



**Gas pressure monitor with low and high alarm contact**

**1.0 Application:**

The gas pressure monitor will be used for monitoring of SF<sub>6</sub> gas pressure to be used in Gas Insulated Switchgear.

**2.0 Specification**

SF<sub>6</sub> Gas Density monitors (Pressure Gauge) with Bourdon tube.  
 Temperature compensated Type  
 Casing with bayonet bezel of stainless steel – SS 304  
 With 3-hole back flange for surface mounting  
 Window of laminated safety glass  
 Bourdon tube in stainless steel 316  
 Accuracy 1.0% of fsd at -20°C.  
 And +/-2.5% of fsd for range -40 to +60°C.  
 With alarm contacts magnetic snap action  
 Double contacts type  
 Contact 1: for Alarm :0.8 bar (contact is falling making )  
 Contact 2: for Lockout :0.7 bar (contact is falling making )  
 Hysteresis for rise in pressure 2 - 4%  
 Contact rating : 30 W/50 VA, max 1A  
 Material of contacts : 80% Ag + 20% Ni + 10 micron gold plated  
 High voltage test : 2 kV, 50 Hz , 1s  
 Dial: Aluminum ,red-green-yellow section  
 Pointer: Black aluminum pointer  
 Case: Stainless steel with gas filling  
 Gas tight: Leakage rate <1 x10<sup>-5</sup> mbar l/s  
 Ingress protection : IP 65  
 Bottom connection: ¼ " BSP

**3.0 Dial marking**

Red arc: less than 0.8 bar  
 Yellow arc : 0.8 bar to 1.2 bar  
 Green arc: beyond 1.2 bar EL  
 Filling pressure : 1.2 bar  
 Calibration pressure :1.2 bar

**4.0 Range**

-1 to 2 Bar (i.e.-14.5 to 29 psi or-100 to 200 kPa)

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<b>REV.</b>		<b>PRINTS TO:-</b>		<b>APPROVED –</b>		
<b>ALTD.</b>		RPD		HRP		
<b>APPD.</b>		SWM(P)	1	<b>PREPARED</b>	<b>ISSUED</b>	<b>DATE</b>
<b>DATE.</b>		SWM(shop)	1			
		SWM(TC Assy)	1	DJ	APS	14.11.12
		QCX	1			



**PRODUCT STANDARD**  
SWITCHGEAR ENGINEERING DIVISION

SG 16031 REV.00

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**Acceptance Criteria**

**(A) For Sample:** Supplier should submit one no. sample and shall start bulk manufacturing only after approval of sample by BHEL. Criteria for sample approval are –

- Dimensional verification as per drawing approved by BHEL.
- Operational verification for measurement of SF6 gas pressure on actual assembly
- Leak test :

Sample shall be tested for SF6 gas leakage by mounting it on switchgear assembly with 1 Bar SF6 gas pressure. No leakage should be observed at the coupling joint.

- Verification of the Electrical contacts.

**(B) For Lot**

- Dimensional verification as per BHEL approved drawing.

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