



## PX180B, PX181B, PX182B, PX480A, PX481A, PX482A

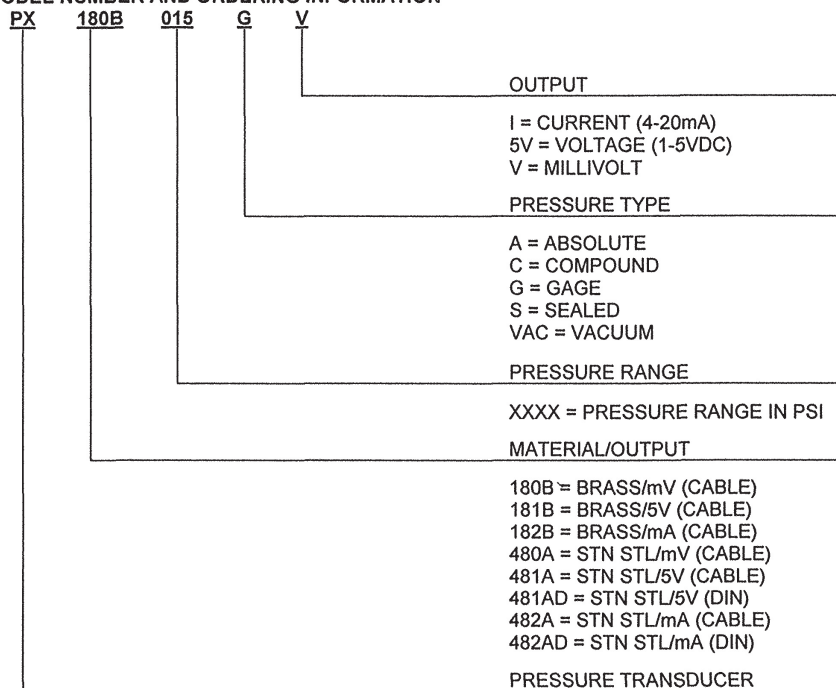
Miniature Stainless Steel & Brass Pressure Transducers in Gage, Absolute, Sealed and Vacuum Ranges

INSTRUCTION  
SHEET

M-4182/0305

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### MODEL NUMBER AND ORDERING INFORMATION



### AVAILABLE PRESSURE RANGES

	PX180B	PX181B	PX182B	PX480A	PX481A&D	PX482A&D
ABSOLUTE RANGES (PSIA) 15, 30, 60				X	X	X
COMPOUND RANGES (PSIG) VAC/15, VAC/30, VAC/60	X	X	X	X	X	X
GAGE RANGES (PSIG) VAC/0, 1, 6, 15, 30, 60, 100, 200, 300, 500	X	X	X	X	X	X
SEALED RANGES (PSIS) 1000, 2000, 3000				X	X	X

# PX180B/PX480A

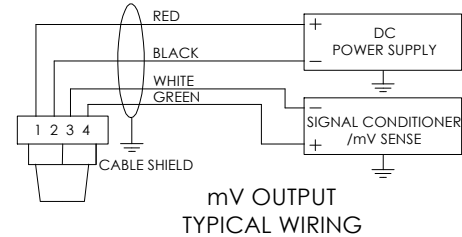
## MILLIVOLT OUTPUT

SPECIFICATIONS			
PRESSURE RANGES – PX180B PX480A	VACUUM - UP TO 500 PSI VACUUM - UP TO 3000 PSI	0 – 1 PSI	0 – 6 PSI
REFERENCE ACCURACY (BFSL)	± 0.2% FS TYP, ± 0.3% FS MAX	± 1.0% FS MAX	± 0.5% FS MAX
NULL OFFSET @25°C (77°F) – PX180B PX480A	± 1% FS	± 2.0% FS MAX	± 1.0% FS MAX
SPAN SET @25°C (77°F) – PX180B PX480A	± 1% FS	± 2.0% FS MAX	± 1.5% FS MAX
THERMAL EFFECT ON NULL (ZERO) WITHIN COMPENSATED RANGE – PX180B PX480A	± 0.5% FS TYP OVER COMP. RANGE, ± 2% MAX	± 4% FS MAX ± 5% FS MAX	± 2% FS MAX ± 3% FS MAX
THERMAL EFFECT ON SPAN WITHIN COMPENSATED RANGE	± 0.5% FS TYP OVER COMP. RANGE, ± 2% MAX	± 4% FS MAX	± 2% FS MAX
1 YR. STABILITY	< 0.25% FS	< 1.0% FS	< 0.5% FS
OUTPUT VOLTAGE	10mV/V	5mV/V	10mV/V
INPUT SUPPLY VOLTAGE	10VDC MAX.		
OUTPUT IMPEDANCE	3.5K ohms - 6.0K ohms		
OPERATING TEMPERATURE	-40 TO 80 °C (-40 TO 176°F)		
PROCESS TEMPERATURE – PX180B PX480A	-40 TO 125 °C (-40 TO 257°F) -40 TO 100 °C (-40 TO 212°F) 125°C/257°F FOR LOW PRESSURE GAGE RANGES		
COMPENSATED TEMPERATURE	-25 TO 75 °C (-13 TO 167°F)		
OVERPRESSURE	2X FS (750 PSI FOR 500 PSI RANGE)		
BURST PRESSURE – PX180B PX480A	3X FS (OR 750 PSI, WHICHEVER IS LESS) 3X FS (750 PSI FOR 300 & 500 PSI, PROCESS CONTAINMENT OF 2000 PSI ON LOW PRESSURE GAGE RANGES)		
VIBRATION	10G, 55 – 2000 Hz		
SHOCK	30G		
PROCESS WETTED MATERIAL – PX180B PX480A	BRASS, BOROSILICATE, SILICON, RTV, EPOXY STAINLESS STEEL		
ELECTRONICS HOUSING MATERIAL	ALUMINUM, BLACK ANODIZED		
PROCESS CONNECTION	1/8-27 NPT		
ELECTRICAL CONNECTION	36" CABLE, 24 AWG		

CONDUCTOR COLORS	OUTPUT
RED	+Vin
BLACK	-Vin
WHITE	-S
GREEN	+S

### NOTES:

1. FOR PX180B, CONDUCTIVE MEDIA "-Vin" SHOULD BE TIED TO CASE POTENTIAL
2. THE CABLE SHIELD, POWER SUPPLY & RECEIVER GROUNDINGS ARE OPTIONAL DEPENDING ON INSTALLATION (SHOWN BELOW)
3. FOR VACUUM RANGES, REVERSE GREEN AND WHITE WIRES



# PX181B/PX182B/PX481A/PX482A

## 4-20mA OR 1-5VDC

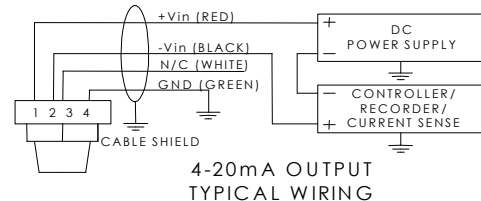
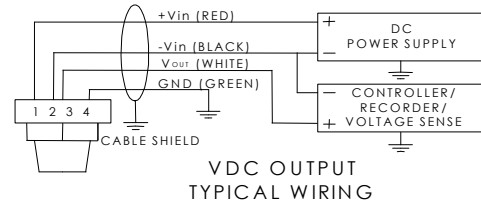
SPECIFICATIONS			
PRESSURE RANGE – PX181B/182B PX481A/482A	VACUUM - UP TO 500 PSI VACUUM - UP TO 3000 PSI	0 – 1 PSI	0 – 6 PSI
ACCURACY @25°C INCLUDING LINEARITY (BFSL), HYSTERESIS & REPEATABILITY	±0.2% FS TYP, ±0.3% FS MAX	±1.0% FS MAX	±0.5% FS MAX
1 YR. STABILITY	< 0.25% FS	< 1.0% FS	< 0.5% FS
LOAD LIMITATION	50K OHM MIN (ALL VOLTAGE OUTPUTS) 600 OHMS MAX (4-20MA)		
OPERATING TEMPERATURE	-40 TO 80 °C (-40 TO 176°F)		
PROCESS TEMPERATURE – PX181B/182B PX481A/482A	-40 TO 125 °C (-40 TO 257°F) -40 TO 100 °C (-40 TO 212°F) 125°C/257°F FOR LOW PRESSURE GAGE RANGES		
COMPENSATED TEMPERATURE	-25 TO 75 °C (-13 TO 167°F)		
TOTAL ERROR BAND (INCLUDES TEMPERATURE EFFECTS, ZERO & SPAN SET)	±1% FS	±2.5% FS MAX	±1.5% FS MAX
OVERPRESSURE	2X FS (750 PSI FOR 500 PSI RANGE)		
BURST PRESSURE – PX181B/182B PX481A/482A	3X FS (OR 750 PSI, WHICHEVER IS LESS) 3X FS (750 PSI, FOR 300 & 500 PSI) PROCESS MEDIA CONTAINMENT OF 2000 PSI ON LOW GAGE RANGES		
VIBRATION	10G, 55 – 2000 Hz		
SHOCK	30G		
PROCESS WETTED MATERIAL – PX181B/182B PX481A/482A	BRASS, BOROSILICATE, SILICON, RTV, EPOXY STAINLESS TEEL		
ELECTRONICS HOUSING MATERIAL	ALUMINUM, BLACK ANODIZED		
PROCESS CONNECTION	1/8-27 NPT		
ELECTRICAL CONNECTION	36" CABLE 24 AWG, DIN 43650 FORM C CONNECTOR		
INPUT/OUTPUT – PX181B, PX481A	9-30VDC / 1-5VDC		
INPUT/OUTPUT – PX182B, PX482A	11-30VDC / 4-20MA		

### WIRE COLORS

CONDUCTOR COLORS	DIN 43650-C PIN No.	VOLTAGE OUTPUT	CURRENT OUTPUT
RED	1	+Vin	+Vin
BLACK	2	-Vin	-Vin
WHITE	3	Vout	N/A
GREEN	GND	CASE GROUND	CASE GROUND

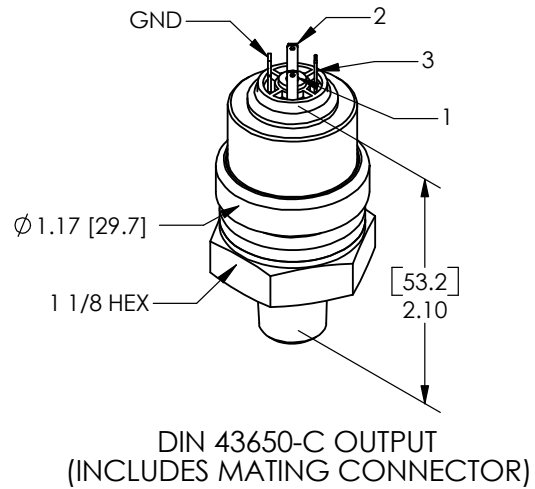
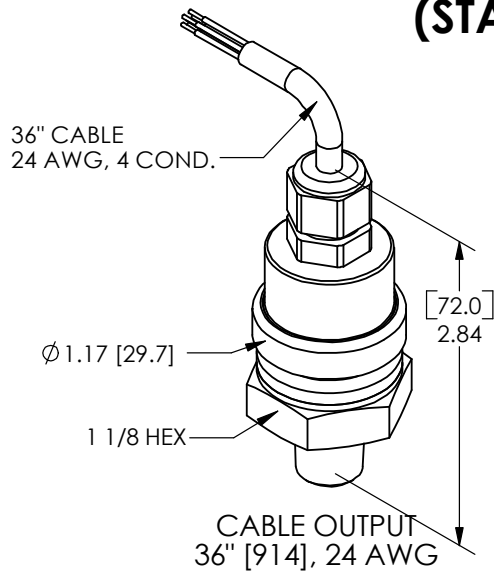
### NOTES:

1. FOR PX181B, PX182B, CONDUCTIVE MEDIA "-Vin" SHOULD BE TIED TO CASE POTENTIAL.
2. THE CABLE SHIELD, POWER SUPPLY & RECEIVER GROUNDINGS ARE OPTIONAL DEPENDING ON INSTALLATION (SHOWN BELOW).

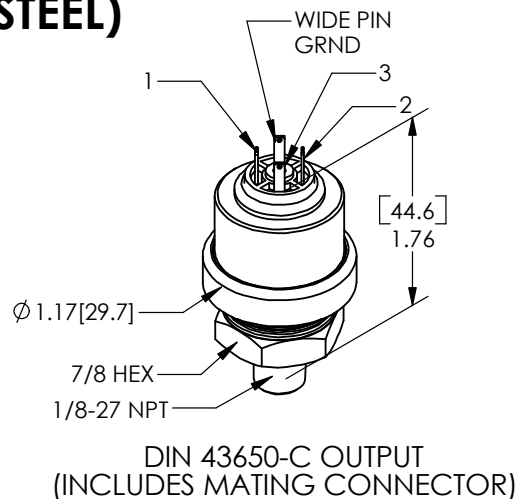
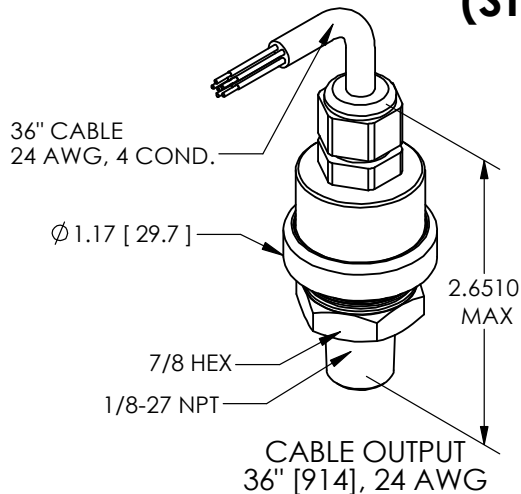


**Dimensions shown in inches [mm]**

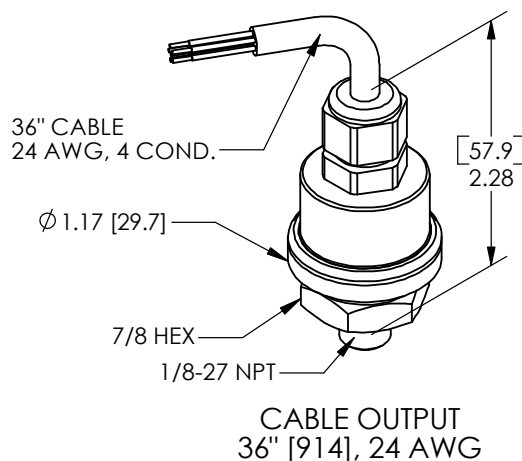
**PX480A/PX481A/PX482A ABSOLUTE & HIGH PRESSURE  
(STAINLESS STEEL)**



**PX480A/PX481A/PX482A GAGE PRESSURE  
(STAINLESS STEEL)**



**PX180B/PX181B/PX182B  
(BRASS)**





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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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