

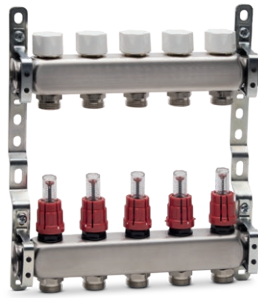


STAINLESS STEEL DISTRIBUTION MANIFOLDS

2.4 / SERIE CX

CX

STAINLESS STEEL DISTRIBUTION MANIFOLDS



Do only use Luxor manifolds with Luxor accessories with soft o-ring sealing. All of Luxor fittings and accessories for manifolds (such as drain valves, plugs, etc.) are provided with this kind of sealing and do not require any intermedia-

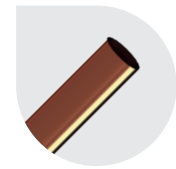
te sealing element (PTFE, hemp, etc.), which could result in cracks.

We recommend to tighten the fittings to a maximum torque of 60 Nm.

TECHNICAL DATA

Max temperature	Max pressure	Materials	Knob	Stem	Testing
120 °C	10 bar	AISI 304	white ABS RAL 9016	AISI 316	100%

SYSTEM CONNECTIONS



Copper pipe
W 24x19 - TR 91
G 3/4 EK - TR 91/A

TECHNICAL SPECIFICATIONS WITH FLOW REGULATORS ART. TM 4014

Max temperature	Max pressure
65 °C	6 bar

TECHNICAL SPECIFICATIONS WITH THERMOELECTRIC HEAD ART. TE

Working temperature range	Room temperature	Max relative humidity
0 °C ÷ 100 °C	0 °C ÷ 60 °C	80%



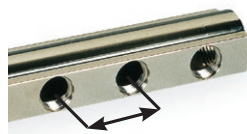
Plastic pipe
W 24x19 - TP 95
G 3/4 EK - TP 98

MAIN BODY CONNECTION



G 1"

CENTRE TO CENTRE DISTANCE



G 1" 50 mm



Multilayer pipe
W 24x19 - TP 97
G 3/4 EK - TP 99

FLOW REGULATORS AND HOLDERS



With regulators and flow meters TM 4012, adjusting and balancing manifolds allow for an immediate verification of the system's balance by reading the flow rate. This adjustment can be locked through a block cap. The glass and the measuring spring can be disassembled for maintenance and cleaned while the system is operating. This kind of manifold must be installed on the inlet.

LOCKSHIELD VALVE



Adjusting and balancing manifolds (lockshield type) feature a double micrometric adjustment with memory of position in case of temporary shutdowns and can be mounted both on inlets and outlets of the system.



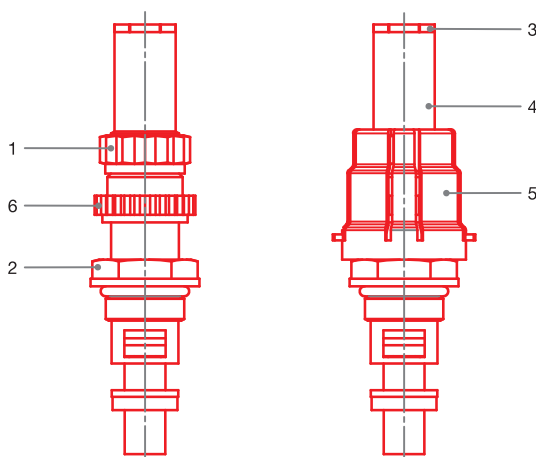
CONVERTIBLE HEADWORK

The tightening device on the stem of the manifolds with built-in valves for thermoelectric adjustment can be inspected and replaced while the system is operating. The control stem is in AISI 316 stainless steel and its tightness is ensured by two peroxide cured EPDM o-rings.

All manifolds series CX are 100% checked with an electronically controlled pneumatic test.

The characteristics of the fluid in the system must be compliant with the UNI 8065: 2019 directive.

DISTRIBUTION MANIFOLDS FOR HEATING SYSTEMS WITH INLET REGULATOR / FLOW METERS



- 1. Adjusting collar
- 2. Fixing collar
- 3. Glass collar
- 4. Glass
- 5. Block cap
- 6. Memory ferrule

ADJUSTMENT INSTRUCTIONS FOR MANIFOLDS WITH INLET REGULATOR/FLOW METERS

BALANCING OF THE HYDRAULIC CIRCUITS

The theoretical flow rate of a hydraulic circuit, assigned by a technician, is given by the adjustment carried out through the regulator/flow meters TM 4014 (code 69000017) assembled on the flow inlet.

The adjustment must be carried out with the valve on the return circuit fully open.

Since the flow rates of each heating ring affect each other, each single heating ring has to be adjusted until the values in litres/minute laid down in the project are satisfactorily reached.

FLOWMETER "MEMORY-STOP" FUNCTION

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

- 1) Set the Flowmeter control to the design value. The control wheel must be removed during this operation;
- 2) Turn the "Memory stop" ferrule anticlockwise (left-hand thread) to the end of its travel;
- 3) Put the control wheel back on. The individual circuit can be closed by turning the wheel clockwise. By turning it the other way up to the stop it is possible to reopen the circuit to the set design value;

Using the two holes in the control wheel it is possible to seal the Flowmeter so as to prevent tampering with the setting.

Warning: do NOT use any tools to turn/manipulate the Flowmeter, as to do so could stop it working properly.

CLEANING

The glass and the measuring spring can be disassembled for maintenance and cleaned.

This can be done as follows even while the system is operating:

- close the top meter and the screw placed on the return manifold;
- unscrew the glass applying strength on the collar and take it out - be careful not to lose the measuring spring;
- during this operation, a negligible water leakage will appear;
- if necessary, the glass can now be easily cleaned;
- to reassemble, follow the above instructions in reverse.

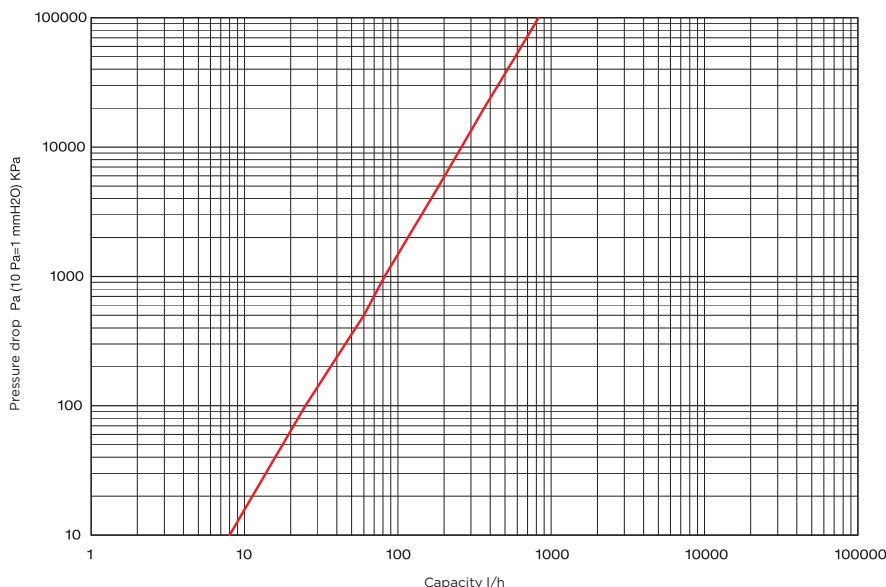
PRESSURE DROP

The total pressure drop of the heating circuit is made up by various pressure drops: water return valve, pipes and regulator/flow meters.

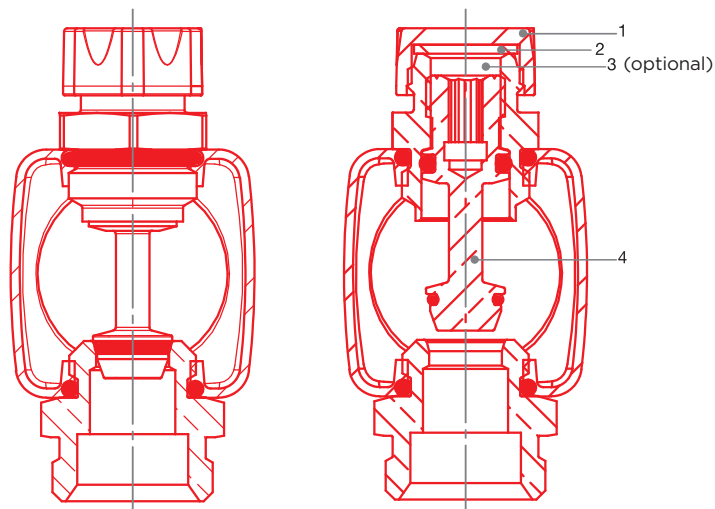
TM 4014 FLOWMETER 0,5 L

ΔP Pa	ΔP Kpa	Q l/h
10	0,01	8
100	0,1	25
500	0,5	60
1000	1	82
5000	5	185
10000	10	260
20000	20	365
30000	30	450
40000	40	520
50000	50	585
60000	60	640
70000	70	690
80000	80	740
90000	90	785
100000	100	825

FLUID DYNAMIC CHARACTERISTICS



DISTRIBUTION MANIFOLDS FOR HEATING SYSTEMS WITH BUILT-IN LOCKSHIELDS



1. ABS plug
2. Gasket
3. Adjusting collar, code 3346656
4. Obturator

ADJUSTMENT INSTRUCTIONS FOR MANIFOLDS WITH LOCKSHIELDS

Unscrew the plug (1). Screw the obturator with a hex key until it reaches the closed position.

After these operations the lockshield is ready to be set.

The relation between the Kv value, the position of the obturator and the corresponding curve, are described in the differential pressure diagram chart. This means that by unscrewing the obturator for a certain number of turns, it is possible to obtain the required Kv value.

EXAMPLE

- Curve n. 1: 1/2 turn of the screw – Kv 0,09
- Curve n. 3: 1+1/2 turn of the screw – Kv 0,76

Using the collar code 3346656 (supplied separately) it is possible to create a mechanical stop of the obturator.

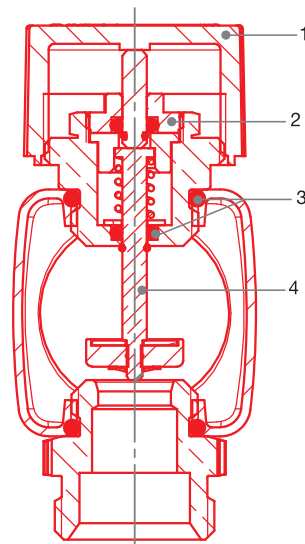
Once the flow rate has been set through the obturator, the regulating collar must be screwed to the obturator.

It is now possible to open and close the obturator without losing the position of the previously set regulation.

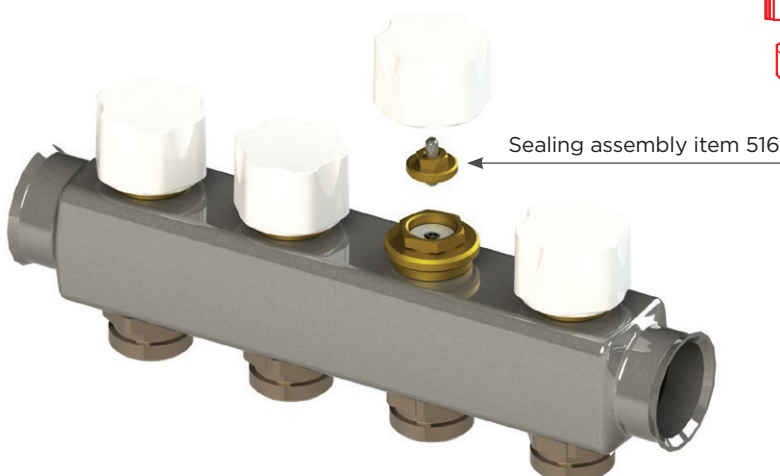
In case of water leakage from the screw stem, the sealing assembly can be tightened until the flow comes to a full stop.

Should the leakage continue, the whole sealing assembly can be replaced by following the instructions below while the group is operating.

- Remove the protection cap, the knob, the thermostatic head or the thermoelectric head;
- Unscrew the sealing assembly with a 9mm key blocking the screw body with a 19mm key;
- Replace the part with article code 67980200 screwing it in with a 9mm key;
- Replace the protection cap, the knob, the thermostatic head or the thermoelectric head.



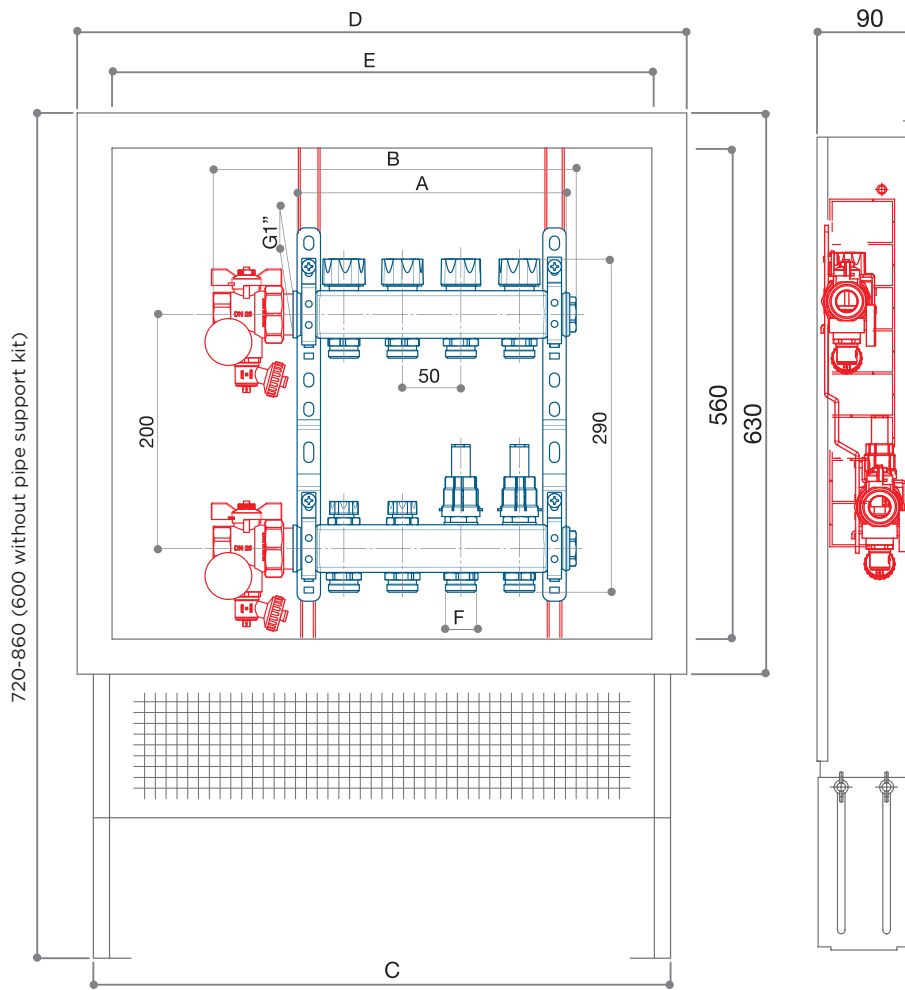
1. ABS plug or manual knob
2. Sealing assembly item 516
3. Gasket
4. Obturator



G 1"

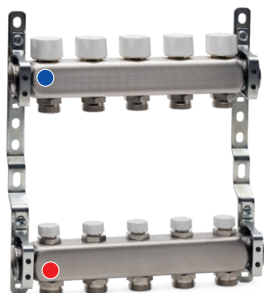
HOW TO CHOOSE THE RIGHT CABINET

G 1" MANIFOLD



OUTLETS							CABINETS	
	A	B	C	D	E	F	ITEM	CODE
2	130	210						
3	180	260						
4	230	310	500	560	490		CF 490	68561405
5	280	360						
6	330	410						
7	380	460						
8	430	510	700	760	690	W24x19 - G 3/4 EK	CF 490	68561407
9	480	560						
10	530	610						
11	580	660						
12	630	710	850	910	840		CF 490	68561408
13	680	760						
14	730	810						
15	780	860	1000	1060	990		CF 490	68561410
16	830	910						






STAINLESS STEEL DISTRIBUTION MANIFOLDS









Pre-assembled distribution manifold consisting of:

- 1 return manifold with built-in valves set for thermoelectric adjustment and protection caps
- 1 inlet manifold with built in lockshields fit for double regulation
- 2 metal brackets.

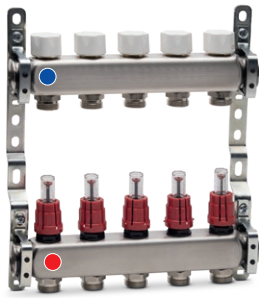
CX 2465

CODE	SIZE	OUTLETS N°						
15512402X	G 1" x (W24x19)	2	TR 91	TP 95	TP 97	1,331	1	-
15512403X		3	TR 91	TP 95	TP 97	1,756	1	-
15512404X		4	TR 91	TP 95	TP 97	2,166	1	-
15512405X		5	TR 91	TP 95	TP 97	2,552	1	-
15512406X		6	TR 91	TP 95	TP 97	2,998	1	-
15512407X		7	TR 91	TP 95	TP 97	3,384	1	-
15512408X		8	TR 91	TP 95	TP 97	3,782	1	-
15512409X		9	TR 91	TP 95	TP 97	4,108	1	-
15512410X		10	TR 91	TP 95	TP 97	4,602	1	-
15512411X		11	TR 91	TP 95	TP 97	5,008	1	-
15512412X		12	TR 91	TP 95	TP 97	5,438	1	-
15512413X		13	TR 91	TP 95	TP 97	5,832	1	-
15512414X		14	TR 91	TP 95	TP 97	5,914	1	-
15512415X		15	TR 91	TP 95	TP 97	6,303	1	-
15512416X		16	TR 91	TP 95	TP 97	6,692	1	-

CX 2468

CODE	SIZE	OUTLETS N°						
15512702X	G 1" x G 3/4 EK	2	TR 91/A	TP 98	TP 99	1,138	1	-
15512703X		3	TR 91/A	TP 98	TP 99	1,756	1	-
15512704X		4	TR 91/A	TP 98	TP 99	2,166	1	-
15512705X		5	TR 91/A	TP 98	TP 99	2,552	1	-
15512706X		6	TR 91/A	TP 98	TP 99	2,998	1	-
15512707X		7	TR 91/A	TP 98	TP 99	3,384	1	-
15512708X		8	TR 91/A	TP 98	TP 99	3,782	1	-
15512709X		9	TR 91/A	TP 98	TP 99	4,108	1	-
15512710X		10	TR 91/A	TP 98	TP 99	4,602	1	-
15512711X		11	TR 91/A	TP 98	TP 99	5,008	1	-
15512712X		12	TR 91/A	TP 98	TP 99	5,438	1	-
15512713X		13	TR 91/A	TP 98	TP 99	5,832	1	-
15512714X		14	TR 91/A	TP 98	TP 99	6,306	1	-
15512715X		15	TR 91/A	TP 98	TP 99	6,723	1	-
15512716X		16	TR 91/A	TP 98	TP 99	7,140	1	-





Pre-assembled distribution manifold consisting of:

- 1 return manifold with built-in valves set for thermoelectric adjustment and protection caps
- 1 inlet manifold with regulator/flow meters
- 2 metal brackets.

CX 2478

CODE	SIZE	OUTLETS N°						
15612402X	G 1" x (W24x19)	2	TR 91	TP 95	TP 97	1,276	1	-
15612403X		3	TR 91	TP 95	TP 97	1,666	1	-
15612404X		4	TR 91	TP 95	TP 97	2,040	1	-
15612405X		5	TR 91	TP 95	TP 97	2,412	1	-
15612406X		6	TR 91	TP 95	TP 97	2,804	1	-
15612407X		7	TR 91	TP 95	TP 97	3,160	1	-
15612408X		8	TR 91	TP 95	TP 97	3,528	1	-
15612409X		9	TR 91	TP 95	TP 97	3,856	1	-
15612410X		10	TR 91	TP 95	TP 97	4,280	1	-
15612411X		11	TR 91	TP 95	TP 97	4,652	1	-
15612412X		12	TR 91	TP 95	TP 97	5,042	1	-
15612413X		13	TR 91	TP 95	TP 97	5,424	1	-
15612414X		14	TR 91	TP 95	TP 97	5,525	1	-
15612415X		15	TR 91	TP 95	TP 97	5,886	1	-
15612416X		16	TR 91	TP 95	TP 97	6,247	1	-

CX 2473

CODE	SIZE	OUTLETS N°						
15612702X	G 1" x G 3/4 EK	2	TR 91/A	TP 98	TP 99	1,082	1	-
15612703X		3	TR 91/A	TP 98	TP 99	1,666	1	-
15612704X		4	TR 91/A	TP 98	TP 99	2,040	1	-
15612705X		5	TR 91/A	TP 98	TP 99	2,412	1	-
15612706X		6	TR 91/A	TP 98	TP 99	2,804	1	-
15612707X		7	TR 91/A	TP 98	TP 99	3,160	1	-
15612708X		8	TR 91/A	TP 98	TP 99	3,528	1	-
15612709X		9	TR 91/A	TP 98	TP 99	3,856	1	-
15612710X		10	TR 91/A	TP 98	TP 99	4,280	1	-
15612711X		11	TR 91/A	TP 98	TP 99	4,652	1	-
15612712X		12	TR 91/A	TP 98	TP 99	5,042	1	-
15612713X		13	TR 91/A	TP 98	TP 99	5,424	1	-
15612714X		14	TR 91/A	TP 98	TP 99	5,917	1	-
15612715X		15	TR 91/A	TP 98	TP 99	6,306	1	-
15612716X		16	TR 91/A	TP 98	TP 99	6,695	1	-



Fittings for copper pipe



Fittings for plastic pipe



Fittings for multilayer pipe

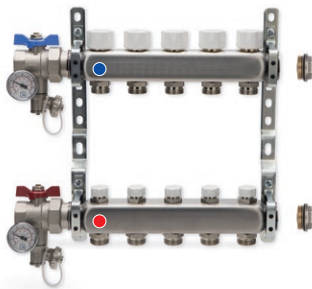


Fittings: chapter 7



Accessories: chapter 2.A







PRE-ASSEMBLED STAINLESS STEEL DISTRIBUTION MANIFOLDS WITH INSTALLATION ACCESSORIES









Pre-assembled distribution manifold consisting of:

- 1 return manifold with built-in valves set for thermoelectric adjustment and manual control knob
- 1 inlet manifold with built-in lockshields fit for double regulation.

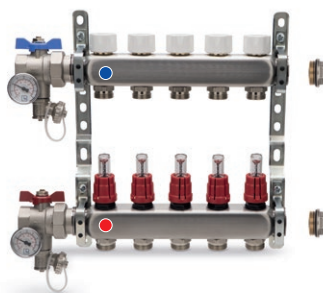
CX 2465M

CODE	SIZE	OUTLETS N°						
15512402MX	G 1" x (W24x19)	2	TR 91	TP 95	TP 97	2,658	1	-
15512403MX		3	TR 91	TP 95	TP 97	3,276	1	-
15512404MX		4	TR 91	TP 95	TP 97	3,686	1	-
15512405MX		5	TR 91	TP 95	TP 97	4,072	1	-
15512406MX		6	TR 91	TP 95	TP 97	4,518	1	-
15512407MX		7	TR 91	TP 95	TP 97	4,904	1	-
15512408MX		8	TR 91	TP 95	TP 97	5,302	1	-
15512409MX		9	TR 91	TP 95	TP 97	5,628	1	-
15512410MX		10	TR 91	TP 95	TP 97	6,122	1	-
15512411MX		11	TR 91	TP 95	TP 97	6,528	1	-
15512412MX		12	TR 91	TP 95	TP 97	6,958	1	-
15512413MX		13	TR 91	TP 95	TP 97	7,352	1	-
15512414MX		14	TR 91	TP 95	TP 97	7,313	1	-
15512415MX		15	TR 91	TP 95	TP 97	7,702	1	-
15512416MX		16	TR 91	TP 95	TP 97	8,090	1	-

CX 2468M

CODE	SIZE	OUTLETS N°						
15512702MX	G 1" x G 3/4 EK	2	TR 91/A	TP 98	TP 99	2,658	1	-
15512703MX		3	TR 91/A	TP 98	TP 99	3,276	1	-
15512704MX		4	TR 91/A	TP 98	TP 99	3,686	1	-
15512705MX		5	TR 91/A	TP 98	TP 99	4,072	1	-
15512706MX		6	TR 91/A	TP 98	TP 99	4,518	1	-
15512707MX		7	TR 91/A	TP 98	TP 99	4,904	1	-
15512708MX		8	TR 91/A	TP 98	TP 99	5,302	1	-
15512709MX		9	TR 91/A	TP 98	TP 99	5,628	1	-
15512710MX		10	TR 91/A	TP 98	TP 99	6,122	1	-
15512711MX		11	TR 91/A	TP 98	TP 99	6,528	1	-
15512712MX		12	TR 91/A	TP 98	TP 99	6,958	1	-
15512713MX		13	TR 91/A	TP 98	TP 99	7,352	1	-
15512714MX		14	TR 91/A	TP 98	TP 99	7,705	1	-
15512715MX		15	TR 91/A	TP 98	TP 99	8,122	1	-
15512716 MX		16	TR 91/A	TP 98	TP 99	8,538	1	-





Pre-assembled distribution manifold consisting of:

- 1 return manifold with built-in valves set for thermoelectric adjustment and manual control knob
- 1 inlet manifold with regulator/flow meters.

CX 2478M

CODE	SIZE	OUTLETS N°						
15612402MX	G 1" x (W24x19)	2	TR 91	TP 95	TP 97	2,602	1	-
15612403MX		3	TR 91	TP 95	TP 97	3,186	1	-
15612404MX		4	TR 91	TP 95	TP 97	3,560	1	-
15612405MX		5	TR 91	TP 95	TP 97	3,932	1	-
15612406MX		6	TR 91	TP 95	TP 97	4,324	1	-
15612407MX		7	TR 91	TP 95	TP 97	4,680	1	-
15612408MX		8	TR 91	TP 95	TP 97	5,048	1	-
15612409MX		9	TR 91	TP 95	TP 97	5,376	1	-
15612410MX		10	TR 91	TP 95	TP 97	5,800	1	-
15612411MX		11	TR 91	TP 95	TP 97	6,172	1	-
15612412MX		12	TR 91	TP 95	TP 97	6,562	1	-
15612413MX		13	TR 91	TP 95	TP 97	6,944	1	-
15612414MX		14	TR 91	TP 95	TP 97	6,924	1	-
15612415MX		15	TR 91	TP 95	TP 97	7,285	1	-
15612416MX		16	TR 91	TP 95	TP 97	7,646	1	-

CX 2473M

CODE	SIZE	OUTLETS N°						
15612702MX	G 1" x G 3/4 EK	2	TR 91/A	TP 98	TP 99	2,602	1	-
15612703MX		3	TR 91/A	TP 98	TP 99	3,186	1	-
15612704MX		4	TR 91/A	TP 98	TP 99	3,560	1	-
15612705MX		5	TR 91/A	TP 98	TP 99	3,932	1	-
15612706MX		6	TR 91/A	TP 98	TP 99	4,324	1	-
15612707MX		7	TR 91/A	TP 98	TP 99	4,680	1	-
15612708MX		8	TR 91/A	TP 98	TP 99	5,048	1	-
15612709MX		9	TR 91/A	TP 98	TP 99	5,376	1	-
15612710MX		10	TR 91/A	TP 98	TP 99	5,800	1	-
15612711MX		11	TR 91/A	TP 98	TP 99	6,172	1	-
15612712MX		12	TR 91/A	TP 98	TP 99	6,562	1	-
15612713MX		13	TR 91/A	TP 98	TP 99	6,944	1	-
15612714MX		14	TR 91/A	TP 98	TP 99	7,316	1	-
15612715MX		15	TR 91/A	TP 98	TP 99	7,705	1	-
15612716MX		16	TR 91/A	TP 98	TP 99	8,094	1	-



Fittings for copper pipe



Fittings for plastic pipe



Fittings for multilayer pipe



Fittings: chapter 7



Accessories: chapter 2.A

MULTIPURPOSE WATER INLET BALL VALVE



TECHNICAL DATA



Max temperature

90°C



Max pressure

10 bar



DN

25



Materials

CW617N

CONSTRUCTIVE FEATURES

Multipurpose water inlet ball valves are manufactured in CW617N brass and compatible with Luxor manifolds and components.

Multipurpose water inlet ball valves' pivot pin is installed from the inside. This system, known as "explosion-proof", prevents the pivot pin and its sealing system from escaping, while making external tampering impossible as well. Ball valves feature two elastomeric O-ring seals, chosen for their high resistance to ageing.

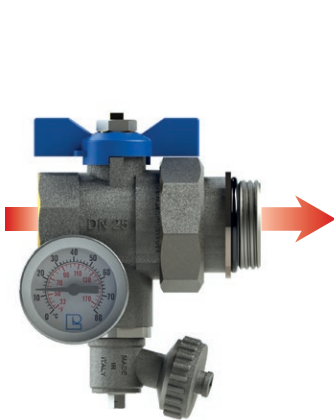
FUNCTIONS

Multipurpose ball valves are extremely compact and may be installed on either right or left of the manifold simply by placing the thermometer on the desired side.

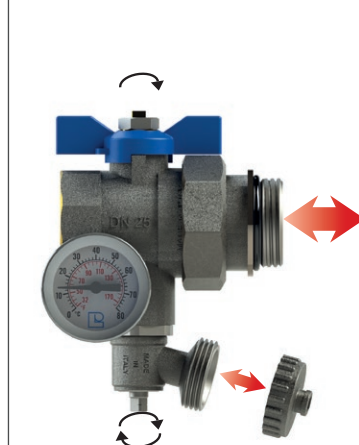
These valves are called "multipurpose" because they combine a number of functions in one product:

- **Ball valve:** allowing to intercept the flow to the manifold.
- **Manual air vent valve:** the handle's stem features a manual air vent which may be operated through the drive on the plug of the water inlet/outlet valve. The position of the vent on the upper side of the valve facilitates the complete expulsion of air from the system, thus allowing for optimal operation.
- **Integrated thermometer** for temperature display: may be installed on either side according to the intended use.

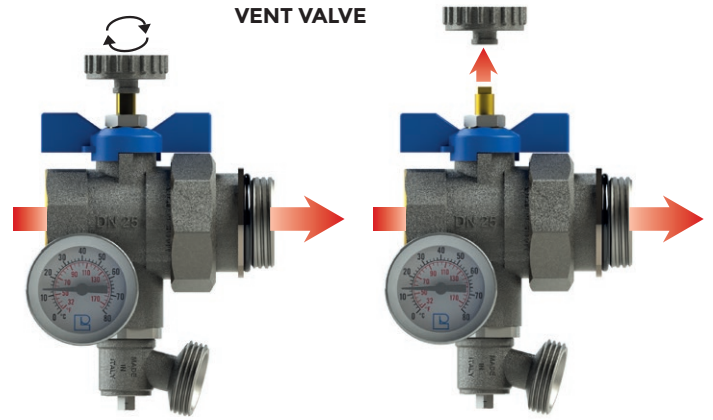
BALL VALVE



WATER OUTLET VALVE



MANUAL AIR VENT VALVE



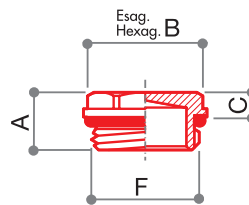
MULTIPURPOSE WATER INLET BALL VALVE



VC 481

Multipurpose water inlet ball valve with manual air vent, blue or red butterfly handle and CR 498 fitting with O-ring for manifold connection, complete with 0°C ÷80°C thermometer.

CODE	SIZE	A	B	C	D	E	F	G	H	L			
68559722B	G 1"	81	41	60	38	70	G 1"	G 1"	70	-	645	4	32
68559722R	G 1"	81	41	60	38	70	G 1"	G 1"	70	-	645	4	32



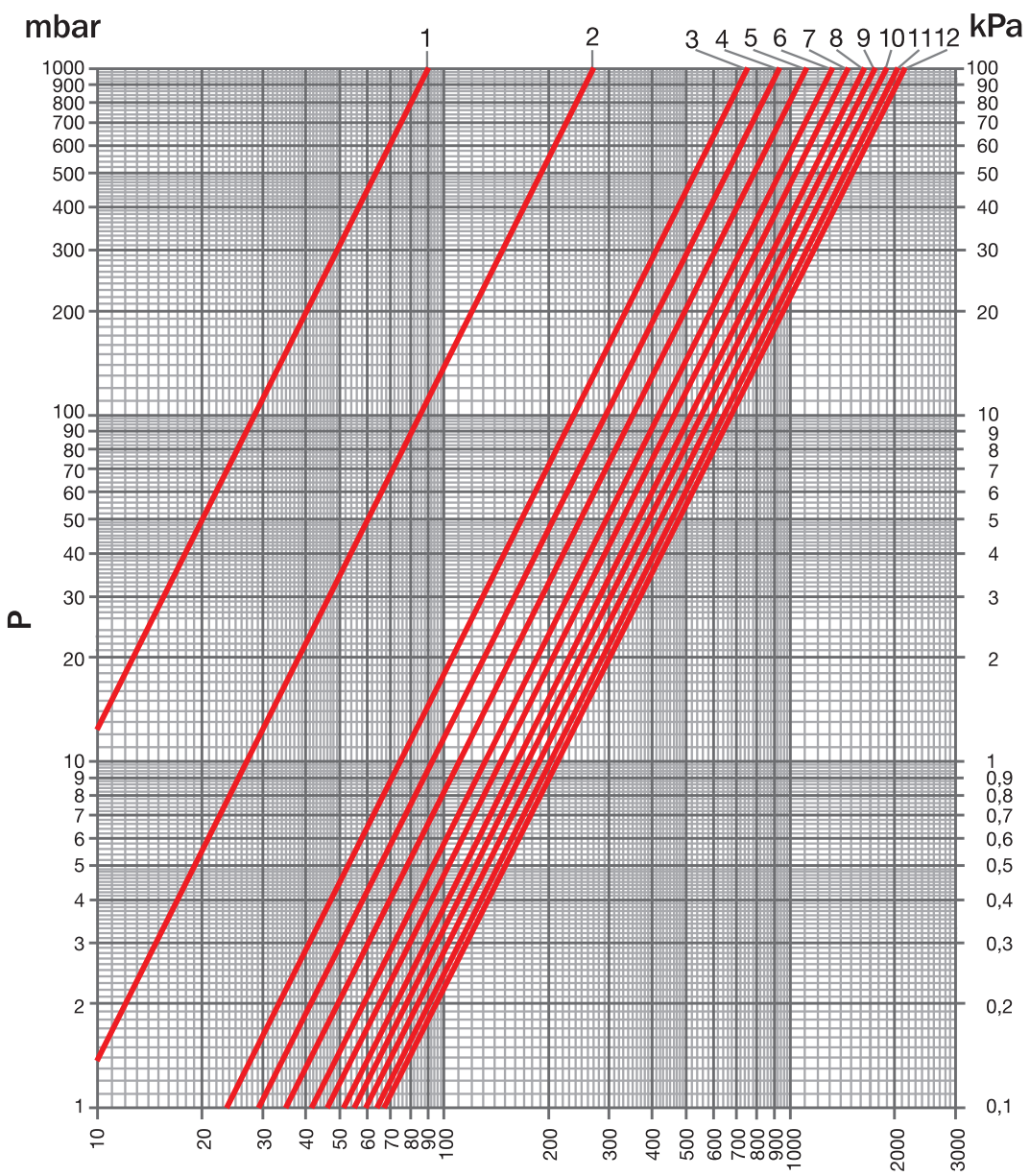
TC 460

Cap with o-ring seal.

CODE	SIZE	PLATED	A	B	C	D	E	F	G	H	L			
68559934N	G 1"	NICKEL	19	27	9	-	-	G 1"	-	-	-	52	50	400

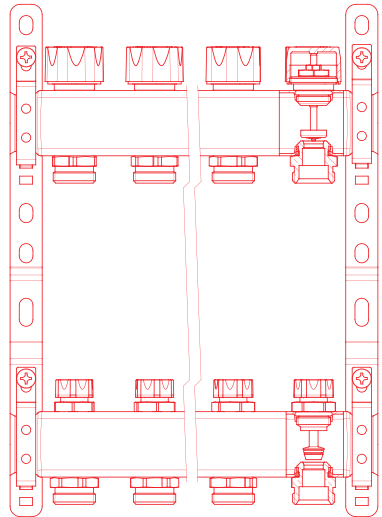
MANIFOLDS FLOW RATE CHART

DISTRIBUTION MANIFOLDS WITH BUILT IN LOCKSHIELDS



qm = kg/h

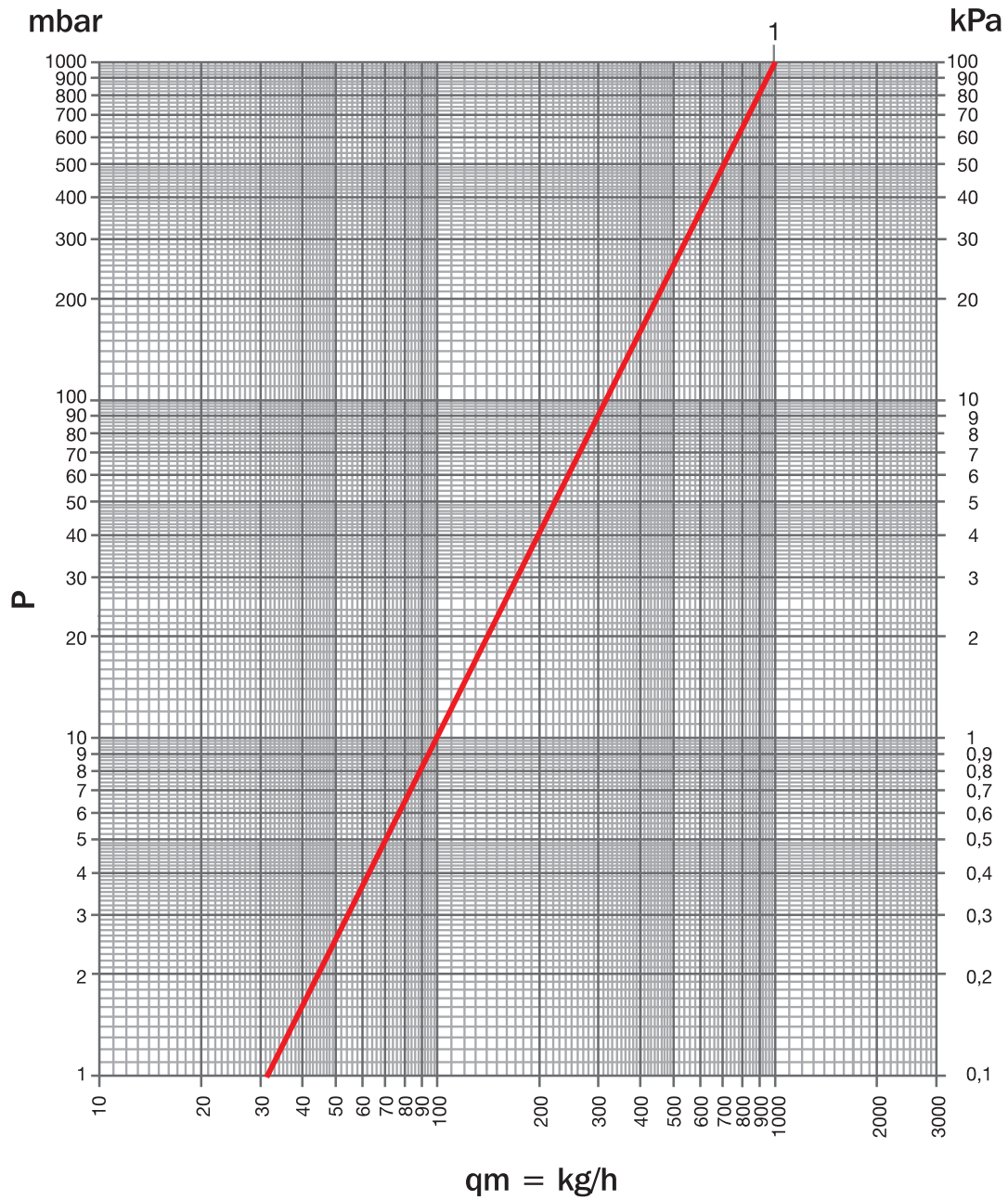
ITEM	SIZE	TURNS N°	Kvs	POS
CX 2468	G 1"	1/2	0,09	1
		1	0,27	2
		1+1/2	0,75	3
		2	0,93	4
		2+1/2	1,11	5
		3	1,31	6
		3+1/2	1,48	7
		4	1,62	8
		4+1/2	1,76	9
		5	1,90	10
		5+1/2	2,02	11
		all open	2,12	12



MAX SUGGESTED FLOW RATE
2860 l/h

MANIFOLDS FLOW RATE CHART

DISTRIBUTION MANIFOLDS WITH FLOW METER TM



ITEM	SIZE	CX + TM	Kvs	POS
CX 2473	G 1"	TM 4014	0,99	1

MAX SUGGESTED FLOW RATE
2450 l/h

