

Bourdon Tube, DN100 & DN150

MIEPL make PP Case 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
- ⇒ Polypropylene case & ring
- ⇒ Dry / Liquid filled

APPLICATION

- ⇒ Liquid & Gaseous mediums
- ⇒ Corrosive Environments
- ⇒ Oil & Gas application
- ⇒ Chemical & Petrochemical
- ⇒ Food & Beverages
- ⇒ Nuclear power plants

REFERENCE

- ⇒ EN 837-1

STANDARD SPECIFICATIONS

Dial size	: DN100 / DN150
Range	: -1...0...2,000 bar
Mounting pattern	: Direct, Bottom connection
Process connection	: ½" NPT (M)
Ingress protection	: IP 54 / IP 65
Execution	: Dry / Dry but fillable, glycerin

STANDARD PARAMETERS

Accuracy	: CL 1.0
Ambient Temperature	: -40...+65°C (without dampening liquid) : -20...+65°C (with dampening liquid)
Service Temperature	: 120°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 (Bourdon tube + Shank)

MATERIAL OF CONSTRUCTION

Sensing Element	: Bourdon Tube (<100 bar : C - type , >100 bar : Helical)
Case & Ring Material	: Polypropylene (PP), Threaded type
Bourdon Tube & Shank	: AISI 316L SS (Shank screwed with 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
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]

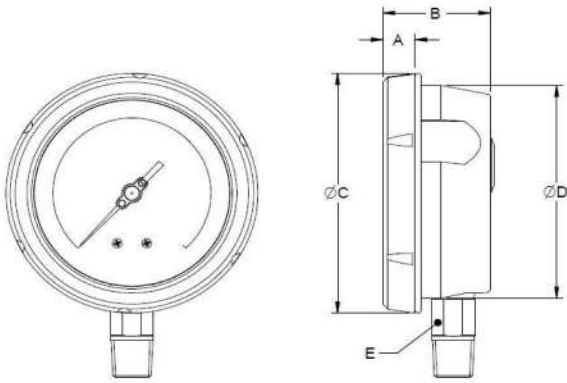
TEMPERATURE EFFECT

Please refer clause no 9.0 of EN 837-1

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

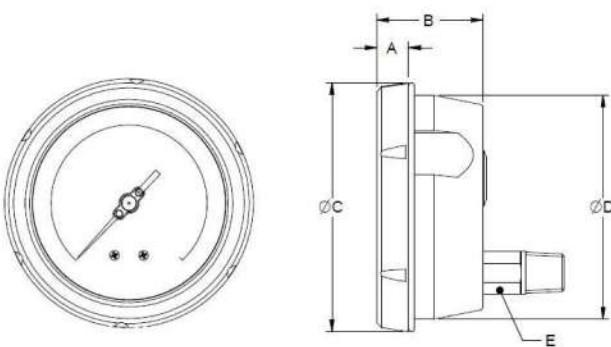
DRAWING

DIMENSIONAL DRAWING



Type - 1A		
DN	100	150
A	16.5	16.0
B	56	50
ØC	129.0	179.5
ØD	116.0	167.5
E	SQ.22	SQ.22
Weight (gm)	520	910

DIMENSIONAL DRAWING



Type - 2E		
DN	100	150
A	16.5	16.0
B	56	55
ØC	129	179.5
ØD	116.0	167.5
E	SQ.22	SQ.22
Weight (gm)	520	910

All dimensions are in mm.

ORDERING CODE

MP05 - D - XXX - 1A - 4NM - IP2 - E2 - XX

1. DIAL SIZE	100 mm / 4"	D	XXX	1A	4NM	IP2	E2	XX
	150mm / 6"	F						
2. RANGE	Refer "Range Table"			XXX				
3. MOUNTING PATTERN	Direct, Bottom connection			1A				
	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			
	Other thread size and standards available on request. ¹							
5. INGRESS PROTECTION	IP 65					IP2		
	IP 66					IP3		
	IP 67					IP4		
6. EXECUTION	Dry ³						E1	
	Dry but fillable						E2	
	Dampening liquid filled, glycerine						E4	
7. OTHER OPTION	Dampening screw, Monel	DM	Knife edge pointer	FX	Certification for oxygen service		SO	
	Dampening screw, AISI 316 SS	DN	Monel wetted parts	LN	Performance test		SP	
	Internal overload stop	DX	Dial with Ammonia temperature scale	M9	C.C. ⁴ with NABL traceability		ST	
	Internal vacuum stop	DY	Over range protection 1.5 x FS	NP	Accuracy CL 0.5 / CL 0.6 of FS		WA	
	Pointer stop on dial	DZ	Receiver gauge ²	Q9	SS tag plate, AISI 304 SS		WF	
	Dial with Freon temperature	F9	5 - point calibration certificate	SA	SS tag plate, AISI 316 SS		WG	
	shatterproof glass	FC	Material test certificate 3.1	SC	Custom designed dial		WR	
	Toughened glass	FD	Helium leak testing	SL	Dial tag marking		WT	
	AISI 316 SS movement	FL	Material test certificate 2.2	SM				
	Dampened movement	FM	Tested to NACE standards	SN				

Ordering Example : MP05 - D - XXX - 1A - 4NM - IP2 - E2 - XX

Notes :

1. For other connections, please contact factory.
2. Please specify the second scale required.
3. Available with Ingress Protection IP 54 (dust proof) only.
4. C.C. = Calibration Certificate.