

P521



Differential Pressure Transmitter

Precision Grade-- High Line Differential Pressure Measurement

Designed for many markets/applications

Tel-Tru's P521 differential pressure transmitter is designed for end users and OEM 's where ruggedness, high performance, and reliability are required at a competitive price. This product is modular and is configurable to meet our customers' exact needs.

Manufactured for extended life cycle

Every P521 is built using advanced manufacturing techniques to ensure symmetry between the HI and LO ports. Symmetry, along with automated welding procedures and extreme environmental burn-in give Tel-Tru's differential pressure products excellent performance and reliability over time and at high elevated line pressure.

Entirely welded 316L SS pressure cavities

The P521 pressure ports all welded 316L SS 'O'-Ring free design make it ideal for high cyclical applications, capillary filled systems, or applications where a guaranteed leak free system is needed.

Certification

Each P521 transmitter is shipped with a NIST traceable calibration certificate.

CE

Conforms to EN50081-2 and EN50082-2

*Wet / Wet
DP*



Shown with optional Mini-DIN connector

Standard Features

*Ranges from 30 psi through 5k psi
5X over-pressure protection
316L SST wetted parts
Stability less than $\pm 0.25\%$ per annum*

Available Options

*Line pressure up to 10k psi
20X over-pressure protection
All Hastelloy C-276 wetted parts (available to NACE)
Accuracy to $\pm 0.1\%$ FSO*

Note: specifications are subject to change.



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P521 Pressure Transmitter

High Line Differential Pressure Measurement

0-30 psid through 0-5,000 psid



Electrical

Excitation	
P521A, P521B	8-38 Vdc*
P521C	2-15 Vdc
Output	
P521A	4-20 mA
P521B	0-5 Vdc*
P521C	1-2 mV/V*
Zero Balance	= ±1% FSO
FSO Setting	= ±1% FSO
Resolution	Infinite (±.001% FSO usable)
Response Time	
P521A, P521B	< 5 mS
P521C	< 1mS
Insulation Resistance	1000 MO @ 50 Vdc
Reverse Polarity	Protected
Warm-up	< 10 mS
Power Supply Effect	= ±.002% FSO per V input (P521A, P521B)
EMI/RFI	Internal Filtering (P521A, P521B)
Short Circuit Protected	Up to 40 Vdc (P521A, P521B)

Mechanical

Pressure Ranges	
Range a:	0-30 through 0-200 psid
Range b:	0-300 through 0-1,000 psid
Range c:	0-2k through 0-5,000 psid
(Customer may specify any range/eng. unit FOC)	
Line Pressure	
Range a:	1,000 psi
Range b:	3,000 psi
Range c:	10,000 psi
Proof Pressure	5X Full Scale either side (10k psi max)*
Burst Pressure	
Range a:	Minimum 5,000 psi
Range b:	Minimum 10,000 psi
Range c:	Minimum 12,000 psi
Materials	
Wetted Parts	316L SST*
Non-wetted Parts	316L SST plus electrical connector
Pressure Port	¼" -NPT Female*
Electrical Connector	NEMA 4X cable exit (24" cable)*
Dimensions	per outline below
Weight	13 oz

Performance

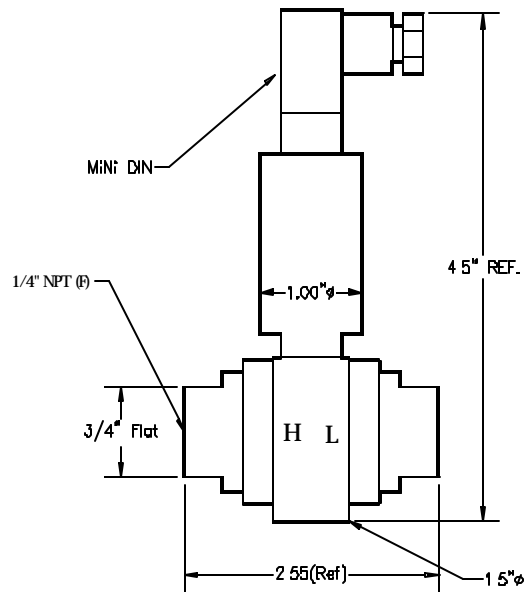
Static Accuracy	= ±0.5% FSO* (BFSL, RSS)
(combined effects of non-linearity, hysteresis & repeatability)	
Static Pressure Effect	
Range a:	= ±1.5% FSO per 1k psi
Range b:	= ±1% FSO per 2k psi
Range c:	= ±1% FSO per 5k psi
Repeatability	= ±0.1% FSO
Temperature Effects	= ±1.5% FSO over comp range
(combined effects of Zero & FSO with reference at 70°F)	
Long Term Stability	= ±0.25% FSO per year

Environmental

Compensated Temp Range	0 to 170 °F
Operating Temp Range	-40 to 200 °F
Storage Temp Range	-40 to 250 °F

Note: specifications are subject to change.

Outline



Shown with optional Mini-DIN connector



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