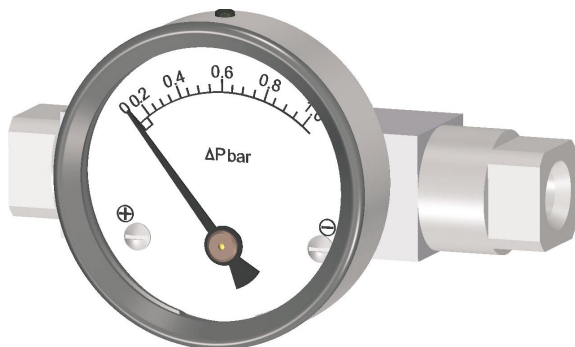


PISTON INSTRUMENTS



Hirlekar Precision manufactures quality differential pressure instruments designed to measure the difference in pressure between two points in a system and show it on a single dial instrument. A magnetic movement senses the differential pressure.

These piston instruments can indicate small values of differential pressure even when used at high line pressures. They provide instantaneous and continuous information regarding system conditions helping in eliminating premature servicing of equipment, avoid unscheduled down time of costly processes and detect abnormal system conditions.

APPLICATIONS :

Filters, Hydraulic systems, Water treatment plants, Chemical plants, Natural gas processing, Heat exchangers, Gasoline / Diesel engine filters, Pumps and Valves, Compressors.

500 DPG

Piston Instruments

SALIENT FEATURES

- Excellent cost-benefit ratio.
- Simple and compact design.
- Easy to read dial instrument eliminates accumulated errors of two instrument installations.
- **High operating pressure up to 200 bar in Aluminium & 400 bar in SS- 316.**
- **Differential pressure range up to 10 bar.**
- Over pressure safe from either side to maximum working pressure.
- Indicating mechanism isolated from pressure chamber.
- Wide applications in air, gas and liquid media.
- Manufactured in ISO 9002 certified plant.
- Exported worldwide.

HIRLEKAR PRECISION

Hirlekar Precision Engineering Private Limited

67 Industrial Town planning scheme II,

Ramtekadi, Pune 411 013 INDIA

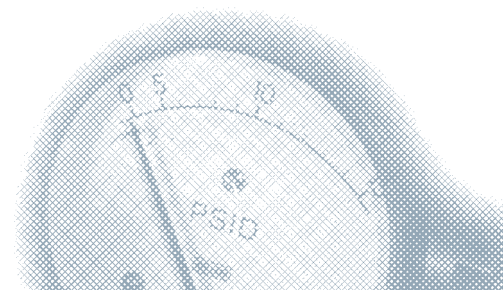
Phone : +91 20 6823648 /9

Fax : +91 20 6871153

Email : hirlekar@vsnl.com

website : www.hirlekarprecision.com

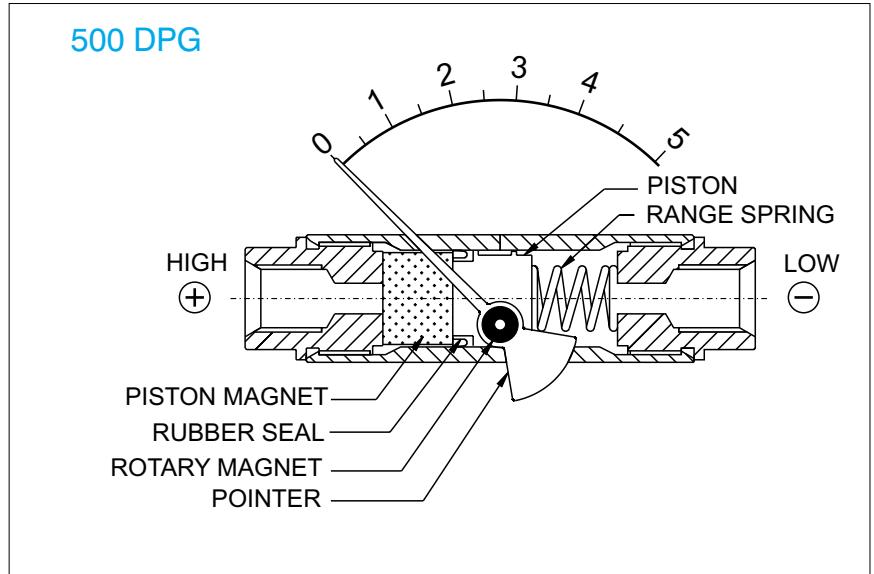
MAGNETIC PRINCIPLE



OPERATING PRINCIPLE

High and Low pressures are separated by a sensor assembly consisting of a magnet, piston, rubber seal and a range spring. The difference in pressure causes the sensor assembly to move in proportion to the change against a range spring.

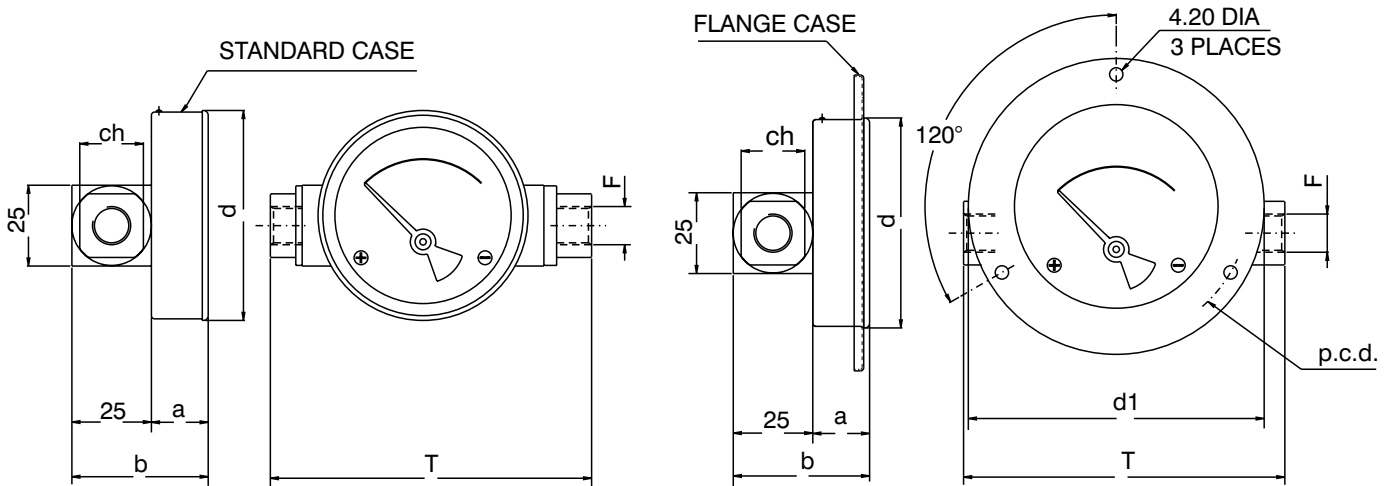
A rotary magnet, located in a separate body cavity and isolated from the acting pressures, is rotated by magnetic coupling as per the linear movement of the sensor assembly. A pointer attached to the rotary magnet indicates differential pressure on the dial.



TECHNICAL DATA (MODEL 500 DPG)

Ranges	:	0-0.25 to 0-10 bar
Units of calibration	:	Kg/cm ² , kPa, bar, mbar, psi.
Operating principle	:	Magnetic coupling using piston & spring.
Working pressure	:	200 bar / 3000 psi for Aluminium, 400 bar / 6000 psi for SS-316.
Accuracy	:	± 3 % of FSD (Ascending)
Dial sizes	:	2.5"(63mm), 3.5"(80mm).
Body Material	:	Aluminium, SS-316.
Temperature	:	80°C Max. for the media.
Protection	:	IP 65 for gauge.
Migration of media	:	Marginal
Connections	:	1/4" NPT(F) or 1/4" BSP(F)(on request, longer lead time).
Wetted parts	:	Body material, S.S. 304 spring, screw, ceramic magnet and Buna-N / Teflon / Viton/ EPDM.
Seals	:	Buna-N (Standard), Viton, EPDM
Porting	:	In-line only.
Dial case	:	Stainless steel 304 case and flange (Standard)
Window	:	Glass (Standard), Acrylic, Toughened glass on request.
Mounting	:	Direct inline or front panel flange.
Other options	:	Dual scale, colour band, strainer in (+) connection, reverse port.

STANDARD DIMENSIONS (MODEL 500 DPG)



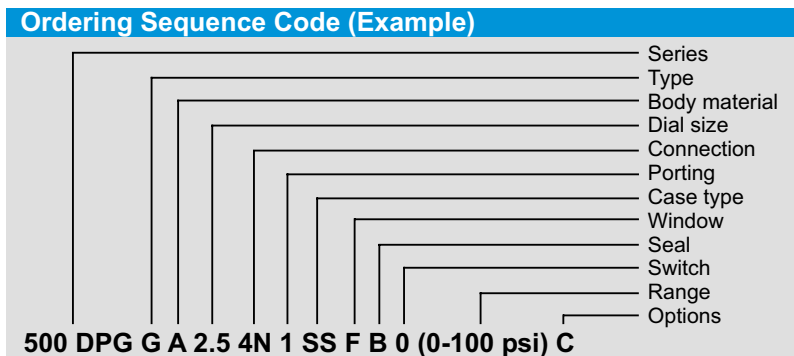
DIALØ	F	a	b	d	d1	T	ch	p.c.d.
63 (2.5")	1/4"BSP - 1/4"NPT	19	44	66	93	100	20	83
80 (3.5")	1/4"BSP - 1/4"NPT	19	44	83	109	100	20	99

* PANEL CUT OUT = d+1

HOW TO ORDER A DIFFERENTIAL PRESSURE INSTRUMENT, MODEL 500 DPG

Example Code Descriptions

Series	500 DPG																																																																								
Type	G	G	Gauge																																																																						
Body material	A	A S	Aluminium (anodized) SS-316 (longer lead time)																																																																						
Dial size	2.5	2.5 3.5	2.5" (63 mm) 3.5" (80 mm)																																																																						
Connection	4N	4B 4N ZZ	1/4" BSP (Female) (on request, longer lead time) 1/4" NPT (Female) Special connection sizes using adaptor																																																																						
Porting	1	1	In-line																																																																						
Case type	SS	SS SF	SS 304 with a rubber ring (standard) SS 304 flange with a rubber ring (standard flange)																																																																						
Window	F	F A T	Glass (standard) Acrylic Toughened glass																																																																						
Seal	B	B V E	Buna-N (standard) Viton EPDM																																																																						
Switch	0	0	None																																																																						
Standard Ranges	0-100 psi	Kg/cm ² bar mbar psi kPa	<table border="1"> <tr> <td>0.25</td><td>0.5</td><td>0.75</td><td>1</td><td>1.6</td><td>2</td><td>2.5</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>9</td><td>10</td> </tr> <tr> <td>0.25</td><td>0.5</td><td>0.75</td><td>1</td><td>1.6</td><td>2</td><td>2.5</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>9</td><td>10</td> </tr> <tr> <td>250</td><td>-</td><td>750</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>-</td><td>8</td><td>-</td><td>15</td><td>25</td><td>30</td><td>-</td><td>40</td><td>60</td><td>-</td><td>-</td><td>100</td><td>-</td><td>-</td> </tr> <tr> <td>25</td><td>50</td><td>75</td><td>100</td><td>160</td><td>200</td><td>250</td><td>300</td><td>400</td><td>500</td><td>600</td><td>700</td><td>900</td><td>1000</td> </tr> </table> <p style="text-align: right;"><i>Other ranges on request.</i></p>	0.25	0.5	0.75	1	1.6	2	2.5	3	4	5	6	7	9	10	0.25	0.5	0.75	1	1.6	2	2.5	3	4	5	6	7	9	10	250	-	750	-	-	-	-	-	-	-	-	-	-	-	-	8	-	15	25	30	-	40	60	-	-	100	-	-	25	50	75	100	160	200	250	300	400	500	600	700	900	1000
0.25	0.5	0.75	1	1.6	2	2.5	3	4	5	6	7	9	10																																																												
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250	-	750	-	-	-	-	-	-	-	-	-	-	-																																																												
-	8	-	15	25	30	-	40	60	-	-	100	-	-																																																												
25	50	75	100	160	200	250	300	400	500	600	700	900	1000																																																												
Options	C	0 C D E F G	None Customer Logo Dual scale Colour band Strainer in (+) connection Reverse port																																																																						



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.