

Model 3550

Compact Low Pressure OEM Pressure Transducer

Setra's Model 3550 MEMS pressure sensor is designed for OEMs who require high performance, reliability and stability for absolute, gauge and compound measurements at an affordable price. The 3550 offers exceptional $\pm 0.25\%$ FS accuracy in pressure ranges from 15 PSI to 250 PSI in a small, 316L stainless steel package designed for harsh environments. The Model 3550 offers a variety of different outputs, pressure connectors and electrical connectors to satisfy the most challenging application requirements.

316L SS Design

The sensor and all wetted materials are manufactured using 316L stainless steel. The design of the sensor gives the 3550 high corrosion resistance for the harsh conditions of the alternative fuels market. The unit is calibrated to an accuracy of $\pm 0.25\%$ FS across the entire pressure range offering.

Pressure Flexibility

The Model 3550 design incorporates gauge, absolute and compound pressure datums all in the same package. Pressure ranges available from 15 PSI to 250 PSI, making it ideal for OEM applications of all types.

Flexibility for Many Applications

The 3550 transducer offers many pressure and electrical fittings covering many installation configurations, minimizing additional engineering time to accommodate the sensor, leading to quicker project completion and faster time to market.



- 316L SS Wetted Parts
- Small Footprint
- High Price-to-Performance Ratio

Model 3550 Features:

- $\pm 0.25\%$ FS Accuracy
- Pressure Ranges from 0-15 PSI to 0-250 PSI
- Low Cost For High Volume OEM Installers
- Absolute, Gauge and Compound Pressure Ranges
- Corrosion Resistant Etched Label
- Many Electrical and Mechanical Options

Applications:

- Oil and Gas
- Medical
- Emissions Monitoring
- Harsh Chemical
- Transformer/Smart Grid Technology

Model 3550

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ORDERING INFORMATION

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Model	Output	Pressure Range	Pressure Datum	Pressure Port	Electrical Conn.	Optional Restrictor
3550=Model 3550	B 4-20 Ma	0000 0 bar ¹ 000P 0 PSI ¹	G Gauge	01 G1/4" External	B Industrial DIN 9.4mm	R Restrictor
	N 0.5-4.5 V	0001 1 bar 015P 15 PSI	A Absolute	02 1/4"-18 NPT External	E M12 x 1	0 No Restrictor
	S 0-10 V	01B6 1.6 bar 030P 30 PSI	C Compound ²	04 7/16-20 UNF w/ 37° Flare	8 Deutsch DT04-4P	
	C 1-6 V	02B5 2.5 bar 050P 50 PSI		05 G1/4" A Integral Face Seal	9 Packard MetriPack ³	
	P 1-10 V	0004 4 bar 100P 100 PSI		08 1/8"-27 NPT External		
	T 0.5-4.5 V Ratiometric	0006 6 bar 150P 150 PSI		OL M12 x 1.5 - 6g		
	H 1-5 V	0010 10 bar 200P 200 PSI		0S G1/8"-27 External		
	R 0-5 V	0016 16 bar 250P 250 PSI				

Ordering Example: 3550B015PA02ER00 = Model 3550, 4-20mA Output, 0-15 psia, 1/4 NPT Fitting, M12 x 1 Electrical Connector with Restrictor Installed in Pressure Port

1. Compound vacuum gauge only (eg. -15 to 0 PSIG or -1 to 0 barG)
2. Compound versions extend the pressure range on the low end to -15 PSIG or -1 barG respectively. Compound versions measure Gauge pressure only. (eg. -15 to 100 PSIG)
3. Compatible with Ratiometric Output Only: Code T.

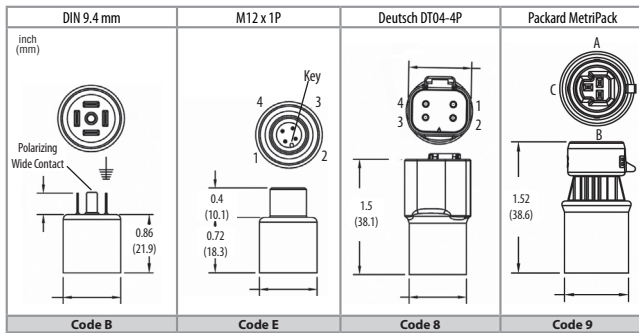
EMC SPECIFICATIONS

Emissions Tests: EN61326-1:2006 and EN61326-2-3:2006	
Test Standard	Test
EN55011:2009 + A1	Radiated Emissions
Immunity Tests: EN61326-1:2006 and EN61326-2-3:2006	
Test Standard	Test
EN6100-4-2:2009	Electrostatic Discharge
EN6100-4-3:2006 + A2	Radiated Immunity
EN6100-4-4:2012	Fast Burst Transients
EN6100-4-6:2009	Conducted RF Immunity

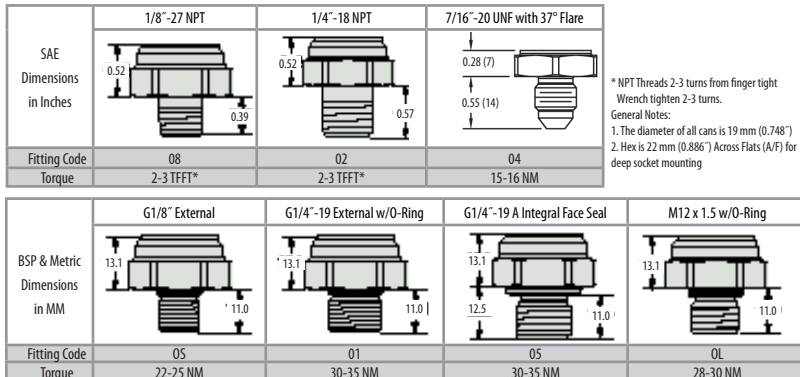
GENERAL SPECIFICATIONS

Performance Data		Mechanical Configuration	
Long Term Drift	< 0.2% FS/YR	Pressure Port	See under "How to Order"
Accuracy (BSFL)	0.25% FS	Wetted Parts	316L Stainless Steel
Thermal Error, Max.	±1% max./176°F (80°C)	Electrical Conn.	See under "How to Order"
Compensated Temp.	-4°F to +212°F (-20°C to +100°C)	Enclosure	IP67 (IP65 for electrical codes B)
Operating Temp.	-40°F to +257°F (-40°C to +125°C)	Vibration	BSEN 60068-2-6 (FC) BSEN 60068-2-64 (FH)
Zero Tolerance, Max.	±0.5% of span max.	Shock	BSEN 60068-2-27 (Ea)
Span Tolerance, Max.	±0.5% of span max.	Approvals	CE, RoHS
Fatigue Life	Designed for more than 100M Cycles	Weight	1.23 to 1.9 ounce (35 to 52 grams) Configuration dependent.
Input		Voltage Output Units	
Pressure Range	0-250 psi (0-16 bar)	Output	0 V min. to 10V max. See under "How to Order"
Proof Pressure	2x Nominal Range	Supply Voltage (Vs)	2 Volts above full scale to 30 VDC (24 VDC max. above 230°F (110°C) applications). Source and Sinks 8mA
Burst Pressure	3x Nominal Range	Current Output Units	
Ratiometric Output Units		Output	4-20 mA
Output	0.5 to 4.5 VDC	Supply Voltage (Vs)	10-30 VDC (24 VDC max. above 230°F (110°C) applications)
Supply Voltage (Vs)	5 VDC ±10%	Max. Load Resistance	(Supply Voltage - 10) x 50 ohms

ELECTRICAL FITTINGS



PRESSURE FITTINGS



MATING ELECTRICAL CONNECTORS

Part Number	Description	For Use on Elect. Code #
557230	MINI DIN Connector, Strain Relief (with drive screw & gasket)	B
557703-01M0	M12 Cord Set - 1 Meter (Red 1, Green 2, Blue 3, Yellow 4)	E
557703-03M0	M12 Cord Set - 3 Meters (Red 1, Green 2, Blue 3, Yellow 4)	E
557703-04M0	M12 Cord Set - 4 Meters (Red 1, Green 2, Blue 3, Yellow 4)	E
557703-05M0	M12 Cord Set - 5 Meters (Red 1, Green 2, Blue 3, Yellow 4)	E
224153	Recommended Mating Parts (Deutsch p/n: Housing Plug DT0645-P012; Wedge W45-P012; Sockets 4X 0462-201-1631)	8
557	Deutsch Cord Set 3' Long (18 AWG PVC Cable - Black 1, Red 2, Green 3, White 4)	8
581	Recommended Mating Parts (Delphi Packard MetriPack p/n: Body 12065286; Seal 12052893; Consult Delphi for Contacts)	9
557	Packard Mate Kit	9
581	Packard Cord Set 3' Long (24 AWG PVC Cable - White 1, Black 2, Red 3)	9
582	Packard Cord Set 63' Long (24 AWG PVC Cable - White 1, Black 2, Red 3)	9