

SS405 series flush diaphragm pressure transmitters

Descriptions

SS405 series flush pressure transmitter adopts a newly designed flat membrane structure. Its hard stainless steel 316L steel plate has super hardness and can easily resist the scratch of sharp particles, the transmitter is very rugged and particularly suitable for pressure measurement where the media is with high viscosity (thick fluids, oils, rubber, pulps, chemical products, etc.) or the traditional pressure transducers with internal measuring chamber can't be used.



SS405 series flush pressure transmitter uses a high performance silicon chip as the sensor element, which makes the transmitter has a good accuracy typically 0.5%F.S, and also the transmitter is very reliable, because it uses a very stable circuit board inside. The new structure SS405 series is a very excellent product, taking into account the accuracy and stability of the product, one of its typical applications is used on shield machines and also very suitable for use with food and industrial fluids that are difficult to measure because of sticking or plugging of orifices, typically slurry, cement, crude oil.

Technical data

Performance (EN 60770)

Accuracy @ 25 °C	± 0.5% F.S. (incl. non-linearity, hysteresis and repeatability)
Non-linearity BFSL (conformity)	± 0.3% F.S.
Hysteresis and repeatability	± 0.1% F.S.
Response time	
Pressure range	Minimum range: 6 bar Maximum range: 600 bar See more details in page 5 (part number chart)
Overload pressure	2.0 × F.S. (≤ 250 bar)
	1.5 × F.S. (> 250 bar)
Pressure type	vented gauge, sealed gauge
Long term stability	≤ 0.2% F.S./Year
Temperature coefficient	± 0.03% F.S./°C

SS405 series flush diaphragm pressure transmitters

Electrical specifications

Output signal	4-20mA	0-10V	0-5V/0.5-4.5V	0.5-4.5V	10%-90%
Supply voltage	9-30Vdc	12-30Vdc	9-30Vdc	5Vdc	5V ratio-metric
Polarity protected	yes	yes	yes	yes	yes
Short-circuit protected	yes	yes	yes	yes	yes
Zero and span adjustment	No	No	No	No	No
Surge protection	yes	yes	yes	yes	yes

Environmental conditions

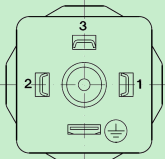
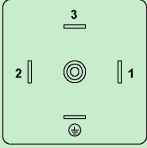
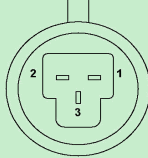
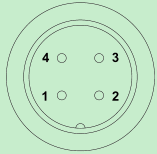
Medium temp range	-40 → +100 °C	More options see page 6
Ambient temp range	-20 → +80 °C (depending on electrical connection)	
Compensated temp range	0 → +70 °C	
EMC - Emission	EN 61000-6-3	
EMC - Immunity	EN 61000-6-1	
Insulation resistance	> 100 MΩ at 250 V	

Mechanical characteristics

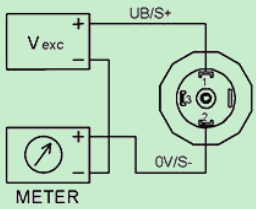
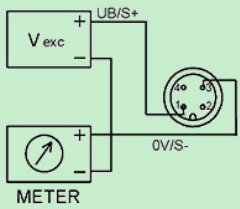
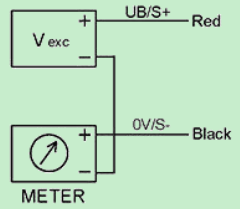
Materials	Diaphragm	Stainless steel 316L (typical)	More options see page 5
	Housing	Stainless steel 304 (typical)	Stainless steel 316L (optional)
	Pressure connection	Stainless steel 316L	
	Electrical connection	Depending on the connection type	
	O-ring	Not used, all stainless steel welding structure	
Pressure connection	1/2" BSP, M20 x 1.5	More options see page 5	
Electrical connection	DIN43650A, DIN43650C, Cable outlet, M12 × 1, LED Display		
Weight	225-500g (depending on pressure connection and electrical connection)		
Sealing rating	IP 65 (fulfilled together with mating connector)		

SS405 series flush diaphragm pressure transmitters

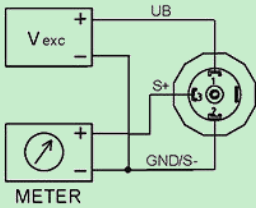
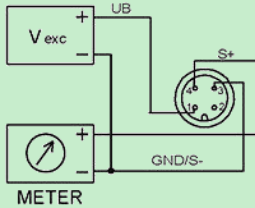
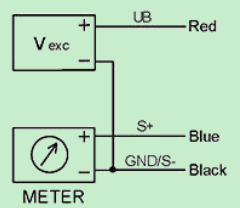
Electrical connector type

DIN43650A	DIN43650C	3-pin Packard	M12 × 1
			

Electrical connections for 4-20mA current output signal (2 wire)

DIN43650	M12 × 1	Cable outlet
Pin 1: + supply Pin 2: + output	Pin 1: + supply Pin 3: + output	Red: + supply Black: + output
		

Electrical connections for 0-10V, 0-5V, 0.5-4.5V voltage output signal (3 wire)

DIN43650	M12 × 1	Cable outlet
Pin 1: + supply Pin 2: GND Pin 3: + output	Pin 1: + supply Pin 3: GND Pin 4: + output	Red: + supply Black: GND Blue: + output
		

SS405 series flush diaphragm pressure transmitters

Dimensions for electrical connections and housing (Unit: mm)

DIN43650A	DIN43650C	Cable outlet
H = 74 mm	H = 74 mm	H = 64 mm

M12 × 1	LED Display
H = 67 mm	H = 122 mm

Dimensions for pressure connections (Unit: mm)

G 1/2" thread	1/2" NPT thread	M20 x 1.5 thread	PT 1/2" thread

SS405 series flush diaphragm pressure transmitters

Part number chart (How to order)

PART NUMBER REQUIRED: **SS405.PL.01.A.01.A.06 (EXAMPLE)**

1	Pressure range(bar)	PL
	PK(0...6) PL(0...10) PM(0...16) PN(0...25) PO(0...40) PP(0...60) PQ(0...100) PR(0...160) PS(0...200) PT(0...250) PU(0...300) PV(0...350) PW(0...400) PX(0...500) PY(0...600) 1Z(Other pressure range or unit is on request)	
2	Pressure type	01
	01(Gauge)	
3	Electrical connection	A
	A(DIN43650A) B(Cable Outlet) C(M12 × 1) D(LED Display) E(DIN43650C) F(Plug type)	
4	Pressure connection	01
	01(1/2" NPT male) 02(1" NPT male) 03(3/4" NPT male) 04(G 1/2" male) 05(G 1" male) 06(G 3/4" male) 07(PT 1/2" male) 08(PT 1" male) 09(PT 3/4" male) 16(M20 x 1.5 male) 17(M27 x 2 male) 4Z(Other pressure connection is on request)	
5	Input & Output	A
	A(9-30Vdc & 4-20mA) B(12-30Vdc & 0-10V) C(9-30Vdc & 0-5V) D(9-30Vdc & 0.5-4.5V) E(5Vdc & 0.5-4.5V) F(5Vdc ratiometric & 0.5-4.5V)	
6	Cable length	06
	01(1m) 02(2m) 03(3m) 04(4m) 05(5m) 06(None) 6Z(Other length is on request)	

Contact us

Company	Ningbo Sendo Electronic Technology CO., LTD		
Email	sales@sendo-sensor.com		
Email	cain.chen@sendo-sensor.com		
Factory	No 15, Yongxing 2nd Rd, Chengbei Industrial Park, Huizhou District, 245900 China		
Office	Building. 1#1108, Wante business center, Hi-Tech, 315040 China		
Website	http://www.pressuresensorsuppliers.com	http://www.sendo-sensor.com	
Skype: sendosensor	WeChat: chenjie4884	WhatsApp: +8613616574884	
Tel: 0086-0574-27725960	Fax: 0086-0574-27725970	Phone: 0086-13616574884	

*Specifications subject to change without notice, the latest date sheet please contact: sales@sendo-sensor.com