

# Paddle flow switches, micro-switch contact, 1/2" BSPP male thread, and Pt100 temperature sensor. Type: R1R



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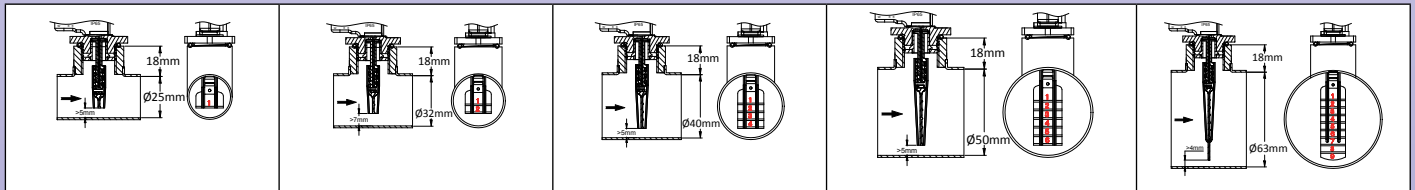
Size and pressure	Flow sensing: Cleavable paddle	Mounting: 1/2" BSPP thread	Contact: Microswitch	Electrical rating	Mounting position	Type
PN10 DN ≥ 25				3A 250V~		<b>R1R</b>

1: Paddle 2: Body 3: Cable 4: Temperature sensor 5: Temperature sensor cable

Versions with connection box

**Main uses:** Water flow detection on water pipes, with simultaneous water temperature measurement  
**Functional principle:** Balanced paddle, perpendicular to the main flow, actuating a micro-switch. Flexible elastomeric gasket between paddle and electric switch. Temperature measurement is made by a plastic pocket located under the 1/2" thread  
**Main housing material:** PPO, fiber glass reinforced, usable with potable water.  
**Paddle material:** Polypropylene, resistant to ozone and water disinfection products  
**Paddle gasket:** Santoprene, resistant to ozone and water disinfection products  
**Electrical rating:** 3A resistive, 250V AC  
**Electric contact type:** SPDT, open or close by flow rise  
**Liquids compatibility:** For use with clean water and liquids without chemical incompatibility with PPO and Santoprene  
**Nominal pressure at 20°C:** 1MPa (PN10)

## Assembly on pipes



## Average Flow detection values vs pipe I.D. and paddle length (Liters/min)

Paddle length	Pipe ID (mm)											
	20		25		32		40		50		63	
	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open
1			34	32	67	63	123	113	225	200	506	424
1+2			23	19	50	48	98	93	173	153	389	324
1+2+3					40	38	76	73	143	128	321	271
1+2+3+4							61	58	110	106	220	200
1~5							49	46	89	84	200	178
1~6									73	68	165	150
1~7									62	58	152	138
1~8											133	123
1~9											113	108

\*: 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 32 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 9 every 5mm.

# Paddle flow switches, micro-switch contact, ½" BSPP male thread, and Pt100 temperature sensor. Type: R1R



**Recommended mounting position:** Vertical, with paddle downside. Other positions are possible with a change in the calibration value related to the paddle weight. .

**Water pipe connection:** Male thread ½"(BSPP) and NBR gasket. Must be used on a BSPP ½" female fitting perpendicular to the main pipe.

**Recommended torque:** 7Nm

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

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

**Ingress protection:** IP65

**Electrical connection:**

*Flow switch contact:* 3 × 0.75 mm<sup>2</sup> cable, PVC insulation, style H05VVF. 2 ways connection block on models with enclosure.

**Temperature sensor:**

- *Pt100 temperature sensor:* 3 × 0.22mm<sup>2</sup> cable, nickel plated braided FEP insulation

Flow and temperature connection cables length is the same

**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 ¾" 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 20mm, to avoid blocking of the pallet

**Accessories:** ½" female 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, paddle type B (see type R1B)

## Main references

	Cable length			With enclosure
	500mm	1m	2m	
Reference	R1RH05079F43N050	R1RH05079F43N100	R1RH05079F43N200	R1RH05079F43N00C

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