



R296

Description

The **R296** mixing valve allows for the interception and mixing of heating fluid in radiant heating and cooling systems and in medium-size radiator heating systems that require precise control of water delivery temperature. The valve is equipped with a handwheel for manual operation, or alternatively, it can be coupled to a K274, K275 or K275-1 actuators for automatic control.

Technical data

- Fluid: water, glycol-based solutions (max. 30 % of glycol)
- Temperature range: 5÷110 °C
- Max. working pressure: 10 bar
- Connections: 1 1/2" flat seat
- Centre distance: 120 mm
- Weight: 1,6 kg

Versions and product codes

Product code	Connections	Compatible actuators	
		Actuator	Kit for actuator installation
R296Y001	1 1/2"M x 1 1/2°F	K274Y101 (K274 series)	Kit not necessary
		K274Y102 (K274 series)	Kit not necessary
		K275Y002 (K275 series)	Kit 0296 (including with the actuator)
		K275Y011 (K275-1 series)	Kit 0296 (including with the actuator)
		K275Y013 (K275-1 series)	Kit 0296 (including with the actuator)

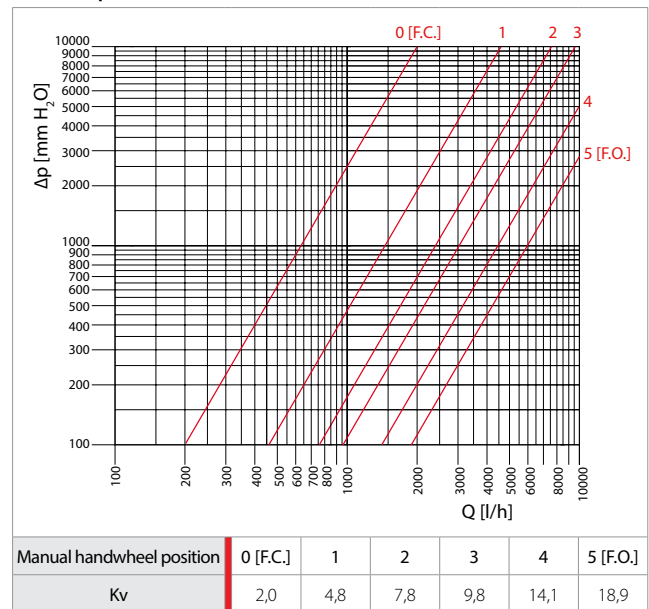
Materials

- Body, ball and nut: CW617N - UNI EN 12165 brass
- Handwheel: plastic material
- By-pass pipe: copper

Completion codes

- **K274Y101**: 230 V, 3-point floating actuator, controllable with KLIMAbus thermoregulation
- **K274Y102**: 24 V, 3-point floating actuator, controllable with KLIMAbus thermoregulation
- **K275Y002**: actuator with integrated constant temperature regulator
- **K275Y011**: 230 V, 3-point floating actuator, controllable with KLIMAbus thermoregulation
- **K275Y013**: actuator with 0...10 V regulation, controllable with KLIMAbus thermoregulation
- **Termoregolazione KLIMAbus**: KLIMAbus thermoregulation components (regulation unit, thermostats, ambient probes, etc...)

Losses of pressure



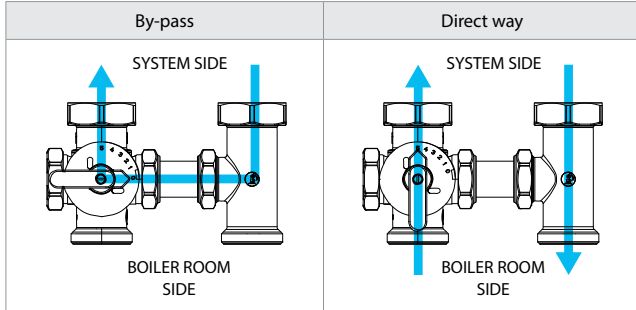
Operation

R296 + HANDWHEEL FOR MANUAL OPERATION

The valve R296 is equipped with a manual handwheel. Due to the graduated scale, the handwheel also functions as a flow indicator.

The direction of flow of the heating fluid can be controlled at any time, simply by checking the position of the handwheel:

- in position 0 the fluid flows entirely through the by-pass.
- in position 5 the fluid passes through the valve entirely, and is directed towards the system terminals.



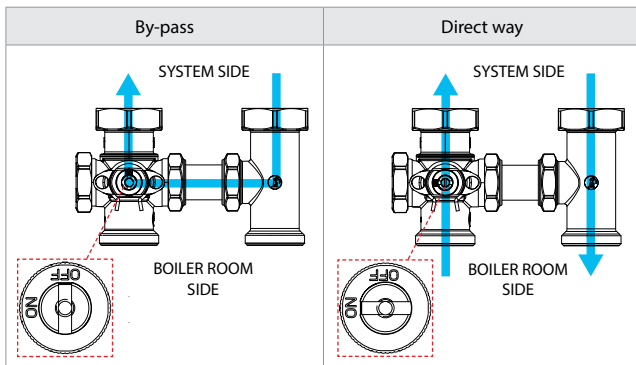
R296 + ACTUATORS

The handwheel can be replaced with the K274Y101, K274Y102, K275Y002 or K275Y013 actuators.

In this case the direction of fluid flow can be visually checked both through the actuator, or by removing the actuator and verifying the position of the indicator mark (milling).

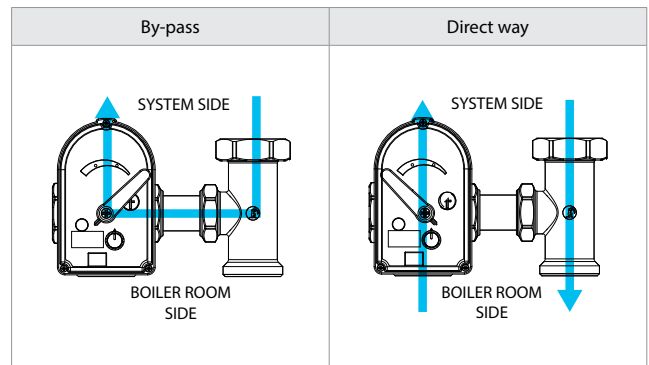
➤ **Flow direction control through the position of the milling:**

- with milling, in correspondence with the OFF label, the fluid flows entirely through the by-pass.
- with milling, in correspondence with the ON label, the fluid passes through the valve entirely, and is directed towards the system terminals.



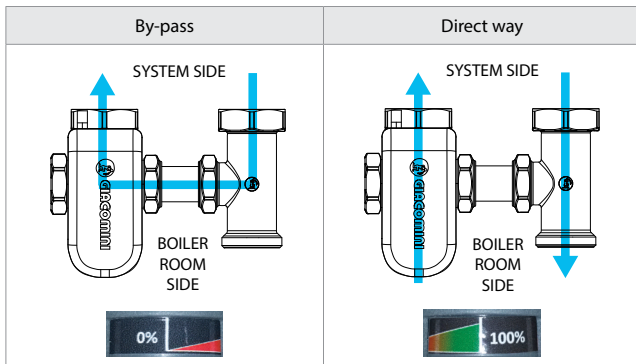
➤ **Flow direction control through K275Y002 actuator:**

- with the indicator at empty crescent the fluid flows entirely through the by-pass.
- with the indicator at fully crescent the fluid passes through the valve entirely, and is directed towards the system terminals.



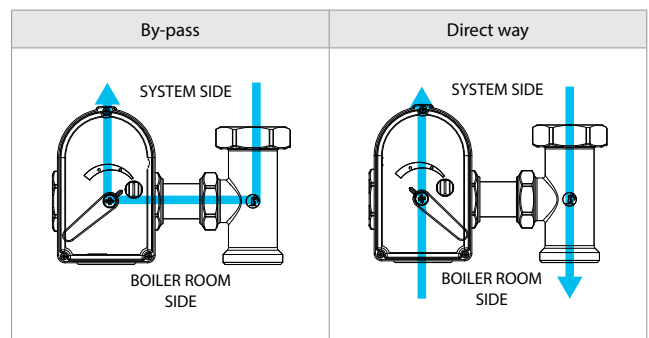
➤ **Flow direction control through K274Y101 or K274Y102 actuators:**

- with the indicator at 0 % the fluid flows entirely through the by-pass.
- with the indicator at 100 % the fluid passes through the valve entirely, and is directed towards the system terminals.



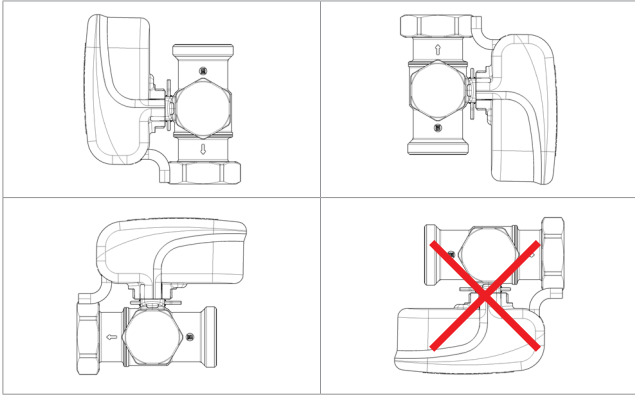
➤ **Flow direction control through K275Y011, K275Y013 actuators:**

- with the indicator at empty crescent the fluid flows entirely through the by-pass.
- with the indicator at fully crescent the fluid passes through the valve entirely, and is directed towards the system terminals.

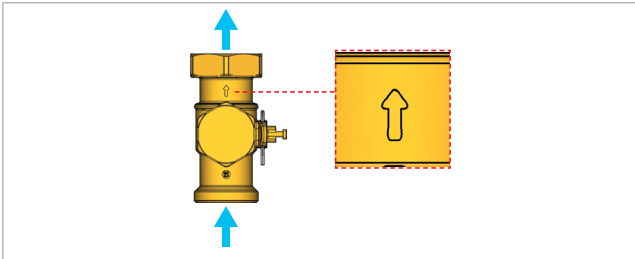


Installation

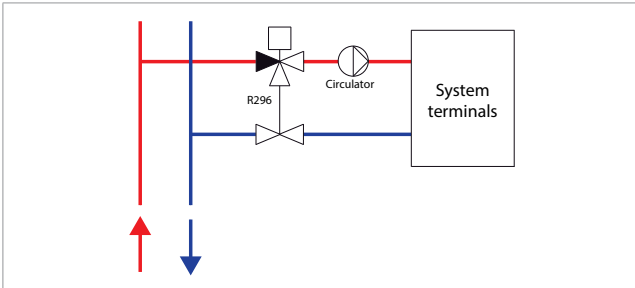
• The R296 valve must be installed with the command stem in a vertical or horizontal position; installation with the command stem vertical and the actuator positioned beneath the valve is not permitted.



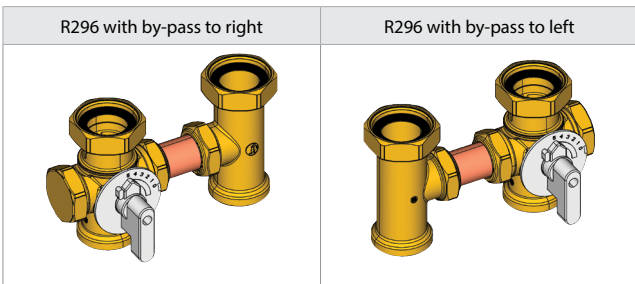
• The R296 valve must be installed according to the direction of flow as indicated by the arrow present on the valve body.



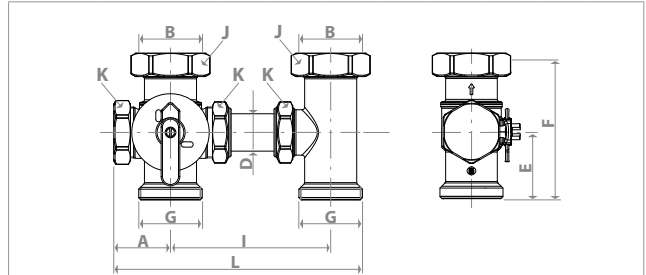
• The R296 valve must be installed on the delivery side. The circulator on the secondary circuit must be installed downstream from the mixing valve.



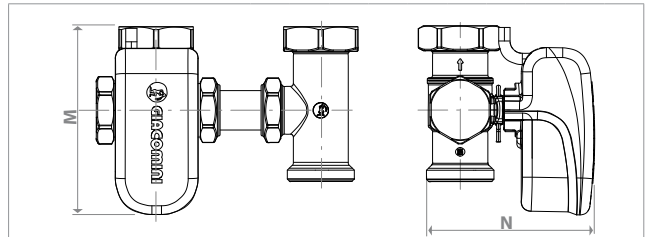
• The mixing valve can be installed with the by-pass to the left or to the right, simply by screwing onto the copper fitting and the return unit on the opposite side of the brass cap.



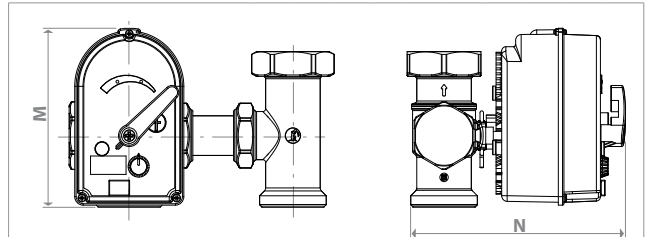
Dimensions



Product code	G x B	A [mm]	I [mm]	L [mm]	D [mm]	E [mm]	F [mm]	K [mm]	J [mm]
R296Y001	1 1/2" M x 1 1/2" F	43	120	188	28	51	104	41	53



Product code	M [mm]	N [mm]
R296Y001 + K274Y101/102	120	125



Product code	M [mm]	N [mm]
R296Y001 + K275Y002/11/13	127	155

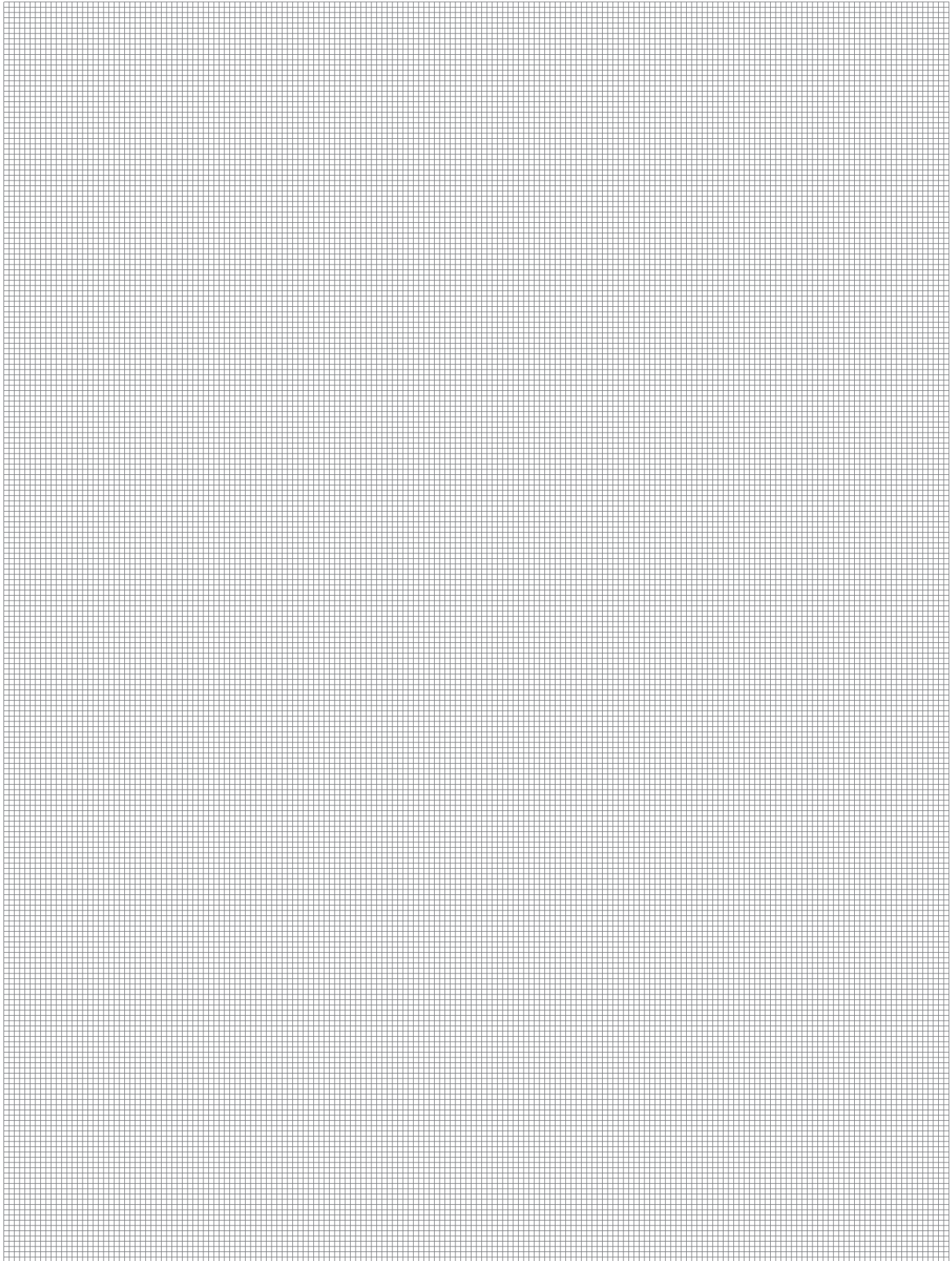
Product specifications

R296

Three-way mixing ball valve. 1 1/2" flat seat connections and by-pass. Body, ball and nut in brass UNI EN 12165 CW617N. Handwheel in plastic material. By-pass pipe in copper. Handwheel with protection and manual operation functions. Fluid: water, glycol-based solutions (max. 30% of glycol). Temperature range: 5÷110 °C. Max. working pressure: 10 bar. Centre distance: 120 mm. Weight: 1,6 kg. Can be motorized by installing the K274, K275 or K275-1 actuators.



Note.
For the installation of actuators and their correct setting please refer to the operating instructions of the valves and actuators.



Additional information

For more information, go to www.giacomini.com or contact our technical assistance service: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com
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