

# Paddle flow switches, reed switch contact, ½" male thread, long paddle. Types: R1S and R1F



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Pressure and size	Flow sensing: Cleavable magnetic pull back paddle	Mounting: ½" male thread	Contact: Reed switch, close on flow rise	Electrical rating	Mounting position	Type
PN10 DN≥25				$\leq 1A$ $\leq 70W$ $\leq 250V_{\sim}$		<b>R1S</b> <small>(BSPP)</small> <b>R1F</b> <small>(NPT)</small>

<b>1: Paddle 2: Body 3: Cable</b> <b>R1S (½"BSPP)</b>	<b>1: Paddle 2: Body 3: Cable</b> <b>R1F (½"NPT)</b>

**Main uses:** The most simple flow switch with magnetic pull-back. Recommended mounting position is on horizontal pipes, but can be mounted in any position. For water flow detection on **dia. 25 to 63mm** water pipes

**Functional principle:** Balanced magnetic pallet mounted perpendicular to the flow and activating a reed switch through the wall. The return of the pallet is made by magnetic action, without spring. No seal or liquid can pass between the piping system and the electrical contact. Suitable for corrosive water pools and spas and salination chlorination and bromination systems. Must not be used for water containing magnetic particles or high viscosity liquids, which block the movement of the pallet.

**Adjustment:**  
- By cleaving the paddle

**Main housing material:** Polypropylene, resistant to ozone and water disinfection products, usable with potable water.

**Paddle shaft:** **Titanium**, providing an outstanding corrosion resistance, and improved mechanical live

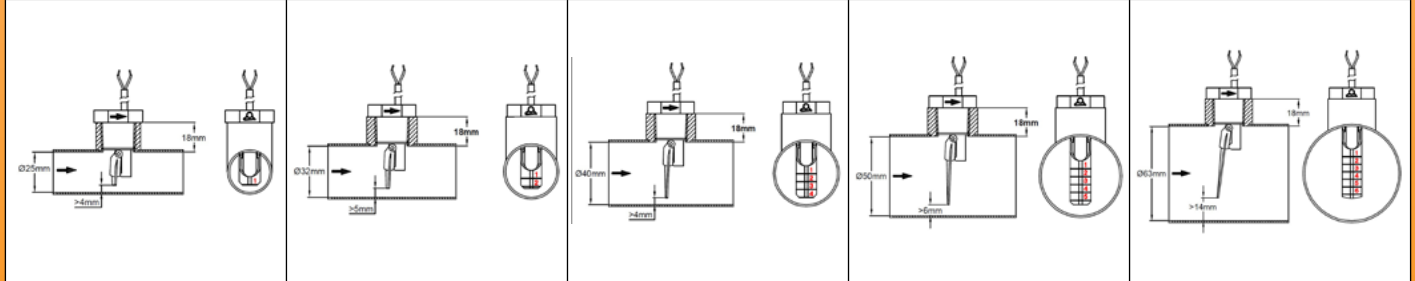
**Electrical rating:** Max 1A, Max 70W, Max 250V, resistive load. Use on inductive circuits reduces electrical rating. We recommend to protect the reed switch with contact protection device when used in inductive loads

**Electric contact type:** Normally open, closes by flow rise

**Liquids compatibility:** For use with clean water and liquids without magnetic particles and without chemical incompatibility with polypropylene and titanium

**Nominal pressure at 20°C:** 1MPa (PN10)

### Mounting configurations



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## Average Flow detection values.

Paddle length	Pipe ID (mm)											
	20		25 Not suitable for R1S (BSPP)		32		40		50		63	
	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open
1			26	6	38	15	79	30	127	58	172	108
1+2					28	11	63	18	83	37	143	73
1+2+3					20	7	49	10	63	27	105	53
1+2+3+4							19	7	57	22	93	47
1~5									48	15	72	31
1~6									48	9	66	23

\* Close by flow rise (L/min) of contact open at no flow position.

\*\* Open by flow decrease (L/min) of contact open at no flow position. Average values for indication only. Standard tolerances ±30%.

**Nominal diameter:** Can be used on 25 to 63 mm internal diameter pipes

The paddle is cleavable and can be cut at various lengths upon pipe diameter. There are cutting lines numbered 1 to 6 every 5mm.

**Recommended mounting position:** On horizontal pipes. Mounting in other positions slightly modify the calibration

**Water pipe connection:** On female ½" fitting. On the type with BSPP thread, a NBR gasket is supplied with the product. On the type with NPT thread, thread sealant must be used.

**Recommended torque:** 7Nm

**Liquids temperature range:** 5 to 80°C

**Ambient temperature range:** 5 to 50°C

**Ingress protection:** IP65

**Electrical connection:** 2 × AWG24 (0.2mm<sup>2</sup>) cable, PVC insulation, T80°, style UL2464.

**Installation instructions:**

- Check carefully the paddle orientation: The arrow on housing must be exactly parallel to the pipe
- A 5 mm minimum gap must be respected between end of the paddle and tube wall opposite to the fitting.
- We recommend the use of nozzles of length less than or equal to 18mm between the gasket seat and the inside of the tube and with an inner diameter greater than or equal to 20 mm, to avoid blocking of the pallet

**Accessories:** ½" PVC saddles for DN40 to DN100 (OD) PVC pipes, and other fittings: see section 8 of this catalogue.

**Options:** cable with connector or terminals, other cable length.

## Main references

Thread	Cable length		
	500mm	1m	2m
½" BSPP	R1S6D4771F45P050	R1S6D4771F45P100	R1S6D4771F45P200
½" NPT	R1F6D4766F25P050	R1F6D4766F25P100	R1F6D4766F25P200

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