

# Gas density monitor

## With test connection and shut-off valve

### Model GDM-100

WIKA data sheet AC 20.01

#### Applications

- Medium and high-voltage switchgear
- SF<sub>6</sub> gas density monitoring in closed tanks
- Raising an alarm when defined limit values have been reached

#### Special features

- Functional check or recalibration possible without dismantling
- Case, wetted parts, shut-off valve and test connection from stainless steel
- Test connection and shut-off valve are welded to prevent leakage.

#### Description

##### Electrical switch contacts

Gas density is a crucial operating parameter for high-voltage switchgear. If the required gas density is not present, safe operation of the switchgear cannot be guaranteed.

The WIKA gas density measuring instruments provide reliable warnings against dangerously low gas levels, even under extreme environmental conditions.

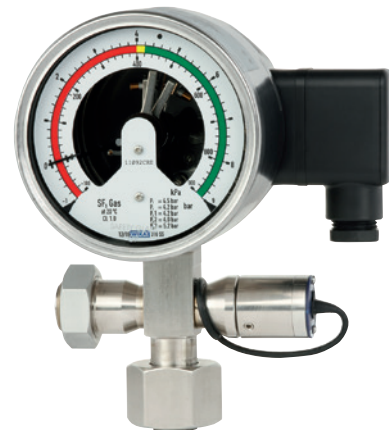
Electrical switch contacts warn the switchgear operator when the gas density drops below defined levels due to leakage.

##### Numerous fields of application

The WIKA gas density monitor is hermetically sealed and temperature-compensated. Measured value fluctuations and erroneous alarms caused by changes in either ambient temperature or air pressure are therefore prevented.

##### Easy and fast functional check

With regard to switchgear safety, asset protection and environmental protection, it is common to perform functional checks on a regular basis. Article 5 of the EU regulation on



Gas density monitor with test connection and shut-off valve, model GDM-100

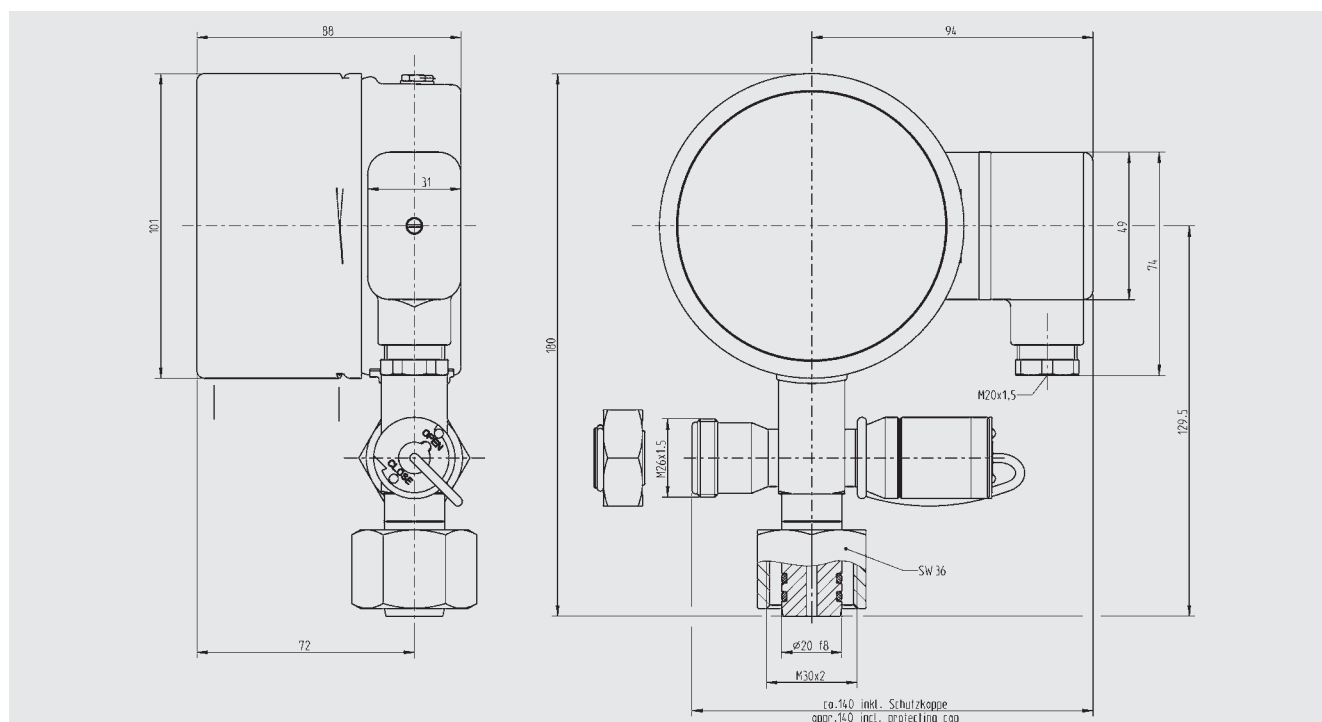
fluorinated greenhouse gases provides for checking of the leakage detection system at least every 6 years if it contains > 22 kg SF<sub>6</sub> gas and the plant was installed after 01 January 2017.

Thanks to the optional test connection and shut-off valve, the functional check of gas density monitors can be conducted without having to dismantle them. This not only reduces maintenance time but also minimises the risks of SF<sub>6</sub> gas emissions and potential leakages during recommissioning.

All components necessary for the functional check are welded. As a consequence, no additional connecting parts and sealings are required that may promote leakages.

In order to prevent unintended opening or closing of the shut-off valve, the latter can only be operated using a special tool and a torque spanner. When the shut-off valve is closed, the special tool cannot be removed. The special tool can be removed only after the shut-off valve is opened and the gas density monitor is thus again connected with the switchgear.

## Dimensions in mm



## Specifications

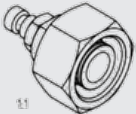
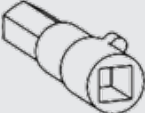
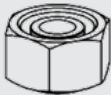
All weld seams are qualified in accordance with DIN EN ISO 15613 in combination with DIN EN ISO 15614-1 and DIN EN ISO 15614-12 by the notified body TÜV Süd.

Tightening torque shut-off valve: 1,2 Nm  $\pm$ 10 %

Tightening torque test connection: 60 Nm  $\pm$ 10 %

Further information see data sheet SP 60.02

## Accessories

	Description	Order number
	Adapter from test connection (M26 x 1,5) to RECTUS quick coupling	14146937
	Tool set to actuate the shut-off valve	14232498
	Wrench socket for shut-off valve (4KT 5,2 mm 1/)	14146708
	Protection cap for test connection (M26 x 1,5)	14193772
	Protection cap for shut-off valve (silicone)	14183253

© 10/2016 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.  
The specifications given in this document represent the state of engineering at the time of publishing.  
We reserve the right to make modifications to the specifications and materials.



**WIKA Alexander Wiegand SE & Co. KG**  
Alexander-Wiegand-Straße 30  
63911 Klingenberg/Germany  
Tel. +49 9372 132-0  
Fax +49 9372 132-406  
info@wika.de  
www.wika.de