

## Dome Style

**MIEPL** make Electric Contact Gauge use wherever the process pressure has to be indicated locally and, at the same time, limit values must be monitored, contact pressure gauges find their application. The switch contacts make or break the circuit dependent upon the pointer position of the indicating measuring instrument. If the reading is significantly above or below a set value, they trigger an alarm, hence also the term “alarm contact”. Contact pressure gauges are also suitable for starting, stopping or switching processes.



### FEATURES

- All SS measuring system
- Socket-case, direct welded
- CE marked contacts
- Liquid filled versions

### APPLICATION

- Pumps & motor controls
- Water treatment plants
- Hydraulic & pneumatics
- Chemical & petrochemicals
- Pharmaceutical industries
- Compressors & utilities

### REFERENCE

- EN 837-1

**NOTE :** Gauge accuracy shall be CL 1.5. but switching accuracy shall be CL 5.0

### STANDARD SPECIFICATIONS

Dial size	: DN100 / DN150
Range	: -1...0...1,600 bar
Mounting pattern	: Direct, Bottom connection
Process connection	: ½" NPT (M) / ½" BSP (M)
Ingress protection	: IP 65
Execution	: Dry
Switch	: Make contact (1NO)
Electrical termination	: 4 pin PG connector

### STANDARD PARAMETERS

Accuracy	: CL 1.5
Ambient Temperature	: -40...+65°C (without dampening liquid) : -20...+65°C (with dampening liquid)
Service Temperature	: 200°C max.
Pressure limits	: Steady pressure up to FS value : Fluctuating pressure up to 90% of FS value
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	: Polycarbonate dome

### MATERIAL OF CONSTRUCTION

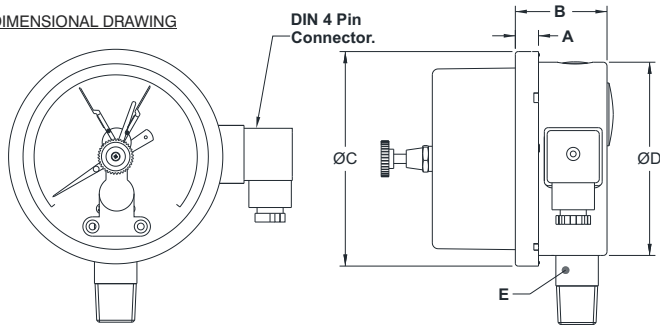
Window	: Polycarbonate dome
Dampening liquid	: Dielectric oil
Gaskets, Blow off disc & filling plug	: Viton

### TEMPERATURE EFFECT

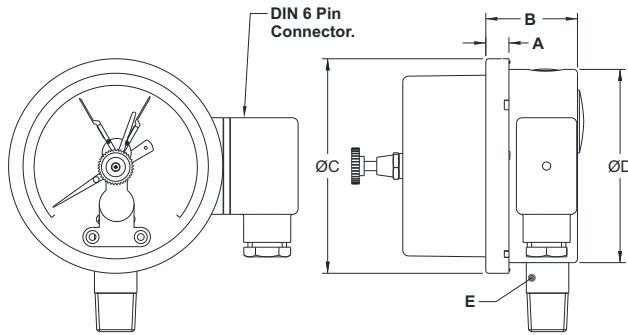
Please refer clause no 9.3 of EN 837-1

### DRAWING

DIMENSIONAL DRAWING

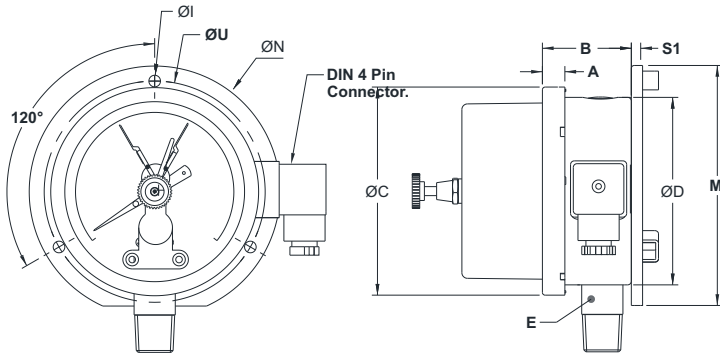


Type - 1A		
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
E	SQ.22	SQ.22
Weight (gm)	580	980

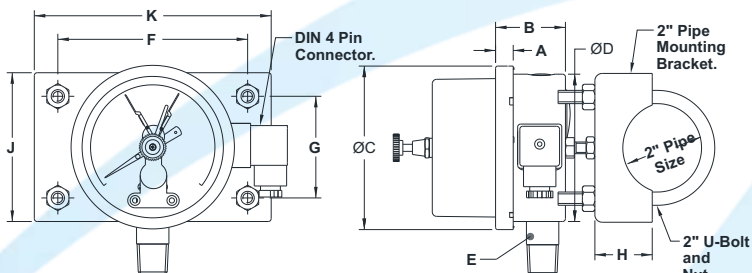


Type - 1A		
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
E	SQ.22	SQ.22
Weight (gm)	590	990

DIMENSIONAL DRAWING



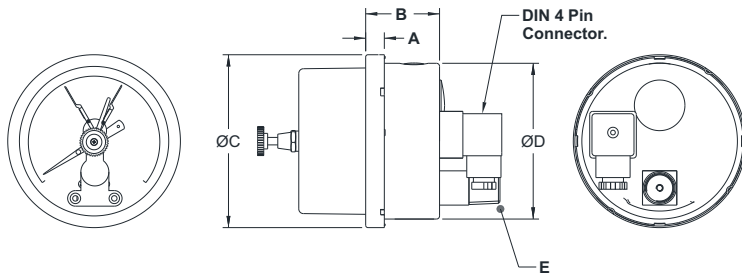
Type - 1B		
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
E	SQ.22	SQ.22
ØI	6	6
M	128	172.4
ØN	134	186
S1	6	6
ØU	118	168
Weight (gm)	687	1080



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)	1654	1994

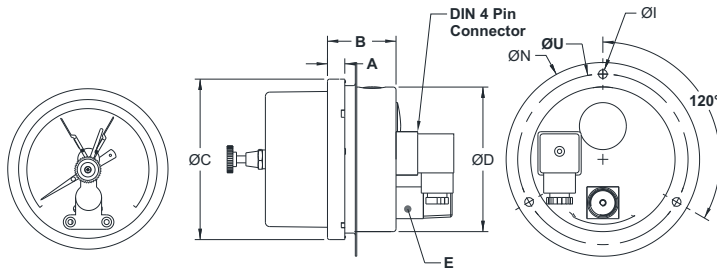
## DRAWING

DIMENSIONAL DRAWING



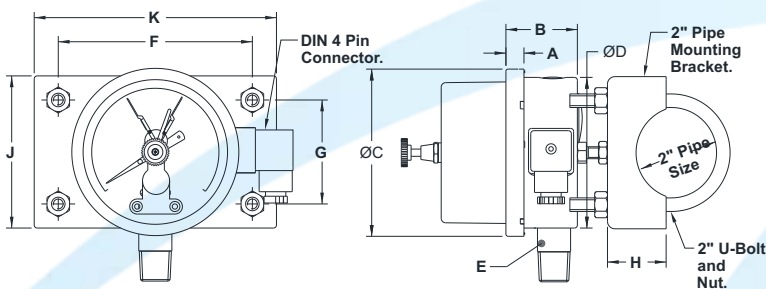
Type - 2E		
DN	100	150
A	12	15
B	48	48
∅C	111	161
∅D	100	149
E	SQ.22	SQ.22
Weight (gm)	580	980

DIMENSIONAL DRAWING



Type - 2F		
DN	100	150
A	12	15
B	48	48
∅C	111	161
∅D	100	149
E	SQ.22	SQ.22
∅I	6	6
∅N	134	186
∅U	118	168
Weight (gm)	654	1050

DIMENSIONAL DRAWING



Type - 2G		
DN	100	150
A	12	15
B	48	48
∅C	111	161
∅D	100	149
E	SQ.22	SQ.22
J	72	106.5
K	16	16
V	108	158.5
Weight (gm)	669	1070

All dimensions are in mm.

### ORDERING CODE

MP16 - D - XXX - 1A - 4NM - IP2 - E1 - ECO C - ECS1 - XX

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						
	Lower, Back connection		2E						
	Panel/Front flange mounting, Lower Back connection		2F						
	Panel/bracket mounting, Lower Back connection		2G						
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. <sup>1</sup>								
5. INGRESS PROCESS	IP 65				IP2				
6. EXECUTION	Dry					E1			
	Dry but fillable, dielectric oil <sup>3</sup>					E6			
	Dampening liquid, dielectric oil <sup>3</sup>					E7			
7. SWITCH CATEGORY	Economic contacts						ECO C		
	Precision contacts						PRE C		
8. ELECTRIC CONTACT <sup>2</sup>	Break contact (1NC)							ECS 1	
	Make contact (1NO)							ECS 2	
	2 x Break contact (2NC)							ECS 3	
	2 x Make contact (2NO)							ECS 4	
	1 Break + 1 Make (1NC+1NO)							ECS 5	
	1 Make + 1 Break (1NO+1NC)							ECS 6	
9. OTHER OPTIONS	Case & Ring in AISI 316 SS (1A)	AA	AISI 316 SS movement	FL	Material test certificate 3.1				SC
	Case & Ring in AISI 316 SS (1B)	AB	Dampened movement	FM	Material test certificate 2.2				SM
	Case & Ring in AISI 316 SS (1C)	AC	6 pin, M20x1.5mm connector	F6	Tested to NACE standards				SN
	Case & Ring in AISI 316 SS (2E)	AK	Earth terminal	F7	Certification for oxygen service				SO
	Case & Ring in AISI 316 SS (2F)	AL	Monel wetted parts	LN	SS tag plate, AISI 304 SS				WF
	Case & Ring in AISI 316 SS (2G)	AM	Rubber parts, Viton	QA	SS tag plate, AISI 316 SS				WG
	Dampening screw, Monel	DM	Vent plug, ON-OFF type	QW	Custom designed dial				WR
	Dampening screw, AISI 316 SS	DN	5 - point calibration certificate	SA	Dial tag marking				WT

Ordering Example: **MP16 - D - XXX - 1A - 4NM - IP2 - E1 - ECO C - ECS1 - XX**

- For other connections, please contact factory.
- Economic contacts & Precision contact are available in Electric contact types ECS1...ECS6 .
- Rubber parts shall be in Viton.