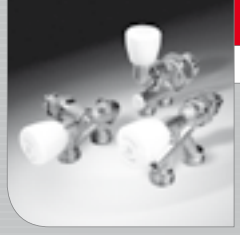
GENERAL CATALOGUE

TWIN-PIPE VALVES
SINGLE-PIPE VALVES

GIACOMINI
Technology in Comfort

SOMMARIO



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0006/5
IT-3995

GENERAL CATALOGUE

THERMOSTATIC TWIN-PIPE VALVES

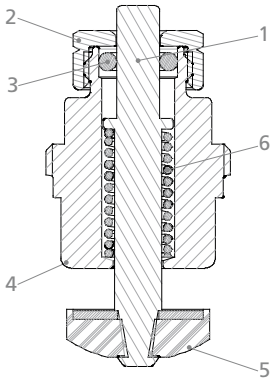
Use

The Giacomini "twin-pipe" valve series is used in heating systems as a valid alternative to traditional connections achieved with a combination of valve and lockshield valve, which require the execution of burdensome tracks in the walls for their overlapping or opposite mounting. This valve actually allows for connection to radiators with a single joint, combining aesthetically pleasing results with inexpensive realization, two features which are often sought after in case of restructuring operations. The wide range of available accessories facilitates any type of solution and is applicable to the various kinds of radiators which the market offers.

Characteristics

The Giacomini "twin-pipe" valve series proposes solutions with connections derived from wall or floor, with straight or angled inlet from below, with right- or left-hand connection, for plates or radiators. The Giacomini "twin-pipe" valves are supplied in the manual version, with micrometric handwheel, and can easily be transformed into the thermostatic version by simply applying any head of the Giacomini range.
The micrometric lockshield valve which they are fitted with also consents the balancing of the circuit up to total closing of the supply flow to the radiator, both in the case of the traditional twin-pipe distribution and in the case of manifold distribution (horizontal or coplanar).

Internal bonnet



1. Stainless steel stem
2. Nut
3. O-ring
4. Body
5. Gasket
6. Spring

Technical data

- Maximum working temperature: **110°C**
- Maximum working pressure: **1 MPa (10 bar)**
- Maximum differential pressure: **0,14 MPa (1,4 bar)**

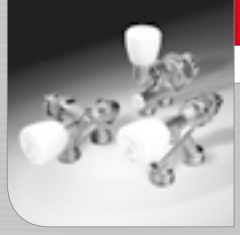
Connection to radiator

Connection to the radiator takes place by means of a self-sealing tail piece which allows for quick, practical and long-lasting installation by carefully following some simple instructions. The Giacomini self-sealing tail piece is supplied already fitted with a sealing element in elastomeric material which enables to mount it on the radiator without having to add hemp, paste or other sealing material. For correct and rapid mounting, a light lubrication of the threading is recommended before proceding with screwing. In view of the elastomeric sealing element it is enough to apply a tightening torque not exceeding 25 Nm.

For correct operation of the system, the sensor must be mounted so as to protrude at least 2÷3 mm inside the tail piece in order to avoid short circuits of the circulating fluid. To obtain the best output from the radiator we recommend the application of sensors with a length of at least 2/3 of the radiator itself.

System connection

When connecting the valve to the supply pipes it is important to respect the correct flow direction as shown by the arrows printed on the body. In this way the obturator is hit by the fluid current in the opening sense, guaranteeing ideal functioning both in the manual and in the thermostatic versions.

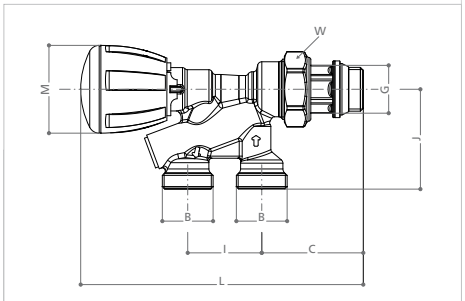


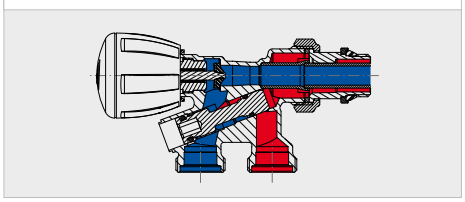
GENERAL CATALOGUE

R440

Thermostatic valve for twin-pipe systems, with integrated lockshield valve, 100% port to the radiator.

For connection to the system use adaptors R178, R178C, R179 or R179AM.





CODE	GxB	I	J	L	C	M	W
R440X032 R440X042	1/2"x16	35	47	137	48	42	30

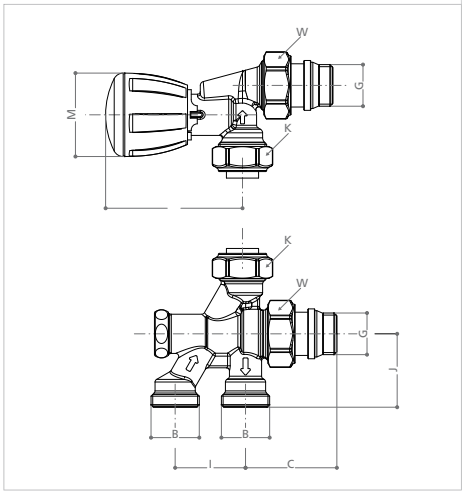
R440X032: R171P Ø12 sensor included

R438

Thermostatic unit for twin-pipe systems, with angled valve and lockshield valve, 100% port to the radiator, self-sealing tail piece.

The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



CODE	GxB	I	J	L1	C	M	K	W
R438X052	1/2"x16	35	37	68	46	42	27	30
R438X053	1/2"x18	50	42	68	38	42	27	30

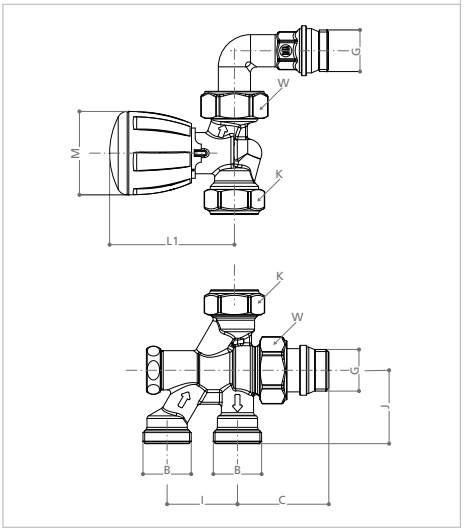
Thermostatic unit for twin-pipe systems, with straight valve and lockshield valve, 100% port to the radiator, self-sealing tail piece.

The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

CODE	GxB	I	J	L1	C	M	K	W
R438IX043	1/2"x16	35	37	62	46	42	27	30
R438IX044	1/2"x18	50	42	62	38	42	27	30

R438-1



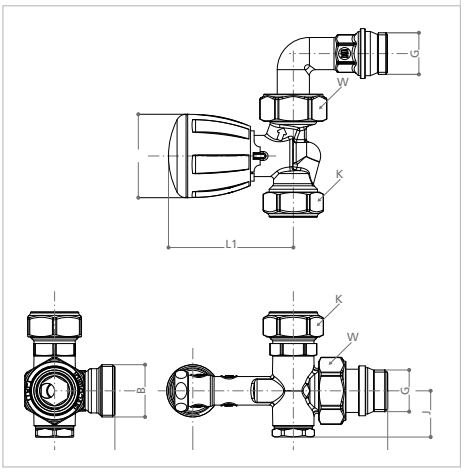
Thermostatic unit for twin-pipe systems, with straight valve and lockshield valve, wall mounted,100% port to the radiator, self-sealing tail piece.

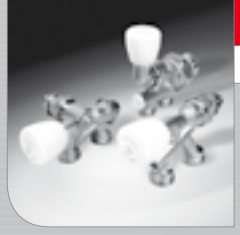
The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

CODE	GxB	I	J	L1	C	S	M	K	W
R438MX033	1/2"x18	50	23	62	47	30	42	27	30

R438M-1



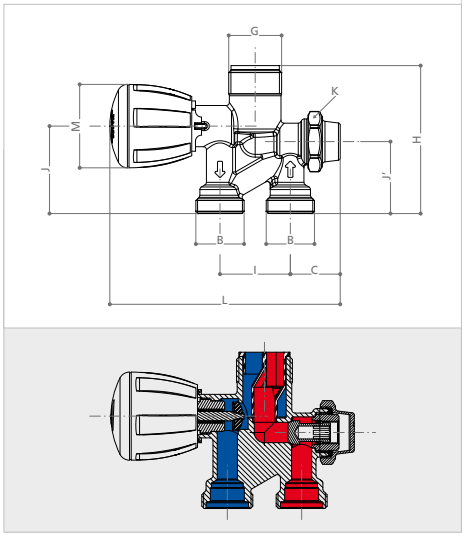


GENERAL CATALOGUE

R356B

Thermostatic micrometric valve for twin-pipe systems, straight, with radiator inlet from below, without tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

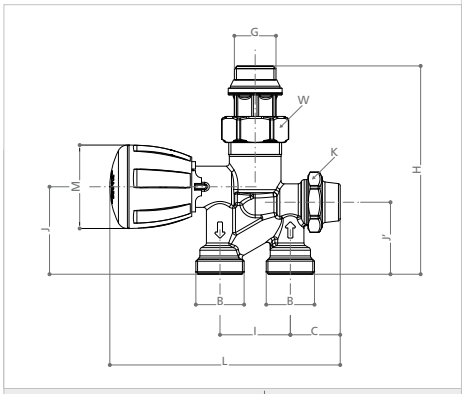


CODE	GxB	I	J	J'	L	C	H	M	K
R356BX031	3/4"x16	35	44	36	115	25	74	42	27
R356BX032	3/4"x18	50	43	35	117	22	73	42	30

R356B1

Thermostatic micrometric valve for twin-pipe systems, straight, with radiator inlet from below, with tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



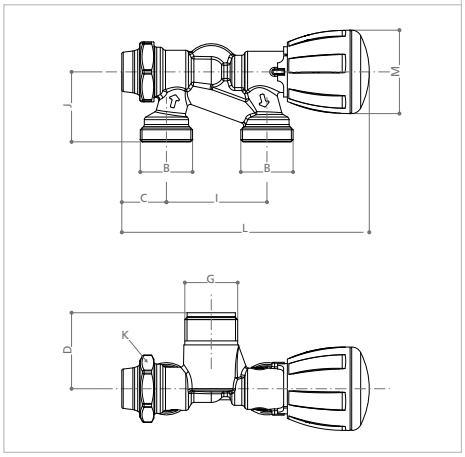
CODE	GxB	I	J	J'	L	C	H	M	K	W
R356BX041	3/4"x16	35	44	36	115	25	104	42	27	30
R356BX042	3/4"x18	50	43	35	117	22	103	42	30	30

The R171C or R171P Ø12 injection sensor must be purchased separately

R357B

Thermostatic micrometric valve for twin-pipe systems, angled, with radiator inlet from below, right-hand connection, without tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

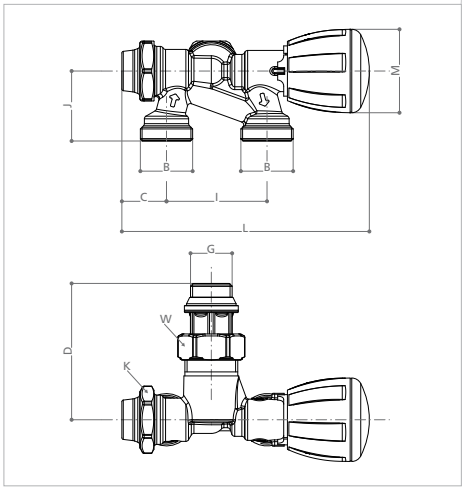


CODE	GxB	I	J	L	C	D	M	K
R357BX032	3/4"x18	50	35	123	22	38	42	30

R357B1

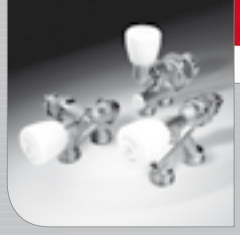
Thermostatic micrometric valve for twin-pipe systems, angled, with radiator inlet from below, right-hand connection, with tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



CODE	GxB	I	J	L	C	D	M	K	W
R357BX042	1/2"x18	50	35	123	22	68	42	30	30

The R171C or R171P Ø12 injection sensor must be purchased separately

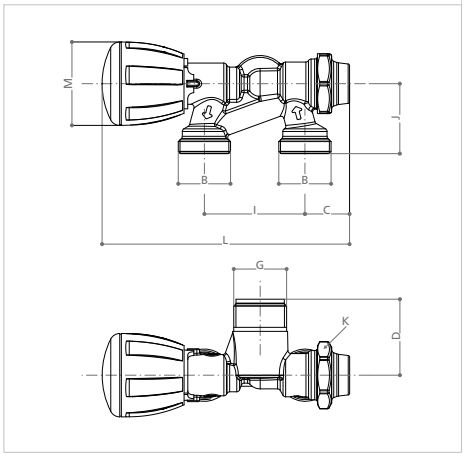


GENERAL CATALOGUE

R358B

Thermostatic micrometric valve for twin-pipe systems, angled, with radiator inlet from below, left-hand connection, without tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

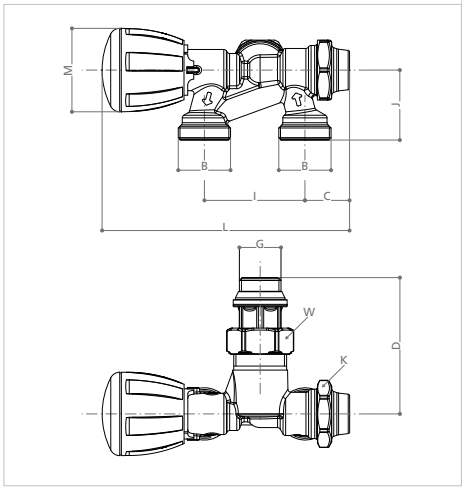


CODE	GxB	I	J	L	C	D	M	K
R358BX032	3/4"x18	50	35	123	22	38	42	30

R358B1

Thermostatic micrometric valve for twin-pipe systems, angled, with radiator inlet from below, left-hand connection, with tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



CODE	GxB	I	J	L	C	D	M	K	W
R358BX042	1/2"x18	50	35	123	22	68	42	30	30

The R171C or R171P Ø12 injection sensor must be purchased separately

THERMOSTATIC SINGLE-PIPE VALVES

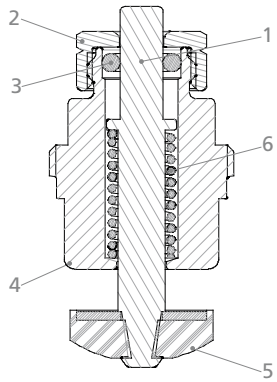
Use

The Giacomini "single-pipe" valve series has been developed and realized with the objective of extending to single-pipe systems all the features applied to the traditional manifold systems, offering the market a series of thermostatic micrometric valves, compatible with any type of thermostatic or thermoelectric head of the Giacomini range.

Characteristics

The Giacomini "single-pipe" valves allow for the total exclusion of the radiator from the supply circuit, consenting interventions on the same even when the system is working. Indeed, by closing the handwheel and integrated lockshield valve, the circulating fluid flows through the valve's by-pass to reach the subsequent heating source.

Internal bonnet



1. Stainless steel stem
2. Nut
3. O-ring
4. Body
5. Gasket
6. Spring

Technical data

- Maximum working temperature: **110°C**
- Maximum working pressure: **1 MPa (10 bar)**
- Maximum supply through radiator:
  50%, for manual applications
  35%, combined with ΔT = 2K thermostatic heads

Connection to radiator

Connection to the radiator takes place by means of a self-sealing tail piece which allows for quick, practical and long-lasting installation by carefully following some simple instructions. The Giacomini self-sealing tail piece is supplied already fitted with a sealing element in elastomeric material which enables to mount it on the radiator without having to add hemp, paste or other sealing material. For correct and rapid mounting, a light lubrication of the threading is recommended before proceding with screwing. In view of the elastomeric sealing element it is enough to apply a tightening torque not exceeding 25 Nm.

For correct operation of the system, the sensor must be mounted so as to protrude at least 2÷3 mm inside the tail piece in order to avoid short circuits of the circulating fluid. To achieve the best output from the radiator we recommend the application of sensors with a length of at least 2/3 of the radiator itself.

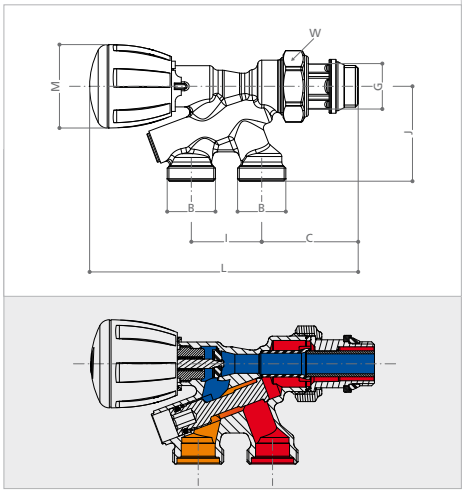
System connection

When connecting the valve to the supply pipes it is important to respect the correct flow direction as shown by the arrows printed on the body. In this way the obturator is hit by the fluid current in the opening sense; this procedure guarantees a better regulation of the fluid current and a lower turbulence in passing through the valve, especially when the lockshield valve is adjusted so as to convey most of the supply to the radiator. Finally, by means of the integrated lockshield valve it is possible to achieve an adjustment of the flow through the radiator ranging from 0% to 50% of the total circulating supply.

R437

Thermostatic micrometric valve for single-pipe systems, with integrated lockshield valve.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



CODE	GxB	I	J	L	C	M	W
R437X031 R437X041	1/2"x16	35	47	137	48	42	30
R437X032 R437X042	1/2"x18	50	59	137	37	42	30

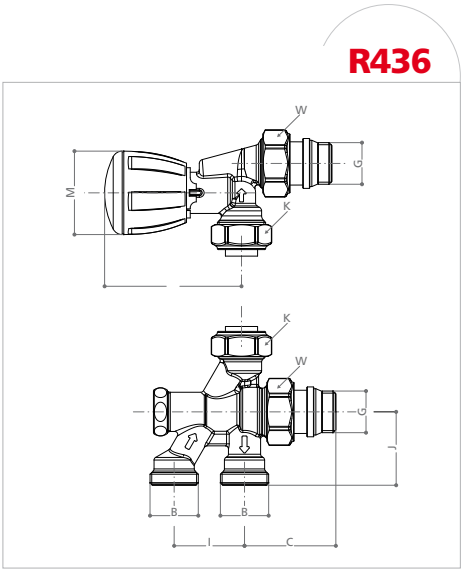
R437X031, R437X032: R171P Ø12 sensor included

R436

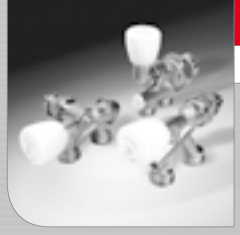
Thermostatic unit for single-pipe systems with angled valve and lockshield valve, self-sealing tail peice.

The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



CODE	GxB	I	J	L1	C	M	K	W
R436X052	1/2"x16	35	37	68	46	42	27	30
R436X053	1/2"x18	50	42	68	38	42	27	30



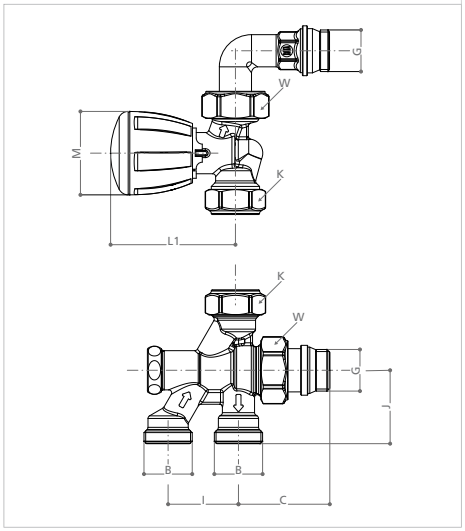
GENERAL CATALOGUE

R436-1

Thermostatic unit for single-pipe systems with straight valve and lockshield valve, self-sealing tail piece.

The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



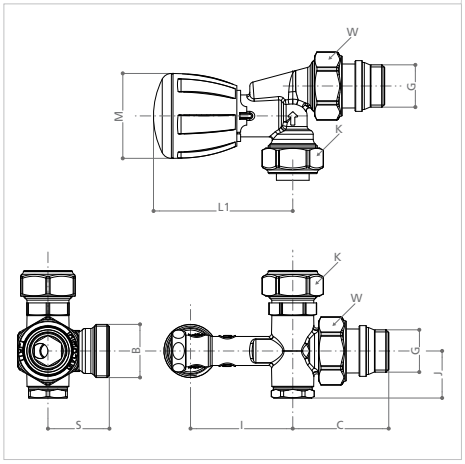
CODE	GxB	I	J	L1	C	M	K	W
R436IX043	1/2"x16	35	37	62	46	42	27	30
R436IX044	1/2"x18	50	42	62	38	42	27	30

R436M

Thermostatic wall-mounted unit for single-pipe systems with angled valve and lockshield valve, self-sealing tail piece.

The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



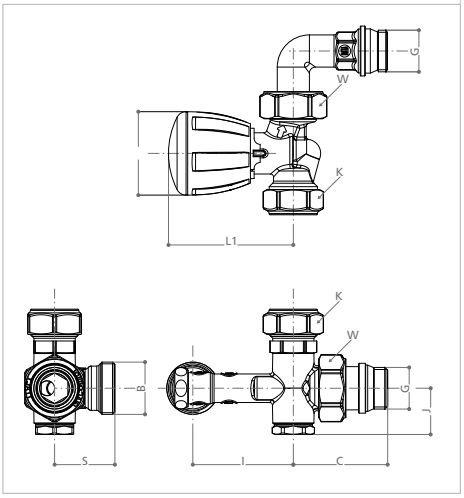
CODE	GxB	I	J	L1	C	S	M	K	W
R436MX037	1/2"x18	50	23	62	47	30	42	27	30

R436M-1

Thermostatic wall-mounted unit for single-pipe systems with straight valve and lockshield valve, self-sealing tail piece.

The R194 Ø16 mm connection pipe between valve and lockshield valve must be purchased separately.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

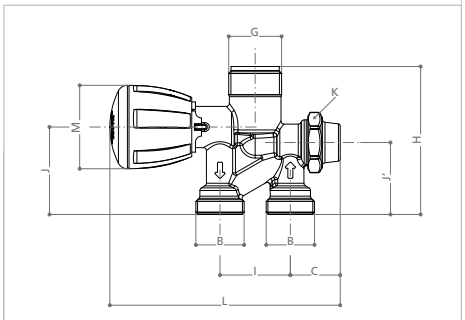


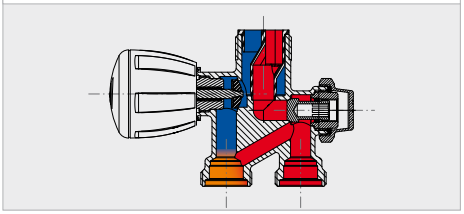
CODE	GxB	I	J	L1	C	S	M	K	W
R436MX033	1/2"x18	50	23	62	47	30	42	27	30

R356M

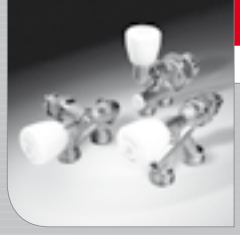
Thermostatic micrometric valve for single-pipe systems, straight, with radiator inlet from below, without tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.





CODE	GxB	I	J	J'	L	C	H	M	K
R356MX031	3/4"x16	35	44	36	115	25	74	42	27
R356MX032	3/4"x18	50	43	35	117	22	73	42	30

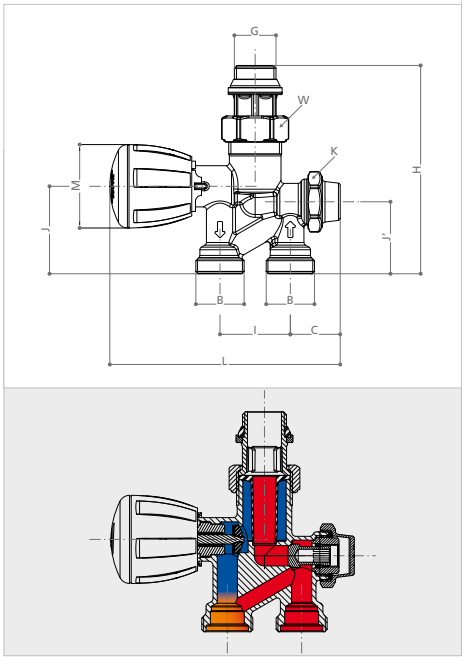


GENERAL CATALOGUE

R356M1

Thermostatic micrometric valve for single-pipe systems, straight, with radiator inlet from below, with tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



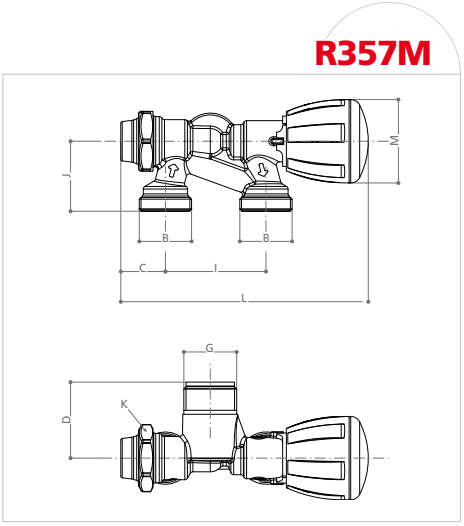
CODE	GxB	I	J	J'	L	C	H	M	K
R356MX041	1/2"x16	35	44	36	115	25	104	42	27
R356MX042	1/2"x18	50	43	35	117	22	103	42	30

La sonda di iniezione R171C o R171P Ø12 mm deve essere acquistata separatamente

R357M

Thermostatic micrometric valve for single-pipe systems, angled, with radiator inlet from below, right-hand connection, without tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

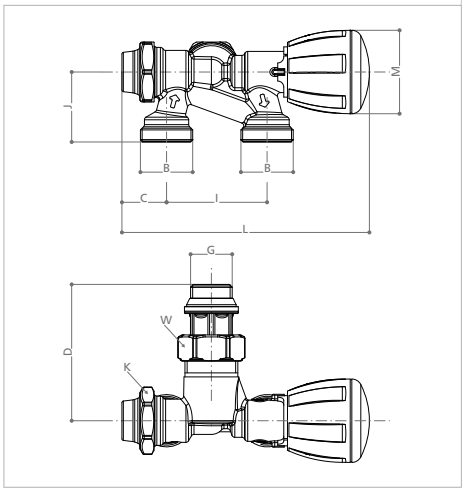


CODE	GxB	I	J	L	C	D	M	K
R357MX032	3/4"x18	50	35	123	22	38	42	30

R357M1

Thermostatic micrometric valve for single-pipe systems, angled, with radiator inlet from below, right-hand connection, with tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



T357MX011: towel dryer version – without self-sealing

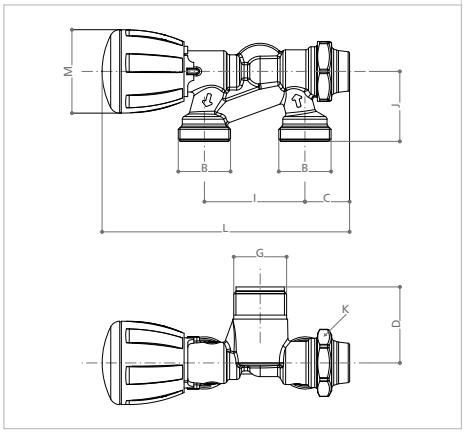
CODE	GxB	I	J	L	C	D	M	K	W
R357MX041 T357MX011	1/2"x16	35	33	126	30	68	42	30	30
R357MX042	1/2"x18	50	35	123	22	68	42	30	30

The R171C or R171P Ø12 injection sensor must be purchased separately

R358M

Thermostatic micrometric valve for single-pipe systems, angled, with radiator inlet from below, left-hand connection, without tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

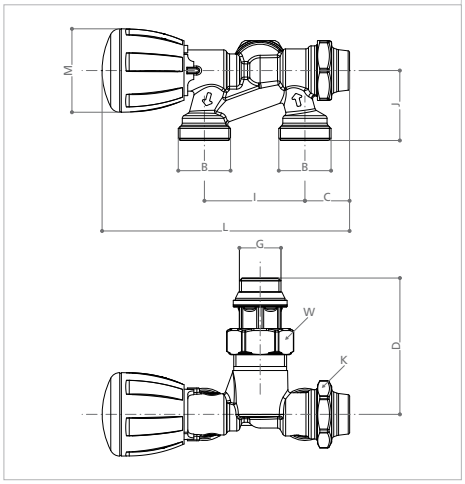


CODE	GxB	I	J	L	C	D	M	K
R358MX032	3/4"x18	50	35	123	22	38	42	30

R358M1

Thermostatic micrometric valve for single-pipe systems, angled, with radiator inlet from below, left-hand connection, with tail piece.

For connection to the system use adaptors R178, R178C, R179 or R179AM.



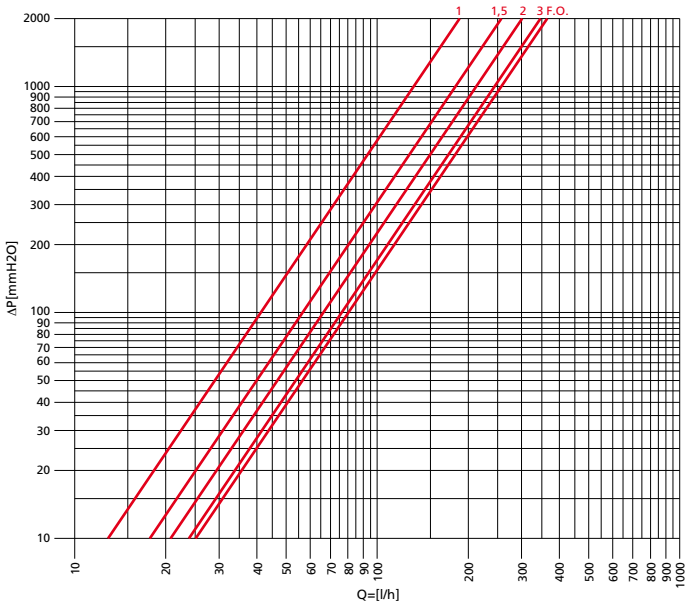
T358MX011: towel dryer version – without self-sealing

CODE	GxB	I	J	L	C	D	M	K	W
R358MX041 T357MX011	1/2"x16	35	33	126	30	68	42	30	30
R358MX042	1/2"x18	50	35	123	22	68	42	30	30

The R171C or R171P Ø12 injection sensor must be purchased separately

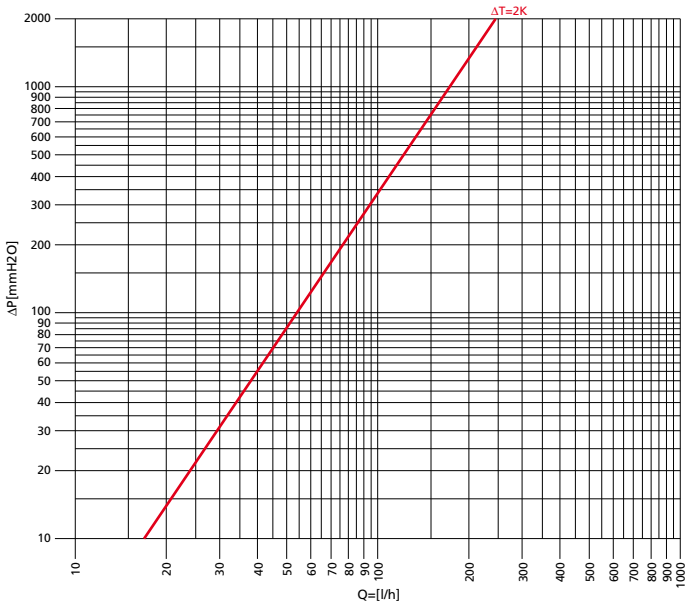
Loss of pressure

R440



	Kv
1	0,43
1,5	0,57
2	0,65
3	0,75
T.A.	0,80

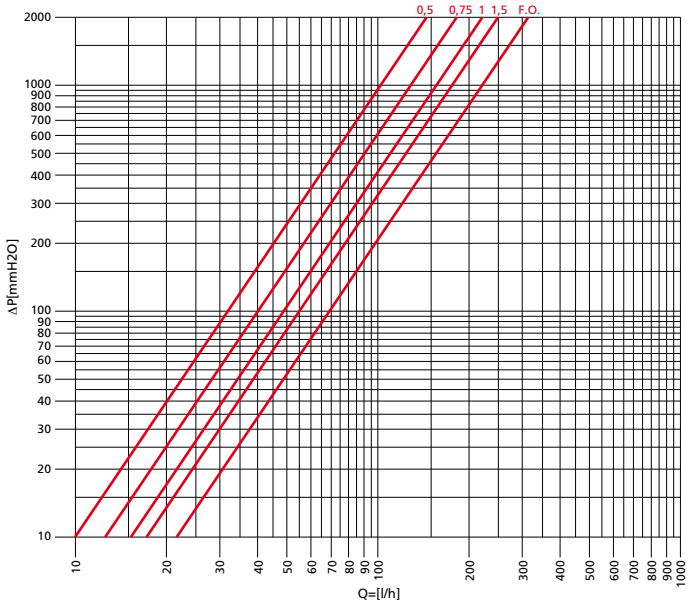
- The numbers relative to curves indicate the number of turns to open the internal lockshield valve.



Kv
0,55

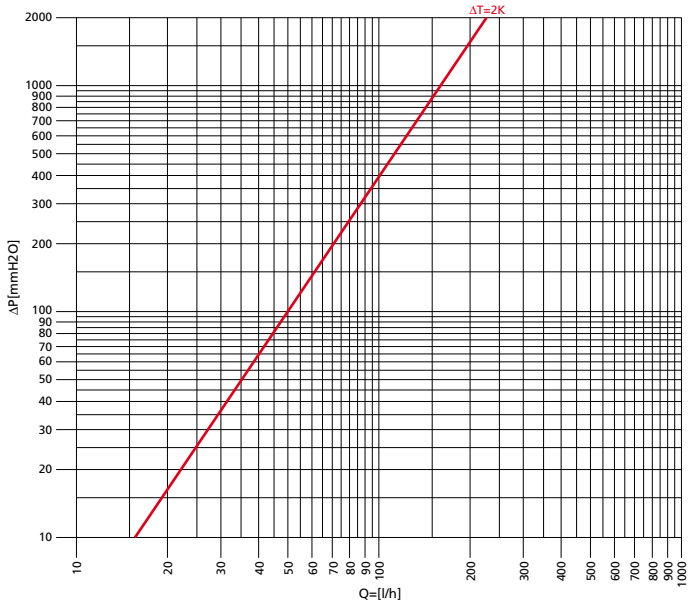
- ΔT=2K
  fully open lockshield valve.

R438 R438-1



	Kv
0,5	0,34
0,75	0,42
1	0,50
1,5	0,56
T.A.	0,71

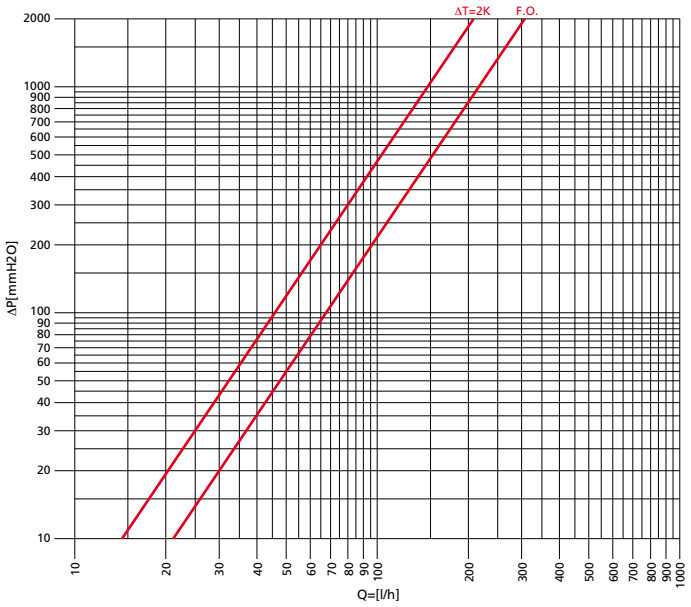
- The numbers relative to curves indicate the number of turns to open the internal lockshield valve.



Kv
0,50

- ΔT=2K
  fully open lockshield valve.

R438M

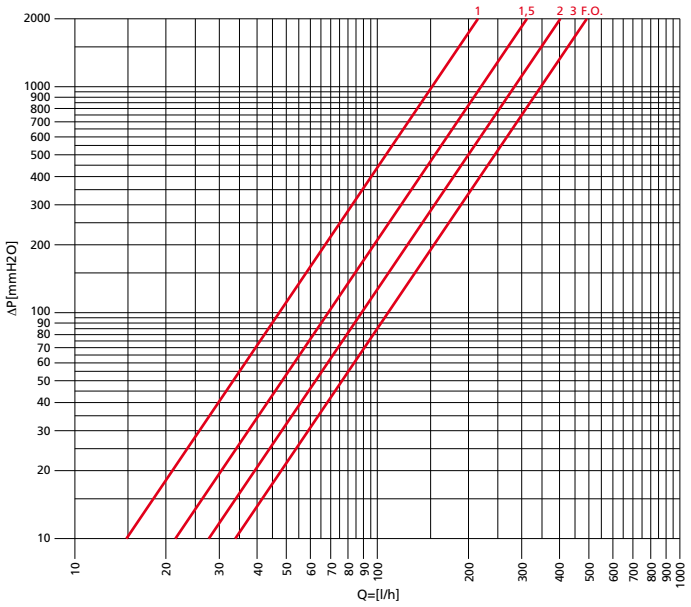


	Kv
ΔT=2k	0,47
T.A.	0,66

- **F.O.**
  fully open handwheel and fully open lockshield valve.

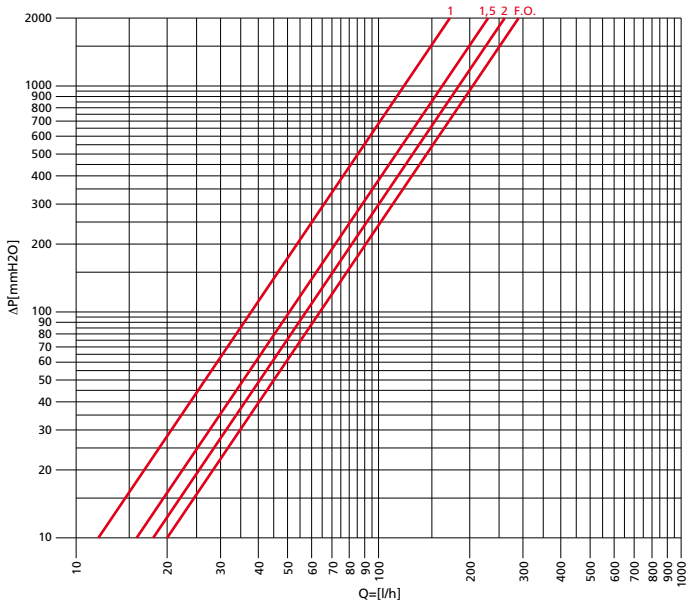
- **ΔT=2k**
  fully open lockshield valve.

R356B R356B1



	Kv
1	0,48
1,5	0,70
2	0,90
3	1,00
T.A.	1,13

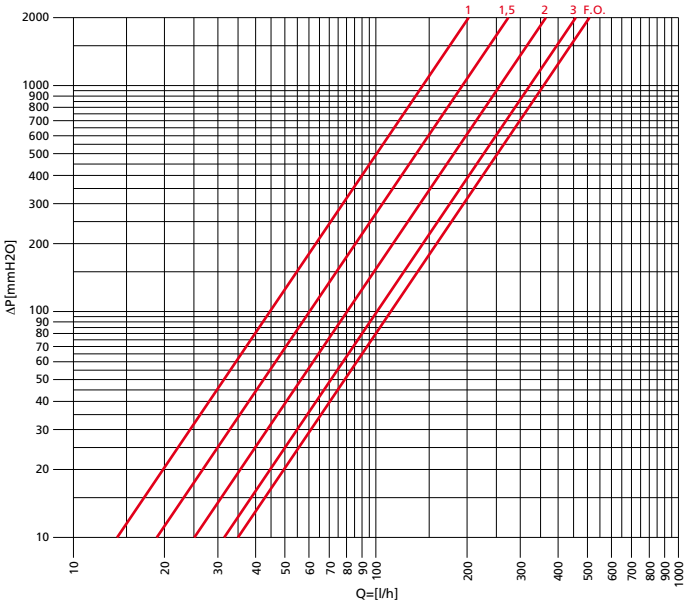
- The numbers relative to curves indicate the number of turns to open the internal lockshield valve.



	Kv
1	0,38
1,5	0,50
2	0,59
T.A.	0,65

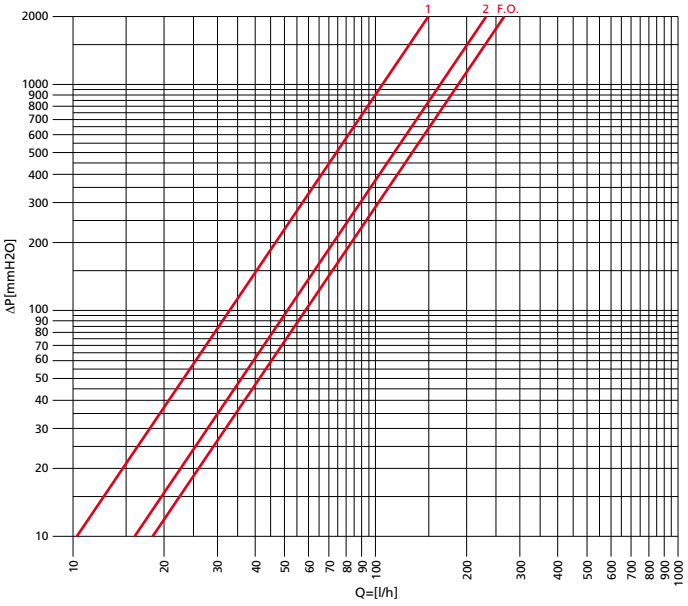
- **ΔT=2k**
  The numbers relative to curves indicate the number of turns to open the internal lockshield valve.

R357B R358B R357B1 R358B1



	Kv
1	0,45
1,5	0,61
2	0,81
3	1,02
T.A.	1,13

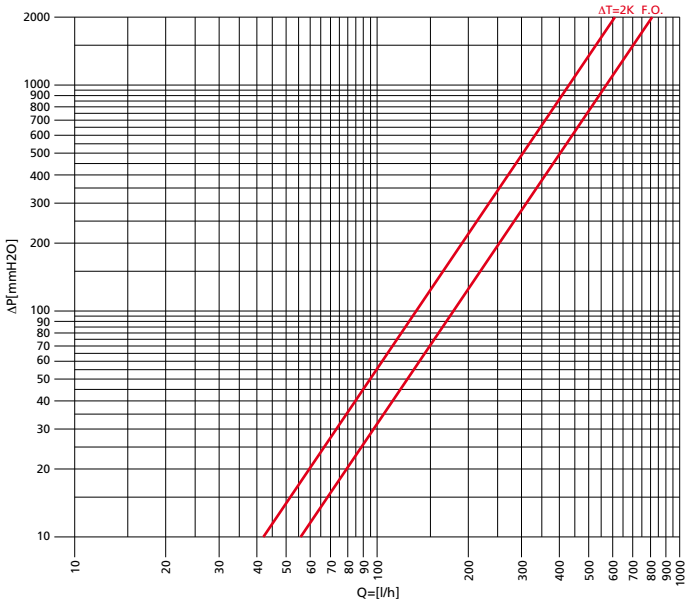
- The numbers relative to curvatures indicate the number of turns to open the internal lockshield valve.



	Kv
1	0,33
2	0,50
T.A.	0,57

- **ΔT=2k**
  The numbers relative to curvatures indicate the number of turns to open the internal lockshield valve.

R437

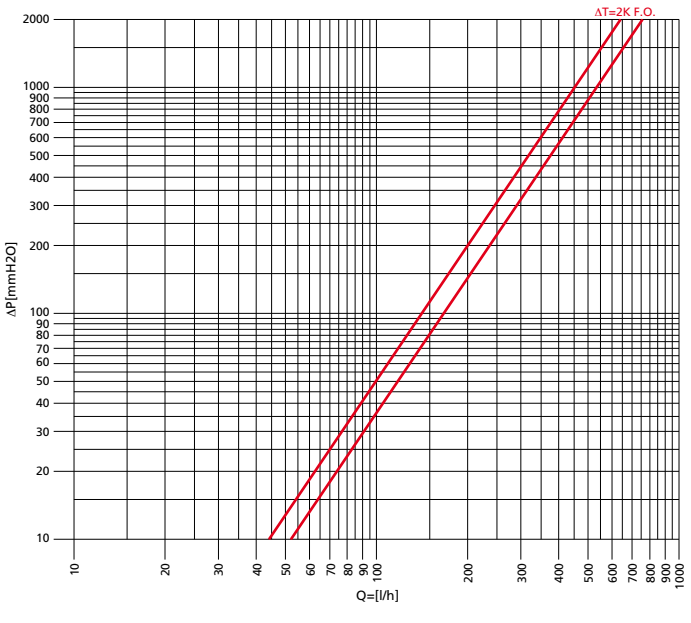


	Kv
ΔT=2k	1,4
T.A.	1,8

- **F.O.**
  fully open handwheel and
  fully open lockshield valve.

- **ΔT=2K**
  fully open lockshield valve.

R436 R436-1

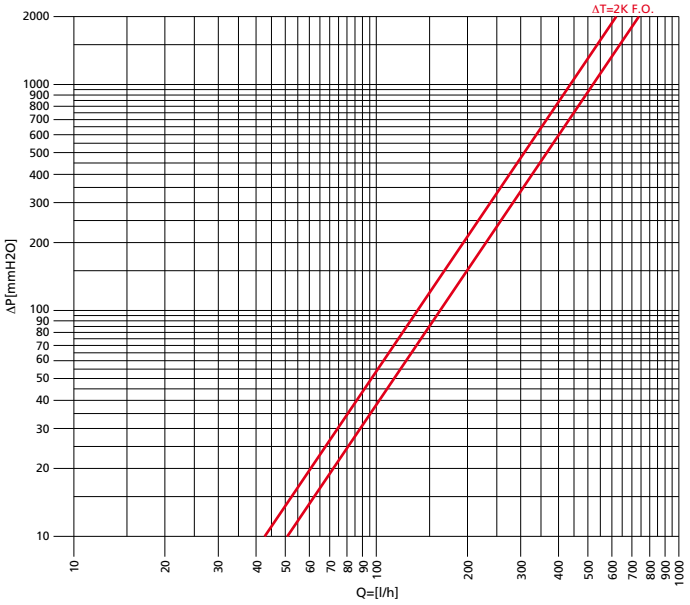


	Kv
ΔT=2k	1,40
T.A.	1,65

- **F.O.**
  fully open handwheel and
  fully open lockshield valve.

- **ΔT=2K**
  fully open lockshield valve.

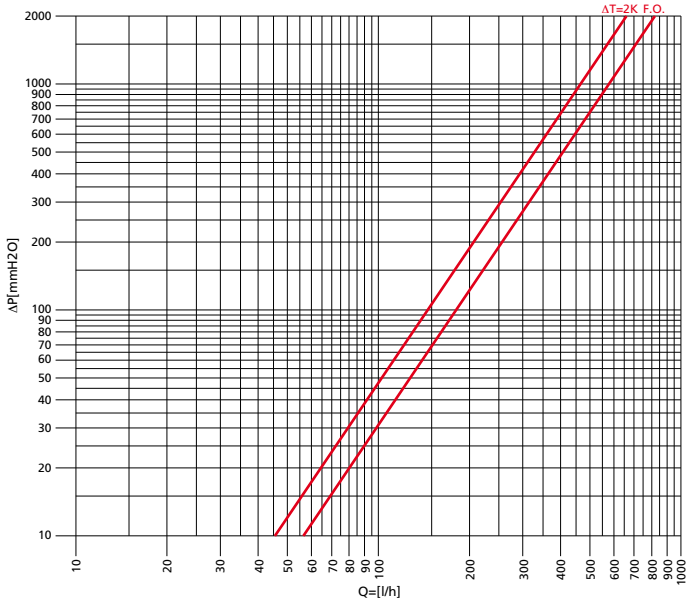
R436M R436M-1



	Kv
ΔT=2k	1,40
T.A.	1,65

- **F.O.**
  fully open handwheel and fully open lockshield valve.
- **ΔT=2K**
  fully open lockshield valve.

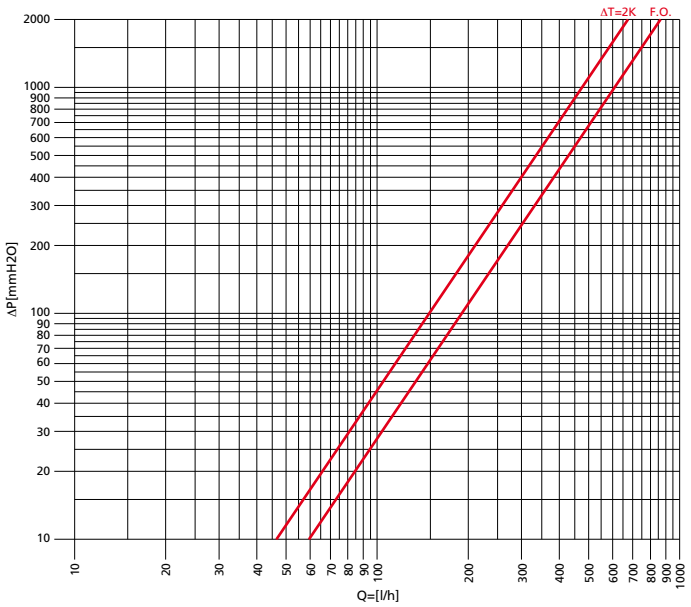
R356M R356M1



	Kv
ΔT=2k	1,48
T.A.	1,84

- **F.O.**
  fully open handwheel and fully open lockshield valve.
- **ΔT=2K**
  fully open lockshield valve.

R357M R357M1 R358M R358M1



	Kv
ΔT=2k	1,52
T.A.	1,93

- **F.O.**
  fully open handwheel and fully open lockshield valve.

- **ΔT=2K**
  fully open lockshield valve.

R304T SINGLE-TWIN-PIPE THERMOSTATIC VALVE

Use

Thanks to its special manufacturing characteristics, the Giacomini R304T valve can be installed both on twin-pipe and single-pipe systems while maintaining the high standards of the micrometric thermostatic valve range. Its size has been designed to consent the substitution of Giacomini R304KA and R324 KA manual single-pipe valves on existing systems. Furthermore, the transversally positioned handwheel allows for the application of thermostatic elements even when very little room is available in the niche.

Characteristics

Thanks to its special double integrated lockshield valve, the R304T valve can be used both in single-pipe and twin-pipe applications. In the twin-pipe version the lockshield valve allows for balancing of the heating unit as required by the planner. In the single-pipe version it is possible to vary the radiator supply so as to obtain a correct distribution of heating along the circuit.

Full closing of lockshield valve and control handwheel interrupts the supply to the radiator thereby allowing interventions on the same without necessarily having to empty the system. In addition, the realization of a swivel connection consents installations either on the right- or left-hand side of the radiator, even when the radiators are not very wide, as in the case of aluminium or steel ones.

For correct operation of the valve, the sensor must be mounted so as to protrude at least 2÷3 mm inside the tail piece. A good output can be obtained from the radiator by applying sensors with a length of at least 2/3 that of the radiator. For ideal functioning of the valve, the fluid should hit the bonnet control in the opening sense, i.e. the flow pipe should be connected to the nearest radiator.

In the case of modest sized radiators, for which the differential pressure at the valve connections is not very high (2 m water column for twin-pipe applications), functioning is guaranteed in any case, even when supply is through the furthest connection from the radiator.



Technical data

- Maximum working temperature: **110°C**
- Maximum working pressure: **1 MPa (10 bar)**
- Maximum differential pressure: **0,14 MPa (1,4 bar)**
- Percentage of supply to radiator in single-pipe version with F.O. manual valve: **47%**
- Percentage of supply to radiator in single-pipe version with thermostatic head: **33%**

Micrometric thermostatic valve for twin and single-pipe systems, with 0° to 180° swivel connection.

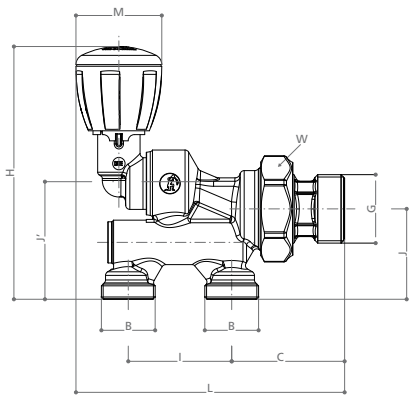
For connection to the system use adaptors R178, R178C, R179 or R179AM.

CODE	GxB
R304TX001	1/2"x16
	3/4"x16
R304TX002	1/2"x18
	3/4"x18
R304TX003	1"x16
R304TX004	1"x18

CODE	GxB	I	J	J'	L	C	H	M	W	Ø SONDA
R304TX011	1/2"x16	35	38	50	115	51	116	42	46	11
R304TX012	1/2"x18	50	44	56	125	51	122	42	46	11
R304TX013	3/4"x16	35	38	50	116	53	116	42	46	12
R304TX014	3/4"x18	50	44	56	126	53	122	42	46	12
R304TX015	1"dx x16	35	38	50	118	53	116	42	46	14
R304TX016	1"sx x 16	35	38	50	118	53	116	42	46	14
R304TX017	1"dx x18	50	44	56	128	53	122	42	46	14
R304TX018	1"sx x 18	50	44	56	128	53	122	42	46	14

The R171C or R171P Ø12 injection sensor must be purchased separately

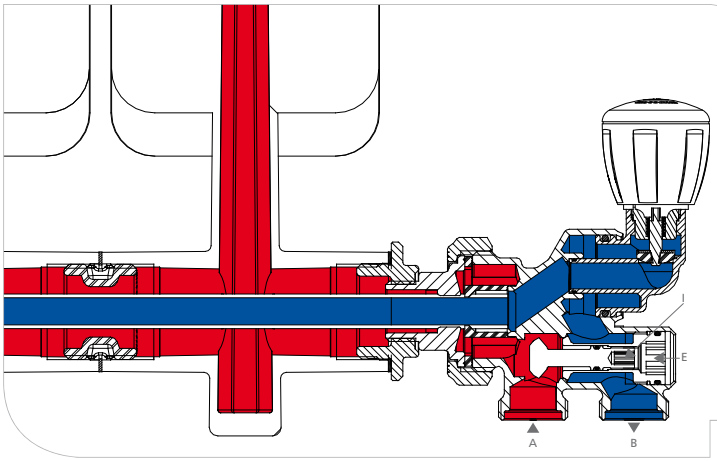
R304T



R304TX001 R304TX002 R304TX003 R304TX004	Supplied without cap and tail piece, to consent substitution of Giacomini manual single-pipe valves

Twin-pipe application

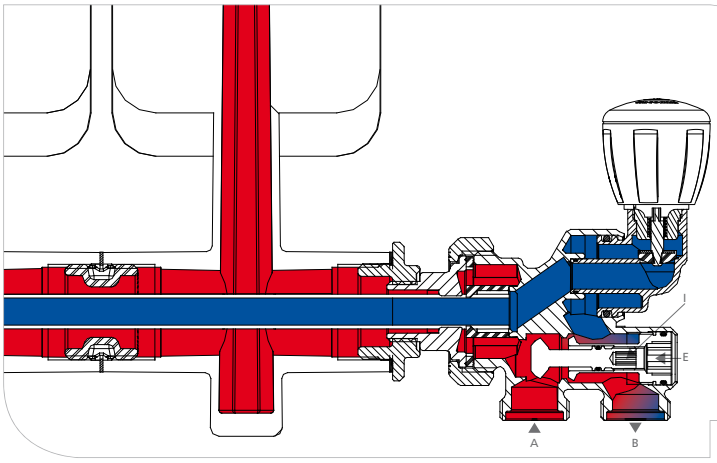
To use the R304T valve in the twin-pipe version it is necessary to close the by-pass pipe completely by intervening on the external lockshield valve (E) with a 10 mm allen wrench. Balancing of the supply which flows through the radiator is obtained by adjusting the internal lockshield valve (I) with a 4 mm spanner. The full closing of the internal lockshield valve allows to disconnect the radiator from the system.
For correct operation of the valve, the sensor must be mounted so as to protrude at least 2÷3 mm inside the tail piece. A good output can be obtained from the radiator by applying sensors with a length of at least 2/3 that of the radiator. For ideal functioning of the valve, the fluid should hit the control bonnet in the opening sense, i.e. the flow pipe should be connected to the nearest radiator.



In the case of modest sized radiators, for which the differential pressure at the valve connections is not very high (2 m water column for twin-pipe applications), functioning is guaranteed in any case, even when supply is through the furthest connection from the radiator.

Single-pipe application

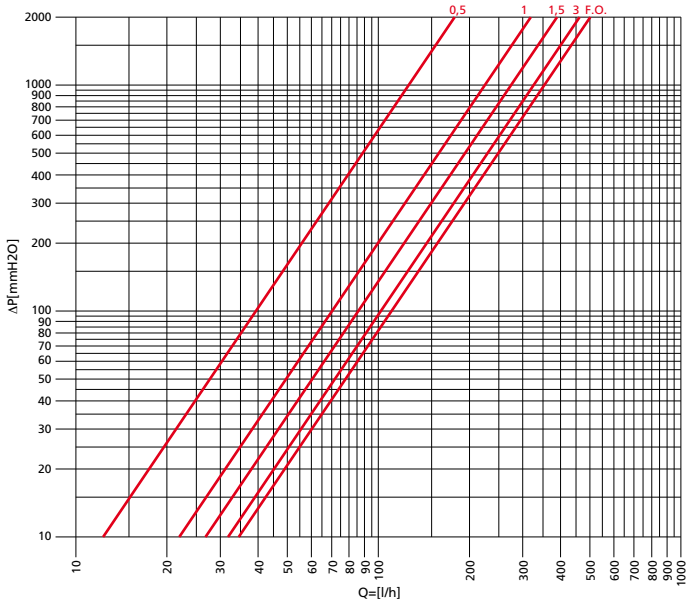
To use the R304T valve in the single-pipe version it is necessary to open the external lockshield valve (E) with a 10 mm allen wrench. Balancing of the supply which flows through the radiator is obtained by adjusting the internal lockshield valve (I) with a 4 mm spanner. The full closing of the internal lockshield valve diverts the entire flow into the by-pass pipe.
For correct operation of the valve, the sensor must be mounted so as to protrude at least 2÷3 mm inside the tail piece. A good output can be obtained from the radiator by applying sensors with a length of at least 2/3 that of the radiator. For ideal functioning of the valve, the fluid should hit the control bonnet in the opening sense, i.e. the flow pipe should be connected to the nearest radiator.



In the case of modest sized radiators, for which the differential pressure at the valve connections is not very high (2 m water column for twin-pipe applications), functioning is guaranteed in any case, even when supply is through the furthest connection from the radiator.

Loss of pressure

R304T twin-pipe version

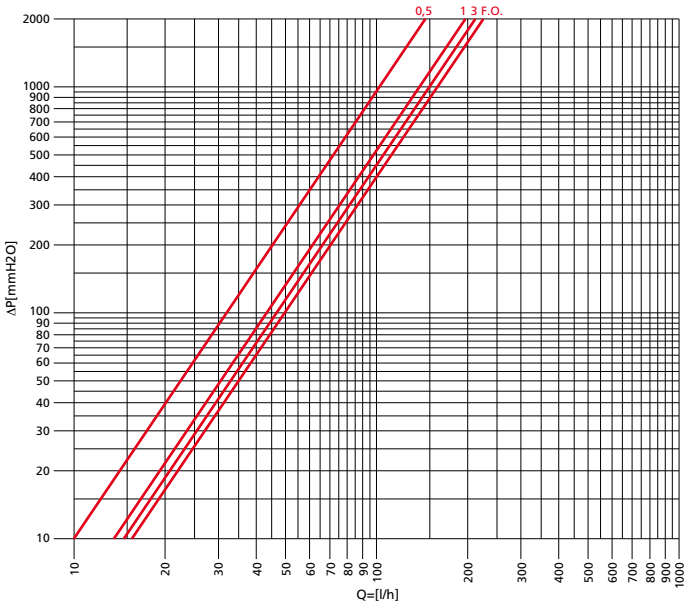


	Kv
0,5	0,4
1	0,71
1,5	0,87
2	0,94
3	1,03
4	1,04
5	1,06
T.A.	1,12

Note: fully open control handwheel

- The numbers relative to curves indicate the number of turns to open the internal lockshield valve.

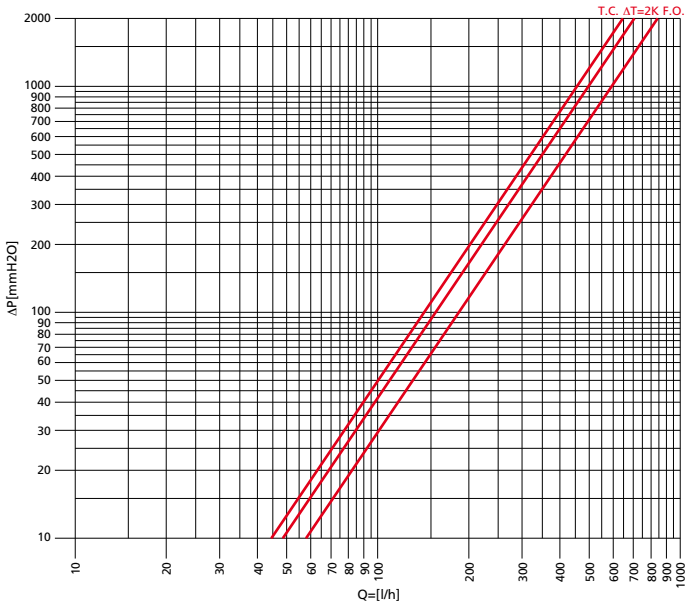
R304T twin-pipe version with opening equal to ΔT=2°K



	Kv
0,5	0,32
1	0,44
1,5	0,46
2	0,47
3	0,48
4	0,49
5	0,50
T.A.	0,51

- The numbers relative to curves indicate the number of turns to open the internal lockshield valve.

R304T single-pipe version



	Kv
T.A.	1,45
ΔT=2K	1,56
T.C.	1,89

- **F.O.**
  fully open manual handwheel and fully open internal lockshield valve.
- **ΔT=2°K**
  fully open internal lockshield valve.
- **F.C.**
  fully closed manual handwheel and fully open internal lockshield valve.

R304N/R324N MANUAL SINGLE-PIPE VALVES

Use

Four-way non-thermostatic manual valves are often used in the realization of traditional single-pipe heating systems. Giacomini R304N and R324N valves are single-pipe valves which allow a 0% to 100% distribution of the flow within the radiator. Full closing of the handwheel, therefore, entails the total isolation of the radiator, consequently deviating the whole flow into the by-pass pipe. This operation consents intervention on the single radiator without interrupting system operation. The special internal design of the valve, furthermore, also guarantees functioning with inverted supply and return connections.

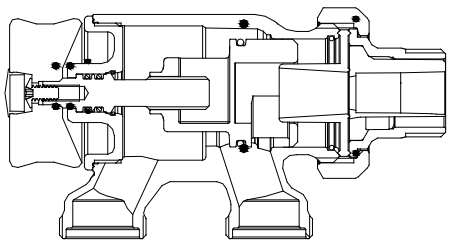
Characteristics

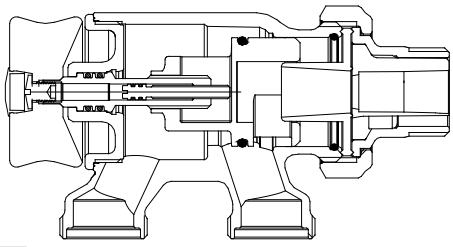
In Giacomini R304N and R324N valves, coupling of the sensor with the flow separator is facilitated by using the P16S sensor holder sleeve.

R304N
Single-pipe valve allowing for 0% to 100% distribution of the flow within the radiator.

R324N
Single-pipe valve allowing for 0% to 100% distribution of the flow within the radiator and for micrometric presetting.

Micrometric regulation is essential in all applications where it is necessary to limit maximum valve opening. This allows for balancing of the flow to radiators installed on the same circuit and for readjustment after any maintenance interventions.





Technical data

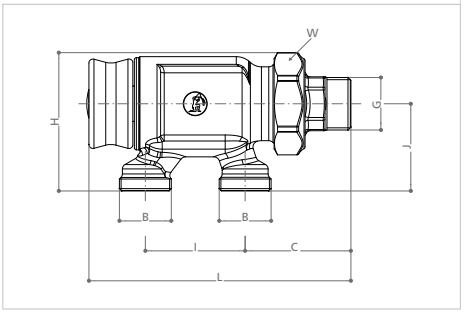
- Maximum working temperature: **110°C**
- Maximum pressure: **1 MPa (10 bar)**

Available versions

Manual valve for single-pipe systems, without sensor.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

R304N



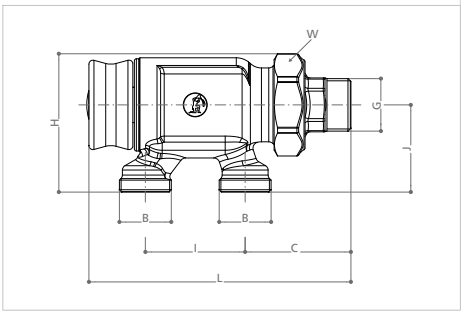
CODE	GxB	I	J	H	L	C	W	Kv	Ø SENSOR
R304NX011	1/2"x16	35	38	64	126	52	46	1,80	11
R304NX012	1/2"x18	50	44	69	131	52	46	1,80	11
R304NX013	3/4"x16	35	38	64	127	53	46	1,80	12
R304NX014	3/4"x18	50	44	69	132	53	46	2,10	12
R304NX015	1"sx x16	35	38	64	129	55	46	2,50	14
R304NX016	1"sx x 18	50	44	69	134	55	46	2,50	14
R304NX017	1"dx x16	35	38	64	129	55	46	2,50	14
R304NX018	1"dx x 18	50	44	69	134	55	46	2,50	14

Depth: 47 mm

Manual valve for single-pipe systems allowing for micrometric presetting, without sensor.

For connection to the system use adaptors R178, R178C, R179 or R179AM.

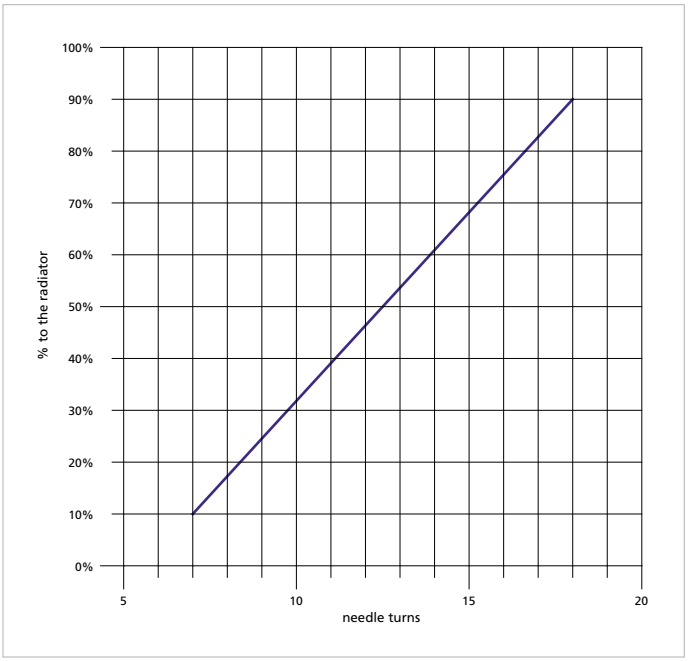
R304N



CODE	GxB	I	J	H	L	C	W	Kv	Ø SENSOR
R324NX011	1/2"x16	35	38	64	126	52	46	1,80	11
R324NX012	1/2"x18	50	44	69	131	52	46	1,80	11
R324NX013	3/4"x16	35	38	64	127	53	46	1,80	12
R324NX014	3/4"x18	50	44	69	132	53	46	2,10	12
R324NX015	1"sx x16	35	38	64	129	55	46	2,50	14
R324NX016	1"sx x 18	50	44	69	134	55	46	2,50	14
R324NX017	1"dx x16	35	38	64	129	55	46	2,50	14
R324NX018	1"dx x 18	50	44	69	134	55	46	2,50	14

Depth: 47 mm

R324N Regulation

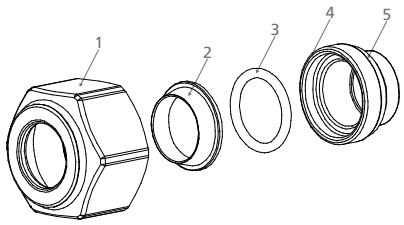


- Distribution of the flow is realized by means of the micrometric adjustment screw.
  After fully closing the valve and the adjustment screw, proceed with opening the latter by the number of turns corresponding to the required percentage, according to the attached diagram.

ADAPTORS

Connection of copper pipes to the distribution systems / thermo-hydraulic regulation can be effected by using the following types of compression fittings.
Reference to latest price list is recommended to check available sizes and codes for each picture.

R178 - Compression connections for copper pipes

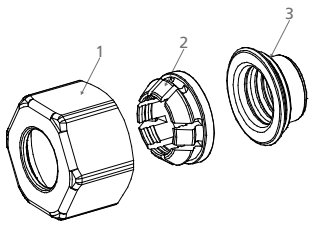


1 Nut
2 Mechanical sealing element
3 Internal o-ring
4 Adaptor
5 External o-ring

Installation

1. The pipe must be cut perpendicularly to its axis and its external surface deburred.
2. Fit the nut on the pipe first, then the mechanical sealing element.
3. Lubrify the hydraulic sealing elements (this is essential to avoid the o-ring being damaged in the installation phase, which would compromise the effectiveness of the connection).
4. Install internal o-ring in the adaptor seat (when predisposed) or in the terminal of the thermo-hydraulic distribution/ regulation system.
5. Insert pipe into the adaptor (when predisposed) or in the terminal of the thermo-hydraulic distribution/regulation system, until it stops against the same.
6. Proceed with tightening the nut to the terminal of the thermo-hydraulic distribution/regulation system.

R178C - Compact compression fittings for copper pipes

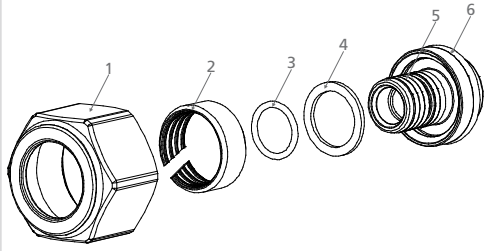


1 Nut
2 Mechanical sealing element
3 Hydraulic sealing element

Installation

1. The pipe must be cut perpendicularly to its axis and its external surface deburred.
2. Fit the nut on the pipe first, then the mechanical sealing element.
3. Lubrify the hydraulic sealing elements (this is essential to avoid the o-ring being damaged in the installation phase, which would compromise the effectiveness of the connection).
4. Install the hydraulic sealing element in the seat of the terminal of the thermo-hydraulic distribution/regulation system.
5. Insert pipe into the terminal of the thermo-hydraulic distribution/regulation system, until it rests against the same.
6. Proceed with tightening the nut to the terminal of the thermo-hydraulic distribution/regulation system.

R179AM - PCompression fittings for synthetic or multilayer pipes



1 Nut
2 Mechanical sealing element
3 Internal o-ring
4 Spacer ring (R179AM only)
5 Adaptor and hose nozzle
6 External o-ring

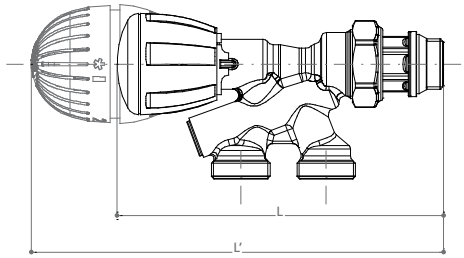
Installation

1. The pipe must be cut perpendicularly to its axis by means of the R990 pipe cutter (we recommend a slight rotation of the cutter during the operation, to facilitate cutting); in case of multilayer pipes, to limit ovalization, use the RP204 roller pipe cutter.
2. To prevent any damage to the hydraulic sealing elements during the installation phase and guarantee effectiveness of connection:
   a. deburr internal surface of the pipe, using the special RP205 tool;
   b. gauge the internal surface of the pipe, using the special RP209 tool (only in case of multilayer pipes);
   c. lubrify both the hydraulic sealing elements and the internal surface of the pipe in contact with the internal o-ring.
3. Fit the spacer ring first (only on R179AM, for use with multilayer tubes) and subsequently slide the pipe in the adaptor pipe slot, until it stops against the adaptor itself.
4. Position the adaptor in the terminal of the thermal-hydraulic distribution/regulation system by means of the external o-ring.
5. Proceed with tightening the nut to the terminal of the thermo-hydraulic distribution/regulation system.

When connecting multilayer pipes to the thermo-hydraulic distribution/regulation system, interposing the plastic spacer ring between the uncovered section of the pipe's metallic surface and the adaptor body prevents the occurring of electro-corrosive phenomena which could compromise the effectiveness of the connection.

THERMOSTATIC HEADS

Thanks to the exclusive CLIP CLAP fastening system, mounting Giacomini thermostatic heads on Giacomini twin-pipe and single-pipe thermostatic valves can be carried out very easily by simply removing the R450TG manual handwheel with the aid of a screwdriver.

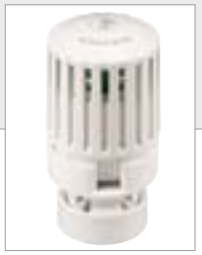


MODEL	R470X001	R456X101	R452X101
L' - L	35	40	35

NOTE: in order to avoid excessive pressure when closing the actuators, the use of R147N differential valves is recommended on systems fitted with thermostatic heads


R470


R456


R452

ACCESSORIES AND SPARE PARTS

Tail pieces

P15TG-5

Chrome-plated tail piece with cap, self-sealing, for R440 and R437 valves.

CODE	SIZE
P15TGX043	1/2"

P15TG-6

Chrome-plated tail piece with cap, self-sealing, for R356B1, R356M1, R357B1, R357M1, R358B1 and R358M1 valves.

CODE	SIZE
P15TGX044	1/2"

P15TG

Chrome-plated tail piece with cap, self-sealing, for R438, R438-1, R438M-1, R436, R436-1, R436M and R436M-1 units.

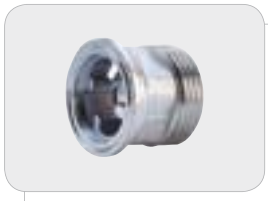
CODE	SIZE
P15TGX004	1/2"

R125C

Chrome-plated, angled tail piece with cap, self-sealing, for R438-1, R438M-1, R436-1 and R436M-1 units.

CODE	SIZE
R125CX003	1/2"

P15-4



Chrome-plated tail piece for R304T four-way valves.

CODE	SIZE
P15X043	1/2"
P15X044	3/4"
P15X045	1" dx
P15X046	1" sx

The P18LX005 cap must be purchased separately

P15-7

Chrome-plated tail piece for R304N and R324N four-way valves.

CODE	SIZE
P15X033	1/2"
P15X034	3/4"
P15X035	1" dx
P15X036	1" sx

The P18LX005 cap must be purchased separately

Flow separators

P16-3

Flow separator for R440 and R437 valves.

CODE	SIZE
P16Y003	1/2"

P16-2

Flow separator for R356B, R356M, R357B, R357M, R358B and R358M valves.

CODE	SIZE
P16Y002	-

P16-1

Flow separator for R356B1, R356M1, R357B1, R357M1, R358B1 and R358M1 valves.

CODE	SIZE
P16Y001	-

P16-6

Flow separator for R304T valves.

CODE	SIZE
P16Y006	1/2"-3/4"
P16Y007	1"

P16-5

Flow separator for R304N and R324N valves.

CODE	SIZE
P16Y005	-

Sensors

R194

ø16 mm chrome-plated pipe for connection of twin-pipe and single-pipe units with two connections.

CODE	SIZE
R194X002	ø16x600mm
R194X003	ø16x900mm
R194X004	ø16x1000mm
R194X005	ø16x1200mm

R171C

Copper sensor for twin-pipe and single-pipe valves.
Length 450 mm

CODE	SIZE
R171CY001	ø11
R171CY002	ø12
R171CY003	ø14

R171P

Plastic sensor for twin-pipe and single-pipe valves.
Length 450 mm

CODE	SIZE
R171PY001	ø11
R171PY002	ø12
R171PY003	ø14

GUARANTEE

All products and components supplied by Giacomini S.p.A. comply with European norms in force with regard to guarantee and responsibility (Directive 1994/44/CE, Directive 2001/95/CE and CEE 85/374).

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