

PT9503

Operation Manual

V1.0



an INFINIT[®] brand

We suggest you read this manual carefully before use.

1 Introduction

PT9503 is a highly stable and reliable pressure transmitter with span and zero correction. It is a cost-effective product which adopts a micro-fused technology pressure sensor and a special designed amplifier circuit. With linear correction and temperature compensation, it can effectively resist water hammer effect, solve the problem of momentary overload pressure, and can also meet the needs for pressure measurements and control in various environmental conditions.

This product supports cable electrical connection with NPT1/4 Male connection along with a rubber sealing gasket.

2 Features

The PT9503 product supports the following features:

- Range: 0.6MPa, 1MPa, 1.6MPa, and 2MPa based on part number

- Micro-fused technology, no oil filling
- Water hammer resistant and cracking resistant
- Compact, reliable and cost-effective
- Temperature Compensation and Linearity Correction

3 Specifications

Range: 0.6MPa, 1MPa, 1.6MPa, 2MPa based on part number

Accuracy: ± 1.0 %FS (Within temperature compensation range)

Zero Thermal Drift: ± 0.025 %FS/ $^{\circ}$ C

Span Thermal Drift: ± 0.025 %FS/ $^{\circ}$ C

Over pressure: $2 \times$ FS

Burst pressure: 10MPa

Supply: 5V DC

Output signal: 0.5V~4.5VDC

Compensation Temp.: 0 to 70° C

Storage Temperature: -20 to 100° C

Insulation Resistance ≥ 100 M Ω @250V DC

Media compatibility: compatible with stainless steel 17-4PH and NBR

Protection; IP65 for finished unit

4 Outline and Installation

4.1 Construction Material

Housing: Stainless Steel 304

Sensor: Stainless Steel 17-4PH

O-ring: NBR

Cable: Φ 5.0mm PE cable with 3-core

Cable sheath: PA

4.2 Outline Dimension (unit: mm)

4.2.1 Cable Connection Type Outline Dimension (See Fig.1)

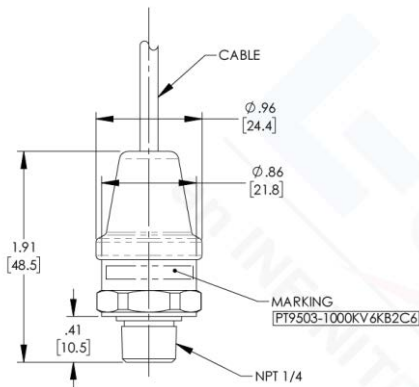


Fig. 1

4.3 Installation

4.3.1 Inspection before installation

- a) The pressure to be measured is in the transmitter's specified pressure range;
- b) The measured liquid or gas is compatible with the transmitter construction material.
- c) The measured liquid or gas does not jam the pressure-leading hole.

4.3.2 Transmitter Installation

For proper operation, the transmitter should be mounted vertically where the plug end is up. If this is not possible, the maximum allowable mount slope angle of the transmitter from the vertical is 30 degrees. It is not recommended to mount the transmitter inverted.

PT9503 pressure transmitter can be mounted on a steel pipeline through the thread connection. The thread is a NPT1/4 Male connection. Using the sealing gasket (included) is recommended.

5 Electrical Connection

The transmitter electrical connection adopts the special cable.

For Wiring Connection, please see Table 1.

Table 1

<u>Color</u>	<u>Definition</u>
Red	+V
Green	+OUT
Black	GND

6 Unpacking, Enclosed Shipment and Storage

6.1 Unpacking

1. Check the package for shipping damage.
2. When opening the box, please be careful to protect the housing and rubber casing of the transmitter cable from being damaged.

6.2 Enclosed Shipment

Shipment includes:

PT9503 Pressure Transmitter

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6.3 Storage

The storage temperature range is -20°C to 100°C, and relative humidity under 85%. The transmitter should not be stored in the presence of corrosive gases.

7 Operation and Maintenance

7.1 Operation

- a) The transmitter can work without any adjustment.
- b) Before operation, please check whether the transmitter is well installed and connected.
- c) The customer can operate the transmitter without any adjustment.
- d) Please be sure that the installation and electrical connection are correct before operation
- e) Connect the (power) excitation and operate.

It is recommended that the transmitter output signal be allowed 30 minutes to settle after it has been powered into operation.

7.2 Maintenance

7.2.1 Product Maintenance

PT9503 pressure transmitter needs regular maintenance to ensure its stable performance and reliability. Please pay attention to the following notes:

The transmitter wiring should be inspected every six months to ensure it

is in good condition; The cable outer casing should be well taken care of to make sure there is no sign of ageing.

Please do not pull the cable by force during the maintenance.

8 Warranty

Products manufactured and/or branded by seller are warranted for a period of one year from time of delivery against defects in workmanship or materials or failure to operate as described in product data sheets under normal use. In some cases, the warranty period may exceed one year where a written warranty description specific to a certain product is stated in a contract or posted on a company website, product catalog or user's manual. Accessories and consumable goods such as batteries, chargers and accessory cables are warranted for four months.

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About L-com



30 High Street, West Mill, 3rd Floor, Suite #302, North Andover, MA 01845, USA

L-com, a leading manufacturer of wired and wireless connectivity products, offers a wide range of solutions and unrivaled customer service for the electronics and data communications industries. The company's product portfolio includes cable assemblies, connectors, adapters, antennas, enclosures, surge protectors and more. L-com is headquartered in North Andover, Mass., is ISO 9001:2015 certified and many of its products are UL® recognized. L-com is an [Infinite Electronics](#) brand.

Company Information

- OSA Contract # 05-35F-01745
- UL File #s: E202961, E202962, E137914
- ISO Cert: #03052077 CAGS
- CASE CODE # 43211
- DUNS # 94-19-9972
- NAICS 33591, 33592, 334419 SICs 3618, 3619, 3644, 3695
- CCR Established
- Military Packaging Capable
- OSI Capabilities with a Government Representative Invariant