

# SINGLE DIAPHRAGM DIFFERENTIAL PRESSURE GAUGE

MODEL  
M2.01



## PRODUCT DESCRIPTION

Differential pressure gauges with single diaphragm instruments are used to check differential pressures of liquids which do not have high viscosity and do not crystalize. It is available in dry & liquid versions the sensing element is diaphragm.



# SINGLE DIAPHRAGM DIFFERENTIAL PRESSURE GAUGE

## MODEL M2.01

### KEY FEATURES

- All SS measuring system
- Case & measuring system in SS
- Dry & Liquid Filled Version
- All welded Stainless steel rugged design
- CE & ATEX approved

### SPECIFICATIONS

Design Standard	: According to EN 837-3
Sensing Element	: Single Diaphragm
Accuracy	: $\pm 1.6\%$ of Span (Standard)
Dial Size	: 100mm (4"), 150mm (6")
Range	: Pressure: -250mbar...0...16 bar (Other custom ranges on request)
Process Conn. Size & Type	: $\frac{1}{4}$ " NPT (F)x 2 Nos (Other sizes on request)
Mounting	: Direct bottom Connection
Ambient Temperature	: -25°C to 65°C
Process Temperature	: Max. 100 °C
Static Pressure	: 10 kg/cm <sup>2</sup> up to ranges 600 mmWC 40 kg/cm <sup>2</sup> up to ranges 1000 mmWC to 2500 10 kg/cm <sup>2</sup> up to ranges 600 mmWC
Ingress Protection	: IP68

### PRESSURE LIMITS

Steady Pressure	: Up to FSD
Fluctuating Pressure	: 90% x FSD
Over Range Pressure	: 130% FSD

### SPECIFICATIONS

Calibration Certificate	: Gauges are factory calibrated to full range by default 5 Point Calibration Cert.
Material Certification	: Available as per EN10204 3.1 for wetted parts (Optional) Available as per EN10204 2.1 for non-wetted parts (Optional)
Approvals	: ATEX: Conformity acc. to RL 2014/34/EU II 2 GD Ex h T6 (Optional)

### APPLICATION

- Pharmaceutical & Petrochemical
- Food & Beverages
- Pulp and paper
- Fertilizer, cement, sugar
- Allied process industries
- Liquid & Gaseous mediums

### MATERIAL OF CONSTRUCTION

Case & Bezel Ring	: SS 304 (Optional SS 316)
Process Connection	: Wetted: SS 316
Diaphragm	: SS 316L
Movement	: SS 304 SS (Optional SS 316)
Seal Chamber	: SS 304
Pointer	: Aluminum, Black colored Micrometer zero adjustable
Dial	: Aluminum, Black graduation on white background
Window	: Shatter proof safety (Optional: Toughened glass)
Window gasket & Blowout disk	: Neoprene
Scale Amplitude	: 180 to 270 (Depends on Range)
Nuts & Bolts	: SS 304

### CASE FILLING (OPTIONAL)

The gauges can be filled with different kind of fill fluids. Available fill fluids are:

- Glycerin fluid (99.7%)
- Silicon fluid
- Other fill fluids can be offered on request

### TEMPERATURE LIMITS

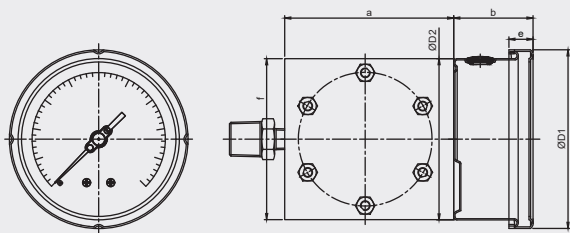
Version	Ambient	Process
Dry	-40 to 65 °C	Max. 200 °C
Glycerin filled	Max. 65 °C	Max. 65 °C
Silicon filled	Max. 165 °C	Max. 165 °C

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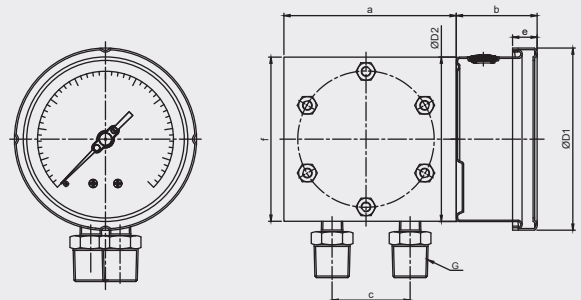
### DIMENSIONAL DRAWINGS

Single Diaphragm DPG  
Back connection



NS	Dimensions in mm								Weight in gm
	a	b	c	ØD1	ØD2	e	f	G	
100	105	50	54	111	100	15	100	1/2"	4250
150	105	50	54	166	150	15	100	1/2"	6420
	Dimensions in mm								
100	150	50	54	111	100	15	150	1/2"	4210
150	150	50	54	166	150	15	150	1/2"	6620

Single Diaphragm DPG  
Bottom connection



NS	Dimensions in mm								Weight in gm
	a	b	c	ØD1	ØD2	e	f	G	
<b>High Pressure</b>									
100	105	50	54	111	100	15	100	1/2"	4250
150	105	50	54	166	150	15	100	1/2"	6420
<b>Low Pressure</b>									
100	150	50	54	111	100	15	150	1/2"	4210
150	150	50	54	166	150	15	150	1/2"	6620

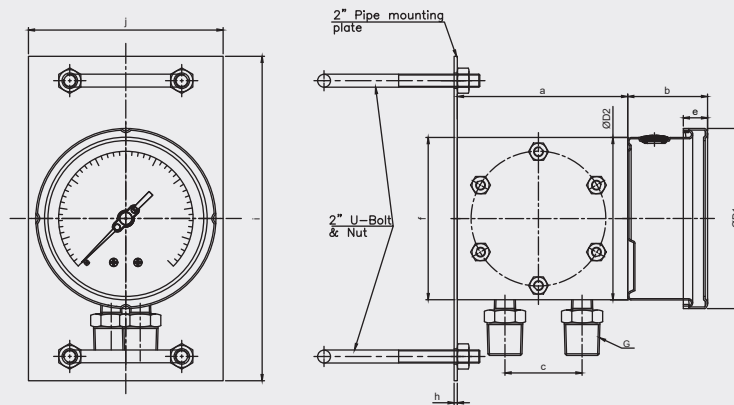
Important Notes: Above drawings are not to scale. All Dimension are in mm

# SINGLE DIAPHRAGM DIFFERENTIAL PRESSURE GAUGE

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## DIMENSIONAL DRAWINGS

Single diaphragm DPG 2" pipe mounting Bottom connection



NS	Dimensions in mm											Weight in gm
	a	b	c	ØD1	ØD2	e	f	G	h	i	j	
<b>High Pressure</b>												
100	105	50	54	111	100	15	100	1/2"	2	250	100	4500
150	105	50	54	166	150	15	100	1/2"	2	250	100	6520
<b>Low Pressure</b>												
100	150	50	54	111	100	15	150	1/2"	2	250	100	4510
150	150	50	54	166	150	15	150	1/2"	2	250	100	6755

Important Notes: Above drawings are not to scale. All Dimension are in mm

## TABLE-1 PRESSURE RANGE

bar		kg/cm2		psi		kPa		MPa		mmWC	
Code	Range	Code	Range	Code	Range	Code	Range	Code	Range	Code	Range
BR31	0...0.6	KG31	0...0.6	PS31	0...10	KP31	0...60	MP31	0...0.06	MW25	0...250
BR35	0...1	KG35	0...1	PS35	0...15	KP35	0...100	MP35	0...0.1	MW50	0...400
BR36	0...1.6	KG36	0...1.6	PS36	0...25	KP36	0...160	MP36	0...0.16	MW55	0...600
BR38	0...2.5	KG38	0...2.5	PS38	0...35	KP38	0...250	MP38	0...0.25	MW60	0...1000
BR40	0...4	KG40	0...4	PS38	0...60	KP40	0...400	MP40	0...0.4	MW64	0...1600
BR42	0...6	KG42	0...6	PS38	0...90	KP42	0...600	MP42	0...0.6	MW68	0...2500
BR45	0...10	KG45	0...10	PS38	0...100	KP45	0...1000	MP45	0...1	MW72	0...4000
BR50	0...16	KG50	0...16	PS38	0...160	KP50	0...1600	MP50	0...1.6	MW76	0...6000

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### MODEL CODING & ORDERING INFORMATION

DESCRIPTION	CODE	M2.01	6	1	B	14NM.14BM	SL	S6	XXX	XLG
<b>Model</b> Single Diaphragm Differential Pressure Gauge	M2.01	M2.01								
<b>Dial Size</b> 100 mm (4") 150 mm (6")	4 6		6							
<b>Version</b> Dry (but fillable) Glycerin filled Silicon Oil filled	1 2 3			1						
<b>Type of Mounting/Connection Orientation</b> Direct Bottom connection Direct, Center back connection	B C				B					
<b>Process Connection (Size &amp; Type)</b> ¼" NPT (M) x ½" BSP (M) ¼" NPT (M) x ½" NPT (M) ¼" NPT (F)	14NM.14BM 14NM.14NM 14NF					14NM.14BM				
<b>Chamber Material</b> SS 304 SS 316 SS 316L Monel 400 Hast C-276	S4 S6 SL M4 HC						SL			
<b>Diaphragm Materials</b> SS 316 SS316L Monel 400 Hast C-276	S6 SL M4 HC							S6		
<b>Range</b> To be selected from Table 1 (Other custom ranges available on request)	XXX								XXX	
<b>Other Options</b> Dampening liquid glycerin filled Dampening liquid silicon filled** 2" Pipe/Yoke mounting bracket for bottom mounting (SS 304) 2" Pipe/Yoke mounting bracket for bottom mounting (SS 316) Back flange for bottom mounting (SS 304) Front flange for lower back/center back mounting (SS 304) Tag number marking on Dial Window in Toughened glass Material test certificate Wetted parts complied to NACE Custom Dial Design / Private labeling Case & Bezel SS316	XLG XLS MB4 MB6 XBF XFF XTM XWT X17 X20 X29 X31									XLG

### SAMPLE ORDERING CODE:

**M2.01-6.1.B.14NM.14BM.SL.S6.XXX.XLG**

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and material specified may be replaced by others without prior notice.