

# Description

The R553D preassembled manifold consists of:

- Delivery manifold with front balancing lockshield valves equipped with mechanical memory.
- $\bullet$  Return manifold with interception valves with manual handwheel, suitable for thermo-electric command.
- Metal brackets R588Z.
- Set of adhesive labels for identifying the various circuits.
- Spanner R558.

### Versions and product code

Product code	Connections Manifold x	N° of outputs	Cabinet *				
1 Todact code	outputs	14 Of Outputs	Series	Product code			
R553ZY002		2		R500Y111 R500Y221 R500Y215			
R553ZY003		3		R500Y111 R500Y221 R500Y215			
R553ZY004	1″x B.18	4		R500Y112 R500Y222 R500Y215			
R553ZY005		5	R500-1	R500Y112 R500Y222 R500Y215			
R553ZY006		6	(flush- mounting)	R500Y112 R500Y222 R500Y215			
R553ZY007		7	R500-2 (flush- mounting)	R500Y112 R500Y222 R500Y215			
R553ZY008		8	R500-2E (flush with	R500Y113 R500Y223 R500Y217			
R553ZY009		9	the wall)	R500Y113 R500Y223 R500Y217			
R553ZY010		10		R500Y113 R500Y223 R500Y217			
R553ZY011		11		R500Y114 R500Y224 R500Y218			
R553ZY012		12		R500Y114 R500Y224 R500Y218			
R553ZY022	_	2		R500Y111 R500Y221 R500Y215			
R553ZY023		3		R500Y111 R500Y221 R500Y215			
R553ZY024		4		R500Y112 R500Y222 R500Y215			
R553ZY025		5	R500-1	R500Y112 R500Y222 R500Y215			
R553ZY026		6	(flush- mounting)	R500Y112 R500Y222 R500Y215			
R553ZY027	1-1/4" x B.18	7	R500-2 (flush- mounting)	R500Y112 R500Y222 R500Y215			
R553ZY028		8	R500-2E	R500Y113 R500Y223 R500Y217			
R553ZY029		9	(flush with the wall)	R500Y113 R500Y223 R500Y217			
R553ZY030		10		R500Y113 R500Y223 R500Y217			
R553ZY031		11		R500Y114 R500Y224 R500Y218			
R553ZY032		12		R500Y218 R500Y224 R500Y218			

D. J. J. J. J.	Connections	NO 6	Cabinet *				
Product code	Manifold x outputs	N° of outputs	Series	Product code			
R553ZY042	1″x 3/4″E	2		R500Y111 R500Y221 R500Y215			
R553ZY043		3		R500Y111 R500Y221 R500Y215 R500Y112 R500Y222 R500Y215			
R553ZY044		4					
R553ZY045		5	R500-1	R500Y112 R500Y222 R500Y215			
R553ZY046		6	(flush- mounting)	R500Y112 R500Y222 R500Y215			
R553ZY047		7	R500-2 (flush- mounting)	R500Y112 R500Y222 R500Y215			
R553ZY048		8	R500-2E (flush with	R500Y113 R500Y223 R500Y217			
R553ZY049		9	the wall)	R500Y113 R500Y223 R500Y217			
R553ZY050		10		R500Y113 R500Y223 R500Y217			
R553ZY051		11		R500Y114 R500Y224 R500Y218			
R553ZY052		12		R500Y114 R500Y224 R500Y218			



#### \*Note.

The cabinet is chosen keeping in consideration the size of the R554D intermediate fitting and R259D ball valve.

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Preassembled manifold R553D





#### Flush-mounting cabinets for manifolds

Series	Product code	Cabinets dimensions [mm] (L x H x D)							
	R500Y111	400 x 460 x 110							
R500-1	R500Y112	600 x 460 x 110							
(flush- mounting)	R500Y113	800 x 460 x 110							
	R500Y114	1000 x 460 x 110							
	R500Y221	400 x 650÷740 x 85÷130							
R500-2	R500Y222	600 x 650÷740 x 85÷130							
(flush-	R500Y223	800 x 650÷740 x 85÷130							
mounting)	R500Y224	1000 x 650÷740 x 85÷130							
	R500Y225	1200 x 650÷740 x 85÷130							
R500-2E	R500Y215	500 x 450 x 80÷110							
(flush with	R500Y217	700 x 450 x 80÷110							
the wall)	R500Y218	850 x 450 x 80÷110							

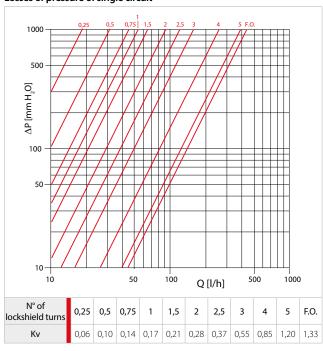
### Technical data

- •Temperature range: 5÷110 °C
- Max. working pressure: 10 bar
- Outputs centre distance: 50 mm

#### Materials

- Manifold: brass
- Gaskets: EPDM
- Brackets: galvanized steel

### Losses of pressure of single circuit



#### Components

#### Manifold

• The delivery manifold consists of a drawn brass bar in a special alloy, containing a balancing lockshield with mechanical memory for each circuit so that the calibration position in each one can be identified and maintained, even in the case of total interception.

The mechanical memory takes the form of a specific ring which, when regulated with the R558 spanner, limits the maximum opening of the lockshield to the value selected during the balancing phase.

To make the correct adjustment, fully open the metal ring using the screwdriver part of the R558 spanner, then close the lockshield valve fully down using the hexagonal part of the spanner.

Open the valve by the number of rotations determined via the calibration diagrams, then tighten the memory ring as far as it will go on the valve.

• The return manifold is equipped with interception valves with a manual handwheel, suitable for thermo-electric command via the thermo-electric actuators R478, R478M (normally open) and R473, R473M (normally closed). The actuators are assembled by releasing the handwheel on the manifolds and thereby freeing the valve connection.

#### **R588Z** metallic brackets

Metal supports for use in R500-1 or R500-2 flush-mounting metal cabinets and in R500-2E metallic cabinets flush with the wall.

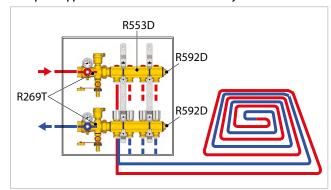
#### Adjustment key and adhesive labels

The kit is completed with a set of adhesive labels for the detection of the various circuits and an adjusting key for adjusting the holders.

#### Installation

- 1) Install any ball valves and intermediate groups at the entrance of the manifold and the terminal groups or taps at the end of themanifold.
- 2) Install the manifold with the metal brackets inside the cabinet.
- **3)** Connect the main pipes coming from the boiler room to the manifold connections and the pipes of the system to the manifold outlets. For the connection use adaptors base 18 (R178, R179 or R179AM series) or Eurocone (R178E, R179E series).
- **4)** Install and electrically connecting any electrical actuators in place of the handwheels on the return manifold.

#### Example of application scheme with radiant floor system

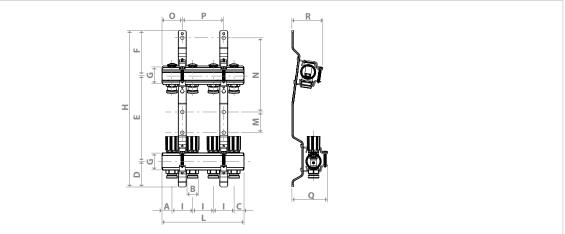


PREASSEMBLED MANIFOLD R553D





# Dimensions



Codice	N° di stacchi	GxB	A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	H [mm]	l [mm]	L [mm]	M [mm]	N [mm]	O [mm]	P [mm]	Q [mm]	R [mm]
R553ZY002	2			24	62	208	108	378	50	98	50	179	49	-	86	81
R553ZY003	3		24							148				50		
R553ZY004	4									198				100		
R553ZY005	5									248				150		
R553ZY006	6									298				200		
R553ZY007	7	1" x base 18								348				250		
R553ZY008	8									398				300		
R553ZY009	9									448				350		
R553ZY010	10									498				400		
R553ZY011	11									548				450		
R553ZY012	12									598				500		
R553ZY022	2		_							98		179	49	-	88	85
R553ZY023	3	-	24			66 208	104	378	50	148	50			50		
R553ZY024	4	-								198				100		
R553ZY025	5									248				150		
R553ZY026	6									298				200		
R553ZY027	7	1 1/4" x base 18		24	66					348				250		
R553ZY028	8									398				300		
R553ZY029	9	-								448				350		
R553ZY030	10									498				400		
R553ZY031	11									548				450		
R553ZY032	12									598				500		
R553ZY042	2									98				-		
R553ZY043	3									148	-			50	-	
R553ZY044	4									198				100		
R553ZY045	5									248				150		
R553ZY046	6		/4"E 24 24		62	208	108	378	50	298	50	50 179	179 49	200		
R553ZY047	7	1"x 3/4"E		24						348				250	86	81
R553ZY048	8									398				300		
R553ZY049	9									448				350		
R553ZY050	10									498				400		
R553ZY051	11									548				450		
R553ZY052	12									598				500		

# Manifolds and preassembled groups

**0106EN** March 2022

Preassembled manifold R553D





## **Product specifications**

#### R553D

Preassembled brass manifold for HVAC systems. Centre distance between the outflow points 50 mm. Temperature range 5÷110 °C. Max. working pressure 10 bar. Consisting of: delivery manifold with front balancing lockshield equipped with mechanical memory. Return manifold with interception valves with manual handwheel, suitable for thermo-electric command. EPDM gaskets. R588Z metal brackets. Set of adhesive labels for identifying the various circuits. 1 adjustment key R558. Available with connection for base 18 or Eurocone adaptors.