

PS300 Series Smart Industry Pressure Switch



Characters:

- ☆ Accuracy: $\leq \pm 0.5\% \text{F.S.}$
- ☆ High stability and reliability
- ☆ Pressure interface can rotate 330°
- ☆ Digital calibration system
- ☆ 4 Bits LED display pressure value
- ☆ Analog output (4~20 mA) or RS485 digital output
- ☆ 2 channels switch output, load capacity of 1.2 A
- ☆ presupposed pressure switch point and Switch point action delay function
- ☆ Equipped with node action leds, convenient for observation
- ☆ Key adjustment and the scene setting various parameters, easy to operate

Applications:

- ☆ Hydraulic pressure controller
- ☆ Industrial automation control
- ☆ Tank Liquid Level Control
- ☆ Petrochemical industry
- ☆ Water conservancy
- ☆ Pressure meter
- ☆ Laboratory equipment
- ☆ Real-time management well
- ☆ Automatic detection system
- ☆ Gas pressure measurement
- ☆ And so on

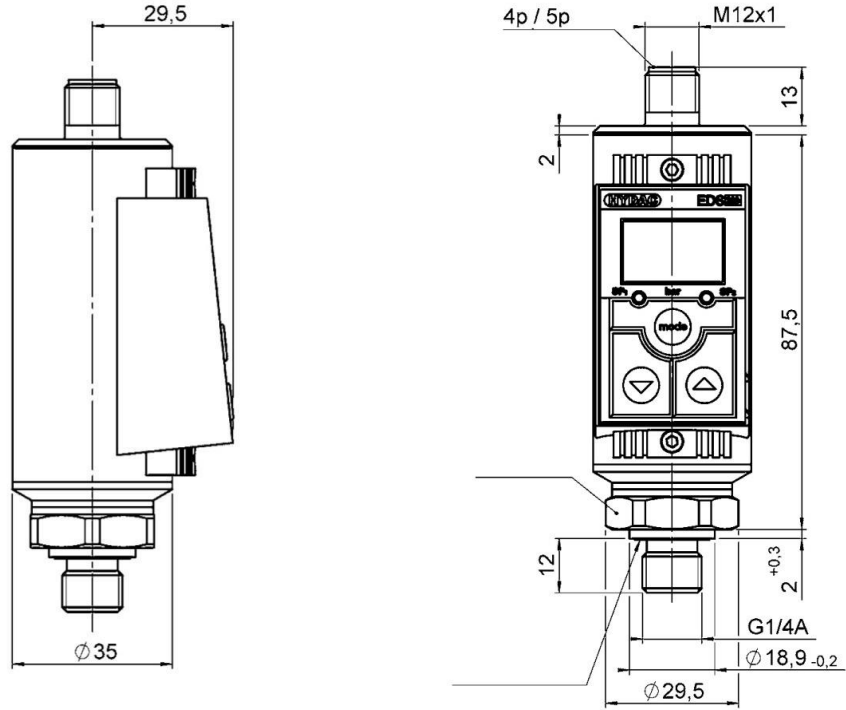
1. Profiles:

PS300 series intelligent pressure switch is an intelligent digital pressure measurement and control products, which with pressure measurement, display, output and control integrated. This product is a full electronic structure, use isolated silicon oil filled diaphragm as sensing components, the output signal is composed of high precision, low drift amplifier processing, signal send into the high precision A/D converter, the digital signals into the microprocessor can processing and through processing the signal can control two channels switch, which is monitoring and control of the pressure control system. The intelligent digital pressure switch is flexible to use, simple operation, easy debugging, safe and reliable. Widely used in hydropower, tap water, petroleum, chemical, mechanical, hydraulic and other industries, the fluid medium pressure measurement display and control.

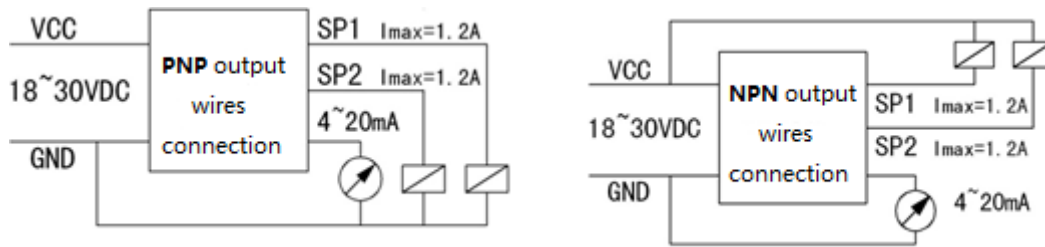
2. Specifications:

Model:	PS300S/ PS300M/PS300A1/PS300R
Parameter:	
Pressure Range:	-1 Bar-1 Bar; 0-0.1 Bar.....1000 Bar / 0-2 Psi...15000 Psi Optional
Pressure Type:	Gauge pressure; Absolute pressure; Sealed gauge pressure optional.
Safe Overload:	150% F.S.
Burst Pressure:	300% F.S.
Accuracy: (Linearity Hysteresis Repeatability)	≤ ±0.5%F.S Including non-lin., rep. and hys. Optional
Display Units Accuracy:	≤ ±0.1%F.S
Display Units Span:	-1999~9999
Total Error Band:	0...50 °C max. ±0.5 %FS -10...70 °C max. ±1.0 %FS
Long Stability:	Standard: 0.1%F.S±0.05%
Working/Storage Temp:	-20°C~80°C
Tempe Compensation:	10°C~60°C(standard)
Medium compatible:	Compatible with 316 Stainless Steel or 1Cr18Ni9Ti stainless steel
Output:	Two switches output; One switch with 4~20mA or RS485 as output signal; Two switches with 4~20mA or RS485 as output signal optional
Power Supply:	12~32V DC
Switch type:	PNP, NPN optional
Load Resistance:	<24Vdc 1.2A
Max power consumption:	<1w
Zero Temp. Drift:	0.03%FS/°C (≤100kPa) , 0.02%FS/°C (>100kPa)
Body materials:	304 stainless steel; 1Cr18Ni9Ti stainless steel optional
Material of diaphragm:	316L Stainless steel
Filling oil:	Silicon oil; Fluorocarbon oil (Oxygen Services)
Electronic connection:	Plug: M12 (4-poles) Type IP65; M12*1-5P; DIN43650 optional
Mechanical vibration:	±20g
Pressure connect port:	G1/4"male, G1/2"male, 1/8"NPT male, 1/4"NPT male, 1/2"NPT male and female optional. (by customized)
Dimension:	See below drawing
Water Proof:	IP65
Response time:	≤5ms
Endurance:	≥1 million cycles, 0...100 %FS at 25°C

3. Dimension and Drawing:



4. Electronic Connections:



PS300S	PS300M	PS300A1	PS300R
Hirschman terminal box IP65	M12*1 -4P	M12*1 -5P	6 Pins Connectors
1:VCC	1:VCC (brown)	1:VCC (brown)	1:VCC (red)
2:GND	2:SP2 (white)	2:SP2 (white)	2:GND (yellow)
3:SP1	3:GND (blue)	3:GND (blue)	3:SP1 (brown)
4:SP2	4:SP1 (black)	4:SP1 (black)	4:SP2 (orange)
		5:4~20mA (gray)	5:RS485A (blue)
			6:RS485B (green)

5. Part Number Selection Table:

Smart Industry Electronic Pressure Switches										
PS300S	DIN43650 Hirschman Terminal Box Type IP65									
PS300M	M12*1 -4P Type IP65									
PS300A1	M12*1 -5P Type IP65									
PS300R	6 Pins Connectors Type IP65									
	Range Code	Pressure range								
	001	0...1 Bar								
	002	0...2 Bar								
	010	0...10 Bar								
	015	0...15 Bar								
	600	0...600 Bar								
	XXX	By Customized								
		Code	Pressure type							
		G	Gauge (relative pressure type)							
		A	Absolute pressure							
		N	Negative pressure							
		Code	Pressure connection							
		8	M20x1.5 male	10	1/2" NPT male					
		6	G1/4" male	3	1/4" NPT male					
		9	G1/2" male	X	By Customized					
		Code	Signal Output							
		S2	Two Channels Switch Output (4 wires)							
		SA	One Channel Switch and 4-20mA Output (4-5 wires)							
		SR	Two Channels Switch and RS485 Output (6 wires)							
		Code	Power Supply							
		S3	24 V DC (Standard)							
		X	24V±20%							
		Code	Switch Types							
		P	PNP							
	N	NPN								
	Code	Accuracy								
	1	±0.5%F.S (Typical)								
	2	±0.25%F.S (Customized)								
	Code	Cable Length								
	000	Non-Cable								
	005	5 Meters								
	XXX	By Customized								
PS300S	010	G	6	S2	S3	P	1	002	Remarks	

Example Part Number: PS300S010G6S2S3P1002