

External Zero Adjustment

MIEPL make SS Pressure Gauges are based on the proven Bourdon tube measuring system. On pressurization, the deflection of the Bourdon tube, proportional to the incident pressure, is transmitted to the movement via a link and indicated. The modular design enables a multitude of combinations of case materials, process connections, nominal sizes and scale ranges.



FEATURES

- ⇒ All SS Measuring System
- ⇒ Socket-Case, Direct Welded
- ⇒ Dry / Liquid filled
- ⇒ External Zero adjustment

APPLICATION

- ⇒ Liquid & Gaseous mediums
- ⇒ Corrosive Environments
- ⇒ Oil & Gas Applications
- ⇒ Chemical & Petrochemical
- ⇒ Food & Beverages
- ⇒ Nuclear Power Plants

REFERENCE

- ⇒ EN 837-1

STANDARD SPECIFICATIONS

Dial size	: DN100 / DN125 / DN150 / DN250
Range	: -1...0...1,600 bar
Mounting pattern	: Direct, Bottom connection
Process connection	: ½" NPT (M) / ½" BSP (M)
Ingress protection	: IP 54 / IP 65
Execution	: Dry / Dry but fillable
Zero adjustment	: External screw with locking mechanism

STANDARD PARAMETERS

Accuracy	: CL 1.0
Ambient Temperature	: -40...+65°C (without dampening liquid) : -20...+65°C (with dampening liquid)
Service Temperature	: 300°C max.
Pressure Limits	: Steady pressure up to FS value : Fluctuating pressure up to 90% of FS value : Short time 1.3 x FS value for range up to 100 bar : Short time 1.15 x FS value for range above 100 bar
Weld Joints	: TIG argon arc welding

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 (Shank welded directly to case)
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

STAD. SPECIFICATIONS: DAMPENING LIQUID FILLED, GLYCERIN

Window	: Safety glass
Dampening liquid	: Glycerin 99.7% [Service temperature up to 65°C]

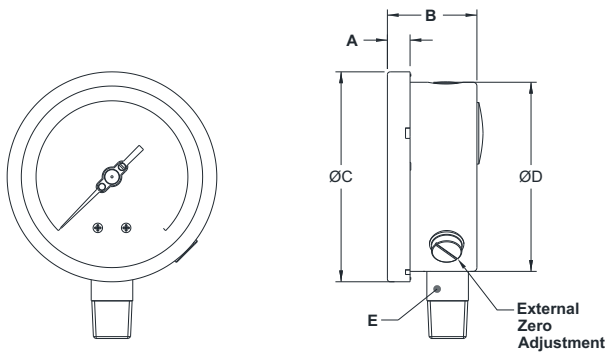
TEMPERATURE EFFECT

Please refer clause no 9.0 of EN 837-1

** DN250 available as standard "Dry" (Code E1) version. For other versions contact factory.

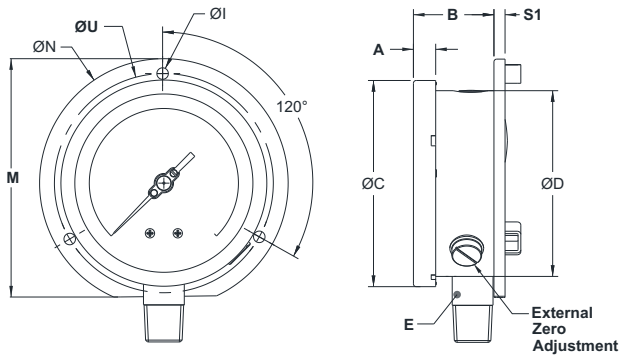
DRAWING

DIMENSIONAL DRAWING



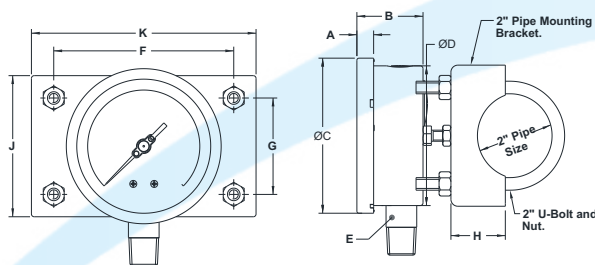
Type -1A				
DN	100	125	150	250
A	12	15	15	18.5
B	48	48	48	50
ØC	111	129	161	263
ØD	100	118.5	149	250
E	SQ.22	SQ.22	SQ.22	SQ.22
Weight (gm)	520	710	910	2110

DIMENSIONAL DRAWING



Type -1B				
DN	100	125	150	250
A	12	15	15	18.5
B	52	50	52	51.5
ØC	111	129	161	263
ØD	100	118.5	149	250
ØE	SQ.22	SQ.22	SQ.22	SQ.22
ØI	6	6	6	7
M	128	143.5	172.4	172.4
ØN	134	150	186	290
S1	6	4	6	1.5
ØU	118	137	168	276
Weight (gm)	620	810	1090	2460

DIMENSIONAL DRAWING

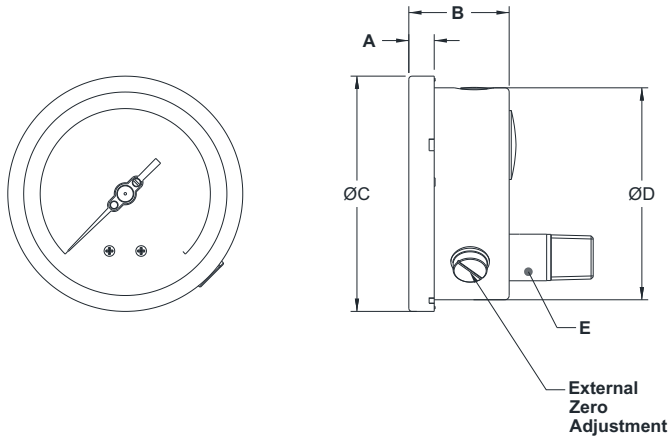


Type -1C		
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
E	SQ.22	SQ.22
F	129	129
G	69	69
H	39	39
J	101	101
K	161	161
Weight (gm)	1590	1990

All dimensions are in mm.

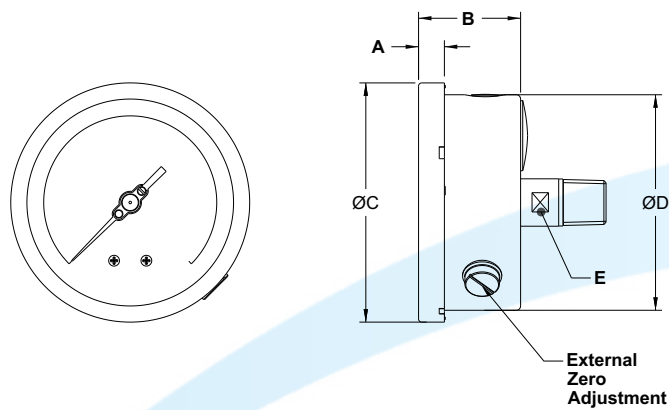
DRAWING

DIMENSIONAL DRAWING



Type - 2E		
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
E	SQ.22	SQ.22
Weight (gm)	520	2110

DIMENSIONAL DRAWING



Type - 2A		
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
E	A/F 17	A/F 17
Weight (gm)	520	2110

All dimensions are in mm.

ORDERING CODE

MP02 - D - XXX - 1A - 4NM - IP2 - E2

1. DIAL SIZE	100 mm / 4"	D					
	125 mm / 4½"	E					
	150 mm / 6"	F					
	250 mm / 10"	H					
2. RANGE	Refer "Range Table"		XXX				
3. MOUNTING PATTERN	Direct, Bottom connection			1A			
	Wall / Surface / Projection mounting, Bottom connection			1B			
	2" Pipe / Yoke mounting, Bottom connection			1C			
	Centre, Back connection ²			2A			
	Lower, Back connection			2E			
4. PROCESS CONNECTION	¼" BSP (M)				2BM		
	¼" NPT (M)				2NM		
	3/8" BSP (M)				3BM		
	½" BSP (M)				4BM		
	M20 X 1.5 mm (M)				4MM		
	½" NPT (M)				4NM		
5. INGRESS PROTECTION	IP 65					IP2	
	IP 66					IP3	
	IP 67					IP4	
6. EXECUTION	Dry						E1
	Dry but fillable						E2
	Dampening liquid filled, glycerine						E4
	Dampening liquid filled, silicon oil						E5
7. OTHER OPTION	Case & Ring in AISI 316 SS (1A)	AA	Maximum Reading pointer ³	FW	Tested to NACE standards		SN
	Case & Ring in AISI 316 SS (1B)	AB	Knife edge pointer	FX	Certification for oxygen service		SO
	Case & Ring in AISI 316 SS (1C)	AC	Monel wetted parts	LN	Performance test		SP
	Case & Ring in AISI 316 SS (2A)	AG	Dial with Ammonia temperature scale	M9	C.C. with NABL traceability ⁶		ST
	Case & Ring in AISI 316 SS (2E)	AK	Over range protection 1.5 x FS	NP	Accuracy CL 0.5 / CL 0.6 of FS		WA
	Dampening screw, Monel	DM	High over pressure protection ⁷	NS	SS tag plate, AISI 304 SS		WF
	Dampening screw, AISI 316 SS	DN	Epoxy coating (Case & Ring)	O8	SS tag plate, AISI 316 SS		WG
	Internal overload stop	DX	Receiver gauge ⁴	Q9	Electro polished (Case & Ring)		WK
	Internal vacuum stop	DY	Rubber parts, Viton	QA	Anti-parallax mirror band		WN
	Pointer stop on dial	DZ	Vent plug, ON-OFF type	QW	Custom designed dial		WR
	Dial with Freon temperature scales	F9	5 - point calibration certificate	SA	Dial tag marking		WT
	Plexi glass	FB	Material test certificate 3.1	SC			
	Shatterproof safety glass	FC	CE certificate	SE			
	Toughened glass	FD	IBR certification	SI			
	AISI 316 SS movement	FL	Helium leak testing	SL			
	Dampened movement	FM	Material test certificate 2.2	SM			

Ordering Example : **MP02 - D - XXX - 1A 4NM - IP2 - E2**

1. For other connections, please contact factory.

3. Available in dry version with accuracy CL 1.0 or above.

5. Available with Ingress Protection IP 54 (dust proof) only.

7. Refer factory for confirmation.

2. Available in DN100 only.

4. Please specify the second scale required.

6. C.C. = Calibration Certificate.