# Measurement & Control Solutions

# UNIK 5000 Pressure Sensing Platform

The new UNIK 5000 is a high performance configurable solution to pressure measurement. The use of Druck silicon technology and analogue circuitry enables best in class performance for stability, low power and frequency response. The new platform enables you to easily build up your own sensor to match your own precise needs. This high performance, configurable solution to pressure measurement employs modular design and lean manufacturing techniques to offer:



With 35 years of pressure measurement experience, our field-proven Druck silicon technology is at the heart of the new platform, resulting in a range of high quality, high stability pressure sensors.

# Bespoke as Standard

Custom-built from standard components, manufacturing sensors to your requirement is fast and simple; each UNIK 5000 is a "bespoke" pressure sensing solution, but with the short lead times and competitive pricing you would expect from standard products.

# **Expertise**

We have the people and the knowledge to support your needs for accurate and reliable product performance; our team of experts can help you make the right sensor selection, guiding you and providing the help and tools you need.



#### **Features**

- Ranges from 70 mbar (1 psi) to 700 bar (10,000 psi)
- Accuracy to ±0.04% Full Scale (FS) Best Straight Line (BSL)
- Stainless Steel construction
- Frequency response to 5 kHz
- High over pressure capability
- Hazardous Area certifications
- mV, mA, voltage and configurable voltage outputs
- Multiple electrical & pressure connector options
- Operating temperature ranges from -55 to 125°C (-67 to 257°F)



# 5000 Specifications

#### Measurement

#### **Operating Pressure Ranges**

#### **Gauge ranges**

Any zero based range between 70 mbar and 70 bar (1 to 1,000 psi) (values in psi are approximate)

#### **Sealed Gauge Ranges**

Any zero based range between 10 and 700 bar (145 to 10,000 psi)

#### **Absolute Ranges**

Any zero based range between 100 mbar and 700 bar (1.5 to 10,000 psi)

#### **Differential Ranges**

Wet/Dry

Uni-directional or bi-directional 70 mbar to 35 bar (1 to 500 psi)

Wet/Wet

Uni-directional or bi-directional 350 mbar to 35 bar (5 to 500 psi)

Line pressure: 70 bar max (1000 psi)

#### **Barometric Ranges**

Barometric ranges are available with a minimum span of 350 mbar (5.1 psi)

#### Non Zero Based Ranges

Non zero based ranges are available. Please contact GE Sensing to discuss your requirements

#### **Over Pressure**

- $10 \times FS$  for ranges up to 150 mbar (2 psi)
- $6 \times FS$  for ranges up to 700 mbar (10 psi)
- 2 × FS for barometric ranges
- 4 x FS for all other ranges (up to 200 bar for ranges
   ≤70 bar and up to 1200 bar for ranges >70 bar)

For differential versions the negative side must not exceed the positive side by more than:

- 6 × FS for ranges up to 150 mbar (2 psi)
- 4 × FS for ranges up to 700 mbar (10 psi)
- 2 x FS for all other ranges up to a maximum of 15 bar (200 psi)

#### **Containment Pressure**

Ranges up to 150 mbar (2 psi) gauge  $10 \times FS$ Ranges up to 70 bar (1000 psi) gauge  $6 \times FS$ (200 bar (3000 psi) max) Ranges up to 70 bar (1000 psi) absolute 200 bar (3000 psi) Ranges above 70 bar (1000 psi) 1200 bar (17500 psi)

Differential (-ve port) must not exceed positive port by more than  $6 \times FS$  (15 bar (200 psi) maximum)

#### **Supply and Outputs**

Electronics Option	Description	Supply voltage (V)	Output	Current Consumption (mA)
0	mV Passive	2.5 to 12	10 mV/V^	<2 at 10 V
1	mV Linearised	7 to 12	10 mV/V^	<3
2	mA	7 to 28**	4-20 mA	<30
3	0 to 5 V 4-wire	7 to 16**	0 to 5 V	<3
4	0 to 5 V 3-wire	7 to 16**	0 to 5 V*	<3
5	1 to 6 V 3-wire	7 to 16**	1 to 6 V	<3
6	0 to 10 V 4-wire	12 to 16**	0 to 10 V	<3
7	0.5 to 4.5 V Ratiometric	$5.0 \pm 0.5$	0.5 to 4.5 V	<3
8	Isolated/Configurable	7 to 36	See below	See below

 $<sup>^{\</sup>wedge}$  with a 10 volt supply mV output sensors give 100 mV over the full scale pressure.

- Output is ratiometric to the supply voltage
- Output reduces pro-rata for pressure ranges below 350 mbar (5 psi)
- $^{*}$ 0 to 5 V 3-wire output is non true zero. At pressures below 1% of span the output will be fixed at approximately 50 mV

#### Isolated/Configurable (Option 8)

Any pressure signal output configurations will be available, subject to the following limitations:

- Minimum span: 2 V
- Maximum span: 20 V
- Output limits: ±10 V
- Maximum zero offset: ± span
- Output voltage range can be specified to a resolution of 0.1 V Reverse output response to pressure is available.

The output will continue to respond to 110% FS. i.e. if a 0 to 10 V output is specified, the output will continue to increase proportionally to applied pressure until at least 11 V. Current consumption is <20 mA @ 7 Vdc supply, reducing to <5 mA @ 32 Vdc supply. On startup <100 mA drawn for 10 ms typically.

Note: Restricted to 80°C (176°F) for this option.

#### **Examples**

Allowed	Not Allowed
-10 to 0 V	0 to 12 V (outside ±10 V limits)
0 to 5 V	6 to 10 V (offset too big)
-5 to +5 V	0 to 0.5 V (span too small)
-2 to 10 V	
1 to 6 V	
10 to 0 V	

#### **Power-Up Time**

- mV, Voltage and current versions: 10 ms
- Isolated/configurable version: 500 ms

#### Insulation

- 500 Vdc:  $100 \text{ M}\Omega$
- 500 Vac: ≤ 5 mA leakage current (mV and mA versions only).

<sup>\*\*7</sup> to 32 V in non-hazardous area operation

#### **Shunt Calibration**

Shunt Calibration provides a customer accessible connection which, when applied, causes a shift in output of 80% FS in order to simulate applied pressure. It is fitted to the mV and Isolated/Configurable versions as

It is fitted to the mV and Isolated/Configurable versions as standard. It is not available with DIN or M12  $\times$  1 electrical connectors. (options 7, D and G)

Shunt calibration is activated in different ways depending on the electrical connector and version:

- mV versions: connect Shunt Cal to -ve Supply or, where available, connect both Shunt Cal connections together.
- Isolated/Configurable version: connect Shunt Cal to -ve Output or, where available, connect both Shunt Cal connections together.

## **Performance Specifications**

There are three grades of performance specification: Industrial, Improved and Premium

#### **Accuracy**

#### Voltage, Current and mV Linearised

Combined effects of non-linearity, hysteresis and repeatability:

Industrial: ±0.2% FS BSL Improved: ±0.1% FS BSL Premium: ±0.04% FS BSL

#### **General Certifications**

RoHS 2002/95/EC

#### **CE Conformity**

Pressure Equipment Directive 97/23/EC

ATEX 94/9/EC (Optional)

EMC Directive 2004/108/EC

BS EN 61000-6-1: 2007 Susceptibility - Light Industrial

BS EN 61000-6-2: 2005 Susceptibility - Heavy Industrial (except mV versions)

BS EN 61000-6-3: 2007 Emissions - Light Industrial Emissions - Heavy Industrial

BS EN 61326-1: 2006 Electrical Equipment for Measurement,

Control and Laboratory Use

BS EN 61326-2-3: 2006 Particular requirements for pressure transducers

#### **Hazardous Area Approvals (optional)**

General applications • IECEx/ATEX Intrinsically Safe 'ia' Group IIC

• FM Approved (Canada & US) Intrinsically Safe Exia Class I, Division 1, Groups A, B, C & D and Class I, Zone 0 AEx/Ex ia Group IIC; Single Seal

Mining applications • IECEx/ATEX Intrinsically Safe 'ia' Group I

For full certification details, refer to the type-examination certificates (or approval listings) and Hazardous Area Installation Instructions

#### **mV** Passive

≤ 70 bar

Industrial/Improved: ±0.2% FS BSL

Premium not available

> 70 bar

Industrial/Improved: ±0.5% FS BSL

Premium not available

Note: For the barometric pressure range, accuracy is of span, not full scale.

#### **Zero Offset and Span Setting**

Demountable electrical connector options allow access to potentiometers that give at least ±5% FS adjustment (see Electrical Connector section)

#### Factory set to:

Product Description	Industrial	Improved and Premium
Current and Voltage Versions (Demountable Electrical Connections and Cable Gland)	±0.5% FS	±0.2% FS
Current and Voltage Versions (All Other Electrical Connections)	±1.0% FS	±1.0% FS
mV Versions	±3.0 mV	±3.0 mV

#### **Long Term Stability**

 $\pm 0.05\%$  FS typical ( $\pm 0.1\%$  FS maximum) per year increasing pro-rata for pressure ranges below 350 mbar

#### **Temperature Effects**

Four compensated temperature ranges can be chosen. Industrial Accuracy performance:

-10 to +50 °C (14 to +122 °F):	±0.75% FS
	Temperature error
	band (TEB)
-20 to +80 °C (-4 to 176 °F):	±1.5% FS TEB
-40 to +80 °C (-40 to 176 °F):	±2.25% FS TEB
-40 to +125 °C (-40 to 257 °F):	±2.25% FS TEB
Improved and Premium Accuracy	/ performance:
-10 to +50 °C (14 to +122 °F):	±0.5% FS TEB
-20 to +80 °C (-4 to 176 °F):	±1.0% FS TEB
-40 to +80 °C (-40 to 176 °F):	±1.5% FS TEB
-40 to +125 °C (-40 to 257 °F):	±1.5% FS TEB

Temperature effects increase pro-rata for pressure ranges below 350 mbar (5 psi) and are doubled for barometric ranges.

#### **Line Pressure Effects (Differential Version Only)**

Zero shift: <±0.03% span/bar of line pressure Span shift: <±0.03% span/bar of line pressure Effects increase pro-rata for differential pressure ranges below 700 mbar (10 psi).

# **Physical Specifications**

#### **Environmental Protection**

- See Electrical Connector section
- Hyperbaric Pressure: 20 bar (300 psi) maximum

#### **Operating Temperature Range**

See Electrical Connector section

#### Pressure Media

Fluids compatible with Stainless Steel 316L and Hastelloy C276.

For the wet/dry differential version, negative pressure port: fluid compatible with stainless steel 316L, stainless steel 304, pyrex, silicon and structural adhesive.

#### **Enclosure Materials**

Stainless steel (body), nitrile- or silicone-rubber (o-rings, gaskets), EPDM (gaskets, depth cone), PTFE (vent filter), Nickel plated brass (lock rings), glass filled nylon (electrical connector assemblies), delrin (depth cone). Cable sheaths as specified (see Electrical Connector).

#### **Pressure Connector**

Available options are

- G1/4 Female\*
- G1/4 Male Flat

- G1/4 Male 60° Internal Cone
- G1/4 Male Flat Long
- G1/4 Male Flat with Snubber
- G1/4 Male Flat with Cross Bore Protection
- G1/8 Male 60° Internal Cone
- G1/2 Male via Adaptor\*
- 1/4 NPT Female\*
- 1/4 NPT Male
- 1/8 NPT Male
- 1/2 NPT Male via Adaptor
- 7/16-20 UNF Female
- 7/16-20 UNF Male Short Flat
- 7/16 UNF Long 37° Flare Tip
- 7/16-20 UNJF Male 74° External Cone
- 3/8-24 UNJF
- 1/4 Swagelok Bulkhead
- M10 X 1 80° Internal Cone
- M12 X 1 60° Internal Cone
- M14 X 1.5 60° Internal Cone
- M20 X 1.5 Male
- Depth Cone (G1/4 Female Open Face)

Choose connectors marked \* for pressure ranges over 70 bar.

Other pressure connectors may be available. Contact GE to discuss your requirement

#### **Electrical Connector**

Various electrical connector options are available offering different features:

Code Number	Description	Max Operatin	Max Operating temp range			
ivanisei		°C	°F	rating	span Adjust	
0	No Connector	-55 to +125	-67 to +257	-	Υ	
1	Cable Gland	-40 to +80	-40 to +176	65	Ν	
2	Raychem Cable	-55 to +125	-67 to +257	65	N	
3	Polyurethane Depth	-40 to +80	-40 to +176	68	N	
4	Hytrel Depth	-40 to +80	-40 to +176	68	N	
6/E	Bayonet MIL-C-26482	-55 to +125	-67 to +257	67	N	
7	DIN 43650 Form A Demountable	-40 to +80	-40 to +176	65	Υ	
A/F	Bayonet MIL-C-26482 Demountable	-55 to +125	-67 to +257	65	Υ	
С	1/2 NPT Conduit	-40 to +80	-40 to +176	65	N	
D	Micro DIN (9.4 mm pitch)	-40 to +80	-40 to +176	65	N	
G	M12x1 4pin	-55 to +125	-67 to +257	67	N	
K	Zero Halogen Cable Demountable	-40 to +80	-40 to +176	65	Y	

Note: Electronics output option 8, Isolated/Configurable, is restricted to a maximum operating temperature of 80°C (176°F).

Note: Hazardous area approved versions are restricted to a maximum operating temperature range of -40°C to 80°C (-40°F to 176°F).

### **Electrical Connector**

Connector Type	Option				Electronics Option				
	code		4 to 20 mA	Voltage (3-wire)	Voltage (4-wire)	Isolated/Configurable	mV		
4olex	0	1 Red	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
		2 Yellow	-	+ve Output	+ve Output	+ve Output	+ve Outpu		
		3 Green	-	-	-ve Output	-ve Output	-ve Outpu		
		4 Blue	-ve Supply	0V common	-ve Supply	-ve Supply	-ve Supply		
		5 Orange	-	-	-	Shunt Cal	Shunt Cal		
		6 Black	Case	Case	Case	Case	-		
Cable	1, 3, 4, C	Red	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
Not Raychem)		Yellow	-	+ve Output	+ve Output	+ve Output	+ve Outpu		
		Blue	-	-	-ve Output	-ve Output	-ve Outpu		
		White	-ve Supply	0V common	-ve Supply	-ve Supply	-ve Supply		
		Orange	-	-	-	Shunt Cal	Shunt Cal		
		Black	-	-	-	-	-		
		Screen	-	-	-	-	-		
Raychem Cable	2	Red	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
		White	-	+ve Output	+ve Output	+ve Output	+ve Outpu		
		Green	-	-	-ve Output	-ve Output	-ve Outpu		
		Blue	-ve Supply	0V common	-ve Supply	-ve Supply	-ve Supply		
		Black	-	-	-	Shunt Cal	Shunt Cal		
		Screen	_	-	_	_	_		
ayonet	6, A	Α	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
25,0.00		В	-ve Supply	+ve Output	+ve Output	+ve Output	+ve Outpu		
		С	-	-	-ve Output	-ve Output	-ve Outpu		
		D	-	0V common	-ve Supply	-ve Supply	-ve Suppl		
		E	-	-	-	Shunt Cal	Shunt Cal		
		F	-	-	-	-	Shunt Cal		
DIN A	7	1	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
Micro DIN	D	2	-ve Supply	0V common	-ve Supply	-ve Supply	-ve Suppl		
		3	-	+ve Output	+ve Output	+ve Output	+ve Outpu		
		E	Case	Case	-ve Output	-ve Output	-ve Outpu		
layonet	E, F	A	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
Alternative Wiring	L, I	В	-	0V common	-ve Supply	-ve Supply	-ve Suppl		
ptions		C		+ve Output	+ve Output	+ve Output	+ve Outpi		
		D	-ve Supply	- ve Output	-ve Output	-ve Output	-ve Outpu		
					•	•	•		
		E	-	-	-	Shunt Cal	Shunt Cal		
		F	-	-	-	Shunt Cal	-		
112 X 1 ⊱Pin	G	1	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
		2	6 1	+ve Output	+ve Output	+ve Output	+ve Outpu		
		3	-ve Supply	0V common	-ve Supply	-ve Supply	-ve Supply		
	14	4	Case	Case	-ve Output	-ve Output	-ve Outpu		
Zero Halogen Cable (Demountable)	V C E C	Pink	+ve Supply	+ve Supply	+ve Supply	+ve Supply	+ve Suppl		
		White	-	+ve Output	+ve Output	+ve Output	+ve Outpu		
		Green	-	-	-ve Output	-ve Output	-ve Outpu		
		Blue	-ve Supply	0V common	-ve Supply	-ve Supply	-ve Supply		
		Grey	-	-	-	Shunt Cal	Shunt Cal		
		Brown	-	-	-	-	-		
		Yellow	-	-	-	-	-		
		Screen	-	-	-	-	-		

#### **Ordering Information**

See the online configuration tool at www.unik5000.com

#### (1) Select model number

```
Main Product Variant
PMP Amplified Pressure Transducer
PDCR mV Pressure Transducer
      4-20 mA Pressure Transmitter
      Product Series
              UNIK 5000
              Diameter and Material
                      25mm Stainless Steel
                      Electrical Connector Note 6
                              No Electrical Connector Note 7
                      1
                             Cable Gland (Polyurethane Cable)
                      2
                              Raychem Cable
                             Polyurethane Cable (Depth)
                      3
                              Hytrel Cable (Depth)
                             MIL-C-26482 (6-pin Shell Size 10) (Mating connector not supplied)
                      6
                      7
                              DIN 43650 Form A Demountable (Mating connector supplied)
                      Α
                             Demountable MIL-C-26482 (6-pin Shell Size 10) (Mating connector not supplied)
                      С
                             1/2" NPT Conduit (Polyurethane cable)
                              Micro DIN (9.4 mm Pitch) (Mating connector supplied)
                      Ε
                             MIL-C-26482 (6 pin Shell Size 10) Alternative Wiring (Mating connector not supplied)
                              Demountable MIL-C-26482 (6 pin Shell Size 10) Alternative Wiring (Mating connector not supplied)
                      G
                             M12 x 1 4-pin male (Mating connector not supplied)
                             Zero Halogen Cable Demountable
                             Electronics Option
                                     mV Passive 4-wire (PDCR) Note 1
                                     mV Linearised 4-wire (PDCR)
                                     4 to 20 mA 2-wire (PTX)
                             2
                             3
                                     0 to 5 V 4-wire (PMP)
                                     0 to 5 V 3-wire (PMP)
                             4
                             5
                                     1 to 6 V 3-wire (PMP)
                                     0 to 10 V 4-wire (PMP)
                                     0.5 to 4.5 V Ratiometric 3-wire (PMP) Note \bf 5
                                     Isolated/Configurable 4-wire (PMP) Note 4, 5
                                     Compensated Temperature Range
                                              -10 to +50 °C (14 to +122 °F)
                                     TB
                                              -20 to +80 °C (-4 to +176 °F
                                     TC
                                              -40 to +80 °C (-40 to +176 °F)
                                     TD
                                              -40 to +125 °C (-40 to +257 °F) Note 2, 5
                                              Accuracy
                                              Α1
                                                     Industrial
                                              Α2
                                                     Improved
                                              Α3
                                                     Premium
                                                     Calibration
                                                              Zero/Span Data
                                                     CA
                                                     CB
                                                              Room Temperature
                                                     CC
                                                              Full Thermal
                                                              Hazardous Area Approval Note 6
                                                              H0
                                                                     None
                                                                     IECEx/ATEX Intrinsically Safe 'ia' Group IIC
                                                              Н1
                                                              H2
                                                                     IECEX/ATEX Intrinsically Safe 'ia' Group I
                                                                     FM (C & US) Intrinsically Safe 'ia' Group IIC/ABCD
                                                              Н6
                                                              НΑ
                                                                     H1 + H2
                                                              HS
                                                                     H1 + H6
                                                                     Pressure Connector
                                                                     PΑ
                                                                              G1/4 Female Note 3
                                                                     PB
                                                                              G1/4 Male Flat
                                                                              G1/4 Male 60 degree Int Cone
                                                                              G1/8 Male 60 degree Int Cone
                                                                     PD
                                                                     PΕ
                                                                              1/4 NPT Female Note 3
                                                                              1/4 NPT Male
                                                                     PF
                                                                     PG
                                                                              1/8 NPT Male
                                                                     РΗ
                                                                              M20x1.5
                                                                     ΡJ
                                                                              M14x1.5 60° Internal Cone
                                                                              M12x1 Internal Cone
                                                                     PL
                                                                              7/16-20 UNJF Male 74° External Cone
                                                                     PΝ
                                                                              G1/2 Male via Adaptor Note 3
                                                                     PR
                                                                              1/2 NPT Male via adaptor Note 3
                                                                     PS
                                                                              1/4 Swagelok Bulkhead
                                                                     РΤ
                                                                              G1/4 Male Flat Long
                                                                              7/16-20 UNF Long 37 degree flare tip
                                                                     PU
                                                                     PV
                                                                              7/16-20 UNF Female
                                                                     PW
                                                                              Depth Cone (G1/4 Female open face)
                                                                     PX
                                                                              7/16-20 UNF Male Short Flat
                                                                     PΥ
                                                                              3/8-24 UNJF
                                                                     PΖ
                                                                              M10 x 1 80° Int Cone
                                                                     RΒ
                                                                              G1/4 Male Flat with Snubber
                                                                     RC
                                                                              G1/4 Male Flat with Cross Bore Protection
PTX
       5
              0
                             2 -
                                    TA -
                                             A2 - CB - H0 -
                                                                    PA
                                                                              Typical Model Number
```

#### **Ordering Notes**

Note 1 Premium Accuracy is not available on this version

Note 2 Please ensure that the electrical connector selected is option 0, 2, 6, A, E, F or G.

Note 3 Select one of these pressure connectors for pressure ranges over 70 bar

Note 4 Max operating temperature is 80°C (176°F)

Note 5 Hazardous area certifications not available

Note 6 Hazardous area certifications are restricted by electrical connector options in line with the following table:

					(	Connec	tor					
Approval	0	1	2	3	4	6/E	7	A/F	С	D	G	K
H1	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-
H2	Υ	-	Υ	Υ	Υ	Υ	-	-	Υ	-	Υ	-
H6	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-
НА	Υ	-	Υ	Υ	Υ	Υ	-	-	Υ	-	Υ	-
HS	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	-

Note 7 Has component certification and must be incorporated into certified apparatus with an IP rated enclosure appropriate to the certification type supplied.

#### 2) State pressure range and units: e.g. 0 to 10 bar, -5 to +5 psi

#### Unit options are:

Symbol bar mbar psi Pa hPa kPa MPa mmH <sub>2</sub> O cmH <sub>2</sub> O inH <sub>2</sub> O mmH <sub>2</sub> O mmHg inHg inHg kaf/cm²	Description bar millibar pounds/sq. inch Pascal hectoPascal kiloPascal MegaPascal mm water cm water metres water inches water feet water mm mercury inches mercury kg force/sq. cm
9	,
Torr	torr

#### 3) State Pressure reference: e.g. gauge

Reference options are:

gauge absolute barometric

sealed gauge

wet/dry differential wet/wet differential

4) State cable lengths and units: Integer values only, e.g. 1m cable, 8 ft, minimum length 1 m (3 ft) cable (only required on certain electrical connectors), Maximum cable length 190 m (570 ft)

5) Output option 8 only: State voltage output at minimum and maximum pressure: e.g. output -1 to 9 V

#### Typical order examples:

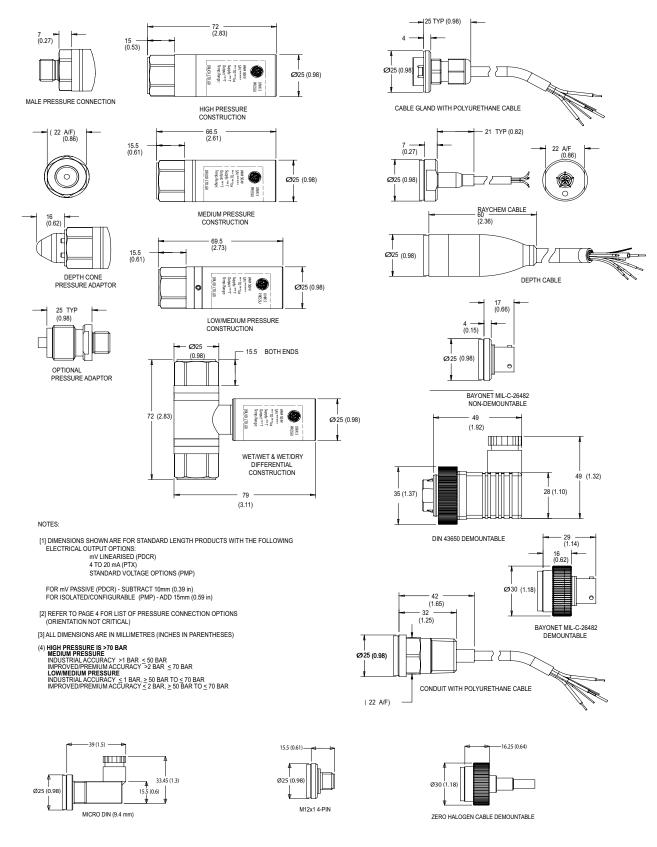
PTX5012-TB-A2-CA-H0-PA, 0 to 10 bar, gauge, 3 m cable PMP5028-TD-A3-CC-H0-PE, -15 to 75 psi, gauge, 15ft cable, output voltage -1 to 5 volts PDCR5071-TB-A1-CB-H0-PB, 0 to 100 bar, sealed gauge

#### Accessories

Mating connector for MIL-C-26482 (Electrical connector options 6, A, E and F) under part number S\_163-009,

Note: Not considered suitable for use in hazardous areas due to light metals content and low ingress protection (IP) rating.

#### **Mechanical Drawings**





www.ge-mcs.com