

# FLUSH DIAPHRAGM TRANSDUCER WITH AMPLIFIED VOLTAGE OUTPUT STAINLESS STEEL WETTED PARTS

**0.5 to 5.5 Vdc Output**  
**0-15 to 0-20,000 psi**  
**0-1 to 0-1300 bar**

1 bar = 14.5 psi  
1 kg/cm<sup>2</sup> = 14.22 psi  
1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar



PX103U0-025G5V,  
shown actual size.

PX103U1-025G5V,  
shown actual size.

## PX103-5V Series



- ✓ All Stainless Steel
- ✓ Amplified Voltage Output
- ✓ Flush Diaphragm for Hard-to-Measure Fluids
- ✓ Ideal for Tank and Level Applications

Omega's PX103U voltage transmitters feature a rugged all stainless steel case and a high-reliability, low-noise 0.5 to 5.5 Vdc output. They are designed for use in critical applications in wastewater management, chemical manufacturing, water processing, tank and level applications, and other industrial applications where a non-plugging flush diaphragm is needed.

### To Order

RANGE	MODEL NO.	COMPATIBLE METERS**
<b>ABSOLUTE PRESSURE (All Ranges Available in Absolute Pressure)</b>		
0 to 15 psi	0 to 1 bar	PX103U[*]-015A5V DP41-E, DP25B-E, DP24-E
0 to 25 psi	0 to 1.7 bar	PX103U[*]-025A5V DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX103U[*]-050A5V DP41-E, DP25B-E, DP24-E
<b>GAGE PRESSURE (All Ranges Also Available in Sealed Gage Pressure)</b>		
0 to 15 psi	0 to 1 bar	PX103U[*]-015G5V DP41-E, DP25B-E, DP24-E
0 to 25 psi	0 to 1.7 bar	PX103U[*]-025G5V DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX103U[*]-050G5V DP41-E, DP25B-E, DP24-E
0 to 100 psi	0 to 6.9 bar	PX103U[*]-100G5V DP41-E, DP25B-E, DP24-E
0 to 200 psi	0 to 13.8 bar	PX103U[*]-200G5V DP41-E, DP25B-E, DP24-E
0 to 500 psi	0 to 34.5 bar	PX103U[*]-500G5V DP41-E, DP25B-E, DP24-E
0 to 1000 psi	0 to 68.9 bar	PX103U[*]-1KG5V DP41-E, DP25B-E, DP24-E
0 to 2000 psi	0 to 138 bar	PX103U[*]-2KG5V DP41-E, DP25B-E, DP24-E
0 to 3000 psi	0 to 207 bar	PX103U[*]-3KG5V DP41-E, DP25B-E, DP24-E
0 to 5000 psi	0 to 345 bar	PX103U[*]-5KG5V DP41-E, DP25B-E, DP24-E
0 to 10,000 psi	0 to 689 bar	PX103U[*]-10KG5V DP41-E, DP25B-E, DP24-E
0 to 15,000 psi	0 to 1034 bar	PX103U[*]-15KG5V DP41-E, DP25B-E*, DP24-E
0 to 20,000 psi	0 to 1379 bar	PX103U[*]-20KG5V DP41-E, DP25B-E*, DP24-E

Comes complete with 5-point NIST traceable calibration.

Metric ranges available – consult Engineering.

\* 4-digit meter, counts by 10. \*\* Visit us online for compatible meters.

[\*] To order cable style insert "0" into model number; to order connector style insert "1".

To order absolute pressure ranges, replace "G" in model number with "A" and add **additional cost**.

To order sealed gage pressure ranges, replace "G" in model number with "S" (no extra charge).

To order extra lead length [3 m (10') standard] add suffix "-(Length of cable in feet)" and **additional cost** for each foot beyond 10'.

**Ordering Examples:** PX103U0-050G5V, 50 psi gage pressure cable style transducer with 0.5 to 5.5 Vdc output. PX103U1-050A5V, 50 psi absolute pressure connector style transducer with 0.5 to 5.5 Vdc output. PT06F10-6S-R, mating connector (sold separately). PX103U0-200S5V-25FT, 200 psi sealed gage pressure cable style transducer with 0.5 to 5.5 Vdc output and 7.6 m (25') leads.

### ACCESSORY

MODEL NO.	DESCRIPTION
PT06F10-6S-R	Mating connector for PX103U1 series transducers

# FLUSH DIAPHRAGM TRANSMITTER

## SPECIFICATIONS

### 5.5 Vdc OUTPUT

**Excitation:** 10 to 30 Vdc

**Output:** 0.5 to 5.5 Vdc  
(0.5 to 10.5 Vdc optional)

**Zero Balance:** 0.5V ±0.1V

### Accuracy:

<100 psi: ±1% FSO linearity,  
hysteresis and repeatability  
combined

≥100 psi: ±0.5% FSO linearity,  
hysteresis and repeatability  
combined

### Operating Temp Range:

<100 psi: -45 to 93°C (-50 to 200°F)

≥100 psi: -45 to 121°C (-50 to 250°F)

### Compensated Temp Range:

<100 psi: -1 to 54°C (30 to 130°F)

≥100 psi: -18 to 66°C (0 to 150°F)

### THERMAL EFFECTS

#### <100 psi:

**Span:** <±2% within  
compensated range

**Zero:** <±1% within  
compensated range

#### ≥100 psi:

**Span:** ±0.003% rdg/°F

**Zero:** ±0.0045% FSO/°F

**Ranges (psi):** 5, 15, 25, 50, 100, 200,  
500, 1K, 5K, 10K, 20K; gage, sealed  
gage or absolute; metric ranges also  
available

### Proof Pressure:

<100 psi: 200% of rated pressure

≥100 psi: 150% rated pressure

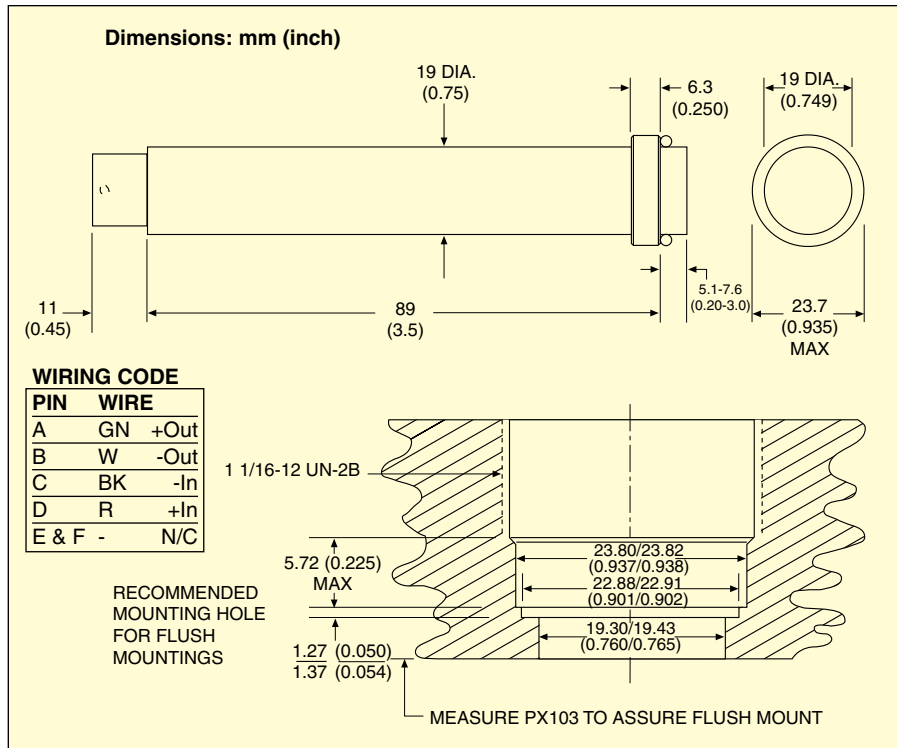
30,000 psi: maximum

### Burst Pressure:

<100 psi: 500% of rated pressure

≥100 psi: 300% of rated pressure

50,000 psi: maximum



### Wetted Parts:

Ranges <100 psi: 316 stainless steel

Ranges ≥100 psi: 17-4 PH stainless steel

### Pressure Port:

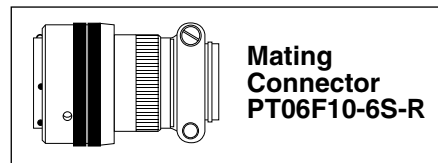
Flush diaphragm

O-Ring: #2-018, sold separately

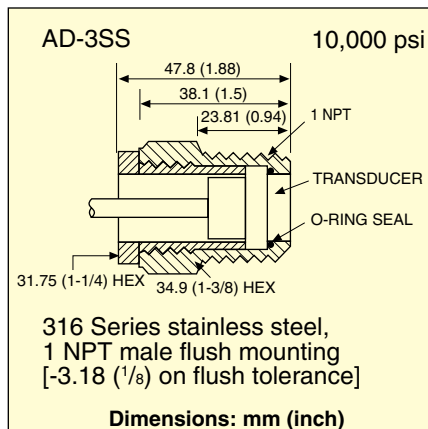
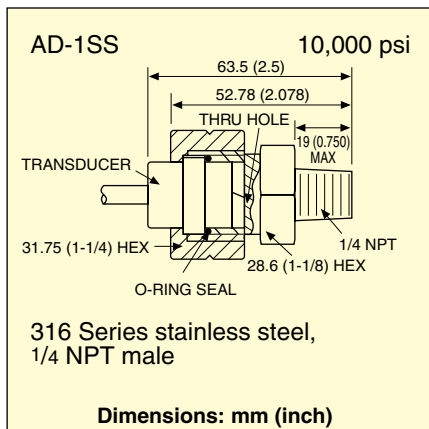
**Electrical Connection:** 3 m (10')  
4-conductor shielded PVC cable or  
PTIH-10-6P or equal

### Mating Connector:

PT06F10-6S-R (sold separately)



## Flush Mount Adaptors for Series PX103 Transducers



## "O" RINGS FKM or Polyurethane

Use for pressures under  
10,000 psi:

#2-018-V

FKM . . . . . Pack of 10

Use for pressures of  
10,000 psi and higher:

#2-018-P

POLYURETHANE . . . . . Pack of 15

O-Ring Provided with Each Adaptor

# FLUSH DIAPHRAGM TRANSMITTER

## STAINLESS STEEL WETTED PARTS

### MOUNTING FITTINGS AVAILABLE



**4 to 20 mA Output**  
**0-15 to 0-20,000 psi**  
**0-1 to 0-1300 bar**

1 bar = 14.5 psi  
 1 kg/cm<sup>2</sup> = 14.22 psi  
 1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar



PX103U0-025GI,  
shown actual size.

Cable style.



PX103U1-025GI,  
shown actual size.

Twist-lock style.

### PX103-i Series



- ✓ All Stainless Steel
- ✓ Low-Noise 4 to 20 mA Output
- ✓ Flush Diaphragm for Hard-to-Measure Fluids
- ✓ Ideal for Tank and Level Applications

Omega's PX103 Series transmitters feature a rugged all stainless steel case and a high-reliability, low-noise 4 to 20 mA output. They are designed for use in critical applications in wastewater management, chemical manufacturing, water processing, tank and level operations, and other industrial applications in which a non-plugging flush diaphragm is needed.

### SPECIFICATIONS

**Excitation:** 10 to 30 Vdc

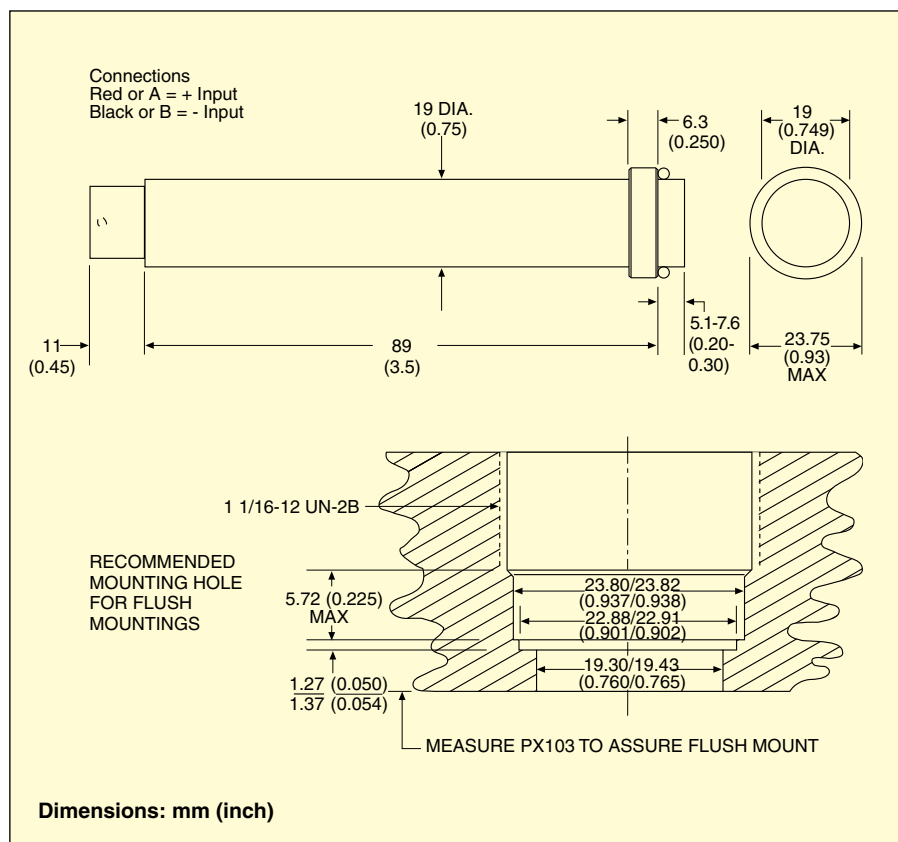
**Output:** 4 to 20 mA

**Zero Balance:** 4 mA ±0.2 mA

**Accuracy:**

<100 psi: ±1% linearity, hysteresis and repeatability combined

≥100 psi: ±0.5% linearity, hysteresis and repeatability combined



**Operating Temp Range:**

<100 psi: -40 to 82°C (-40 to 180°F)  
 ≥100 psi: -46 to 121°C (-50 to 250°F)

**Compensated Temp Range:**

<100 psi: -1 to 54°C (30 to 130°F)  
 ≥100 psi: -18 to 66°C (0 to 150°F)

