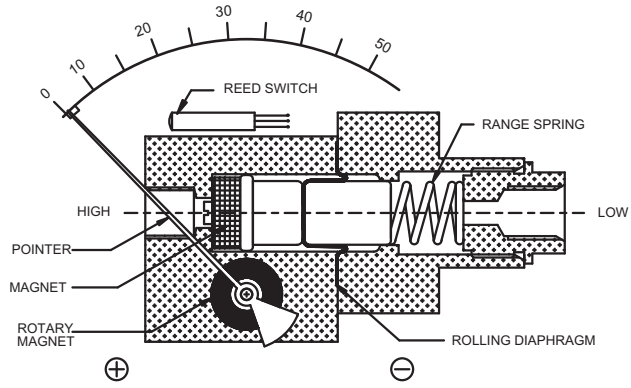
PRD Diaphragm Sensing Element for Medium Pressure Gauge

Description & Features

- Cost effective and reliable
- Uses diaphragm sensor
- Easy to read dial instrument eliminates the accumulated errors of two instruments installations
- High operating pressure upto 200bar
- Differential pressure range upto 7 bar
- Indicating mechanism isolated from pressure chamber
- Wide application in air, gas and liquid media
- Reed contact switches optional
- Zero migration between high and low pressures
- Only switch is also available.



Applications

Monitor filter conditions, set filter by-pass, or initiate filter cleaning cycle. Determine obstructions in process lines. Check condition of pumps, heat exchangers, and other processing equipment. Adjust flow rates in piping systems. Monitor liquid levels in storage tanks

Specifications

Dial Size
2.5"(63mm), 3.5"(80mm), 4"(100mm)
4.5"(115mm) & 6"(150mm)

Case
Stainless steel case or flange

Body Material
316 stainless steel, aluminium or brass

Wetted parts
Diaphragm, ceramic magnet, SS 304 spring

Connection
1/4", 1/2", 3/8" in NPT, BSP, BSPT

Seals
Buna-N (Standard) or Viton

Porting
In line (standard), Back or bottom on request

Migration of media
Zero migration between high and low pressures

Protection
IP 65

Window
Glass, Acrylic or Toughened glass

Pressure range
0.25 upto 7 bar (5 upto 100 psi)

Working pressure
200 bar / 3000 psi

Media Temperature
80 ℃/175 ℉

Accuracy
±2.0% (Ascending)

Operating principle
Magnetic coupling with a rolling diaphragm sensor

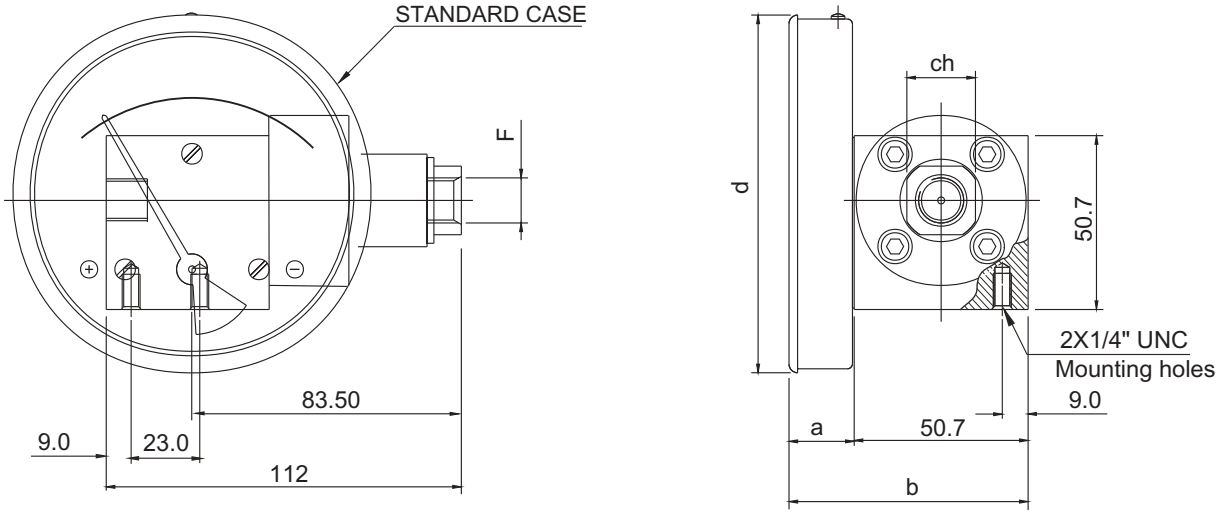
Switch
SPST or SPDT, one or two. Switches are field adjustable. The set points can be increased or decreased externally with a simple screwdriver adjustments. When two switches are used, either switch can be adjusted independently.

Options
Glycerine filling, maximum adjustable pointer, dual scale,
DIN plug strainer in (+) connection
Other connection size available
Other internal parts in Aluminium, or SS-316 as per the body

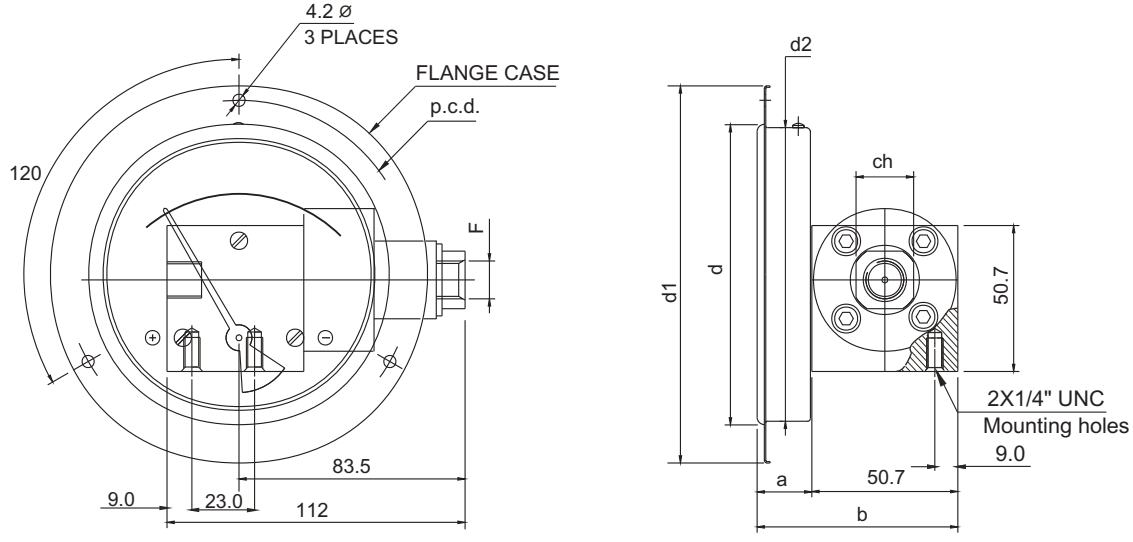
Order Information
Series/ Dial Size/ Case Materials/ Wetted Parts/ Configuration/ Connection Size/ Thread/ Range/ Option

Dimensions

Standard dimensions, in-line porting



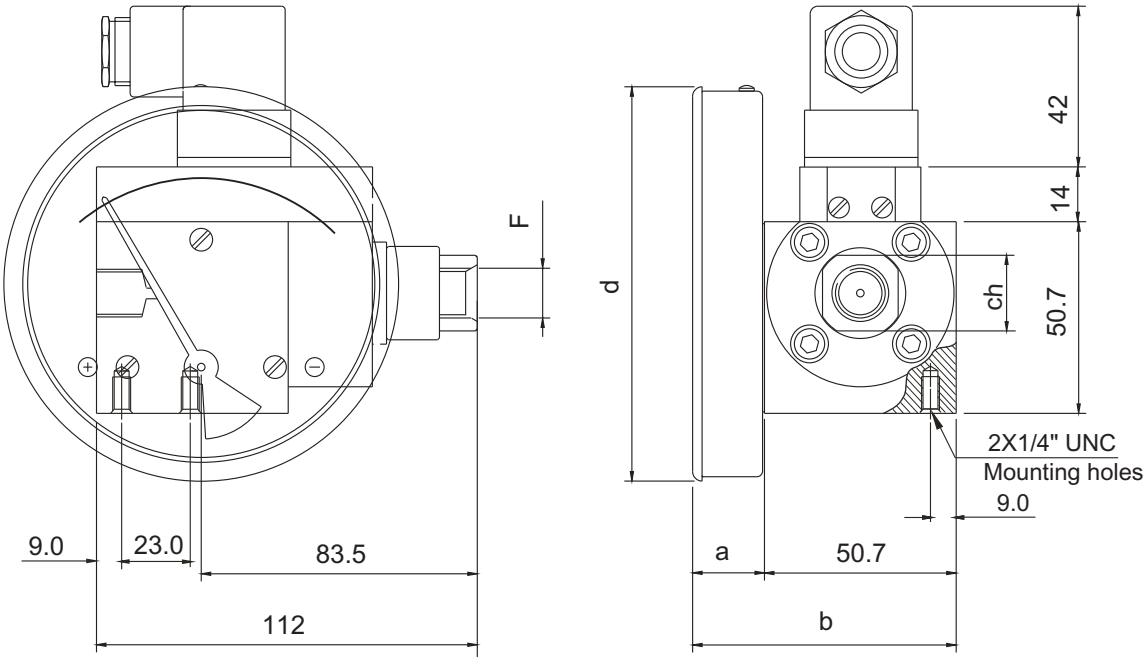
DIAL Ø	F	a	b	d	ch
63 (2.5")	1/4"BSP - 1/4"NPT	19	69.7	66	20
80 (3.5")	1/4"BSP - 1/4"NPT	19	69.7	83	20
100 (4")	1/4"BSP - 1/4"NPT	19	69.7	104.3	20
115 (4.5")	1/4"BSP - 1/4"NPT	19	69.7	119.7	20
150 (6")	1/4"BSP - 1/4"NPT	19	69.7	154.3	20



DIAL Ø	F	a	b	d1	d2	ch	p.c.d.	d *
63 (2.5")	1/4"BSP - 1/4"NPT	19	69.7	93	65	20	83	66
80 (3.5")	1/4"BSP - 1/4"NPT	19	69.7	109	82	20	99	83
100 (4")	1/4"BSP - 1/4"NPT	19	69.7	131	102	20	121	104.3
115 (4.5")	1/4"BSP - 1/4"NPT	19	69.7	146	117	20	136	119.7
150 (6")	1/4"BSP - 1/4"NPT	19	69.7	181	152.5	20	171	154.3

* PANEL CUT OUT = d + 1 mm.

Gauge + Switch with reed contacts with DIN and terminal strip



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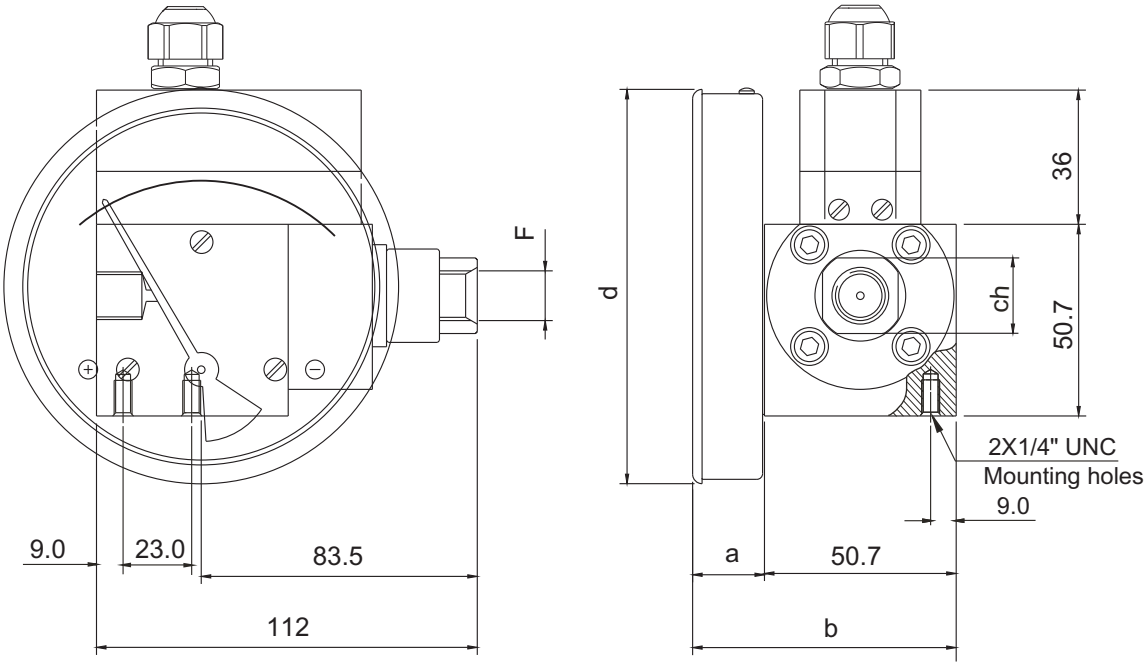
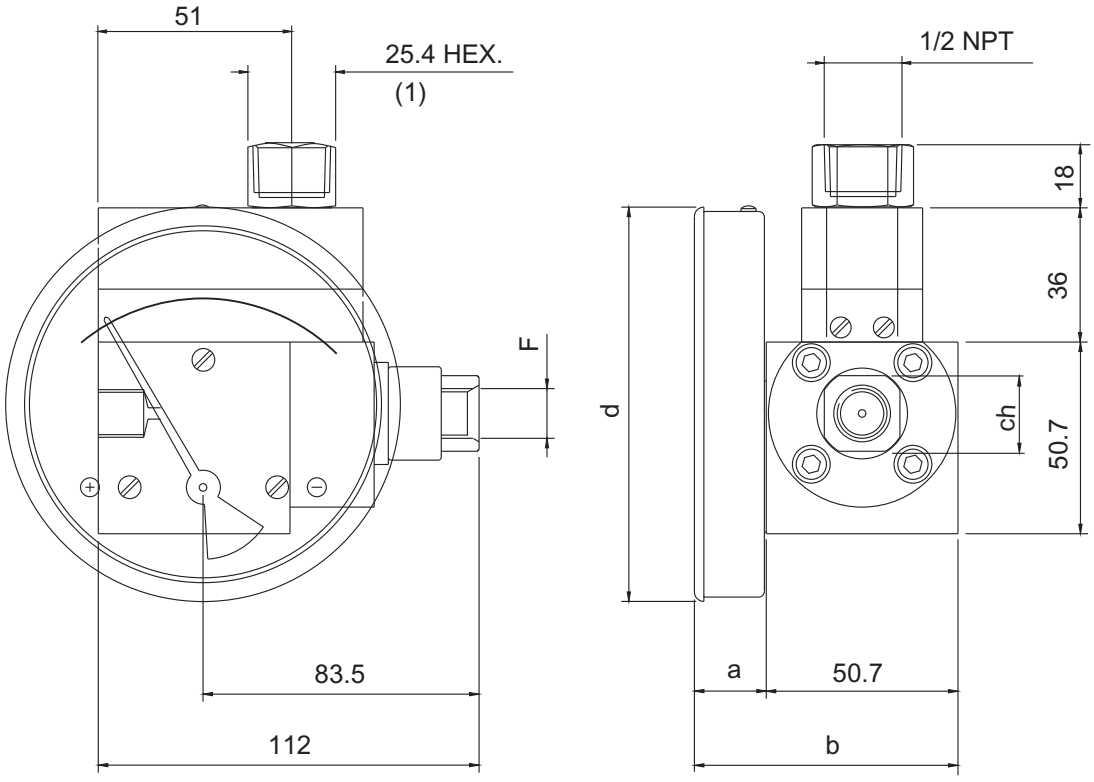


Gauge + Switch with reed contacts with teminal strip & 1/2" conduit connection



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Ordering Code PRD Series

	Field No.	Code	Specifications
1.		PRD	**Series**
			Dial Size
2.		25	2.5" (63mm)
		35	3.5" (80mm)
		40	4" (100mm)
		45	4.5" (115mm)
		60	6" (150mm)
			Type
3.		A	Gauge
		B	Switch
		C	Gauge+Switch
			Body Material
4.		S	316 stainless steel
		B	Brass
		J	Aluminium (anodized)
			Case Material (IP 65)
5.		S	SS case with rubber ring (standard)
		F	SS case with rubber ring and integral front flange
			Window
6.		F	Glass (standard)
		T	Toughened glass
		A	Acrylic
			Porting
7.		I	In-line/side (standard)
		R	Rear / back
		B	Bottom
		N	In-line & Bottom
			Connection
8.		4B	1/4" BSP (Female) (On request,longer lead time)
		4N	1/4" NPT (Female)
		4T	1/4" BSPT (Female) (on request,longer lead time)
		ZZ	Special connection sizes using adaptor
			Seal
9.		B	Buna-N (standard)
		V	Viton
		E	EPDM
			Switch
10.		0	None
		1	One SPST, with a DIN plug*
		2	One SPST, with a terminal strip
		9	One SPST, with built in relay
		3	Two SPSTs, with a DIN plug*
		4	Two SPSTs, with a terminal strip
		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 : *We mount it on the top,on the plastic switch cover. However we can mount it at the back as a request*

SPDT Specifications	Built in relay	SPST Specifications
5 VA AC or DC (max) 175 V AC or DC (max) 0.25 Amp AC or DC (max)	230 V AC, 1 Amps.	10 VA AC or DC (max) 150 V AC or DC (max) 0.5 Amp AC or DC (max)

Ordering Code PRD Series

Field No.	Code	Specifications
11.		**Range (XXXX)**

Standard ranges 2.5 bar

kg/cm	0.25	-	0.5	0.75	1	-	2	2.5	-	4	7
bar	0.25	-	0.5	0.75	1	-	2	2.5	-	4	7
mbar	250	-	-	750	-	-	-	-	-	-	-
psi	-	5	8	-	15	25	30	-	40	60	100
kPa	25	-	50	75	100	-	200	250	-	400	700

Other ranges on request.

Field No.	Code	Options
12.	00	None
	SE	Glycerine filling (Affects accuracy)
	SJ	Red follower pointer on acrylic window (Affects accuracy)
	DS	Dual scale
	CB	Colour band
	ES	Strainer in (+) connection
	RP	Reverse Port**
	NS	NACE
	SD	Silicone Oil*

Limitations for making combinations:

- Glycerine filling will not have follower pointer
- No follower pointer available in 6"(150 mm)

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing, modifications may take place and materials specified may be replaced by others without prior notice.