

3100 Series Compact High Pressure OEM Pressure Transmitter

PRESSURE TRANSDUCERS

SPUTTERED THIN FILM

- ▶ 10 bar to 2200bar pressure ranges
- ▶ Less than 25mm long
- ▶ Choice of outputs

For OEMs that need consistent high levels of performance, reliability and stability the 3100 Series sputtered thin film units offer unbeatable price performance ratio in a small package size with all stainless steel wetted parts in the volumes required. A wide choice of electrical outputs as well as both electrical and pressure connections means the unit is suitable for most applications without modification. The compact construction of the 3100 series makes it ideal for installation where space is at a premium.

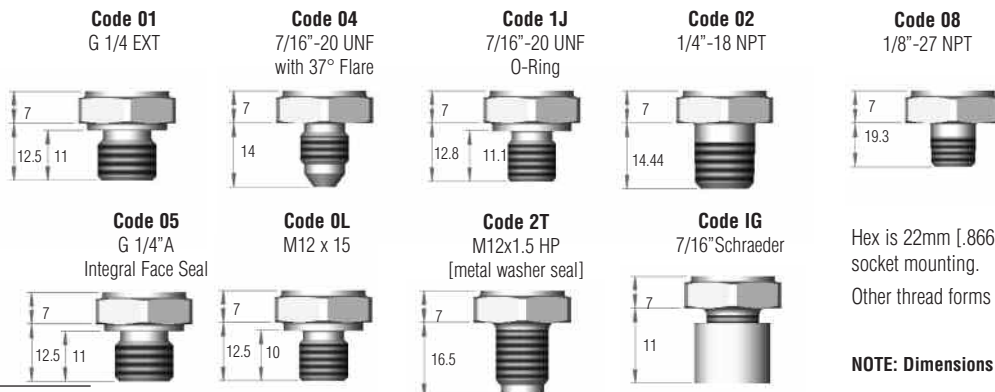
Specifications

Input	
Pressure Range	0 to 10bar or 0 to 2200bar G (100 to 30,000psi)
Proof Pressure	2 x FS (Ranges 1600 & 2200bar 1.5x)
Burst Pressure	Ranges ~ 400bar 10 x minimum 600 & 1000b 4 x, 1600 & 2200 1.8x
Fatigue Life	Designed for more than 100,000,000 cycles
Performance	
Long Term Drift	0.1% FS/year non cumulative
Accuracy	±0.25% FS (Temp O/P ± 2.5%FS)
Thermal Error	±1% typical/100°C
Compensated Temperature	-40° to 120°C (-40° to 250°F)
Operable	-40° to 125°C (-40° to 250°F)
Zero Tolerance	±0.5% of span
Span Tolerance	±0.5% of span
Mechanical Construction	
Pressure Port	See ordering chart
Wetted Parts	17-4 PH Stainless Steel
Electrical Connection	See ordering chart
Enclosure	
	IP65 for electrical code B (with connector fitted) IP67 for electrical codes E, 6, 7, 8 and 9
Vibration	20G, 10-2000Hz sinusoidal
Shock	Withstands free fall to IEC 68-2-32 procedure 1
Approvals	CE
Weight	35 gms

Individual Specifications

Voltage Output Units	
Output	See ordering chart (current 4.5mA)
Supply Voltage	2 Volts above Full Scale, to max 30 Volts
Current Output Units	
Output	4-20mA
Supply Voltage	10 to 30Vdc (24Vdc max for 110° and above)
Max. Loop Resistance	(Vs-10) x 50 ohms
Ratiometric Output Units	
Output	0.5 to 4.5Vdc (3.5mA max)
Supply Voltage	5Vdc, ± 10%

MECHANICAL FITTINGS



Hex is 22mm [.866] Across Flats (A/F) for deep socket mounting.
Other thread forms available. Consult factory.

NOTE: Dimensions in mm

Electrical Connectors



AMP Superseal 1.5



DIN 43650C Industrial



DIN 72585 Bayonet



M12 Ranges



Deutsch DTD4-4P



Packard Metri-pack

How to Order

Use the **Bold** characters from the chart below to construct a product code

Series _____ **310X** **X** **XXXXX** **XX** **X** **000**

Variants to Standard Types

- 00** - Pressure output
- 01** - Pressure and temperature output (see **Note 1**)

Output

- B** - 4-20mA **C** - 1-6V
- H** - 1-5V **N** - 0.5 to 4.5V Non Ratiometric **R** - 0-5 V
- S** - 0-10V **T** - 0.5 to 4.5 Ratiometric

Pressure Range

- 0010G** - 10barG **0100S** - 100barS **1000S** - 1000barS)
- 0016G** - 16barG **0160S** - 160barS **1600S** - 1600barS) (see **Note 2**)
- 0025G** - 25barG **0250S** - 250barS **2200S** - 2200 barS)
- 0040G** - 40barG **0400S** - 400barS
- 0060G** - 60barG **0600S** - 600barS

Integral Pressure Connection

- 01** - G1/4 External
- 02** - 1/4- 18 NPT External
- 04** - 7/16-20 UNF External
- 05** - G1/4 External Soft Seal
- 08** - 1/8 NPT External
- 0L** - M12 x 1.5 - 6g (600b and below)
- 1G** - Schraeder Deflator (Short)
- 1J** - 7/16 - 20 UNF External 'O' Ring Seal
- 2T** - M12 x 1.5-6g (1000b and above)

Electrical Connection

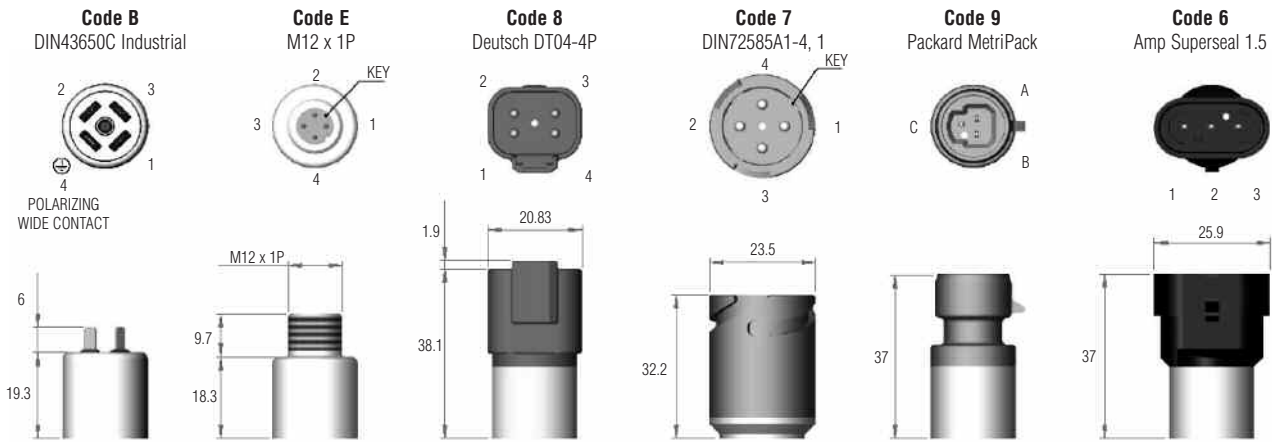
- 6** - AMP Superseal 1.5 Series
- 7** - DIN 72585 Bayonet
- 8** - Deutsch Series DT-04
- 9** - Packard Metripak
- B** - Industrial DIN
- E** - M12x 1

For mating electrical connectors and cables see page 67.

Note 1 Pressure and temperature output available with voltage output and electrical connectors B, E, 7 and 8 only

Note 2 Ranges 1000 bar and above available with 2T pressure port only.

ELECTRICAL CONNECTOR



Note: The diameter of all cans is 19mm [.748]

Pin #	Function	
	Current	Voltage
1	N/A	Press O/P +VE
2	+VE	Supply +VE
3	N/A	Temp O/P +VE
4	-VE	Common

Pin #	Function	
	Current	Voltage
1	+VE	Supply +VE
2	N/A	Press O/P +VE
3	-VE	Common
4	N/A	Temp O/P +VE

Pin #	Function	
	Current	Voltage
1	-VE	Common
2	+VE	Supply +VE
3	N/A	Temp O/P +VE
4	N/A	Press O/P +VE

Pin #	Function	
	Current	Voltage
1	+VE	Supply +VE
2	-VE	Common
3	N/A	Press O/P +VE
4	N/A	Temp O/P +VE

Pin #	Function	
	Current	Voltage
A	-VE	Common
B	+VE	Supply +VE
C	N/A	Press O/P +VE

Pin #	Function	
	Current	Voltage
1	N/A	Press O/P +VE
2	-VE	Common
3	+VE	Supply +VE