FST320 Electronic Flow Switch

MAIN FEATURES

- Digital clear display flow percentage
- high sensitivity
- The switch value can be adjusted continuously
- PNP / NPN / relay / 4 ~ 20mA
- Gas liquid dual purpose
- Suitable for various pipe diameter requirements
- Wide power supply (24 VDC, 85 ~ 265vac, 120 ~ 370 VDC)
- IP67 protection level

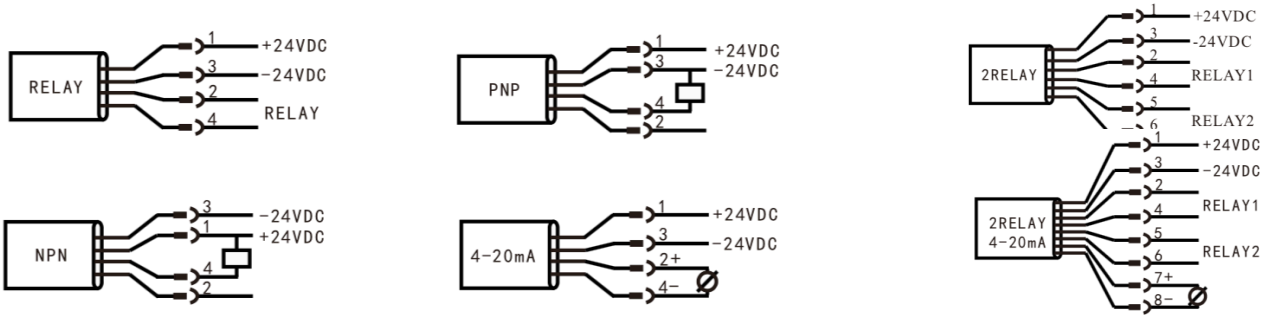
WORKING PRINCIPLE

FST320 electronic pressure switch hardware is widely used in aviation, automobile, military and other high-tech fields of precision electronic components, super strong anti-interference and reliable and stable patent integrated circuit design, simple operation, rich instrument interface software system, so that the detection signal more accurate and stable Its products have been widely used in metallurgy, power, pharmaceutical, chemical, petroleum, water treatment, food and other industries.

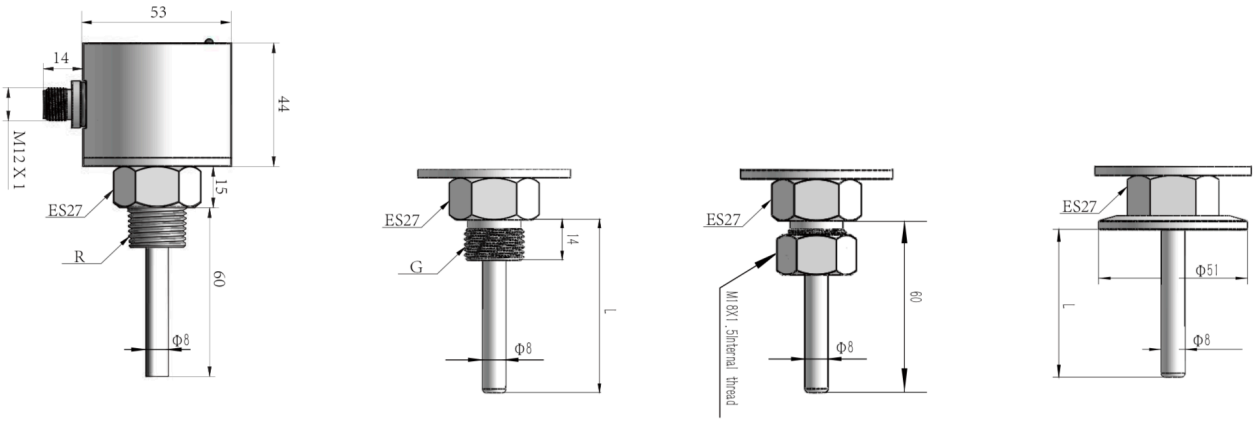
SPECIFICATION

ITEMS	PARAMETER	ITEMS	PARAMETER
Measuring range	Water: 3 ~ 300cm / S; gas: 0 ~ 9000cm / S; oil: 3 ~ 300cm / s	Sensor length	15mm, 20mm, 30mm, 40mm, 60mm
Accuracy	±1~±10cm/s	Display	LED digital display
Warm up time	3 minutes after power on	Current consumption	< 80mA
Working pressure	100bar	Setting mode	key setting
Medium temperature	- 40 ° C ~ 125 ° C	Response time	< 2 s
Process connection	G1 / 2, G1 / 4 external thread, M18 × 1.5 internal thread	Load current	250mA, relay: 30VDC / 5A, 85 ~ 265vac / 5A 120~370VDC/5A
Set way	Potentiometer setting	Maximum change rate of medium temperature	300K / min
Output signal	PNP / NPN / relay / 4 ~ 20mA	Electrical protection	reverse / overload / short circuit
Power supply	24 VDC, 85 ~ 265vac, 120 ~ 370 VDC	Protection grade	IP67
Connection mode	standard M12 connector	Material	probe: ansi316l, Body: ansi316l

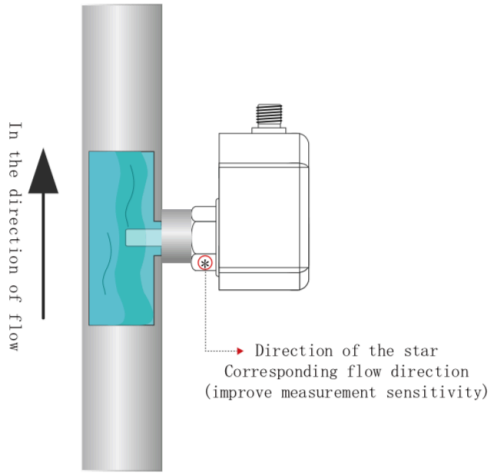
WIRING DIAGRAM



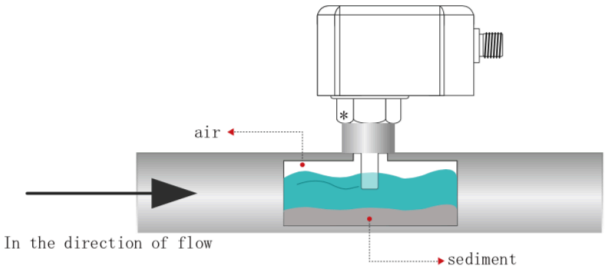
DIMENSIONS (mm)



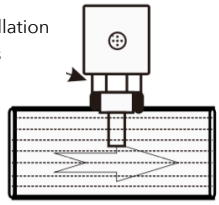
INSTALLATION



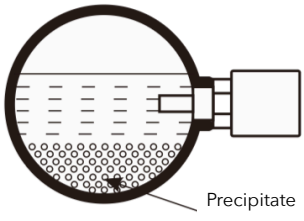
When mounted vertically, it shall be mounted on a pipe segment flowing from bottom to top.
When mounted horizontally, the probe should avoid air and sediment.



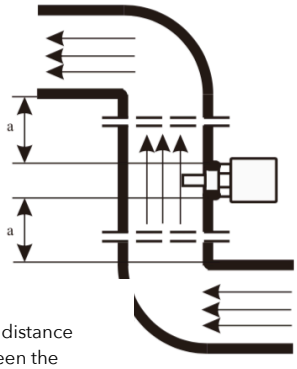
Installation signs



When installing, please pay attention to the flow switch installation indication is opposite to the flow direction.



If there is sediment in the pipe, please refer to this installation method.



a≥3D
A the distance between the installation point and the elbow
D tube diameter

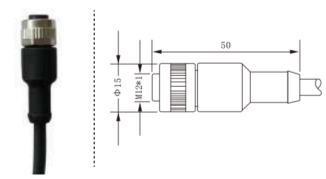
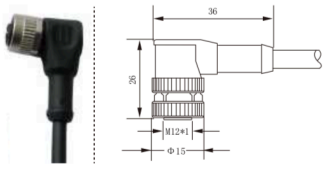
ORDER GUIDE

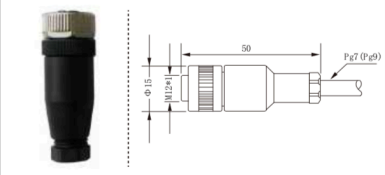
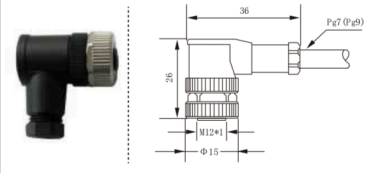
FST320	Electronic flow switch					
	CODE	Thread size				
	G12	Joint thread G1/2 external thread				
	G14	Joint thread G1/4 external thread				
	R12	Joint thread RC1/2 external thread				
	R14	Joint thread RC1/4 external thread				
	M18	Joint thread M18*1.5 internal thread. It is convenient to use with the installation accessories to rotate the installation direction on site.				
		CODE	Power supply			
		DC	24±20%VDC electricity			
		AC	230V±15%VAC electricity			
			CODE	Output		
			P	PNP output		
			N	NPN output		
			C	Relay output		
				CODE	Electric connection	
				M	M12*1 connector (standard zl05-pu02fg, see the attachment for details)	
				Z	Direction outgoing (standard with 2 meters of wire)	
					CODE	Length of probe rod
					-	Standard type G thread, with thread 30mm suitable for ≤DN32 Standard type R thread, 35mm thread is suitable for ≤DN32
					50	mm (including 50 thread), suitable for ≥DN40

* factory standard with electrical accessories M12 connector type zl05-pu02fg
* select M18*1.5 internal screw mounting method please note that installation accessories are selected,M18 screw does not support rod length variation
* for electrical accessories and installation accessories, please refer to the attachment page on page -

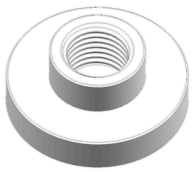
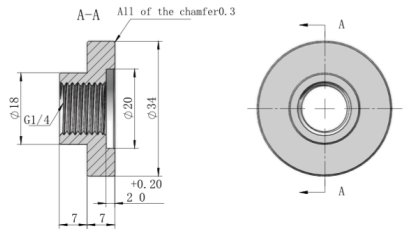
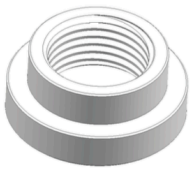
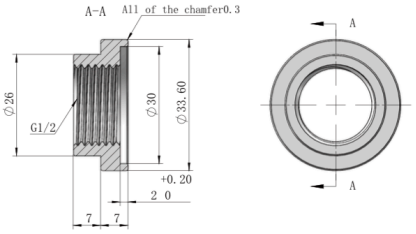
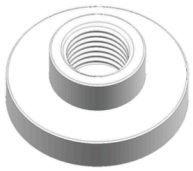
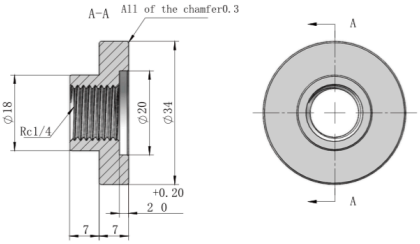
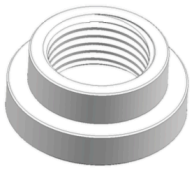
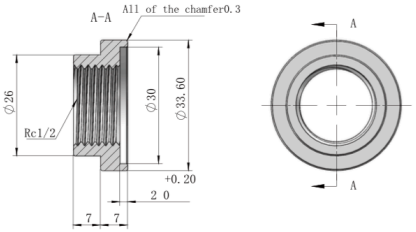
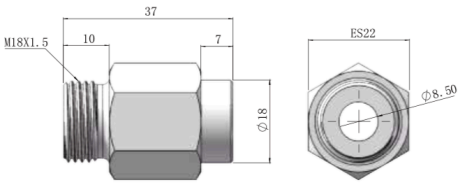
OPTIONAL ACCESSORIES

- **Electrical accessories**

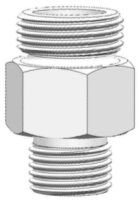
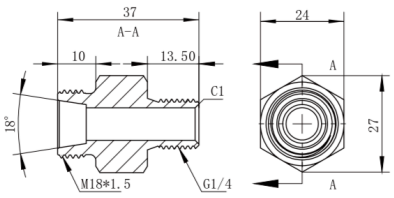
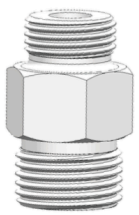
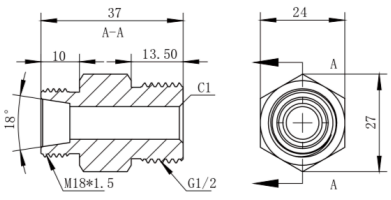
name	Outline drawing/dimension drawing (mm)	material	model
M12*1-5Pin (2m cable)		PUR	ZL05-PU02G
M12*1-5Pin (5m cable)			ZL05-PU05G
M12*1-5Pin (10m cable)			ZL05-PU010G
		PVC	ZL05-PC02G
			ZL05-PC05G
			ZL05-PC010G
M12*1-5Pin (2m cable)		PUR	ZL05-PU02W
M12*1-5Pin (5m cable)			ZL05-PU05W
M12*1-5Pin (10m cable)			ZL05-PU010W
		PVC	ZL05-PC02W
			ZL05-PC05W
			ZL05-PC010W

M12* 1–4pin /5Pin self–connector /size drawing (mm)	model
	GL04 (4Pin joint)
	GL05 (5Pin joint)
	WL04 (4Pin joint)
	WL05 (5Pin joint)

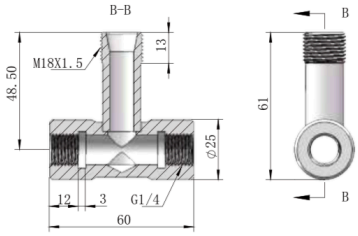
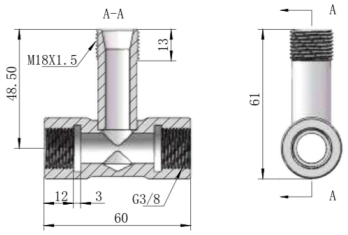
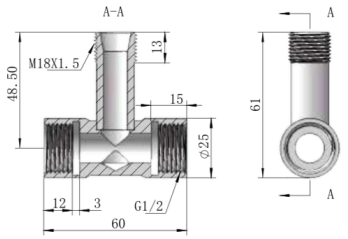
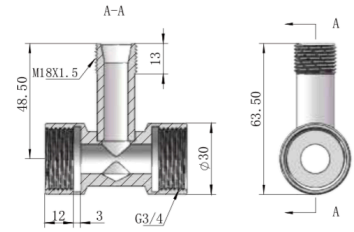
• Installation accessories

name	contour map	Size chart (mm)	model
G1/4Welding the base			FA002-G14 (Material: 304 stainless steel)
G1/2Welding the base			FA002-G12 (Material: 304 stainless steel)
Rc1/4Welding the base			FA002-R14 (Material: 304 stainless steel)
Rc1/2Welding the base			FA002-R12 (Material: 304 stainless steel)
M18*1.5Welding the base			FA002-M18 (Material: 304 stainless steel)

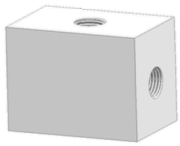
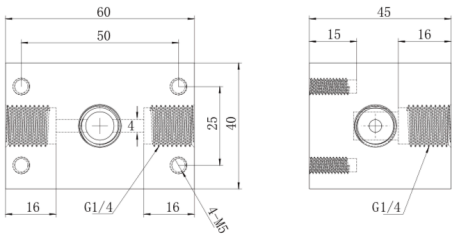
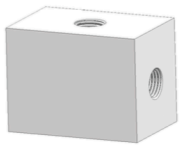
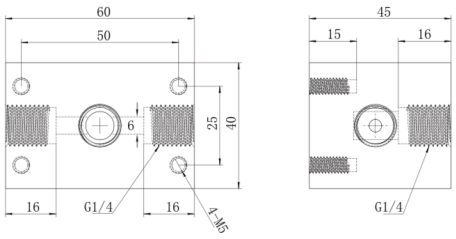
• Optional accessory -adapter

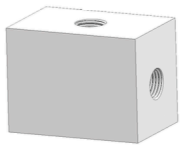
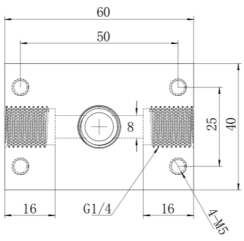
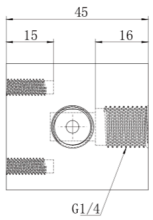
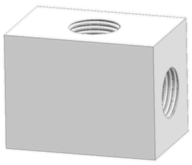
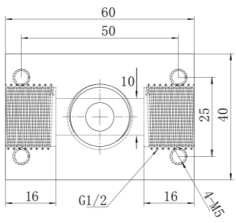
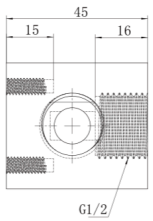
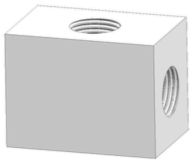
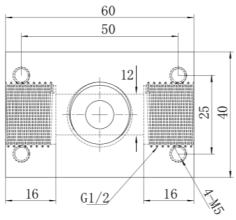
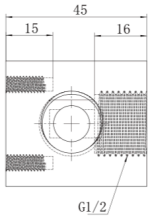
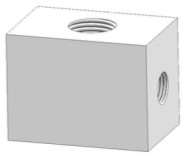
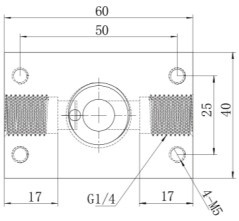
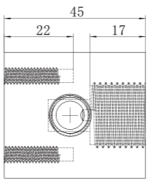
name	contour map	Size chart (mm)	model
M18 * 1.5 internal thread To g1/4 male thread, Probe insertion depth 15mm			FA004-M18G14S (Material: 304 stainless steel) FA004-M18G14T (Material: brass)
M18 * 1.5 internal thread To g1/2 male thread			FA004-M18G12S (Material: 304 stainless steel) FA004-M18G12T (Material: brass)

• Optional accessory -tee

name	contour map	Size chart (mm)	model
M18 * 1.5 internal thread Equipped with G1/4 tee			FA003-M18G14 (Material: 304 stainless steel)
M18 * 1.5 internal thread With G3/8 tee			FA003-M18G38 (Material: 304 stainless steel)
M18 * 1.5 internal thread Equipped with G1/2 tee			FA003-M18G12 (Material: 304 stainless steel)
M18 * 1.5 internal thread With G3/4 tee			FA003-M18G34 (Material: 304 stainless steel)

• Optional accessory -tee

name	contour map	Size chart (mm)	model
Type G1/4 small flow tee			FA010-04G14 (material: PP)
Type G1/4 straight hole tee			FA010-06G14 (material: PP)

Type G1/4 small flow tee				FA010-08G14 (material: PP)
Type G1/2 straight hole tee				FA010-10G12 (material: PP)
Type G1/2 straight hole tee				FA010-12G12 (material: PP)
G1/4 gas only Tee adapter				FA012-01 (material: PP)