

# Density monitoring system

## Model: P580 series

Spec. sheet no. PD05-09

EAC

### Service intended

P580 series are designed to monitor the gas density of closed SF<sub>6</sub> tank (for switchgear). It is capable of the measuring real time status of SF<sub>6</sub> gas density. These series are equipped with the relay contact which has the three configurable independent units to sense and measure the instantaneous pressure rise.

### Display

Analog indicator, operation and alarm status LED

### Accuracy

±1.0 % at ambient temperature +20 °C (Indicator)  
±2.5 % at ambient temperature -20 °C / +60 °C (Indicator)  
±0.25 % at ambient temperature 0 °C ~ +50 °C (Current output)

### Scale range

-0.1 ~ 0.1 MPa to -0.1 ~ 1.2 MPa

### Working temperature

Ambient : -20 ~ 65 °C (Gas phase)  
Storage : -50 ~ 60 °C maximum

### System configuration

HART communication

### Degree of protection

EN60529/IEC529/IP67



## Standard features

### Mechanical

#### Pressure connection

Stainless steel (316SS)

#### Element

Stainless steel (316SS)  
C-type bourdon tube

#### Case and cover

Stainless steel (304SS)  
Bayonet type

#### Window

Safety glass

#### Movement

Stainless steel (304SS)  
Bimetal link (Temperature compensation)

#### Pointer

Black painted aluminium alloy

#### Process connection

G $\frac{1}{2}$ "

#### Helium leak rate

Tested to confirm leakage rates of less than  
10<sup>-8</sup> mbar.L/sec

### Electrical

#### Input power and current consumption

12 ~ 36 V DC input, Max. 60 mA@DC 24 V

#### Display

Operating and alarm status LED

#### Parameter input

HART configurator

#### Output

Current output (4 ~ 20 mA, DC)  
One instantaneous pressure rising alarm relay  
Three pressure limit alarm relay

#### Relay contact rate

Contact resistance : Max. 70MΩ  
Contact rating : 2 A 30 VDC, 0.5 A 125 DC (Res.load)  
Max switching voltage : 220 VDC / 250 VAC  
Max switching power : 60 W / 62.5 VA

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| P580\_01

**1. Base model**

**P580** Gas density monitoring system

**2. Contact**

- 1 Single contact
- 2 Double contact (seperated circuit)
- 3 Triple contact (seperated circuit)

**3. Type of mounting**

- A Bottom connection, direct
- B Bottom connection, case mounting plate
- G Lower back connection, direct
- L Lower back connection, 4 hole bracket

**4. Accuracy**

- 3 ±1.0 % of full scale at ambient temperature +20 °C (Indicator)  
±0.25 % of full scale at ambient temperature  
0 ~ 50 °C (current output)

**5. Connection type**

EI G½"

**6. Unit**

- H bar
- I Mpa
- J kPa

**7. Range**

- 007 -0.1 ~ 0.15 MPa
- 014 -0.1 ~ 0.9 MPa
- 029 -0.1 ~ 0.3 MPa
- 030 -0.1 ~ 0.4 MPa
- 031 -0.1 ~ 0.6 MPa
- 000 Special range

**8. Pressure connection material and dial colors**

- 7 316SS and 5 colors

**9. Option**

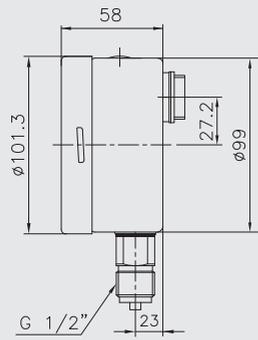
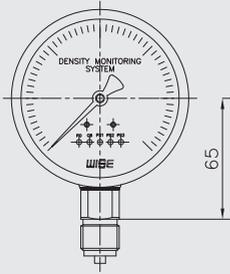
- 0 None
- 1 Special requirement

1	2	3	4	5	6	7	8	9
P580	2	B	3	EI	H	014	7	0

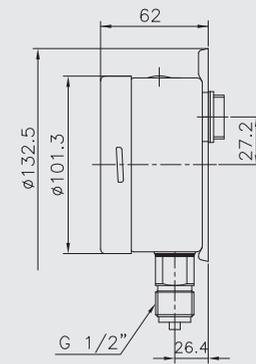
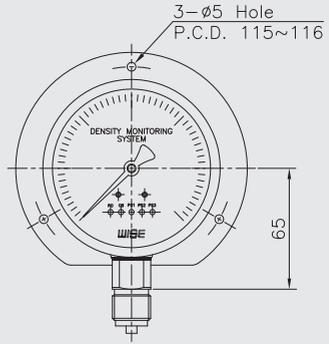
Sample  
ordering code

# P580 : Type of mounting

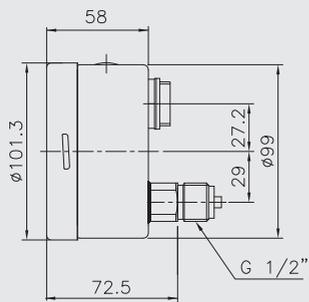
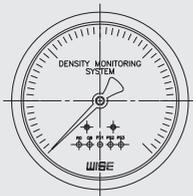
Code A



Code B



Code G



Code L

