

NIPT 22 Series

Industrial Pressure Transducer and Transmitters

SILICON BASED MEMS PIEZO RESISTIVE TECHNOLOGY



NEPTUNE
INSTRUMENTS

OVERVIEW

The NIPT 22 series pressure transmitter incorporates a media isolated silicon pressure sensor with pressure range from 0.1 bar through to 250 bar. For OEMs that need consistent high levels of performance, reliability and stability the NIPT 22 series units offer all 316L stainless steel wetted parts at an unbeatable price performance ratio. A wide choice of output signal types in addition to various electrical connection and pressure port types means the unit is suitable for most applications without modification.



APPLICATIONS

- Engine Fuel Pressure Measurement
- Refrigeration and Air Compressor
- Hydraulic Systems
- Water Pressure Measurement
- Autoclaves & ETO Sterilizers
- Liquid and Gas Pressure Measurement
- Circuit Breakers

FEATURES

- Gauge, Absolute and Vacuum Pressure Measurement
- Lifetime > 100 M Cycles
- Measuring Range From -1 ... 250 bar (other ranges on request)
- Process Temperatures From - 40 ... +125°C
- Wide Range of Pressure Ports and Electrical Connectors
- Housing and Diaphragm made of Premium Stainless Steel
- Customized OEM Versions Available

PERFORMANCE

Accuracy*	≤ ±0.25% BFSL
Stability (1 Year)	≤ ±0.25% of FS
Insulation Resistance	>100MΩ/500VDC
Over Range Protection	300%F.S. (≤70kPa) 200%F.S. (<10MPa)
Temperature Drift	<+1.5% FS(-20 to 85°C)
Response Time	≤90ms (up to 90%F.S.)
Reverse Polarity Protection	Yes

*Accuracy includes non-linearity, hysteresis & non-repeatability

THERMAL

Temperature	
Ambient Temp.	-20°C - 80°C
Medium Temp.	-40°C - 125°C
	(Optional upto 350 Deg C with Cooling Fins)
Storage Temperature	-40°C - 120°C

Thermal Limits

Compensated Range	0°C - 70°C
TC Zero	≤ ±1.5% FS
TC Span	≤ ±1.5% FS

ENVIRONMENTAL

EMI/RFI Protection	Yes (Electromagnetic Compatibility Directive 2014/30/EU)
IP Rating*	IP65 minimum
Vibration	20g (25~2000HZ) Sine Curve; IEC 60068-2-6
Shock	200g/1ms; IEC 60068-2-27

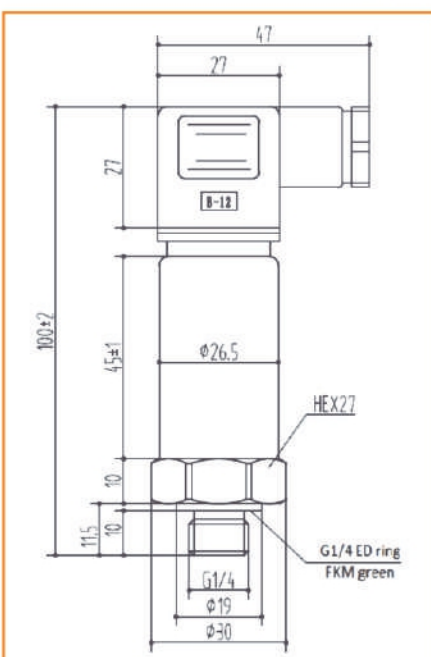
*IP Rating is dependent on electrical termination selected. Contact factory for more information

*IP Rating applies when electrical connector is attached with the appropriate ingress protection

ELECTRICAL

Output	4-20mA	1-5V, 1-6V, 0-5V (3-wire)	0-10V (3-wire)
Excitation	10-28VDC	10-28VDC	15-28VDC

DIMENSION

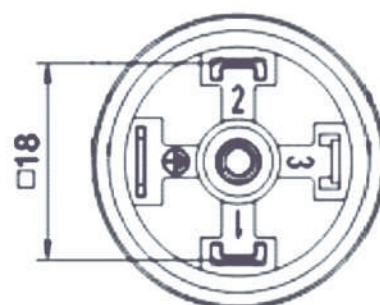


*Dimensions are for reference only

WIRING GUIDE

DIN 43650, FORM A

Output	Pin 1	Pin 2	Pin 3	Wide Pin
4-20mA (2-wire)	+V	-V	N/A	N/A
Voltage (3-wire)	+V	Ground	Signal	N/A
mV (4-wire)+	Signal	Ground	+V	-Signal



ORDERING GUIDE

Model Family

NIPT 22 - Industrial Pressure Transducer

Pressure Range

Insert pressure code

Consult factory for pressures above 3750 PSI

Pressure Unit

P = PSI

B = Bar

K = KG/CM²

M = Millibar

W = Inches of H₂O

Pressure Reference

A = Absolute

V = Vacuum (Gauge)

C = Vacuum (Sealed Gauge)

G = Gauge

S = Sealed Gauge

Output

1 = 4-20 mA

2 = 1-5V

3 = 0-5V

4 = 0.5-4.5V

5 = 0-10V

6 = 1-10V

Options

S = Snubber

C = Cooling Adapter

(upto 250 Deg C)

D = Headmount Display

Wetted Material

L = 316L SS

Process Connection

1 = G 1/4"

2 = G 1/2"

3 = M20X1.5-6G

4 = M14X1.5

5 = 1/4" NPT

6 = 1/2" NPT

Electrical

1: Mini-DIN

2: Big-DIN

3: Packard 3-Pin

4: 1m Cable

5: M12 X 1

Due to continuous development of our products technical informations are subject to change.

*Contact factory for custom configurations not shown