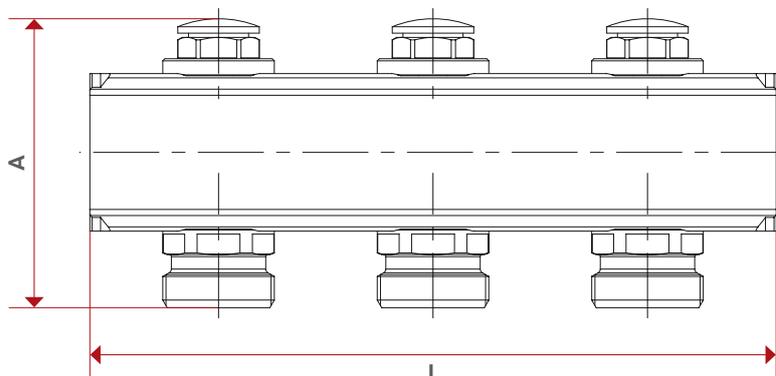
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Lockshield	3-13	Brass CW614N
2	Manifold	1	Brass CW603N M-S
3	Male-male adapter	3-13	Brass CW614N

## OVERALL DIMENSIONS

	1 x 1/2"	1 x 3/4"
	I = 50	
L 3+3	160	160
L 4+4	210	210
L 5+5	260	260
L 6+6	310	310
L 7+7	360	360
L 8+8	410	410
L 9+9	460	460
L 10+10	510	510
L 11+11	560	560
L 12+12	610	610
L 13+13	660	660
A	69	68
Kg/cm² bar	10	10
LBS - psi	145	145

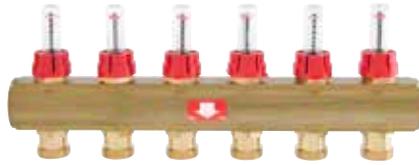


## CERTIFICATIONS



# 930

SINGLE MANIFOLD,  
WITH FLOW METERS

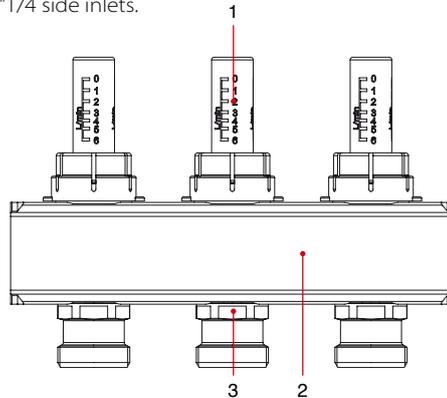


SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	6bar/87psi	9300010003034	1/21
1"x3/4"x4	6bar/87psi	9300010004034	1/21
1"x3/4"x5	6bar/87psi	9300010005034	1/10
1"x3/4"x6	6bar/87psi	9300010006034	1/10
1"x3/4"x7	6bar/87psi	9300010007034	1/10
1"x3/4"x8	6bar/87psi	9300010008034	1/5
1"x3/4"x9	6bar/87psi	9300010009034	1/5
1"x3/4"x10	6bar/87psi	9300010010034	1/5
1"x3/4"x11	6bar/87psi	9300010011034	1/5
1"x3/4"x12	6bar/87psi	9300010012034	1/5
1"x3/4"x13	6bar/87psi	9300010013034	1/4

## TECHNICAL SPECIFICATIONS

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 3 to 13, 3/4" Eurokonus  
 Outlet centre distance: mm.50  
 Available on demand with 1/2" outlets.  
 Available on demand with 1"1/4 side inlets.

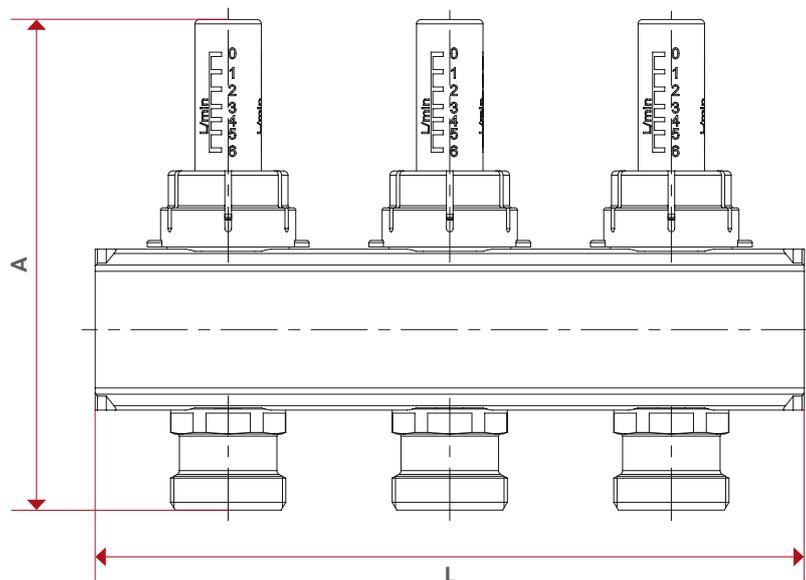
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Flowmeter	3-13	Brass CW614N
2	Manifold	1	Brass CW603N M-S
3	Adapter for flow-meters	3-13	Brass CW614N

## OVERALL DIMENSIONS

	1 x 1/2"	1 x 3/4"
	I = 50	
L 3+3	160	160
L 4+4	210	210
L 5+5	260	260
L 6+6	310	310
L 7+7	360	360
L 8+8	410	410
L 9+9	460	460
L 10+10	510	510
L 11+11	560	560
L 12+12	610	610
L 13+13	660	660
A	109	113
Kg/cm <sup>2</sup> bar	10	10
LBS - psi	145	145



## CERTIFICATIONS



# 935

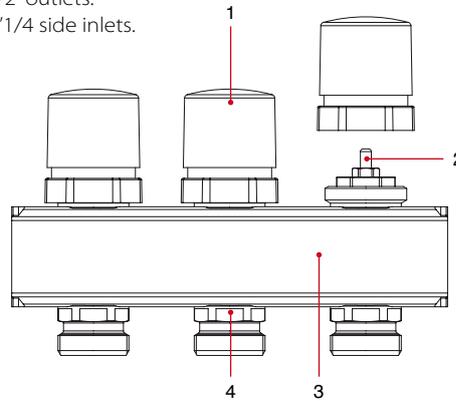
SINGLE MANIFOLD WITH SHUT-OFF VALVES PRESET FOR ELECTROTHERMAL ACTUATORS - WITH HANDLES

SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	10bar/145psi	9350010003034	1/21
1"x3/4"x4	10bar/145psi	9350010004034	1/21
1"x3/4"x5	10bar/145psi	9350010005034	1/10
1"x3/4"x6	10bar/145psi	9350010006034	1/10
1"x3/4"x7	10bar/145psi	9350010007034	1/10
1"x3/4"x8	10bar/145psi	9350010008034	1/5
1"x3/4"x9	10bar/145psi	9350010009034	1/5
1"x3/4"x10	10bar/145psi	9350010010034	1/5
1"x3/4"x11	10bar/145psi	9350010011034	1/5
1"x3/4"x12	10bar/145psi	9350010012034	1/5
1"x3/4"x13	10bar/145psi	9350010013034	1/4

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 3 to 13, 3/4" Eurokonus  
 Outlet centre distance: mm.50  
 Available on demand with 1/2" outlets.  
 Available on demand with 1"1/4 side inlets.

## TECHNICAL SPECIFICATIONS

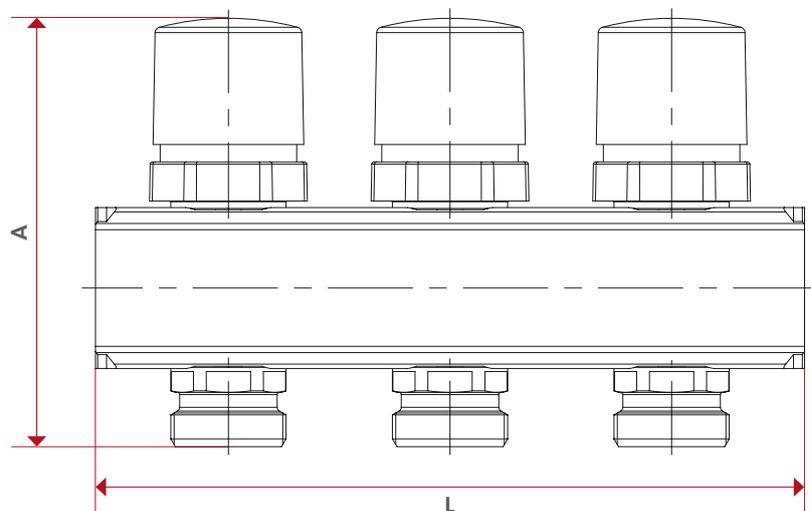
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Handwheel	3-13	ABS
2	Shutoff valve	3-13	Brass CW614N
3	Manifold	1	Brass CW603N M-S
4	Male-male adapter	3-13	Brass CW614N

## OVERALL DIMENSIONS

	1 x 1/2"	1 x 3/4"
	I = 50	
L 3+3	160	160
L 4+4	210	210
L 5+5	260	260
L 6+6	310	310
L 7+7	360	360
L 8+8	410	410
L 9+9	460	460
L 10+10	510	510
L 11+11	560	560
L 12+12	610	610
L 13+13	660	660
A	99,5	98,5
Kg/cm² bar	10	10
LBS - psi	145	145



## CERTIFICATIONS



# 940

SINGLE MANIFOLD WITH SHUT-OFF VALVES PRESET FOR ELECTROTHERMAL ACTUATORS - WITH CAPS

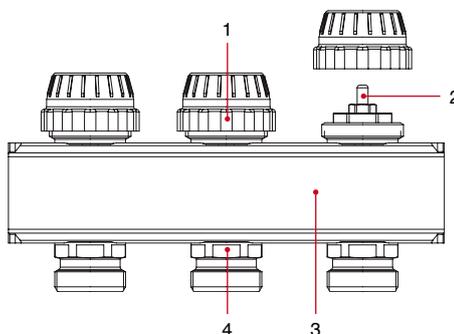


SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	10bar/145psi	9400010003034	1/21
1"x3/4"x4	10bar/145psi	9400010004034	1/21
1"x3/4"x5	10bar/145psi	9400010005034	1/10
1"x3/4"x6	10bar/145psi	9400010006034	1/10
1"x3/4"x7	10bar/145psi	9400010007034	1/10
1"x3/4"x8	10bar/145psi	9400010008034	1/5
1"x3/4"x9	10bar/145psi	9400010009034	1/5
1"x3/4"x10	10bar/145psi	9400010010034	1/5
1"x3/4"x11	10bar/145psi	9400010011034	1/5
1"x3/4"x12	10bar/145psi	9400010012034	1/5
1"x3/4"x13	10bar/145psi	9400010013034	1/4

## TECHNICAL SPECIFICATIONS

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 3 to 13, 3/4" Eurokonus  
 Outlet centre distance: mm.50  
 Available on demand with 1/2" outlets.  
 Available on demand with 1"1/4 side inlets.

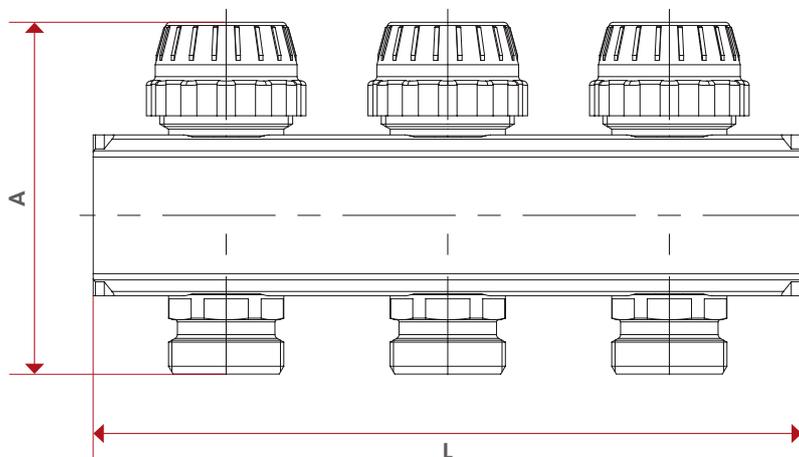
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Cap	3-13	ABS
2	Shutoff valve	3-13	Brass CW614N
3	Manifold	1	Brass CW603N M-S
4	Male-male adapter	3-13	Brass CW614N

## OVERALL DIMENSIONS

	1 x 1/2"	1 x 3/4"
	I = 50	
L 3+3	160	160
L 4+4	210	210
L 5+5	260	260
L 6+6	310	310
L 7+7	360	360
L 8+8	410	410
L 9+9	460	460
L 10+10	510	510
L 11+11	560	560
L 12+12	610	610
L 13+13	660	660
A	82	81
Kg/cm <sup>2</sup> bar	10	10
LBS - psi	145	145



## CERTIFICATIONS



# 945

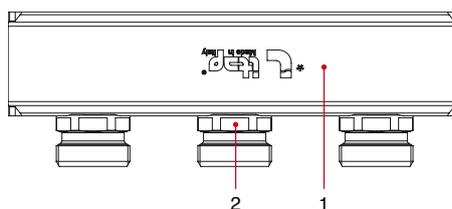
SINGLE MANIFOLD,  
WITH 3/4" EUROKONUS  
OUTLETS

SIZE	PRESSURE	CODE	PACKING
1"x3/4"x3	10bar/145psi	9450010003034	1/21
1"x3/4"x4	10bar/145psi	9450010004034	1/21
1"x3/4"x5	10bar/145psi	9450010005034	1/14
1"x3/4"x6	10bar/145psi	9450010006034	1/10
1"x3/4"x7	10bar/145psi	9450010007034	1/10
1"x3/4"x8	10bar/145psi	9450010008034	1/5
1"x3/4"x9	10bar/145psi	9450010009034	1/5
1"x3/4"x10	10bar/145psi	9450010010034	1/5
1"x3/4"x11	10bar/145psi	9450010011034	1/5
1"x3/4"x12	10bar/145psi	9450010012034	1/5
1"x3/4"x13	10bar/145psi	9450010013034	1/4

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 3 to 13, 3/4" Eurokonus  
 Outlet centre distance: mm.50  
 Available on demand with 1"1/4 side inlets.

## TECHNICAL SPECIFICATIONS

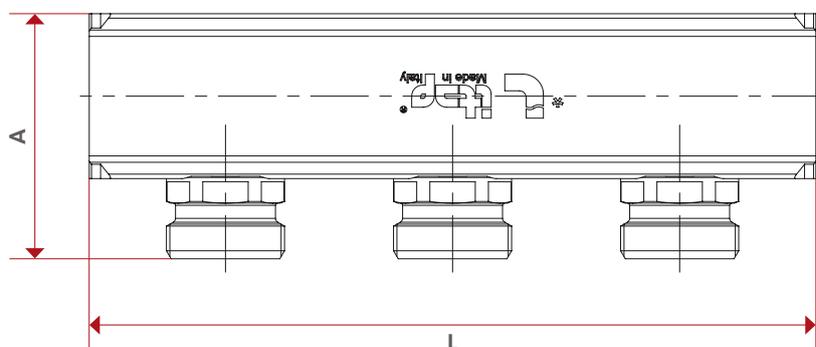
## MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Manifold	1	Brass CW603N M-S
2	Male-male adapter	3-13	Brass CW614N

## OVERALL DIMENSIONS

	1 x 1/2"	1 x 3/4"
	I = 50	
L 3+3	160	160
L 4+4	210	210
L 5+5	260	260
L 6+6	310	310
L 7+7	360	360
L 8+8	410	410
L 9+9	460	460
L 10+10	510	510
L 11+11	560	560
L 12+12	610	610
L 13+13	660	660
A	56	55
Kg/cm <sup>2</sup> bar	10	10
LBS - psi	145	145



## CERTIFICATIONS



# 498

## METAL BOX FOR MANIFOLDS



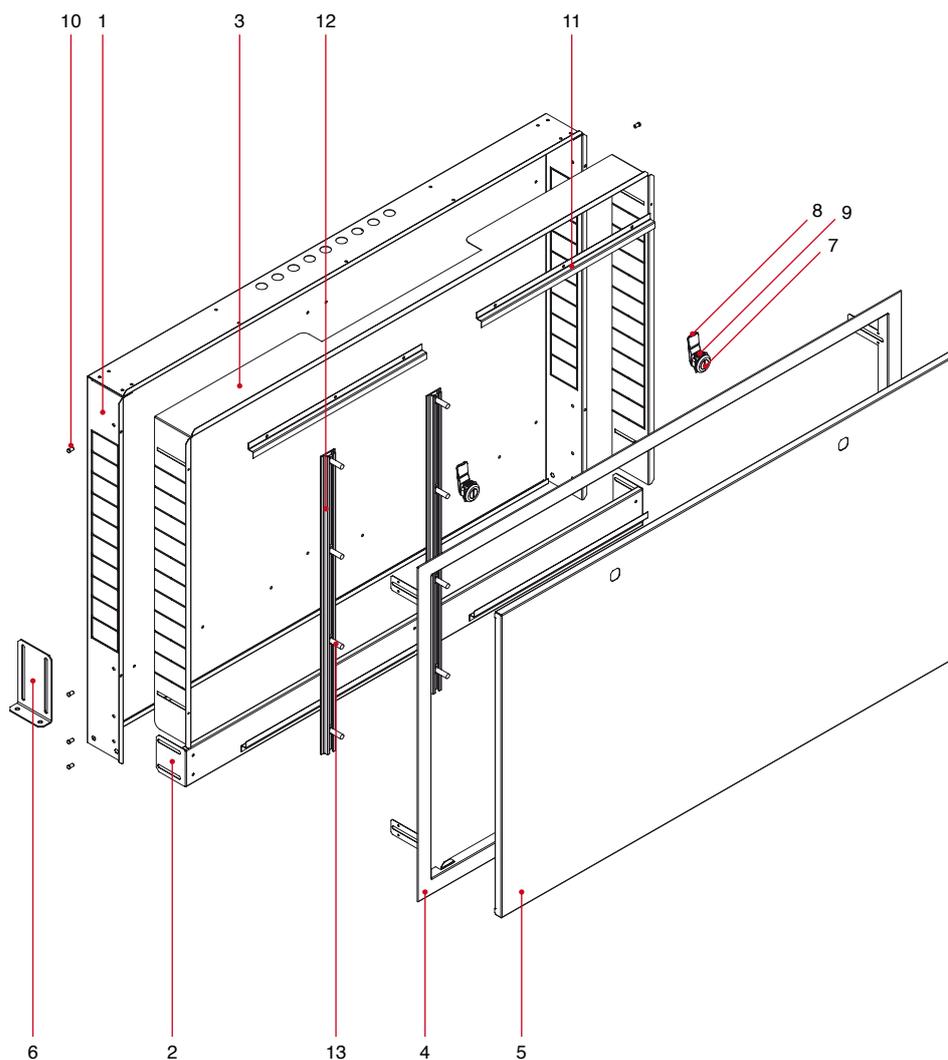
SIZE LXHXP	CODE	PACKING
500x600x(80-130)	498500600	1/1
600x600x(80-130)	498600600	1/1
700x600x(80-130)	498700600	1/1
800x600x(80-130)	498800600	1/1
1000x600x(80-130)	4981000600	1/1
1100x600x(80-130)	4981100600	1/1

## TECHNICAL SPECIFICATIONS

Complete with basement and support for floor installation.  
Equipped with plaster protection.

Enclosure, telescopic door frame and door in zincplated steel.  
The telescopic door frame and the door are painted.  
Adjustable depth: from mm. 80 to mm. 130.  
Minimum depth for Itap manifolds installation: mm. 90.  
Adjustable height: from mm. 700 to mm. 800.

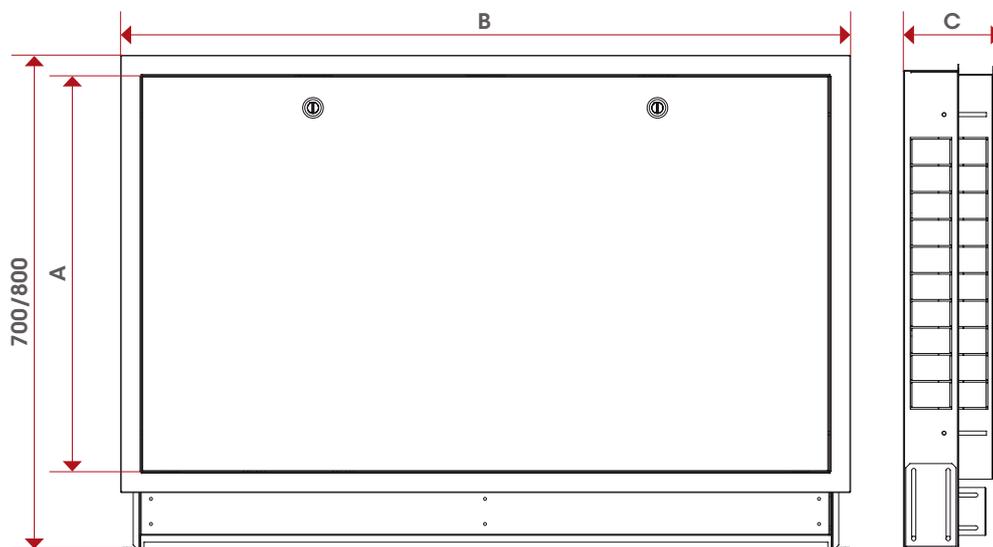
## MATERIALS



## MATERIALS

POS.	DESCRIPTION	N.	MATERIAL
1	Outside framework	1	Zinc-plated steel EN 10346 DX51+Z140
2	Bottom framework	1	Zinc-plated steel EN 10346 DX51+Z140
3	Inside framework	1	Zinc-plated steel EN 10346 DX51+Z140
4	Frame	1	Zinc-plated steel EN 10346 DX51+Z140
5	Cover	1	Zinc-plated steel EN 10346 DX51+Z140
6	Bracket	2	Zinc-plated steel EN 10346 DX51+Z140
7	Sleeve	2	Polymer
8	Lever	2	Polymer
9	Lever locker	2	Polymer
10	Pin	8	Steel 8.8
11	Guide	4	Zinc-plated steel EN 10346 DX51+Z140
12	Stick	2	EN AW-6061
13	Screw	8	Steel 8.8
-	Daubing mesh	1	Polypropylene

## OVERALL DIMENSIONS



	500 x 600 x (80 - 130)	600 x 600 x (80 - 130)	700 x 600 x (80 - 130)	800 x 600 x (80 - 130)	1000 x 600 x (80 - 130)	1100 x 600 x (80 - 130)
<b>A</b>	600	600	600	600	600	600
<b>B</b>	500	600	700	800	1000	1100
<b>C</b>	80 - 130	80 - 130	80 - 130	80 - 130	80 - 130	80 - 130

# 498ST

MOUNTING BRACKETS  
IN STEEL FOR METAL  
BOXES ART. 498



Centres distance mm. 200.  
Offset mm. 12.

SIZE	CODE	PACKING
3/4"	498ST034K	1/40
1"	498ST100K	1/40
1"1/4	498ST114K	1/40



Centres distance mm. 200.  
Offset mm. 30.

SIZE	CODE	PACKING
1"	498ST100KM	1/40
1"1/4	498ST114KM	1/40



Centres distance mm. 211.  
Offset mm. 30.

SIZE	CODE	PACKING
1"	498ST100KMB	1/40



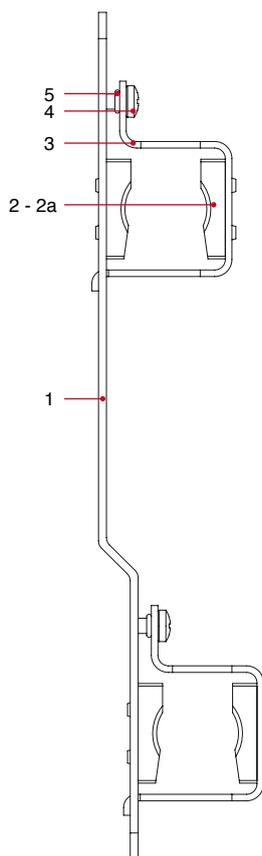
## TECHNICAL SPECIFICATIONS

The set includes a pair of brackets with screws and fixings.

For installation in box art. 498:

- 498STK: standard version. Offset: 12 mm. Suitable for outlets pipe up to 20mm.
- 498STKM: deeper version. Offset: 30 mm. Suitable for outlets pipe up to 25mm.
- 498STKMB: deeper version. Offset: 30 mm. Suitable for outlets pipe up to 25mm.

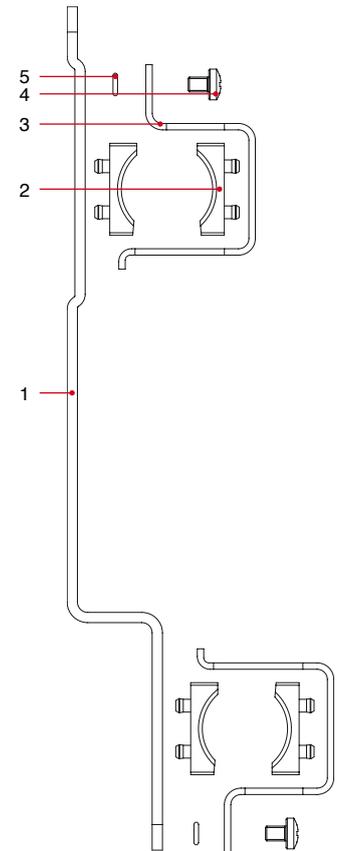
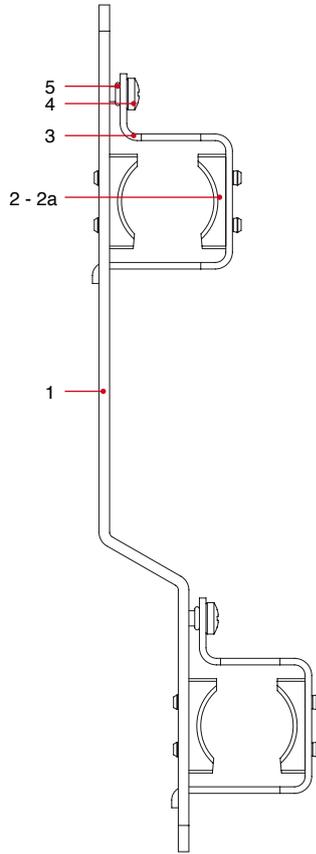
## MATERIALS 498STK



POS.	DESCRIPTION	N.	MATERIAL
1	Bracket	1	Steel P11
2	Dowel	1	EPDM
2a	Dowel ( only for 498STK 1" )	1	MARFRAN E FG3 75A
3	Collar	1	Steel P11
4	Screw	1	Zinc-plated steel Fe
5	O-Ring	1	NBR

MATERIALS  
498STKM

POS.	DESCRIPTION	N.	MATERIAL
1	Bracket	1	Steel P11
2	Dowel	1	EPDM
2a	Dowel ( only for 498STKM 1" )	1	Polyethylene PE
3	Collar	1	Steel P11
4	Screw	1	Zinc-plated steel Fe
5	O-Ring	1	NBR

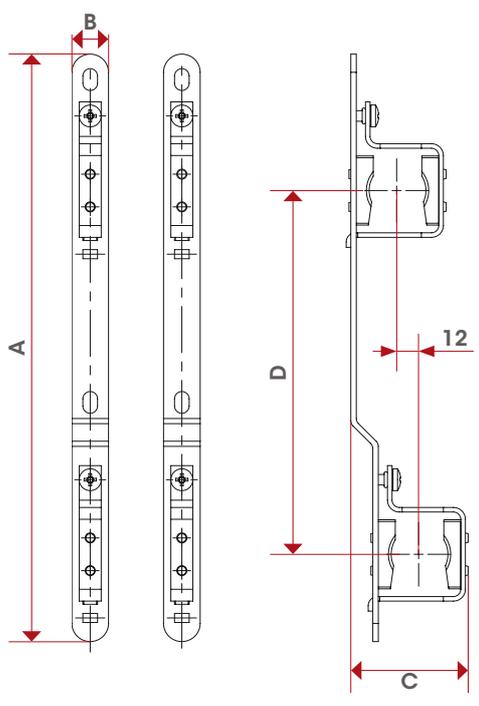


MATERIALS  
498STKMB

POS.	DESCRIPTION	N.	MATERIAL
1	Bracket	1	Steel P11
2	Dowel	1	Polyethylene PE
3	Collar	1	Steel P11
4	Screw	1	Zinc-plated steel Fe
5	O-Ring	1	NBR

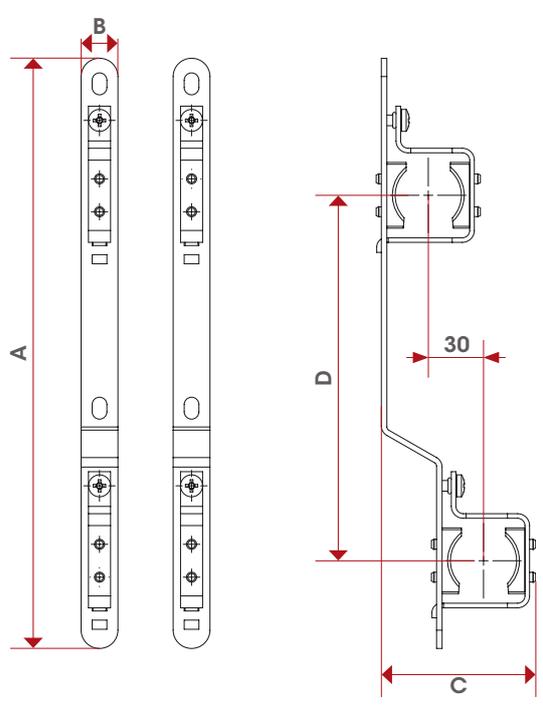


OVERALL  
DIMENSIONS  
498STK



	3/4"	1"	1 1/4"
A	323	323	323
B	20	20	20
C	64	66	73
D	200	200	200

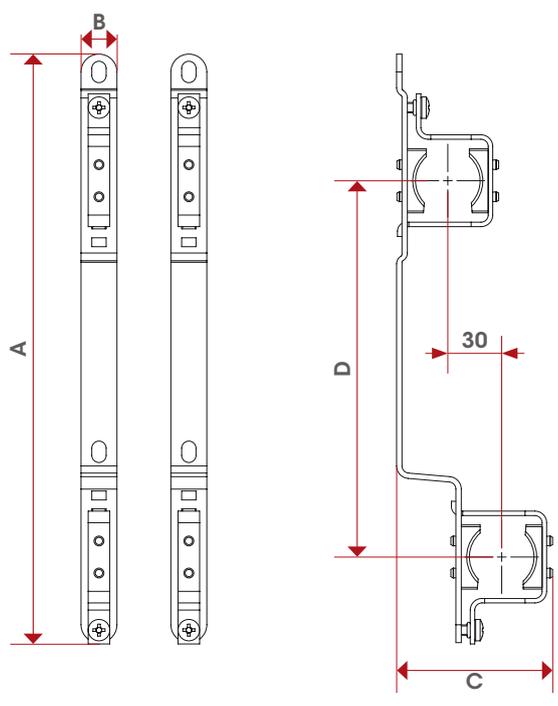
OVERALL  
DIMENSIONS  
498STKM



	1"	1 1/4"
A	323	323
B	20	20
C	84	91
D	200	200

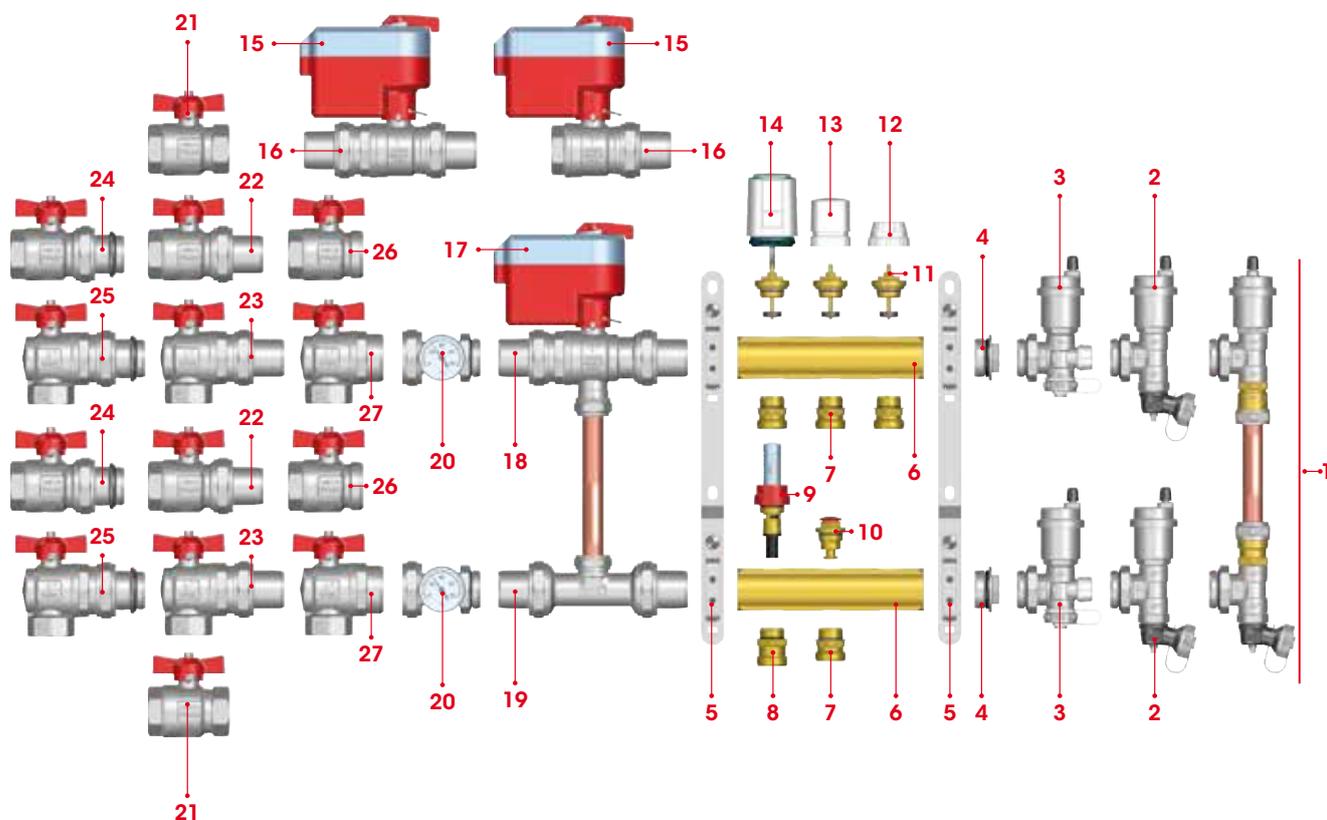


OVERALL  
DIMENSIONS  
498STKMB



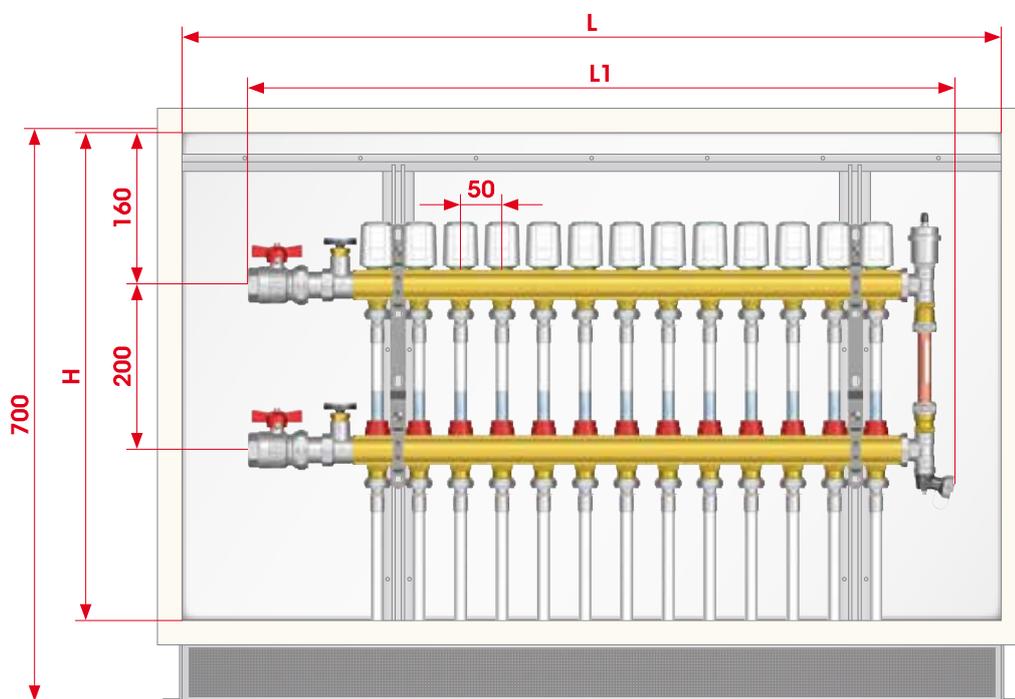
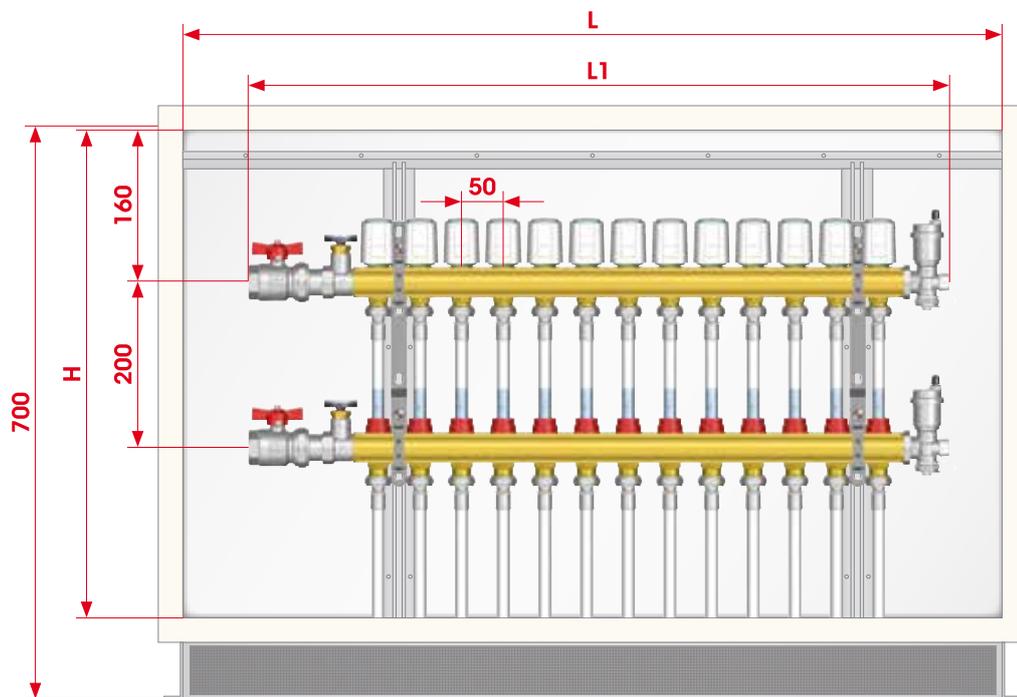
	<b>1"</b>
<b>A</b>	330
<b>B</b>	20
<b>C</b>	87
<b>D</b>	211

# ACCESSORIES CHART PRE-ASSEMBLED BRASS MANIFOLDS IN METAL BOXES



POS	ART	DESCRIPTION
1	860BY	Off-centre by-pass kit
2	489A	Adjustable end piece with drain valve and automatic air vent valve
3	489AR	Adjustable end piece with drain valve and automatic air vent valve
4	494	Male end cap
5	498ST	Mounting brackets in steel for metal boxes
6	860	Brass bar manifold
7	518	Male/male adapter 1"
8	471	Adapter for flow meters - 1" manifold
9	471FL	Flow meter
10	Vitonde	Lockshield
11	Vitonvat	Convertible control spindle
12	894CP	Protection cap
13	894VM	Handle
14	891M	Electrothermal actuator
15	990 - 991 989	Electric actuator for zone ball valves Electric actuator for 2-way zone ball valves
16	980-981	2-way zone ball valve - 2-way zone ball valve M/M
17	990 - 991	Electric actuator for zone ball valves
18	984	3-way zone ball valve
19	988	By-pass kit for zone ball valves
20	492BC	Thermometer union complete with thermometer
21	092	Ball valve F/F
22	098	Ball valve for manifolds
23	298	Angle ball valve for manifolds
24	098S	Ball valve for manifolds with o-ring on the union
25	298S	Angle ball valve for manifolds with o-ring on the union
26	098SDC	Ball valve for manifolds without union
27	298SDC	Angle ball valve for manifolds without union

# POSITIONING THE PRE-ASSEMBLED BRASS MANIFOLDS INTO METAL BOXES

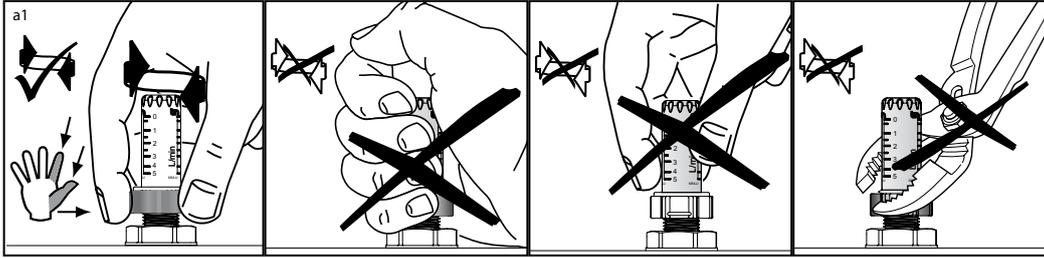


CODE	498.500.600	498.600.600	498.700.600	498.800.600	498.1000.600
LxH (mm)	500x600	600x600	700x600	800x600	1000x600
N° outlet	3-4	5-6	7-8	9-10	11-12-13
MANIFOLD	1"				
L1	415	515	615	715	815

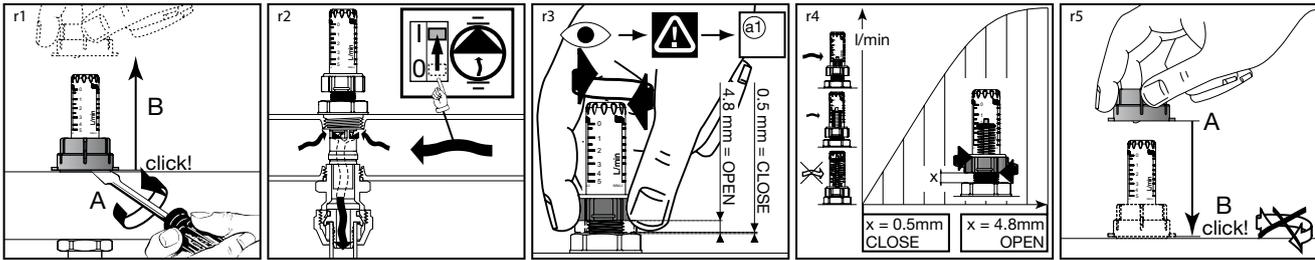


# FLOWMETER ADJUSTMENT

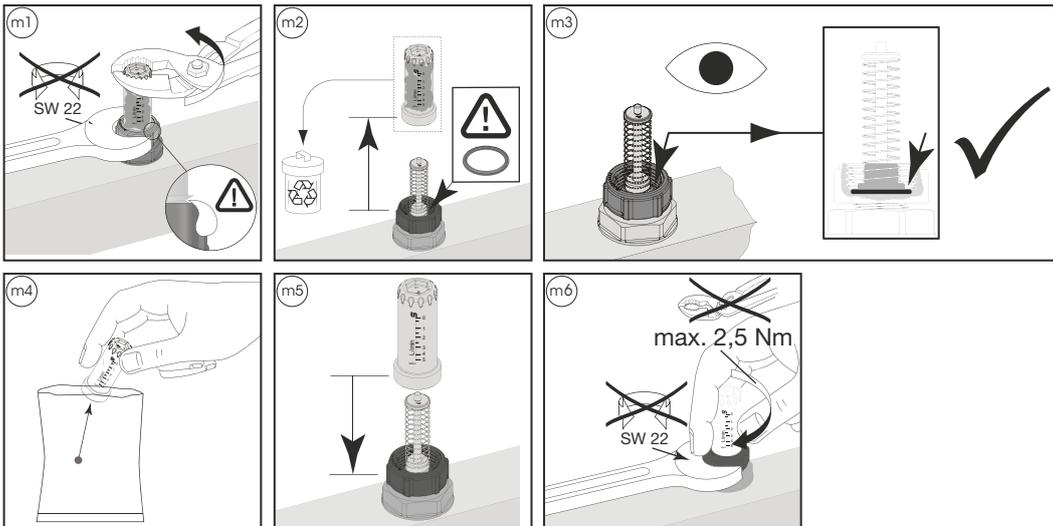
## How to handle the flowmeter



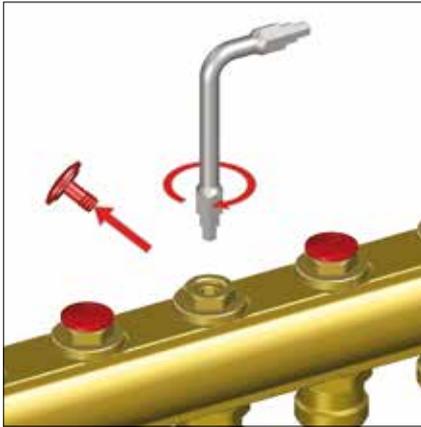
## How to adjust the flow rate



## How to replace the sight glass



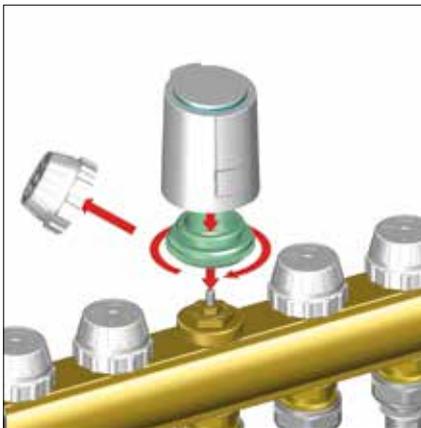
## LOCKSHIELD ADJUSTMENT



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.

## INSTALLATION OF ELECTROTHERMAL ACTUATOR



Electrothermal actuator Art. 891M:

- Normally closed, on-off operation.
- Power supply voltage: 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.
- Available with 2 cables or 4 cables with an auxiliary microswitch.
- Capacity of the auxiliary connection: 300mA.
- CE marked.

## NOTES

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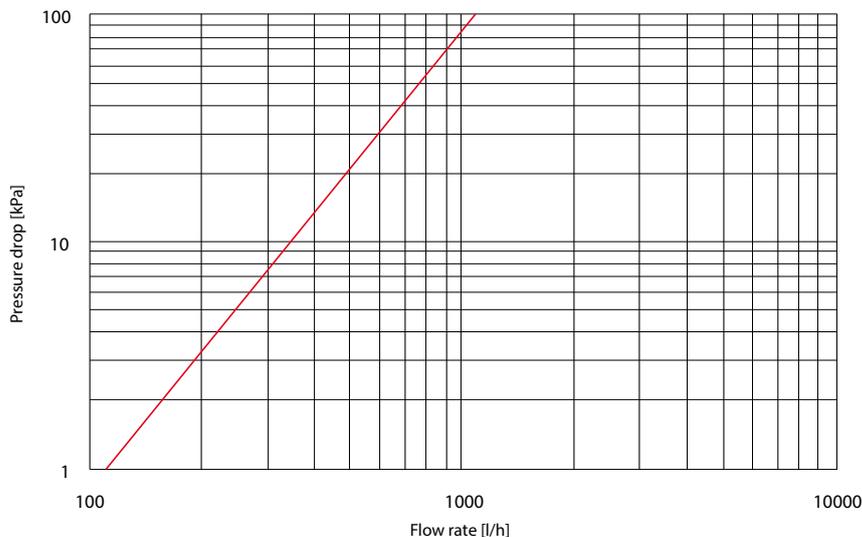
We reserve the right to make improvements and changes to the products described herein and to the relative technical data, at any time and without forewarning.



# DIAGRAMS

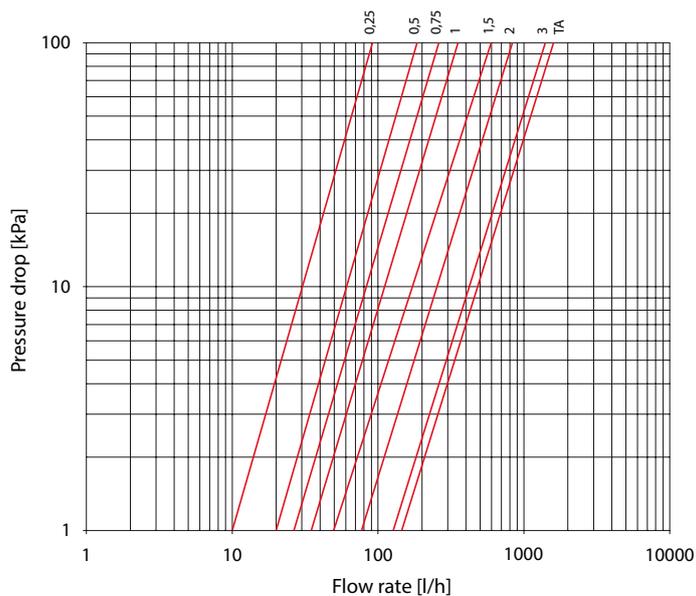
Below are the flow rate / pressure drop diagrams relative to pre-assembled manifolds with main 1" connections.

## Diagram of flow meter fully open (flow manifold)



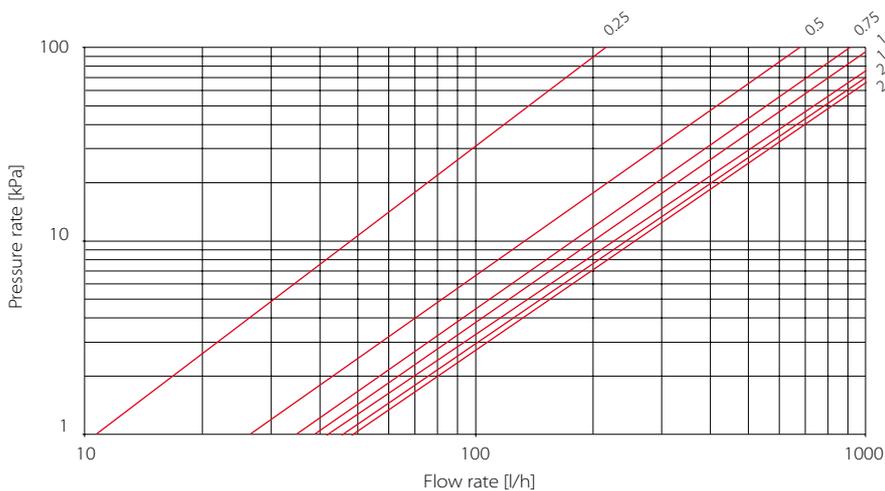
**$K_v = 1,1 \text{ m}^3/\text{h}$**

## Regulation lockshield diagram (flow manifold)



Regulation (rpm)	$K_v$ [ $\text{m}^3/\text{h}$ ]
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)	1,65

## Cut-off valve (return manifold)



Regulation (rpm)	$K_v$ [ $\text{m}^3/\text{h}$ ]
0,25	0,22
0,5	0,68
0,75	0,91
1	1,05
1,5	1,22
2	1,30
2,5	1,35



ITAP S.p.A.  
Via Ruca 19  
25065 Lumezzane  
Brescia (ITALIA)  
Tel 030 89270  
Fax 030 8921990  
[www.itap.it](http://www.itap.it) - [info@itap.it](mailto:info@itap.it)