

## 3500 Series

### Compact Low Pressure OEM Pressure Transmitters

- ▶ 5 to 600 psi pressure ranges (0.35 to 40 bar)
- ▶ Choice of outputs, electrical connections and pressure ports
- ▶ Operating temperature up to 257°F (125°C)

For OEMs that need consistent high levels of performance, reliability and stability the 3500 Series units offer a small package size with all stainless steel wetted parts at an unbeatable price performance ratio. 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 3500 Series makes it ideal for installation where space is at a premium.

### Specifications

|                                 |   |
|---------------------------------|---|
| <b>Input</b>                    |   |
| <b>Pressure Range</b>           | 5-600 psi (0.35-40 bar)                                   |
| <b>Proof Pressure</b>           | 2x  |
| <b>Burst Pressure</b>           | 3X  |
| <b>Performance</b>              |   |
| <b>Long Term Drift</b>          | <0.2% FS/YR   |
| <b>Accuracy</b>                 | 0.25% FS  |
| <b>Thermal Error, Max.</b>      | ±1% / 176°F (80°C)  |
| <b>Compensated Temperatures</b> | -4°F to +212°F (-20°C to +100°C)                          |
| <b>Operating Temperatures</b>   | -40°F to +257°F (-40°C to +125°C)                         |
| <b>Zero Tolerance, Max.</b>     | ±0.5% of span   |
| <b>Span Tolerance, Max.</b>     | ±0.5% of span   |
| <b>Fatigue Life</b>             | Designed for more than 100 M cycles                       |
| <b>Mechanical Configuration</b> |   |
| <b>Pressure Port</b>            | See under "How to Order," last page                       |
| <b>Wetted Parts</b>             | 316L Stainless Steel                                      |
| <b>Electrical Connection</b>    | See under "How to Order," last page                       |
| <b>Enclosure</b>                | IP67  |
| <b>Vibration</b>                | BSEN 60068-2-6 (FC)<br>BSEN 60068-2-64 (FH)               |
| <b>Shock</b>                    | BSEN 60068-2-27 (Ea)                                      |
| <b>Approvals</b>                | CE, PED, RoHS   |
| <b>Weight</b>                   | 1.23 to 1.9 ounces (35-53 grams). Configuration dependant |

### Individual Specifications

|                                |   |
|--------------------------------|---|
| <b>Voltage</b>                 |   |
| <b>Output</b>                  | 0V min. to 10V max.<br>See under "How to Order," last page                            |
| <b>Supply Voltage (Vs)</b>     | 2 Volts above full scale to 30 Vdc<br>(24 Vdc, max. above 230°F (110°C) applications) |
| <b>Source and Sinks</b>        | 8 mA  |
| <b>Current</b>                 |   |
| <b>Output</b>                  | 4-20 mA   |
| <b>Supply Voltage (Vs)</b>     | 10-30 Vdc (24 Vdc, max. above 230°F (110°C) applications)                             |
| <b>Maximum Load Resistance</b> | (Supply Voltage – 7.5) x 50ohms   |
| <b>Ratiometric</b>             |   |
| <b>Output</b>                  | 0.5 to 4.5V   |
| <b>Supply Voltage (Vs)</b>     | 5 Vdc ±10%  |



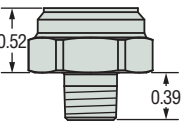
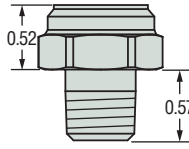
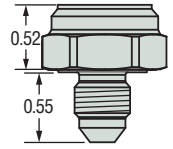
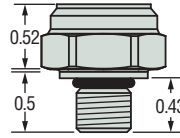
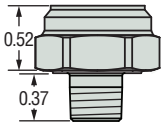
### EMC Specifications

**Emissions Tests:** EN61326-1:2006 and EN61326-2-3:2006  
EN55011:2009 + A1 Radiated Emissions

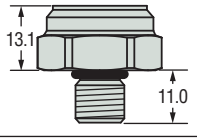
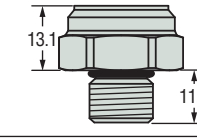
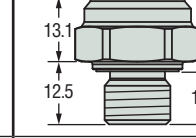
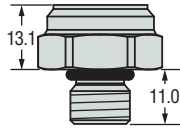
**Immunity Tests:** EN61326-1:2006 and EN61326-2-3:2006  
EN61000-4-2:2009 Electrostatic Discharge  
EN61000-4-3:2006 + A2 Radiated Immunity  
EN61000-4-4:2012 Fast Burst Transients  
EN61000-4-6:2009 Conducted RF Immunity

Pressure Ports

SAE

|                      | 1/8"-27 NPT   | 1/4"-18 NPT   | 7/16"-20 UNF with 37° Flare   | 7/16"-20 UNF  | 1/8"-27 NPTF  |
|----------------------|---|---|---|---|---|
| Dimensions in Inches |  |  |  |  |  |
| Fitting Code         | 08  | 02  | 04  | 1J  | 4D  |
| Torque               | 2-3 TFFT*   | 2-3 TFFT*   | 15-16 NM  | 18-20 NM  | 2-3 TFFT*   |

BSP & Metric

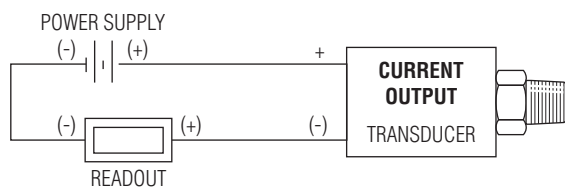
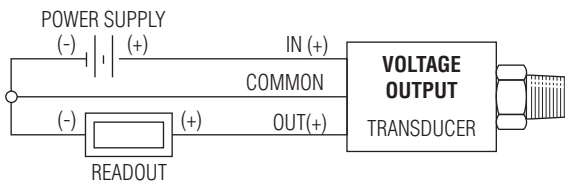
|                  | G1/8" External  | G1/4"-19 External w/O-Ring  | G1/4"-19 A Integral Face Seal   | M12 x 1.5 w/O-Ring  |
|------------------|---|---|---|---|
| Dimensions in MM |  |  |  |  |
| Fitting Code     | 0S  | 01  | 05  | 0L  |
| Torque           | 22-25 NM  | 30-35 NM  | 30-35 NM  | 28-30 NM  |

\* NPT Threads 2-3 turns from finger tight. Wrench tighten 2-3 turns.

General Notes:

1. The diameter of all cans is 19 mm (0.748")
2. Hex is 22 mm (0.886") Across Flats (A/F) for deep socket mounting

Wiring Diagram



## Electrical Connector

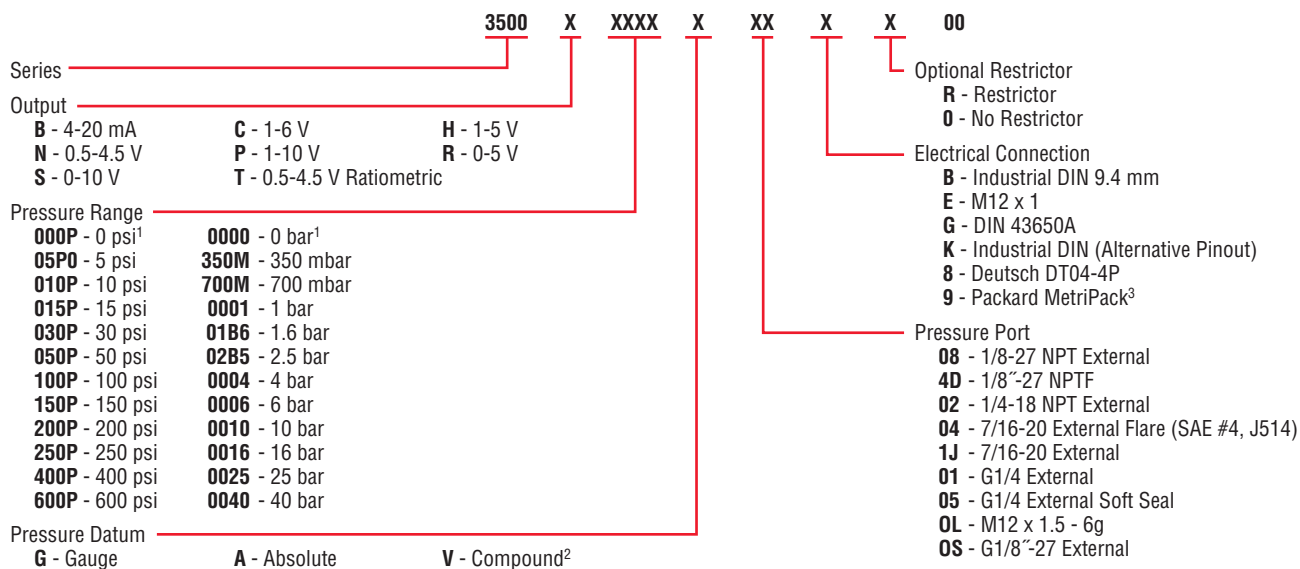
| DIN 9.4 mm                     |                      |               | M12 x 1P     |               | Deutsch DT04-4P      |               | DIN 43650A           |               | Packard MetriPack |               |        |                      |  |
|--------------------------------|----------------------|---------------|--------------|---------------|----------------------|---------------|----------------------|---------------|-------------------|---------------|--------|----------------------|--|
| <p>POLARIZING WIDE CONTACT</p> |                      |               |              |               |                      |               |                      |               |                   |               |        |                      |  |
| <b>Code B</b>                  |                      | <b>Code K</b> |              | <b>Code E</b> |                      | <b>Code 8</b> |                      | <b>Code G</b> |                   | <b>Code 9</b> |        |                      |  |
| Pin #                          | Voltage Mode         | Current Mode  | Voltage Mode | Current Mode  | Voltage Mode         | Current Mode  | Voltage Mode         | Current Mode  | Voltage Mode      | Current Mode  | Pin ID | Voltage Mode         | Note   |
| 1                              | $V_{out}$ (pressure) | No Connect    | $V_{supply}$ | Supply        | $V_{supply}$         | Supply        | Ground               | Return        | $V_{supply}$      | Supply        | C      | $V_{out}$ (pressure) | MetriPack connectors may be used with 0.5-4.5V Ratiometric and 4-20 mA only. |
| 2                              | $V_{supply}$         | Supply        | Ground       | Return        | $V_{out}$ (pressure) | No Connect    | $V_{supply}$         | Supply        | Ground            | Return        | A      | Ground               |  |
| 3                              | No Connect           | No Connect    | $V_{out}$    | No Connect    | Ground               | Return        | No Connect           | No Connect    | $V_{out}$         | No Connect    | B      | $V_{supply}$         |  |
| 4                              | Ground               | Return        | No Connect   | No Connect    | No Connect           | No Connect    | $V_{out}$ (pressure) | No Connect    | No Connect        | No Connect    | —      | —                    |  |

## Mating Connectors

| Part Number | Description  | For Use on Elect. Code # |
|-------------|--|--------------------------|
| 557230      | MINI DIN Connector, Strain Relief (with drive screw & gasket)  | B and K                  |
| 557254      | Large DIN 43650A   | G                        |
| 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                        |
|             | Recommended Mating Parts (Deutsch p/n: Housing Plug DT064S-P012; Wedge W4S-P012; Sockets 4X 0462-201-1631)         | 8                        |
| 224153      | Deutsch Cord Set 3' Long (18 AWG PVC Cable – Black 1, Red 2, Green 3, White 4)                                     | 8                        |
|             | Recommended Mating Parts (Delphi Packard MetriPack p/n: Body 12065286; Seal 12052893. Consult Delphi for Contacts) | 9                        |
| 218760      | Packard Mate Kit   | 9                        |
| 223974      | Packard Cord Set 3' Long (24 AWG PVC Cable – White 1, Black 2, Red 3)  | 9                        |
| 223975      | Packard Cord Set 6' Long (24 AWG PVC Cable – White 1, Black 2, Red 3)  | 9                        |
| 227987      | Packard Cord Set 14.75' Long (22 AWG PVC Cable - White 1, Black 2, Red 3)  | 9                        |
| 220492      | Packard Mate - 12" Flying Leads – 3 Conductor PVC 18 AWG   | 9                        |
| 222976      | Packard Mate - 18" Flying Leads – 3 Conductor PVC 18 AWG   | 9                        |
| 220797      | Packard Mate - 24" Flying Leads – 3 Conductor PVC 18 AWG   | 9                        |

## How to Order

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



Notes:

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