

Function

The manual valves 938, 968, 923 and 943 can be used on systems with single and double pipe type radiators.

The valves can be installed only through the lower radiator connection, which is used both as fluid inlet and outlet.



Technical Features

Working Fluids:	water and glycole sol.
Max percentage of glycole:	30%
Max working pressure:	10 bar
Max differential pressure:	1 bar
Max working temperature:	100°C
Max flow to radiator:	See pressure drop diagram

Manufacturing Features

Body:	Brass CW 617 N UNI EN 12165 White (923-943) Chrome (938-968)
Setting nut:	Brass CW 614 N UNI EN 12164
Spring and control rod:	Stainless steel
Hydraulic gasket:	EPDM perox
Handle:	ABS white (923-943) ABS chrome (938-968)

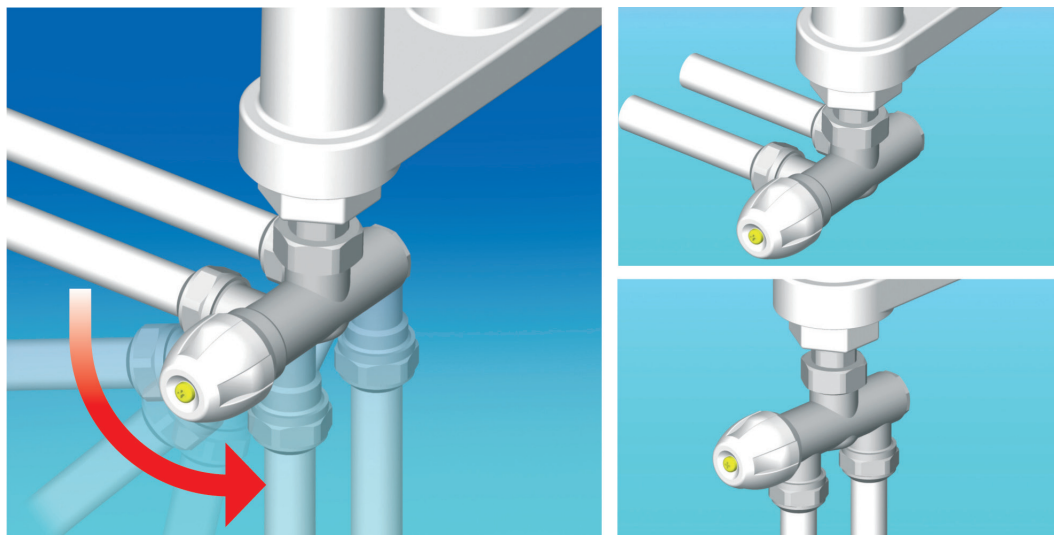
Operation Principle

In single-pipe systems, the radiators are connected in series, with respect to each manifold derivation. The 938, 968, 923 and 943 series valves, set for this type of system, send only a part of the flow to the radiator, while the remaining part of fluid is bypassed and routed to the next radiator. In this way the radiators can be intercepted individually (for exclusion or maintenance), allowing the functioning of the radiators installed further downstream.

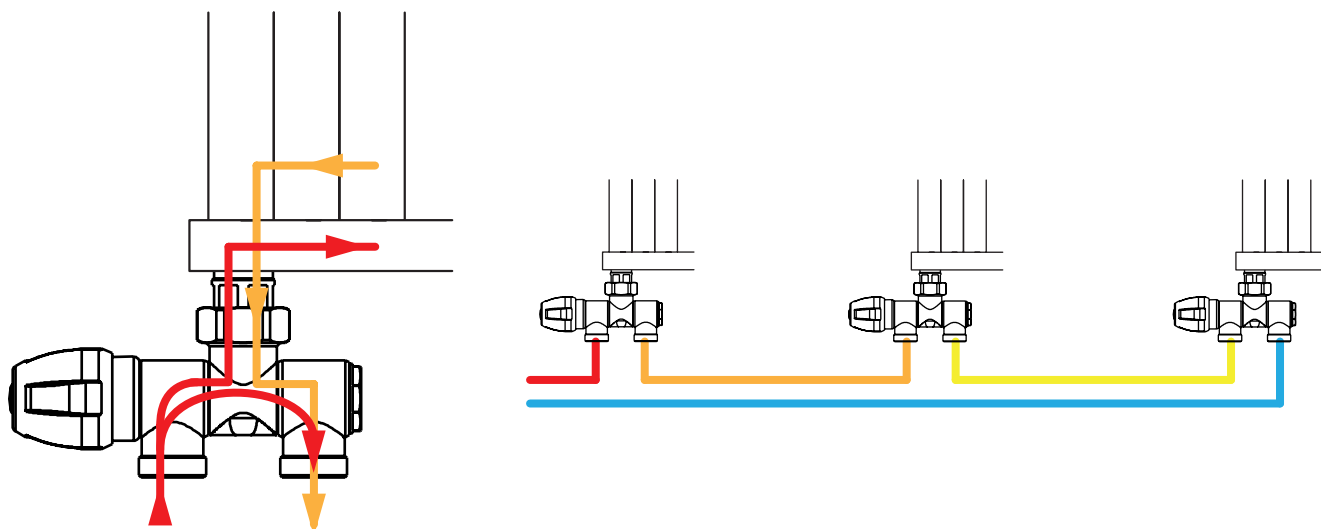
In the two-pipe system, the radiators are installed in parallel, with respect to all the manifold derivations. In this type of system, the 938, 968, 923 and 943 series valves send up to 60% of the inlet flow to the radiator.

The valves series 938, 968, 923 and 943, in double pipe mode, incorporate in a single device the dual function of the manual valve and of the lockshield that characterizes the systems where the fluid inlet valve is connected to the upper connection of the radiator and the holder to the lower one .

Installation Angles Exaples



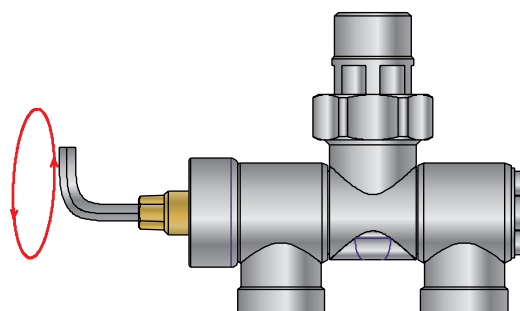
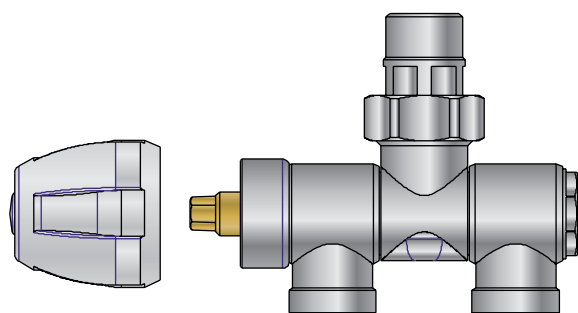
Single-pipe Example



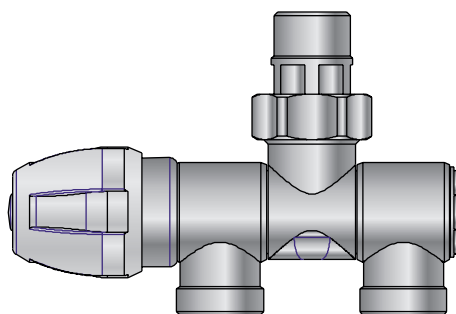
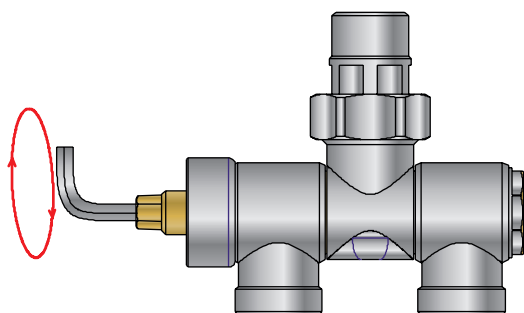
Single-pipe Setting

Unscrew the handwheel locking screw using a Phillips screwdriver, then remove the handwheel.

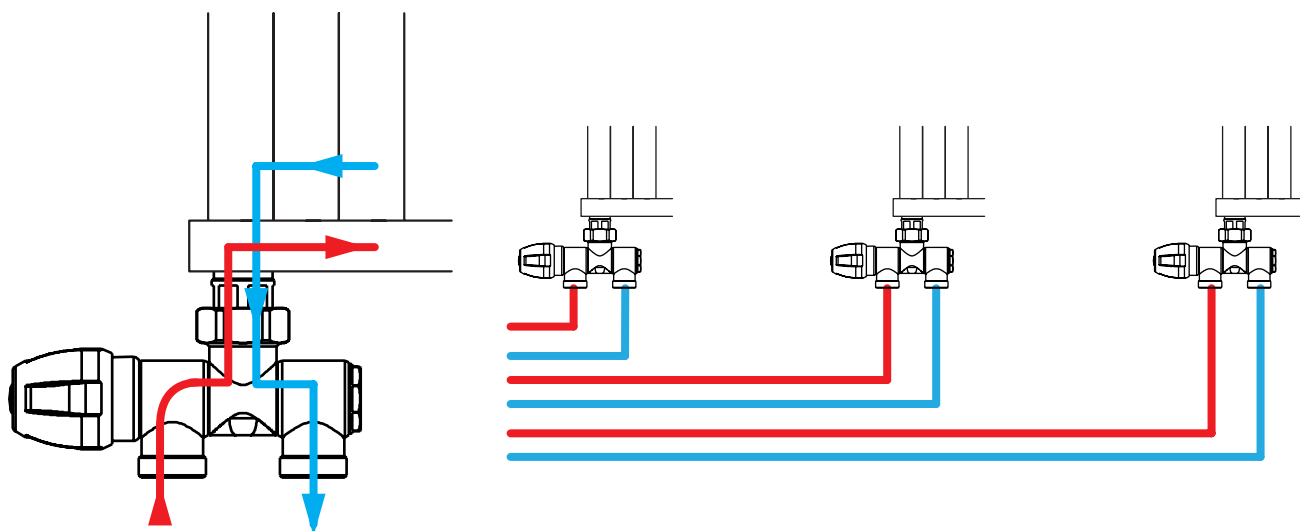
Fully open the BYPASS screw (counterclockwise) using a 3mm CH Allen key.



Progressively turn the screw clockwise according to the system requirements. Refit the handwheel and locking screw.



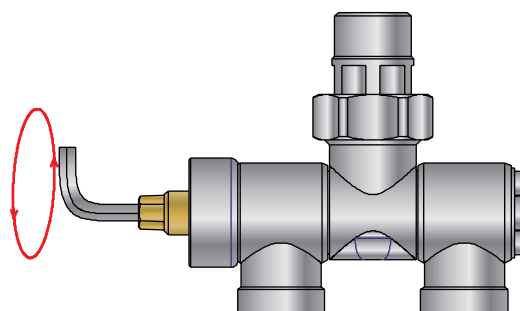
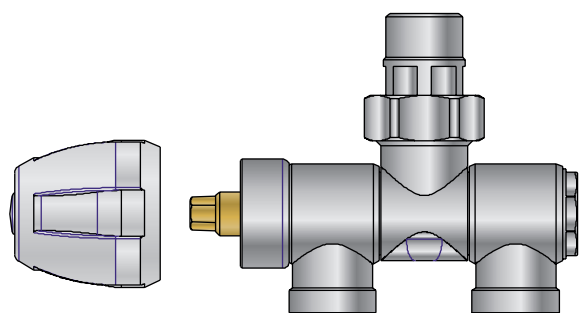
Double-pipe example



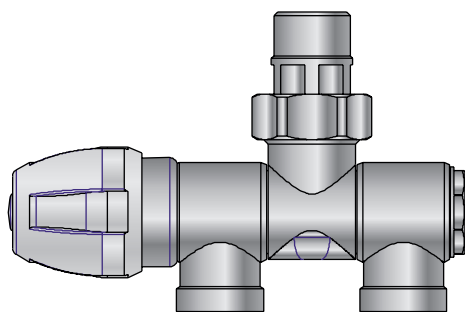
Double-pipe Setting

Unscrew the handwheel locking screw using a Phillips screwdriver, then remove the handwheel.

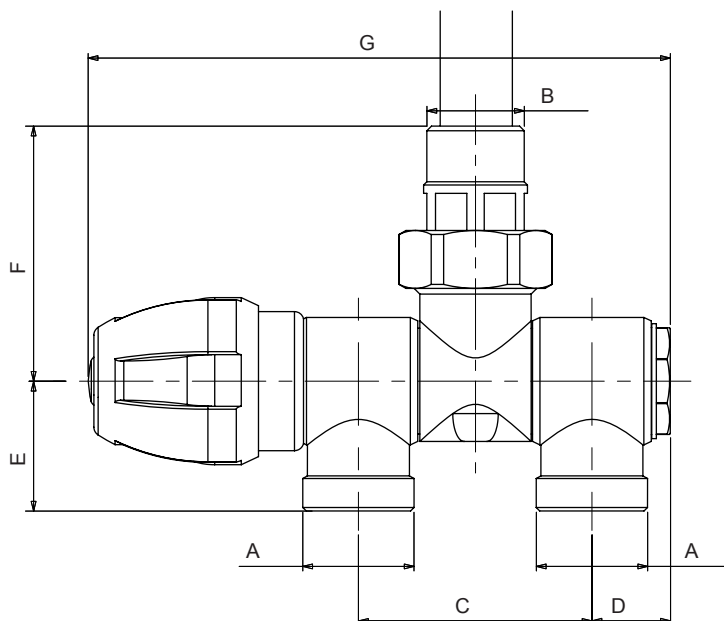
Fully close the BYPASS screw (clockwise) using a 3mm CH Allen key.



Refit the handwheel and locking screw.



Dimensions

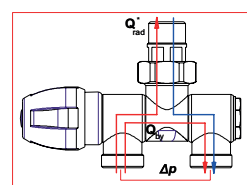
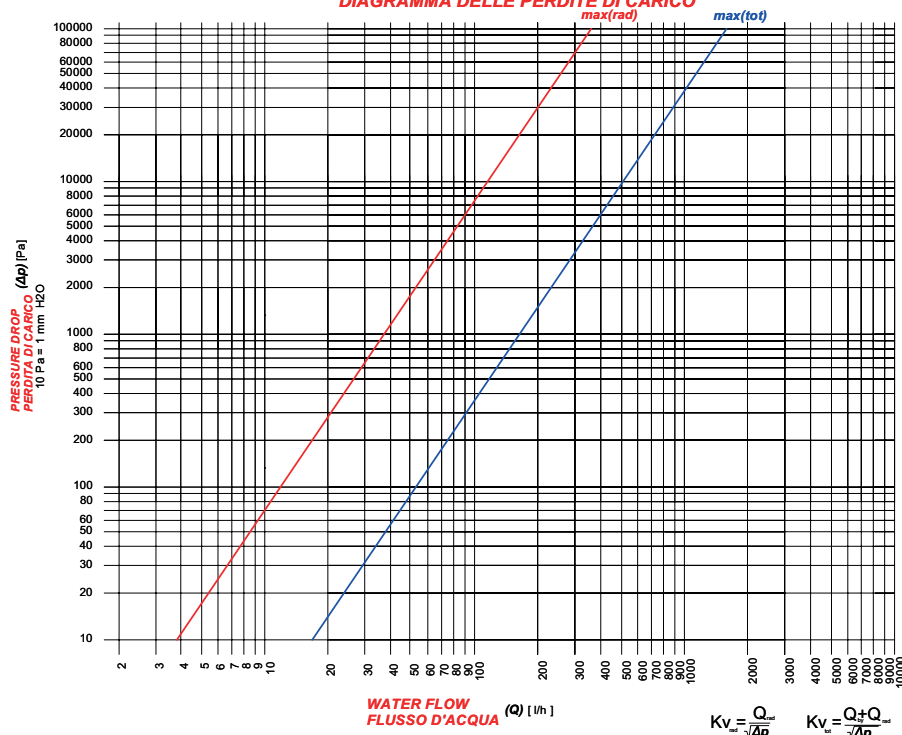


SERIE	CODICE	A	B	C	D	E	F	G
938	82938AD07	1/2"	24x1,5	50	17	28	53,5	125
968	82968AD07	1/2"	3/4"	50	17	28	53,5	125
923	82923AD13	1/2"	24x1,5	50	17	28	53,5	125
943	82943AD13	1/2"	3/4"	50	17	28	53,5	125

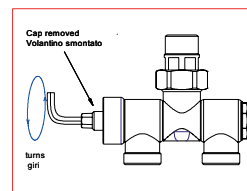
Hydraulic Features

One-pipe valve Art.894-895
Valvola monotubo Art.894-895

PRESSURE DROP DIAGRAM DIAGRAMMA DELLE PERDITE DI CARICO



*Radiator flow
*Flusso nel radiatore



° opening turns (Diposa screw) giri in apertura (Vite bypass)	Kv_{rad} [m ³ /h]	Kv_{tot} [m ³ /h]	%Rad
0	0,42	0,69	60
1	0,41	0,88	46
2	0,38	1,16	32
3	0,38	1,42	26
4	0,36	1,55	23
5	0,36	1,61	22
max	0,36	1,66	21