### ALL SS PRESSURE GAUGE



### **ELECTRIC CONTACT TYPE**

# Model - PJ

#### Special Features :

- Stainless Steel case & measuring system
- Filled version available
- Standard followed in general EN 837-1

#### Applications:

- To control the electric operation of compressors
- Pumps, Motors & Presses
- Hydraulic & Pneumatic Equipments
- Chemicals & Petrochemicals Plant

#### **Specifications**

#### STANDARD VERSION: 100mm & 150mm

Accuracy :  $\pm 1.0\%$  of F.S Ambient temperature : -25°C to +65°C Process Temperature : Max. 100°C

Electric Wiring : DIN Connector

Contact Setting : Over on arc of 270°C through a knob placed on front of lens

Operating Pressure Range : 75% of the Scale Value

Over pressure limit : Not Suitable

Case & Bezel : AISI 304 SS (Bayonet Type)

Bourdon : AISI 316L SS

Socket : AISI 316L SS (Directly Welded to Case)

Movement : AISI 304 SS

Joints : Tig Argon Arc Welding

Protection : IP 65

Dial : Aluminium, black graduation on white background

Pointer : Aluminium, Black coloured, Micrometer Zero Adjustable

Window : Polycarbonate Dome

Electrical Contacts\* : Refer Selection of Model

Blow off Disc : Neoprene

Gasket : Neoprene

#### DIELECTRIC OIL FILLED VERSION (OPTION DF)

Accuracy : ± 1.6% of F.S.

Ambient temperature : Maximum 65℃

Process Temperature : +15°C / 65°C

Window : Polycarbonate Dome

Blow off Disc\* : NBR

Gasket & Filling Plug\* : NBR

Dampening Liquids : Dielectric Oil

Other Features : Refer Specification of Standard Version

<sup>\*</sup>Please specify contact set points while ordering.

<sup>\*</sup>Blow off Disc, Gasket & Filling Plug of Viton.

#### Temperature effect:

The variation of indication caused by effects of temperature is to be calculated by below formula;

which is to be added in the specified accuracy while measurement :- Formula :

 $\pm$  0.04 x (t2 - t1) % of F. S. where t1 = reference temperature (+20°C) and t2 = ambient temperature in °C...

Note: The addition of Mechanical electric contacts affects the accuracy of Instruments such as 1% becomes 1.5%,

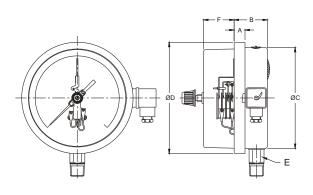
1.6% becomes 2.4% etc..

### **DIMENSIONS: - FOR STANDARD MODEL**

#### TYPE 11 TYPE 14 TYPE 21 TYPE 22 TYPE 23

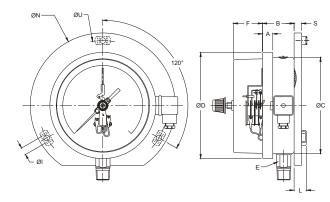
DRAWING OF MODEL (TYPE WISE)

**TYPE 11 - DIRECT BOTTOM ENTRY** 



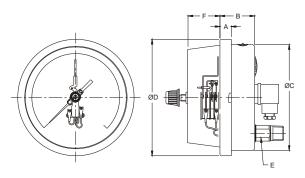
Size	Α	В	ØС	ØD	Е	F
100	12.5	47	100	111	22	44
150	15	49	149	161	22	44

TYPE 14 - WALL / SURFACE WITH BOTTOM ENTRY



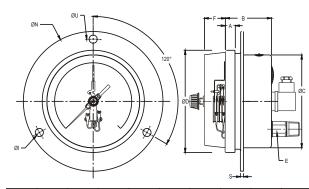
Size	Α	В	ØС	ØD	Е	F	ØI	ØN	ØU	L	S
100	12.5	45	100	111	22	44	6	134	118	14.5	6
150	15	46.5	149	161	22	44	6	186	118	14.5	6

**TYPE 21 - DIRECT LOWER BACK ENTRY** 



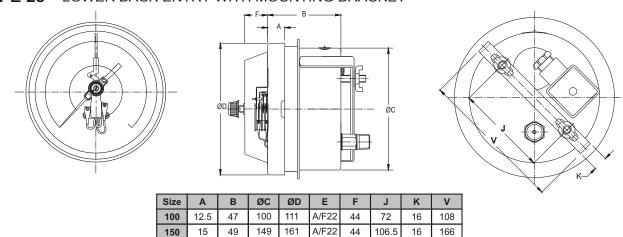
Size	Α	В	ØС	ØD	Е	F
100	12.5	47	100	111	22	44
150	15	49	149	161	22	44

TYPE 22 - LOWER BACK ENTRY WITH FRONT FLANGE



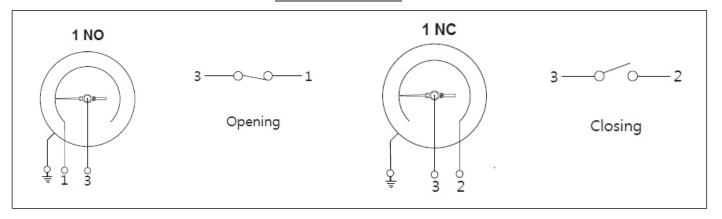
Size	Α	В	ØС	ØD	Е	F	ØI	ØN	Øυ
100	12.5	47	100	111	A/F22	44	6	134	118
150	15	49	149	161	A/F22	44	6	186	118

TYPE 23 - LOWER BACK ENTRY WITH MOUNTING BRACKET

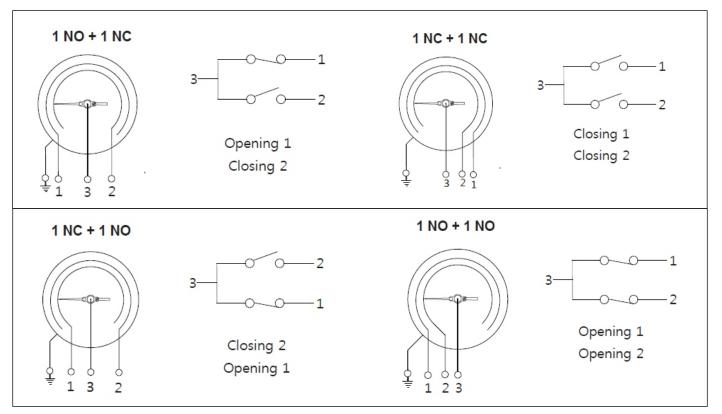


## WIRING DIAGRAMS FOR ELECTRIC CONTACTS

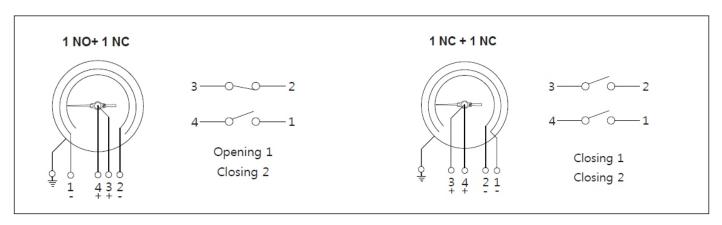
#### **SINGLE CONTACT**



#### **DOUBLE CONTACT**



#### **INDEPENDENT DOUBLE CONTACT**



## **SELECTION OF MODEL**

#### (1) MODEL CODE

#### (2) DIAL SIZE

Dial Size	Code
100	4
150	5

#### (3) MOUNTING TYPE

Mounting Type	Code
DIRECT BOTTOM ENTRY	11
WALL / SURFACE / PROJECTION MOUNTING WITH BOTTOM ENTRY	14
DIRECT LOWER BACK ENTRY	21
DIRECT LOWER BACK ENTRY WITH FRONT FLANGE	22
LOWER BACK ENTRY WITH MOUNTING BRACKET	23

#### (4) ELECTRICAL CONTACTS (CE & Atex Approved)

# 1) Single insulated magnetic snap action type (230 V AC, 1 Amp.)(48 V DC, 0.5 Amp.)

SJ Single: Normally Closed (1NC)
SK Double: Normally Closed + Normally Open (1NC + 1NC
SL Single: Normally Open (1 NO)
SM Double: Normally Open + Normally Closed (1NO + 1NC
SN Double: Normally Closed (both NC)
SO Double: Normally Open (both NO)
SU Booster with relay for Current upto 5 Amp.
SA SPDT
SC DPDT

#### 2) Inductive type (230 V AC, 0.4 Amp.)

IW	Single: Normally Open (1 NO)
IV	Single: Normally Closed (1NC)
IX	Double: Normally Closed + Normally Open (1NC + 1NO)
IY	Double: Normally Open (both NO)
ΙZ	Double: Normally Closed (both NC)
IA	Double: Normally Open + Normally Closed (1NO + 1NC)

#### (5) GAUGE CONNECTION SIZE

1/4" NPT (M)	2NM
1/2" NPT (M) (STD)	4NM
3/8" BSP(M)	3BM

4BM
4TM
4MM

Note:- OTHER OPTIONS WILL BE PROVIDED ON REQUEST. CONSULT FACTORY FOR MORE DETAILS

#### (6) RANGE

#### REFER TO THE FOLLOWING TABLE

Kg/cm <sup>2</sup>
0 - 1.6 kg/cm <sup>2</sup>
0 - 2.5 kg/cm <sup>2</sup>
0 - 4 kg/cm <sup>2</sup>
0 - 6 kg/cm <sup>2</sup>
0 - 7 kg/cm <sup>2</sup>
0 - 10 kg/cm <sup>2</sup>
0 - 16 kg/cm <sup>2</sup>
0 - 21 kg/cm <sup>2</sup>
0 - 25 kg/cm <sup>2</sup>
0 - 28 kg/cm <sup>2</sup>
0 - 40 kg/cm <sup>2</sup>

Kg/cm <sup>2</sup>
0 - 60 kg/cm <sup>2</sup>
0 - 70 kg/cm <sup>2</sup>
0 - 100 kg/cm <sup>2</sup>
0 - 160 kg/cm <sup>2</sup>
0 - 200 kg/cm <sup>2</sup>
0 - 250 kg/cm <sup>2</sup>
0 - 280 kg/cm <sup>2</sup>
0 - 400 kg/cm <sup>2</sup>
0 - 600 kg/cm <sup>2</sup>
0 - 700 kg/cm²
0 - 1000 kg/cm <sup>2</sup>

Kg/cm <sup>2</sup>
0 - 1600 kg/cm <sup>2</sup>
-1 - 5 kg/cm <sup>2</sup>
-1 - 9 kg/cm <sup>2</sup>
-1 - 15 kg/cm <sup>2</sup>

(Othe Pressure UNIT like Bar, kPa, MPa, psi, kg/cm2 or Dual Scale like kg/cm2 with psi, kPa with bar, bar with psi ,etc will be provided on request)

#### (7) OPTIONS

DC CUSTOM DESIGNED DIAL	DB INTEGRAL DAMPENING SCREW (316 SS)
TS SS TAG PLATE	CC FIVE POINT CALIBRATION CERTIFICATE
<b>DF</b> DIELECTRIC OIL FILLED	HT HELIUM LEAK TEST
	MC MATERIAL TEST CERTIFICATE

Example	1	2	3	4	5	6	7
SELECTION OF MODEL	PJ	4	11	xx	4NM	0-7 kg/cm²	xx

PJ

4

11

XX

4NM

0-7 Kg/Cm<sup>2</sup>

XX