Bently Nevada 146054 146055 Series Service Manual

146824-0050

1. Description

146824-0050

3. Product Information

146824-0050 | Bently Nevada | Cylinder Pressure Transducer Cable

Manufacturer : Bently Nevada

Product No. : 146824-0050

Product Type : Cylinder Pressure Transducer Cable

Made in U.S.A

Length Option : 0050 = 50 ft (15.2 m)

Dimensions (D x W x H) : 3.175 cm x 3.175 cm x 3 cm

Weight : 0.25 Kg

Transducer Characteristics

Measurement

Range

0 to 100/ 250/ 500/ 1000/

2500/ 5000/ 10,000 psia

0 to 6.8/ 17/ 34.5/ 69/172/

345/ 689 bar

Proof (Over)

Pressure 1.5X Full Scale

Burst Pressure 3X Full Scale (2X FS on 689

bar/ 10,000 psia units)

Full Scale

Output 10 ± 0.3 Vdc

Zero 0.5 ± 0.1 Vdc

Power Supply 18 to 30 Vdc

Max. Current < 15 mA

Compensated

Temperature

-40 to 85° C

-40 to 185° F

Thermal Zero

Shift

-1.0 to +2.0 (for 6.8 and 17

bar/ 100 and 250 psia) %FS

-0.5 to +1.5 (for all other

pressure ranges)

Note: Within compensated

temperature range.

Linearity,

Hysteresis,

Repeatability

£ ±0.3 %FS

Frequency

response

0Hz to 5500 Hz ± 1 dB

Operating

Temperature

-40 to 85 (electronics

housing) °C

-40 to 150 (sensor head) °C

-40 to 185 (electronics

housing) °F

-40 to 302 (sensor head) °F

Overvoltage

Category II

Weight 250 g (0.55 lbm)

Sensor Head 150 g (0.33 lbm)

Dimensions See diagram

Materials

Gold plated, per MIL-G-45204

Type III Grade A, C-276

welded to a 316L stainless
steel body. (patent pending)
Humidity 95% condensing on exposed
surfaces excluding connector
Body Designed to meet IP67
Operating
Temperature
Dependent upon O-ring
material
Hifluor: -26°C to 150 °C (-15 °F
to 302 °F)
Ethylene Propylene:
-40°C to 150 °C (-40 °F to 302
°F)
Pressure
Media
Fluid media compatible with
C-276 and either Hifluor or
Ethylene Propylene o-ring
material (common media
below)
Pollution
Degree 2
Maximum Use
Altitude 2000 meters above sea level
O-rings
Hifluor
(black)
Hydrogen sulfide, sulfuric acid,
butane, fuel oil, petroleum oil,
turbine oil, propane, propylene,
butylenes, and natural gas.
Ethylene
Propylene
(purple)
Ammonium hydroxide,
anhydrous ammonia
Mounting
Torque 68 N-m (50 lbf-ft)
Compliance and Certifications
FCC
This device complies with part 15 of the
FCC Rules. Operation is subject to the
following two conditions:
l This device may not cause harmful
interference.
l This device must accept any
interference received, including
interference that may cause
undesired operation.
EMC
EN 61326-1
EMC Directive 2014/30/EU
RoHS
RoHS Directive 2011/65/EU
ATEX
EN 60079-01
EN 60079-07
EN 60079-11

EN 60079-15

ATEX Directive 2014/34/EU

ATEX/IECEx

II 1 G Ex ia IIC T4 Ga

II 3 G Ex nA IIC T4 Gc

T4 @ Ta = -40°C to +85°C

cNRTLus

Ex ia IIC T4 Ga;

Class I, Zone 0, AEx ia IIC T4 Ga;

Class I, Division 1, Groups A, B, C & D, T4

Ex nA IIC T4 Gc;

Class I, Zone 2, AEx nA IIC T4 Gc;

Class I, Division 2, Groups A, B, C & D, T4

Ex ec IIC T4 Gc;

Class I, Zone 2, AEx ec IIC T4 Gc;

Class I, Division 2, Groups A, B, C & D, T4

T4 @ Ta = -40 °C to 85 °C