

ZMJ100P Density Monitor



Description

ZMJ100P Density Monitors are used to monitor SF₆ gas density in sealed tanks. They are applied to indicate gas density and to provide signal outputs when the density reaches preset threshold values. They are designed to monitor High Voltage systems. They can provide multiple solutions to support new substations and the renovation and upgrading of existing substations.



ZMJ100P Density Monitor

Features

- With temperature compensation, ensuring higher measuring accuracy.
- Suitable for indoor or outdoor installation.
- AISI 304 hermetically sealed stainless steel case.
- Gas line connecting parts are made of AISI 316 stainless steel.
- The on-screen display value and output signals are immune from the impact of external environment, such as altitude.
- Electric contact switch design can ensure the precise and stable SF₆ gas density monitoring.
- Up to 4 sets of switch contacts can achieve over-pressure alarm, dual alarm or double locking and many other options, making the monitoring more secure and reliable.

Application

- SF₆ Gas Insulated Switchgear (GIS)
- SF₆ Insulated Circuit Breakers
- SF₆ Insulated Pole-Mounted Switch
- SF₆ Insulated Transformers
- SF₆ Insulated Current Transformers or Voltage Transformers
- SF₆ Insulated Busbar Systems

Options

- Oil-filled
- Withstand voltage: 2.5kV 50/60 Hz, 1min
- Wide temperature range : Optional -40 °C ~ +60 °C or -60 °C ~ +60 °C
- Measuring medium: SF₆, Air, N₂, SF₆+N₂ and other gases
- Optional measurement accuracy: ±1.6%FS(+20±1°C), ±2.4%FS (-20°C~ +60°C) (gas phase)

Technical Parameters

Case diameter	100mm
Scale range	-0.1 ~ 0.9MPa (customizable)
Accuracy	±1.0%FS (+20±1°C) , ±1.8%FS (-20°C~ +60°C) (gas phase)
Degree of protection	IP65
Ambient conditions	-20° C ~ +60° C, relative humidity ≤ 95%RH
Leakage rate	≤ 1×10 ⁻⁹ Pa·m ³ /s(Helium leakage inspection)
Process connection	M20 × 1.5, (customizable)
Installation method	Radial or Axial
Electrical connection	Plug-in connection M20 X 1.5 sealing head cable size: 1.5mm ² recommended, upper limit 2.5mm ²
Insulation properties	Insulation resistance: >100 MΩ (500 V DC) Withstand voltage: 2kV, 50/60 Hz, 1min
Contact type	Magnetic snap-action switch 80%Ag, 20%Ni, 10μm Gold plated
Impact rating	50g (oil-filled), 30g (non-oil-filled)
Contact electrical parameters	30W/50VA, 1A (upper limit) 220VDC/380V 50/60Hz (upper limit)
Watch glass	Laminated safety glass
Weight	≈ 1.0kg
Pressure element	Bourdon tube

Dimensions

