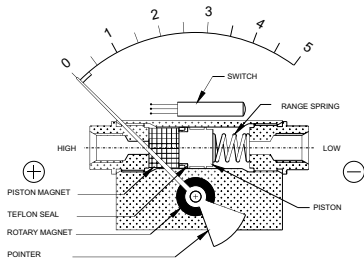


NESS

DIFFERENTIAL PRESSURE GAUGE

PISTON OPERATED

Model - PHP



ΔP Range : 0 to 0.25 upto 70 bar
0 to 5 upto 1050 psi

COMBINATIONS

Gauge



Switch



Gauge + switch (with a terminal strip inside)



Gauge + switch (with a DIN plug on top)



MOUNTING BRACKETS

Gauge



Gauge + switch (with a DIN plug)



PHP

Specifications

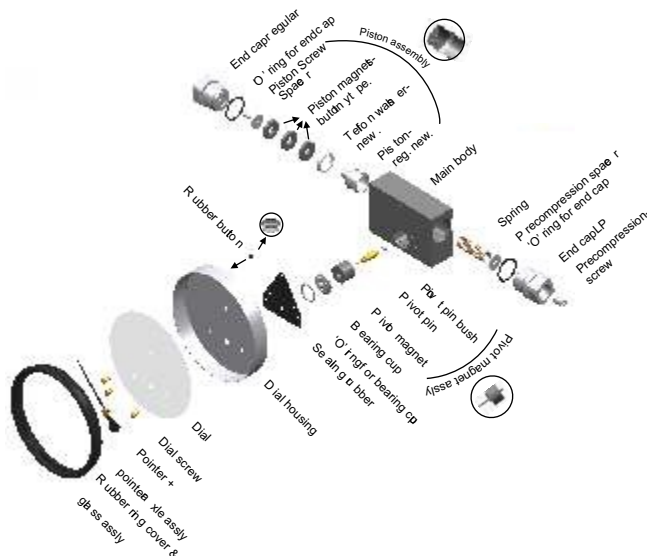
Accuracy	±2% of the FSD (Ascending)
Migration	Minor from high to low port
Range	0-0.25 to 0-70 bar or equivalent range in other units
First marking on the scale	20% of the FSD
Sensing element	Piston
Wetted parts	Body material, SS 302 spring, ceramic magnet & seals
Case material	Stainless steel (SS 304)
Dial size in inch /mm	2", 2.5", 3.5", 4", 4.5", 6" / 50, 63, 80, 100, 115, 150 mm
Mounting	Direct, front flange, 2" pipe & surface mounting
Maximum working pressure	200 bar for Aluminium & Brass, 400 bar for SS & Monel
Maximum process temperature	80°C / 175° F
Body material	Aluminum, Brass, SS 316 & Monel
Seals	Buna-N, Viton & EPDM 'O' rings
Window	Float glass(Std.), toughened glass, acrylic & safety glass.
Connection	1/4" NPT(F) Std. Optional 1/4" BSP(F)
Porting	In-line, rear, bottom, in-line & bottom
Over range protection	Up to the max. working pressure from high & low side
Protection for gauge & switch	IP 65 / NEMA-4

Options

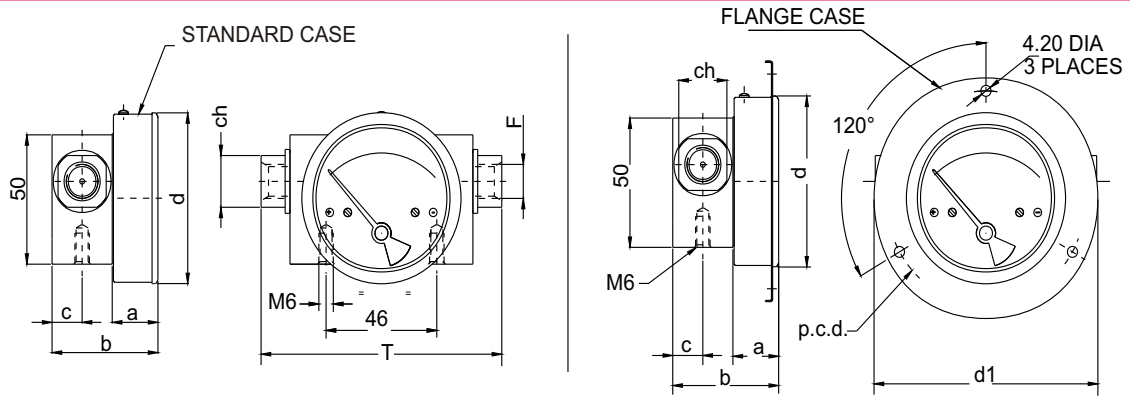
- Liquid filling
- Red follower pointer (except 2" & 6")
- Customer logo
- Dual scale
- Colour band
- Filter mesh in (+) connection
- Reverse port (pointer moves from right to left)
- Descending calibration

Switches (Adjustable in 20-100% of FSD)

- 1 or 2 SPSTs with a DIN plug
- 1 or 2 SPSTs with a terminal strip
- 1 or 2 SPSTs with a built in relay
- 1 or 2 SPDTs with a DIN plug
- 1 or 2 SPDTs with a terminal strip



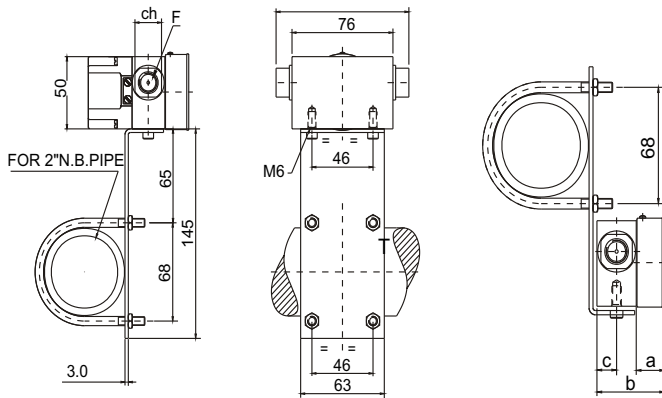
Dimensions - Standard Version



DIAL Ø	F	a	b	c	d	d1	T	ch	p.c.d.
50 (2")	1/4"BSP - 1/4"NPT	18	43	12.5	53	79	100	20	69
63 (2.5")	1/4"BSP - 1/4"NPT	19	44	12.5	66	93	100	20	83
80 (3.5")	1/4"BSP - 1/4"NPT	19	44	12.5	83	109	100	20	99
100 (4")	1/4"BSP - 1/4"NPT	19	44	12.5	104.3	131	100	20	121
115 (4.5")	1/4"BSP - 1/4"NPT	19	44	12.5	119.7	146	100	20	136
150 (6")	1/4"BSP - 1/4"NPT	19	44	12.5	154.3	181	100	20	171

* PANEL CUT OUT = d + 1

MOUNTING BRACKETS



BRACKET MOUNTING FOR GAUGE + SWITCH

BRACKET MOUNTING FOR GAUGE

DIAL Ø	F	a	b	c	T	ch
50 (2")	1/4"BSP - 1/4"NPT	18	43	12.5	100	20
63 (2.5")	1/4"BSP - 1/4"NPT	19	44	12.5	100	20
80 (3.5")	1/4"BSP - 1/4"NPT	19	44	12.5	100	20
100 (4")	1/4"BSP - 1/4"NPT	19	44	12.5	100	20
115 (4.5")	1/4"BSP - 1/4"NPT	19	44	12.5	100	20
150 (6")	1/4"BSP - 1/4"NPT	19	44	12.5	100	20

SELECTION OF MODEL

1 MODEL CODE	PHP	
2 Type	G Gauge GS Gauge + Switch	S Switch
3 Body material	A Aluminum S SS-316	B Brass M Monel
4 Dial size	2.0 2.0" (50 mm) 2.5 2.5" (63 mm) 3.5 3.5" (80 mm)	4.0 4.0" (100 mm) 4.5 4.5" (115 mm) 6.0 6.0" (150 mm)
5 Connection	4N 1/4" NPT (F) (Std.) ZZ Special connection sizes using adaptor	4B 1/4" BSP (F)
6 Porting	1 In-line (Std.) 2 Rear / Back 3 Bottom	4 Bottom & Vent 5 Inline & Vent 6 Inline & Bottom
7 Case	SS SS 304 (Std.)	SF SS 304 flange
8 Window	F Glass (Std.) T Toughened glass	A Acrylic L Safety glass
9 Seals/Diaphragm	B Buna-N (Std.) V Viton	E EPDM
10 Switch	Select option & Specifications	

Advantages :

Instrument automatically resets after line surges and cold start. This eliminates balancing of differential pressure instrument after such events.

Model

PHP

Notes

- No mounting bracket for back and bottom portings.
- Switch not available for gauge with back porting. However, it can be offered in 32mm thick body with switch on top.

All Models

- Liquid filling will not have follower pointer.
- Toughened glass not available in 2" (50mm) dial.
- Safety glass not available in 2" and 2.5" dials.

Switch adjustment range

Model	% FSD
PHP	20 to 100

0	None
1	One SPST, with a DIN plug †
2	One SPST, with a terminal strip
2A	One SPST, with built in relay
3	Two SPSTs, with a DIN plug †
4	Two SPSTs, with a terminal strip
4A	Two SPSTs, with built in relay

SPST Specifications (AC/DC max)

1 Standard	2	3	4
10 VA	40 VA	100 VA	-
100 V	230 V	300 V	-
0.5 Amp	1 Amp	1 Amp	
Adjustable	Adjustable	Adjustable	

5	One SPDT, with a DIN plug †
6	One SPDT, with a terminal strip
7	Two SPDTs, with two DIN plugs
8	Two SPDTs, with a terminal strip

† DIN plug mounted on the top.

SPDT Specifications (AC/DC max)

1 Standard	2	3	4*
3 VA	5 VA	5 VA	60 VA
30 V	125 V	175 V	400 V
0.3 Amp	0.25 Amp	0.25 Amp	1 Amp
Adjustable	Adjustable	Adjustable	Factory Set

* Available in models 200DPG and 200DGR only.

SELECTION OF MODEL

11 Range Standard Ranges:(other range on request)

Kg/cm²	0.25	-	0.5	0.75	1	-	1.6	2	2.5	3	3.5	4	5	-	6	7	9	10
bar	0.25	-	0.5	0.75	1	-	1.6	2	2.5	3	3.5	4	5	-	6	7	9	10
mbar	250	-	500	750	1000	-	-	-	-	-	-	-	-	-	-	-	-	-
psi	-	5	8	-	15	20	25	30	-	40	50	60	-	80	-	100	-	-
kPa	25	-	50	75	100	-	160	200	250	300	350	400	500	-	600	700	900	1000

12 Options

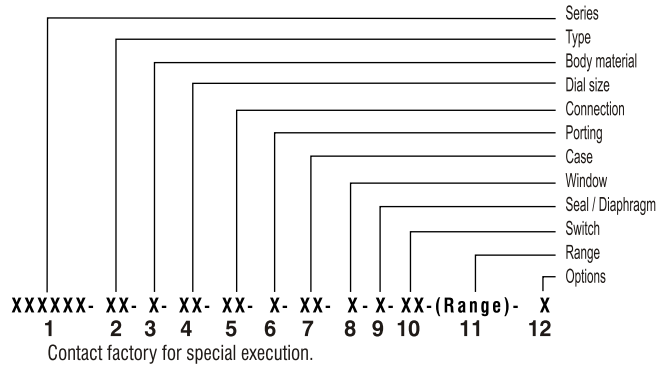
- 0 None
- A Glycerine*
- B Red follower pointer on acrylic window *
- C Customer Logo
- D Dual scale
- E Colour band
- F Filter mesh in (+) connection
- G Reverse Port**
- H Descending calibration (long delivery time)
- N NACE
- S Silicone oil*
- I Oxygen service (Contact factory)
- K 32mm thick body
- P DIN plug at back on plastic switch cover
- M1 2" horizontal pipe mounting bracket
- M2 Surface mounting bracket
- M3 2" vertical pipe mounting bracket

* Affects accuracy

** Pointer moves from right to left

Ordering code sequence

Before creating ordering code, please refer model wise notes above.



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