

## Description

The flow switch serie FS is designed for controlling flow rates in pipes and ducts employed in HVAC applications from 1" up to 8". In particular for monitoring flow in water, for pumps in oil circulation, cooling and lubrication systems, heat exchangers, compressors and is used as flow control device or as water failure protection switch. Models available with brass and stainless steel body for aggressive media.

## **Technical specifications**

Flow rate	See schedule
Switching output	Dustproof microswitch as potential-free SPDT contact
Electrical rating	16 (8) A, 24 - 250 V AC, at 24 V AC min. 150 mA
Lifetime	100.000 cycles at nominal load
Electrical connection	Screw terminal, wire up to 1,5 mm <sup>2</sup> , cable Ø 6…9 mm
Max. pressure	See schedule
Calibration	The flowswitch is factory calibrated at its min. sensitivity. To increase the set value turn clock- wise the adjustment screw. The cut-out value must be >- the minimum flow necessary to gu- arantee the protection of the plant. The units without "T" fittings are supplied with 4 paddles, which must be cut off according to the pipe. All devices can be supplied with "T" connection on request as schedule indications.
Housing	ABS, white
Cable conduit	PG 20 x 1,5 mm
Body and lever material	1" GAS, brass or stainless steel Aisi 316
Paddles material	Stainless steel Aisi 304
Dimensions	See drawing
Weight	600 gr
Protection type	IP65
Protection class	III
Max. fluid temperature	-25+120°C
Working humidity RH	1095% RH, non-condensing
Working temperature °C	-40+85°C
Storage temperature	-20+60°C
Installation	Horizontal and vertical, screw-in thread, Rp 1" (ISO7/1) shall be installed far from elbows or thrott- lings, with arrow on flow direction. If pipe is vertical, recalibrate range to balance paddle weight. If the device is downwards mounted take care to slags, and apply it in a straight pipe far from filters, valves, etc with length at least 5 times the diameter of pipe upstream and downstream the unit.
Standards	CE conformity, RoHS

Models	Fluid	Max. pressure	Body material
FS1	normal	15 bar	brass
FS2	aggressive	30 bar	stainless steel Aisi 316



# Flow rates in m<sup>3</sup>/h

	Pipe size	1"	1 1⁄4"	<b>1</b> ½"	2"	<b>2</b> <sup>1</sup> / <sub>2</sub> "	3"	4"	5"	6"	8"
Min. flow rate	Flow increase R to B closes	1.0	1.3	1.7	3.1	4.1	6.2	8.4	12.9	16.8	46.6
	Flow decrease R to Y closes	0.6	0.8	1.1	2.2	2.8	4.3	6.1	9.3	12.3	38.6
Max. flow rate	Flow increase R to B closes	2.0	3.0	4.4	6.6	7.8	12.0	18.4	26.8	32.7	94.2
	Flow decrease R to G closes	1.9	2.8	4.1	6.1	7.3	11.4	17.3	25.2	30.7	90.8

# **Dimensions (mm)**



#### ATTENTION

If flowswitch is used as a minimum flow controller, it is necessary to add another device downstream for alarm condition activation.