

Technical data sheet Manifolds



CD 465M – CD 468M

Function

Pre-assembled distribution manifolds with installation accessories group together in one single item a number of elements which are usually needed for a standard installation.

The distribution manifold is available in various sizes, with a varying number of outlets. Pre-assembled distribution manifolds with installation accessories consist of:

- 1 return manifold with built-in valves set for thermoelectric adjustment and manual control knob;
- 1 delivery manifold with built-in lockshields fit for double regulation;
- Ball valve with blue/red handle and thermometer on the pipe union;
- Manifold terminals with automatic air vent valves and water load/drain taps.

It is recommended to tighten the fittings to a maximum torque of 60 Nm.



Technical data

Maximum working pressure:	10 bar
Maximum working temperature:	120 °C
Maximum differential pressure:	1 bar
Thermometer range:	0 ÷ 80 °C
Working fluids:	water in compliance with UNI 8065:2019

Materials

Manifolds

Manifold:	CW 617 N – DW UNI-EN 12165:2016
Screw and lockshield:	CW 614 N – DW UNI-EN 12164:2016
Gaskets:	Peroxide cured EPDM; FASIT
Knob and plug:	White ABS RAL9016

Ball valves

Valve body:	CW 617 N – DW UNI-EN 12165:2016
Ball:	CW 617 N – DW UNI-EN 12165:2016
Housing:	PTFE
Gaskets:	NBR
Handle:	Red or blue die-cast aluminium

Thermometer

Case and stem:	Galvanized steel
Covering:	Transparent plastic material
Thermometric element:	Bimetallic spring

Automatic air vent valves

Valve body:	CW 617 N – DW UNI-EN 12165:2016
Float:	PP
Gaskets:	NBR
Spring:	Stainless steel

Water load/drain taps

Terminal body:	CW 617 N – DW UNI-EN 12165:2016
Valve body:	CW 617 N – DW UNI-EN 12165:2016
Gaskets:	Peroxide cured EPDM

Brackets

Brackets:	Galvanized steel
Clamps:	Galvanized steel
Gaskets:	NBR

Finish

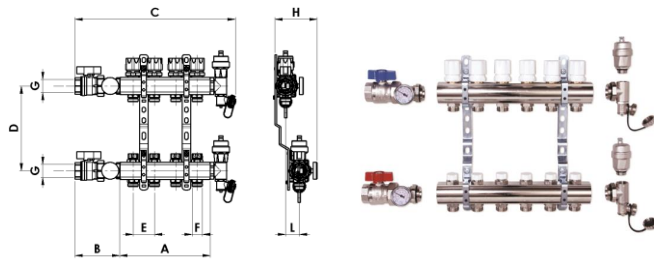
Nickel plating

Dimensional drawing

CD 465M

Pre-assembled manifold with built-in valves, lockshields and installation accessories.

Connections type W24x19



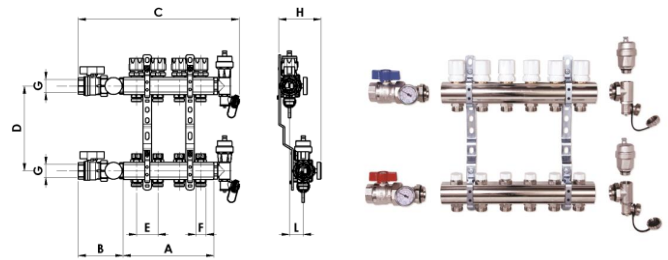
Code	Size	A	B	C	D	E
15552402MN	G1"xW24x19	112	106	278	200	50
15552403MN	G1"xW24x19	162	106	328	200	50
15552404MN	G1"xW24x19	212	106	378	200	50
15552405MN	G1"xW24x19	262	106	428	200	50
15552406MN	G1"xW24x19	312	106	478	200	50
15552407MN	G1"xW24x19	362	106	528	200	50
15552408MN	G1"xW24x19	412	106	578	200	50
15552409MN	G1"xW24x19	462	106	628	200	50
15552410MN	G1"xW24x19	512	106	678	200	50
15552411MN	G1"xW24x19	562	106	728	200	50
15552412MN	G1"xW24x19	612	106	778	200	50
15552413MN	G1"xW24x19	662	106	828	200	50

Code	Size	F	G	H	L	M
15552402MN	G1"xW24x19	W24x19	G1"	90	32	-
15552403MN	G1"xW24x19	W24x19	G1"	90	32	-
15552404MN	G1"xW24x19	W24x19	G1"	90	32	-
15552405MN	G1"xW24x19	W24x19	G1"	90	32	-
15552406MN	G1"xW24x19	W24x19	G1"	90	32	-
15552407MN	G1"xW24x19	W24x19	G1"	90	32	-
15552408MN	G1"xW24x19	W24x19	G1"	90	32	-
15552409MN	G1"xW24x19	W24x19	G1"	90	32	-
15552410MN	G1"xW24x19	W24x19	G1"	90	32	-
15552411MN	G1"xW24x19	W24x19	G1"	90	32	-
15552412MN	G1"xW24x19	W24x19	G1"	90	32	-
15552413MN	G1"xW24x19	W24x19	G1"	90	32	-

CD 468M

Pre-assembled manifold with built-in valves, lockshields and installation accessories.

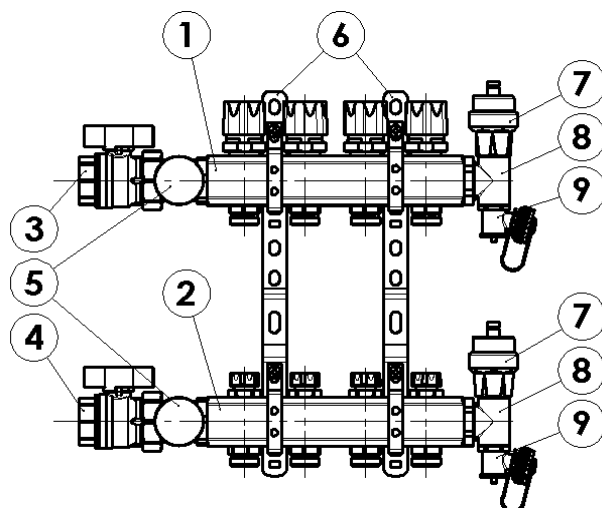
Connections type Eurokonus



Code	Size	A	B	C	D	E
15552702MN	G1"xG3/4Ek	112	106	278	200	50
15552703MN	G1"xG3/4Ek	162	106	328	200	50
15552704MN	G1"xG3/4Ek	212	106	378	200	50
15552705MN	G1"xG3/4Ek	262	106	428	200	50
15552706MN	G1"xG3/4Ek	312	106	478	200	50
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15552711MN	G1"xG3/4Ek	562	106	728	200	50
15552712MN	G1"xG3/4Ek	612	106	778	200	50
15552713MN	G1"xG3/4Ek	662	106	828	200	50

Code	Size	F	G	H	L	M
15552702MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552703MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552704MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552705MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552706MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552707MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552708MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552709MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552710MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552711MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552712MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-
15552713MN	G1"xG3/4Ek	G3/4Ek	G1"	90	32	-

Construction



1. Return manifold

2. Delivery manifold

3. Blue return ball valve

4. Red delivery ball valve

5. Thermometer

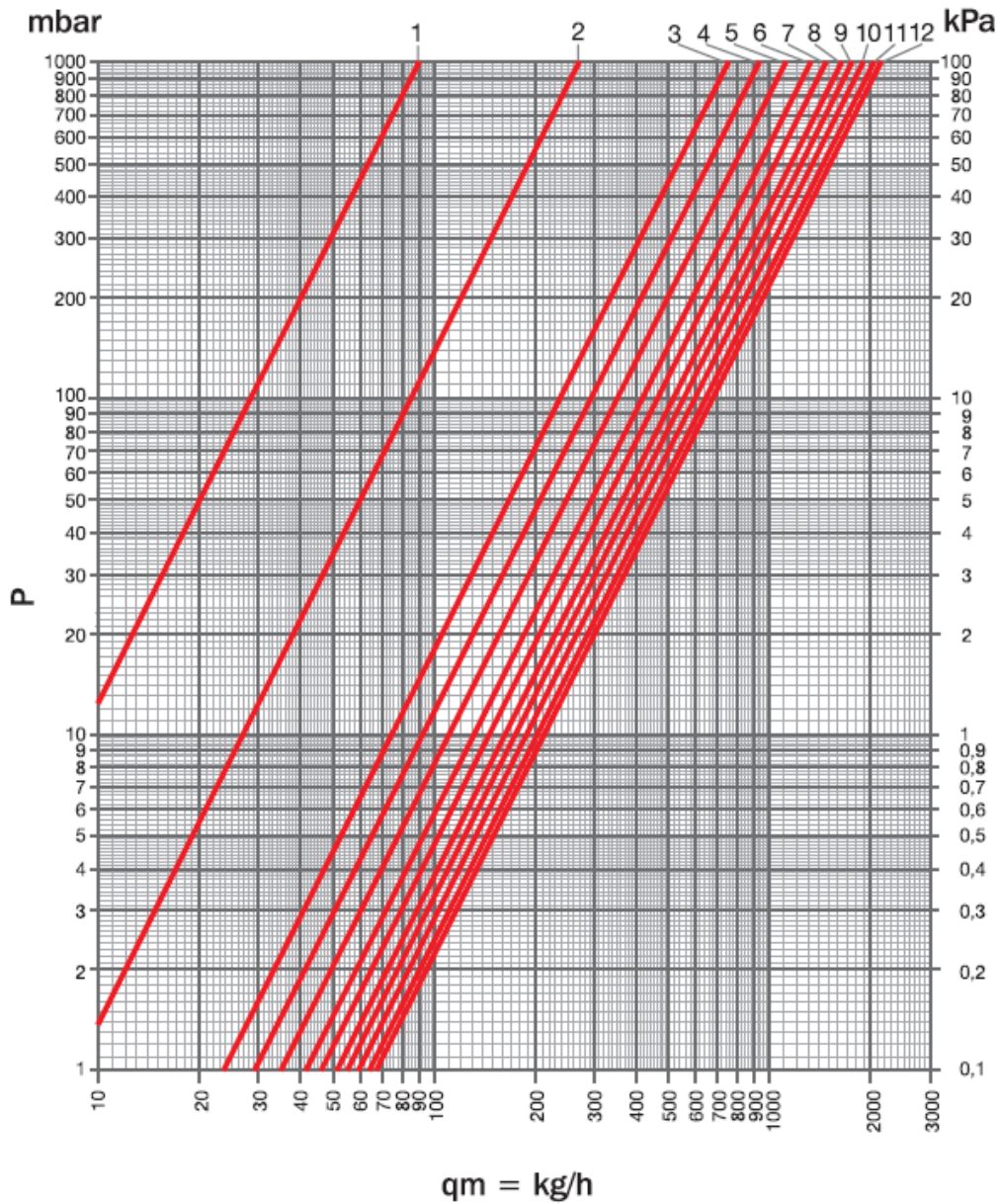
6. Brackets

7. Automatic air vent valve

8. Adjustable terminal

9. Water load/drain tap

Flow rate chart

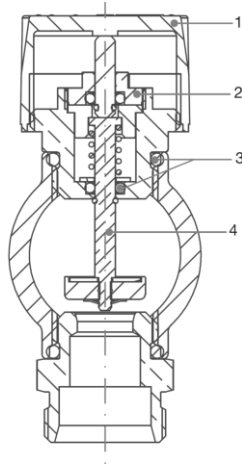


Pos.	Turns no.	Kvs	Item
1	1/2	0.09	
2	1	0.27	
3	1+1/2	0.75	
4	2	0.93	
5	2+1/2	1.11	
6	3	1.31	CD 465M; CD 468M (for single outlet)
7	3+1/2	1.48	
8	4	1.62	
9	4+1/2	1.76	
10	5	1.90	
11	5+1/2	2.02	
12	All open	2.12	

Max suggested flow rate: 2400 l/h (on the manifold)

Operating instructions

Thermostatic screw



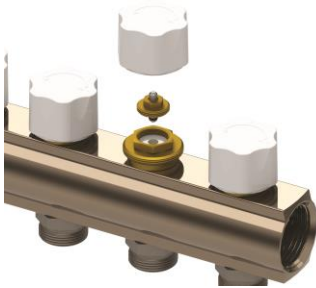
10. ABS plug or manual knob

11. Sealing assembly item 516

12. Gasket

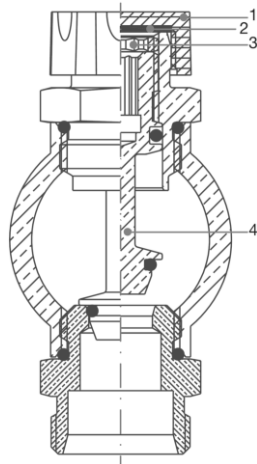
13. Obturator

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 sealing assembly with the spare part screwing it in with a 9mm key;
- Replace the protection cap, the knob, the thermostatic head or the thermoelectric head.

Lockshield



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 (4) until it reaches the close 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;
- Using the collar (3) 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.

Item specifications

CD 465M

2-way (from 2- to 13-way) pre-assembled distribution manifold for radiant panel systems. Brass body in CW614N. The sealing elements are in peroxide cured EPDM. Head connection 1" female threaded, interaxis 200mm. Male connections W24x19, interaxis 50mm. Liquids: water and water-glycol solutions; max glycol quantity 30%. Max working pressure 10bar. Max liquid temperature 120°C.

Components:

- Delivery manifold complete with lockshields for interception and balancing fit for double regulation, with ABS and protection plug.
 - Return manifold complete with check valves set for electro-thermic adjustment and manual control knob.
 - Couple of terminal groups complete with automatic air vent valve, water load/drain taps, supplied in package.
 - Couple of full-flow ball valves complete with pipe unions with thermometer range 0 °C ÷ 80 °C, supplied in package.
 - Couple of fixing brackets with shaped rubber.
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CD 468M

2-ways (from 2- to 13-ways) pre-assembled distribution manifold for radiant panel systems. Brass body CW614. The sealing elements are in peroxide cured EPDM. Head connection 1" female threaded, interaxis 200mm. Male connections G3/4 Eurokonus, interaxis 50mm. Liquids: water and water-glycol solutions; max glycol quantity 30%. Max working pressure 10bar. Max liquid temperature 120°C.

Components:

- Delivery manifold complete with lockshields for interception and balancing fit for double regulation, with ABS and protection plug.
 - Return manifold complete with check valves set for electro-thermic adjustment and manual control knob
 - Couple of terminal groups complete with automatic air vent valve, water load/drain taps, supplied in package.
 - Couple of full-flow ball valves complete with pipe unions with thermometer range 0 °C ÷ 80 °C, supplied in package.
 - Couple of fixing brackets with shaped rubber.
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