

DYNISCO MODEL PT292

Button-Seal Replacement Pressure Transmitters for Process Control in Hazardous Areas

Description

The PT292 transmitters were designed for applications where a threaded stem configuration is required. Models are available with Factory Mutual (FM) explosion - proof or FM intrinsically safe (SIRA) approvals. Both models, PT292E and PT292S, are approved for Class I, Division I, Groups A, B, C and D. The 290 Series is the ideal choice for low pressure applications.

Features

- Accuracy of better than $\pm 0.5\%$ full scale
- 0 - 25 psi (0 - 2 bar) to 0 - 10,000 psi (0 - 700 bar)
- Replacement for traditional "button - seal" units
- New diaphragm design
- 4 to 20 mA loop powered output
- New side - mounted zero and span adjustments
- Various configurations
- New amplifier
- Heavy - duty welded electronics housing
- Thermocouple or RTD option available

Benefits

- Improves process optimization
- Proper range choice improves performance
- Installs in "button" seal holes
- Improved stability
- Industry standard
- Reduces set - up time
- Easy to install
- Superior resistance to electromagnetic noise
- Environmental protection
- Temperature measurement from same process connection



Specifications

Performance Characteristics

Ranges:

psi: 0 - 25, 0 - 50, 0 - 100, 0 - 250, 0 - 500, 0 - 750,
0 - 1,000, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000
bar: 0 - 2, 0 - 3, 0 - 7, 0 - 15, 0 - 30, 0 - 50, 0 - 100, 0 - 200,
0 - 350, 0 - 500, 0 - 700

Accuracy: $\pm 0.5\%$ FSO

Repeatability: $\pm 0.1\%$ FSO

Maximum pressure: 2 x full range below 7,500 psi, 1.5 x full range for 10,000 psi

Material in contact with pressure media: DyMax™ coated 15 - 5 PH stainless steel

Weight: 2 lbs. (.9 kg)

NEW
EXTENDED
LIFE
COATING

Electrical Characteristics

Input voltage: 12 to 36 Vdc

Output: 4 to 20 mA (2 - wire)

Maximum load resistance: 600 Ohms at 24 Vdc, 1,200 Ohms at 36 volts

Gain (span) adjustment range: $\pm 25\%$ FSO minimum, factory set to within $\pm 0.5\%$

Load regulation: At operating voltage of 24 Vdc, current output will vary

$< 0.25\%$ full scale for a change of 10 to 600 Ohms

Zero balance adjustment range: $\pm 40\%$ FSO up to 100 psi, $\pm 25\%$ FSO

at higher ranges (positive output indicated only). Factory set to within $\pm 0.5\%$

Temperature Characteristics

Transducer diaphragm:

Maximum transducer diaphragm temperature: 750°F (400°C)

Zero shift due to temperature change:

1.0 psi/100°F typical (from 75°F to 450°F)

2.0 psi/100°F typical (from 450°F to 600°F)

.07 bar/38°C typical (from 24°C to 232°C)

.14 bar/38°C typical (from 232°C to 315°C)

Electronics housing:

Operating temperature range: -20°F to +140°F (-28° to +60°C)

Temperature effects over a compensated range of 0°F to 140°F

(-18°C to +60°C):

Zero: 0.01% full scale/°F maximum (0.02% full scale/°C maximum)

Span: 0.01% full scale/°F maximum (0.02% full scale/°C maximum)

