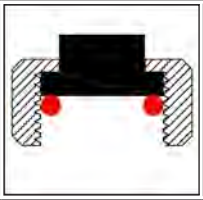
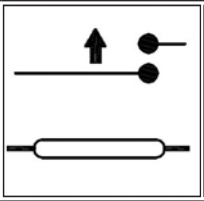
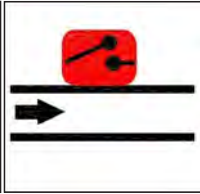
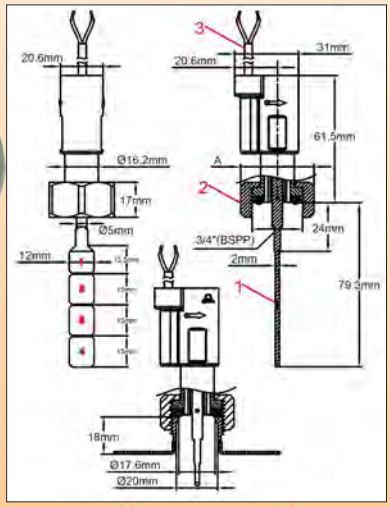
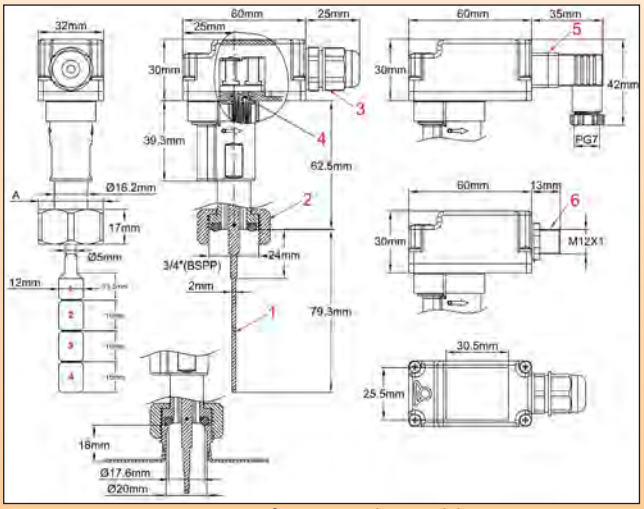
Paddle flow switches, reed switch contact, external body
Type: R1X

Size and pressure	Flow sensing: Cleavable paddle	Mounting: ¾" BSPP Union nut	Contact: Reed switch, close on flow rise	Electrical rating	Mounting position	Type
PN10 DN≥15				≤1A ≤70W ≤250V~		R1X



Cable connection model

1: Paddle
2: Plastic body and plastic ¾" BSPP union nut
3: Cable



Waterproof connection box model

1: Paddle
2: Plastic body and plastic ¾" BSPP union nut
3: Connection box
4: Adjustment screw
5: EN17530-803-A (DIN43650-A) connector (Option)
6: IEC947-5-2, M12x1, 4 terminals connector (Option)

Main uses: General application in flow detection. . Recommended mounting position is on horizontal pipes, but can be mounted in any position. For water flow detection on dia. 15 to 100 mm water pipes
Functional principle:
Balanced magnetic paddle mounted perpendicular to the flow and activating a reed switch through the wall. The return of the paddle is by 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 to be used for water containing magnetic particles or high viscosity liquids, which block the movement of the paddle.
Adjustment:
- By cleaving the paddle
- Fine adjustment by screw driver on internal dial (on models with connection box only)
Paddle shaft: Titanium, providing an outstanding corrosion resistance, and improved mechanical live. Suitable for corrosive water pools and spas and salination chlorination and bromination systems
Main housing material: PPO, fiber glass reinforced for improved pressure resistance, usable with potable water.
Paddle: PPO, 12 mm width, can be cleaved into 4 sections numbered 1 to 4 for pipe diameter adjustment
Pipe mounting: Fiber glass reinforced union nut,¾" BSPP, mounting on ¾" BSPP male fitting with gasket. Recommended torque: 7±1 Nm
Gasket: NBR
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 PPO and titanium
Nominal pressure at 20°C: 1MPa (PN10)
Liquids temperature range: 5 to 100°C
Ambient temperature range: 5 to 80°C
Ingress protection: IP65
Calibration tolerances: +/-15% (on paddle operating force at end of paddle 1)
Electrical connection:
4 possible models:
- 2 x AWG24 (0.2mm²) cable, PVC insulation, T80°, style UL2464.
- Waterproof connection box with 2.5mm² connection block, M16x1.5 cable gland
- Waterproof connection box with EN17530-803-A (DIN43650-A) connector (MOQ apply for this model)
- Waterproof connection box with IEC947-5-2, M12x1, 4 terminals connector(MOQ apply for this model)
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 13.5 mm, to avoid blocking of the paddle.
Accessories: 3/4" male PVC saddles for DN40 to DN100 (OD) PVC pipes, and other fittings: see last section of this catalogue
Options(MOQ apply): cable with connector or terminals, other cable length, nickel plated ¾" BSPP union nut
Important notice: In the case of plastic pipes (PVC, PE), the DN (nominal diameter) corresponds to the outside diameter and wall thickness is variable depending on the application. This must be taken into account to avoid blocking the paddle. In the case of metal pipes, the inner diameter corresponds to the DN. Flow values data are for tubes whose internal diameter corresponds to DN.

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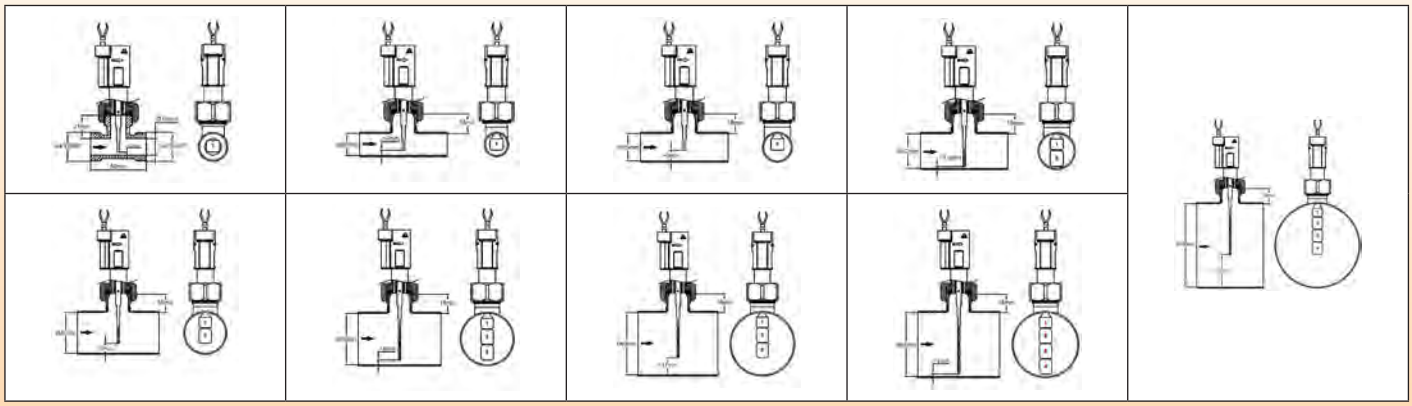
Paddle flow switches, reed switch contact, external body
Type: R1X

Pipe mounting configurations



Average flow detection values (Liters/min)

Paddle length	Pipe ID (mm)															
	15		20		25		32		40		50		63		100	
	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open	*Close	**Open
1-m	2,7	2,3	4,8	4,5	13	11	22	20	38	35	67	47	167	112	472	317
1-H	4,3	3,3	7,3	6,5	18	17	29	27	53	48	83	72	218	142	616	401
1-M	5,5	3,2	14	12	25	22	38	35	67	60	132	108	262	202	740	571
1+2-m									20	18	37	32	68	52	192	155
1+2-H									30	28	53	43	88	72	248	203
1+2-M									40	37	67	63	123	115	347	324
1~3-m											22	20	37	33	125	108
1~3-H											34	32	63	50	176	165
1~3-M											46	43	77	73	233	217
1~4-m													27	24	88	72
1~4-H													43	40	140	132
1~4-M													58	55	180	167

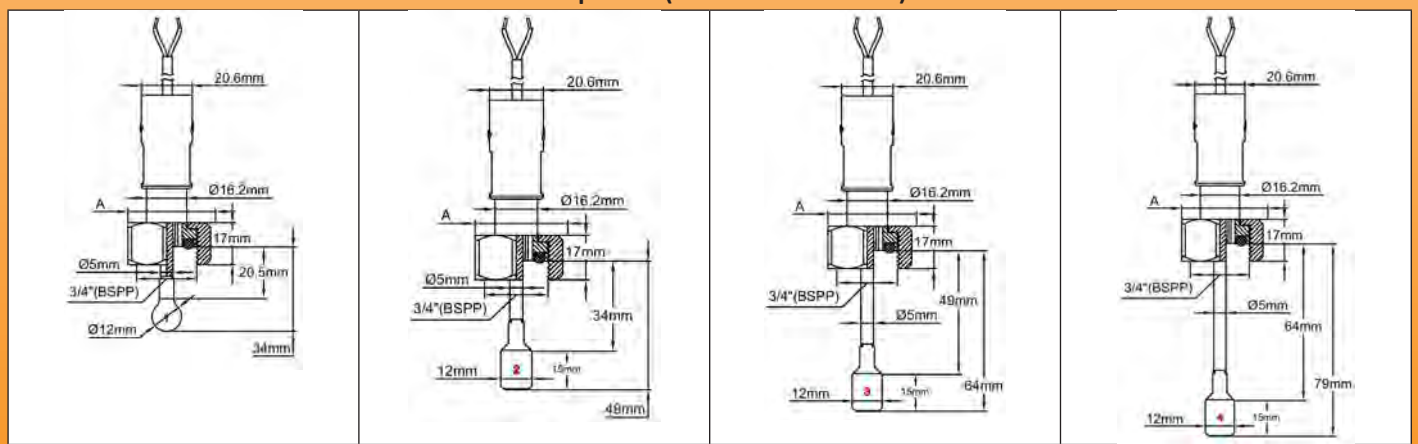
m= calibration at min span
H= calibration at Half span
M= calibration at Max span

* 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 ±15%

Main references (With type A cleavable paddle)

Calibration (Calibration force ±15%, measured at end of paddle N°1)	500 mm cable	2 mm cable	3 mm cable	Waterproof connection box with M16x1.5 cable gland	Waterproof connection box with 4 pins, M12x1 IEC947-5-2 connector	Waterproof connection box with DIN 43650-A connector
Low span end: 3gr	R1X636680G35N050	R1X636680G35N200	R1X636680G35N300	R1X636680G35N00C	R1X636680G35N00L	R1X636680G35N00D
Middle span:7gr	R1X676680G35N050	R1X676680G35N200	R1X676680G35N300	R1X676680G35N00C	R1X676680G35N00L	R1X676680G35N00D
High span end:14 gr	R1X6E6680G35N050	R1X6E6680G35N200	R1X6E6680G35N300	R1X6E6680G35N00C	R1X6E6680G35N00L	R1X6E6680G35N00D

Other paddles (Non cleavable models)



Paddle type B	Paddle type C	Paddle type D	Paddle type E
Replace 6680 in reference by 1234	Replace 6680 in reference by 1549	Replace 6680 in reference by 1564	Replace 6680 in reference by 1579

Consult us for flow detection values with these paddles. OEM paddles can be made on order (MOQ apply)