

INSTRUCTION MANUAL
Flow Switches PLJ & PLJ EN Series

1. DESCRIPTION

Flow switches PLJ & PLJ EN are devices meant to control the flow of liquids.
Flow switch PLJ is available with 1” NPT-M or 1” GAS-M connection.
Flow switch PLJ EN is available with 1” GAS-M connection and it’s in compliance with the EN 12259-5:2003 Standard entitled «Fixed firefighting systems Part 5 - Water flow detectors».

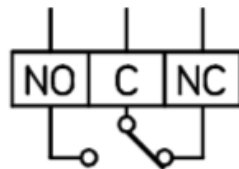
2. TECHNICAL SPECIFICATIONS

	PLJ Series	PLJ EN Series
Metal parts material	Stainless steel	Stainless steel compliant to EN-12259-5
Maximum working pressure	25 bar	25 bar
Room temperature limits	-20 °C / 85 °C	-20 °C / 85 °C
Liquid temperature limits	-30 °C / 120 °C	-30 °C / 120 °C
Protection rating	IP65	IP65
Set of vanes material	Stainless steel	Stainless steel compliant to EN-12259-5
Housing material	ABS	Painted aluminium
Pressacavi	M14	M20
Contact	Micro-switch SPDT 15 (8A) 24/250 VAC	Micro-switch SPDT 15A 125/250 VAC - 5A 24 VDC

3. ELECTRICAL CONNECTIONS

The COM-NC contact closes, at the calibration value, when the flow increases.
The COM-NO contact opens, at the calibration value, when the flow decreases.

SPDT VERSION



No = Normally Open
C = Common
Nc = Normally Close

4. INSTALLATION

Flow switches PLJ & PLJ EN can be mounted in any position.
The arrow must be oriented in the direction of the flow.
In the event of installation with vertical pipes, the instrument needs recalibrating to compensate for the weight of the vanes.
Fit the instrument along a straight run of the piping, in the absence of filters, valves, etc. and along at least five times its diameter, both upstream and downstream.

It’s possible to adjust the calibration of the instrument tightening or unscrewing the screw shown in the picture.



The instrument is delivered equipped with 5 vanes. If necessary, the vanes can be cut by reference to the inner diameter of the piping.

PADDLE DIMENSION

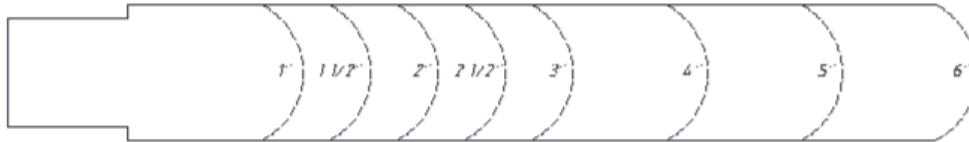


TABLE OF FLOWS

Piping Ø	Min setting (m3/h)	Max setting (m3/h)
1"	0.6 (1)	1.9 (2)
1 ¼"	0.8 (1.3)	2.8 (3)
1 ½"	1.1 (1.7)	4.1 (4.4)
2"	2.2 (3.1)	6.1 (6.6)
2 ½"	2.8 (4.1)	7.3 (7.8)
3"	4.3 (6.2)	11.4 (12)
4"	6.1 (8.4)	17.3 (18.4)
5"	9.3 (12.9)	25.2 (26.8)
6"	12.3 (16.8)	30.7 (32.7)
8"	38.6 (46.6)	90.8 (94.2)

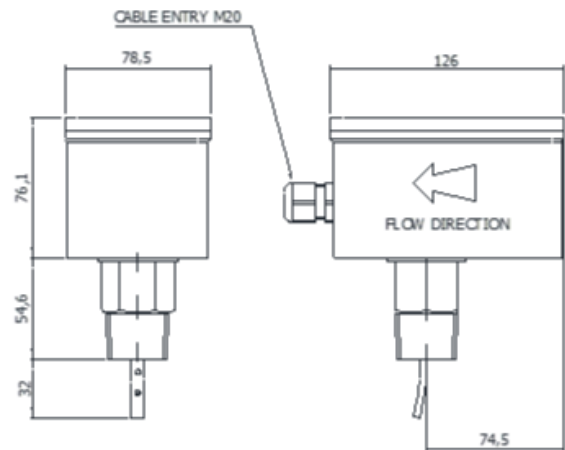
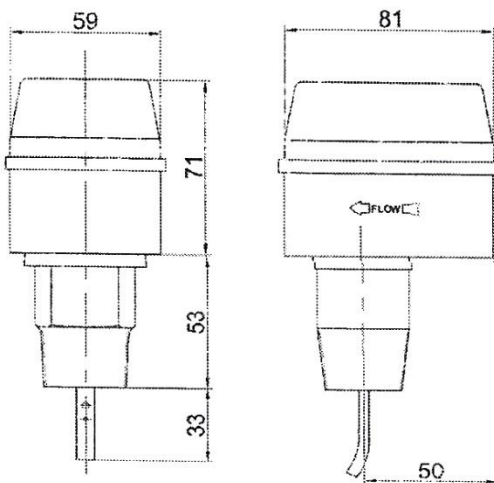
Data inside brackets shown in the table refers to closing values, whereas data outside brackets refers to opening values.

The flow switches are factory-set to the minimum trip value.

By turning the adjusting screw that is inside the housing clockwise the opening value increases.

Flow switch PLJ

Flow switch PLJ EN



5. MAINTENANCE

We recommend routine inspections (roughly once every 6 months) to guarantee the efficiency of the instrument. If it's possible to remove the instrument, check the good operating of the flow switch by moving the paddle. If not, check the good operating of the micro-switch by simply moving the hinge lever.

