DP Series

Differential Pressure Transmitter

Senex® Corporation

High Line Differential Pressure Measurement

Designed for many markets/applications
Senex's DP Series 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 DP Series 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 Senex's differential pressure products excellent performance and reliability over time and at high elevated line pressure.

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

Senex's Customer Service
1-2 Week delivery on standard or custom products.

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 ± 0.25% per annum

Available Options

Line pressure up to 10k psi
20X over-pressure protection
All Hasteloy C-276 wetted parts (available to NACE)
Accuracy to ±0.1% FSO

Senex Corporation
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Grand Island, NY 14072

Design & Manufacture of Pressure Instruments

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Formerly Known As: HTI Hi-Tech Instrument Corporation

DP Series Pressure Transmitter

High Line Differential Pressure Measurement

0-30 psid through 0-5k psid

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Electrical

Excitation	
DP1	2-15 Vdc
DP2 & DP3	8-38 Vdc*
Output	
DP1	1-2 mV/V*
DP2	0-5 Vdc*
DP3	4-20 mAdc
Zero Balance	= ±1% FSO
FSO Setting	= ±1% FSO
Resolution	Infinite (±.001% FSO usable)
Response Time	
DP1	< 1mS
DP2 & DP3	< 5 mS
Insulation Resistance	1000 MO @ 50 Vdc
Reverse Polarity	Protected
Warm-up	< 10 mS
Power Supply Effect	= ±.002% FSO per V input (DP2 & DP3)
EMI/RFI	Internal Filtering (DP2 & DP3)
Short Circuit Protected	Up to 40 Vdc (DP2 & DP3)

Performance

Static Accuracy	= ±0.5% FSO* (BFSL, RSS)
(combined effects of non-lineartiy, 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 70ºF)	
Long Term Stabily	= ±0.25% FSO per year

Environmental

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

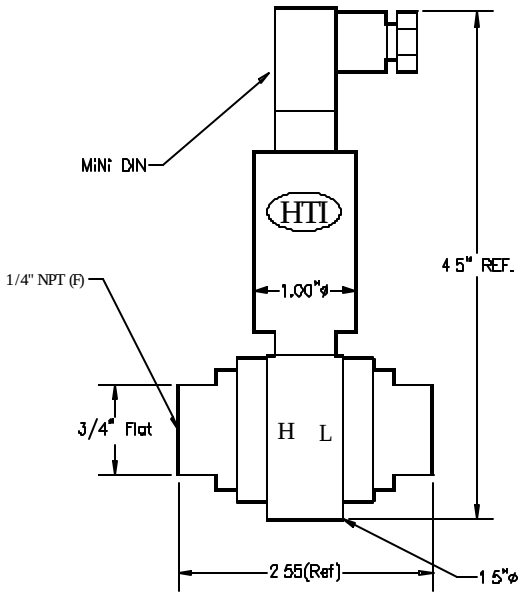
Mechanical

Pressure Ranges

Range a: 0-30 through 0-200 psid
Range b: 0-300 through 0-1k psid
Range c: 0-2k through 0-5 k 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 5k psi
Range b:	Minimum 10k psi
Range c:	Minimum 12k 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

Outline



Shown with optional Mini-DIN connector

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