

# SERIES TPS\WPS

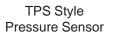
Pressure Sensors

- Full port design
- Accurate pressure sensing
- One wetted part
- 360° Self-cleaning sensing surface
- Integral flange gaskets
- Isolates instrumentation from process fluids
- Virtually maintenance-free design

Series TPS/WPS pressure sensors provide the ideal method of protecting pressure measurement and control instruments in process lines. The full port flow-through design is self-cleaning, eliminating the problem of seal cavity blockage that is common with diaphragm type pressure sensors. The instrumentation is also completely isolated from the process fluid line.

Wafer-style Pressure Sensors (WPS) contain only one wetted part, with integral flange gaskets provided by the one piece molded sleeve. They are available to suit all ANSI flange classifications. A variety of sleeve materials are available to provide optimum abrasion and corrosion resistance for different process fluids. Threaded-style Pressure Sensors (TPS) are available with alloy metal and plastic threaded ends for small diameter piping systems.





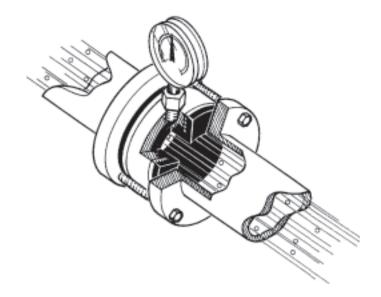


WPS Style Pressure Sensor

## **Typical Applications**

Pump Protection - Control Loop Feedback -Pump Head Control - Liquid Level and Control Indication - Remote and Local Pressure Indication

The Series TPS/WPS Pressure Sensors are available in a variety of body materials, sleeve elastomers and sensing fluids, to meet any application requirement. High pressure series of this sensor is available up to 5000 psi, contact factory for more information.



As process material flows through the pressure sensor, changes in the pipeline or vessel pressure are transmitted through the elastomer sleeve to the sensing fluid which operates the pressure instrument mechanism. This large sensing area gives consistently accurate pressure readings. Due to the high volume of sensing fluid available - as compared to conventional diaphragm seals - multiple instruments can be used.

Series TPS/WPS pressure sensors can be used to protect gauges, sensors, transducers, and transmitters in a variety of pressure measurements and control applications.

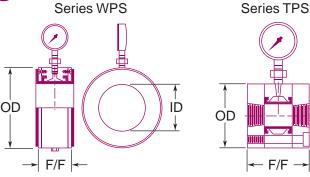




# SERIES TPS\WPS

Pressure Sensors

#### Series WPS



#### Series TPS

ID <sup>1</sup>	1/2	3/4	1	1-1/2	2
F/F <sup>1</sup>	2-7/8	3	3-3/8	3-3/8	3-3/8
OD <sup>1</sup>	2-1/2	3	3	4	4-3/4

For engineering specifications or when placing your order, please provide the following information:

Sensing Fluid Glycol/Water (50/50)

Mineral Oil

Vegetable Oil

Distilled Water

Silicon DC 200 (Low Temp)

Silicon DC 704 (High Temp) Fluorlube (Chlorine Service)

Notes: Instrument specification must be provided when ordering.

> For highly corrosive environments, body parts are available in a wide range of plastics and metal alloys.

### Series WPS

ID¹	1	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14
F/F <sup>1</sup>	1-7/8	1-7/8	1-7/8	1-7/8	1-7/8	2-1/8	2-1/4	2-1/4	2-1/4	2-13/16	3-1/2	3-1/8
OD <sup>1</sup>	2-1/2	3-1/4	4	4-3/4	5-1/4	6-3/4	7-5/8	8-5/8	10-7/8	13-1/4	16	17-1/2

ID

1 · inches

Dimensions can be revised to suit custom specifications.

#### **Elastomer Selection Guide**

Ethylene Propylene Rubber (EPDM)
Most effective for applications involving water, steam or diluted acids.

Viton™ (FKM)

Resists solvents, halogenated hydrocarbons, oxygen, weather, ozone, oils and chemicals.

Buna N (NBR)

Resistant to kerosene, moderate chemicals, fats, oils, grease and many hydrocarbons

Natural Rubber (NR)

Good abrasion resistance, tensile strength and resiliency. Also suitable when dealing with organic acids, alcohols, ketones and most moderate chemicals.

esists strong acids and bases, ozone, weathering, heat and oxidizing

**Butyl (CIIR)**Good resistance to animal and vegetable fats, strong and oxidizing chemicals, oils, heat and greases.

**Neoprene (CR)**Generally resistant to oil and grease, moderate chemicals, fats, many hydrocarbons and ozone. Resistant to barnacle growth.

## Options

Capillary tube connections and multiple instrument arrangements are available. Please contact EVR for details.

Gauges

Switches

Transducers

**Transmitters** 

Isolation Valve

Note: State volumetric displacement required for full range of instrument function.

> When placing your order, please indicate sleeve material by appending elastomer abbreviation (CR, NR, etc) to the model name. IE: Series TPS-CR

## Series TPS/WPS vs. Diaphragm Seals

A conventional method of isolating pressure sensing instruments from process fluids is the installation of a diaphragm seal. The diaphragm seal is usually threaded or flanged to a small nipple welded to the pipeline. This thin flexible diaphragm serves as a barrier between the process fluid and the fluid-filled instrument side of the seal. Less than clean process fluids will eventually plug the small port or the seal cavity resulting in inaccurate reading, poor process control, costly downtime and a continuing maintenance program to rod and flush the diaphragm seal and connection.

Series TPS/WPS Pressure Sensors provide an effective solution to these problems as the flexible. self-cleaning rubber sleeve resists the accumulation of debris in the process line.

#### WARRANTY

All EVR products are guaranteed for one full year against defects resulting from faulty workmanship or materials. If any such product is found to be defective by reason of faulty workmanship or materials, upon written notice and return of the product, the defective product will be replaced by us free of charge, including the shipping charges for the replacement product. Claims for labour costs and other expenses required to replace such defective product, or to repair damage resulting from the use thereof will not be allowed by us. Our liability is limited to the price paid for the defective product. EVR Products shall not be bound by any warranty other than the above set forth unless such warranty shall be in writing. This literature is published in good faith and is believed to be reliable, however, EVR Products does not represent and/or warrant in any manner the above information and suggestions contained in this brochure. Data presented is the result of laboratory tests and field experience.

Distributed by:

## ELASTO VALVE RUBBER PRODUCTS INC.

1691 Pioneer Road, Sudbury, Ontario Canada P3G 1B2 Tel. (705)523-2026 - Fax. (705)523-2033 Toll Free 1-800-461-6331 (N.A.) Website: www.evrproducts.com E-mail: sales@evrproducts.com

ISO 9001 Certified

