

Capsule Type Pressure Gauge Model M300



Magwell Model M300 Series Capsule Type Gauges are designed for low Pressure Measurement. Capsule Pressure Gauges employ the use of a welded capsule housing two thin diaphragms. One diaphragm measures the pressure signal and the other is used as a reference point. The relative deflection of the capsule is then translated into a rotational movement through the use of mechanical linkages, causing the pointer to move around the dial of the gauge.

Standard Features

- ◆ Compact Design
- ◆ Micro-Zero Adjustable Pointer
- ◆ Shatter Proof Safety Glass
- ◆ Design Standard EN 837-1
- ◆ Weather Protection IP 66 / IP67
- ◆ Low Pressure Application (<0.6 bar)

Applications

- ◆ Liquid & Gaseous Medium
- ◆ Corrosive Environments
- ◆ Offshore Oil Rigs & Platforms
- ◆ Chemical & Petrochemical Plants
- ◆ Power & Utility
- ◆ Water & Waste Water Treatment Facilities
- ◆ Clean-Air Applications



Specification

Design Standard :	EN 837-1
Case Style :	Open Front, with rear Blow Out Disc
Accuracy :	± 1.6% for 100 mm & 160 mm Gauges ± 0.5% optional for 100 mm & 160 mm Gauges
Ambient Temperature :	-40 ~ +65° C
Process Temperature :	150°C Max
Sensing Elements :	Capsule
Case & Bayonet Material :	AISI 316, Bayonet Type
Movement :	AISI 304 SS, Optional SS 316L
Dial :	Aluminium, Black Graduation on White Background
Pointer :	Micro-Zero adjustable, Aluminum, Black Powder Coated
Gaskets, Blow out Disc & Filling Plug :	Neoprene / NBR
Window :	Shatterproof Safety Glass
Ingress Protection :	IP65
Fill Fluid Options :	Glycerin, Silicon Oil
Range :	0 to 100 mbar
Over Pressure Limit :	130% of Full Scale, Optional 150%

Component Materials

Capsule Element :	SS 316L
Bayonet Ring :	SS 316
Blow Out Disc :	Neoprene
Shank :	SS 316L
Mounting Pattern :	Stem
Movement :	Adjustable

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Model Selection Guide

Description	Coding
1 Dial	
4" / 100 mm	100
6" / 160 mm	160
2 Model	
M300 - Capsule Type Pressure Low Pressure Gauge	M300
3 Mounting / Connection Orientation	
Bottom Connection	BT
4 Process Connection	
1/4" NPT (M)	2MN
1/4" BSP (M)	2MB
1/2" NPT (M)	4MN
1/2" BSP (M)	4MB
3/8" NPT (M)	3MN
3/8" BSP (M)	3MB
5 Case Filling	
Dry Case	D
Dry Case but Field Fillable	X
Silicone	S

Description	Coding
6 Wetted Parts	
Socket & Tube : SS 316 L	SL
7 Range	
Refer to Page 3, Chart 1	
8 Units	
Refer to Page 3, Chart 1	
9 Options	
AISI 316 SS Movement	SM
Over Range Protection 1.5 FS	OP
5 Point Calibration Certificate	CC
316 L Tag Plate	TP
Internal Overload Stop	OS
Dampened Movement	DM
Epoxy Coating	EC
Material Test Certificate	MT
Optional Accuracy 0.5%	AC
Dual Scale Marking	DS
Receiver Gauge	RC
External Zero Adjustment	EZ

Sample Model Selection Code

1	2	3	4	5	6	7	8	9				
100	M300	BT	4MN	G	SS	0/100	PSI	CC	TP	DM	AC	DS

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Capsule Type Pressure Gauge Model M300



Dial Size :	100 mm
Model :	M300 - Capsule Type Pressure Gauge
Mounting :	BT = Direct Bottom
Process Connection :	4MN = 1/2" NPT M
Case Filling :	G = Case Filling - Glycerin
Wetted Parts :	SS = 316 Stainless Steel
Range :	Range : 0 ~ 100
Units :	Mbar
Optional Extras :	
CC	5 Point Calibration Certificate
TP	AISI 316L Tag Plate
DM	Dampened Movement
AC	Optional Accuracy 0.5%
DS	Dual Scale Marking

Pressure Gauge Ranges				Compound / Vacuum Gauge Ranges	
mbar	inH2O	mmH2O	kPa	mbar	
0 ~ 2.5	0 ~ 5	0 ~ 25	0 ~ 1	-2.5 ~ 0	-10 ~ 15
0 ~ 4	0 ~ 10	0 ~ 40	0 ~ 1.6	-4 ~ 0	-10 ~ 30
0 ~ 6	0 ~ 15	0 ~ 60	0 ~ 2.5	-6 ~ 0	-10 ~ 50
0 ~ 10	0 ~ 20	0 ~ 100	0 ~ 4	-10 ~ 0	-15 ~ 10
0 ~ 16	0 ~ 250	0 ~ 160	0 ~ 6	-16 ~ 0	-15 ~ 25
0 ~ 25	0 ~ 300	0 ~ 250	0 ~ 10	-25 ~ 0	-20 ~ 5
0 ~ 40	0 ~ 40	0 ~ 400		-40 ~ 0	-20 ~ 20
0 ~ 60		0 ~ 600		-60 ~ 0	-20 ~ 40
0 ~ 100		0 ~ 1,000		-100 ~ 0	-25 ~ 40
				-1 ~ 5	-25 ~ 15
				-2 ~ 4	-25 ~ 75
				-2 ~ 8	-30 ~ 30
				-3 ~ 3	-40 ~ 20
				-4 ~ 2	-40 ~ 60
				-4 ~ 6	-50 ~ 10
				-4 ~ 12	-50 ~ 50
				-5 ~ 1	-60 ~ 40
				-5 ~ 5	-75 ~ 25
				-6 ~ 10	-80 ~ 20
				-8 ~ 2	
				-8 ~ 8	
				-10 ~ 6	

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