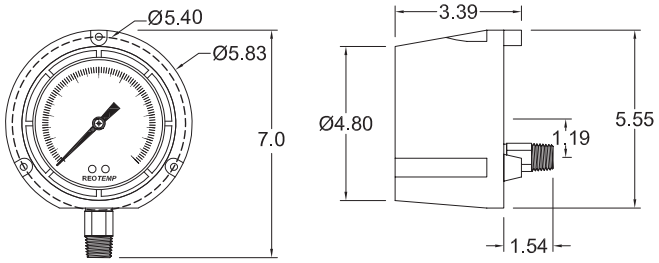
4.5” INDUSTRIAL PROCESS GAUGE

REOTEMP’s Series PT45 process gauge is designed to withstand corrosive atmospheres and media, pulsation and vibration; a very rugged gauge engineered for the process industries. The solid front and blowout back provides a high degree of user safety. *Note: For highly-corrosive, high-temperature, or severe service applications a diaphragm seal is recommended.*

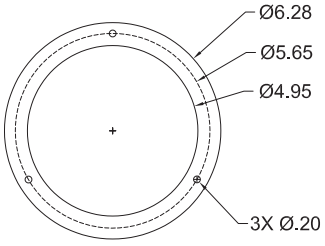
PT45P



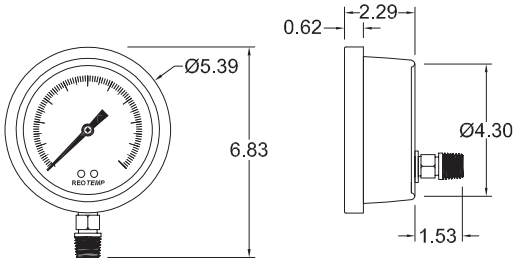
PT45P

*dimensions in inches

PT45T



PT45T Mounting Flange



PT45T

*dimensions in inches

Fillable | Dials | Accuracy | Custom Logo | Diaphragm Seal Compatible

FEATURES / BENEFITS

- Solid Front/Blowout Back Safety Case
- All Stainless Steel Internal Parts
- Internal Overload and Underload Stops
- Field Fillable Case
- Micro-Adjustable Pointer with Floating Zero

ASME B40.100

NACE INTERNATIONAL THE CORROSION SOCIETY

SPECIFICATIONS

Construction Materials:

Non Wetted
- Case: Reinforced Thermoplastic (Phenolic) or 316SS
- Ring: Phenolic Turret Twist-Off or SS Twist-Off Bayonet
- Dial: White Aluminum, Black Letters

Wetted
- Tube: 316LSS
- Socket: 316SS

Case-to-Socket
- O-Ring

Lens
- Tempered Safety Glass
- Plastic
- Laminated Safety Glass

Temperature Limits:

Ambient
-40°F — 150°F

Process
-40°F — 250°F

Process Temperature Limits When Assembled with a Diaphragm Seal

-60°F — 400°F
Direct Mount

-100°F — 750°F
Remote Mount or Cooling Tower

*Exact temperature limits will depend on diaphragm seal & fill fluid.

Accuracy: ±0.5%, Grade 2A
(10k - 20k psi = 1% upscale, 3% downscale)

Fillable: Yes

Restrictor Screw: Yes, removable

Weight: Phenolic (Dry) = 2.5 lbs
Phenolic (Filled) = 3.5 lbs
SS (Dry) = 2 lbs
SS (Filled) = 3 lbs

Maximum Working Pressure:
Stable = 100%
Momentary = 130% of scale

4.5” INDUSTRIAL PROCESS GAUGE

Visit reotemp.com

✓ Check Stock ✓ Get Price
✓ Configure Part # ✓ Download PDF Data Sheets

HOW TO ORDER: Choose options to build a part number. For example: PT45P1A2P21-D-T-HV

PT45	P	1	A	2	P21	-D	-T	-HV
DIAL SIZE	CASE TYPE	TUBE & SOCKET	MOUNT TYPE	CONNECTION	RANGE CODE	CASE FILL	LENS	ACCESSORIES
PT45 = 4.5”	**P** = Fiberglass Reinforced Thermo-plastic **T** = 316SS	**1** = 316SS ***3** = Monel	**A** = Bottom **C** = Lower Back **E** = Lower Back / Front Flange (316SS case ONLY)	**2** = 1/2” NPT **4** = 1/4” NPT **5** = 1/4” Female High Pressure (9/16” - 18 UNF)	*See Master Range Code Sheet on page 41* *Common Ranges* **P01** = -30 in Hg-0 psi **P03** = -30 in Hg-0-30 psi **P16** = 0-30 psi **P18** = 0-100 psi **P20** = 0-200 psi **P21** = 0-300 psi **P25** = 0-1,000 psi **P34** = 0-5,000 psi *Available Ranges* ■ Vac to 20,000 psi ■ Gauge Pressure, Vacuum, or Compound ■ Lowest Range = 10 psi *Available Units* ■ psi ■ bar ■ kPa ■ kg/cm² ■ ftH$_2$0 ■ & more	**-D** = Dry **-G** = Glycerin **-T** = Dry, Teflon Coated Movement **-W** = Glycerin Water (65/35) **-S** = Silicone	**-T** = Tempered Safety Glass (std) **-P** = Plastic **-S** = Laminated Safety Glass	**-HV** = Hi-Vis™ Dial **-C3** = 3 pt. Calibration Certificate **-OX** = Cleaned for O$_2$ Service **-TS** = Stainless Steel Tag **-MP** = Max. Pointer **-EC** = Electrical Contacts **-P6** = Pointer Stop at 6 O’clock **-FM** = Flush Mount Ring for Phenolic Case **-NC** = NACE Compliance Certificate

*Non-standard configuration

Diaphragm Seal Suitability Guide

For applications where a diaphragm seal is required, the following diaphragm seal model types are most commonly assembled and filled to Series PT45 pressure gauges. This matrix identifies which diaphragm seal is appropriate based on the specified pressure range. Please reference the diaphragm seal data sheet and seal fill fluid guide for additional application considerations including max pressure, temperature limits, and material compatibility.

Diaphragm Seal Model		Total Gauge Span* (in psi)						
		15	30	45	60	75	100	160+
Mini Seals	MS6	X	S	T	T	T		
	MS8	S	T	T				
Threaded Flush	1”	X	X	X	S	S	T	
	1.5”	S	S	T	T			
Offline	W5	S	T	T				
	W6	T						
	T5	S	T					
	V5							

*Total gauge span is additive of negative and positive pressures.

Example: -15 - 0 - 30 psi = 45 psi span

- Assembly will function correctly with minimal accuracy degradation.
- T — Assembly will function correctly given stable process temperature.
- S — Assembly is highly sensitive to orientation and temperature variance. REOTEMP cannot guarantee a stated accuracy.
- X — Assembly will not work. The diaphragm does not displace enough fill fluid to drive the pressure gauge.