



TEL-TRU MANUFACTURING COMPANY

MODEL P621 SANITARY PRESSURE TRANSMITTER

Industrial *Silicon Glass Fused Sensor Series*



KEY BENEFITS

- Designed and manufactured to meet **3-A® Standard Number 74-xx**
- Process connections from 1.5" through 4" flush diaphragms, Tri-Clamp® or Cherry-Burrell®
- All 316L stainless steel welded construction for long service life in demanding applications
- Integrated design without threads or crevices to trap and grow bacteria
- Compatible with CIP and SIP maintenance procedures
- Unique **glass fused** strain gauge sensor provides exceptional calibration stability
- Re-rangeable in the field
- Food grade actuating fill fluids, FDA Compliant

APPLICATIONS:

- Dairy
- Food and Beverage
- Pharmaceutical
- Cosmetic
- Biotech

RANGES:

Many ranges up to 0-1,000psi; also metric standard Bar and Kg/cm² ranges. Custom ranges readily accommodated.

CONNECTIONS:

Many pressure and electrical connections available. Custom connections can be accommodated.

OPTIONS:

- Certificate of Conformance
- Certificate of Calibration traceable to NIST, with five check points
- Silicone gel potting of electronics housing for added shock and vibration protection
- Electro-polished sanitary contact surfaces
- Tamper-proof unit without customer accessible zero and span adjustment
- PTD-2 local plug-in loop powered indicator for use with the DIN 43650 A electrical connection and 4-20mA output electronics

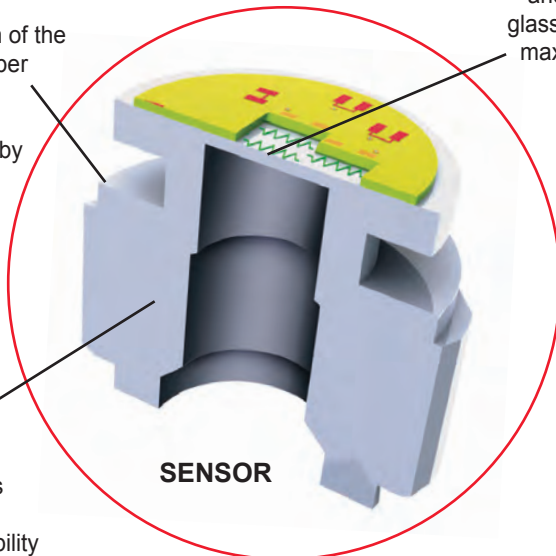
WARRANTY:

Three-year warranty, see website for details: www.teltru.com/t-P600.aspx

Tri-Clamp® is a registered trademark of Ladish Company
Cherry-Burrell® is a registered trademark of United Dominion Industries, Inc.
3-A® is a registered trademark of 3-A Sanitary Standards, Inc.

Stepped design of the pressure chamber minimizes any effect on the sensor caused by installation stresses

Robust, single piece, 316L sensor construction without O-rings or seals provides leak-proof reliability



Single piece diaphragm and high output silicon glass fused strain gauge maximize cycle life and protection from pressure spikes



www.teltru.com

World-Class Instruments

Since 1916

MODEL P621 SANITARY PRESSURE TRANSMITTER - Additional specs at www.teltru.com/t-P600.aspx

FUNCTIONAL SPECIFICATIONS

Proof Pressure:*

Up to 2 times URL

Burst Pressure:*

Up to 5 times URL

Strength and Safety:

Pressure chamber structure tested to 40,000psi

Zero Adjustability:

Up to +/- 30% of calibrated span (output dependent), externally accessible

Span Adjustability:

Up to 2.5 to 1 turndown of URL, externally accessible

Output:

4-20mA, 2-wire

Output Impedance:

>10K Ohms

Current Consumption:

20mA

Output Load:

0-1000 Ohms @ 10-30Vdc

Output Noise:

Negligible

Power Supply Requirements:

10-30Vdc

Temperature Limits:

Process range: -40/250°F (-40/121°C)

Compensated range: 32/130°F (0/55°C)

Operating range: -40/185°F (-40/85°C)

Storage range: -40/212°F (-40/100°C)

* URL = Upper Range Limit (see range code list on website, www.teltru.com/t-P600.aspx)

PERFORMANCE SPECIFICATIONS

Static Accuracy (combined effects of linearity, hysteresis, repeatability):

+/-0.50% or +/-0.25% of calibrated span

+/-0.15% of calibrated span

Linearity:***

+/-0.15% of calibrated span, BFSL

+/-0.05% of calibrated span, BFSL

Hysteresis:

Better than 0.05% of calibrated span

Repeatability:

Better than 0.05% of calibrated span

Response Time:

Less than 5ms

Zero Offset:

Within calibrated accuracy (+/-1% of URL for sealed housing option)

Span Tolerance:

Within calibrated accuracy (+/-2% of URL for sealed housing option)

Stability:

Better than +/-0.25% of URL for 1 year, non-accumulating

Durability:

Greater than 1,000,000 full scale cycles

Thermal Effect on Zero:**

Less than +/-0.047% URL/°F (+/-0.085% URL/°C)

Thermal Effect on Span:**

Less than +/-0.036% of calibrated span/°F (+/-0.065% of calibrated span/°C)

Shock:

Designed to withstand 10Gs, 11ms, 1/2 sine (50Gs with optional silicone gel potting)

Vibration:

Designed to withstand 10Gs peak, 20-2400Hz (50Gs with optional silicone gel potting)

*** Best-Fit-Straight-Line

** Over Compensated Range

PHYSICAL SPECIFICATIONS

Wetted Materials:

Single piece 316L Stainless Steel diaphragm structure, with welded on 316L SS sanitary conn.

Housing Material:

316L Stainless Steel

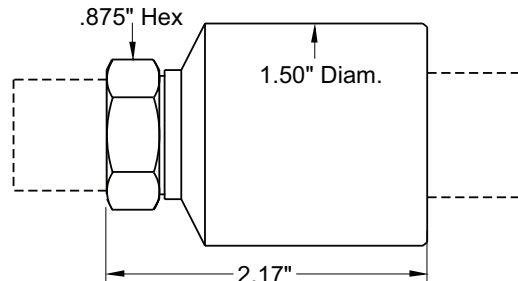
Environmental Rating:

Integral PVC cable and 1/2" NPT conduit connections are IP65/IP67

Optional integral polyurethane cable is IP69K

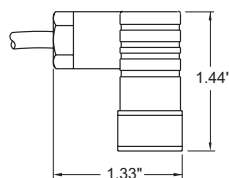
DIN 43650 A and C connections are IP65

M12 connection is IP65/IP67



ELECTRICAL CONNECTIONS

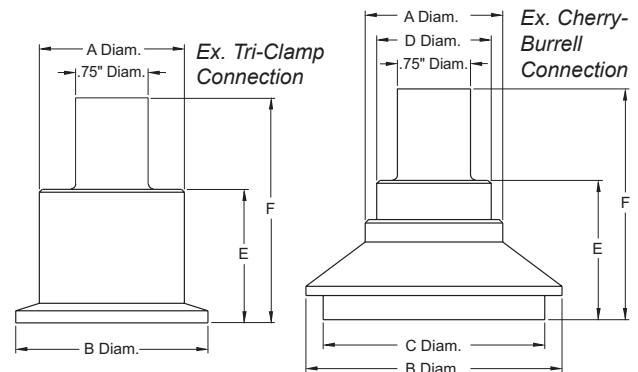
Numerous standard connections available



Ex. Mini-DIN 43650 C

PROCESS CONNECTIONS

Numerous standard connections available



WIRING COLORS AND PINOUTS

Function	Integral Cable or 1/2\" NPT w/Cable	DIN 43650 A	DIN 43650 C	M12
+ Supply	Red	1	1	1
+ Output	Black	2	2	3

	Code	SIZE in	A DIAM	B DIAM	C DIAM	D DIAM	E	F
Tri-Clamp®	27	1.5	1.50	1.97	---	---	1.38	3.32
	28	2.0	1.5	2.52	---	---		
	29	2.5	2.52	3.05	---	---		
	30	3.0	2.31	3.58	---	---		
Cherry Burrell®	69	4.0	2.31	4.68	---	---	1.38	2.32
	67	1.5	1.42	2.00	1.18	1.74		
	31	2.0		2.64	1.18	2.24		
68	3.0	3.87		1.30	3.30	1.59	2.53	



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