

Paddle Flow Switch WFS27020PF(xx) Series



Principles & Structures:

WFS27 series paddle flow switches are flow switches with brand-new structure, which developed by researchers specializing in this industry for years after an analysis of the shortcomings of the current flow switches applied in small heat generating air source heat pumps, water/pool heat pumps. It follows a simple and reliable design concept, and greatly improves the reliability of flow switches on structure aspect, which is incomparable to the non-traditional target flow switch. Besides what mentioned above, this type of flow switch is also famous for characters of plug-in installation, mechanical flow switch and built-in magnetic trigger switch.

Features:

Mechanical parts are safely isolated from electrical parts, and bellows vulnerable to cause malfunction are not part of our flow switch. Materials in contact with liquid are reinforced nylon, PPO, brass and stainless steel. All plastic flow switch are optional for connecting with male thread PVC joint, and is applicable to UPVC pipe of current seawater heat pump or swimming pool heat pump. Flow switches with brass components are applicable to small heating pump. Our flow switch use imported magnetism-sensitive switch as an electrical action component, which has small disconnection and reset flow, and its negligible pressure drop make it to be the first priority flow switch for pool heat pumps and other heat-pumping air conditioners.

Applications:

This type of switch is dual-use for vapor and liquid and is widely used in industrial automation/ mechanical equipment/ air compression industry/ refrigeration and air conditioning field. Because the magnet of flow switch is not in a flowing channel, it can be used in sewage systems and work properly. It's the first priority flow protection switch for air source heat pumps, seawater or pool heat pumps.

Applicable Medium:



Please indicate your metering substances with your order.

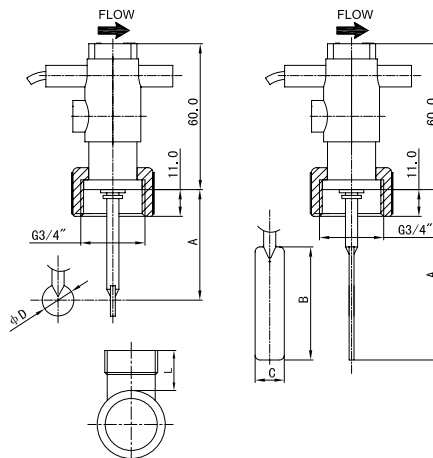
Parameters:

caliber	model	Adjustable flow range l/min(water)	Max Flow Rate l/min(water)	A mm	B mm	C mm	D mm	L mm
φ20	WFS27020PF30..	5.0(4.3) ~ 6.8(5.8)	40	29.5	--	--	13	29
φ25	WFS27020PF35..	7.7(6.6) ~ 10.5(8.9)	60	35.5	--	--	13	29
φ32	WFS27020PF35..	7.7(6.6) ~ 10.5(8.9)	80	35.5	--	--	13	29
φ40	WFS27020PF35..	19.9(16.9) ~ 26.9(22.9)	100	35.5	--	--	13	29
φ50	WFS27020PF45..	31.1(26.5) ~ 42.0(35.7)	150	45.5	--	--	13	29
φ63	WFS27020PF70..	48.0(40.8) ~ 64.9(55.2)	250	70	46.5	12	--	29

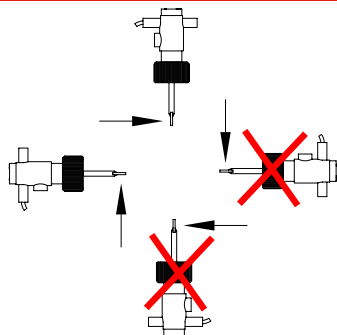
Note: 1. Of adjusting flow range parameters in the table above, outside the brackets are closed flow points; inside the brackets are disconnected (open) flow points.
 2. length of different paddles apply to different measuring method, please pay attention to measurement of figure A in the pictures below.
 3. Flow range refers to tested flow in certain UPVC tee joints, and it is for reference only; actual flow rate depends on what kind of tee joint used.
 4. This is just part of parameter range, for more information, please contact us

Technical Parameters:

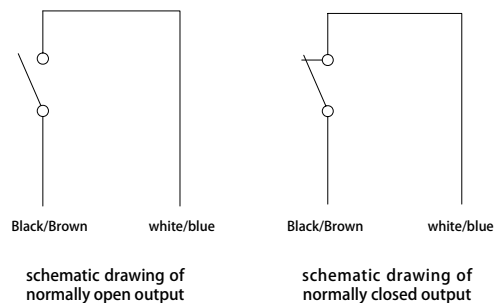
- Voltage: Max 250V
- Max Current: 1A, 50VA
- Connection Type: wire directly attached/DIN43650A industrial plug
- Output: SPST magnetism sensitive switch (default setting normally open)
- Proof pressure: 10bar (plastic shell at 25°C)
- Average Pressure loss: 0.01bar (at max flow rate)
- Working temperature: -20...85°C (customizable for -30°C lower temperature type)
- Enclosure protection grade: IP65
- Material: shell in contact with liquid: PPO plastic
Paddle: PPO plastic



Installation Locations:



Electrical Output:



Nomenclature:

WFS27	0	20	P	F	30	P	A	-1.0	/1M	Specification
WFS27										WFS27 series paddle flow switch
	0									shape with single magnet
	1									shape with double magnet
		20								body connected thread: G3/4" plug-in with female thread
			P							materials of shell in contact with liquid:engineering plastic
				F						connection type: plug-in with female thread
					28					code of paddle length: 28
					29					code of paddle length: 29
					30					code of paddle length: 30
					34					code of paddle length: 34
					35					code of paddle length: 35
					38					code of paddle length: 38
					40					code of paddle length: 40
					42					code of paddle length: 42
					44					code of paddle length: 44
					45					code of paddle length: 45
					46					code of paddle length: 46
					48					code of paddle length: 48
					55					code of paddle length: 55
					57					code of paddle length: 57
					70					code of paddle length: 70
					100					code of paddle length: 100
				 (length and type of paddles are influenced by pipe caliber and flow rate)
						P				nut material:plastic(can be omitted)
						B				nut material:nickle plated brass
							P			paddle material:plastic(can be omitted)
							A			paddle material:brass
								-1.0		protection flow in pipes of certain caliberm ³ /h(not applicable for no protection flow)
							
									/1M	wire length:1M= 1 meter
									/D	DIN43650 industrial plug(with electrical junction box)
								

Hints for Orders:

- 1、 Please specify medium flow direction, medium type, pipe diameter and expected setting value when ordering. We can complete it in factory settings.
- 2、 If viscous medium, please indicate viscosity, temperature and type of medium.
- 3、 If gaseous medium, please indicate pressure (gauge/absolute pressure), temperature and type of medium.

Optional Joints:



Note: please indicate the joint in your order.