

Temperature compensated pressure switch –Liquid Free Type–



The newly evolved temperature compensated switch
The newly evolved temperature compensation switch has arrived. This is installed in Gas Insulated Switchgear (GIS) and Gas Circuit Breaker (GCB) of nuclear / thermal / hydraulic power stations to monitor the pressure and density of SF₆ gas which is an electric insulating medium. This new model is liquid-free and light weight at a more reasonable price.

◆ Features of this product

1. Automatic compensation for pressure change due to temperature

This product is equipped with a function to compensate pressure change of SF₆ gas due to temperature by bimetal. This temperature compensating mechanism enables proper detection of a pressure drop due to SF₆ gas leakage.

2. Complete removal of liquid leakage risks

With the inert liquid filled in the switch, high lubrication, anti-corrosion, and anti-vibration effects are improved in the internal mechanism with the standard model. The liquid free model is designed to enclose nitrogen gas in place of liquid and adopt an even more specialized internal mechanism giving it nearly the same capacity as the standard model.

3. Simple installation and removal through weight reduction

The case and other materials have been reconsidered to realize a reduction in weight. (Standard model: 1.7kg → Liquid free model: 1.35kg)

4. Improvements to the working properties of wiring

The working properties of wiring have been improved by enlarging the terminal box and terminal screw dimensions.

◆ Example for setting pressure

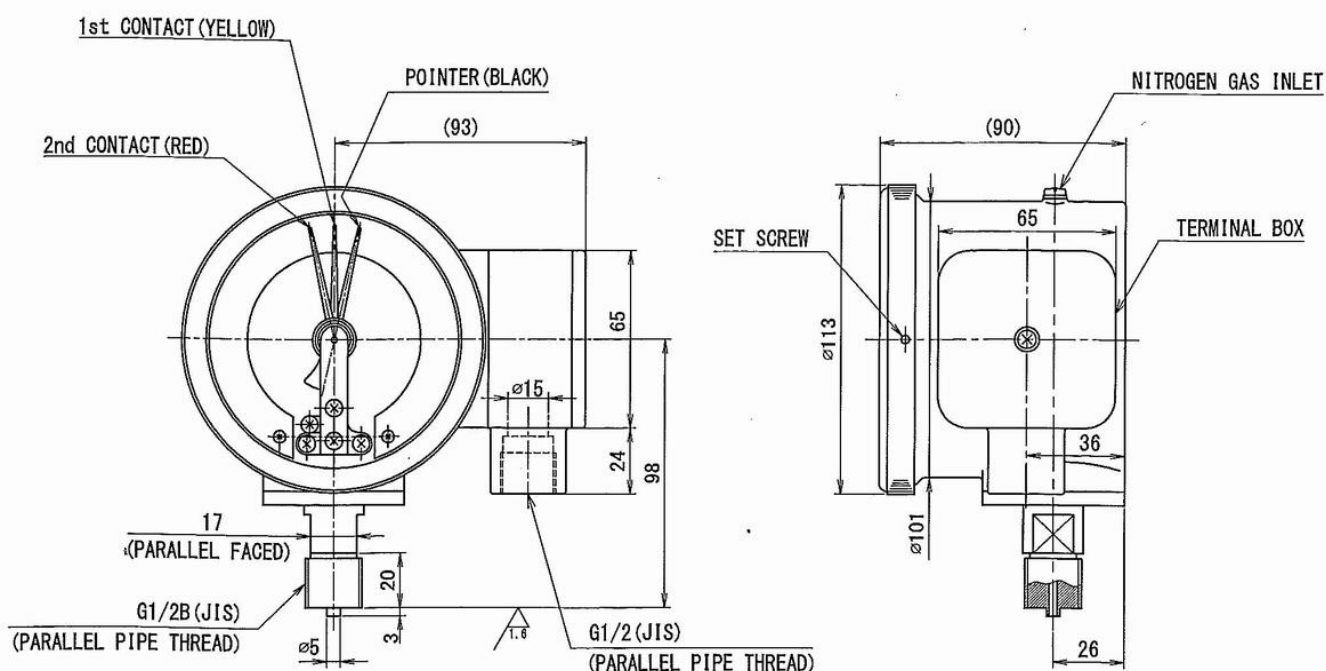
Unit: kgf/cm² Setting temperature: 20°C

Rated pressure	1st contact (lower limit)	2nd contact (lowest limit)
3.5	3.0 ±0.2	2.5 ±0.2
5.0	4.5 ±0.2	4.0 ±0.2
5.5	5.0 ±0.2	4.5 ±0.2
6.0	5.5 ±0.2	5.0 ±0.2

◆ Main specifications

1) Ambient temperature	-20°C ~ +40°C
2) Temp. compensation range	-20°C ~ +60°C
3) Indication accuracy	±1% F.S. (at +20°C)
4) Scale range (example)	- 76cmH ~ 10 kgf/cm ²
5) Contact mechanism	Magnet assist type (2 lower limits)
6) Contact capacity	more than 0.05A at 250V AC, more than 0.1A at 125V AC (inductive breaking current) more than 0.13A at 250V DC, more than 0.26A at 125V DC (non-inductive breaking current)
7) Max. allowable gas leakage	1 × 10 ⁻⁹ Pa·m ³ /s or less
8) Operating environment	Both indoors and outdoors
9) Weight	Approx. 1.35 kg

◆ External dimensions



For further information:

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