

Double Diaphragm

MIEPL make High Safety 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. This widely used for Petrochemical Industries and Gaseous applications.



FEATURES

- Single side static sustainable
- Static pressure 200 bar max.
- External Zero adjustment
- Electric contact version
- Dry / liquid filled

APPLICATION

- Liquid & gaseous media
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Level measurement in closed tank
- Filter monitoring

STANDARD SPECIFICATIONS

Dial size	: DN100 / DN150
Range	: 0 to 100 mBar ... 0 to 200 Bar
Mounting pattern	: Direct, Bottom connection
Process connection	: 1/4" NPT (F) x 2 Nos.
Ingress protection	: IP 65
Execution	: Dry

STANDARD PARAMETERS

Accuracy	: CL 1.6 (AISI 316L SS) - Accuracy will be 2.5 with Hastelloy C and monel 400 Diaphragm
Ambient Temperature	: -40...+60°C (without dampening liquid) : -20...+60°C (with dampening liquid)
Service Temperature	: 100°C max.
Static pressure limits (on either side)	: 40 bar / 100 bar / 200 bar
Over-pressure safety	: 200 bar for ranges 0...0.4 bar up to 0...40 bar
Zero shift	: Max. $\pm 2.5\%$ at 20°C and max. static pressure

MATERIAL OF CONSTRUCTION

Sensing Element	: Double diaphragm, Internal stop without o-ring : ≤ 16 bar - AISI 316L SS, > 16 bar Inconel 718
Case & Ring Material	: AISI 304 SS (Bayonet type)
Diaphragm	: AISI 316L SS
Chamber	: AISI 304 SS
Fastener	: AISI 304 SS (PN 100 bar max.) : Alloy steel zinc coated
Movement mechanism	: Stainless Steel
Transmission chamber dampening liquid	: Silicon oil
Chamber sealing gaskets	: Viton
Dial	: Aluminum, black graduation on white background
Pointer	: Micro-zero adjustable, aluminum, black powder coated
Gaskets & filling plug	: NBR
Window	: Shatterproof Safety Glass, 4mm thickness
Purging plugs	: 2 x 1/4" NPT (M), AISI 316 SS

REFERENCE

EN 837-3

STAND. SPEC. : DAMPENING LIQUID FILLED, GLYCERIN OR SILICON OIL

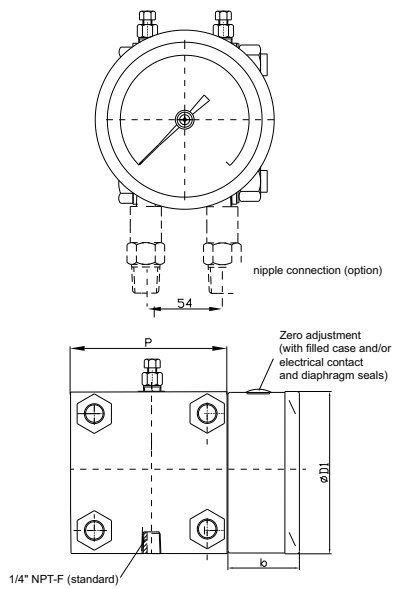
Accuracy	: CL 2.5
Window	: Shatterproof safety glass
Dampening liquid	: Glycerin 99.7% / Silicon oil 47V50

TEMPERATURE EFFECT

Please refer clause no 9.3 of EN 837-1

DRAWING

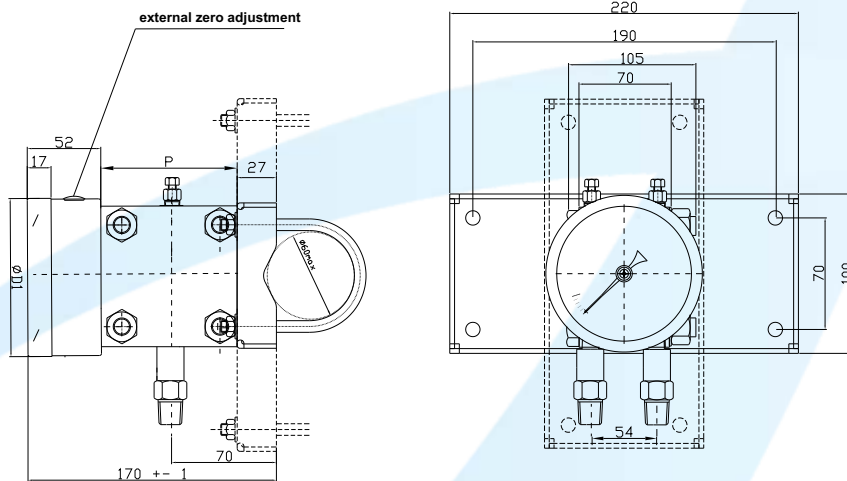
DIMENSIONAL DRAWING



Type - 1A				
DN	100	100	160	160
Range mbar	≤160	250	≤160	250
P (PN40/100)	140	100	140	100
ØP (PN 200)	-	100	-	100
B	51	51	51	51
D1	100	100	160	160

DIMENSIONAL DRAWING

Type 1C

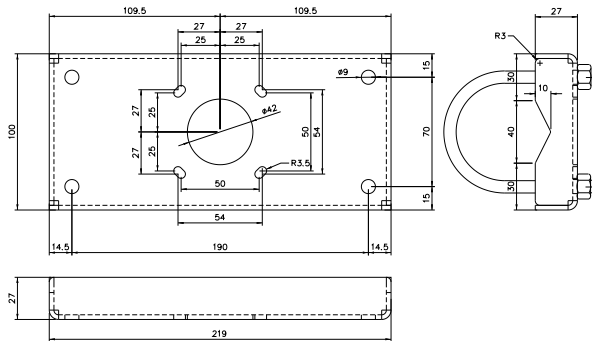


All dimensions are in mm.

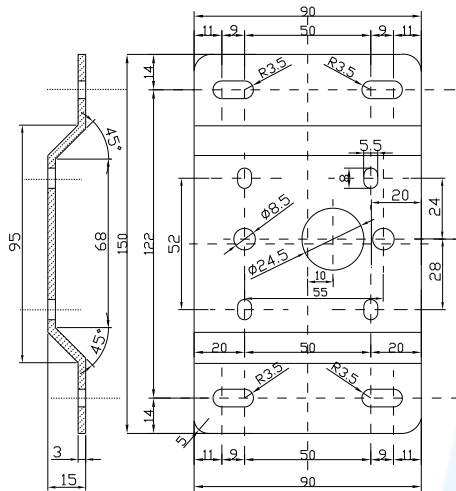
DRAWING

DIMENSIONAL DRAWING

2" pipe bracket

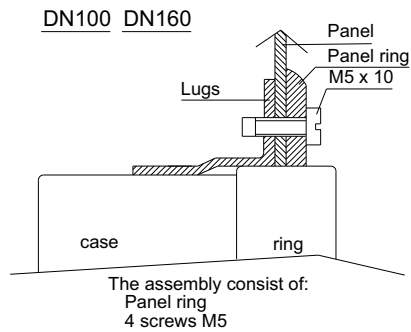


Back flange surface mounting



DIMENSIONAL DRAWING

Panel Mounting (*)

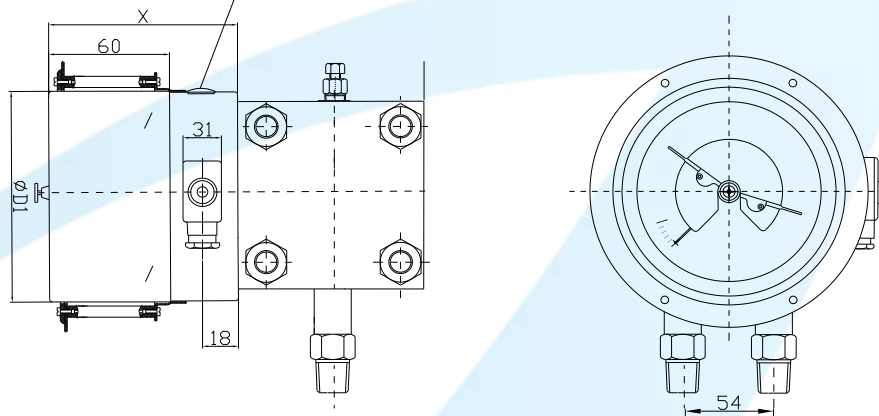


(*) Panel Cut-out : 105 mm for DN100 & 165 mm for DN160

DIMENSIONAL DRAWING

Type 1D

external zero adjustment



All dimensions are in mm.

ORDERING CODE

MP10 - **D** - **XXX** - **1A** - **2NF** - **IP2** - **E1** - **040**

1. DIAL SIZE	100 mm	D					
	150 mm	F					
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			
	Panel/Front flange mounting, Bottom Connection			1D			
4. PROCESS CONNECTION	¼" NPT (F) x 2 Nos.				2NF		
	3/8" BSP (M) x 2 Nos.				3BM		
	½" BSP (M) x 2 Nos.				4BM		
	M20 X 1.5 mm (M) x 2 Nos.				4MM		
	½" NPT (M) x 2 Nos.				4NM		
	Other thread size and standards available on request. ¹						
	* Male threads through adaptors						
5. INGRESS PROCESS	IP 65					IP2	
6. EXECUTION	Dry						E1
	Dry but fillable						E2
7. STATIC PRESSURE	40 bar						040
	100 bar						100
	200 bar						200
8. OTHER OPTIONS	Monel diaphragm	CM	Food grade oil filled chamber	NF	SS tag plate		WF
	Hastelloy C-276 diaphragm	CO	5 - point calibration certificate	SA	Custom designed dial		WR
	Maximum reading pointer	FW	Material test certificate 3.1	SC	Dial tag marking		WT
	External zero adjustment (Standard for filled versions)	FZ	Material test certificate 2.2	SM			
	Monel chambers	MN	Tested to NACE standards	SN			
	Hastelloy C-276 chambers	MO	Certificate of Oxygen service	SO			

COMPATIBLE ACCESSORIES

Diaphragm seal

5 Valve Manifolds

3 Valve manifolds

Ordering Example : **MP10 - D - XXX - 1A - 2NF - IP2 - E1 - 040**

Notes :

1. . For other connections, please contact factory.