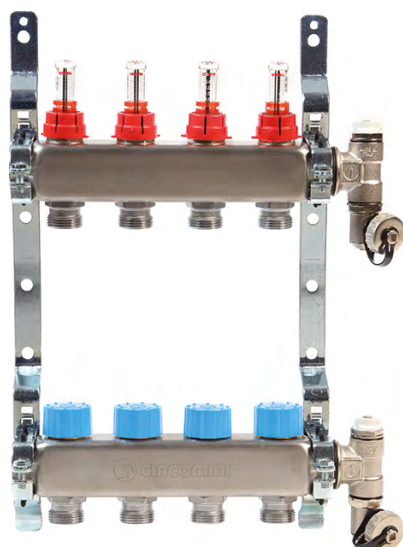


Preassembled stainless steel manifold kit

Datasheet
0939EN 07/2026



R553FS stainless steel preassembled manifold kit for HVAC systems, including:

- supply manifold with flow meters (double scale 0÷5 l/min and 0÷1,5 GPM) working as balancing lockshields;
- return manifold with shut-off valves for thermo-electric control thanks to the M30 x 1,5 mm standard connection; handwheels included;
- pair of terminal units with drain cocks, manual air vent valves and R74 special control wrench;
- electro-galvanized steel brackets for cabinet or wall-mounting installation.

Technical data

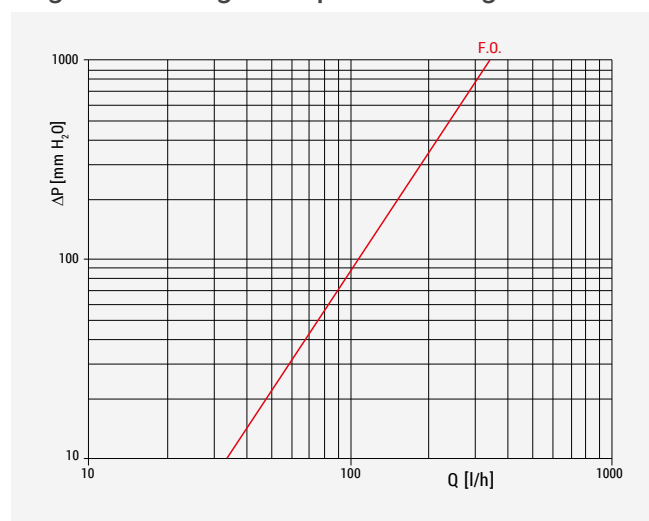
Performance

- Fluids of use: water with glycol for HVAC systems
- Max. glycol percentage: 30%
- Temperature range 5÷70 °C
- Max. working pressure: 6 bar (10 bar for system pressure test)
- Center distance between manifold outlets: 50 mm

Materials

- Supply and return manifolds: AISI 304 stainless steel
- Terminal units and drain cock: EN 12165 CW617N brass
- Gaskets: EPDM
- Manifold brackets: galvanized steel
- Handwheels: plastic

Diagram for setting loss of pressure in single circuits



N° of turns of the flow meter's lockshield	F.O.
Kv	1,21

➤ Versions and product codes

PRODUCT CODE	CONNECTIONS: MANIFOLD x OUTLETS	No. OUTLETS	CABINETS L x H x D
R553FSX242	G 1"x 3/4"E	2	R500Y111 R500Y221 R500Y231
R553FSX243		3	R500Y111 R500Y221 R500Y231
R553FSX244		4	R500Y112 R500Y222 R500Y232
R553FSX245		5	R500Y112 R500Y222 R500Y232
R553FSX246		6	R500Y112 R500Y222 R500Y232
R553FSX247		7	R500Y112 R500Y222 R500Y232
R553FSX248		8	R500Y113 R500Y223 R500Y233
R553FSX249		9	R500Y113 R500Y223 R500Y233
R553FSX250		10	R500Y113 R500Y223 R500Y233
R553FSX251		11	R500Y114 R500Y224 R500Y234
R553FSX252		12	R500Y114 R500Y224 R500Y234

🔗 **NOTE.** Manifold/cabinet combinations are applicable for manifolds with end pieces only, WITH NO optional kits installed.

Optional kits

PRODUCT CODE	CONNECTIONS
 R259SX077	G 1"F x G 1"M
 R259KX006	G 3/4"F x G 1"M
 R259KX007	G 1"F x G 1"M
 R859KX116	G 3/4"F x G 1"M
 R859KX117	G 1"F x G 1"M
 R859KX126	G 3/4"F x G 1"M
 R859KX127	G 1"F x G 1"M

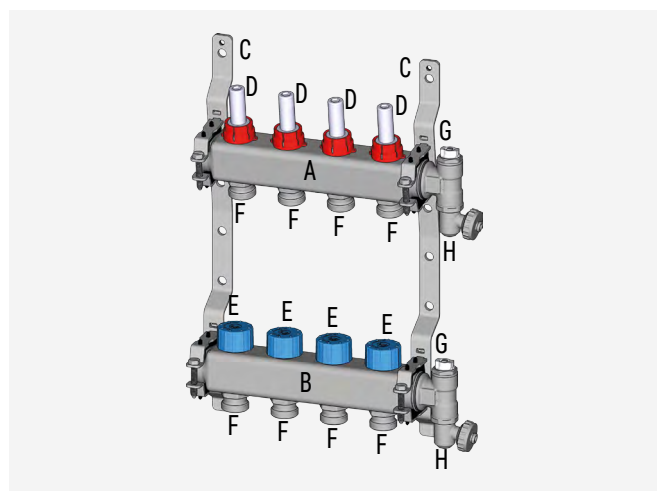
Optional components

- **R500-1:** flush-mounting metal cabinet, 120 mm depth
- **R500-2:** flush-mounting metal cabinet, with adjustable depth
- **R500-2C:** flush with the wall metal cabinet, with adjustable depth
- **R473, R473M:** normally closed thermo-electric actuators
- **R453FY002:** M30 x 1,5 mm plastic ring nut for installing thermo-electric actuators
- **R178E, R179E:** 3/4"E adaptors

Spare parts

- **R554FSX001:** pair of chrome plated brass end pieces, complete with a manual air vent and a drain cock

➤ Components



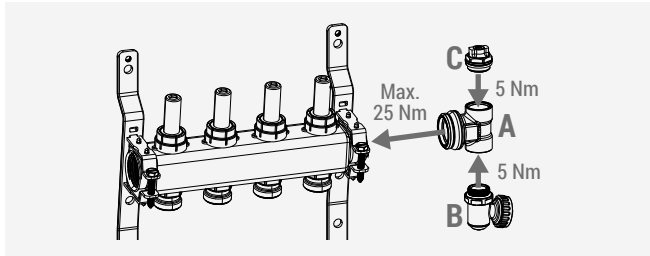
A	Supply manifold
B	Return manifold
C	Metal bracket
D	Flow meter working as regulation lockshield
E	Shut-off valve with handwheel
F	3/4" Eurocone threaded fitting
G	Manual air vent valve
H	Drain cock

➤ Installation and setting

⚠ WARNING. Installation must be carried out by qualified operators according to the instructions below.

Installation of terminal units

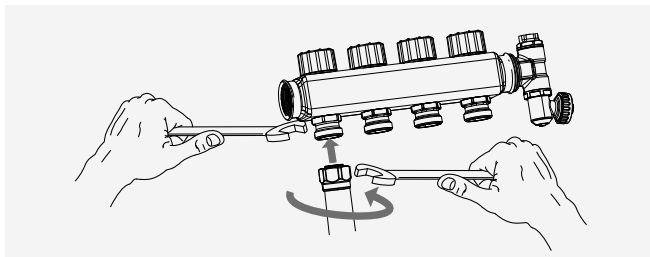
First screw the intermediate fitting **(A)** on the manifold. Then install the drain cock **(B)** on the bottom of the intermediate fitting and the air vent valve **(C)** on top. All components are provided with self-sealing gasket.



Circuit pipe connection

To connect the circuit water supply pipes, use Eurocone adaptors for copper, plastic or multilayer pipes series R178E or R179E.

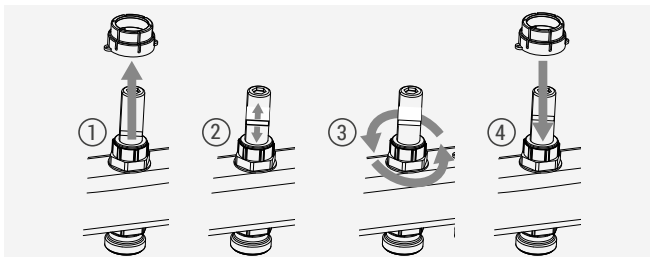
⚠ WARNING. Use a 26 mm back wrench when screwing/unscrewing the adaptors to the manifold outlets.



Setting and balancing of hydraulic circuits on supply manifold

The system single circuits must be set using the flow meters as regulation lockshields on the supply manifold. For proper setting, follow the instructions below:

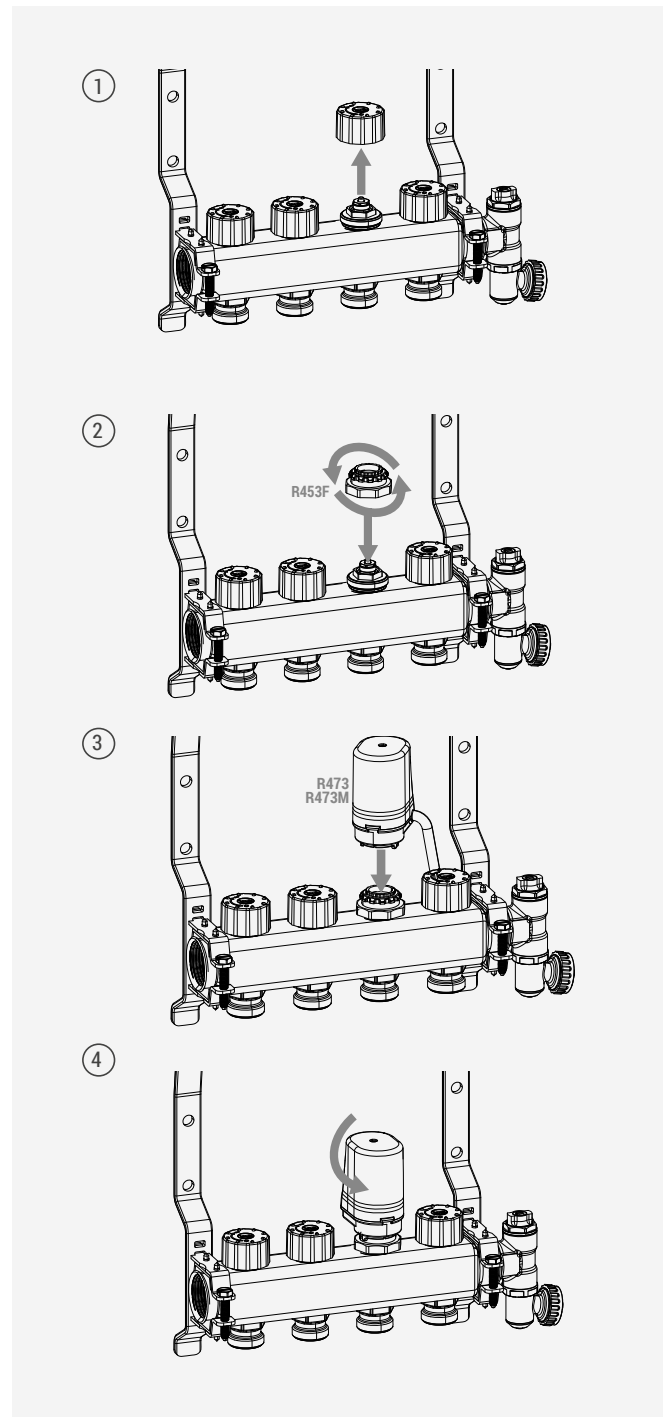
- 1) Remove the red protection cap;
- 2) Place the flow indicator on the desired flow rate value;
- 3) Set the flow rate by turning the special ring nut till the meter inner plate is on the flow rate indicator previously set;
- 4) Replace the red protection cap which also blocks the preset regulation.



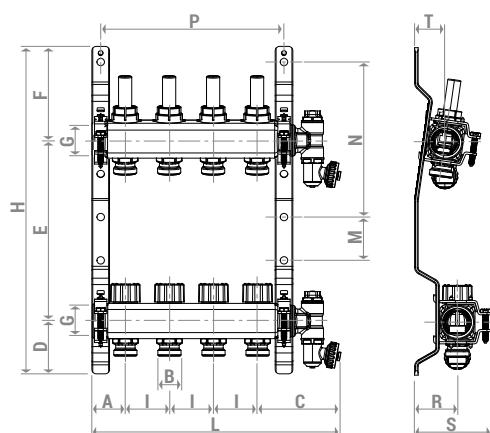
Shutting off the hydraulic circuits on the return manifold

Turn the provided blue handwheels all the way through to shut off the circuits on the return outlets. As an alternative, thermo-electric actuators can be installed on the M30 x 1.5 mm standard connection.

To install the R473/R473M thermo-electric actuators normally closed, replace the blue handwheels with R453FY002 quick-fit ring nuts. Install the thermo-electric actuator of the ring nut using enough pressure to fit it. Turn the thermo-electric actuator slightly to properly connect it to the ring nut (max. torque 5 Nm).



➤ Dimensions



➤ Product specifications

R553FS

Stainless-steel preassembled manifold kit for HVAC systems. 3/4" Eurocone outlet circuit connections for copper, plastic or multilayer pipe adaptors. Fluids of use: water with glycol for HVAC systems. Max. glycol percentage: 30%. Center distance between outlets 50 mm. Temperature range 5÷70 °C. Max. working pressure: 6 bar (10 bar for system pressure test). Includes a supply manifold with flow meters (double scale 0÷5 l/min and 0÷1,5 GPM) working as regulation lockshields for single circuits, a return manifold with shut-off valves activated by handwheels, manifold metal brackets and a pair of terminal units including manual air vent valve and drain cock. Replace the handwheel with thermo-electric actuators normally closed for automatic setting of the circuits.

PRODUCT CODE	N° OF OUTLETS	G x B	A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	I [mm]	L [mm]	M [mm]	N [mm]	P [mm]	R [mm]	S [mm]	T [mm]
R553FSX242	2									190			110			
R553FSX243	3									240			160			
R553FSX244	4									290			210			
R553FSX245	5									340			260			
R553FSX246	6									390			310			
R553FSX247	7	G 1" F x 3/4" E	38	102	61	209	109	379	50	440	50	197	360	49	86	35
R553FSX248	8									490			410			
R553FSX249	9									540			460			
R553FSX250	10									590			510			
R553FSX251	11									640			560			
R553FSX252	12									690			610			

⚠ Safety Warning. Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

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