

PRESSURE TRANSMITTER

PTX130 G1, G2, S1, S2, A1 & A2,

- > Measuring Range (>2 to 700) bar
- > <0.25% FS Accuracy
- > Gauge, Sealed Gauge or Absolute Range
- > 2 Wire 4/20mA or 3 Wire Voltage Output
- > Choice of Process Connections



INTRODUCTION

The PTX130 pressure transmitter series has a piezo-resistive ceramic pressure sensor giving it excellent media compatibility. Constructed of stainless steel, it is available with a wide variety of process connections, and every device is temperature compensated. The electronics are microprocessor based which means no manual adjustment is needed. The product can be ordered with current or voltage output and has excellent temperature stability.

SPECIFICATION @ 20 °C

Type Gauge, Absolute or Sealed Gauge
 Pressure Range (1 to 700) bar

Nominal Pressure (bar)	Permissible Overpressure (bar)	Burst Pressure (bar)
1	2	4
2	4	5
5	10	12
10	20	25
20	40	50
50	100	120
100	200	250
250	400	500
400	650	650
600	880	880
700	880	880

Accuracy (non-linearity & hysteresis) $\leq \pm 0.25\%$ / Full Scale
 Option $\leq \pm 0.1\%$ / Full Scale

Setting Errors (offsets)
 Zero & Full Scale $\leq \pm 0.5\%$ / Full Scale

Thermal Zero Shift
 Option $\leq \pm 0.04\%$ / Full Scale / °C
 $\leq \pm 0.02\%$ / Full Scale / °C
 $\leq \pm 0.01\%$ / Full Scale / °C

Thermal Span Shift $\leq -0.015\%$ / °C

Standard Media Temperature (-20 to 135) °C
 Ambient Temperature (-20 to 80) °C
 Storage Temperature (-40 to 125) °C
 Compensated Temperature Range (20 to 80) °C

Output Options (4 to 20) mA two wire (See order codes)

Supply Voltage (9 to 32) V DC (See order code for optional outputs supplies)

Supply Voltage Influence Typically <0.05 % FS

Load Resistance
 2-wire $R_{max} = \frac{(V_{supply} - V_{supply\ min})}{0.02}$
 3-wire $R_{min} = 10\ k\Omega$
 4-wire $R_{min} = 11\ k\Omega$

Load Influence 0.05 % FSO / kΩ

Material Diaphragm, Ceramic Al₂O₃96 %
 Housing Stainless Steel 303
 O Rings Viton

Process Connections Options G $\frac{1}{4}$ " male (See order codes)

Mechanical Stability
 Shock 100 g / 11 ms
 Vibration 10 g RMS (20 to 2000) Hz

PRESSURE TRANSMITTER

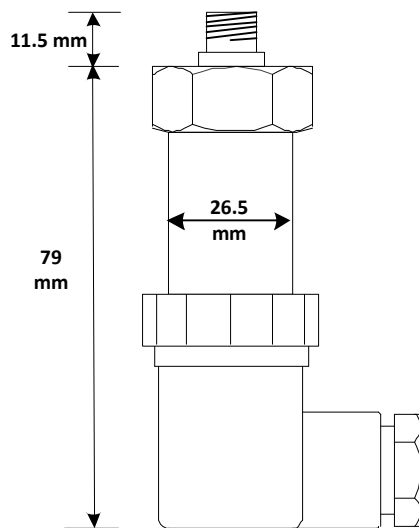
Typical Passive mV/V Outputs

Nominal Pressure	Bar	1	2	5	10	20	50	100	250	400	600	700
Output	mV/V	2 to 3.5	2 to 4	2.4 to 4.5	3.6 to 6	2.5 to 4	4 to 6.5	3.1 to 4.8	3.1 to 4.8	3.1 to 4.8	3.7 to 5.7	4.3 to 6.7
Zero setting Error	mV/V	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Span Setting Error	%	30	30	30	30	30	30	30	30	30	30	30

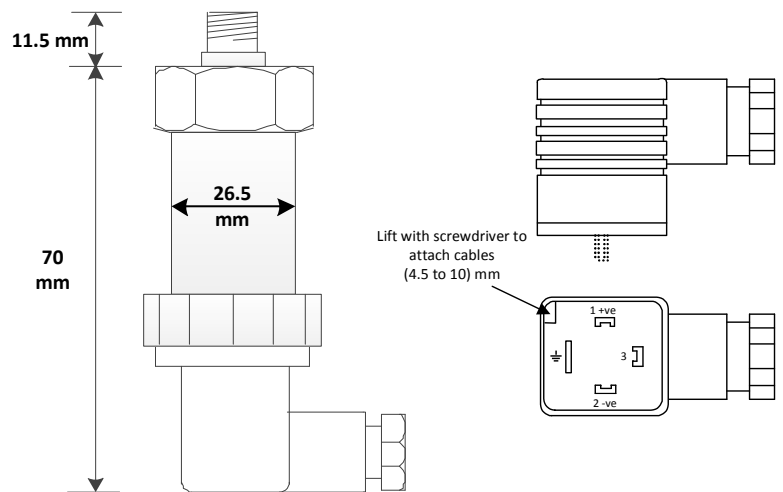
Wiring Designation

		Large Plug & Socket	Small Plug & Socket	IP66 Cable	AMP 6-Pin Bayonet	IP68 Vented cable	Binder 6-Pin Connector	M12x1 4 Pin Connector
2-Wire	+ve Supply -ve Supply Ground	Pin 1 Pin 2 Earth Pin	Pin 1 Pin 2 Earth Pin	Red Blue Green	Pin 1 Pin 2 Earth Pin	Red Blue White	Pin 1 Pin 2 Pin 3	Pin 1 Pin 2 Pin 3
3-Wire	+ve Supply -ve Supply +ve Output Ground	Pin 1 Pin 2 Pin 3 Earth Pin	Pin 1 Pin 2 Pin 3 Earth Pin	Red Blue Green Yellow	Pin 1 Pin 2 Pin 3 Earth Pin	Red Blue White Yellow	Pin 1 Pin 2 Pin 3 Pin 4	Pin 1 Pin 2 Pin 3 Pin 4
4-Wire	+ve Supply -ve Supply +ve Output -ve Output	Pin 1 Pin 2 Pin 3 Earth Pin	Pin 1 Pin 2 Pin 3 Earth Pin	Red Blue Green Yellow	Pin 1 Pin 2 Pin 3 Pin 4	Red Blue White Yellow	Pin 1 Pin 2 Pin 3 Pin 4	Pin 1 Pin 2 Pin 3 Pin 4

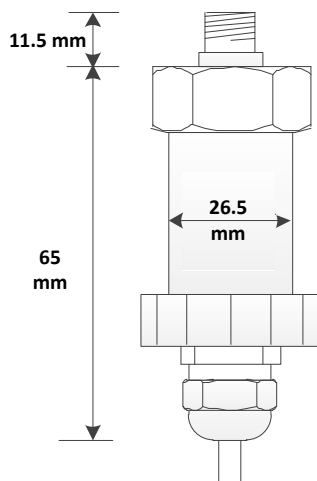
MECHANICAL



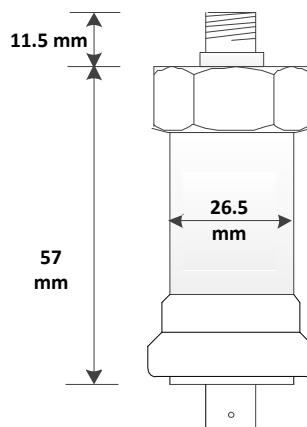
Large Plug & Socket



Small Plug & Socket



Cable Gland Assembly



Amphenol Connector

PRESSURE TRANSMITTER

ORDER CODE

PTX130									
Pressure Type:									
Absolute	A								
Gauge	G								
Sealed Gauge	S								
Pressure Range:									
(>2 to 700) Bar	1								
(-1 to +1) Bar and (0 to 2) Bar	2								
Output:		Supply Voltage Variations							
(4 to 20) mA 2-Wire									-5
Options:									
mV/V / 4-wire	(2 to 30) V								-1
2 mV/V / 4-wire	(2 to 30) V								-2
10 mV/V / 4-wire	(3 to 12) V								-3
0 to 100/200 mV 4-Wire									-4
(0 to 5) V 3-Wire									-6
(0 to 10) V 3-Wire	(13 to 32) V								-7
(1 to 5) V 3-Wire									-8
(0.5 to 4.5) V 3-Wire									-9
(1 to 10) V 3-Wire	(13 to 32) V								-A
(1 to 6) V 3-Wire									-B
(0 to 6) V 3-Wire									-C
(0.5 to 4.5) V 3-Wire (non ratiometric)	5 Vdc								-D
Accuracy (Combined NL&H)									
<±0.25									A
Option:									
<±0.1									B
Accuracy (Thermal Zero Shift)									
<±0.04%/FS/ °C									4
Options:									
<±0.02%/FS/ °C									2
<±0.01%/FS/ °C									1
Electrical Connection									
Large Plug & Socket (GDM3009, DIN43650)									-B
Options:									
Small Plug & Socket (GDS307, DIN43650)									-A
Screened Cable via IP66 gland									-C
Amphenol 6 pin Bayonet connector									-D
Vented Cable via IP68 Gland									-E
Binder 6 Pin 723 Series connector									-F
M12 x 1, 4 Pin connector									-G
Process Connection									
G¼" Male DIN3852									A
Options:									
G¼" Male DIN3852 (316 St/St)									B
G½" Male DIN3852									F
G¼" Male DIN3852, 150 °C Integrated Cooler									P
G½" Male DIN3852, 150 °C Integrated Cooler									Q
G¼" Male DIN3852, HG St/St (UNS31803)									I
G¼" Female (303 St/St)									E
¼" NPT Male									C
½" NPT Male									G
7/16 UNF - 20									D
9/16 UNF Internal Thread									H
O Ring Material:									
Viton									V
Options:									
NBR									N
EPDM									E
Chemraz									C
Options:									
Cable Length in Metres									
<p>EXAMPLE: PTX130G2-5B1-BCV (-1 to +1) Bar [Customer to specify Pressure Range at end of code as shown] Pressure Transmitter, Gauge, Pressure Range, (4 to 20) mA Output, Accuracy (combined NL&H) ≤±0.01% /FS, Accuracy (Thermal Zero Shift) ≤±0.01% /FS/ °C, Large Plug, ¼" NPT Male, O Ring Viton</p>									