Manifold Kit

Kits are distribution systems consisting of delivery and return manifolds with built-in mounting brackets for an easy housing into the box. Delivery manifolds feature flow meter devices by which the circuits can be balanced and flow rates can be read directly. Return manifolds are equipped with manually operated on-off valves for flow interception. With respect, manifold kit features a free way both on the delivery and on the return manifolds for fill-drain cocks and automatic air-vent valves. All distribution manifolds are obtained from drawn brass bars with a special profile. They are machined and assembled automatically by innovative machinery; they then undergo stress relief heat treat-ment, in order to minimize crack risk. Each manifold is tested under pressure with all the fittings and accessories mounted to be sure that there are no leaks. Threads on the main column connections comply with ISO228 standard. Deriva-tion pipes are connected by means of two types of fittings, M24×1.5 thread or 3/4" EUROKONUS, sealed by glued o-rings to ensure they do not loosen when disassembling the fitting.

Manifolds are available with nickel-plated surface (product code final "N"). Manifold kits are suitable for radiant floor heating systems. In particular, with flow meter devices installed on delivery manifolds, one can monitor the flow rate of each branch through a spyglass with graduated scale and indicator. Besides, flow meter devices allow to balance each single outtake and to keep memory of the selected setting, which is particularly useful in case of temporary closure due to maintenance operations.

TECHNICAL FEATURES

Max operating temperature: 90 °C

Max operating pressure: 10 bar

Flow Meter
Adjustment range: 0÷1.3 GPM
Precision: ±10 %

MATERIALS

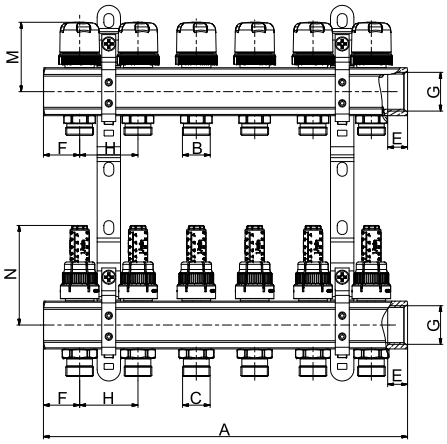
Brass parts: CW617N

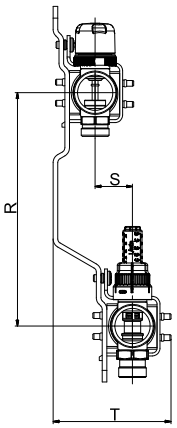
Seal parts: peroxide EPDM
Cut-off knobs: ABS

Flow Meter
Body: PPA
Shutter: PA MXD6
Seal: peroxide EPDM
Lock ring: PPO and PS
blend Indicator: PA 12
Spindle: PSU
Spyglass: transparent PA 12
Cover: ABS

DIMENSIONS

Kit of adjustment manifold with integrated flow meter and shut-off manually con-trolled manifold, with built-in supports and fittings



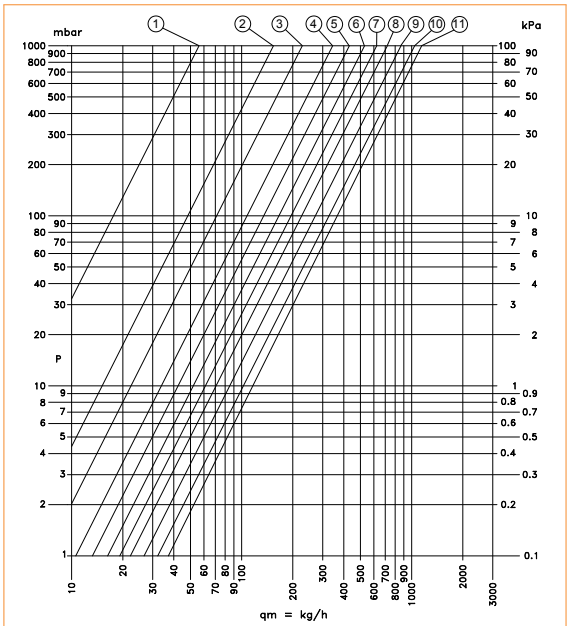


CI 595MN - Dimensions and product codes

WAYS	COD.	SIZE	A	B	C	D	E	F	G	H	M	N	P	R	S	T
2	502292MN	1”×M24	112	M24×1.5	M24×1.5	-	17	31	1”	50	60	85	-	200	32	100
	500082MN	1”×EK		3/4”	3/4”											
	502312MN	1 1/4”×M24	114	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502142MN	1 1/4”×EK		3/4”	3/4”											
3	502293MN	1”×M24	162	M24×1.5	M24×1.5		17	31	1”		60	85				
	500083MN	1”×EK		3/4”	3/4”											
	502313MN	1 1/4”×M24	164	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502143MN	1 1/4”×EK		3/4”	3/4”											
4	502294MN	1”×M24	212	M24×1.5	M24×1.5		17	31	1”		60	85				
	500084MN	1”×EK		3/4”	3/4”											
	502314MN	1 1/4”×M24	214	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502144MN	1 1/4”×EK		3/4”	3/4”											
5	502295MN	1”×M24	262	M24×1.5	M24×1.5		17	31	1”		60	85				
	500085MN	1”×EK		3/4”	3/4”											
	502315MN	1 1/4”×M24	264	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502145MN	1 1/4”×EK		3/4”	3/4”											
6	502296MN	1”×M24	312	M24×1.5	M24×1.5		17	31	1”		60	85				
	500086MN	1”×EK		3/4”	3/4”											
	502316MN	1 1/4”×M24	314	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502146MN	1 1/4”×EK		3/4”	3/4”											
7	502297MN	1”×M24	362	M24×1.5	M24×1.5		17	31	1”		60	85				
	500087MN	1”×EK		3/4”	3/4”											
	502317MN	1 1/4”×M24	364	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502147MN	1 1/4”×EK		3/4”	3/4”											
8	502298MN	1”×M24	412	M24×1.5	M24×1.5		17	31	1”		60	85				
	500088MN	1”×EK		3/4”	3/4”											
	502318MN	1 1/4”×M24	414	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502148MN	1 1/4”×EK		3/4”	3/4”											
9	502299MN	1”×M24	462	M24×1.5	M24×1.5		17	31	1”		60	85				
	500089MN	1”×EK		3/4”	3/4”											
	502319MN	1 1/4”×M24	464	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502149MN	1 1/4”×EK		3/4”	3/4”											
10	502300MN	1”×M24	512	M24×1.5	M24×1.5		17	31	1”		60	85				
	500090MN	1”×EK		3/4”	3/4”											
	502320MN	1 1/4”×M24	514	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502150MN	1 1/4”×EK		3/4”	3/4”											
11	502301MN	1”×M24	562	M24×1.5	M24×1.5		17	31	1”		60	85				
	500091MN	1”×EK		3/4”	3/4”											
	502321MN	1 1/4”×M24	564	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502151MN	1 1/4”×EK		3/4”	3/4”											
12	502302MN	1”×M24	612	M24×1.5	M24×1.5		17	31	1”		60	85				
	500092MN	1”×EK		3/4”	3/4”											
	502322MN	1 1/4”×M24	614	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502152MN	1 1/4”×EK		3/4”	3/4”											
13	502303MN	1”×M24	662	M24×1.5	M24×1.5		17	31	1”		60	85				
	500093MN	1”×EK		3/4”	3/4”											
	502323MN	1 1/4”×M24	664	M24×1.5	M24×1.5		19	32	1 1/4”		65	90				
	502153MN	1 1/4”×EK		3/4”	3/4”											

HYDRAULIC FEATURES

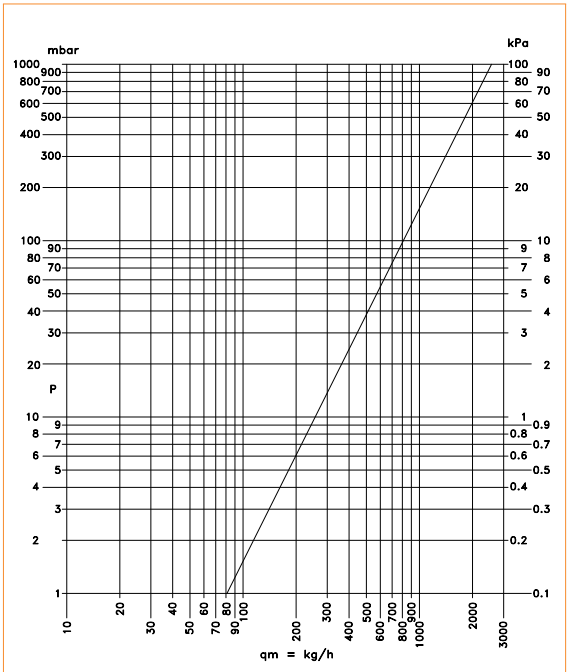
Flow manifold (single way)



Flow Meter

#	1	2	3	4	5	6	7	8	9	10	11
↺	1	1.125	1.25	1.375	1.5	1.75	1.875	2	2.25	2.5	Max
Kv	0.05	0.15	0.22	0.32	0.41	0.51	0.61	0.71	0.87	1.02	1.16

Return manifold (single way)



Kvs = 2.5

↺ = number of turns from closure position
Max = completely open position
Manifold Cv factor = 3.2

OPERATING INSTRUCTIONS

Adjustment

Flow meter devices allow the adjustment and the balancing of each outtake and keep memory of the selected position in case of temporary closure due to maintenance operations. In order to perform a correct adjustment, proceed as follows:

1. Remove the orange cover as in Fig.1-A;
2. Set the flow meter in closure position by turning the upper lock ring in the direction indicated by the arrow in Fig.1-B; NB: in closure position, the indicator points a null flow-rate;
3. Open the device by turning the same lock ring in the opposite direction (Fig.1-C), and check the correct flow rate through the spyglass;
4. Screw the lower lock ring in the direction indicated in Fig.1-D, until mechanical stop;
5. Put back the orange cover (Fig.1-E);

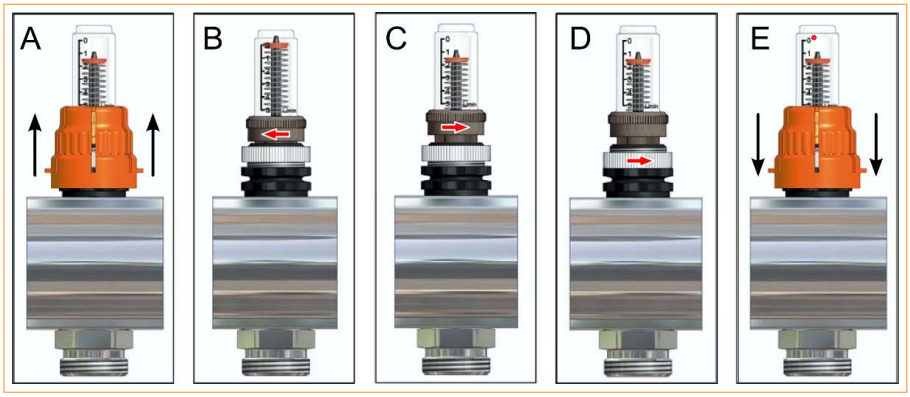


Fig. 1: Flow Meter adjustment and block.

I.V.A.R. S.p.A.
Via IV Novembre 181
25080 Prevalle (BS)
Tel. +39 030 68028
Fax +39 030 6801329
www.ivar.eu - info@ivar.eu