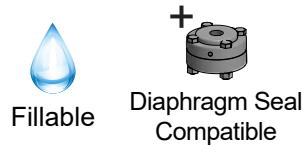


HIGH ACCURACY PROCESS DIFFERENTIAL PRESSURE GAUGE

PRESSURE GAUGES

Reotemp Series D50 differential pressure gauges are widely used in the process industry on dissimilar liquids and gasses that require a rugged all stainless steel construction. With a large dial face, full 270° arc, and optional Hi-Vis™ dial, this highly accurate gauge is easy to read in many different lighting conditions. The high and low housings are equipped with the ability to flush out solid particles that build-up within the pressure chamber. Inside the pressure chambers are corrosion resistant diaphragms that are liquid-filled to compensate static pressure. The outer body and process ports mimic the dimensions of most field-mount differential pressure transmitters and allow for easy mounting to a manifold.



FEATURES / BENEFITS

- Rugged All Stainless Steel Construction
- High Accuracy: +/-1.6% FS or upgrade to +/-1% FS
- Easy-to-Read 270° Dial Arc
- External Zero Adjustment
- High/Low Chamber Flushing Ports
- Up to 750°F Max Working Temperature with Diaphragm Seals

SPECIFICATIONS

Accuracy	+/- 1.6% Full Scale +/-1% Full Scale (Optional)
Temperature Limits	Ambient: 0/175° F Process: 0/212° F Process with Diaphragm Seals: -110° F / 750° F* *Exact limits depend on diaphragm seal model, fill fluid, and mounting
Wetted Materials	Body: 316SSL Housing Diaphragms: 16 to 160"WC - 316SS Ti Diaphragms: 10 to 400 psid - NiCrCo-Alloy (Duratherm) Optional Diaphragm: Hastelloy C-276 Gaskets/Seals: Viton
Non-Wetted Materials	304SS Case and Bezel Alumium Dial and Pointer Laminated Safety Glass Lens Silicone Filled System
Fillable Case	Yes
Maximum Working Pressure	600psi (1,500, 3500, & 6000psi optional)
Environmental Protection	Dry: Nema 3S (IP54) Filled: Nema 4 (IP65)

HIGH ACCURACY PROCESS DIFFERENTIAL PRESSURE GAUGE

PRESSURE GAUGES

HOW TO ORDER: Choose options to build a part number. For example: **D504SVF2XXX-PD20-D-P-HV**

D50	4	S	V	F2	XX	X
SERIES	DIAL SIZE	MATERIAL/MAX PRESSURE	GASKET & SEALS	PROCESS CONNECTION	SWITCH TYPE AND HOUSING	ELECTRICAL CONNECTION
D50 = Process DP Gauge	4 = 4" Dial 6 = 6" Dial	S = SS Body & Internals; MWP 600psi Q = SS Body & Internals; MWP 1,500psi R = SS Body & Internals; MWP 3,500psi T = SS Body & Internals; MWP 6,000psi H = Hastelloy C-276 Body & Internals (Call for Pricing)	V = Viton P = Vi900 Wetted	F4 = 1/4" Female NPT F2 = 1/2" Female NPT M4 = 1/4" Male NPT M2 = 1/2" Male NPT FM = Flange Mount to M20, M30, or M50 manifolds	XX = None W1 = One Micro Switch in Weatherproof Enclosure 2% W2 = Two Micro Switches in Weatherproof Enclosure 2% W3 = Three Micro Switches in Weatherproof Enclosure 2%	X = None M = SPDT, 4A, 30VDC; 3A, 240 VAC; 5A, 120VAC

-PD20	-D	-P	-HV
PRESSURE RANGE	CASE FILL	MOUNTING	OPTIONS

Low Pressure		High Pressure	
-ID16	0-16 inH ₂ Od	-PD10	10 psid
-ID30	0-30 inH ₂ Od	-PD15	15 psid
-ID40	0-40 inH ₂ Od	-PD20	20 psid
-ID60	0-60 inH ₂ Od	-PD30	30 psid
-ID80	0-80 inH ₂ Od	-PD40	40 psid
-ID100	0-100 inH ₂ Od	-PD60	60 psid
-ID160	0-160 inH ₂ Od	-PD100	100 psid
-PD5	5 psid	-PD160	160 psid
		-PD200	200 psid
		-PD300	300 psid
		-PD400	400 psid

D = Dry
G = Glycerin USP
S = Silicone

P = 2" Pipe Mounting Kit with Stainless Steel Bracket
W = Wall Mounting Kit
X = None

HV = Hi-Vis Dial
R1 = Upgrade to 1% Accuracy Full Scale
TS = SS tag
C3 = Certificate of Calibration (3-points)
NC = NACE Certificate
MR = CMTR per EN3.1
3H = 316SS Head and Bezel

For Additional Range Codes See Pages 69 and 70

Diaphragm Seal Suitability Guide

Differential Pressure Gauges are very sensitive and require diaphragm seals with high fluid displacement. If a diaphragm seal is required to isolate the process fluid from the pressure gauge, the following seal model types are available for the Series D50.

Diaphragm Seal Model	Total Gauge Span					
	psid	10	15	30	60	100+
High Displacement (High Pressure Ranges Only)						
W6	X	X	X	X	X	
W7	T					
T6	X	S				
V5	T					

- Assembly will function correctly with minimal accuracy degradation.
- T Assembly will function correctly given stable 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.

HIGH ACCURACY PROCESS DIFFERENTIAL PRESSURE GAUGE

PRESSURE GAUGES

External
Zero
Adjustment
Screw

SS Case
&
Wetted Parts

HiVisTM
Optional

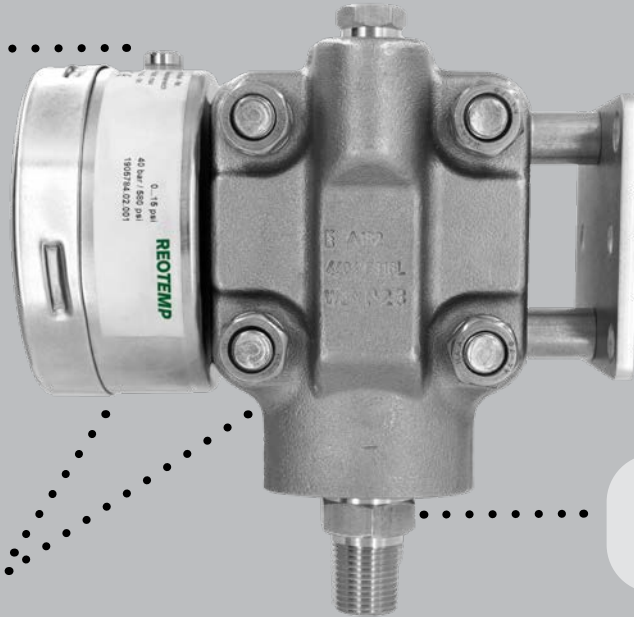
High/Low
Connections

Wall Mount
(2" Pipe
Mounting
also available)

7/16 UNF flange
mount pad

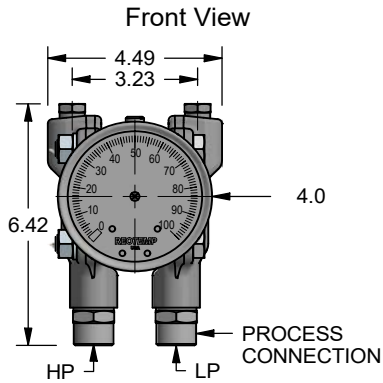
1/8" BSP Flush-
ing Ports

270°
Dial

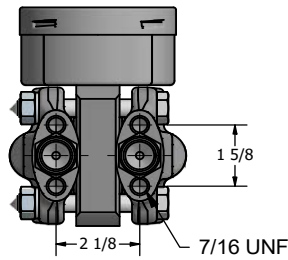


HIGH ACCURACY PROCESS DIFFERENTIAL PRESSURE GAUGE

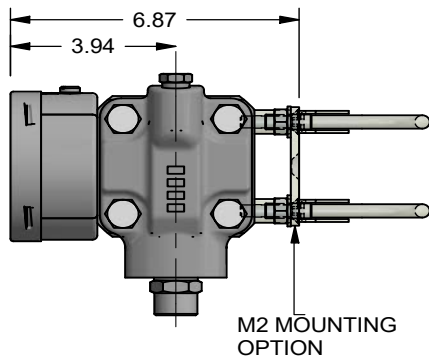
4 INCH GAUGE



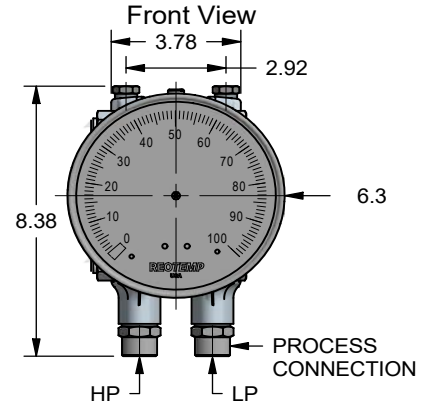
Bottom View



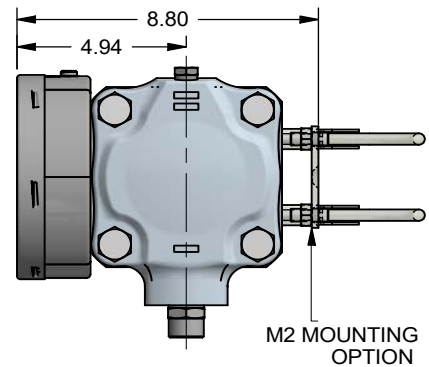
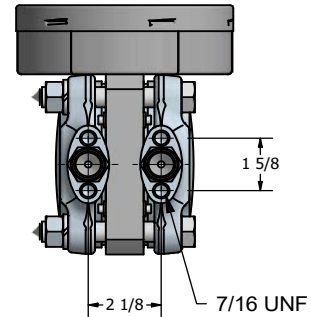
Side View



6 INCH GAUGE



Bottom View



PRESSURE GAUGE RANGES AND CODES

SPECIAL RANGE TYPES

Receiver Ranges			Refrigerant Ranges			Tank Level Ranges	
Code	Element	Dial Range	Code	Dial Range	Refrigerant	Code	Range
P60	3-15 psi	0-100%	N06	-30inHg to 160 psi	Ammonia	F14	0-24ft H ₂ O
P61	3-15 psi	0-10 sq rt	R06	-30inHg to 160 psi	R134A	F15	0-30ft H ₂ O
P62	3-15 psi	0-100% & 0-10 sq.rt.	R06A	-30inHg to 160 psi	R22	F15C	0-40ft H ₂ O
			R06C	-30inHg to 160 psi	R404A	F16	0-60ft H ₂ O
			N07	-30inHg to 200 psi	Ammonia	F165	0-100ft H ₂ O
			N08	-30inHg to 300 psi	Ammonia		

DIFFERENTIAL PRESSURE RANGES (DP GAUGES ONLY)

psid		inH ₂ Od		bard		mbard		kPad	
Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
PD1	0-1 psid	ID10	0-10 inH ₂ Od	BD1	0-1 bard	MD40	0-40 mbard	AD2.5	0-2.5 kPad
PD3	0-3	ID20	0-20	BD1.6	0-1.6	MD60	0-60	AD6	0-6
PD5	0-5	ID30	0-30	BD2.5	0-2.5	MD100	0-100	AD10	0-10
PD10	0-10	ID50	0-50	BD4	0-4	MD160	0-160	AD25	0-25
PD20	0-20	ID100	0-100	BD6	0-6	MD250	0-250	AD40	0-40
PD50	0-50	ID150	0-150	BD7	0-7	MD400	0-400	AD100	0-100
PD100	0-100	ID200	0-200	BD11	0-11	MD600	0-600	AD250	0-250
PD200	0-200	ID400	0-400	BD55	0-55	MD1000	0-1000	AD700	0-700
PD6000	0-6000			BD400	0-400				

PRESSURE GAUGE RANGES AND CODES

PRESSURE GAUGES

LOW PRESSURE RANGES (PC SERIES ONLY)

Low Pressure Ranges									
inH ₂ O		oz/in ²		inH ₂ O & oz/in ²		mbar		psi	
Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
P50D	0-1.6 inH ₂ O *					M50D	0-4 mbar*		
P504	0-4*					M504	0-10*		
P506	0-6*					M506	0-16*		
P50	0-10	Z50	0-6 oz/in ²	Q50Z	0-10 inH ₂ O & 0-6 oz/in ²	M50	0-25		
P51	0-15	Z51	0-8			M51	0-40		
P49	0-20	Z49	0-10	Q49C	0-20 & 0-12				
P515	0-25	Z52E	0-15			M522	0-60		
P52	0-30			Q52N	0-30 & 0-18	M521	0-70	I52	0-1 psi
P525	0-40	Z52	0-20	Q525W	0-40 & 0-24	M525	0-100		
P53	0-60	Z535	0-35	Q53	0-60 & 0-35	M53F	0-150	I53	0-2**
P54	0-100	Z54	0-60	Q54B	0-100 & 0-60	M54	0-250	I54	0-3
P55	0-160					M55	0-400	I55	0-5
P56	0-200	Z56	0-100	Q56C	0-200 & 0-115	M56	0-500	I56	0-7
Vacuum Ranges									
P88	-10-0 inH ₂ O	Z88	-6-0 oz/in ²	Q88	-10/0 inH ₂ O & -6/0 oz/in ²				
P90	-30-0	Z90	-20-0	Q90	-30/0 & -18/0	M905	-100-0 mbar	I90	-1-0 psi
P91	-60-0	Z91	-30-0	Q91	-60/0 & -35/0	M94	-200-0	I91	-2-0
P92	-100-0	Z92	-60-0	Q92	-100/0 & -60/0	M95	-400-0		
Compound Ranges									
P7A	-5/0/5 inH ₂ O	Z7A	-3/0/3 oz/in ²			M71	-20/0/20 mbar		
P70	-10/0/10			Q70C	-10/0/10 inH ₂ O & -6/0/6 oz/in ²	M72E	-30/0/30		
P71	-15/0/15					M72	-40/0/40		
P72	-20/0/20	Z72	-10/0/10	Q72C	-20/0/20 & -12/0/12	M72A	-50/0/50	I73	-1-0-1 psi
P73	-30/0/30			Q73C	-30/0/30 & -18/0/18	M735	-100/0/100	I74	-2-0-2
P74	-60/0/60	Z745	-30/0/30					I55U	-3/0/3
P75	-100/0/100			Q75B	-100/0/100 & -60/0/60			P14C	-5/0/5

*available on 4" & 6" sizes only
 **short scaled range