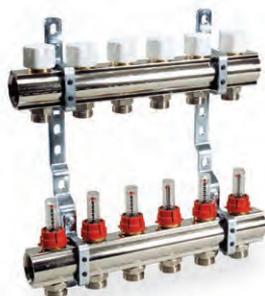




DISTRIBUTION MANIFOLDS

2.3 / SERIES CD

CD DISTRIBUTION MANIFOLDS FOR HEATING SYSTEMS



*In compliance with
D.M. 174/2004

The CD series manifolds are obtained from drawn brass bar with yellow or nickel-plated finish.

All manifolds undergo a post weld heat treatment to eliminate any tension caused from processing. 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 the use of any intermediate 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
120 °C



Max pressure
10 bar



Materials
CW617N
UNI EN
12165:2016



Knob
white ABS
RAL 9016



Stem
AISI 316



Testing
100%

TECHNICAL SPECIFICATIONS WITH FLOW REGULATORS ART. TM 4012



Max temperature
70 °C



Max pressure
6 bar



Working temperature range
0 °C ÷ 100 °C



Room temperature
0 °C ÷ 60 °C



Max relative humidity
80%

TECHNICAL SPECIFICATIONS WITH THERMOELECTRIC HEAD ART. TE

SYSTEM CONNECTIONS

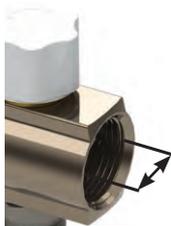


Copper pipe
W 24x19 - TR 91
G 3/4 EK - TR 91/A



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

MAIN BODY CONNECTION



G 3/4
G 1"
G 1 1/4

CENTRE TO CENTRE DISTANCE



G 3/4 40 mm
G 1" 50 mm
G 1 1/4 50 mm



Multilayer pipe
W 24x19 - TP 97
G 3/4 EK - TP 98

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.



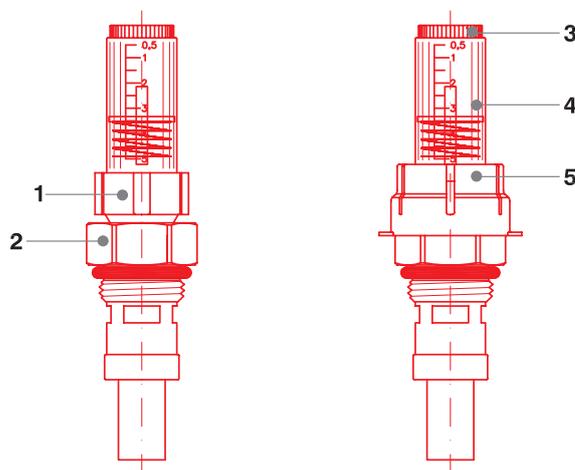
CONVERTIBLE HEADWORK

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 CD are 100% tested with electronically controlled pneumatic seal 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

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 4012 (code 69000010) 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.

SECURING HYDRAULIC BALANCE AGAINST TAMPERING

The regulator/flow meters adjustment can be secured through a block cap.

If needed, the caps can be sealed with iron wire and lead.

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.

DISTRIBUTION MANIFOLDS FOR HEATING SYSTEMS WITH BUILT-IN LOCKSHIELDS

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.

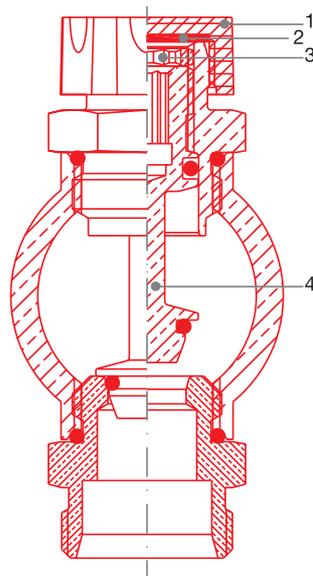
EXAMPLE

- 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 33466656 (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.

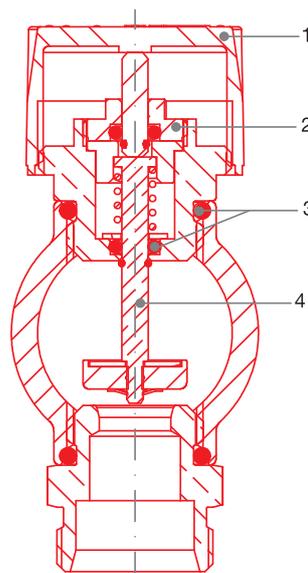


1. ABS plug
2. Gasket
3. Adjusting collar, code 3346656
4. Obturator

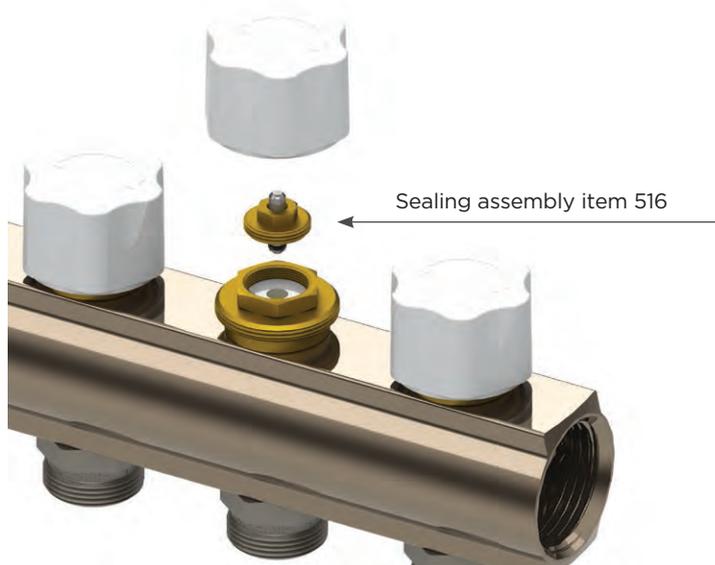
In case of water leakage from the screw stem, the sealing assembly can be tightened until the flow comes to a full stop.

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.



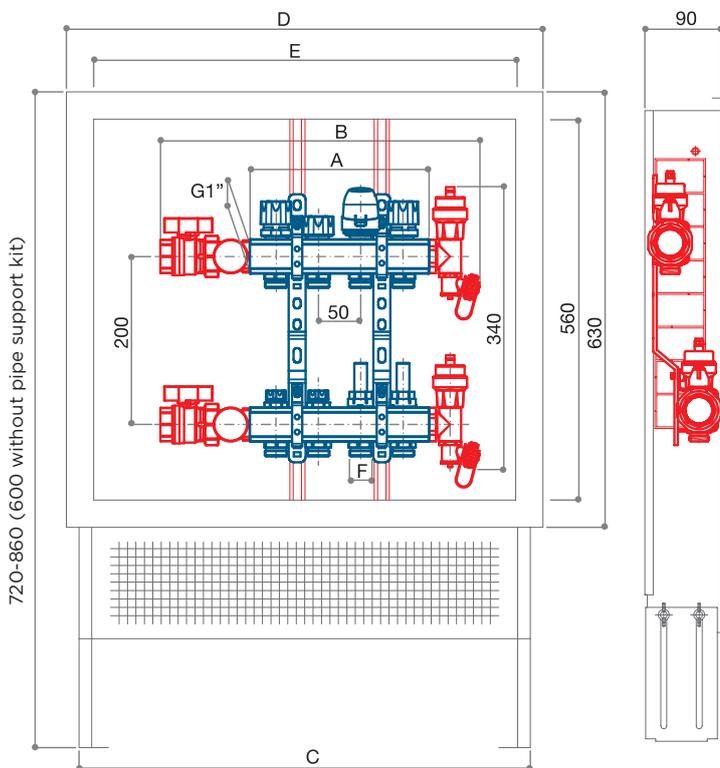
1. ABS plug or manual knob
2. Sealing assembly item 516
3. Gasket
4. Obturator



G 1"

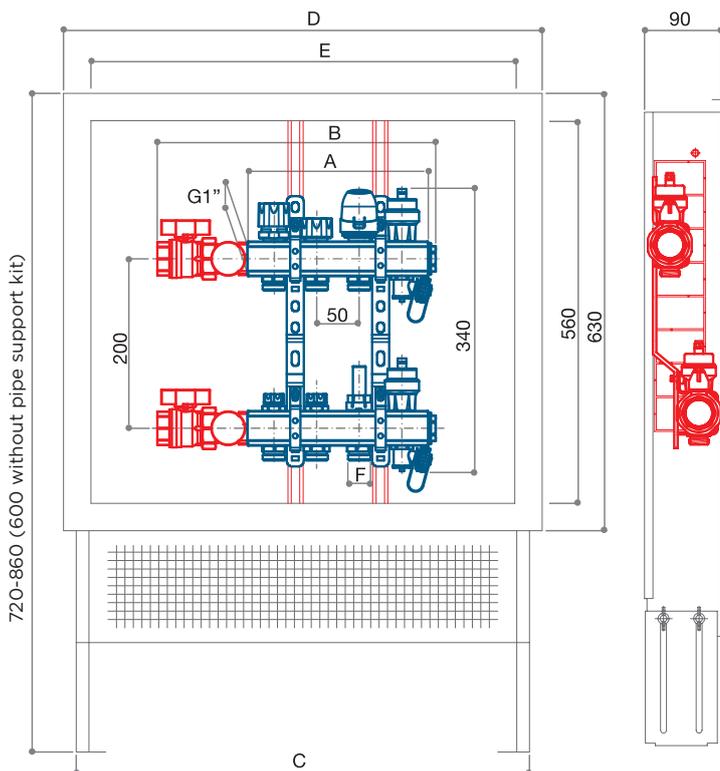
HOW TO CHOOSE THE RIGHT CABINET

G 1" MANIFOLD



							CABINETS	
OUTLETS	A	B	C	D	E	F	ITEM	CODE
2	112	276	500	560	490	W24x19 - G 3/4 EK	CF 490	68561405
3	162	326						
4	212	376						
5	262	426	700	760	690		CF 490	68561407
6	312	476						
7	362	526						
8	412	576	850	910	840		CF 490	68561408
9	462	626						
10	512	676						
11	562	726	1000	1060	990		CF 490	68561410
12	612	776						
13	662	826						

G 1" MANIFOLD WITH DRAIN

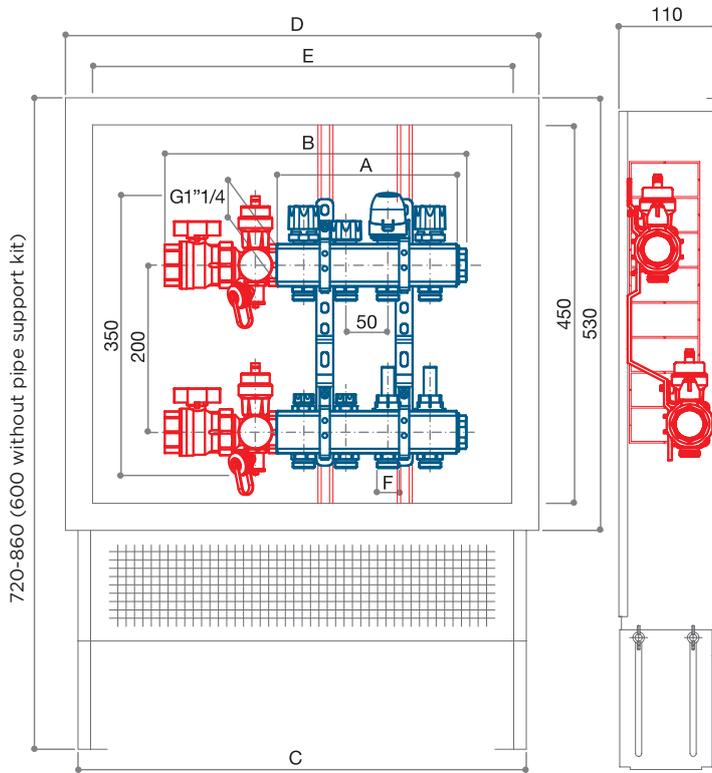


							CABINETS	
OUTLETS	A	B	C	D	E	F	ART.	CODE
2	162	276	500	560	490	W24x19 - G 3/4 EK	CF 490	68561405
3	212	326						
4	262	376						
5	312	426	700	760	690		CF 490	68561407
6	362	476						
7	412	526						
8	462	576	850	910	840		CF 490	68561408
9	512	626						
10	562	676						
11	612	726	776					
12	662							

G 1 1/4

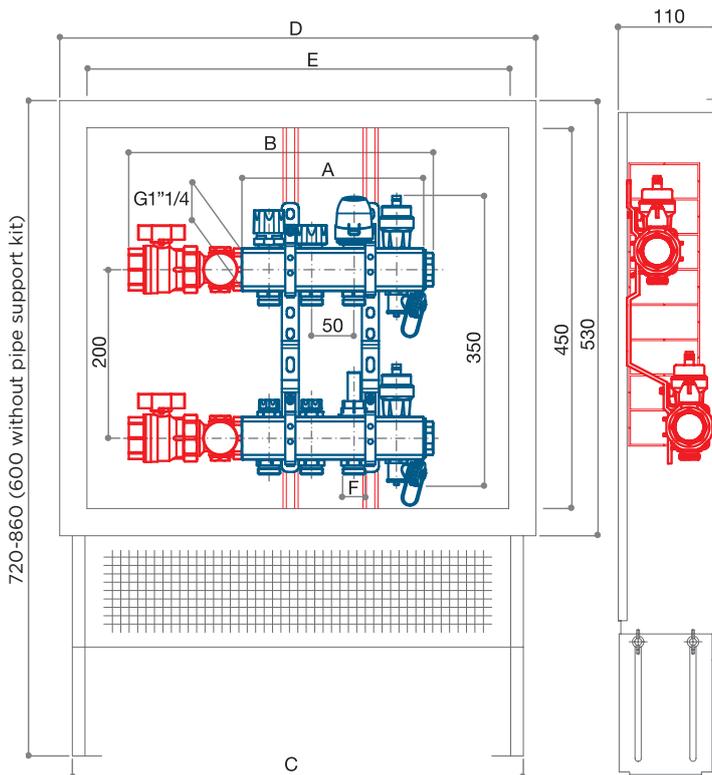
HOW TO CHOOSE THE RIGHT CABINET

G 1 1/4 MANIFOLD



							CABINETS	
OUTLETS	A	B	C	D	E	F	ITEM	CODE
2	114	260	500	565	490	W24x19 - G 3/4 EK	CF 485	68560705
3	164	310						
4	214	360						
5	264	410	700	765	690		CF 485	68560707
6	314	460						
7	364	510						
8	414	560	850	915	840		CF 485	68560708
9	464	610						
10	514	660						
11	564	710	1000	1065	990		CF 485	68560710
12	614	760						
13	664	810						

G 1 1/4 MANIFOLD WITH DRAIN



							CABINETS	
OUTLETS	A	B	C	D	E	F	ITEM	CODE
2	164	310	500	565	490	W24x19 - G 3/4 EK	CF 485	68560705
3	214	360						
4	264	410						
5	314	460	700	765	690		CF 485	68560707
6	364	510						
7	414	560						
8	464	610	850	915	840		CF 485	68560708
9	514	660						
10	564	710						
11	614	760	1000	1065	990		CF 485	68560710
12	664	810						



Pre-assembled distribution manifold with two 1/2 drain holes and built-in valves set for thermoelectric adjustment and manual control knob.

CD 2466

yellow surface	nickel plated	SIZE	OUTLETS N°							
CODE	CODE									
15162402	15162402N	G 1" x (W24x19)	2	TR 91	TP 95	TP 97	0,854	-	10	
15162403	15162403N		3	TR 91	TP 95	TP 97	1,176	-	8	
15162404	15162404N		4	TR 91	TP 95	TP 97	1,498	-	8	
15162405	15162405N		5	TR 91	TP 95	TP 97	1,820	-	6	
15162406	15162406N		6	TR 91	TP 95	TP 97	2,142	-	6	
15162407	15162407N		7	TR 91	TP 95	TP 97	2,464	-	6	
15162408	15162408N		8	TR 91	TP 95	TP 97	2,785	-	6	
15162409	15162409N		9	TR 91	TP 95	TP 97	3,108	-	6	
15162410	15162410N		10	TR 91	TP 95	TP 97	3,430	-	6	
15162411	15162411N		11	TR 91	TP 95	TP 97	3,752	-	6	
15162412	15162412N		12	TR 91	TP 95	TP 97	4,074	-	6	

CD 2446

yellow surface	nickel plated	SIZE	OUTLETS N°							
CODE	CODE									
15162702	15162702N	G 1" x G 3/4 EK	2	TR 91/A	TP 98	TP 99	0,874	-	10	
15162703	15162703N		3	TR 91/A	TP 98	TP 99	1,206	-	8	
15162704	15162704N		4	TR 91/A	TP 98	TP 99	1,538	-	8	
15162705	15162705N		5	TR 91/A	TP 98	TP 99	1,870	-	6	
15162706	15162706N		6	TR 91/A	TP 98	TP 99	2,202	-	6	
15162707	15162707N		7	TR 91/A	TP 98	TP 99	2,534	-	6	
15162708	15162708N		8	TR 91/A	TP 98	TP 99	2,866	-	6	
15162709	15162709N		9	TR 91/A	TP 98	TP 99	3,198	-	6	
15162710	15162710N		10	TR 91/A	TP 98	TP 99	3,530	-	6	
15162711	15162711N		11	TR 91/A	TP 98	TP 99	3,862	-	6	
15162712	15162712N		12	TR 91/A	TP 98	TP 99	4,194	-	6	

CD 873

yellow surface	nickel plated	SIZE	OUTLETS N°							
CODE	CODE									
16162402	16162402N	G 1 1/4 x (W24x19)	2	TR 91	TP 95	TP 97	1,064	-	8	
16162403	16162403N		3	TR 91	TP 95	TP 97	1,446	-	6	
16162404	16162404N		4	TR 91	TP 95	TP 97	1,828	-	6	
16162405	16162405N		5	TR 91	TP 95	TP 97	2,210	-	6	
16162406	16162406N		6	TR 91	TP 95	TP 97	2,592	-	6	
16162407	16162407N		7	TR 91	TP 95	TP 97	2,974	-	6	
16162408	16162408N		8	TR 91	TP 95	TP 97	3,356	-	6	
16162409	16162409N		9	TR 91	TP 95	TP 97	3,738	-	6	
16162410	16162410N		10	TR 91	TP 95	TP 97	4,120	-	6	
16162411	16162411N		11	TR 91	TP 95	TP 97	4,502	-	6	
16162412	16162412N		12	TR 91	TP 95	TP 97	4,884	-	6	

CD 874

yellow surface	nickel plated	SIZE	OUTLETS N°							
CODE	CODE									
16162702	16162702N	G 1 1/4 x G 3/4 EK	2	TR 91/A	TP 98	TP 99	1,084	-	8	
16162703	16162703N		3	TR 91/A	TP 98	TP 99	1,476	-	6	
16162704	16162704N		4	TR 91/A	TP 98	TP 99	1,868	-	6	
16162705	16162705N		5	TR 91/A	TP 98	TP 99	2,260	-	6	
16162706	16162706N		6	TR 91/A	TP 98	TP 99	2,652	-	6	
16162707	16162707N		7	TR 91/A	TP 98	TP 99	3,044	-	6	
16162708	16162708N		8	TR 91/A	TP 98	TP 99	3,436	-	6	
16162709	16162709N		9	TR 91/A	TP 98	TP 99	3,828	-	6	
16162710	16162710N		10	TR 91/A	TP 98	TP 99	4,220	-	6	
16162711	16162711N		11	TR 91/A	TP 98	TP 99	4,612	-	6	
16162712	16162712N		12	TR 91/A	TP 98	TP 99	5,004	-	6	



Pre-assembled distribution manifold with two 1/2" drain holes with regulator/flow meters.

CD 3474

yellow surface	nickel plated	SIZE	OUTLETS N°						
CODE	CODE								
15262402	15262402N	G 1" x (W24x19)	2	TR 91	TP 95	TP 97	0,858	-	12
15262403	15262403N		3	TR 91	TP 95	TP 97	1,182	-	7
15262404	15262404N		4	TR 91	TP 95	TP 97	1,546	-	7
15262405	15262405N		5	TR 91	TP 95	TP 97	1,850	-	6
15262406	15262406N		6	TR 91	TP 95	TP 97	2,174	-	5
15262407	15262407N		7	TR 91	TP 95	TP 97	2,508	-	4
15262408	15262408N		8	TR 91	TP 95	TP 97	2,822	-	4
15262409	15262409N		9	TR 91	TP 95	TP 97	3,146	-	5
15262410	15262410N		10	TR 91	TP 95	TP 97	3,470	-	5
15262411	15262411N		11	TR 91	TP 95	TP 97	3,774	-	5
15262412	15262412N		12	TR 91	TP 95	TP 97	4,128	-	4

CD 2474

yellow surface	nickel plated	SIZE	OUTLETS N°						
CODE	CODE								
15262702	15262702N	G 1" x G 3/4 EK	2	TR 91/A	TP 98	TP 99	0,868	-	12
15262703	15262703N		3	TR 91/A	TP 98	TP 99	1,197	-	7
15262704	15262704N		4	TR 91/A	TP 98	TP 99	1,566	-	7
15262705	15262705N		5	TR 91/A	TP 98	TP 99	1,875	-	6
15262706	15262706N		6	TR 91/A	TP 98	TP 99	2,204	-	5
15262707	15262707N		7	TR 91/A	TP 98	TP 99	2,543	-	4
15262708	15262708N		8	TR 91/A	TP 98	TP 99	2,862	-	4
15262709	15262709N		9	TR 91/A	TP 98	TP 99	3,191	-	5
15262710	15262710N		10	TR 91/A	TP 98	TP 99	3,520	-	5
15262711	15262711N		11	TR 91/A	TP 98	TP 99	3,829	-	5
15262712	15262712N		12	TR 91/A	TP 98	TP 99	4,188	-	4

CD 870

yellow surface	nickel plated	SIZE	OUTLETS N°						
CODE	CODE								
16262402	16262402N	G 1 1/4 x (W24x19)	2	TR 91	TP 95	TP 97	1,114	-	10
16262403	16262403N		3	TR 91	TP 95	TP 97	1,511	-	6
16262404	16262404N		4	TR 91	TP 95	TP 97	1,908	-	6
16262405	16262405N		5	TR 91	TP 95	TP 97	2,315	-	5
16262406	16262406N		6	TR 91	TP 95	TP 97	2,712	-	5
16262407	16262407N		7	TR 91	TP 95	TP 97	3,089	-	4
16262408	16262408N		8	TR 91	TP 95	TP 97	3,516	-	4
16262409	16262409N		9	TR 91	TP 95	TP 97	3,913	-	5
16262410	16262410N		10	TR 91	TP 95	TP 97	4,350	-	5
16262411	16262411N		11	TR 91	TP 95	TP 97	4,727	-	5
16262412	16262412N		12	TR 91	TP 95	TP 97	5,104	-	4

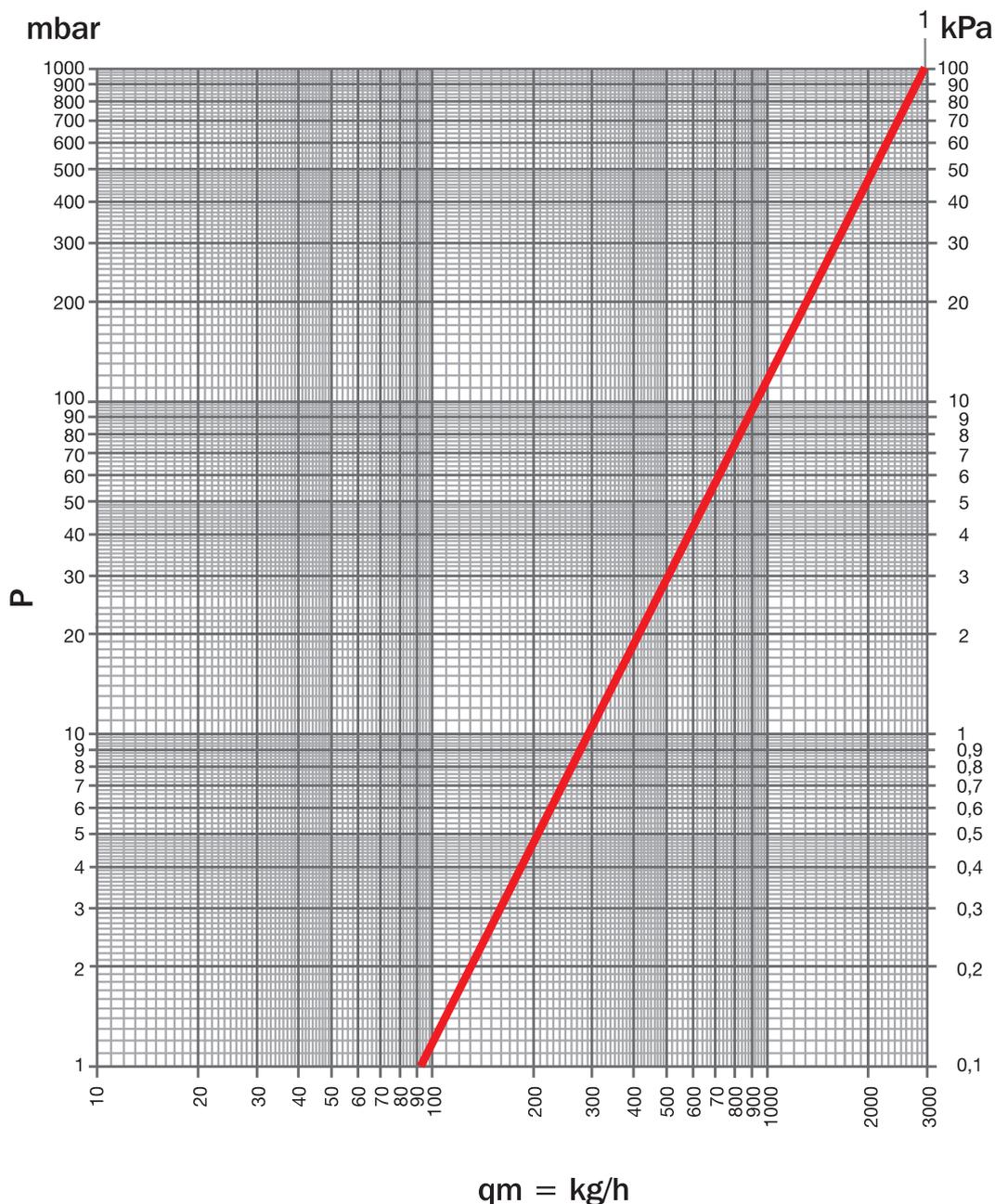
CD 869

yellow surface	nickel plated	SIZE	OUTLETS N°						
CODE	CODE								
16262702	16262702N	G 1 1/4 x G 3/4 EK	2	TR 91/A	TP 98	TP 99	1,124	-	10
16262703	16262703N		3	TR 91/A	TP 98	TP 99	1,526	-	6
16262704	16262704N		4	TR 91/A	TP 98	TP 99	1,928	-	6
16262705	16262705N		5	TR 91/A	TP 98	TP 99	2,340	-	5
16262706	16262706N		6	TR 91/A	TP 98	TP 99	2,742	-	5
16262707	16262707N		7	TR 91/A	TP 98	TP 99	3,124	-	4
16262708	16262708N		8	TR 91/A	TP 98	TP 99	3,556	-	4
16262709	16262709N		9	TR 91/A	TP 98	TP 99	3,958	-	5
16262710	16262710N		10	TR 91/A	TP 98	TP 99	4,400	-	5
16262711	16262711N		11	TR 91/A	TP 98	TP 99	4,782	-	5
16262712	16262712N		12	TR 91/A	TP 98	TP 99	5,164	-	4



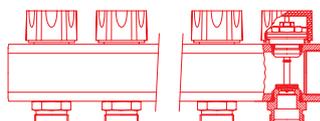
MANIFOLDS FLOW RATE CHART

PRE-ASSEMBLED DISTRIBUTION MANIFOLDS WITH FIT-IN VALVES



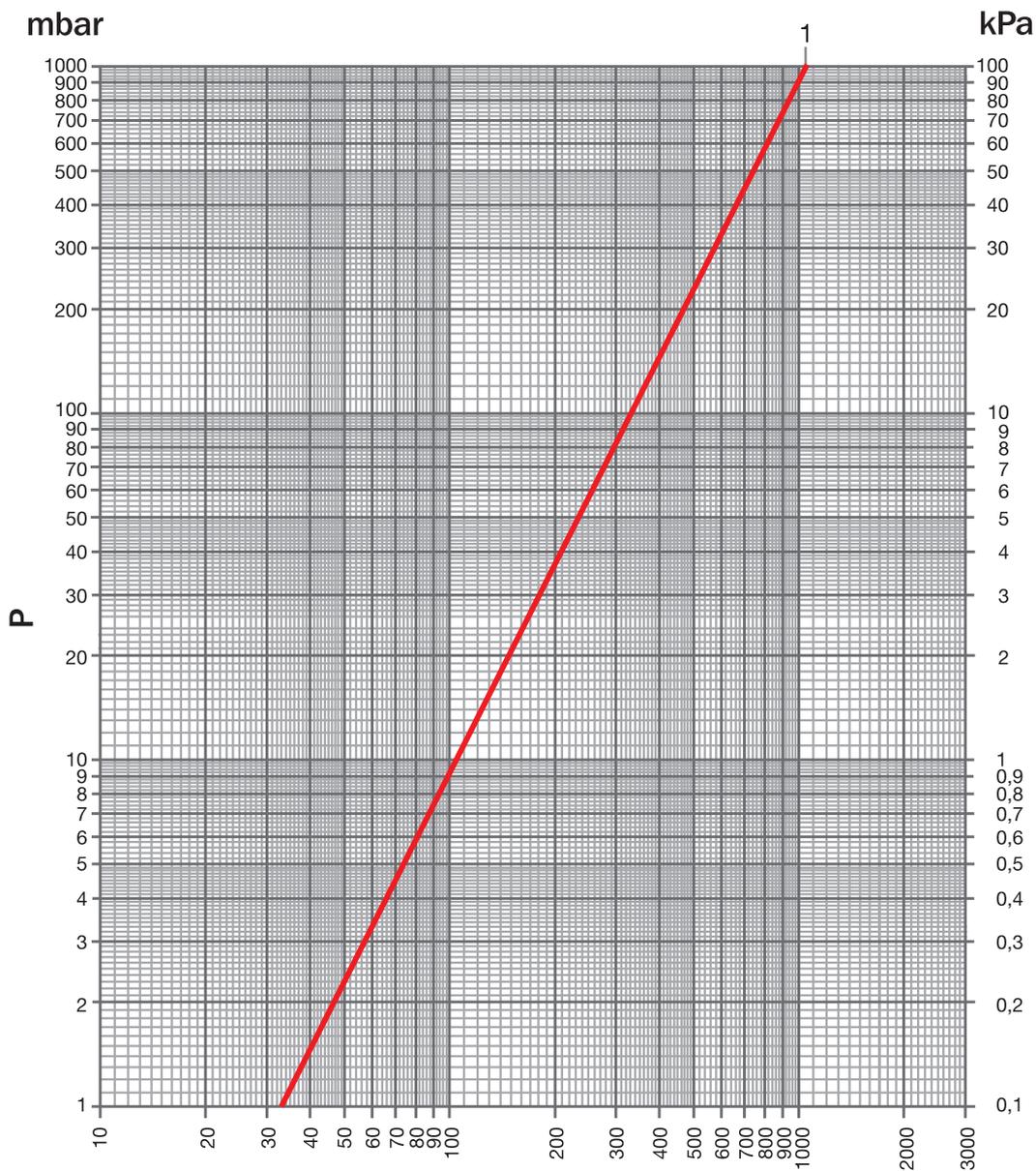
ITEM	SIZE	DRAIN HOLE	Kvs	POS
CD 1466 CD 466 CD 1446 CD 446	G 1"	NO	2.98	1
CD 875 CD 871 CD 876 CD 872	G 1 1/4"			
CD 3466 CD 2466 CD 3446 CD 2446	G 1"	YES		
CD 877 CD 873 CD 878 CD 874	G 1 1/4"			

MAX SUGGESTED FLOW RATE	
G 1"	3900 l/h
G 1 1/4"	6600 l/h



MANIFOLDS FLOW RATE CHART

DISTRIBUTION MANIFOLDS WITH FLOW METER TM



$q_m = \text{kg/h}$

ITEM	SIZE	CD + TM	DRAIN HOLE	Kvs	POS
CD 1474	G 1"	TM 4012	NO	1,05	1
CD 474	G 1"				
CD 868	G 1 1/4"		YES		
CD 867	G 1 1/4"				
CD 3474	G 1"		YES		
CD 2474	G 1"				
CD 870	G 1 1/4"				
CD 869	G 1 1/4"				

MAX SUGGESTED FLOW RATE	
G 1"	1350 l/h
G 1 1/4"	3150 l/h

