giacotech

GENERAL CATALOGUE

MICROMETRIC, THERMOSTATIC VALVES
THERMOSTATIC VALVES
MANUAL VALVES
LOCKSHIELDS
ACCESSORIES AND SPARE PARTS

GIACOMINI

Technology in Comfort

SUMMARY

GIACOTECH

Use

Constantly focused on the market and on the growing needs in terms of user-friendliness and reliability of the system, Giacomini proposes the Giacotech valves and lockshields range. This family represents the evolution and implementation of the well-known and successful Programma 80 that, with its functional innovative characteristics (the thermostatic element and the pipe union with self-sealing element in plastic material) imposed itself on the market from 1979 on. Today Giacotech comes out as legitimate successor, with a new version, enhanced both in the range and in the technical aspects.

Unlike the well-known and successful Programma 80, the most recent Giacotech series consists of a wider range including micrometric thermostatic valves as well as the basic thermostatic valves, manual valves and lockshields, all are both in the versions with iron connection and with adaptor connection. This way the installer can easily choose within the Giacotech series with the safety of finding and using something as close as possible to one's needs.

Programma 80, introduced on the Italian market in 1979, was successful thanks to its functional innovative characteristics, such as the thermostatic element (without the help of any accessories) and the presence of a pipe union with a self-sealing element in plastic material. During the years the work of the installer became easier and this is one of the basic aspects for Giacomini. Within the Giacotech series the main aspects are:

- Introduction of a self-sealing element in elastomeric material, the natural evolution of the self-sealing in plastic material featured by Programma 80
- Unification of the adaptor for the mostly used sizes
- Restyling of operation hand wheels of micrometric thermostatic valves
- Introduction of building yard protections to prevent accidental damage to operation handwheels during the installation.

MICROMETRIC THERMOSTATIC VALVES

Micrometric adjustment.

The series of micrometric thermostatic valves Giacotech features, in addition to a more comfortable operation handle and a series of parameters already widely described in the introduction, and the possibility of making the micrometric adjustment through which it is possible to separate the opening of the valve operating in manual. Removing the upper part of the handwheel access to the graduation scale is easy.

The adjustment can be made shifting the metal pin in the position that best suits one's needs, according to the specific diagrams reported in the Hydraulic Versions and Characteristics.

Technical Data

- Fluids: hot water
- Max. operating temperature: 110°C
- Max operating pressure for manual applications: PN16
- Max operating pressure in association with thermostatic heads: 1 MPa (10 bar)
- Max differential pressure:
  0,14 MPa (1,4 bar), 3/8" - 1/2" - 3/4"
  0,04 MPa (0,4 bar), 1"

Materials

- Bodies, caps and pipe unions: brass UNI EN 12165 CW617N
- Operation handwheels: ABS
- Self-sealing: EP

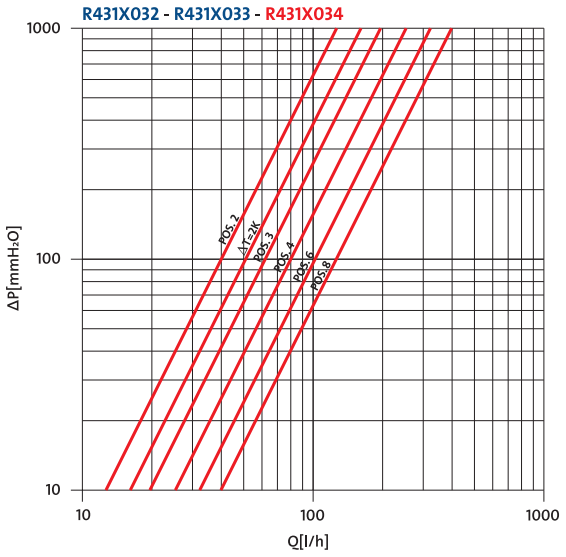
Hydraulic versions and characteristics

In the following tables the values of Kv are reported according to the micrometric adjustment set positioning the metal pin (as described in the previous paragraph). T=2K refers to the situation of valve with thermostatic head installed.

R431TG

Chrome-plated thermostatic angle micrometric valve, with adaptor connection and pipe union with self-sealing

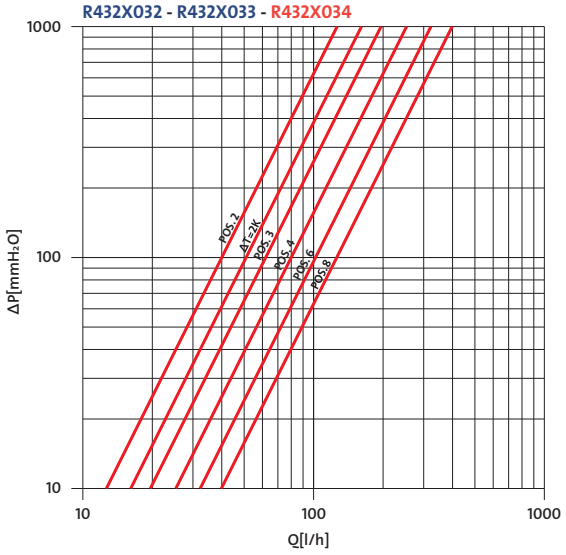
		POSITION					
CODE	MEASURE	2	3	4	6	8	ΔT=2K
R431X032	3/8" x 16	0,40	0,62	0,80	1,02	1,26	0,51
R431X033	1/2" x 16	0,40	0,62	0,80	1,02	1,26	0,51
R431X034	1/2" x 18	0,40	0,62	0,80	1,02	1,26	0,51



R432TG

Chrome-plated thermostatic straight micrometric valve, with adaptor connection and pipe union with self-sealing

CODE	MEASURE	POSITION					
		2	3	4	6	8	ΔT=2K
R432X032	3/8" x 16	0,40	0,62	0,80	1,02	1,26	0,51
R432X033	1/2" x 16	0,40	0,62	0,80	1,02	1,26	0,51
R432X034	1/2" x 18	0,40	0,62	0,80	1,02	1,26	0,51



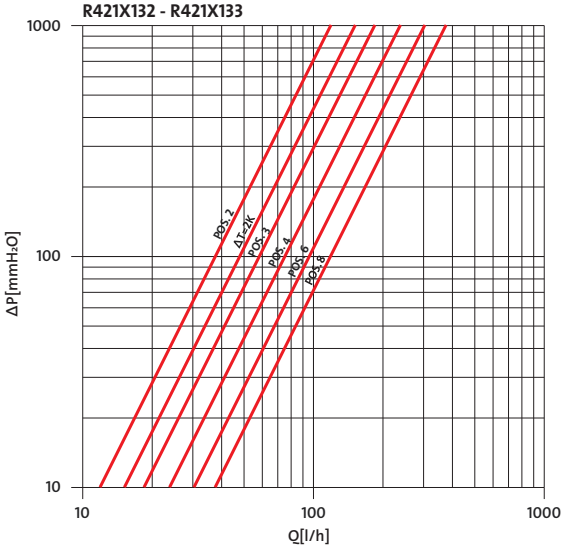
R421TG

Chrome-plated thermostatic angle micrometric valve, with iron pipe connection and pipe union with self-sealing

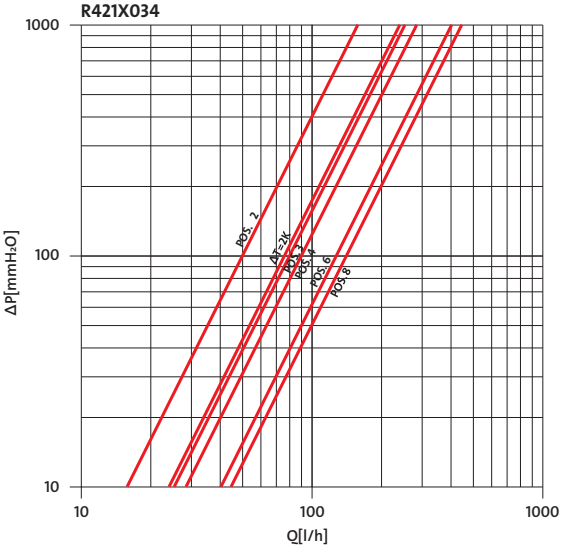
***Without self-sealing tail piece**

CEN	CODE	MEASURE	POSITION					
			2	3	4	6	8	ΔT=2K
	R421X132	3/8" x 3/8"	0,40	0,58	0,78	1,00	1,26	0,51
	R421X133	1/2" x 1/2"	0,42	0,62	0,80	1,02	1,26	0,51
	R421X034	3/4" x 3/4"*	0,50	0,80	0,90	1,25	1,41	0,76
	R421X035	1" x 1"*	1,37	1,85	2,38	3,36	3,98	1,22

R421X132 - R421X133



R421X034



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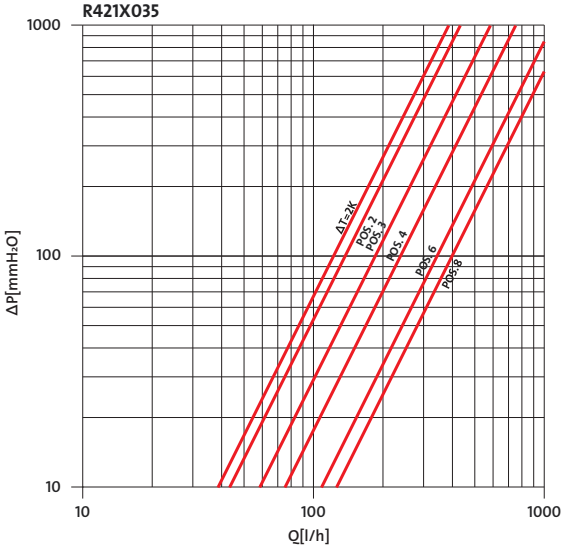

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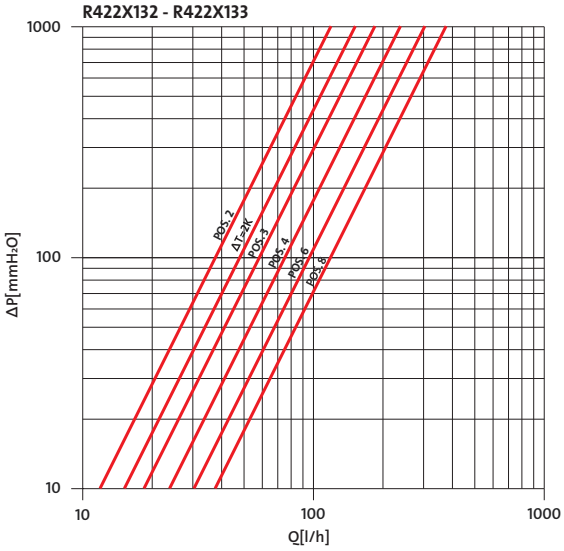
R422TG

Chrome-plated thermostatic straight micrometric valve, with iron pipe connection and pipe union with self-sealing*

***Without self-sealing tail piece**

CEN	CODE	MEASURE	POSITION 2	3	4	6	8	ΔT=2K
	R422X132	3/8" x 3/8"	0,40	0,58	0,78	1,00	1,26	0,51
	R422X133	1/2" x 1/2"	0,42	0,62	0,80	1,02	1,26	0,51
	R422X034	3/4" x 3/4"*	0,50	0,80	0,90	1,25	1,41	0,76
	R422X035	1" x 1"*	1,37	1,73	2,10	2,82	2,95	1,15

R422X132 - R422X133



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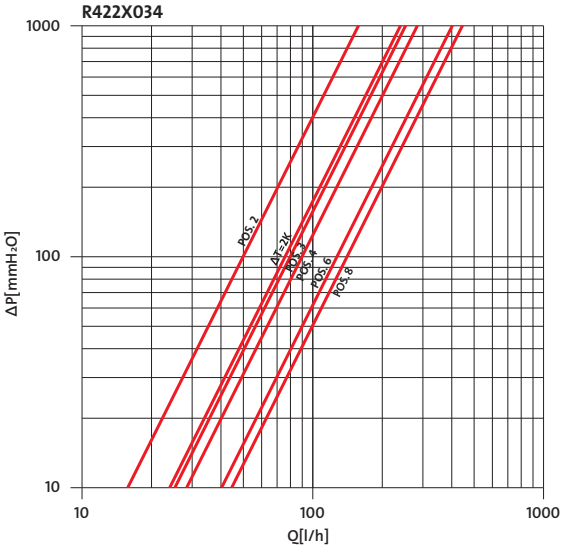
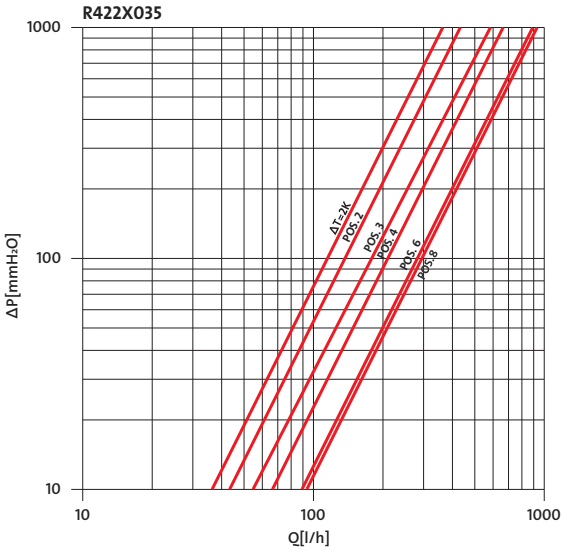


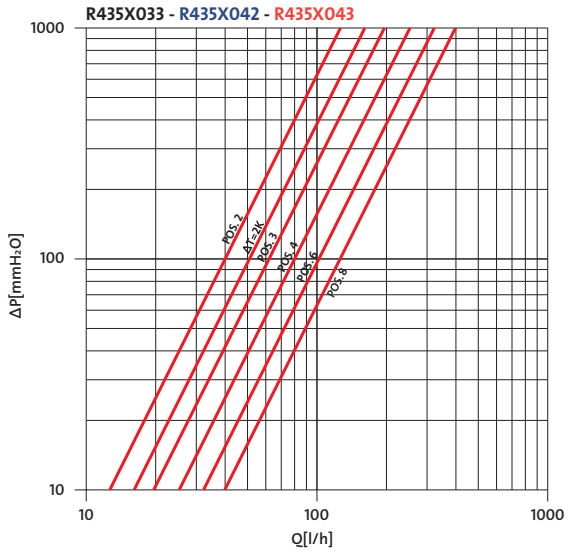
R422X035



R435TG

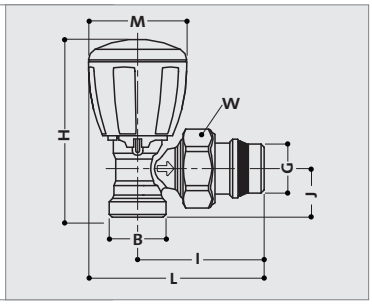
Chrome-plated thermostatic angle micrometric valve, with pipe union with self-sealing;
Available both with adaptor and iron pipe connection

CODE	MEASURE	POSITION					
		2	3	4	6	8	ΔT=2K
R435X033	1/2" x 1/2"	0,40	0,62	0,80	1,02	1,26	0,51
R435X042	1/2" x 16	0,40	0,62	0,80	1,02	1,26	0,51
R435X043	1/2" x 18	0,40	0,62	0,80	1,02	1,26	0,51

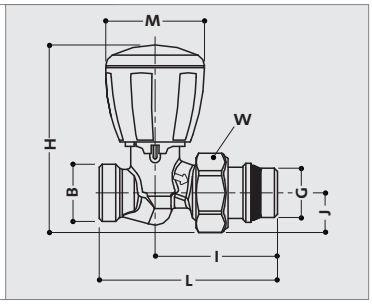


Volumes and dimensions [mm]

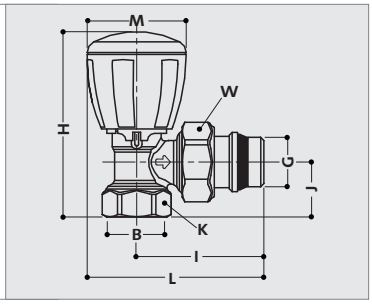
R431TG							
CODE	MEASURE GxB	H	I	J	L	M	W
R431X032	3/8"x16	75	53	21	74	42	30
R431X033	1/2" x 16	75	53	21	74	42	30
R431X034	1/2" x 18	75	53	21	74	42	30



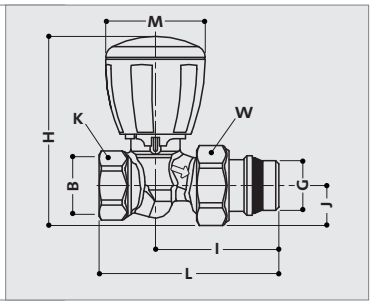
R432TG							
CODE	MEASURE GxB	H	I	J	L	M	W
R432X032	3/8"x16	79	51	17	74	42	30
R432X033	1/2" x 16	79	51	17	75	42	30
R432X034	1/2" x 18	79	51	17	76	42	30



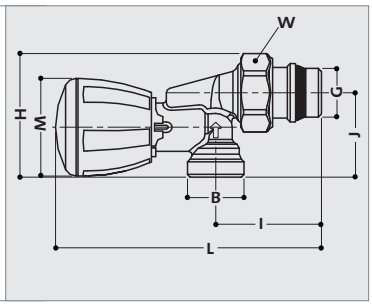
R421TG									
CEN	CODE	MEASURE GxB	H	I	J	K	L	M	W
	R421X132	3/8"x 3/8"	74	51	20	22	72	42	27
	R421X133	1/2" x 1/2"	78	53	23	26	74	42	30
	R421X034	3/4" x 3/4"	79	60	25	32	81	42	38
	R421X035	1" x 1"	97	72	31	39	94	42	46



R422TG									
CEN	CODE	MEASURE GxB	H	I	J	K	L	M	W
	R422X132	3/8"x 3/8"	77	51	15	22	71	42	27
	R422X133	1/2" x 1/2"	79	51	17	26	82	42	30
	R422X034	3/4" x 3/4"	83	55	21	32	81	42	38
	R422X035	1" x 1"	95	64	26	39	105	42	46



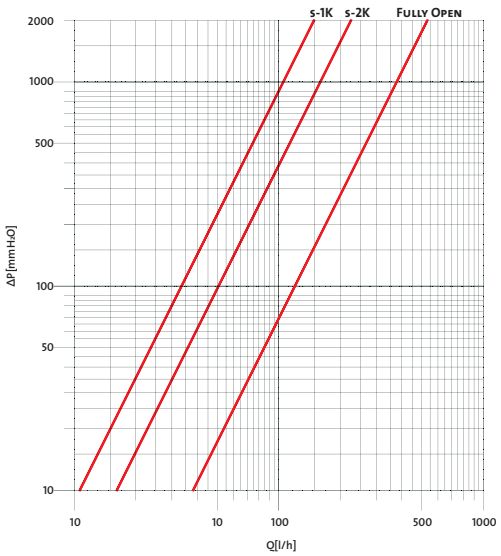
R435TG								
CODE	MEASURE GxB	H	I	J	K	L	M	W
R435X033	1/2" x 1/2"	53	45	36	25	113	42	30
R435X042	1/2" x 16	53	45	36	-	113	42	30
R435X043	1/2" x 18	53	45	37	-	113	42	30



* Please refer to chapter Accesories - Thermostatic head for overall dimensions with installed thermostatic head.

Additional information for CEN - EN215 certified valves

CODE	MEASURE	THERMOSTATIC HEAD	nominal supply QMNH in association with the heads	Authority of the shutter
R421X132 R422X132	3/8”	R452	130 Kg/h	0,894
R421X133 R422X133	1/2”	R452	130 Kg/h	0,894
R421X132 R422X132	3/8”	R456	150 Kg/h	0,858
R421X133 R422X133	1/2”	R456	150 Kg/h	0,858
R421X132 R422X132	3/8”	R470	150 Kg/h	0,858
R421X133 R422X133	1/2”	R470	150 Kg/h	0,858



3/8” - 1/2”	Kv
s - 1K	0,332
s - 2K	0,506
Fully Open	1,26

Declared hysteresis value: 0,8K (R452) 0,4K (R456, R470)
Min calibration in association with thermostatic heads R452, R456, R470: 8°C in position*
Max operating pressure in association with thermostatic heads: 10 bar

On demand data relative to response time (Z) are available, temperature influence (W), influence of differential pressure (D), spindle movement.

THERMOSTATIC VALVES

The series of Giacotech thermostatic valves with protection handle is especially recommended for the assemblies with thermostatic heads or electrothermal actuators installation for the control of ambient temperature, aimed at maintaining the comfort conditions in addition to optimising consumptions. The building yard protection anyway allows separating the supply of the valve. Turning the red cap counter clockwise to open it and the opposite to close it. Red cap's rotations of 36° correspond to temperature variations equal to 1°C.

The protection with the red cap tightly closed in addition allows largely exceeding differential pressures of 10 bar with the system off. Anyway we recommend carrying out pressure tightness tests only after connecting the heating bodies in order to avoid, in case of damage to the mechanism, causing floods.

Technical data

- Fluids: hot water
- Max. operating temperature: 110°C
- Max. operating pressure for manual applications: PN16
- Max. operating pressure in association with thermostatic heads: 1 MPa (10 bar)
- Max. differential pressure
  0,14 MPa (1,4 bar), 3/8" - 1/2" - 3/4" (except for F series)
  0,07 MPa (0,7 bar), 3/4" (F series)
  0,04 MPa (0,4 bar), 1"

Materials

- Bodies, caps and pipe unions: brass UNI EN 12165 CW617N
- Operation handwheels: PP-H
- Self-sealing: EP

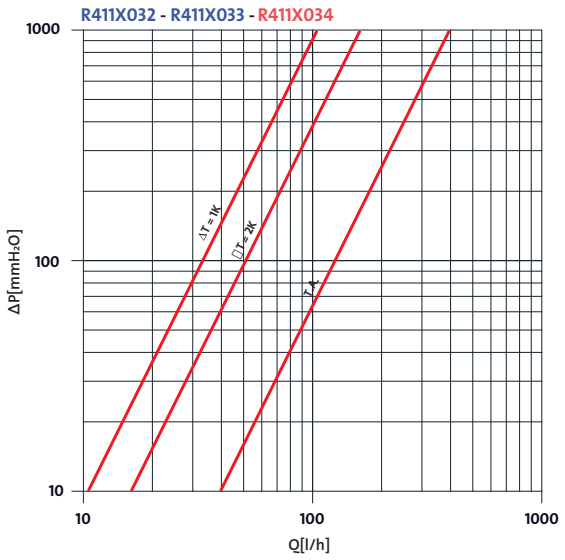
Hydraulic versions and characteristics

The following tables report the values of Kv with thermostatic head installed. Usually at the stage of design reference is made to the situation ΔT=2K. T.A.= all open

R411TG

Chrome-plated thermostatic angle valve, with protection for building yards. Complete with adaptor connection and pipe union with self-sealing

CODE	MEASURE	ΔT=1K	ΔT=2K	T.A.
R411X032	3/8" x 16	0,33	0,51	1,26
R411X033	1/2" x 16	0,33	0,51	1,26
R411X034	1/2" x 18	0,33	0,51	1,26



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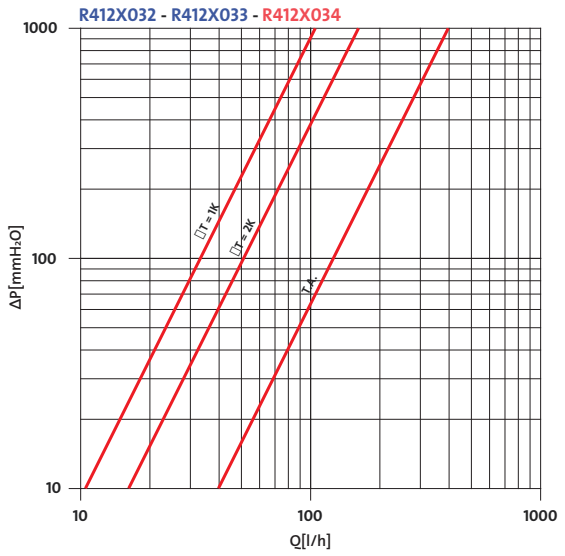
R412TG

Chrome-plated thermostatic straight valve, with protection for building yards. Complete with adaptor connection and pipe union with self-sealing

CODE	MEASURE	ΔT=1K	ΔT=2K	T.A.
R412X032	3/8" x 16	0,33	0,51	1,26
R412X033	1/2" x 16	0,33	0,51	1,26
R412X034	1/2" x 18	0,33	0,51	1,26

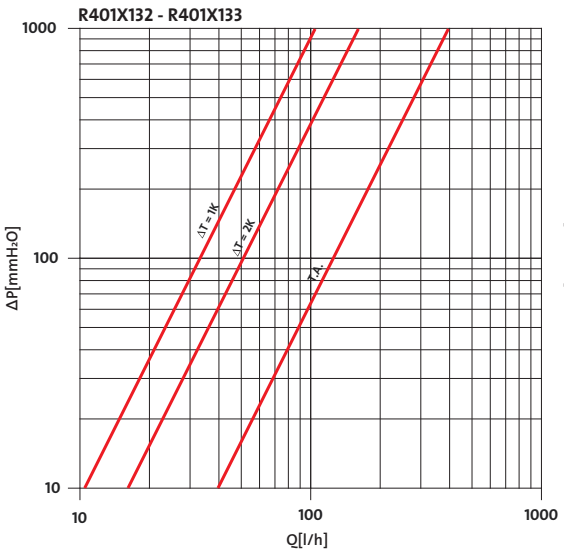


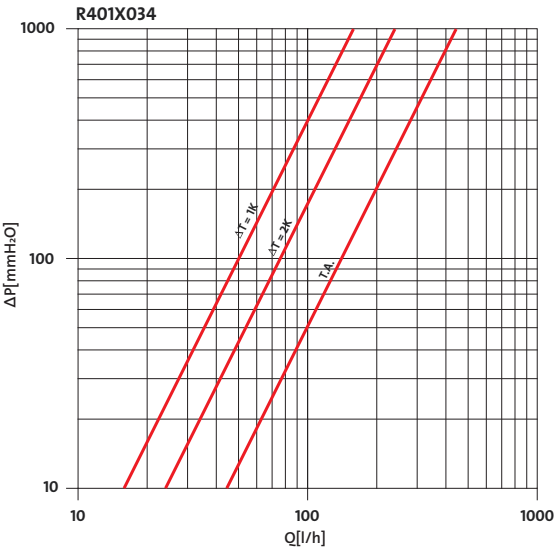
R401TG

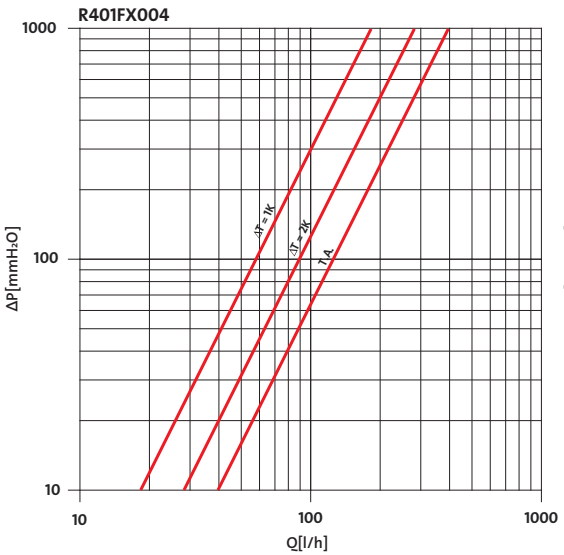
Chrome-plated thermostatic angle valve, with protection for building yards. Complete with iron pipe connection and pipe union with self-sealing

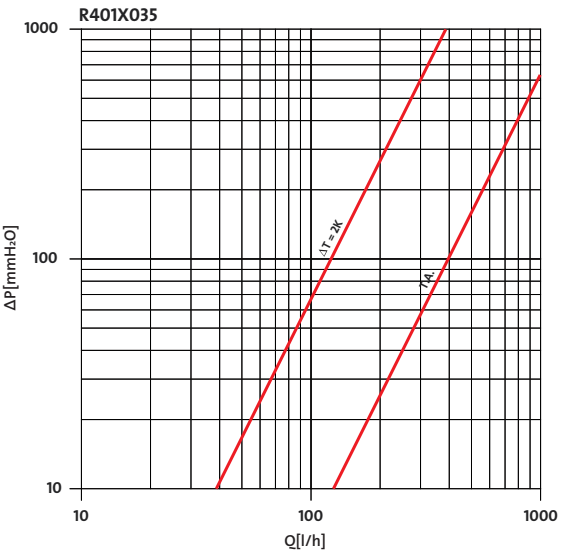
***Without self-sealing tail piece**

CEN	CODE	MEASURE	ΔT=1K	ΔT=2K	T.A.
	R401X132	3/8" x 3/8"	0,33	0,51	1,26
	R401X133	1/2" x 1/2"	0,33	0,51	1,26
	R401FX004	3/4" x 3/4"*	0,60	0,92	3,54
	R401X034	3/4" x 3/4"*	0,50	0,76	1,41
	R401X035	1" x 1"*	-	1,22	3,98







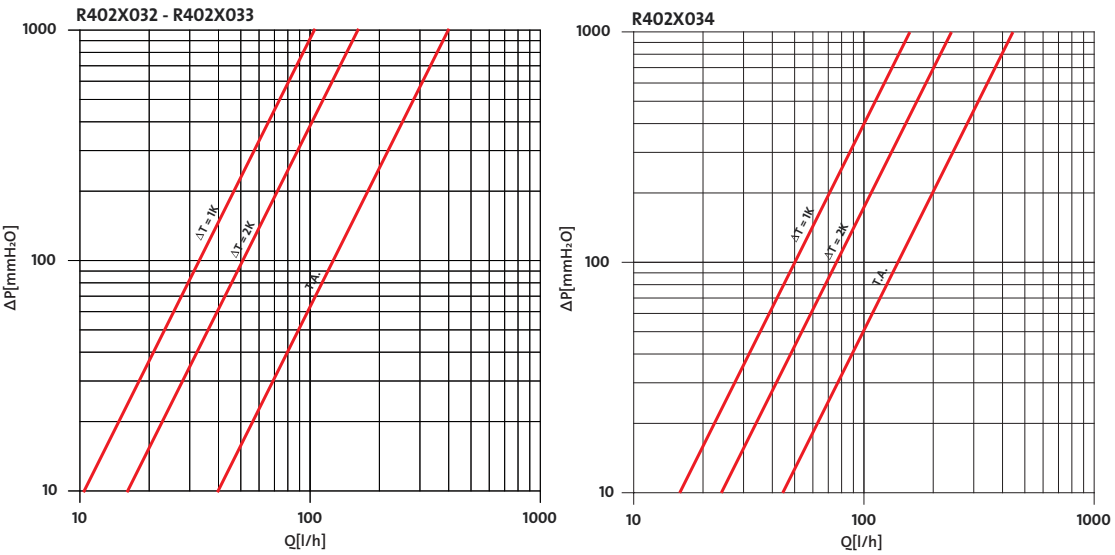


R402TG

Chrome-plated thermostatic straight valve, with protection for building yards. Complete with iron pipe connection and pipe union with self-sealing

***Without self-sealing tail piece**

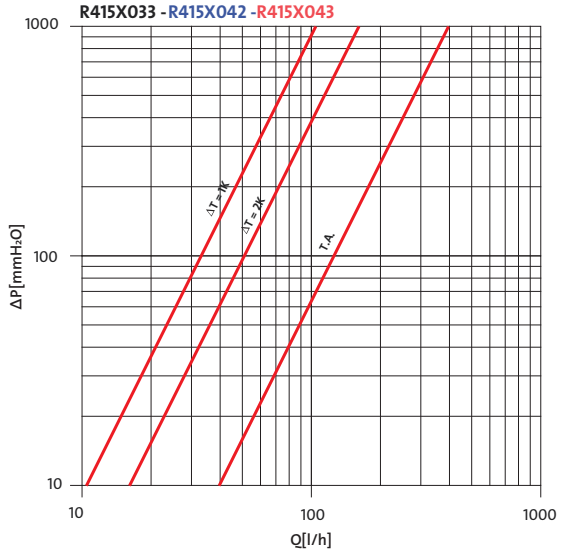
CEN	CODE	MEASURE	ΔT=1K	ΔT=2K	T.A.
	R402X132	3/8" x 3/8"	0,33	0,51	1,26
	R402X133	1/2" x 1/2"	0,33	0,51	1,26
	R402FX004	3/4" x 3/4"*	0,60	0,92	2,67
	R402X034	3/4" x 3/4"*	0,50	0,76	1,41
	R402X035	1" x 1"*	-	1,15	2,95



R415TG

Chrome-plated thermostatic angle valve, with protection for building yards. Complete with adaptor connection and pipe union with self-sealing
Available both with adaptor and iron pipe connection

CEN	CODE	MEASURE	ΔT=2K	ΔT=2K	T.A.
	R415X033	1/2" x 1/2"	0,33	0,51	1,26
	R415X042	1/2" x 16	0,33	0,51	1,26
	R415X043	1/2" x 18	0,33	0,51	1,26



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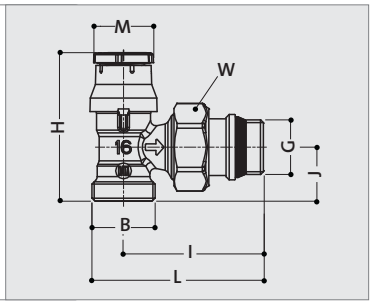
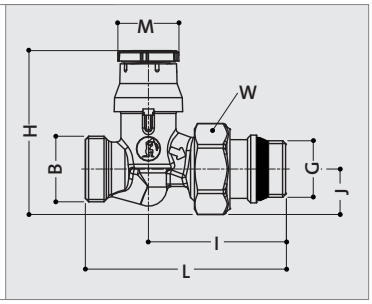
Volumes and dimensions [mm]

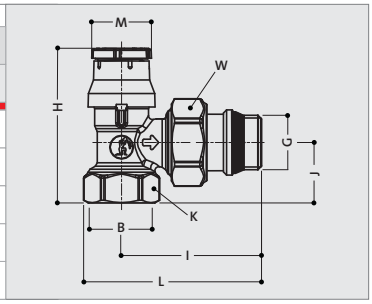
R411TG								
CODE	MEASURE GxB	H	I	J	L	M	W	H_{MAX}*
R411X032	3/8"x16	56	53	21	66	23	30	113
R411X033	1/2" x 16	56	53	21	66	23	30	113
R411X034	1/2" x 18	56	53	21	66	23	30	113



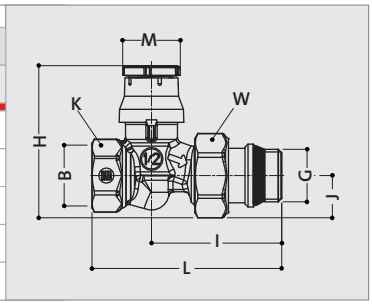
R412TG								
CODE	MEASURE GxB	H	I	J	L	M	W	H_{MAX}
R412X032	3/8"x16	60	51	17	74	23	30	117
R412X033	1/2" x 16	60	51	17	75	23	30	117
R412X034	1/2" x 18	60	51	17	76	23	30	117



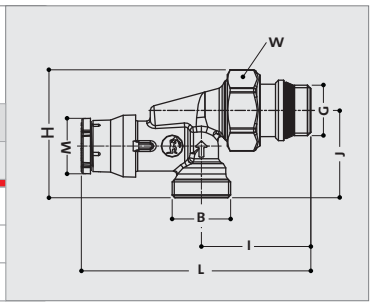
R401TG										
CEN	CODE	MEASURE GxB	H	I	J	K	L	M	W	H_{MAX}*
	R401X132	3/8"x 3/8"	55	51	20	22	64	23	27	112
	R401X133	1/2" x 1/2"	59	53	23	26	68	23	30	116
	R401FX004	3/4" x 3/4"	68	58	26	32	76	23	38	125
	R401X034	3/4" x 3/4"	60	60	25	32	78	23	38	117
	R401X035	1" x 1"	78	72	31	39	94	23	46	135



R402TG										
CEN	CODE	MEASURE GxB	H	I	J	K	L	M	W	H_{MAX}*
	R402X132	3/8"x 3/8"	58	54	15	22	76	23	27	115
	R402X133	1/2" x 1/2"	60	55	17	26	82	23	30	117
	R402FX004	3/4" x 3/4"	70	61	22	32	93	23	38	127
	R402X034	3/4" x 3/4"	64	55	21	32	81	23	38	121
	R402X035	1" x 1"	76	64	26	39	105	23	46	133



R415TG										
CEN	CODE	MEASURE GxB	H	I	J	K	L	M	W	L_{MAX}
	R415X033	1/2" x 1/2"	53	45	36	25	94	23	30	151
	R415X042	1/2" x 16	53	45	36	-	94	23	30	151
	R415X043	1/2" x 18	53	45	37	-	94	23	30	151



* H_{MAX} and L_{MAX} max overall dimensions with installed thermostatic head

Additional information for CEN - EN215 certified valves

CODE	MEASURE	THERMOSTATIC HEAD	Nominal supply qmNH in association with the heads 130 Kg/h	Authority of the shutter	Z (min)	W(K)
R401X132 R402X132	3/8”	R452	130 Kg/h	0,894	32	1,48
R401X133 R402X133	1/2”	R452	130 Kg/h	0,894		
R401FX004	3/4”	R452	240 Kg/h	0,954		
R402FX004	3/4”	R452	240 Kg/h	0,919		
R401X132 R402X132	3/8”	R456	150 Kg/h	0,858	30	1,46
R401X133 R402X133	1/2”	R456	150 Kg/h	0,858		
R401FX004	3/4”	R456	250 Kg/h	0,950		
R402FX004	3/4”	R456	250 Kg/h	0,912		
R401X132 R402X132	3/8”	R470	150 Kg/h	0,858	26	1,42
R401X133 R402X133	1/2”	R470	150 Kg/h	0,858		
R401FX004	3/4”	R470	250 Kg/h	0,950		
R402FX004	3/4”	R470	250 Kg/h	0,912		

R415X033	1/2”	R452	140 Kg/h	0,877	32	1,48
R415X033	1/2”	R456	180 Kg/h	0,796	30	1,46
R415X033	1/2”	R470	180 Kg/h	0,796	26	1,42

Declared hysteresis value: 0,8K (R452) 0,4K (R456, R470)
Min calibration with thermostatic heads R452, R456, R470: 8°C in position*
Max operating pressure in association with thermostatic heads: 10 bar

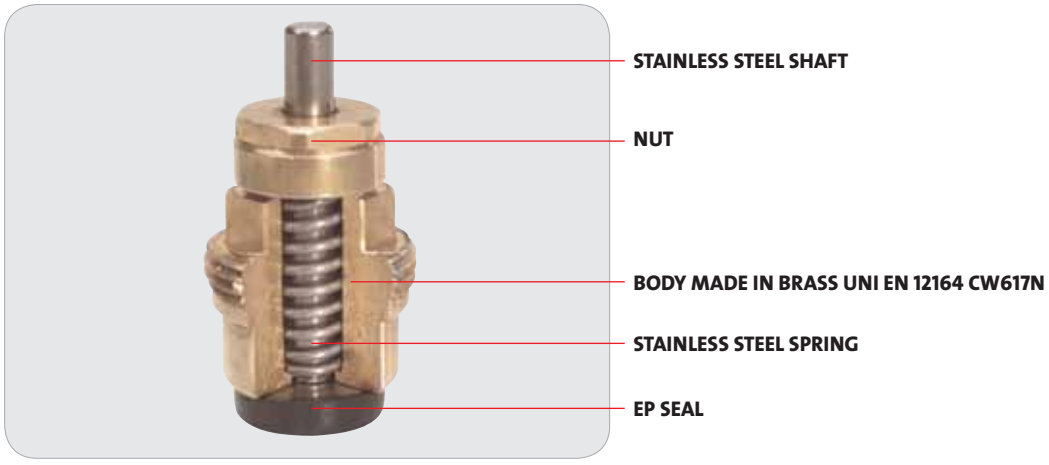
On demand data relative to response time (Z) are available, temperature influence (W), influence of differential pressure (D), spindle movement.

Thermostatic element

The series of Giacotech thermostatic valves and micrometric thermostatic valves can be easily equipped with thermostatic heads of thermoelectric actuators in order to allow, quite simply, the automation of ambient temperature control thus guaranteeing comfort and significant energy saving. So thermostatic heads with wax (R452) or liquid sensor (R470, R456, R462 with remote sensor, R463 with remote adjustment sensor) can be used or thermoelectric actuators normally open (R478/R478M) or normally closed (R473/R473M) directly controlled by ordinary ambient thermostats.

Anti-blocking-system screw-down valve

The series of Giacotech micrometric and thermostatic micrometric valves features a system called anti-blocking-system. Inside the operation mechanism there is an operation rod in stainless steel in a single piece, obtained with cold moulding and successive roll-forming, strongly reduces the adhesion capability of lime deposits and consequently the possibility of screw down blocking.



Manual valves

The widespread habit of installing manual valves led Giacomini to introduce within the Giacotech series also this kind of valves. The Giacotech manual valves are easy to operate, and in addition the new handle is more comfortable and is equipped with a specific building yard protection.

Technical data

- Fluids: hot water
- Max operating temperature: 110°C
- Max operating temperature for manual applications: PN16

Materials

- Bodies, caps, pipe unions: UNI EN 12165 CW617N brass
- Operation hand wheels: ABS
- Self-sealing: EP

Hydraulic versions and characteristics

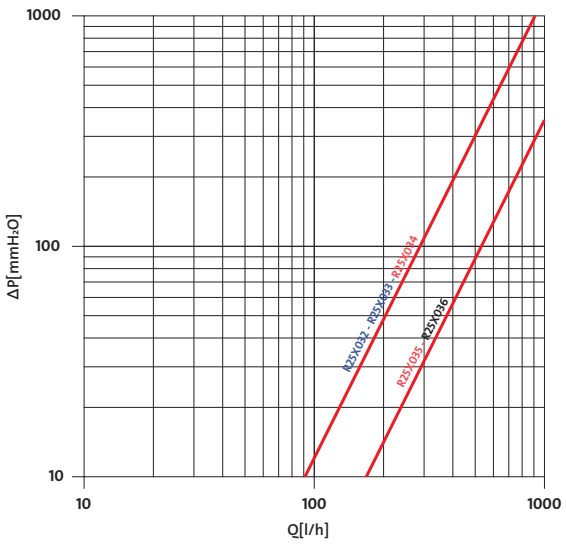
The following tables show the Kv values referred to situations of all open valve.

R25TG

Chrome-plated, single-adjustment angle valve with adaptor connection and pipe union with self-sealing*

***Without self-sealing tail piece**

CODE	MEASURE	Kv
R25X032	3/8" x 16	2,88
R25X033	1/2" x 16	2,88
R25X034	1/2" x 18	2,88
R25X035	3/4" x 18*	5,34
R25X036	3/4" x 22*	5,34

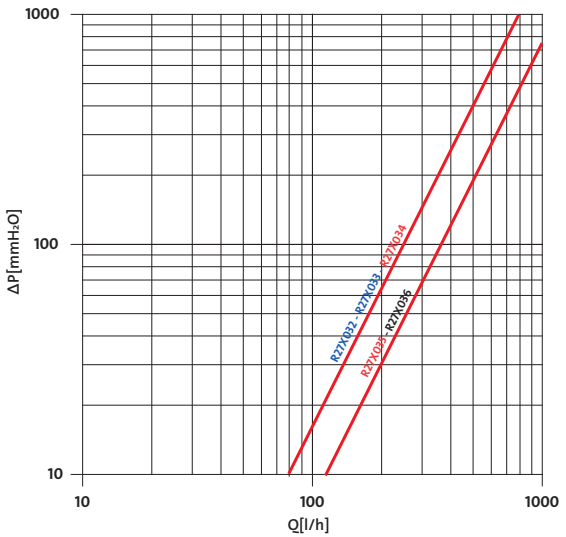


R27TG

Chrome-plated, single-adjustment straight valve with adaptor connection and pipe union with self-sealing

***Without self-sealing tail piece**

CODE	MEASURE	Kv
R27X032	3/8" x 16	2,50
R27X033	1/2" x 16	2,50
R27X034	1/2" x 18	2,50
R27X035	3/4" x 18*	3,65
R27X036	3/4" x 22*	3,65

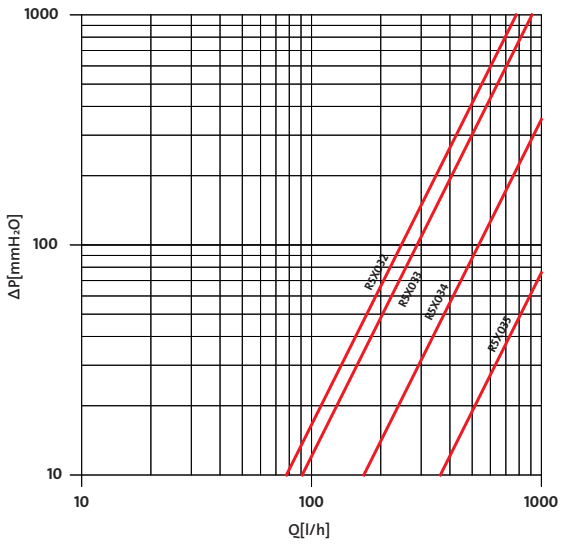


R5TG

Chrome-plated angle valve with simple adjustment, complete with iron pipe connection and pipe union with self-sealing

***Without self-sealing tail piece**

CODE	MEASURE	Kv
R5X032	3/8" x 3/8"	2,46
R5X033	1/2" x 1/2"	2,88
R5X034	3/4" x 3/4"*	5,34
R5X035	1" x 1"*	11,50
R5X036	1"1/4 x 1"1/4*	-

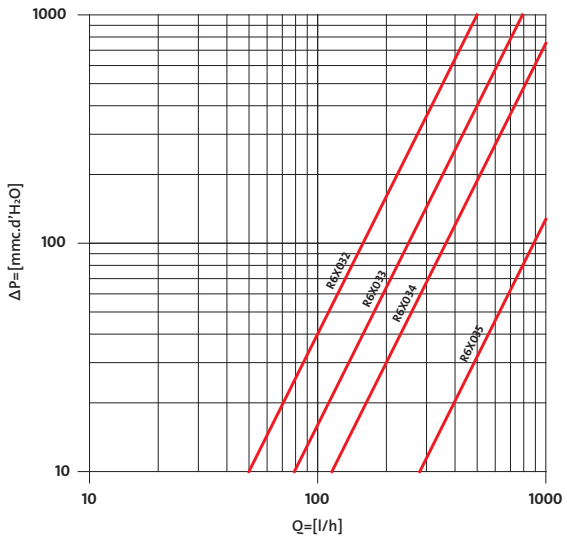


R6TG

Chrome-plated, straight valve with simple-adjustment, iron pipe connection and with self-sealing*

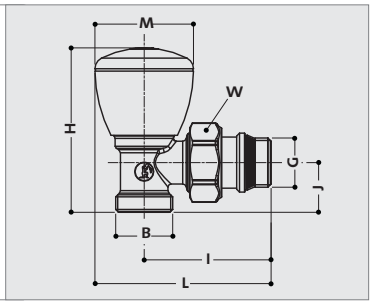
***Without self-sealing tail piece**

CODE	MEASURE	Kv
R6X032	3/8" x 3/8"	1,58
R6X033	1/2" x 1/2"	2,50
R6X034	3/4" x 3/4"*	3,65
R6X035	1"x 1"*	8,45
R6X036	1"1/4 x 1"1/4*	-

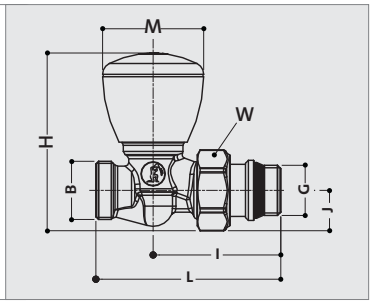


Volumes and dimensions [mm]

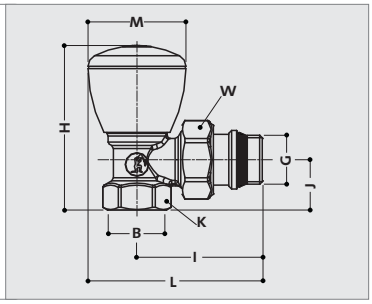
R25TG							
CODE	MEASURE GxB	H	I	J	L	M	W
R25X032	3/8"x16	69	53	21	74	42	30
R25X033	1/2" x 16	69	53	21	74	42	30
R25X034	1/2" x 18	73	54	24	75	42	30
R25X035	3/4" x 18	79	60	24	84	49	38
R25X036	3/4" x 22	79	60	24	84	49	38



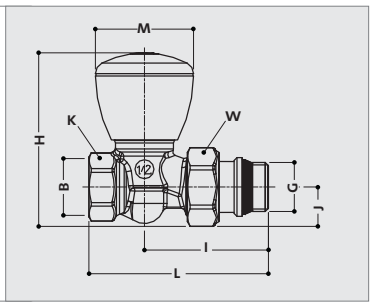
R27TG							
CODE	MEASURE GxB	H	I	J	L	M	W
R27X032	3/8"x16	73	52	17	75	42	30
R27X033	1/2" x 16	73	52	17	76	42	30
R27X034	1/2" x 18	73	52	17	77	42	30
R27X035	3/4" x 18	87	55	21	81	49	38
R27X036	3/4" x 22	87	55	21	91	49	38



R5TG								
CODE	MEASURE GxB	H	I	J	K	L	M	W
R5X032	3/8"x 3/8"	65	50	19	22	71	42	27
R5X033	1/2" x 1/2"	70	53	21	26	74	42	30
R5X034	3/4" x 3/4"	79	60	23	32	84	49	38
R5X035	1" x 1"	87	68	30	39	92	49	46
R5X036	1"1/4 x 1"1/4	92	81	33	49	110	59	53



R6TG								
CODE	MEASURE GxB	H	I	J	K	L	M	W
R6X032	3/8"x 3/8"	69	51	15	22	72	42	27
R6X033	1/2" x 1/2"	73	52	17	26	76	42	30
R6X034	3/4" x 3/4"	86	55	21	32	81	49	38
R6X035	1" x 1"	93	69	26	39	106	49	46
R6X036	1"1/4 x 1"1/4	97	84	30	49	135	59	53



LOCKSHIELDS

System adjustment.
In order to make available for the operator a complete installation system, the Giacotech series also includes lockshields, essential elements for proper system balancing.

This operation, to make according to design characteristics of the system and of hydraulic characteristics of the product at issue, is crucial to guarantee the proper operation of the system. Removing the upper cap you can reach easily the adjustment rod that should be operated with the help of a specific hexagonal wrench (R73). Starting from the position of all closed the shutter is opened according to what the system design provides for.

Technical data

- Fluids: hot water
- Max. operating temperature: 110°C
- Max. operating pressure for manual applications: PN16

Materials

- Bodies, caps and pipe unions: UNI EN 12165 CW617N brass
- Self-sealing: EP

Versions and hydraulic characteristics

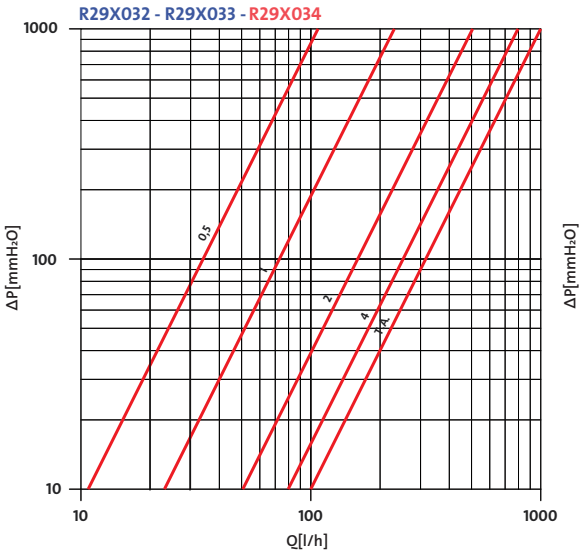
The following tables show the values of Kv according to the n° of opening turns of the lockshield starting from the position of complete closing.
T.A.= (tutto aperto) all open

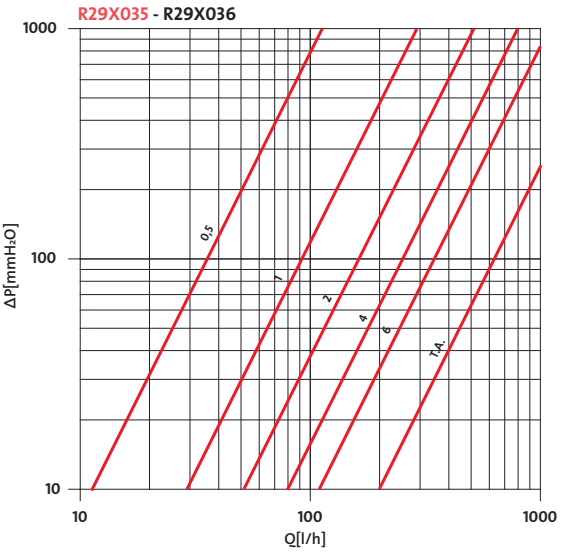
R29TG

Chrome-plated, angle lockshield with adaptor connection and pipe union with self-sealing

***Without self-sealing tail piece and with brass cap**

		NUMBER OF OPENING TURNS					
CODE	MEASURE	0,5	1	2	4	6	T.A.
R29X032	3/8" x 16	0,34	0,73	1,60	2,52	-	3,16
R29X033	1/2" x 16	0,34	0,73	1,60	2,52	-	3,16
R29X034	1/2" x 18	0,34	0,73	1,60	2,52	-	3,16
R29X035	3/4" x 18*	0,35	0,89	1,60	2,52	3,46	6,32
R29X036	3/4" x 22*	0,35	0,89	1,60	2,52	2,95	6,32



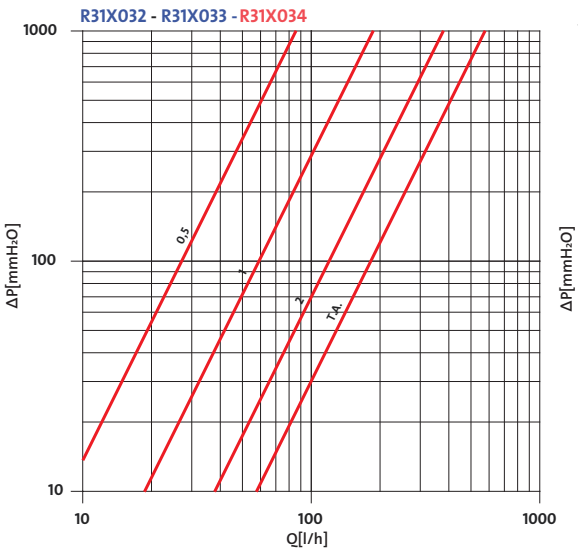


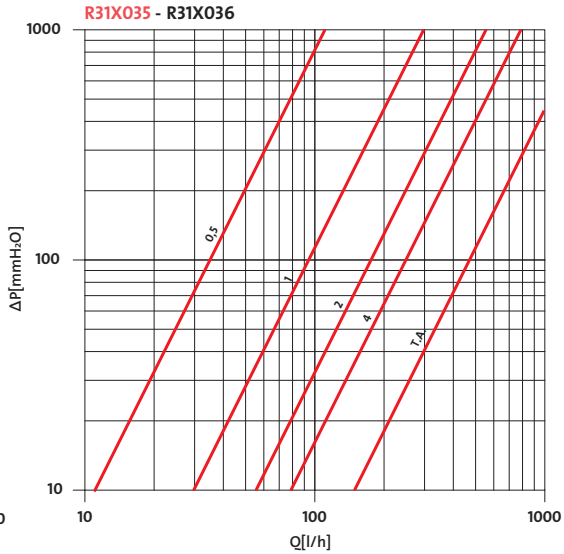
R31TG

Chrome-plated, angle lockshield with adaptor connection and pipe union with self-sealing

***Without self-sealing tail piece and with brass cap**

		NUMBER OF OPENING TURNS				
CODE	MEASURE	0,5	1	2	4	T.A.
R31X032	3/8" x 16	0,27	0,59	1,20	-	1,83
R31X033	1/2" x 16	0,27	0,59	1,20	-	1,83
R31X034	1/2" x 18	0,27	0,59	1,20	-	1,83
R31X035	3/4" x 18*	0,35	0,94	1,76	2,50	4,71
R31X036	3/4" x 22*	0,35	0,94	1,76	2,50	4,71



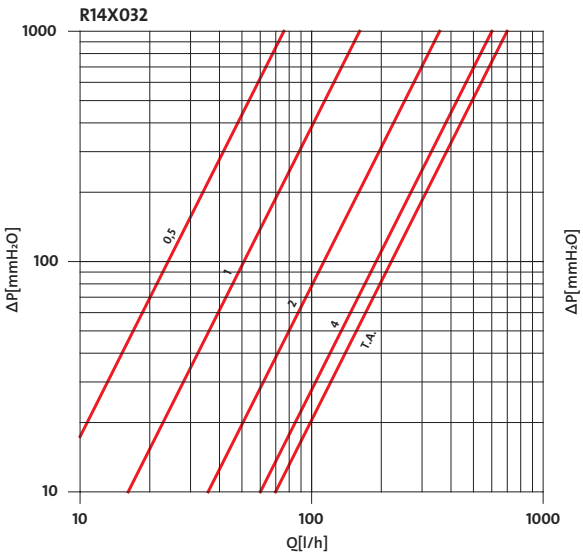


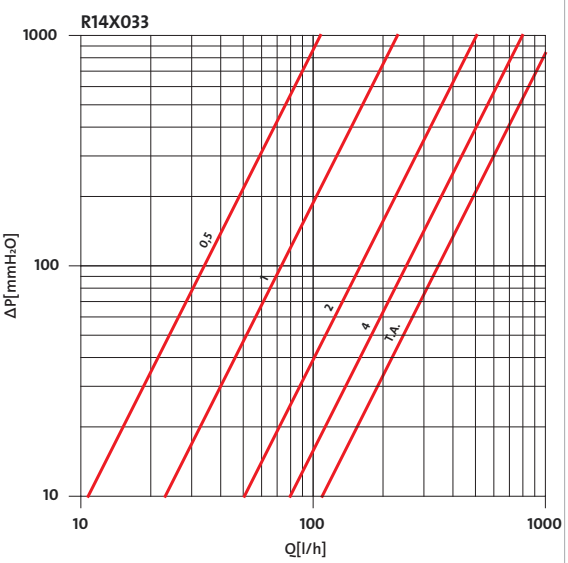
R14TG

Chrome-plated angle lockshield with iron pipe connection and pipe union with self-sealing*

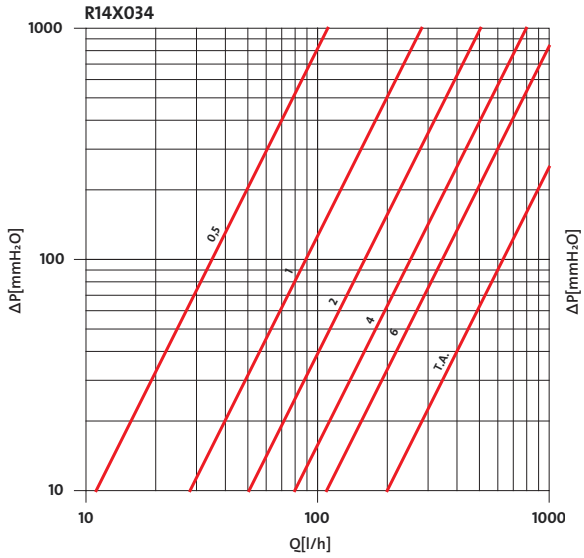
***Without self-sealing tail piece and with brass cap**

CODE	SIZE	NUMBER OF OPENING TURNS					
		0,5	1	2	4	6	T.A.
R14X032	3/8" x 3/8"	0,24	0,51	1,13	1,90	-	2,21
R14X033	1/2" x 1/2"	0,34	0,73	1,60	2,52	-	3,16
R14X034	3/4" x 3/4"*	0,35	0,89	1,60	2,52	3,46	6,32
R14X035	1" x 1"*	0,51	1,15	2,12	2,84	4,00	11,80
R14X036	1"1/4 x 1"1/4*	0,64	1,46	2,52	3,20	6,70	14,10

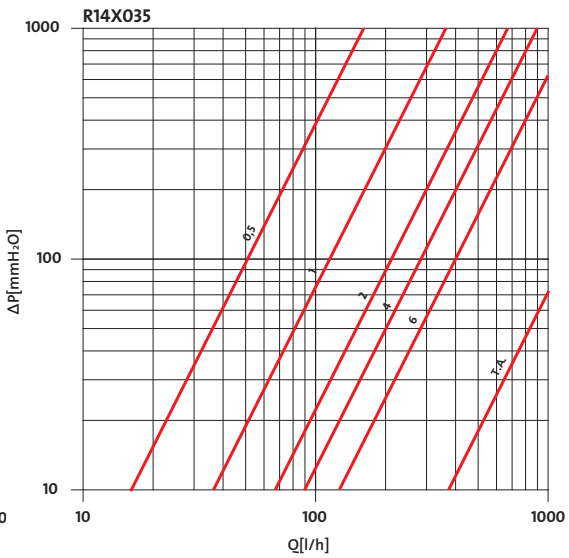




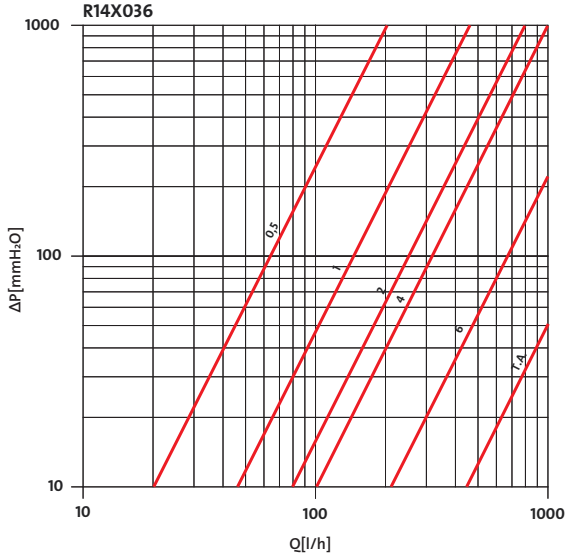
R14X034



R14X035



R14X036

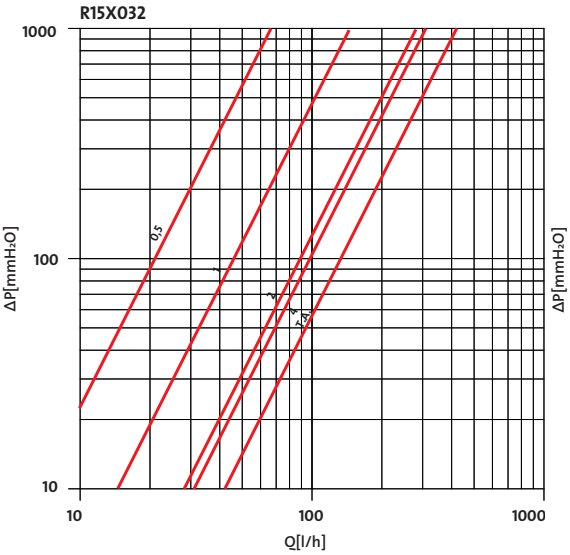


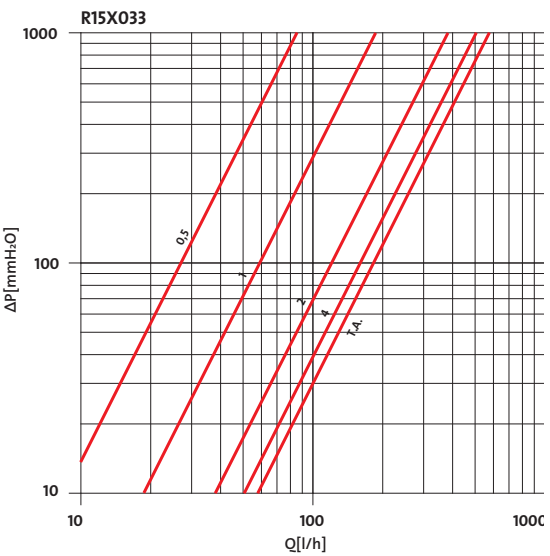
R15TG

Chrome-plated straight lockshield with iron pipe connection and pipe union with self-sealing

***Without self-sealing tail piece and with brass cap**

CODE	SIZE	NUMBER OF OPENING TURNS					
		0,5	1	2	4	6	T.A.
R15X032	3/8" x 3/8"	0,21	0,46	0,89	0,98	-	1,33
R15X033	1/2" x 1/2"	0,27	0,59	1,20	1,60	-	1,83
R15X034	3/4" x 3/4"*	0,35	0,94	1,76	2,50	3,46	4,71
R15X035	1" x 1"*	0,48	1,17	1,87	3,00	4,71	8,94
R15X036	1"1/4 x 1"1/4*	0,70	2,00	4,42	8,16	9,48	11,20





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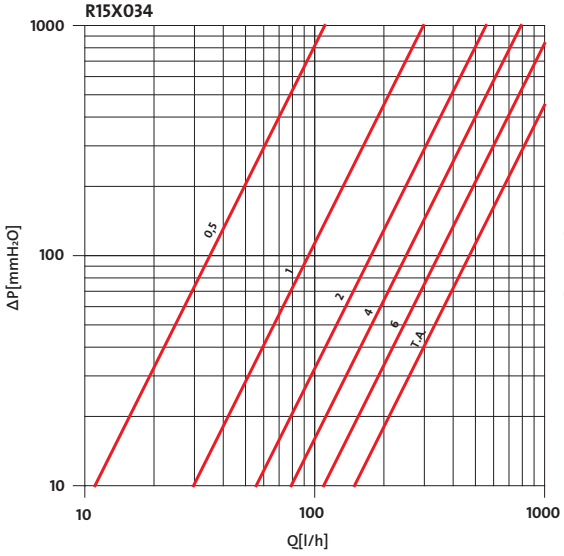
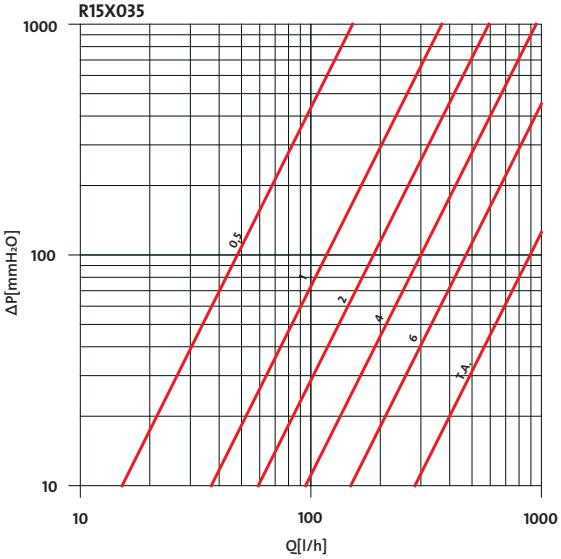
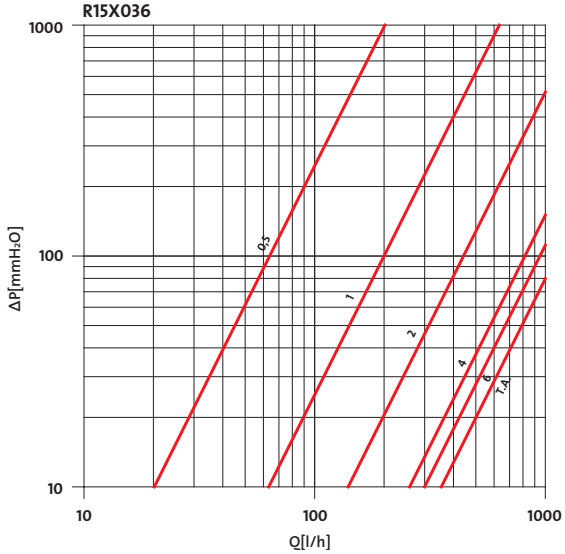


R15X035

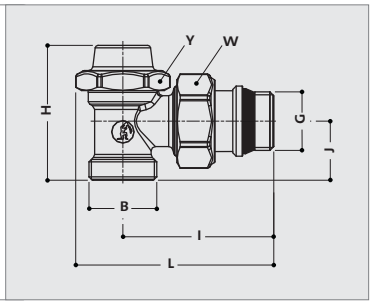


R15X036

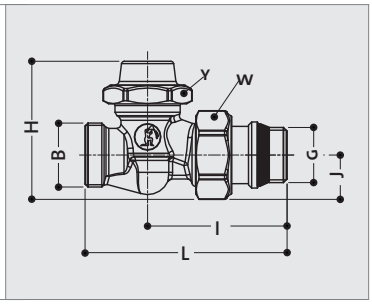


Volumes and dimensions [mm]

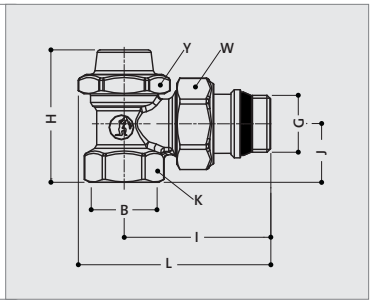
R29TG							
CODE	MEASURE GxB	H	I	J	L	W	Y*
R29X032	3/8"x16	48	53	21	70	30	30
R29X033	1/2" x 16	48	53	21	70	30	30
R29X034	1/2" x 18	51	54	24	71	30	30
R29X035	3/4" x 18	54	60	24	79	38	35
R29X036	3/4" x 22	61	60	31	79	38	35



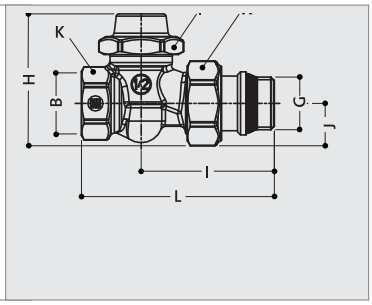
R31TG							
CODE	MEASURE GxB	H	I	J	L	W	Y*
R31X032	3/8"x16	52	52	17	75	30	30
R31X033	1/2" x 16	52	52	17	75	30	30
R31X034	1/2" x 18	52	52	17	77	30	30
R31X035	3/4" x 18	62	54	21	81	38	35
R31X036	3/4" x 22	62	54	21	85	38	35



R14TG								
CODE	MEASURE GxB	H	I	J	K	L	W	Y*
R14X032	3/8"x 3/8"	44	50	19	22	65	27	27
R14X033	1/2" x 1/2"	48	53	21	26	70	30	30
R14X034	3/4" x 3/4"	54	60	23	32	79	38	35
R14X035	1" x 1"	72	68	30	39	90	46	40
R14X035	1"1/4 x 1"1/4	80	80	34	49	108	53	46



R15TG								
CODE	MEASURE GxB	H	I	J	K	L	W	Y*
R15X032	3/8"x 3/8"	48	51	15	22	71	27	27
R15X033	1/2" x 1/2"	52	52	17	26	76	30	30
R15X034	3/4" x 3/4"	62	55	21	32	81	38	35
R15X035	1" x 1"	78	69	26	39	106	46	40
R15X035	1"1/4 x 1"1/4	86	78	30	49	119	53	46



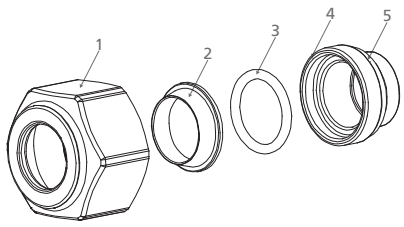
* Y measure of the manoeuvre key for the brass cap.
Versions 3/8" and 1/2" are supplied with plastic cap

ACCESSORIES AND SPARE PARTS

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



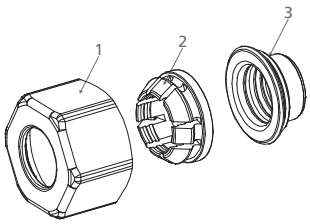
1 Nut
2 Mechanical sealing element
3 Internal o-ring
4 Adaptor *
5 External o-ring *

*components not present in sizes 16x16, 18x18 e 22x22

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

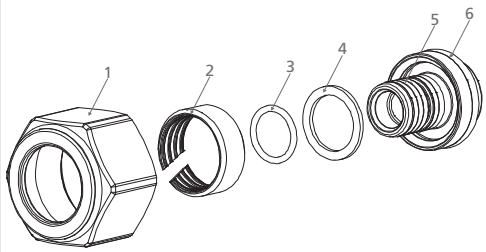


1 Nut
2 Mechanical sealing element
3 Hydraulic sealing element

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 - Compression fittings for synthetic or multilayer pipes



1 Nut
2 Mechanical sealing element
3 Internal o-ring
4 Spacer ring (R179AM only) compulsory for use with multilayer pipe
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 (compulsory 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.

Tail pieces

Self/sealing pipe union (in 3/8" and 1/2" sizes)

Always attentive to market needs, during long studies and tests at its technological laboratories Giacomini implemented also on the valves and radiator lockshields of the new Giacotech series (in 3/8" and 1/2" sizes) the notion of self/sealing. The presence of the tightness ring on the conical part of the union pipe allows making the installation without forcing the screwing of the union cap between the body and the union pipe. Following attentively some simple instructions you can quickly make functional long-life installations. The self-sealing pipe union by Giacomini is supplied already equipped with a tightness element in elastomeric material that prepares its assembly on the heating body without the use of hemp, paste or other tightness materials. For proper and fast assembly we recommend light lubrication of the threading before starting the screwing. The screwing phase should be carried out with specific R73 hexagonal Allen wrench (e.g. 9mm for 3/8" tail pices or 12 mm for 1/2"). Due to the presence of the tightness element in elastomeric material just apply a screwing torque not higher than 25 Nm.

Tail pieces and nuts

P15TG

- Brillant chrome plated tail piece.

P15TGX002:
for versions with 3/8" iron connection.
P15TGX003:
for versions with 3/8"x16 adaptor connection
P15TGX004:
for versions with 1/2"x16, 1/2"x18 adaptor connections and 1/2" iron connection

PART NUMBER	SIZE
P15TGX002	3/8"
P15TGX003	1/2"x3/8"
P15TGX004	1/2"

P15-2

- Chrome plated tail piece.

P15X002:
Tail piece for valves and lockshield valves 3/8” iron pipe connection
P15X009
Tail piece for valves and lockshield valves 3/8”X16

PART NUMBER	SIZE	NUT
P15X002	3/8”	P18LX002
P15X003	1/2”	P18LX003
P15X004*	3/4”	P18LX004
P15X005*	1”	P18LX005
P15X006*	1”1/4	P18LX006
P15X009	1/2”x3/8”	P18LX003

P18L

- Nut for straight fittings.

PART NUMBER	SIZE
P18LX002	5/8”x3/8”
P18LX003	3/4”x1/2”
P18LX004	1”x3/4”
P18LX005	1”1/4x1”
P18LX006	1”1/2x1”1/4

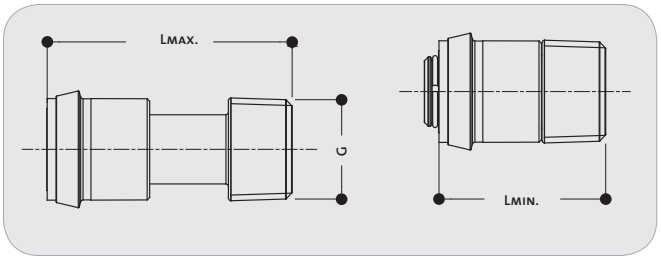
Chrome-plated telescopic pipe union

In order to facilitate the operations of systems refurbishing the R173 telescopic extensible pipe unions with R173TG self-sealing. The variable length of the pipe union according to installation needs allows saving a lot of time and avoiding the need of extensions, obtaining anyway a simple and reliable assembly. This solution in addition allows compensating very easily any thermal expansions.

CODE	G	Lmin	Lmax	Δ	COMPATIBILITY
R173X002	3/8”	31	47	16	Valves and lockshields 3/8” iron connection
R173X007	3/8”	31	47	16	Valves and lockshields 3/8” x 16
R173X003	1/2”	34	50	16	Valves and lockshields 1/2” x 16 - 1/2” x 18 - 1/2” x 12”
R173X004	3/4”	38	57	19	Valves and lockshields 3/4” x 18 - 3/4” x 22 - 3/4” x 3/4”
R173X005	1”	42	63	21	Valves and lockshields 1” x 1”
R173X006	1” 1/4	50	74	24	Valves and lockshields 1”x1/4 x 1”x1/4

CODE	G	Lmin	Lmax	Δ	COMPATIBILITY
R173X032	3/8”	37	53	16	Valves and lockshields iron connection 3/8”
R173X037	3/8”	37	53	16	Valves and lockshields 3/8” x 16
R173X033	1/2”	38	54	16	Valves and lockshields 1/2” x 16 - 1/2” x 18 - 1/2” x 12”

* L_{max} max lenght with nut included

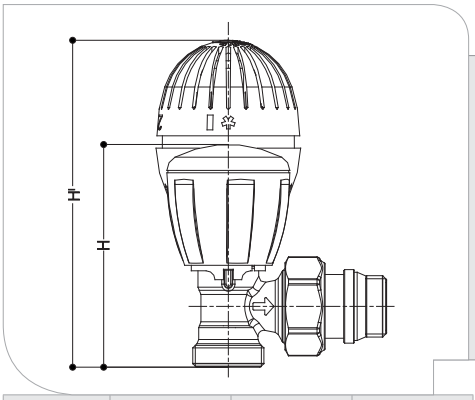


R173

R173TG

Thermostatic head

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

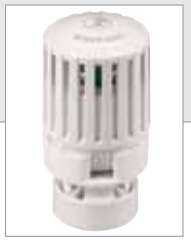


MODELLO	R470X001	R456X101	R452X101
H'-H	35	40	35

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

R452

- Thermostatic head with wax sensor.

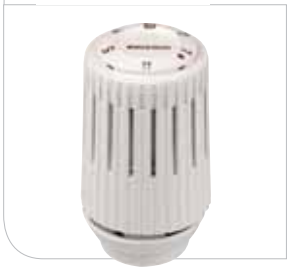
PART NUMBER
R452X101

R470

- Thermostatic head with liquid sensor.

PART NUMBER
R470X001

R456



Thermostatic head with liquid sensor.

PART NUMBER
R456X101

R462

- Thermostatic head with remote sensor.

PART NUMBER	SIZE
R462X002	2 m
R462X005	5 m
R462X010	10 m
R462X015	15 m

R463

- Thermostatic head with remote sensor.

PART NUMBER	SIZE
R463X002	2 m
R463X005	5 m
R463X010	10 m
R463X015	15 m

Handwheels and caps

R450TG

- Micrometric handwheel for valves with thermostatic option GIACOTECH series.

PART NUMBER
R450X012
R450X016

P22B

Handwheel for manual valves

CODICE	MISURA
P22BY007	3/8”-1/2”
P22BY008	3/4”-1”
P22BY009	1”1/4

P26A

Chrome plated cap for R14A, R15A, R29A, R31A.

P26AX002:
for 3/8” iron connection versions

P26AX003:
for 1/2” iron connection versions and 3/8”x16, 1/2”x16 and 1/2”x18 adaptor connection

CODICE	MISURA
P26AX002	3/8”
P26AX003	1/2”
P26AX004	3/4”
P26AX005	1”
P26AX006	1”1/4

P26PD

Plastic cap for lockshield valves.

P26PY012:
for 3/8” iron connection versions

P26PY013:
for 1/2” iron connection versions and 3/8”x16, 1/2”x16 and 1/2”x18 adaptor connection

PART NUMBER	SIZE
P26PY012	3/8”
P26PY013	1/2”

▸ Bonnets

P12A

TRV bonnet.

PART NUMBER	SIZE
P12AX011	3/8”-1/2”-3/4”
P12AX002	3/4” DIN
P12AX003	1”
P12AX004	-

Keys

R400

Special tool to replace the bonnet of any thermostatic valve without draining the system.

PART NUMBER
R400Y001

R79A

Tail piece key.

PART NUMBER
R79AY021

R73

Tail piece Allen key.

hex. 10 for 3/8”
hex. 13 for 1/2”, 1/2”x3/8” and P15TGX003

PART NUMBER	SIZE
R73Y009	es.9
R73Y010	es.10
R73Y012	es.12
R73Y013	es.13

R131

Spanner.

27/27: for base 16 adaptors.
27/29: for base 16 and 18 adaptors and 3/8” tail piece nuts.
29/30: for base 18 adaptors and 1/2” tail piece nuts.

PART NUMBER	SIZE
R131Y001	24
R131Y002	27/27
R131Y003	27/29
R131Y004	29/30

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MICROMETRIC, THERMOSTATIC VALVES
THERMOSTATIC VALVES
MANUAL VALVES
LOCKSHIELDS
ACCESSORIES AND SPARE PARTS

GIACOTECH

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