

## APPLICATIONS

- Liquid & gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Food & Beverages
- Nuclear power plants

## FEATURES

- All stainless steel welded construction
- Standards followed EN 837-1 / ASME B40.100
- Accuracy as per  $\pm 1.0\%$  / CL 1.0 / Grade 1A
- Dry / Fillable / Liquid filled



STAINLESS STEEL PRESSURE GAUGE, M100

## DESCRIPTION

## General

**Design :** EN 837-1

**Accuracy :**  $\pm 1.6\%$  of full scale (MPB01)

**Accuracy :**  $\pm 1.0\%$  of full scale (MPB11)

**Ambient temperature :**  $-40 \dots +65^\circ\text{C}$  [without dampening liquid]  
 $-40 \dots +65^\circ\text{C}$  [with dampening liquid filled silicon oil]

**Service temperature :**  $300^\circ\text{C}$  max.

**Pressure limits :** Steady pressure up to FS value  
 Fluctuating pressure up to 90% of FS value  
 Short time 130% of FS value for range up to 100 bar  
 Short time 115% of FS value for range above 100 bar

**Weld joints :** TIG argon arc welding

**Protection class as per EN 837-1 :** S1

## Material of construction

**Sensing element :** Bourdon Tube

[ $< 100$  bar : C - type ,  $> 100$  bar : Helical]

**Case & Ring material :** AISI 304 SS [Bayonet type]

**Bourdon tube & Shank :** AISI 316L SS / Monel

[Shank welded directly to case for rigidity in vibration field]

**Movement mechanism :** AISI 304 SS

**Dial :** Aluminum, black graduation on white background

**Pointer :** Micro-zero adjustable, aluminum, black powder coated

**Gaskets, Blow off disc & filling plug :** Neoprene / NBR

**Window :** Sheet glass / Shatterproof safety glass

## Standard version

**Dial size (MPB01) :** 40 mm / 50 mm / 63 mm

**Dial size (MPB11) :** 100 mm / 115 mm / 150 mm / 250 mm

**Range :** -1 - 0 - 1,600 bar

**Mounting pattern :** Direct Bottom

**Process connection :**  $\frac{1}{2}$ " NPT (M) /  $\frac{1}{2}$ " BSP (M)

**Ingress protection :** IP 65

**Execution :** Dry / Dry but fillable

## Filled versions

## Glycerin

**Window :** Shatterproof safety glass

**Dampening liquid :** Glycerin 99.7% / 80% / 60%  
 [Service temperature  $-20^\circ\text{C}$  up to  $65^\circ\text{C}$ ]

## Silicon Oil

**Window :** Shatterproof safety glass

**Gasket, Blow off disc & filling plug :** NBR / Viton

**Dampening liquid :** Silicon oil DC 200  
 [Service temperature  $-40^\circ\text{C}$  up to  $150^\circ\text{C}$ ]

## Temperature effect

When temperature of the measuring system deviates from reference temperature ( $+20^\circ\text{C}$ ):  
 max  $\pm 0.4\%$  / 10K of full scale value.

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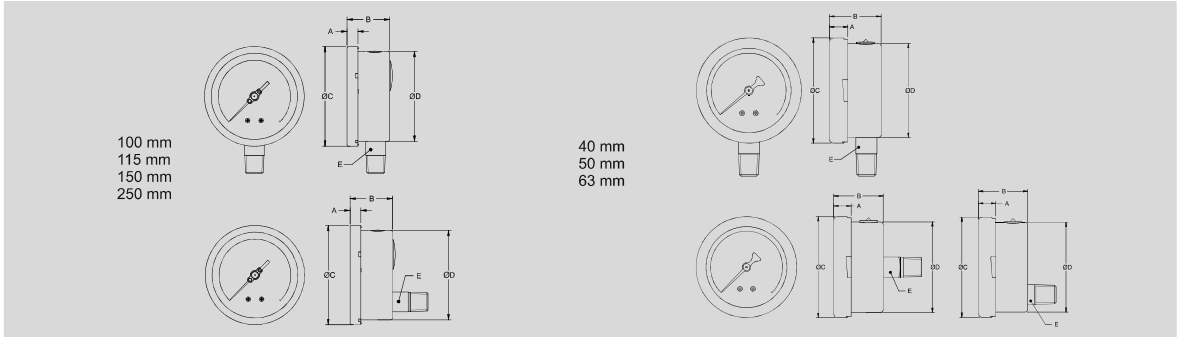
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M100

Stainless steel pressure gauge

DIMENSIONAL DRAWING



NS	A	B	ØC	ØD	E
40	9	34	58.5	52	□14
50	9	34	58.5	52	□14
63	12	33	69.7	62.5	□14
100	12	48	111	100	□22
150	15	48	161	149	□22
250	18.5	50	263	250	□22

- NOTES  
 1. Drawing not to scale. All dimensions are in mm.  
 2. For other mounting details, Panel cut-out dimensions, kindly contact factory.

ORDERING CODES

DIAL SIZE						100
040	1.5" / 40 mm	050	2" / 50 mm	063	2.5" / 63 mm	
100	4" / 100 mm	115	4.5" / 115 mm	150	6" / 150 mm	
250	10" / 250 mm					
MODEL						M100
M100	Stainless steel pressure gauge					
MOUNTING						BT
BT	Direct bottom	CB	Direct center back	LB	Direct lower back	
CONNECTION						4MN
2MN	¼" NPT (M)	4MN	½" NPT (M)	4MM	M20 X 1.5 mm (M)	
2MB	¼" BSP (M)	3MB	3/8" BSP (M)	4MB	½" BSP (M)	
CASE FILLING						D
D	Dry	G	Glycerin filled	S	Silicon oil filled	
WETTED PARTS						SL
SL	AISI 316L SS	MO	MONEL			
RANGE						0-150 psi
0-150 psi Please mention range required with the measurement unit [Magwell offer in all types of National & International measurement units, e.g. kg/cm², psi, kPa, etc. with single or dual scales]						
OPTIONAL EXTRAS						CC=TP
CS	AISI 316 SS case & ring	OS	Internal overload stop	VS	Internal Vacuum stop	
SM	AISI 316 SS movement	DM	Dampened movement	MR	Maximum Reading pointer	
OP	Over range protection 1.5xFS	EC	Epoxy coating (Case & Ring)	RG	Receiver gauge	
CC	5 - point calibration certificate	MT	Material test certificate 3.1	NC	Tested to NACE standards	
OC	Cleaned for Oxygen service	AC	Accuracy ±0.5%	FF	Front flange	
TP	AISI 316 SS tag plate	EZ	External zero adjustment	BF	Back flange	
CL	Custom Logo	DS	Dual scale marking	PM	Panel mounting clamp	
				2P	2" Pipe mounting bracket & clamp	

Ordering Example : 100=M100=BT=4NM=D=SL=0-150 psi=CC=TP

Rev 00

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Stainless steel pressure gauge M 100



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