

# 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.

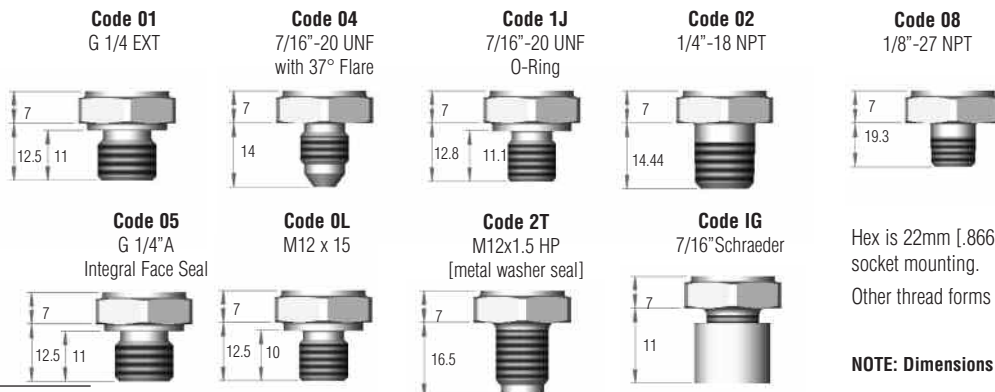
## Specifications

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

## Individual Specifications

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

#### 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)

**310X**    **X**    **XXXXX**    **XX**    **X**    **000**

#### 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.

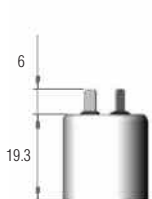
### ELECTRICAL CONNECTOR

#### Code B

DIN43650C Industrial

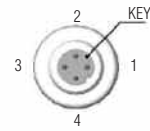


POLARIZING  
WIDE CONTACT



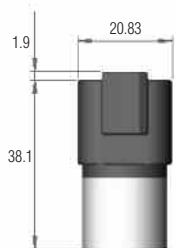
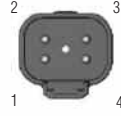
#### Code E

M12 x 1P



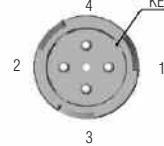
#### Code 8

Deutsch DT04-4P



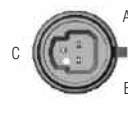
#### Code 7

DIN72585A1-4, 1



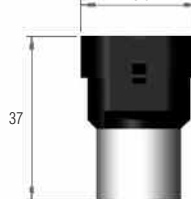
#### Code 9

Packard MetriPack



#### Code 6

AMP Superseal 1.5



**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

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	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