

**SS303 series piezoresistive pressure transmitters for high temperature application**

**Features**

- CE conformity
- Rugged construction
- Stainless steel 316L diaphragm
- Piezoresistive pressure sensor, oil filled
- Pressure ranges from 0..0.1 up to 1000 bar
- Isolated construction, able to test various media
- Integrated with cooling fins, maximum temp to 250°C
- Output signals: 4-20mA and 0-10V, 0-5V voltage output



**Descriptions**

SS303 series high temperature pressure sensor is developed from SS312 series, different numbers of cooling fins are integrated between the process connection and housing, acting as a heat sink, which cools the process before it reaches the transmitter, extend the maximum process temperature of pressure sensor from 302 °F (150 °C) up to 482 °F (250 °C), with 5 pcs of cooling extensions, the standard medium working temperature is up to 150°C, 10 pcs is 200°C, 15 pcs is 250°C.

SS303 series with cooling fins has been designed for applications with higher temperature requirements, its modular design uses the selection of off-the-shelf pressure transducer as the sensing part, offers a variety of signal, thread and connecting options, allowing a quick customized production.

**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	< 4 ms
Pressure range	Minimum range: 0.1 bar Maximum range: 1000 bar See more details in <a href="#">page 5 (part number chart)</a>
Overload pressure	2.0 × F.S. (≤ 250 bar)
	1.5 × F.S. (> 250 bar), 1.2 × F.S. (1000bar)
Pressure type	vented gauge, sealed gauge, absolute
Long term stability	≤ 0.2% F.S./Year
Temperature coefficient	± 0.03% F.S./°C

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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

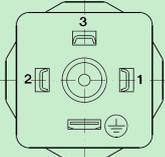
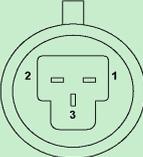
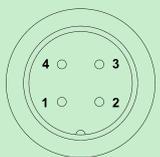
Medium temp range	-20 → +150 °C (typical)	More options see <a href="#">page 5</a>
Ambient temp range	-20 → +80 °C (depending on electrical connection)	
Compensated temp range	0 → +70 °C	
EMC - Emission	EN 61000-6-3	
EMC - Immunity	EN 61000-6-1	
Insulation resistance	> 100 MΩ at 250 V	

Mechanical characteristics

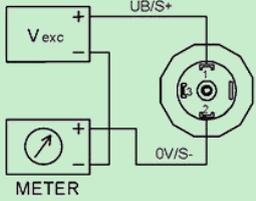
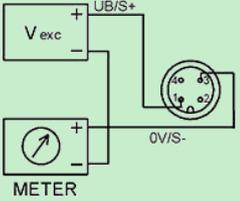
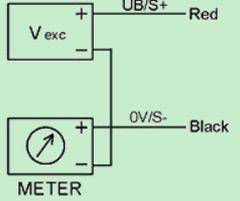
Materials	Diaphragm	Stainless steel 316L (typical)	More options see <a href="#">page 5</a>
	Housing	Stainless steel 304 (typical)	Stainless steel 316L (optional)
	Pressure connection	Stainless steel 304 (typical)	Stainless steel 316L (optional)
	Electrical connection	Depending on the connection type	
	O-ring	FKM / Viton (typical)	EPDM (optional)
Pressure connection	1/4" BSP, 1/4" NPT, 9/16-18 UNF, M14 x 1.5		More options see <a href="#">page 5</a>
Electrical connection	DIN43650A, DIN43650C, Cable outlet, M12 × 1, LED Display		
Weight	300-500g (depending on pressure connection and electrical connection)		
Sealing rating	IP 65 (fulfilled together with mating connector)		

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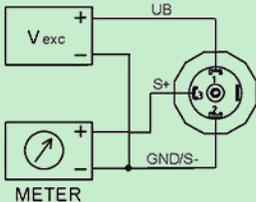
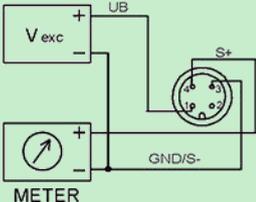
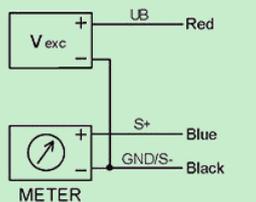
Electrical connector type

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
		

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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)

5pcs of cooling extensions	10pcs of cooling extensions	15pcs of cooling extensions
L = 61 mm		

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**Part number chart (How to order)**

PART NUMBER REQUIRED: **SS303.T05.PL.01.A.04.A.06 (EXAMPLE)**

0	Medium working temperature	<b>T05</b>
	T05(150 °C) T10(200 °C) T15(250 °C) TZ(Other temperature is on request)	
1	Pressure range(bar)	<b>PL</b>
	NA(-1...0) NB(-0.7...0) NC(-0.5...0) ND(-0.35...0) NE(-0.2...0) NF(-0.1...0) PA(0...0.1) PB(0...0.2) PC(0...0.35) PD(0...0.5) PE(0...0.7) PF(0...1) PG(0...1.6) PH(0...2) PI(0...2.5) PJ(0...4) 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) PZ(0...1000) CA(-1...0.6) CB(-1...1.5) CC(-1...3) CD(-1...5) CE(-1...9) CF(-1...15) CG(-1...24) 1Z(Other pressure range or unit is on request)	
2	Pressure type	<b>01</b>
	01(Gauge) 02(Absolute)	
3	Electrical connection	<b>A</b>
	A(DIN43650A) B(Cable Outlet) C(M12 × 1) D(LED Display) E(DIN43650C) F(Plug type)	
4	Pressure connection	<b>04</b>
	01(1/4" NPT male) 02(1/2" NPT male) 03(1/8" NPT male) 04(G 1/4" male) 05(G 1/2" male) 06(G 1/8" male) 07(PT 1/4" male) 08(PT 1/2" male) 09(PT 1/8" male) 10(9/16-18 UNF male) 11(7/16-20 UNF male) 12(1/2-20 UNF male) 13(3/8-24 UNF male) 14(M10 x 1.25 male) 15(M14 x 1.5 male) 16(M20 x 1.5 male) 4Z(Other pressure connection is on request)	
5	Signal & supply	<b>A</b>
	A(4-20mA & 9-30Vdc) B(0-10V & 12-30Vdc) C(0-5V & 9-30Vdc) D(0.5-4.5V & 9-30Vdc) E(0.5-4.5V & 5Vdc) F(0.5-4.5V & 5Vdc ratiometric)	
6	Cable length	<b>06</b>
	01(1m) 02(2m) 03(3m) 04(4m) 05(5m) 06(None) 6Z(Other length is on request)	

NON- REQUIRED: **SS303.T03.PL.01.A.04.A.06 - V5G**

1	Material of O-ring sealing	<b>V2B</b>
	V2B(EPDM)	
2	Material of housing	<b>V3C</b>
	V3C(Stainless steel 316L)	
3	Material of diaphragm	<b>V4E</b>
	V4D(Titanium) V4E(Tantalum) V4F(Hastelloy-C)	
4	Material of wetted parts (metal parts, not include the diaphragm)	<b>V5G</b>
	V5G(Stainless steel 316L)	
5	Pulse snubber / Bumper (Anti cavitation, pressure spikes, or pulses)	<b>V6H</b>
	V6H(Assemble into the pressure hole)	

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**Contact us**

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



**WARNING: DO NOT USE THIS PRODUCT AS SAFETY OR EMERGENCY STOP DEVICE OR IN ANY OTHER APPLICATION WHERE FAILURE OF THE PRODUCT COULD RESULT IN PERSONAL INJURY OR EVEN DEATH.**