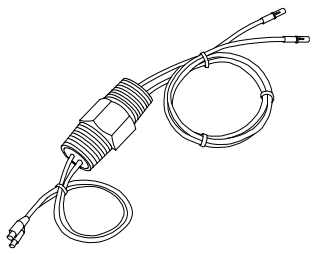
3300 XL High-Pressure Feedthrough

For 3300 XL 8 mm, 3300 XL 11mm, and 3300 5 mm probes

Bently Nevada* Asset Condition Monitoring



Description

Allows placement of 3300 XL 8 mm probes, 3300 XL 11mm, and 3300 5 mm probes in pressurized machines.

Some rotating machines have significant differential pressure between the inside of the machine case and ambient conditions where the extension cable exits. Since proximity probes are mounted inside the pressurized area, a safe, convenient way to route the probe cable through the case is essential. Depending upon the pressure, a cable seal or High-Pressure (HP) Feedthrough is used to seal pressure inside the machine case and allow probe connections outside the case.

Three models of the 3300 XL 8mm Series High-Pressure Feedthrough are available which can route 1, 2, or 3 cables through the case. One model of the 3300 XL 11mm Series High-Pressure Feedthrough is available which can route 2 cables through the case. These models seal 2.76 MPa (400 psi) inside the machine. They are ordered according to the total length of the Proximitor* sensor so that system electrical length is maintained.

When ordering, careful consideration should be given to the type of O-ring specified. The O-ring must be compatible with the type of gas or fluid that the cable will be exposed to in the machine.

In addition, since these feedthroughs are used in place of probe extension cables, the high pressure end is usually supplied with female connectors and the low pressure end with male connectors. This permits compatibility with standard probes and Proximitor Sensors. The connectors are corrosion-resistant, gold-plated brass ClickLoc* connectors. These connectors require only finger-tight torque when mated to 3300 XL Proximitor Sensors or ClickLoc connectors on 3300 XL 8 mm probes, 3300 XL 11mm, or 3300 5 mm probes.

We can also offer modified feedthroughs, which can seal up to 6.89 MPa (999 psi). Contact your sales representative for more information on these products.

Specifications

Operating Temperature:

Note: Temperature range depends on O-Ring Option:

7 9 -51°C to 121°C (-60°F to 250°F).

8 4 -43°C to 121°C (-45°F to 250°F).

9 4 -26°C to 121°C (-15°F to 250°F).

Maximum Pressure Rating:

2.76 MPa (400 psi).

Minimum Recommended Bend Radius:

25.4 mm (1.00in) with or without armor.

Fitting Material:

303 stainless steel.

Caution:

Beware that the feedthrough length ordered must be compatible with the total transducer system length being used.

Ordering Information

330161 Single Triaxial HP Feedthrough for 3300 System

330161-AXX-BXX-CXX-DXX-EXX-FXX

A: Armor Option
- **0 1** Without armor
- **0 2** With armor at low pressure end
- **0 3** With armor at high pressure end
- **0 4** With armor at both ends

B: Dimension 1 Length Option
- **4 0** 4.0 metres
- **4 5** 4.5 metres
- **8 0** 8.0 metres
- **8 5** 8.5 metres

C: Dimension 2 Length Option

Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 1 (B option) minus 0.5 metre.

D: O-Ring Material Option
- **7 9** Ethylene propylene, for exposure to ammonium hydroxide, carbon dioxide, chlorine, nitrogen, gaseous oxygen and steam
- **8 4** Neoprene, for exposure to R-12 or R-134A refrigerants
- **9 4** Fluorocarbon, for exposure to butane, fuel oil, natural gas, petroleum oil, and turbine oil.

E: High Pressure End Connector Option
- **0 0** Without connector
- **0 1** With female miniature coaxial connector
- **0 2** With male miniature coaxial connector
- **Note:** For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

F: Low Pressure End Connector Option
- **0 0** Without connector
- **0 1** With female miniature coaxial connector
- **0 2** With male miniature coaxial connector
- **Note:** For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

330162 Dual Triaxial HP Feedthrough for 3300 System

330162-AXX-BXX-CXX-DXX-EXX-FXX-GXX-HXX

A: Armor Option
- **0 1** Without armor
- **0 2** With armor at low pressure end
- **0 3** With armor at high pressure end
- **0 4** With armor at both ends

B: Dimension 1 Length Option
- **4 0** 4.0 metres
- **4 5** 4.5 metres

8 0 8.0 metres
8 5 8.5 metres

C: Dimension 2 Length Option
4 0 4.0 metres
4 5 4.5 metres
8 0 8.0 metres
8 5 8.5 metres

D: Dimension 3 Length Option
Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 1 (B option) minus 0.5 metre.

E: Dimension 4 Length Option
Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 2 (C option) minus 0.5 metre.

F: O-Ring Material Option
7 9 Ethylene propylene, for exposure to ammonium hydroxide, carbon dioxide, chlorine, nitrogen, gaseous oxygen and steam
8 4 Neoprene, for exposure to R-12 or R-134A refrigerants
9 4 Fluorocarbon, for exposure to butane, fuel oil, natural gas, petroleum oil, and turbine oil.

G: High Pressure End Connector Option
0 0 Without connector
0 1 With female miniature coaxial connector
0 2 With male miniature coaxial connector
Note: For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

H: Low Pressure End Connector Option
0 0 Without connector
0 1 With female miniature coaxial connector
0 2 With male miniature coaxial connector
Note: For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

330163 Triple Triaxial HP Feedthrough for 3300 System

330163-AXX-BXX-CXX-DXX-EXX-FXX-GXX-HXX-IXX-JXX

A: Armor Option
0 1 Without armor
0 2 With armor at low pressure end
0 3 With armor at high pressure end
0 4 With armor at both ends

B: Dimension 1 Length Option
4 0 4.0 metres
4 5 4.5 metres
8 0 8.0 metres
8 5 8.5 metres

C: Dimension 2 Length Option
4 0 4.0 metres
4 5 4.5 metres
8 0 8.0 metres
8 5 8.5 metres

D: Dimension 3 Length Option
4 0 4.0 metres
4 5 4.5 metres
8 0 8.0 metres
8 5 8.5 metres

E: Dimension 4 Length Option
Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 1 (B option) minus 0.5 metre.

F: Dimension 5 Length Option
Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 2 (C option) minus 0.5 metre.

G: Dimension 6 Length Option
Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 3 (D option) minus 0.5 metre.

H: O-Ring Material Option

- **7 9** Ethylene propylene, for exposure to ammonium hydroxide, carbon dioxide, chlorine, nitrogen, gaseous oxygen and steam
- **8 4** Neoprene, for exposure to R-12 or R-134A refrigerants
- **9 4** Fluorocarbon, for exposure to butane, fuel oil, natural gas, petroleum oil, and turbine oil.

I: High Pressure End Connector Option

- **0 0** Without connector
- **0 1** With female miniature coaxial connector
- **0 2** With male miniature coaxial connector
- **Note:** For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

J: Low Pressure End Connector Option

- **0 0** Without connector
- **0 1** With female miniature coaxial connector
- **0 2** With male miniature coaxial connector
- **Note:** For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

330762 Dual Triaxial HP Feedthrough for 3300 XL 11mm System

330762-AXX-BXX-CXX-DXX-EXX-FXX-GXX-HXX

A: Armor Option

- **0 1** Without armor
- **0 2** With armor at low pressure end
- **0 3** With armor at high pressure end
- **0 4** With armor at both ends

B: Dimension 1 Length Option

- **4 0** 4.0 metres
- **8 0** 8.0 metres

C: Dimension 2 Length Option

- **4 0** 4.0 metres
- **8 0** 8.0 metres

D: Dimension 3 Length Option

Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 1 (B option) minus 0.5 metre.

E: Dimension 4 Length Option

Order in increments of 0.1 metre.
Minimum ordering length: 0.5 metre.
Maximum ordering length: Dimension 2 (C option) minus 0.5 metre.

F: O-Ring Material Option

- **7 9** Ethylene propylene, for exposure to ammonium hydroxide, carbon dioxide, chlorine, nitrogen, gaseous oxygen and steam
- **8 4** Neoprene, for exposure to R-12 or R-134A refrigerants
- **9 4** Fluorocarbon, for exposure to butane, fuel oil, natural gas, petroleum oil, and turbine oil.

G: High Pressure End Connector Option

- **0 0** Without connector
- **0 1** With female miniature coaxial connector
- **0 2** With male miniature coaxial connector
- **Note:** For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

H: Low Pressure End Connector Option

- **0 0** Without connector
- **0 1** With female miniature coaxial connector
- **0 2** With male miniature coaxial connector
- **Note:** For proper connection, the connector on the probe side must be female and the connector on the Proximitor Sensor side must be male.

Dimensional drawings

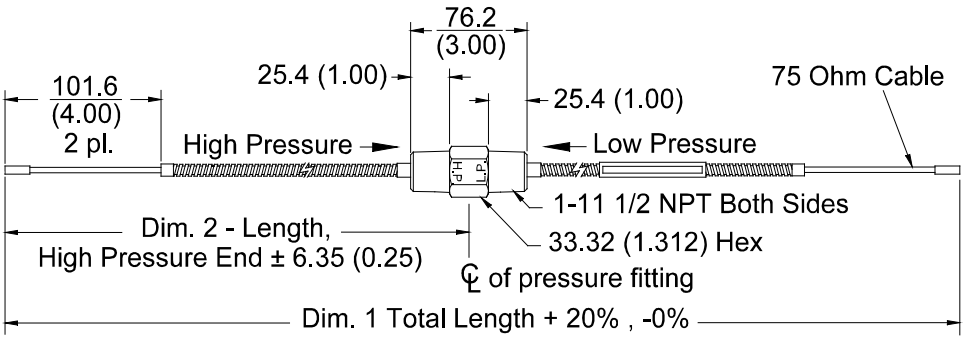


Figure 1: Part Number 330161
Single Feedthrough
Dimensions are in millimetres (inches)

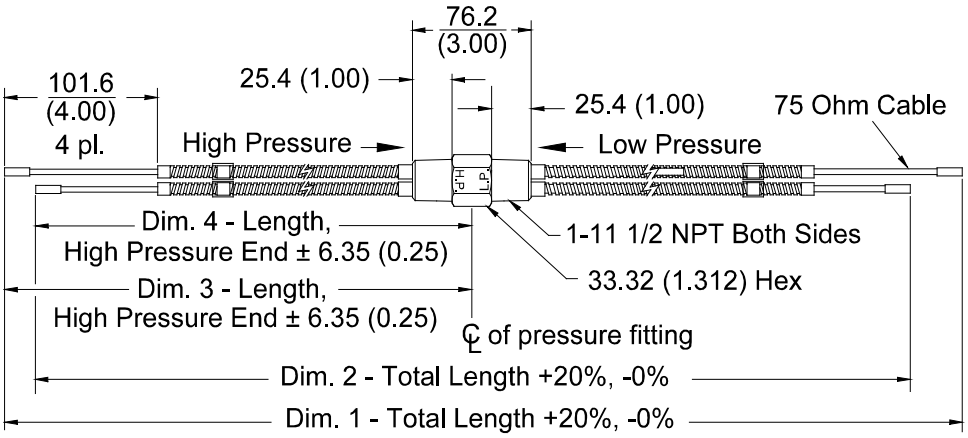


Figure 2: Part Number 330162
Dual Feedthrough
Dimensions are in millimetres (inches)

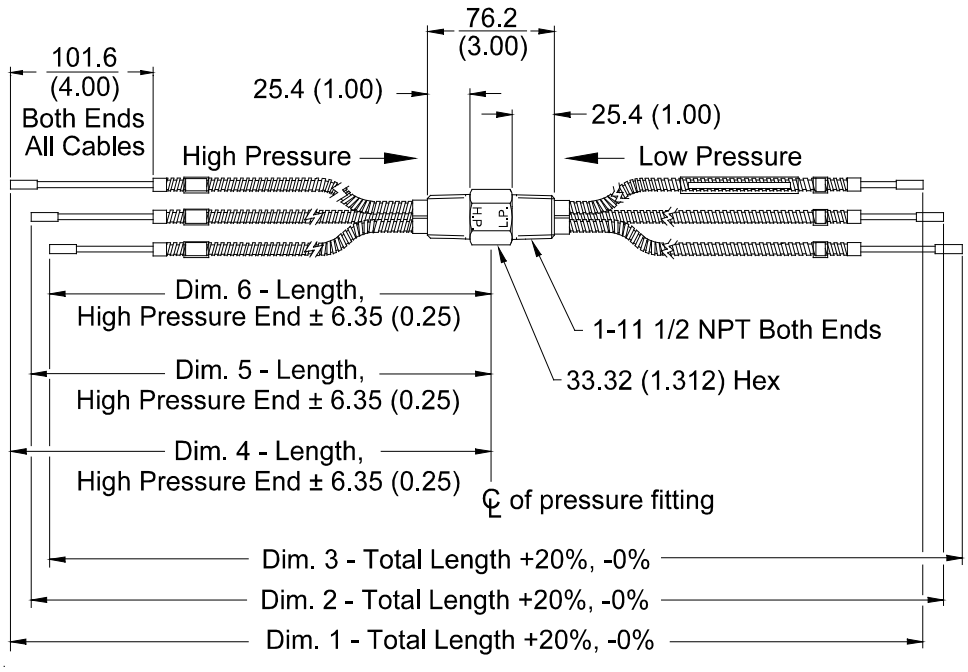


Figure 3: Part Number 330163
Triple Feedthrough
Dimensions are in millimetres (inches)

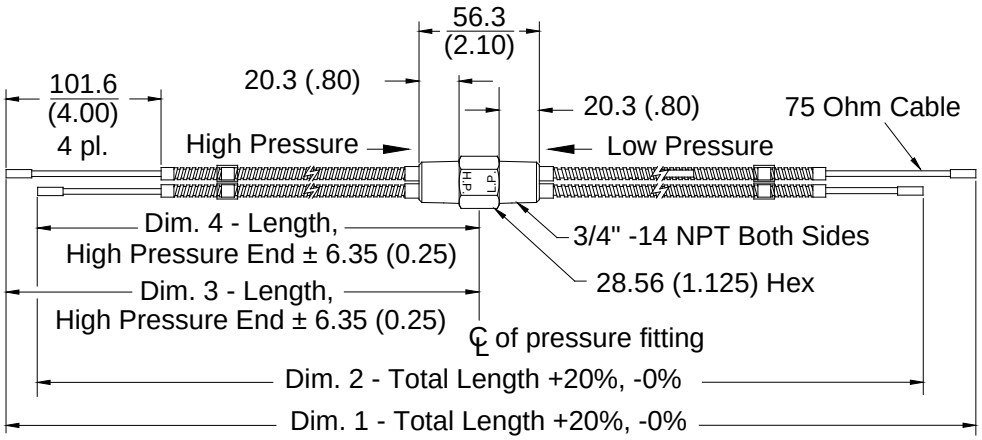
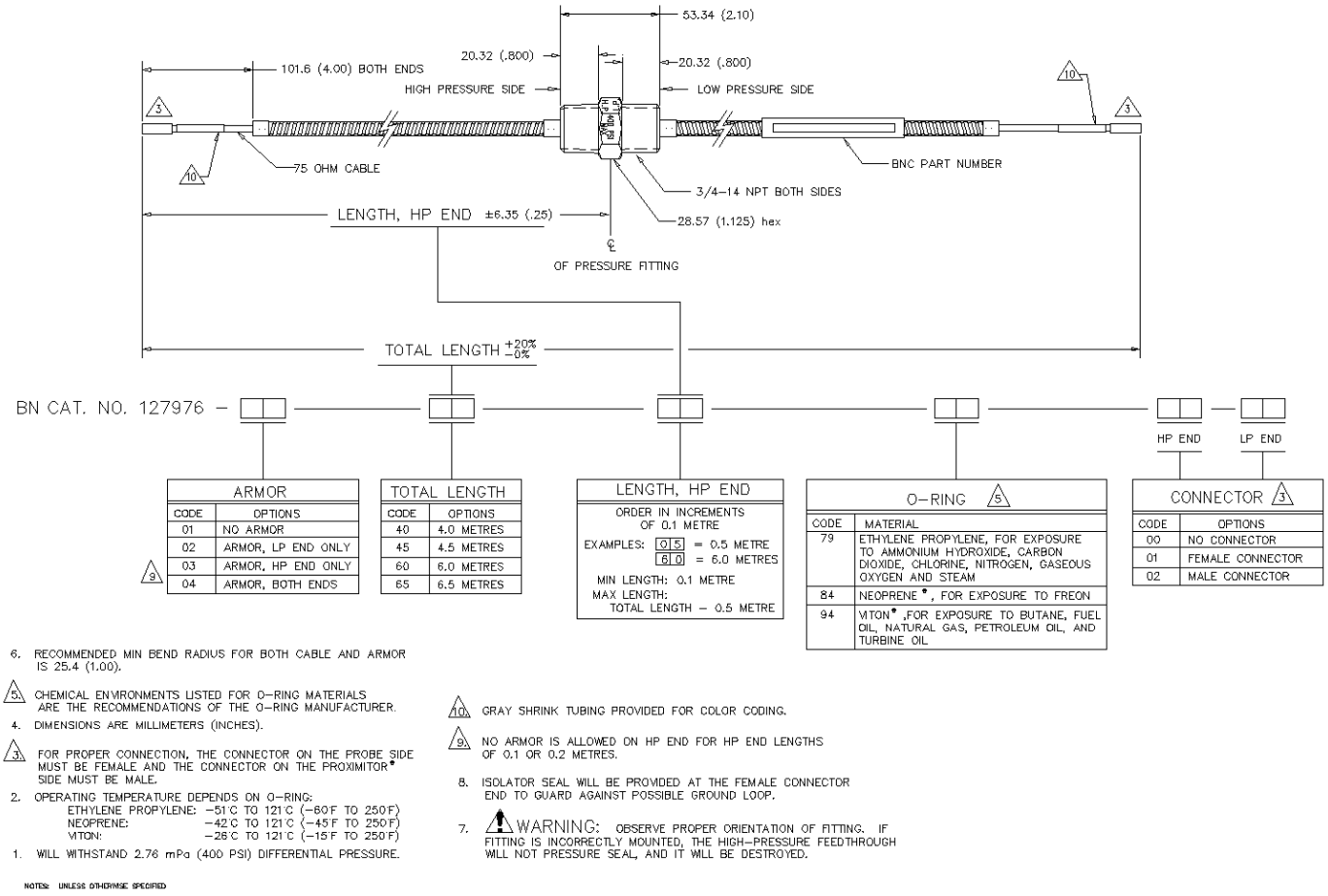


Figure 4: Part Number 330762
Dual Feedthrough
3300 XL 11mm System
Dimensions are in millimetres (inches)



6. RECOMMENDED MIN BEND RADIUS FOR BOTH CABLE AND ARMOR IS 25.4 (1.00).

5. CHEMICAL ENVIRONMENTS LISTED FOR O–RING MATERIALS ARE THE RECOMMENDATIONS OF THE O–RING MANUFACTURER.

4. DIMENSIONS ARE MILLIMETERS (INCHES).

3. FOR PROPER CONNECTION, THE CONNECTOR ON THE PROBE SIDE MUST BE FEMALE AND THE CONNECTOR ON THE PROXIMITOR® SIDE MUST BE MALE.

2. OPERATING TEMPERATURE DEPENDS ON O–RING:
   ETHYLENE PROPYLENE: −51°C TO 121°C (−60°F TO 250°F)
   NEOPRENE: −42°C TO 121°C (−45°F TO 250°F)
   VITON: −26°C TO 121°C (−15°F TO 250°F)

1. WILL WITHSTAND 2.76 mPa (400 PSI) DIFFERENTIAL PRESSURE.

10. GRAY SHRINK TUBING PROVIDED FOR COLOR CODING.

9. NO ARMOR IS ALLOWED ON HP END FOR HP END LENGTHS OF 0.1 OR 0.2 METRES.

8. ISOLATOR SEAL WILL BE PROVIDED AT THE FEMALE CONNECTOR END TO GUARD AGAINST POSSIBLE GROUND LOOP.

7. ⚠ WARNING: OBSERVE PROPER ORIENTATION OF FITTING. IF FITTING IS INCORRECTLY MOUNTED, THE HIGH–PRESSURE FEEDTHROUGH WILL NOT PRESSURE SEAL, AND IT WILL BE DESTROYED.

NOTES: UNLESS OTHERWISE SPECIFIED

Figure 5: Part Number 127976
High Pressure Feedthrough Single Cable NSv System
Dimensions are in millimetres (inches)

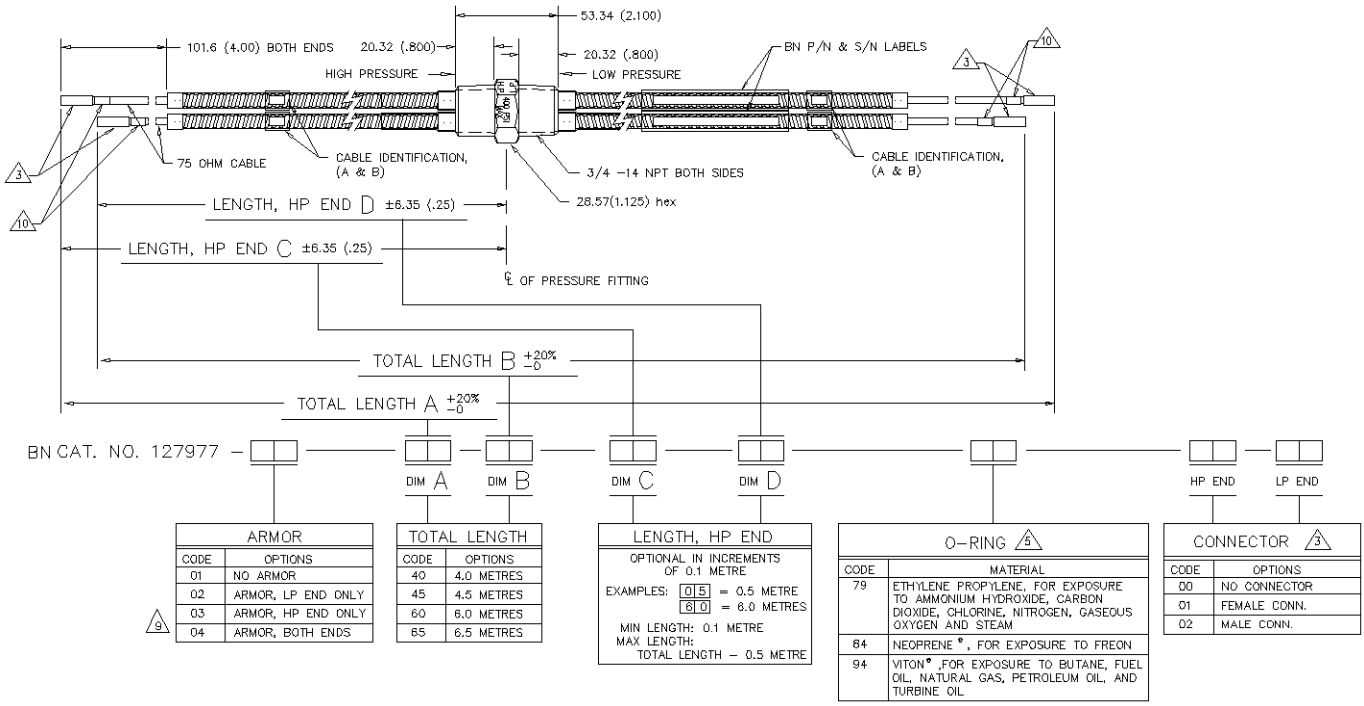


Figure 6: Part Number 127977
High Pressure Feedthrough Dual Cable NSv System
Dimensions are in millimetres (inches)

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