



## SERIES: PST400

**0.2% ACCURACY**

- ▶ 4-20 mA OR 0...10 VDC OUTPUT
- ▶ 2 RELAYS OUTPUTS
- ▶ PRESSURE INDICATION IN VARIOUS UNITS
- ▶ TEMPERATURE INDICATION IN °C OR °F
- ▶ SIMPLE CONFIGURATION
- ▶ TEMPERATURE COMPENSATION
- ▶ ST. STEEL HOUSING & PROCESS CONNECTION
- ▶ EXCELLENT ALTERNATING LOAD RESISTANCE
- ▶ PRESSURE PEAK DAMPING ELEMENT
- ▶ LONG SERVICE LIFE AND GREAT STABILITY
- ▶ RANGES UP TO 30,000 PSI (2,000 BAR)
- ▶ ELECTROMAGNETIC PROTECTION



### INTRODUCTION

The PST400 Indicating Pressure Transmitter/Switch has a number of innovative features integrated into a compact housing. In addition to having a 4-20 mA or 0-10 volt output, the instrument is equipped with two electrically isolated relay outputs.

The back-lit LCD display indicates the pressure in both a 4-digit numerical value and a bargraph presentation. In addition, the status of the switches, temperature of the sensor and a warning light to indicate "out of rated pressure" will be displayed for an informative operation.

The PST400 Series is easily programmed with the aid of only two buttons located on the face of the instrument, and configuration parameters may be saved with security codes to prevent instrument tampering.

The all stainless steel design stands aggressive fluids, and provides the measurement accuracy of better than 0.2%. The high burst pressure capability of this pressure transmitter/switch gives the PST400 another advantage over the available pressure sensing instruments.

The PST400 Series are equipped with a damping element to direct away pressure peaks or liquid hammering from their sensors; hence showing a high level of resistance to mechanical shocks.

The industrial, heavy-duty PST400 meets the electromagnetic compatibility (EMC) requirements of IEC61000-6-2 and IEC61000-6-3.

### SPECIFICATIONS

<b>Accuracy</b>	±0.2% FS
<b>Repeatability</b>	±0.05% FS
<b>Sensor</b>	AISI 316L, AISI 630
<b>Housing</b>	AISI 304
<b>Seal</b>	NBR
<b>Process Connection</b>	¼" G male or female ½" G male, ¼" NPT male or female (for up to 600 psi or 40 bar only) ½" NPT male (for up to 600 psi or 40 bar only) M18x1.5 male, flange
<b>Analogue Output</b>	4-20 or 0-10 VDC
<b>Switching</b>	2 electrically isolated relays, 30W (1A max.) 36 VAC/DC
<b>Switching Time</b>	5...9999 ms adjustable

## SPECIFICATIONS (continue..)

<b>Switching Differential</b>	1...99% FS
<b>Response Time</b>	1 ms, 10...90%
<b>Power Supply (mA out)</b>	10...30VDC, 24VDC nominal
<b>Power Supply (V out)</b>	15...30VDC, 24VDC nominal
<b>Insulation Resistance</b>	>10MΩ, 100 VDC
<b>Dielectric Strength</b>	100 VAC, 50 Hz
<b>Load (4-20 mA Output)</b>	≤250Ω (10...30 VDC)
<b>Load (0-10 V Output)</b>	≥5kΩ (15...30 VDC)
<b>Current Consumption</b>	≤70 mA
<b>Electrical Connection</b>	M12x1, 8-pole plug, PUR cable, 2m, 5m (option)
<b>Display</b>	Back-lit LCD display, 4-digit pressure indication, Temperature display °C/°F, ON/OFF switching state
<b>Pressure Scale</b>	psi (kpsi), Pa, kPa (MPa), bar, mbar, mWG selectable
<b>Configuration</b>	By 2 buttons, Menu selection
<b>Temp. Compensation</b>	-25...+80°C
<b>LCD Temp. Display</b>	-10...+70°C
<b>Media Temperature</b>	-25...+125°C
<b>Storage Temperature</b>	-25...+80°C
<b>Humidity</b>	maximum 95% RH
<b>Vibration</b>	10 g (25...2000 Hz)
<b>Shock</b>	50 g / 11 ms
<b>Environ. Protection</b>	IP65 with the plug installed
<b>Temp. Coefficient</b>	
<b>Zero &amp; Span</b>	±0.01% / K / FS (typical) ±0.025% / K / FS (max.)
<b>EMC Emission</b>	IEC 61000-6-3
<b>Immunity</b>	IEC 61000-6-2
<b>Dimensions</b>	Ø 34 x 130±7 mm,
<b>Weight</b>	Approx. 200 g (0.45 lb)

Code	Range	Over Range	Burst Pressure
01	0...1 bar	2 bar	30
03	0...2.5	5	100
04	0...4	8	100
05	0...6	12	100
06	0...10	20	200
07	0...16	32	200
08	0...25	50	300
09	0...40	80	300
10	0...60	120	500
11	0...100	200	500
13	0...250	500	1000
14	0...400	800	1500
15	0...600	1200	2000
16	0...1000	1800	2800
17	0...1600	3000	4000
18	0...2000	3000	4000
21	0...15 psi	30 psi	1000
22	0...30	60	2500
23	0...60	120	2500
24	0...100	200	2500
25	0...150	300	4500
26	0...200	400	4500
27	0...300	600	4500
28	0...400	800	4500
29	0...500	1000	4500
30	0...600	1200	4500
31	0...750	1500	4500
32	0...1000	2000	7500
33	0...1500	3000	7500
34	0...2000	4000	7500
35	0...3000	6000	7500
36	0...5000	10000	15000
37	0...7500	15000	22000
38	0...10000	18000	30000
39	0...15000	27000	40000
40	0...20000	35000	60000
41	0...30000	45000	60000

Please use XX code for vacuum, compound and special ranges.  
Ex.: -1...4 bar, 0...5 bar, 0...12 bar, -10...30 psi, 0...120 psi, etc.

## ORDER CODES

### Model PST400 -

#### RANGE

Select a range from the table (01 to 41)

for special ranges use XX. Ex: -100...+400 kPa

#### PRESSURE

Gauge

Absolute (¼" female connection only - ranges from 30 psi to 600 psi and their equivalent in bar and kPa available only)

#### OUTPUT ANALOGUE SIGNAL

4 - 20 mA  
0 - 10 VDC

#### PROCESS CONNECTION

- |   |                                       |
|---|---------------------------------------|
| 1 | (up to 40 bar or 600 psi) ¼" NPT male |
| 2 | G ¼ male                              |
| 3 | (up to 40 bar or 600 psi) ¼" NPTf     |
| 4 | G ¼ female                            |
| 5 | (up to 40 bar or 600 psi) ½" NPT male |
| 6 | G ½ male                              |
| 7 | M18x1.5 male                          |
| 8 | Flange Connection                     |

#### SWITCHES

2 Relays



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