



K500

Description

The flow switch K500 is used to control the flow in the pipes of the heating and/or conditioning system.

The flow switch is equipped with four blades for use in pipes from 1" (DN25) to 8" (DN200). The device is designed in such a way as to ensure hermetic separation of the mechanical part from the electric part.

Versions and product codes

Product code	Size	No. of blades included
K500Y002	1" ÷ 8" (DN25 ÷ DN200)	1 blade of 35 mm 1 blade of 58 mm 1 blade of 89 mm 1 blade of 167 mm

Technical data

- Operating temperature range: -20÷110 °C
- Maximum ambient temperature: 50 °C
- Max. working pressure: 10 bar
- Fixing with G 1" threaded fitting
- Blades for pipes from 1" to 8" (from DN25 to DN200)
- Protection degree: IP65
- Measured flow rate: see the table in the paragraph "installation"

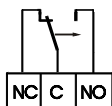
Materials

- Casing: shockproof thermoplastic material
- Body: brass
- Blades: stainless steel AISI 301

Electrical data

- SPDT dust-tight microswitch with approvals UL, cUL, CSA, ENEC.
- Rated insulation voltage: 380 V~
- Rated use voltage: 220÷250 V~
- Rated current for continuous service: 10 A
- Resistive load: 16 A
- Inductive load: 6 A
- Continuous current: 0,2 A

- Increasing flow rate:
Open contact C - NC
Close contact C - NO



Operation

When inserted in the pipe, the blade movement is proportional to the flow that strikes it; the movement is mechanically transmitted to a microswitch that activates or deactivates an electric contact.

The sensitivity of the flow switch can be adjusted via the setting screw. A particular feature of the device is its low load loss.

Setting

The flow switch is calibrated at the factory for intervention at the minimum flow rate. Turn the adjustment screw clockwise to increase the flow rate value at which the intervention occurs.



Warning.

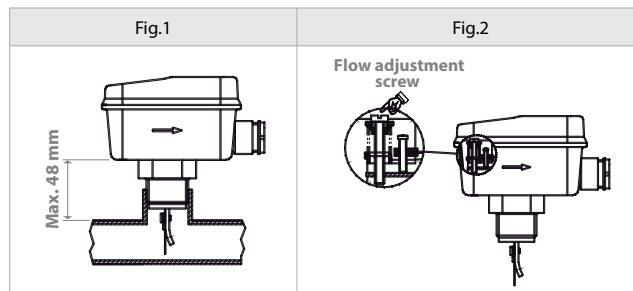
If you need to turn the screw anti-clockwise to decrease the flow rate, check that the spring is not too unloaded, as this will affect the reset of the device.

Installation

The flow switch is installed on horizontal pipe sections, away from sources of disturbance or turbulence, such as valves, elbows, etc ... (minimum distance from said devices is equal to 5 times the diameter of the pipe).

For correct operation, respect the maximum distance between the bottom of the appliance and the surface of the pipe (~ 48 mm) (Fig.1).

Once the flow switch has been installed, check the correct operation by pressing on the flow adjustment screw to simulate the flow (Figure 2).



Warning.

The 35 mm blade could interfere with the internal diameter of some 1" fittings. If this occurs simply cut the blade to reduce the length.

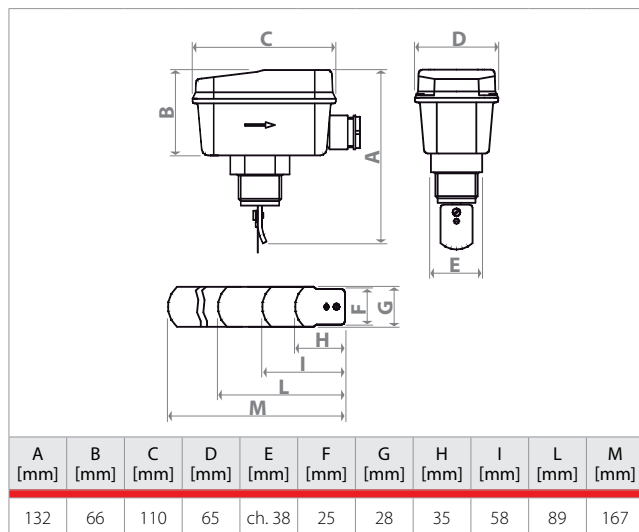
The table indicates the flow rate values at which the intervention and recovery occur, the diameters of the corresponding pipes and the blade to use. If necessary shape the profile of the blades.

Ø piping	Blade length [mm]	MIN Flow rate [m³/h] with flow in:		MAX flow rate [m³/h] with flow in:	
		reduction	increase	reduction	increase
1" (DN25)	35	0,5	1	1,9	2
1 1/4" (DN32)		0,7	1,2	2,7	2,9
1 1/2" (DN40)	58	1	1,6	3,6	3,9
2" (DN50)		2,1	2,9	5,7	6,1
2 1/2" (DN65)	89	2,7	4	6,5	7
3" (DN80)		4,3	6,1	10,7	11,4
4" (DN100)		11,3	14,7	27,6	28,9
5" (DN125)	167 *	6,1	7,9	17,3	18,4
	89	22,8	28,3	53	55,5
6" (DN150)	167 *	9,2	12,8	25	26,7
	89	35,8	43	81,6	85
8" (DN200)	167 *	12,2	16,8	30,5	32,5
	89	72,4	85	165,5	172,3
	167 *	38,5	46,4	90,7	94

* These values are obtained by adding the longer blade



Dimensions



Product specifications

K500

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Additional information

For additional information please check the website: www.giacomini.com or contact the technical service: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com
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 Giacomini S.p.A. Via per Alzo, 39 - 28017 San Maurizio d'Opaglio (NO) Italy