



PANAM
ENGINEERING
BEYOND
LIMITS

Pressure Gauges

- PANAM Pressure Gauges are available in SS 316 & SS 316L
- 63mm, 100mm, 115mm, 150mm etc
- Protection:- According to IP54 / IP65 / IP66 / IP67
- Dry or filled with glycerin, silicon, halocarbon other upon request
- Standard stem, optional panel, bracket, surface or others on request
- NACE, diaphragm seals, valves, electric contacts, dampener, gauge saver syphon etc.
- Overload protection 130%



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Introduction

PANAM[®] has emerged as renowned name in Global market for 'Instrumentation Fittings & Valves'. Since its inception in 1998 to present day, **PANAM**[®] has added new product every year and has broadened its product portfolio and its clientele base by supplying to potential customers worldwide. Key core values like Timely Delivery, Quality Consistency, Product Improvisation and after sales service has been instrumental in the phase wise evolution of company. Continuous improvement is the key to success, Customer feedback are taken with positive attitude and product are constantly groomed to a new quality and performance level to cope up with the competition. Our products are known for providing high-quality, high-reliability, low-cost options for the oil and gas industry. Over the year, the company has evolved from a product based company to a complete system solution provider. Over the coming years the entity of the company will attain state of the art operational efficiency for maintaining a competitive edge, with the advent increase in the utilization of its products in oil, gas and power sector.

PANAM[®] is having state of the art manufacturing facility span over an area of 65,000 sqft with a fleet of CNC machines, VMC machines, Semi-Automatic Lathe machines, High pressure test bench with SCADA control, Configuration centre for transmitters and dedicated R&D Team.

PANAM[®] offers Pressure Gauges in SS 316 & SS 316L, Dial Sizes in 63mm, 100mm, 115mm, 150mm etc., Protection according to IP54 / IP65 / IP66/IP67. Dry or filled with glycerin, silicon, halocarbon other upon request, Standard stem, optional panel, bracket, surface or others on request, NACE, diaphragm seals, valves, electric contacts, dampener, gauge saver syphon etc., Overload protection 130%.

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Stainless Steel Process Gauges (PWPS)

Nominal size:

63 mm (2.5"), 100 mm (4"), 115 mm (4.5"), 150 mm (6") or 250 mm (10")

ASME B40.100 / EN 837-1 / IS-3624

Accuracy: Class 1 (1%) / Class 1.6 (1.6%) for 63r

Features

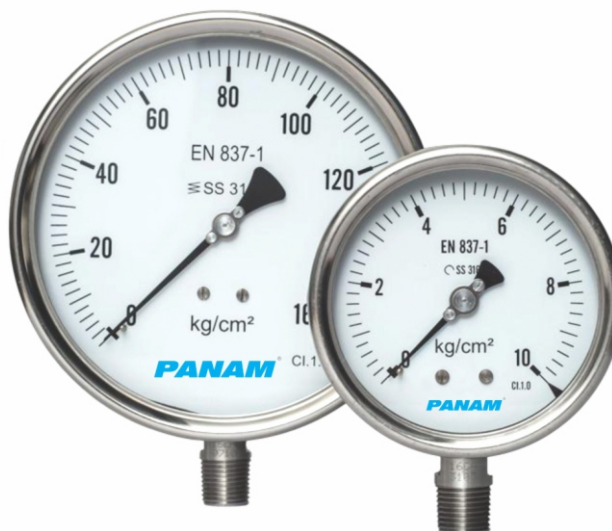
- Rugged stainless steel construction
- Measuring system stainless steel or Monel
- Socket and case welded
- Protection IP66 and IP68
- Usable to full scale
- Overload protection 130%
- Dry, liquid filled
- Optional contacts
- Optional external Zero Adjustment

Ranges

-30 in. Hg ... 0 psi up to 0 ... 36,000 psi
 -1 ... 0 bar up to 0 ... 2500 bar & kg/cm²
 -100 ... 0 kPa up to 0 ... 250,000 kPa

Applications

Chemical & petrochemical industries, refineries
 Fertilizer, thermal & nuclear power plants
 OEM & machine apparatus

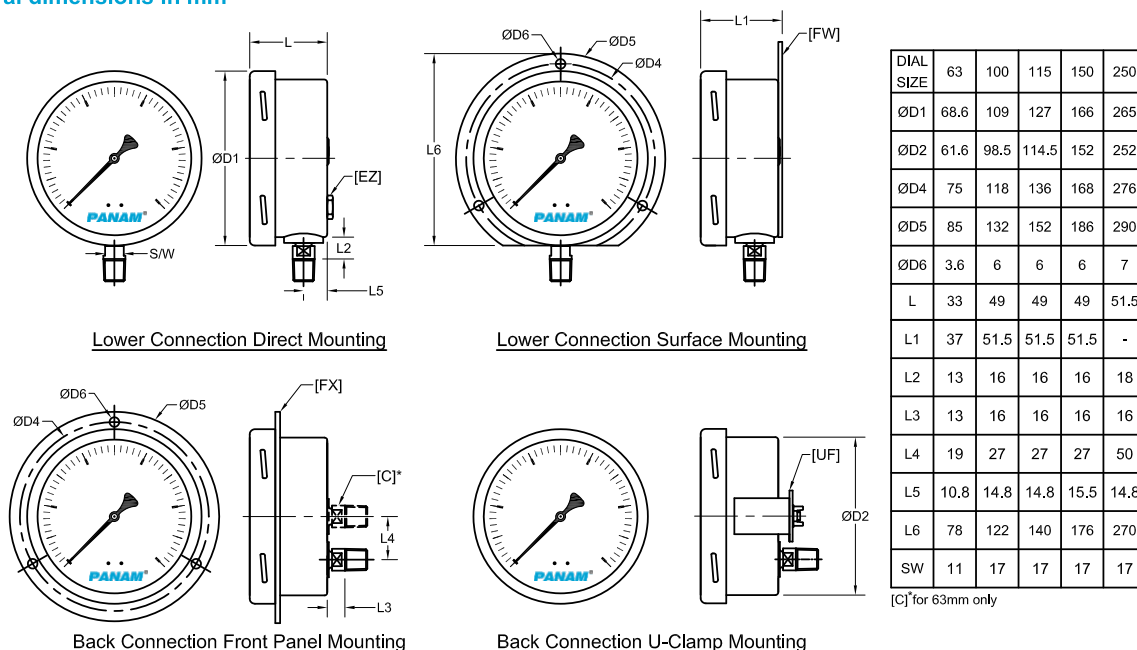


Technical specification	PWPS				
Dial size in mm	63	100	115	150	250
Construction	Open front cylindrical case with snap action bayonet ring with blow out disc				
Measuring principle	Bourdon tube				
Range in kg/cm ² (or bar)	0.6 1 1.6 2.5 4 6 10 16 25 40 60 100 160 250 400 600 1,000 1,600 2,500 -1/0 -1/0.6 -1/1.5 -1/3 -1/5 -1/9 -1/15 -1/24				
Overpressure limit	130 % F.S., short time.				
Pressure type	Gauge, vacuum and compound				
Process connection	1/8" 1/4" 3/8" 1/2" BSP / NPT (M), M20x1.5 (M), Others on request				
Connection location	Lower, back				
Material					
Pressure connection	Stainless steel 316, optional 316L, Monel, Hastelloy C276, Inconel 625				
Tube	Stainless steel 316, optional 316L, Monel, Ni Span, Hastelloy C276, Inconel 625				
Case/bayonet ring	Stainless steel 304, optional 316L				
Window	Instrument glass, optional laminated safety glass, acrylic glass				
Dial	Aluminum, black markings on white background, others on request				
Pointer	Aluminum, black optional micrometer adjustment				
Movement	Stainless steel 304, optional 316L				
Accuracy	Class 1.6 (1.6 % F.S.)		Class 1 (1 % F.S.)		Class1 (1 % F.S.), optional 0.5 % F.S.
Permissible					
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)				
Medium temperature	Max. 200 °C (392 °F) (dry), max. 100 °C (212 °F) (for liquid filled)				
Storage temperature	-40 ... 65 °C (-40 ... 150 °F)				
Effect	Max. 0.3 % / 10 K				
Protection according	IP66 / IP68				
Optional Approval	Conformity according to 2014/34/EU for mechanical equipment in potential hazardous areas   II 2G Ex h IIC T6..T1 Gb X II 2D Ex h IIIC T85..T450°C Db X				
Filling liquids	Glycerin, silicone, halocarbon, others on request				
Mounting	Standard stem, optional panel, bracket, surface or others on request				
Weight dry/filled in kg	0.1 / 0.17		0.51 / 0.86	0.53 / 0.88	0.88 / 1.78 2.02 / 3.52
Accessories, options	NACE, diaphragm seals, valves, electric contacts, dampener, gauge saver, syphon etc				

All specifications are subject to change without notice.

Stainless Steel Process Gauges (PWPS)

General dimensions in mm



Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/case material	Options
(63) 63mm	PWPS	(S) Socket 316, Tube 316	(L) IP66	(04) 1/2" NPT (M) ¹⁾	(L) Lower	-1/ 0	kg/cm ² (bar)	(=) Standard no filling	(NH) Tagging wired
(100) 100 mm		(L) Socket and Tube 316L	(N) IP68	(03) 3/8" NPT (M) ¹⁾	(B) Back	-1/ 0.6		(GV) Silicone ⁵⁾	(DA) Dial Marking
(115) 115mm		(P) Socket and Tube Monel ¹⁾		(02) 1/4" NPT (M)	(C) Centre back ²⁾	-1/ 3		(GR) Glycerin ⁵⁾	(CS) Dual Scale
(150) 150mm		(D) Socket 316, Tube Ni Span ¹⁾		(01) 1/8" NPT (M)		-1/ 5		(GX) Halocarbon ⁵⁾	(AV) Anti-Vibration ⁸⁾
(250) 250mm		(H) Socket and Tube Hastelloy-C276 ¹⁾		(15) 1/2" BSP (M) ¹⁾		-1/ 9		(YW) Case material 316L (1.4404)	(OF) Oil free
				(14) 3/8" BSP (M) ¹⁾		-1/ 15		(EC) Contact type and function (see EC.1) ^{1) 3) 5) 9)}	(MP) Micrometer pointer ¹⁾
				(13) 1/4" BSP (M)		0/ 0.6 ¹⁾			(PD) Acrylic glass ⁹⁾
				(12) 1/8" BSP (M)		0/ 1			(SG) Safety glass
				(16) M20x1.5 (M) ¹⁾		0/ 1.6			(FX) Front panel
				(KQ) 1/2" BSPT (M) ¹⁾		0/ 2.5			(FW) Surface plate
		(I625) Socket and Tube Inconel 625 ¹⁾		(KR) 3/8" BSPT (M) ¹⁾		0/ 4			(UF) U-clamp
				(KA) 1/4" BSPT (M)		0/ 6			(TU) Throttle screw
						0/ 10			(EZ) External Zero adjustment ^{1) 6)}
						0/ 16			(AJ) Calibration 0.5 % F.S. ⁴⁾
						0/ 25			(PR) Receiver gauge ¹⁾
						0/ 40			(TM) 2" Pipe mounting ¹⁾
						0/ 60			(AT) ATEX listed ⁷⁾
						0/ 100			
						0/ 160			
						0/ 250			
						0/ 400			
						0/ 600			
						0/ 1000			
						0/ 1600 ¹⁾			
						0/ 2500 ¹⁾			

1) Not for size 63mm 2) For 63mm only 3) For dry gauges only 4) For 150 mm, 250 mm 5) Not for 0.6 kg/cm² 6) not for 250 mm
7) Not admissible with glass option (PD) 8) For size 100mm, 115mm, 150mm and pressure ranges 2.5 kg/cm² and above 9) Not available with Ex-proof

How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/Case material	Option
150	PWPS	S	L	04	L	0/16	KG/CM2	=	NH

All specifications are subject to change without notice.

All Stainless Steel Safety Process Gauges (PSFS)

Nominal size: 100 mm (4"), 115 mm (4.5"), 150 mm (6")
ASME B40.100 / EN 837-1 / IS-3624
Accuracy: Class 1 (1%)

Features

- Solid front type construction
- Rugged stainless steel construction
- Measuring system stainless steel or Monel
- Socket and case welded
- Protection IP66, IP68
- Usable to full scale
- Overload protection 130%
- Dry, liquid filled
- Optional external Zero Adjustment

Ranges

-30 in. Hg ... 0 psi up to 0 ... 36,000 psi
-1 ... 0 bar up to 0 ... 2500 bar & kg/cm²
-100 ... 0 kPa up to 0 ... 250,000 kPa

Applications

Chemical, petrochemical industry, petroleum refinery
Fertilizer, thermal & nuclear power generation industry
Machine and apparatus construction

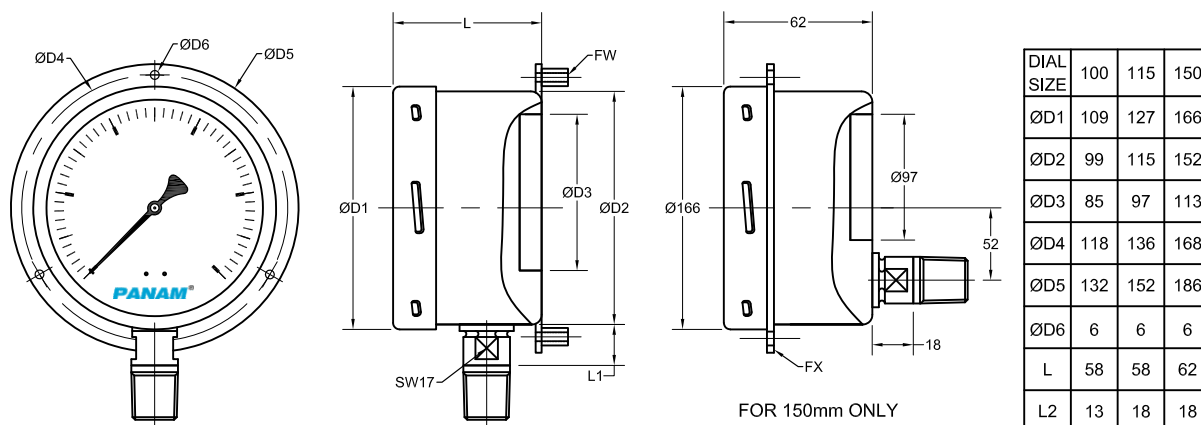


Technical specification	PSFS		
	100	115	150
Dial size in mm			
Construction	Solid front safety pattern cylindrical case with blowout at the back		
Measuring principle	Bourdon tube		
Range in kg/cm ² (or bar)	0.6 1 1.6 2.5 4 6 10 16 25 40 60 100 160 250 400 600 1,000 1,600 2,500 -1/0 -1/0.6 -1/1.5 -1/3 -1/5 -1/9 -1/15 -1/24		
Overpressure limit	130 % F.S., short time.		
Pressure type	Gauge, vacuum and compound		
Process connection	1/4" 3/8" 1/2" BSP / NPT (M) , M20x1.5 (M), Others on request		
Connection location	Lower, back(for 150 mm only)		
Material			
Pressure connection	Stainless steel 316, optional 316L, Monel, Hastelloy C276, Inconel 625		
Tube	Stainless steel 316, optional 316L, Monel, Ni Span, Hastelloy C276, Inconel 625		
Case/bayonet ring	Stainless steel 304, optional 316L		
Window	laminated safety glass		
Dial	Aluminum, black markings on white background		
Pointer	Aluminum, black optional - micrometer adjustment others on request		
Movement	Stainless steel 304, optional 316L		
Accuracy	Class 1 (1 % F.S.), optional 0,5 % F.S.		
Permissible			
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)		
Medium temperature	Max. 200 °C (392 °F) (dry), max. 100 °C (212 °F) (for liquid filled)		
Storage temperature	-40 ... 60 °C (-40 ... 140 °F)		
Effect	Max. 0,3 % / 10 K		
Protection according	IP66/ IP68		
Optional Approval	Conformity according to 2014/34/EU for mechanical equipment in potential hazardous areas CE Ex II 2G Ex h IIC T6..T1 Gb X Ex II 2D Ex h IIIC T85..T450°C Db X		
Filling liquids	Glycerin, silicone, halocarbon, others on request		
Mounting	Standard stem, optional flush, surface		
Weight dry/filled in kg	0.63 / 1.02	0.76 / 1.65	1.14 / 2.08
Accessories, options	NACE compliance, diaphragm seals, valves, electric contacts, dampener, gauge saver, syphon etc		

All specifications are subject to change without notice.

All Stainless Steel Safety Process Gauges (PSFS)

General dimensions in mm



Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/Case material	Options
(100) 100 mm	PSFS	(S) Socket 316, Tube 316	(L) IP66	(04)1/2" NPT (M)	(L) Lower	-1/ 0	kg/cm2 (bar)	(=) Standard no filling	(NH) Tagging wired
(115) 115mm		(L) Socket and Tube 316L	(N) IP68	(03)3/8" NPT (M)	(B) Back ²⁾	-1/ 0.6		(GV) Silicone ¹⁾	(DA) Dial Marking
(150) 150mm		(P) Socket and Tube Monel			(02)1/4" NPT (M)	-1/ 1.5		(GR) Glycerin ¹⁾	(CS) Dual scale
					(15)1/2" BSP (M)	-1/ 3		(GX) Halocarbon ¹⁾	(OF) Oil free
					(14)3/8" BSP(M)	-1/ 5			(YW) Case material 316L (1.4404)
					(D)Socket 316, Tube Ni Span	(13)1/4" BSP(M)		-1/ 9	
		(H)Socket and Tube Hastelloy-C276	(16)M20x1.5(M)	-1/ 15	(FX) Front panel				
		(I625) Socket and Tube Inconel 625				0/ 24		0/ 1.6	(FW) Surface plate
						0/ 2.5		0/ 4	(TU) Throttle screw
						0/ 6		0/ 6	(AJ) Calibration 0.5 % F.S. ²⁾
						0/ 10		0/ 10	(AV) Anti-Vibration ⁴⁾
						0/ 16		0/ 160	(AT) ATEX listed
						0/ 25		0/ 1400	(TM) 2" pipe mounting bracket ³⁾
0/ 40						0/ 2500			
0/ 60									
0/ 100									
0/ 160									
0/ 250									
0/ 400									
0/ 600									
0/ 1000									
0/ 1400									
0/ 1600									
0/ 2500									
	</								

1) Not for range 0.6 kg/cm² 2) For size 150mm and range up to 0/700 kg/cm² only 3) For size 150mm only 4) For pressure ranges ≥ 2.5 kg/cm² & available with limited options, Halocarbon filling not allowed & consult engineering 5) Not available with Ex-proof

How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/Case material	Option
100	SFS	S	L	04	L	0/16	KG/CM2	=	NH

All specifications are subject to change without notice.

Liquid Filled Gauges (PGFB)

Nominal size: 63 mm (2.5"), 100 mm (4")
 ASME B40.100 / EN 837-1 / IS-3624
 Accuracy: Class 1.6 (1.6%)

Features

- Twin o-ring design for leak tight enclosure
- Protection IP65
- Usable to full scale
- Overload protection 130 %
- Measuring tubes SS316 / PB
- Minimized pulsation, Vibration and pointer flittering due to dampening effect

Ranges

-30 in. Hg ... 0 psi up to 0 ... 6,000 psi
 -1 ... 0 bar up to 0 ... 400 bar & kg/cm²
 -100 ... 0 kPa up to 0 ... 4,000 kPa

Applications

Power packs
 Hydraulic machinery
 Pumps
 Other vibration applications

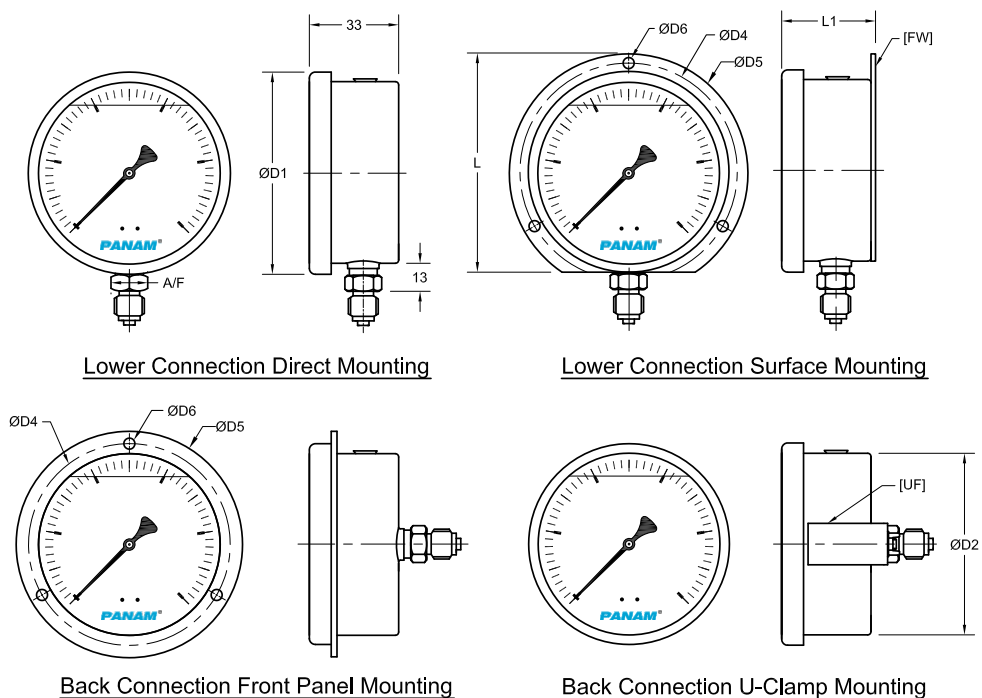


Technical specification	PGFB	
Dial size in mm	63	100
Construction	Open front cylindrical case with crimp type bezel ring	
Measuring principle	Bourdon tube	
Range in kg/cm ² (or bar)	1 1.6 2.5 4 6 10 16 25 40 60 100 160 250 400 -1/0 -1/0.6 -1/1.5 -1/3 -1/5 -1/9 -1/15 -1/24	
Overpressure limit	130 % F.S., short time.	
Pressure type	Gauge, vacuum and compound	
Process connection	1/8" 1/4" BSP / NPT (M)	1/4" 3/8" 1/2" BSP / NPT (M)
Connection location	Lower, back	
Material	Brass SS 316/ Phosphorous Bronze below 6 kg/cm ² , Brass Stainless steel 304 Acrylic glass Aluminum, black markings on white background Plastic, Black Aluminum, black Brass	
Accuracy	Class 1.6 (1.6% F.S)	
Permissible	Ambient temperature -40 ... 60 °C (-40 ... 140 °F) Medium temperature Max. 100 °C (212 °F) Storage temperature -40 ... 65 °C (-40 ... 150 °F) Effect Max. 0,3 % / 10 K	
Protection according	IP65	
Filling liquids	Glycerin, silicone, others on request	
Mounting	Standard stem, optional panel, bracket, surface or others on request	
Weight with liquid filling in kg	0.22	0.48

All specifications are subject to change without notice.

Liquid Filled Gauges (PGFB)

General dimensions in mm



Dial Size	63	100
ØD1	67.7	108
ØD2	61.6	98.6
ØD4	75	118
ØD5	85	132
ØD6	3.6	6
L	78	122
L1	36	37

Thread Size	A/F
1/8"	14
1/4"	14
3/8"	17
1/2"	22

Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling material	Options
(63) 63 mm (100) 100 mm	PGFB	(B) Socket Brass, Tube SS316 ²⁾	(L) IP 65	(04) 1/2" NPT (M) ¹⁾ (03) 3/8" NPT (M) ¹⁾ (02) 1/4" NPT (M) (01) 1/8" NPT (M) ³⁾ (15) 1/2" BSP(M) ¹⁾ (14) 3/8" BSP(M) ¹⁾ (13) 1/4" BSP(M) (12) 1/8" BSP(M) ³⁾ (16) M20x1.5(M) ¹⁾ Others on request	(L) Lower (C) Center back	-1/ 0 ²⁾ -1/ 0.6 ²⁾ -1/ 1.5 ²⁾ -1/ 3 ²⁾ -1/ 5 ²⁾ -1/ 9 -1/ 15 -1/ 24 0/ 1 ²⁾ 0/ 1.6 ²⁾ 0/ 2.5 ²⁾ 0/ 4 ²⁾ 0/ 6 ²⁾ 0/ 10 0/ 16 0/ 25 0/ 40 0/ 60 0/ 100 0/ 160 0/ 250 0/ 400	kg/cm2 (bar)	(=) No filling (GV) Silicone (GR) Glycerin	(NH) Tagging wired (DA) Dial Marking (CS) Dual Scale (FX) Front panel (FW) Surface plate (UF) U-clamp

1) Not for 63mm 2) Tube material Phosphorous Bronze for range below 6 kg/cm² 3) For 63 mm only

How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case material	Option
63	PGFB	B	L	02	L	0/16	KG/CM2	=	NH

All specifications are subject to change without notice.

Stainless Steel Liquid Filled Gauges (PGFS)

Nominal size: 63 mm (2.5"), 100 mm (4")
 ASME B40.100 / EN 837-1 / IS-3624
 Accuracy: Class 1.6 (1.6%) for 63 mm, Class 1 (1%) for 100 mm

Features

- Rugged stainless steel construction
- Socket and case welded
- Protection IP66, IP68
- Usable to full scale
- Overload protection 130%
- Dry or liquid filled
- Measuring system stainless steel

Ranges

-30 in. Hg ... 0 psi up to 0 ... 23,000 psi
 -1 ... 0 bar up to 0 ... 1600 bar & kg/cm²
 -100 ... 0 kPa up to 0 ... 160,000 kPa

Applications

Power packs
 Hydraulic machinery
 HVAC & Refrigeration
 Pumps
 Power plants
 Pipelines
 Transmission stations

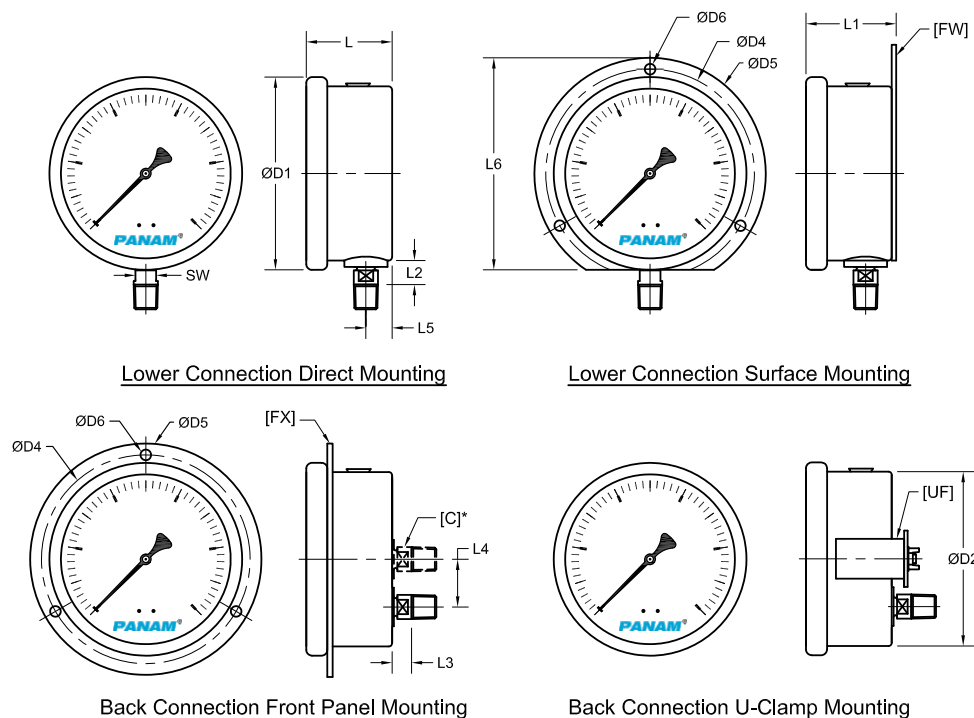


Technical specification	PGFS	
Dial size in mm	63	100
Construction	Open front cylindrical case with crimp type bezel ring	
Measuring principle	Bourdon tube	
Range in kg/cm ² (or bar)	1 1.6 2.5 4 6 10 16 25 40 60 100 160 250 400 600 1000 1600 -1/0 -1/0.6 -1/1.5 -1/3 -1/5 -1/9 -1/15 -1/24	
Overpressure limit	130 % F.S., short time.	
Pressure type	Gauge, vacuum and compound	
Process connection	1/8" 1/4" BSP / NPT (M)	1/4" 3/8" 1/2" BSP / NPT (M), M20x1.5(M)
Connection location	Lower, back	
Material	Pressure connection: Stainless steel 304, 316, 316L, Monel, Hastelloy C276, Inconel 625 Tube: Stainless steel 316, optional 316L, Monel, Hastelloy C276, Inconel 625 Case/bayonet ring: Stainless steel 304, optional 316L Window: Acrylic glass, optional laminated safety glass Dial: Aluminum, black markings on white background Pointer: Plastic, Black Aluminum, black Movement: Stainless steel 304, optional 316L	
Accuracy	Class 1.6 (1.6% F.S)	Class 1 (1 % F.S.)
Permissible	Ambient temperature: -40 ... 60 °C (-40 ... 140 °F) Medium temperature: Max. 200 °C (392 °F) (dry), max. 100 °C (212 °F) (for liquid filled) Storage temperature: -40 ... 65 °C (-40 ... 150 °F) Effect: Max. 0,3 % / 10 K	
Protection according	IP66/ IP68	
Optional Approval	Conformity according to 2014/34/EU for mechanical equipment in potential hazardous areas  II 2G Ex h IIC T6..T1 Gb X II 2D Ex h IIIC T85..T450°C Db X	
Filling liquids	Glycerin, silicone, halocarbon, others on request	
Mounting	Standard stem, optional panel, bracket, surface or others on request	
Weight with liquid filling in kg	0.21	0.75
Accessories, options	Diaphragm seals, valves, dampener, gauge saver, etc	

All specifications are subject to change without notice.

Stainless Steel Liquid Filled Gauges (PGFS)

General dimensions in mm



DIAL SIZE	63	100
ØD1	67.7	108.5
ØD2	61.5	98.5
ØD4	75	118
ØD5	85	132
ØD6	3.6	6
L	32.5	47.5
L1	37	51
L2	13	16
L3	13	18
L4	-	27
L5	10.8	14.3
L6	78	122
SW	11	17

[C]^{*} for 63mm only

Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/case material	Options
(63) 63 mm	PGFS	(S) Socket 316, Tube 316	(L) IP 66 / IP68	(04) 1/2" NPT (M) ¹⁾	(L) Lower	-1/ 0	kg/cm2 (bar)	(=) No filling	(NH) Tagging wired
(100) 100 mm				(03) 3/8" NPT (M) ¹⁾	(B) Back	-1/ 0.6		(GV) Silicone	(DA) Dial Marking
		(L) Socket and Tube 316L		(02) 1/4" NPT (M)	(C) Center back ²⁾	-1/ 1.5		(GR) Glycerin	(CS) Dual Scale
				(01) 1/8" NPT (M) ²⁾		-1/ 3		(GX) Halocarbon	(OF) Oil free
		(P) Socket and Tube Monel ¹⁾		(15) 1/2" BSP(M) ¹⁾		-1/ 5		(YW) Case material 316L (1.4404)	(SG) Safety glass
				(14) 3/8"BSP(M) ¹⁾		-1/ 9			(FX) Front panel
		(D) Socket 316, Tube Ni Span ¹⁾		(13) 1/4" BSP(M)		-1/ 15			(FW) Surface plate
				(12) 1/8" BSP(M) ²⁾		0/ 24			(UF) U-clamp
		(H) Socket and Tube Hastelloy-C276 ¹⁾		(16) M20x1.5(M) ¹⁾		0/ 1			(AT) ATEX listed ³⁾
						0/ 1.6			
						0/ 2.5			
						0/ 4			
						0/ 6			
						0/ 10			
						0/ 16			
						0/ 25			
						0/ 40			
						0/ 60			
						0/ 100			
						0/ 160			
						0/ 250			
						0/ 400			
						0/ 600			
						0/ 1000			
						0/ 1600			
			¹⁾	Equivalent ranges in kPa, MPa, psi, bar and others units available					

1) Not for 63mm 2) For 63 mm only 3) Not admissible with glass option (PD)

How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case material	Option
63	PGFS	S	L	02	L	0/16	KG/CM2	=	NH

All specifications are subject to change without notice.

Diaphragm Type Pressure Gauges (PSDS)

Nominal size: 100 mm (4"), 150 mm (6")
 ASME B40.100 / EN 837-3 / IS-3624
 Accuracy: Class 1.6 (1.6%), optional 1.0%

Features

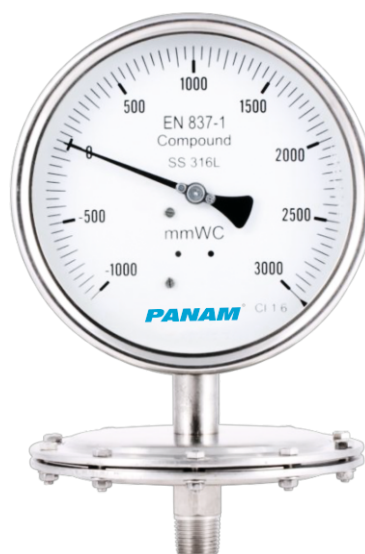
- Stainless steel construction
- Suitable for corrosive environments
- Protection IP66, IP68
- Usable to full scale
- Overload protection 130%
- Optional solid front protection

Ranges

-30 in. Hg ... 0 psi up to 0 ... 30 psi
 -1 ... 0 bar up to 0 ... 2.5 bar & kg/cm²
 -100 ... 0 kPa up to 0 ... 250 kPa

Applications

Chemical and petrochemical industry
 Machine and apparatus construction
 Food and beverage industry
 Pulp and paper industry



Technical specification	PSDS	
	100	150
Dial size [mm]		
Construction	Open front cylindrical case with snap action bayonet ring with blow out disc	
Measuring principle	Horizontal diaphragm	
Range [mmwc]	250 400 600 1000 1600 2500 4000 -250/0 -400/0 -600/0 -1000/0 -1600/0 -2500/0 -4000/0	
[kg/cm ² (or bar)]	0,6 1,0 1,6 2,5 -1/0 -1/0,6 -1/1,5	
Overpressure limit	130 % F.S., short time.	
Pressure type	Gauge, vacuum and compound	
Process connection	1/4" 3/8" 1/2" BSP / NPT (M), M20x1.5(M) Direct flange as per DIN/ANSI Others on request	
Connection location	Lower	
Material		
Process connection	Stainless steel 316 optional Stainless steel 316L, PTFE lined, Hastelloy C276, Inconel 625, Monel	
Diaphragm	Stainless steel 316L optional PTFE protected, Hastelloy C276, Inconel 625, Tantalum, Monel	
Case/bayonet ring	Stainless steel 304 optional 316L	
Window	Instrument glass optional laminated safety glass	
Dial	Aluminum, black markings on white background	
Pointer	Aluminum, black, optional micrometer adjustment	
Movement	Stainless steel 304, optional 316L	
Accuracy	Class 1.6 (1.6 % F.S.)	
Permissible		
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)	
Medium temperature	Max. 100 °C (212 °F)	
Storage temperature	-40 ... 60 °C (-40 ... 140 °F)	
Effect	Max. 0,5 % / 10 K	
Protection according	IP66/ IP68	
Optional Approval	Conformity according to 2014/34/EU for mechanical equipment in potential hazardous areas  II 2G Ex h IIC T6..T1 Gb X II 2D Ex h IIIC T85..T450°C Db X	
Mounting	Standard stem or flange	
Weight ≤ 600 mbar / > 600 mbar [kg]	1.66 / 1.26	1.99 / 1.59
Accessories, options	Valves, dampener, gauge saver, etc.	

All specifications are subject to change without notice.

Diaphragm Seals Threaded Types (PDS20)

ASME B40.100

Features

- Metal diaphragms with Teflon gasket
- Interchangeable components
- Removable top and bottom housing
- Variety of wetted parts materials

Ranges

15 psi up to 1000 psi
1 kg/cm² up to 100 bar & kg/cm²
100 kPa up to 10000 kPa

Applications

Chemical and petrochemical industry
Machine and apparatus construction
Offshore installations
Pulp and paper industry
Waste water treatment

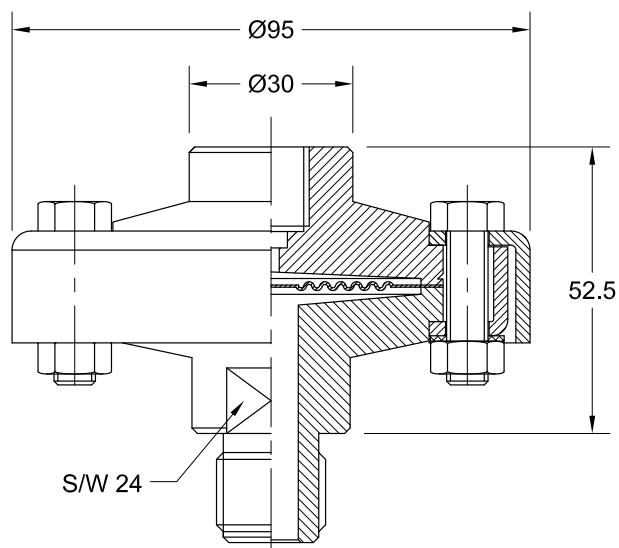


Technical specification	PDS20
Process connection size (ISO 228-1 / ASME B1.20.1)	1/4" 3/8" 1/2" BSP / NPT, M20x1.5, others on request
Construction	Bolted top and bottom housing, removable for easy maintenance
Fill port	At the side with stainless steel ball and set screw
Flushing connection	Optional flushing
Flushing connection size	1/4" NPT female
Maximum pressure	
Metal bottom housing [psi / bar]	1500 / 100
Other bottom housing [psi / bar]	150 / 10
Measuring principle	Diaphragm welded to top housing
Instrument connections [female]	3/8" BSP, 1/2" NPT, others on request
Material (wetted parts)	
Bottom housing	Stainless steel 316, 316L, Polypropylene, PVC, SS 316 with Teflon protection, Hasteloy-C 276
Diaphragm (metal type)	Stainless steel 316L Optional Hasteloy-C276
Diaphragm (other types)	Stainless steel 316L with Teflon protection
Material (non wetted parts)	
Top housing	Stainless steel 304, optional 316
Clamp rings	Steel painted black, optional stainless steel
Bolts and nuts	Stainless steel 300 series
Accuracy	Additional 0,5 % to the specified tolerance of the mounted instrument
Filling liquids (temperature range)	Glycerin (0/400 °F, -18/204 °C), Silicone (-40/600 °F, -40/315 °C), Halocarbon (-70/300 °F, -56/149 °C), Syltherm 800 (-40/750 °F, -40/400 °C), Vegetable oil (32/248 °F, 0/120 °C), Food grade silicone (-13/400 °F, -25/200 °C), Others on request, also depending on selected material and configuration.
Mounting	Direct or with capillary
Weight in kg	1.00
Accessories, options	NACE, pressure gauges, pressure switches, transducer, capillaries

All specifications are subject to change without notice.

Diaphragm Seals Threaded Types (PDS20)

General dimensions in mm



Order information

Process connection	Type	Diaphragm	Bottom housing material	Instrument connection	Filling fluid	Options			
(06) 1" NPT(M)	PDS20	(S) 316L	(S) 316	(14T) 3/8" BSP (F)	(CG) Glycerin (direct mounted, -18/204 °C)	(NH) Tagging wired			
(05) 3/4" NPT(M)		(SP) 316L with teflon protection ¹⁾	(L) 316L	(04T) 1/2" NPT (F)	(CK) Silicone (direct mounted or with capillary, -40/315 °C)	(OF) Oil free (only filled with halocarbon)			
(04) 1/2" NPT(M)			(SP)316 with teflon lined ¹⁾³⁾		(YT) Stainless steel 316 top housing				
(03) 3/8" NPT(M)		(SJ) 316L with teflon Coating ¹⁾	(PP)Polypropylene ¹⁾²⁾		(CF) Halocarbon (direct mounted or with capillary, -56/149 °C)	(SE) Stainless steel clamp rings			
(02) 1/4" NPT(M)		(H) Hastelloy C	(V) PVC ¹⁾²⁾		(HA) Syltherm 800 (direct mounted or with capillary, -40/400 °C)	(PU) Flushing connection 1/4" NPT (F) ⁵⁾			
(18) 1" BSP(M)			(H) Hastelloy C		(GZ) Vegetable oil (direct mounted or with capillary, 0/120 °C)	(CA) Stainless steel armored capillary ⁴⁾			
(17) 3/4" BSP(M)		(H) Hastelloy C	(H) Hastelloy C		(CZ) Food grade silicone (direct mounted or with capillary, -25/200 °C)	(CP) Stainless steel armored capillary with PVC sleeving ⁴⁾			
(15) 1/2" BSP(M)									
(14) 3/8" BSP(M)									
(13) 1/4" BSP(M)									
(16) M20x1.5(M)									
(06T) 1" NPT(F)									
(05T) 3/4" NPT(F)									
(04T) 1/2" NPT(F)									
(02T) 1/4" NPT(F)									
					others on request	4) Max length 30m, specify length in meter EG. CP1.0 = CP with 1m			

1) Restricted to maximum temperature 200 °C, pressure 40 bar

2) Max. Rating / temperature limit: 200 psi / 14 bar at 74 °F / 23 °C; 125 psi / 8.6 bar at 125 °F / 52 °C; 80 psi / 5.5 bar at 150 °F / 65 °C

3) Not for process connection (02), (13), (06T), (05T), (04T), (02T), not available with option PU

5) Not for (SP), (PP) & (V)

How to order

Process connection	Type	Diaphragm	Bottom housing material	Instrument connection	Filling fluid	Option
04	DS20	S	S	14T	CK	CA1.0

All specifications are subject to change without notice.

Flush Type Flanged Diaphragm Seal (PDF50)

ASME B40.100

Features

- Welded diaphragm seal
- Variety of wetted parts material
- Filling port in the upper housing
- Suitable for pressure gauges, switches and transmitters

Size

1 ½", 2" & 3" ASME/ANSI
DN40, DN50 & DN80

Pressure Rating

From 150 lbs up to 2500 lbs
From PN10 up to PN160

Applications

Chemical and petrochemical industry
Machine and apparatus construction
Offshore installations
Pulp and paper industry

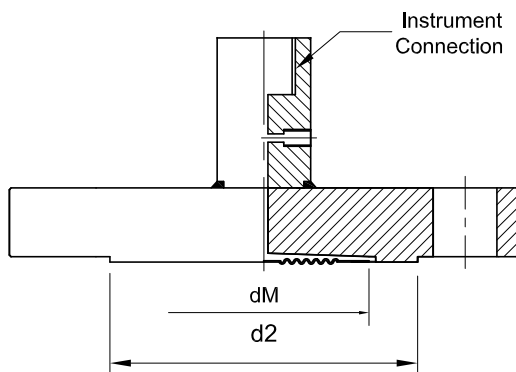


Technical specification		PDF50
Process connection size, flanged ASME B16.5	ANSI	1 ½", 2", 3"
EN 1092-1	DIN	DN40, DN50, DN80
Rating	ANSI	150 lbs, 300 lbs, 600 lbs, 900 lbs, 1500 lbs, 2500 lbs
	DIN	PN10, PN16, PN25, PN40, PN64, PN100, PN160 others on request
Construction		Machined flange with welded flush diaphragm
Fill port		In upper housing side with stainless steel ball and set screw
Maximum pressure		According to flange rating
Measuring principle		Diaphragm welded to flange
Instrument connections [female]		3/8" BSP(F), 1/2" NPT(F), Others on request
Sealing surfaces		
ANSI/ASME		B16.5 RF, optional RTJ
EN		EN 1092-1 Form B1
Material (wetted parts)		
Diaphragm & contact surface		Stainless steel 316L, Optional 316L with PTFE protection, Hasteloy-C276
Material (non wetted parts)		
Instrument connection		Stainless steel 304
Capillary and armor		Stainless steel 316 and stainless steel 304
Filling liquids (temperature range)		Glycerin (0/400 °F, -18/204 °C), silicone (-40/600 °F, -40/315 °C), halocarbon (-70/300 °F, -56/149 °C), Syltherm 800 (-40/750 °F, -40/400 °C), vegetable oil (32/248 °F, 0/120 °C), Food grade silicone (-13/400 °F, -25/200 °C), Others on request, also depending on selected material and configuration.
Accuracy		Additional 0.5% to the specified tolerance of the mounted instrument
Mounting		Direct or with capillary
Weight dry in kg		Depending on flange size
Accessories, options		NACE, pressure gauges, pressure switches, transducers, capillaries

All specifications are subject to change without notice.

Flush Type Flanged Diaphragm Seal (PDF50)

General dimensions in mm



SIZE	RATING	d2	dM	Min.Range Direct mounting (kg/cm ²)	Min.Range with Capillary (kg/cm ²)
1 1/2"	150 ~ 2500#	73	40	4	10
2"	150 ~ 2500#	92	63	1	1
3"	150 ~ 2500#	127	63	1	1
DN 40	PN 10 ~ 160	88	40	4	10
DN 50	PN 10 ~ 160	102	63	1	1
DN 80	PN 10 ~ 160	138	63	1	1

Order information

Process Size	Type	Diaphragm	Flange material	Instrument connection	Flange Rating	Flange Facing	Filling fluid	Options	
ANSI Flanged (15)1½" (20)2" (30)3"	PDF50	(S) 316L	(S) 316	(14T) 3/8 BSP(F)	ANSI	(RF) Raised face ²⁾	(CG) Glycerin (direct mounted, -18/204 °C)	(NH) Tagging wired	
		(SJ) 316L with Teflon Coating ¹⁾	(L) 316L	(04T) 1/2 NPT(F)	(150) 150 lbs	(RTJ) Ring joint type ²⁾	(CK) Silicone (direct mounted or with capillary, -40/315 °C)	(OF) Oil free (only filled with halocarbon)	
		(H) Hastelloy C	(SJ) 316 with PTFE coating ¹⁾		(600) 600 lbs		(CA) Stainless steel armored capillary ³⁾		
			(H) Hastelloy C		(1500) 1500 lbs		(CF) Halocarbon (direct mounted or with capillary, -56/149 °C)	(CP) Stainless steel armored capillary with PVC sleeving ³⁾	
					(2500) 2500 lbs		(HA) Syltherm 800 (direct mounted or with capillary, -40/400 °C)		
DIN Flanged (DN40) (DN50) (DN80)					DIN				
					(PN10)		(GZ) Vegetable oil (direct mounted or with capillary, 0/120 °C)		
					(PN16)				
					(PN25)				
					(PN40)		(CZ) Food grade silicone (direct mounted or with capillary, -25/200 °C)		
					(PN64)				
					(PN100)				
					(PN160)				
				others on request					3) Max length 30m, specify length in meter EG. CP1.0= CP with 1m

1) Restricted to temperature 200 °C 2) The DIN-flange facing depends on nominal size and nominal pressure

How to order

Process Size	Type	Wetted Parts	Flange material	Instrument connection	Flange rating	Flange facing	Filling fluid	Options
20	PDF50	S	S	14T	150	RF	CK	CA1.0

All specifications are subject to change without notice.

Truncated Type Flanged Diaphragm Seal (PDF55)

ASME B40.100

Features

- Welded diaphragm seal
- Variety of wetted parts material
- Filling port in the upper housing
- Suitable for pressure gauges, switches and transmitters
- Afford instrument protection from corrosives, heat and clogging issues associated with viscous media or solids

Size

2", 3" & 4" ASME/ANSI

Pressure Rating

150, 300 & 600 lbs

Applications

Chemical and petrochemical industry
Machine and apparatus construction
Corrosive processes
Elevated process temperatures

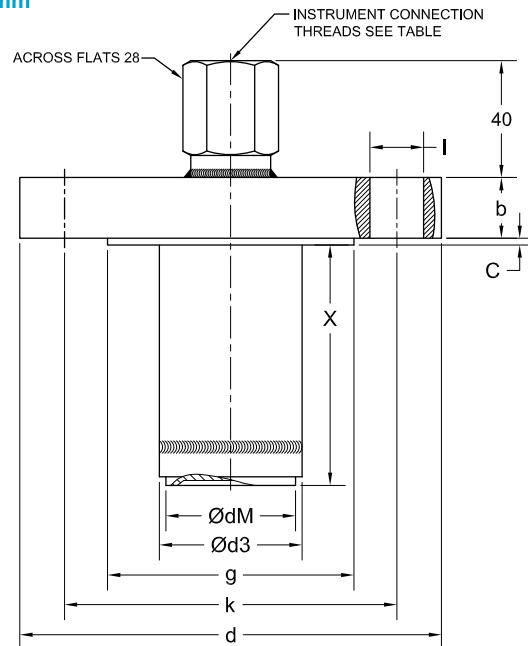


Technical specification	PDF55
Process connection size, flanged ANSI	2", 3", 4"
Back up flange Rating ANSI	150 lbs, 300 lbs, 600lbs others on request
Construction	Machined flange with welded diaphragm via extension
Fill port	In upper housing side with stainless steel ball and set screw
Measuring principle	Diaphragm welded to flange
Instrument connections [female]	G ¼, G ½ female, ¼ NPT, ½ NPT female, Others on request
Sealing surfaces ANSI/ASME	B16.5 RF, optional RTJ
Material (wetted parts) Diaphragm & contact surface	Stainless steel 316L, Optoinal 316L with PTFE protection, Hasteloy-C276
Material (non wetted parts) Instrument connection Capillary and armor	Stainless steel 316L (1.4404) Stainless steel 316 and stainless steel 304
Filling liquids (temperature range)	Glycerin (0/400 °F, -18/204 °C), silicone (-40/600 °F, -40/315 °C), halocarbon (-70/300 °F, -56/149 °C), Syltherm 800 (-40/750 °F, -40/400 °C), vegetable oil (32/248 °F, 0/120 °C) Food grade silicone (-13/400 °F, -25/200 °C), Others on request, also depending on selected material and configuration.
Accuracy	Additional 0,5% to the specified tolerance of the mounted instrument
Mounting	Direct / Cooling Tower / with capillary
Weight dry in kg	Depending on flange size
Accessories, options	NACE, pressure gauges, pressure switches, transducers, capillaries

All specifications are subject to change without notice.

Truncated Type Flanged Diaphragm Seal (PDF55)

General dimensions in mm



SIZE DN	ØdM	Ød3
2"	45	48.3
3"	63	76
4"	88	94

B, C, D, G, K, I AS PER ANSI B16.5, OTHER
DIMENSION AVAILABLE ON REQUEST

Order information

Process Size	Type	Diaphragm	Flange & Extension material	Instrument connection	Flange Rating	Flange Facing	Extension ¹⁾	Filling fluid	Options
ANSI Flanged (20) 2" (30) 3" (40) 4"	PDF55	(S) 316L (1.4404)	(S) 316	(02T) ¼" NPT(F)	ANSI (150) 150 lbs (300) 300 lbs (600) 600 lbs	(RF) Raised face (FF) Flat face (RTJ) Ring joint type	(50) 50 mm (100) 100 mm (150) 150 mm (200) 200 mm (40.5) 40.5 mm (XX) customized dimension	(CG) Glycerin (direct mounted, -18/204 °C) (CK) Silicone (direct mounted or with capillary, -40/315 °C) (CF) Halocarbon (direct mounted or with capillary, -56/149 °C) (HA) Syltherm 800 (direct mounted or with capillary, -40/400 °C) (GZ) Vegetable oil (direct mounted or with capillary, 0/120 °C) (CZ) Food grade silicone (direct mounted or with capillary, -25/200 °C) others on request	(NH) Tagging wired (OF) Oil free (only filled with halo-carbon) (CA) Stainless steel armored capillary ³⁾ (CP) Stainless steel armored capillary with PVC sleeving ³⁾ (IB007) design as per TB.5002-25 (MHP) Mounted on HP (MLP) Mounted on LP 3) Max length 30m, specify length in meter EG, CP1.0 = CP with 1m
		(SJ) 316L with Teflon Coating ²⁾	(L) 316L	(04T) ½" NPT(F)					
		(H) Hastelloy C	(SJ) 316 with PTFE coating ²⁾	(13T) ¼" BSP(F)					
		(E) 316L Urea application	(H) Hastelloy C	(14T) 3/8 BSP(F)					
			(E) 316L Urea application	(15T) ½" BSP(F)					
				others on request					

1) Other dimension on request

2) Restricted to temperature 200 °C

How to order

Process Size	Type	Diaphragm	Flange & Extension material	Instrument connection	Flange rating	Flange facing	Extension	Filling fluid	Options
20	PDF55	S	S	14T	150	RF	100	CK	CA1.0

All specifications are subject to change without notice.

Bellow Differential Pressure Gauges (PD100)

Nominal size: 150 mm (6")
ASME B40.100 / EN 837-1 / IS-3624
Accuracy: Class 1.6 (1.6%) optional class 1 (1%)

Features

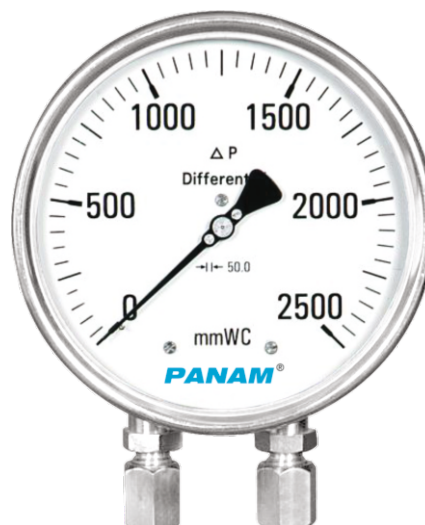
- Stainless steel case and wetted parts
- Static pressure 10 times of the range
- Protection IP65
- High corrosive resistance
- Dry or liquid filled

Ranges

0 ... 100 in H₂O up to 0 ... 150 psi
0 ... 2500 mmWC up to 0 ... 10 bar & kg/cm²
0 ... 25 kPa up to 0 ... 1000 kPa

Applications

Chemical and petrochemical industry
Machine and apparatus construction
Food and beverage industry
Pulp and paper industry

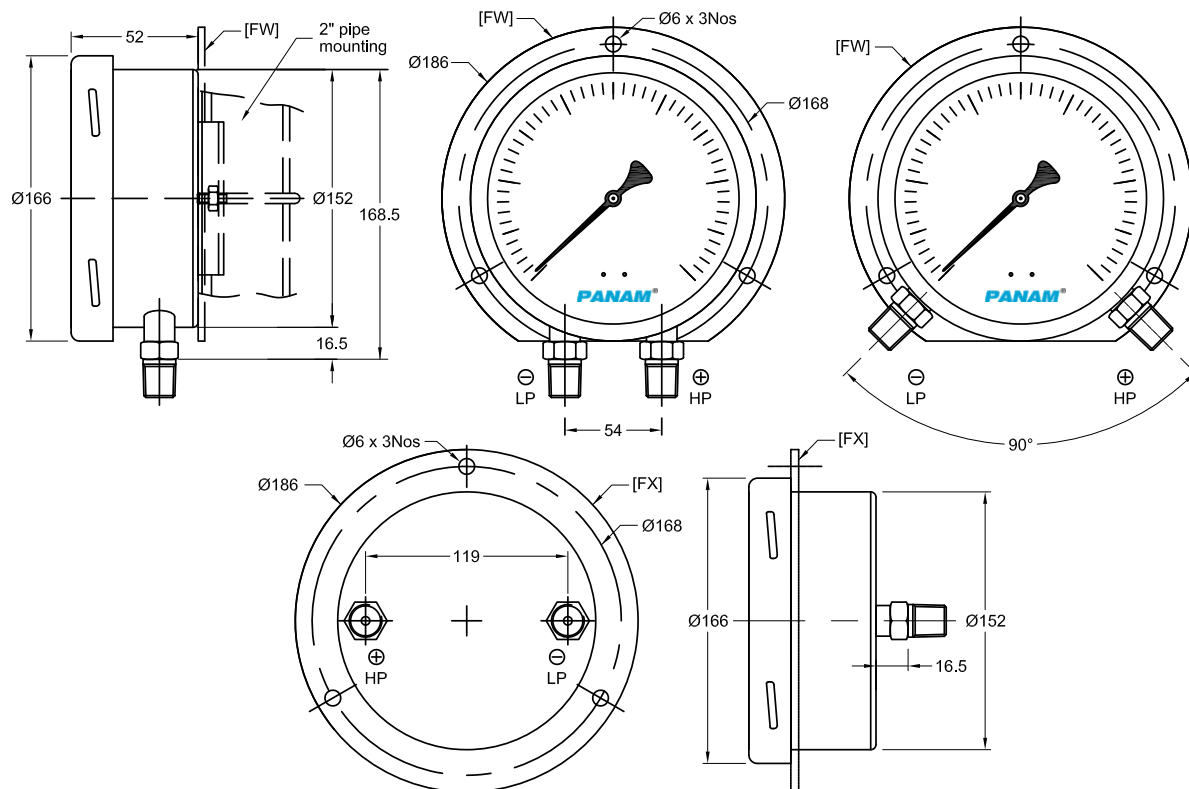


Technical specification	PD100
Dial size [mm]	150
Construction	Open front cylindrical case with bayonet ring
Measuring principle	Twin bellow
Range [mmWC]	2500 4000
[kg/cm ² (or bar)]	0,6 1 1,6 2,5 4 6 10
Max. static pressure	10 times of the range. Static pressure is also maximum pressure allowed on one side
Pressure type	Differential
Process connection	1/4" 1/2" NPT (F), 1/4" 3/8" 1/2" BSP / NPT (M), M20x1.5(M), others on request
Connection location	Lower, 90° lower, back
Material	
Pressure connection	Stainless steel 316L
Measuring bellow	Stainless steel 316L
Case/bayonet ring	Stainless steel 304, optional 316L
Window	Laminated safety glass optional acrylic glass
Dial	Aluminum, black markings on white background
Pointer	Aluminum, black, optional Micrometer Adjustment
Accuracy calibrated ascending	Class 1.6 (1.6 % F.S.) optional 1.0 (1.0 % F.S.)
Permissible	
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Medium temperature	Max. 100 °C (212 °F)
Storage temperature	-40 ... 65 °C (-40 ... 150 °F)
Effect	Max. 0,3 % / 10 K
Protection	IP65
Filling liquids	Glycerin, silicone, others on request
Mounting	Wall mounting, optional 2" pipe mounting, others on request
Weight dry/filled [kg]	1.15 / 2.05
Accessories, options	3 or 5 way remote or direct mounted manifolds, valves

All specifications are subject to change without notice.

Bellow Differential Pressure Gauges (PD100)

General dimensions in mm



Order information

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/case material	Options
(150) 150mm	PD100	(S) 316L process connection and bellow	(L) IP65	(25) 1/4" NPT (F) (50) 1/2" NPT (F) (04) 1/2" NPT (M) (03) 3/8" NPT (M) (02) 1/4" NPT (M) (15) 1/2" BSP (M) (14) 3/8" BSP (M) (13) 1/4" BSP (M) (16) M20x1.5 (M)	(L) Lower (N) 90° Lower (B) Back	0/2500 0/4000 0/ 0,6 0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10	mmWC kg/cm2 (or bar)	(=) Standard no filling (GV) Silicone (GR) Glycerin (GX) Halocarbon (YW) Case material 316L	(NH) Tagging wired (DA) Dial marking (CS) Dual scale (OF) Oil free (MP) Micrometer pointer (FX) Front panel (FW) Surface plate (TM) 2" pipe mounting (AN) Calibration 1 % F.S.

How to order

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/Case material	Option
150	PD100	S	L	04	L	0/1	KG/CM2	=	NH

All specifications are subject to change without notice.

Double Diaphragm Differential Pressure Gauges (PD105)

Max. Static pressure 400 bar

Nominal size: 100 mm (4"), 150 mm (6")

ASME B40.100 / EN 837-1 / IS-3624

Accuracy: Class 1,6 (1.6%)

Features

- Stainless steel case and wetted parts
- Max static pressure 400 kg/cm², one side load permitted
- Chamber purge and bleed connection available
- High corrosive resistance
- Dry or liquid filled
- Dual diaphragm, solid front not required
- IP65

Ranges

0 ... 10 in H₂O up to 0 ... 350 psi

0 ... 250 mmWC up to 0 ... 25 bar & kg/cm²

0 ... 2.5 kPa up to 0 ... 2500 kPa

Applications

Chemical and petrochemical industry

Machine and apparatus construction

Food and beverage industry

Pulp and paper industry



Technical specification	PD105	
Dial size in mm	100	150
Construction	Cylindrical case	
Zero adjustment	Optional, Externally at the top of the case.	
Measuring principle	Dual diaphragm safety design, solid front not required	
Static Pressure	25 bar standard for ranges 250 to 1000 mmWC 100 bar standard for ranges 1600 mmWC to 25 bar Optional 100, 250 & 400 bar (refer limits below)	
Pressure range	250 to 1000 mmWC 1600 mmWC to 25 bar	
Max static pressure	100 bar 250 bar & 400 bar	
Overload capability	Static pressure is also maximum pressure allowed on one side	
Pressure type	Differential	
Process connection	1/4" NPT (F), 1/4" NPT (M), 1/2" NPT (M), 1/4" BSP (M), 1/2" BSP (M), others on request	
Connection location	Lower	
Material		
Pressure connection	Stainless steel 316L	
Pressure chamber	Stainless steel 316L	
Measuring diaphragm	Stainless steel 316L / Stainless steel 316Ti	
Case/bayonet ring	Stainless steel 304, optional 316	
Window	Laminated safety glass	
Dial	Aluminum, black markings on white background	
Pointer	Micro Pointer Aluminum, black,	
Accuracy	Class 1,6 (1,6 % F.S.)	
Permissible		
Zero shift	±2% at maximum static pressure	
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)	
Medium temperature	Max. 100 °C (212 °F)	
Storage temperature	-40 ... 65 °C (-40 ... 150 °F)	
Effect	Max. 0,6 % / 10 K	
Protection according EN 60 529/IEC 529	IP65	
Filling liquids	Glycerin, silicone, others on request	
Mounting	Direct, optional 2" pipe mounting	
Weight small / large chamber in kg	5.1 / 11.0	5.7 / 11.6
Accessories, options	3 or 5 way remote or direct mounted manifolds, valves, NACE	

All specifications are subject to change without notice.

Pulsation Dampener / Snubber (PPD1)

ASME B40.100

Features

- Protects pressure instrument from line surges
- Reduce pulsation of process fluid
- Stainless steel body optional monel
- Improve reading and accuracy of instruments
- Horizontal and vertical installation

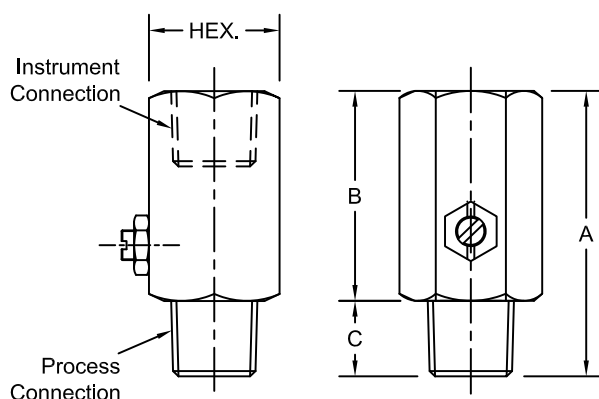
Applications

Reciprocating pumps and compressor
Hydraulic Machines and fluid power system
Process plant, Power plant
Chemical and Petrochemical Industries
Off shore and on shore refineries
Clean air, gas and non-crystallizing media

Permissible Pressure rating:
400 kg/cm² @ 100°C (212°F)



General dimensions in mm



Connection	A	B	C	HEX. A/F
1/4"(MX F)	55	40	15	25
3/8"(MX F)	55	39	16	25
1/2"(MX F)	63	43	20	28

Order information

Type	Connection	Form ¹⁾	System material	Options
PPD1	(02)1/4" NPT (04)1/2" NPT (13)1/4" BSP (14)3/8" BSP (15)1/2" BSP (16)M20x1.5 Others on request	(M/F) Male X female	(C) SS 304 (S) SS 316 (L) SS 316L (P) Monel (H) Hastelloy-C	(NH) Tagging Stamped (OF) Oil free (CD3) Material certificate for wetted parts (10K) Pressure rating 10000PSI

1) For Form, First character indicates Process connection and Second character indicates Instrument connection

How to order

Type	Connection	Form	System material	Option
PPD1	04	M/F	S	CD3

All specifications are subject to change without notice.

Cooling Tower (PCT1 / PCT5)

Features

- Protect pressure instruments from high temperature
- Used where the service temperature exceeds the rating of the instrument
- Stainless steel construction which is compatible with many process media
- Perforated and finned design

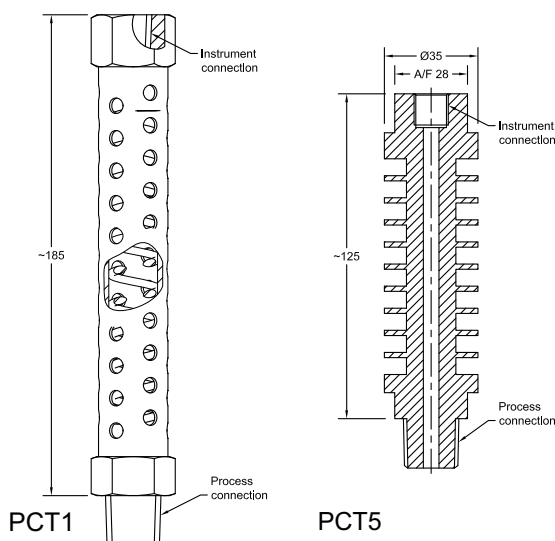
Applications

Process plant, Power plant
Chemical and Petrochemical Industries
Off shore, on shore refineries
Clean air, gas and non-crystallizing media



Technical specification	PCT1	PCT5
Operating principle	Ambient air convection	
Type	Perforated design	Finned design
Connection	1/4" 3/8" 1/2" BSP / NPT (M) , M20x1.5 (M)	
Body	Stainless steel 316L	
Tube	Stainless steel 316	
Permissible pressure rating	100 kg/cm ²	
Permissible temperature rating	500°C	
Weight in kg	0.4	0.55
Mounted below	Pressure gauge, Pressure switch, Pressure Transmitter/Transducer	

General dimensions in mm



Order information

Type	Connection		Form ¹⁾	Options
PCT1	(02)1/4" NPT	(13)1/4" BSP	(M/F) Male X female	(NH) Tagging Stamped
PCT5	(03)3/8" NPT	(14)3/8" BSP		(OF) Oil free
	(04)1/2" NPT	(15)1/2" BSP		(CD3) Material certificate for wetted parts
	Others on request	(16)M20x1.5		(CD5) NACE MR0175/ISO15156-2005

1) For Form, First character indicates Process connection and Second character indicates Instrument connection

How to order

Type	Connection	Form	Option
PCT5	04	M/F	CD3

All specifications are subject to change without notice.

Syphon (PWS)

Features

- Similar to DIN 16 282/ Industrial standards
- Male thread end for process side and weld end on process side
- Protect pressure measuring instrument from direct heating.
- U-Type for horizontal tapping
- Q-Type for vertical tapping

Applications

To protect pressure measuring instrument excessive heating

For liquids, gas or steam

Mounted on Shut-off valve or stop cock

Reduce the effect of rapid pressure surges

Permissible Pressure and Temperature Rating

100 kg/cm² @ 100°C

95 kg/cm² @ 150°C

85 kg/cm² @ 250°C

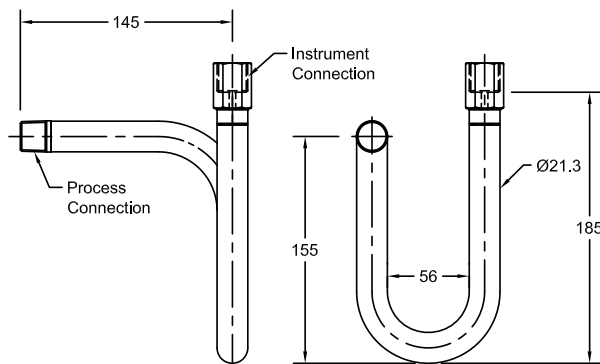
80 kg/cm² @ 300°C

70 kg/cm² @ 350°C

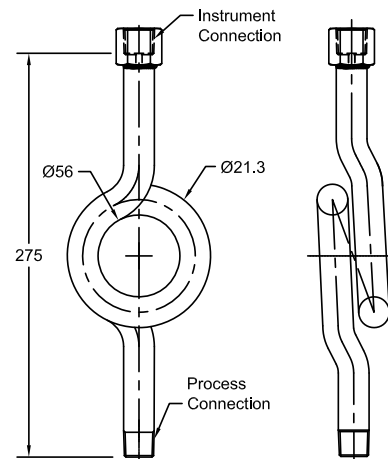
63 kg/cm² @ 400°C



General dimensions in mm



U-type



Q-type

Order information

Type	Connection	Form ¹⁾	System material	Design/schedule	Options
PWS	(04) 1/2" NPT (15) 1/2" BSP (16) M20x1.5 Others on request	(M/F) Male X female (M/M) Male X Male (F/F) Female X female (F/B) Female X Blank for weld (M/B) Male X Blank for weld	(C) SS 304 (S) SS 316 (L) SS 316L (CS) Carbon steel ASTM A106	(U40) U type SCH 40 (Q40) Q type SCH 40 (Q80) Q type SCH 80	(NH) Tagging Wired (CDIB) IBR Certified (CD3) Material certificate for wetted parts

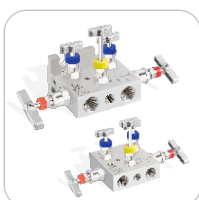
1) For Form, First character indicates Process connection and Second character indicates Instrument connection

How to order

Type	Connection	Form	System material	Design / schedule	Options
PWS	04	M/F	S	U40	CDIB

All specifications are subject to change without notice.

Other Products



2-3-5 VALVE MANIFOLDS



BELLOW SEAL VALVES



GAUGE ROOT VALVES



NEEDLE VALVES



HP NEEDLE VALVES



BALL VALVES



HP BALL VALVES



DOUBLE BLOCK & BLEED VALVES



MONO FLANGE VALVES



CHECK VALVES



RELIEF VALVES



FILTERS



TUBE FITTINGS



PIPE FITTINGS



HP PIPE FITTINGS



SWIVEL FITTINGS



JIC FITTINGS



WELD FITTINGS



HIGH PRESSURE FITTINGS



GAUGE SAVERS



PRESSURE GAUGES



TEMPERATURE GAUGES



PRESSURE TRANSMITTERS



TEMPERATURE TRANSMITTERS



PRESSURE REGULATORS



CONDENSATE POTS



AIR HEADERS



GRAB SAMPLING SYSTEM



PRE-FABRICATED HOOK UPS



FLANGE ADAPTERS



SWIVEL GAUGE ADAPTERS



THERMOWELLS



BLEED PLUGS



DIE-ELECTRIC FITTINGS



TUBING



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