

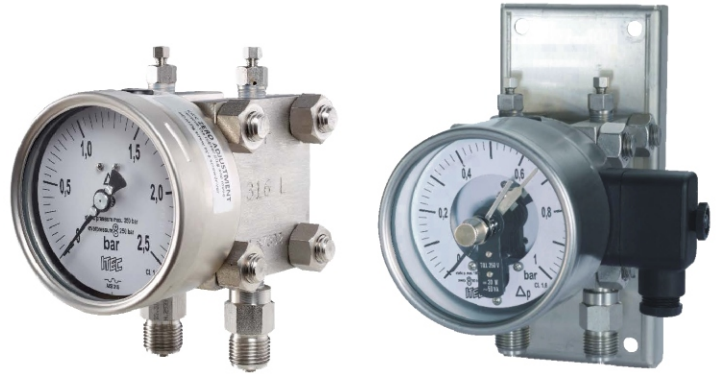
## FEATURES

- Single side static sustainable
- Static pressure 400 bar max.
- External Zero adjustment
- Electric contact version
- Dry / liquid filled
- ATEX certified

## APPLICATION

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

### Double Diaphragm (Old Model code : DP 800 & DP 800 CE)



#### STANDARD PARAMETERS

Accuracy <sup>1</sup>	: CL 1.6 (AISI 316L SS / Hastelloy C276) : CL 2.5 (Monel 400)
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 / 250 bar / 400 bar
Over-pressure safety	: 400 bar for ranges 0...0.4 bar up to 0...40 bar
Zero shift	: Max. ± 2% 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 316 SS (Bayonet type)
Diaphragm	: AISI 316L SS
Chamber	: AISI 316L SS
Fastener	: AISI 304 SS ( PN 100 bar max.) : Alloy steel zinc flake coated, RoHS complaint (PN 250 bar and PN 400 bar)
Movement mechanism	: Stainless Steel with ball bearing
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 316L SS

#### STANDARD SPECIFICATIONS

Dial size	: DN100 / DN160
Range	: 0...60 mbar (gauge body DN 140) : 0...100 to 0... 250 mbar (gauge body DN 100) : 0...0.4 to 0...40 bar (gauge body DN 88)
Mounting pattern	: Direct, Bottom connection
Process connection	: 1/4" NPT (F) x 2 Nos.
Ingress protection	: IP 65 - EN 60529 / IEC 529
Execution	: Dry

#### TEMPERATURE EFFECT

When temperature of the measuring system deviates from reference temperature (+20°C) max error ±0.6% / 10K of true scale value.

#### NOTES

1. At 20°C and Zero static pressure.

## REFERENCE



EN 837-3

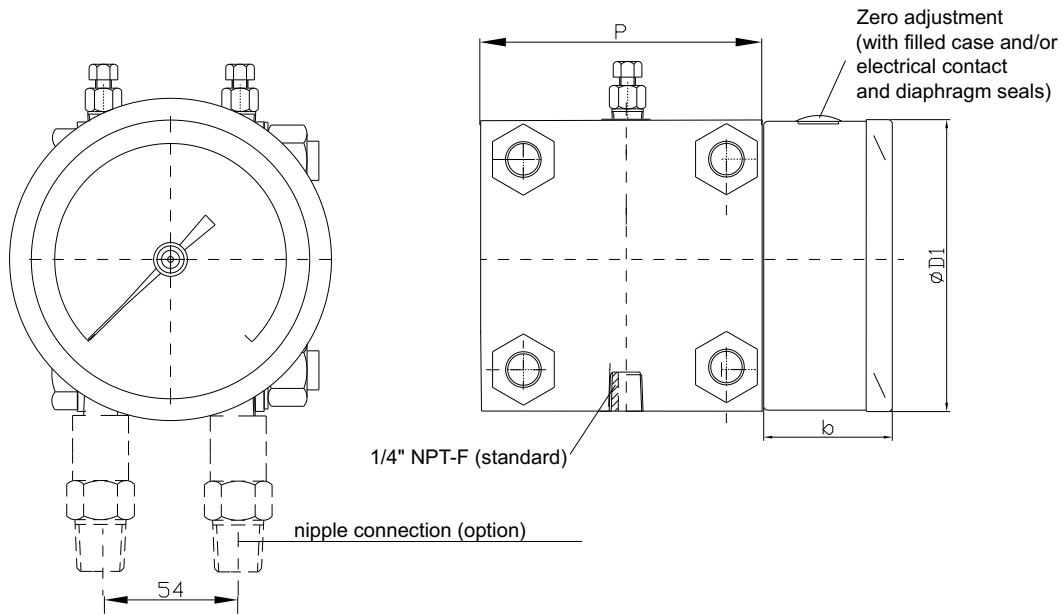
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**STANDARD SPECIFICATIONS : DAMPENING LIQUID FILLED, GLYCERIN OR SILICON OIL**

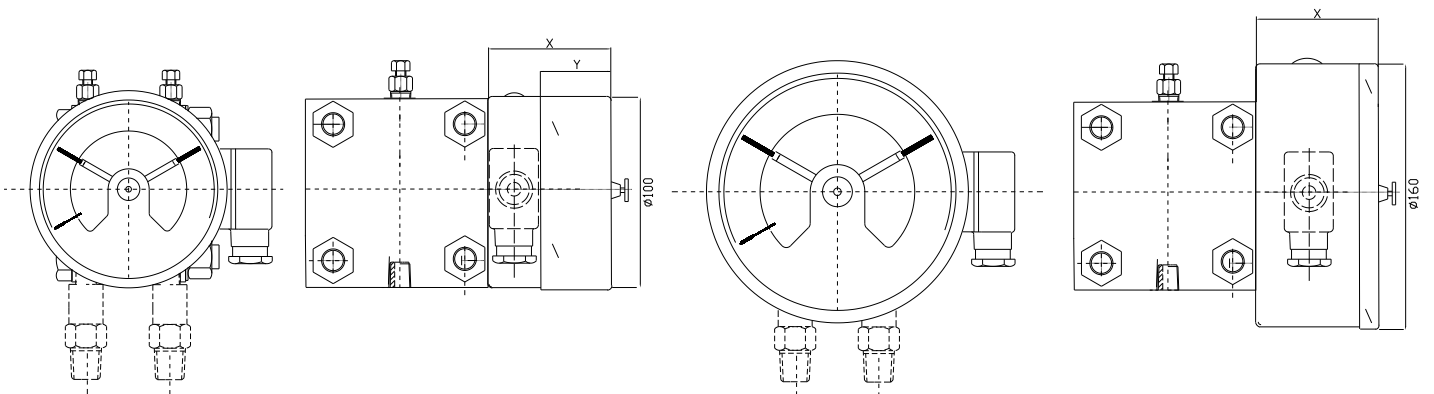
Accuracy	:	CL 2.5
Window	:	Shatterproof safety glass
Dampening liquid	:	Glycerin 99.7% / Silicon oil 47V50

**DIMENSIONAL DRAWING**

**Type B0**



DN	Range mbar	P□ (PN40/100)	P□ (PN250)	P□ (PN400)	b	D1
100	≤160	140	-	-	51	100
100	250	100	100	-	51	100
100	≥400	88	88	100	51	100
160	≤160	140	-	-	51	160
160	250	100	100	-	51	160
160	≥400	88	88	100	51	160

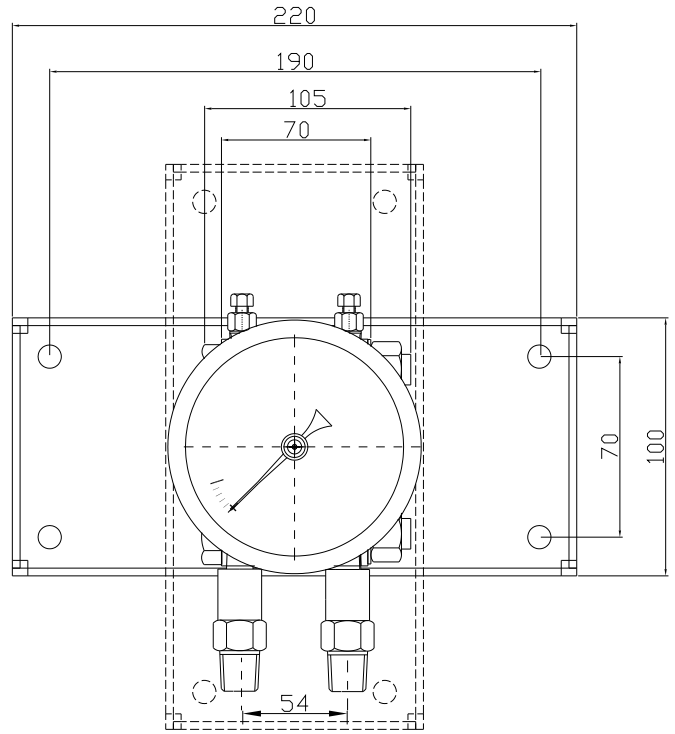
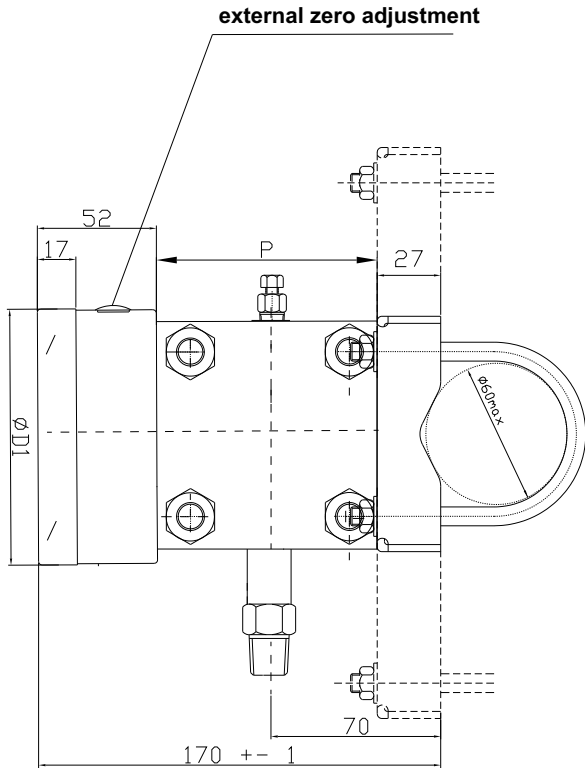


DN	Type of contact	X	Y
100	Single or double contact / SPDT	100	60
160	DPDT	110	-
160	Single or double contact / SPDT	102	-

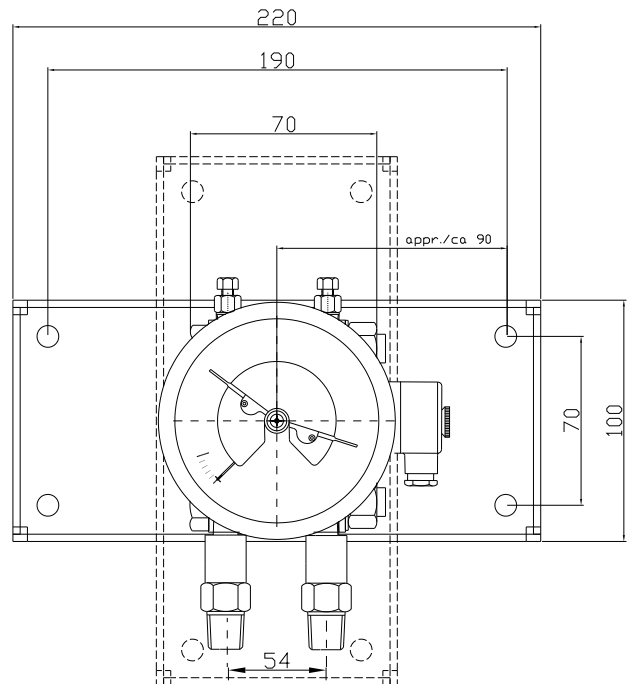
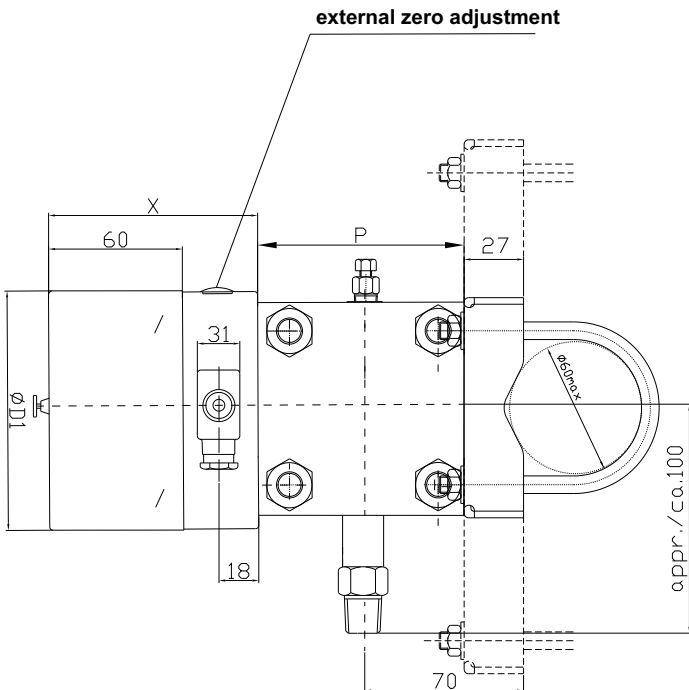
All dimensions are in mm.

DIMENSIONAL DRAWING

Type B2



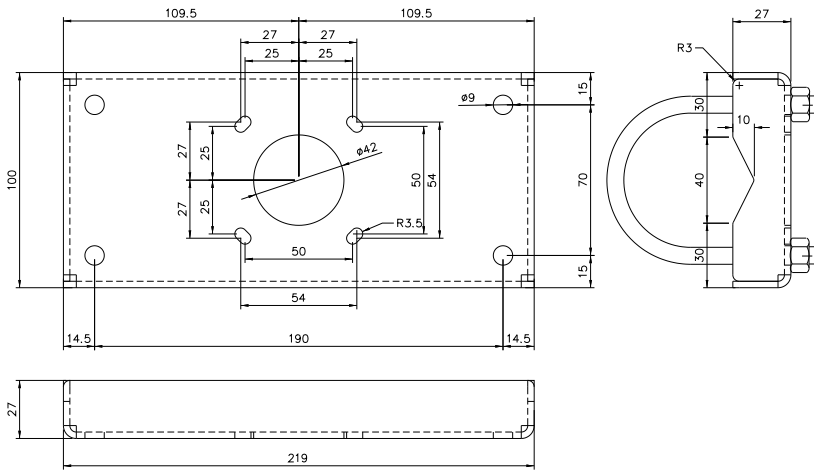
Type B2  
With Electric Contact



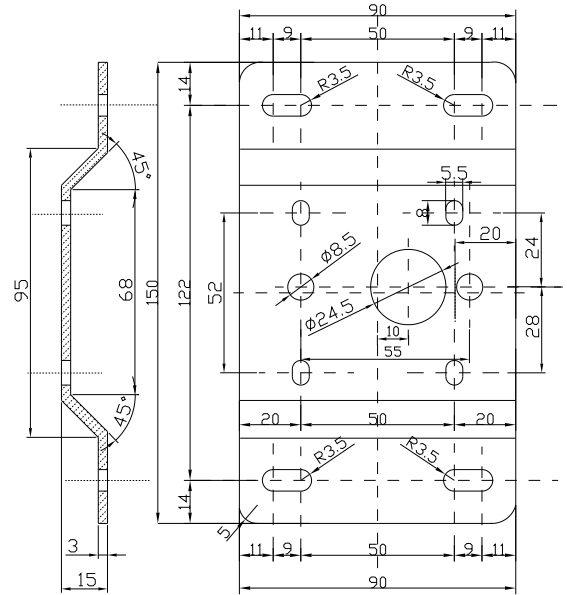
All dimensions are in mm.

DIMENSIONAL DRAWING

2" pipe bracket



Back flange surface mounting

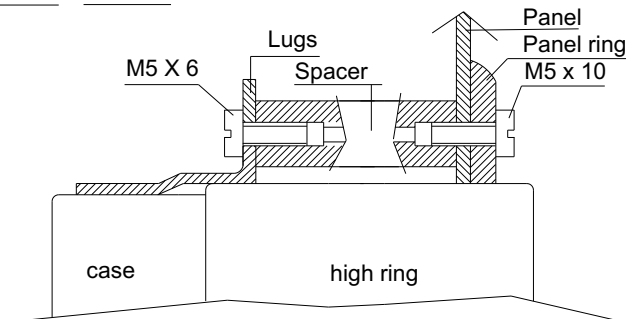
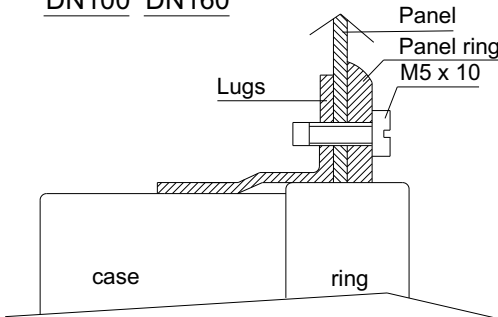


Panel Mounting (\*)

Panel Mounting with electrical contacts (\*)

DN100 DN160

DN100 DN160

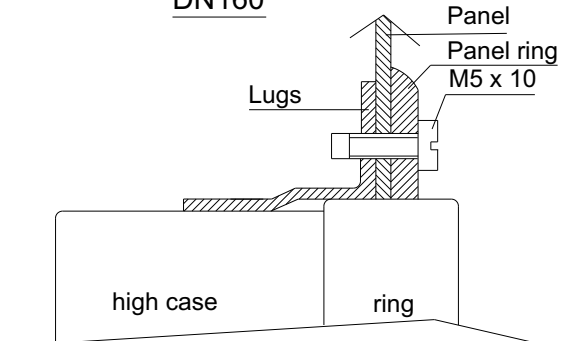


The assembly consist of:  
Panel ring  
4 screws M5

The assembly consist of:  
Panel ring  
4 spacers  
8 screws M5

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

DN160

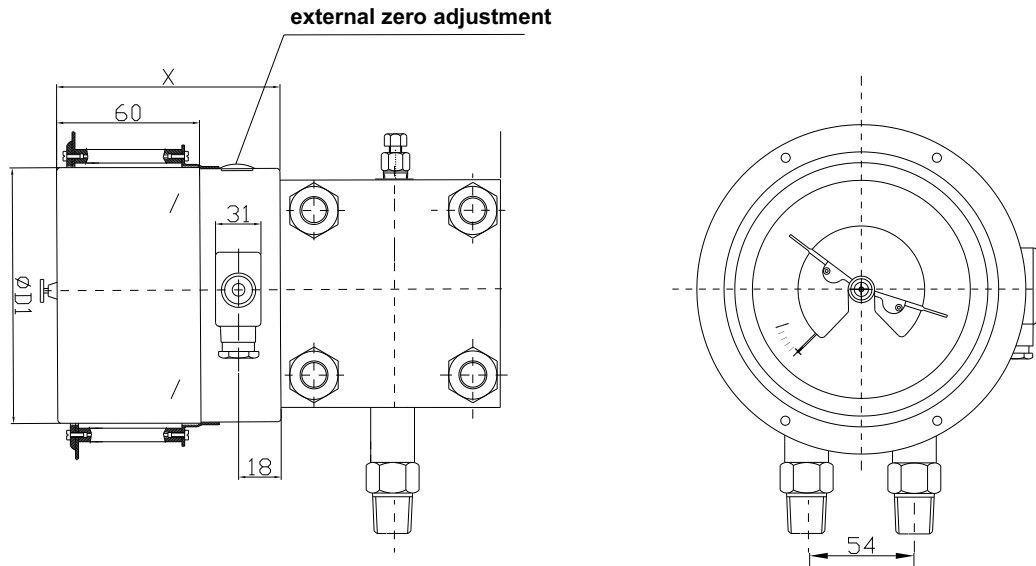


The assembly consist of:  
Panel ring  
4 screws M5

All dimensions are in mm.

DIMENSIONAL DRAWING

Type B3



All dimensions are in mm.

STANDARD SPECIFICATIONS : ELECTRIC CONTACT VERSION

Accuracy	:	CL 2.5
Window	:	Shatterproof Safety Glass, 4mm thickness
Switch	:	1NO; Make contact
Dampening liquid	:	Dielectric oil (Optional)

ELECTRIC CONTACT DETAILS

Switch type	Contacts	Action	Rating	Code
Normally closed (1NC)	Single	Break contact	230VAC/1A; 48VDC/0.5A	CD1
Normally open (1NO)	Single	Make contact	230VAC/1A; 48VDC/0.5A	CD2
Normally closed (2NC)	Double	Break contact	230VAC/1A; 48VDC/0.5A	CD3
Normally open (2NO)	Double	Make contact	230VAC/1A; 48VDC/0.5A	CD4
Normally closed + Normally open (1NC+1NO)	Double	Break contact + Make contact	230VAC/1A; 48VDC/0.5A	CD5
Normally open + Normally closed (1NO+1NC)	Double	Make contact + Brake contact	230VAC/1A; 48VDC/0.5A	CD6
SPDT	Single		230VAC/1A; 48VDC/0.5A	CD7
DPDT	Double		230VAC/1A; 48VDC/0.5A	CD8
Normally closed (1NC)	Single	Break contact	220VAC/0.4A	C11
Normally open (1NO)	Single	Make contact	220VAC/0.4A	C12
Normally closed (2NC)	Double	Break contact	220VAC/0.4A	C13
Normally open (2NO)	Double	Make contact	220VAC/0.4A	C14
Normally closed + Normally open (1NC+1NO)	Double	Break contact + Make contact	220VAC/0.4A	C15
Normally open + Normally closed (1NO+1NC)	Double	Make contact + Brake contact	220VAC/0.4A	C16

NOTES

1. Codes starts with "CD" denomination are magnetic contacts and "CI" are Inductive contacts.
2. Inductive contacts are ATEX approved.

## ORDERING CODES

### 1. DIAL SIZE

<b>04</b>	100 mm / 4"
<b>06</b>	160 mm / 6"

04

### 2. RANGE

<b>XXX</b>	Refer "Range Table"
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XXX

### 3. MOUNTING PATTERN

<b>B0</b>	Direct, Bottom connection
<b>B1</b>	Wall/Surface/Projection mounting, Bottom connection
<b>B2</b>	2" Pipe/Yoke mounting, Bottom connection
<b>B3</b>	Panel/Front flange mounting, Bottom Connection

B0

### 4. PROCESS CONNECTION

<b>02N</b>	1/4" NPT (F) x 2 Nos.
<b>13B</b>	3/8" BSP (M) x 2 Nos.
<b>14B</b>	1/2" BSP (M) x 2 Nos.
<b>14M</b>	M20 X 1.5 mm (M) x 2 Nos.
<b>14N</b>	1/2" NPT (M) x 2 Nos.

02N

\* Male threads through adaptors

### 5. INGRESS PROTECTION

<b>ER</b>	IP 65
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ER

### 6. EXECUTION

<b>EA</b>	Dry
<b>EB</b>	Dry but fillable
<b>EF</b>	Dry but fillable, dielectric oil <sup>2</sup>
<b>EK</b>	Dampening liquid, dielectric oil <sup>2</sup>

EA

### 7. STATIC PRESSURE

<b>040</b>	40 bar
<b>100</b>	100 bar
<b>250</b>	250 bar
<b>400</b>	400 bar

040

### 8. SWITCH CATEGORY

<b>RS</b>	Precision contacts (magnetic)
<b>RT</b>	ATEX / CE approved contacts (inductive)

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### 9. ELECTRIC CONTACT

<b>CD1</b>	Break contact (1NC)
<b>CD2</b>	Make contact (1NO)
<b>CD3</b>	2 x Break contact (2NC)
<b>CD4</b>	2 x Make contact (2NO)
<b>CD5</b>	1 Break + 1 Make (1NC+1NO)
<b>CD6</b>	1 Make + 1 Break (1NO+1NC)
<b>CD7</b>	SPDT
<b>CD8</b>	DPDT
<b>CI1</b>	Break contact (1NC)
<b>CI2</b>	Make contact (1NO)
<b>CI3</b>	2 x Break contact (2NC)
<b>CI4</b>	2 x Make contact (2NO)
<b>CI5</b>	1 Break + 1 Make (1NC+1NO)
<b>CI6</b>	1 Make + 1 Break (1NO+1NC)
<b>CI9</b>	Booster relay for current up to 5A

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### 10. OTHER OPTIONS

<b>DM</b>	Monel diaphragm
<b>DO</b>	Hastelloy C-276 diaphragm
<b>GW</b>	Maximum reading pointer
<b>GZ</b>	External zero adjustment (Standard for filled versions)
<b>NM</b>	Monel chambers
<b>NO</b>	Hastelloy C-276 chambers
<b>OF</b>	Food grade oil filled chamber
<b>TA</b>	5 - point calibration certificate
<b>TC</b>	Material test certificate 3.1
<b>TM</b>	Material test certificate 2.2
<b>TN</b>	Tested to NACE standards
<b>TO</b>	Certificate of Oxygen service
<b>TX</b>	ATEX certificate
<b>XF</b>	SS tag plate
<b>XR</b>	Custom designed dial
<b>XT</b>	Dial tag marking

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**Ordering Example : P301-04-XXX-B0-02N-ER-EA-040**

## COMPATIBLE ACCESSORIES

- Diaphragm seal
- 5 Valve Manifolds
- 3 Valve manifolds

### NOTES

- For other connections, please contact factory.
- Rubber parts shall be in Viton.

**P3-06** [www.itec.it](http://www.itec.it)

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