

Transmitter for oxygen

Edition 1
2002



Ex-proof as per CENELEC standard
One-man calibration on-site
Output 0.2 .. 1 mA or 4 .. 20 mA

Worldwide Supplier of Gas Detection Solutions



Stationary monitoring of oxygen deficiency

Transmitter

The transmitter is the key component of a gas monitoring system. This is why GfG gives top priority to their development and has been a leader in the industry for more than 40 years.

All GfG transmitters offer integrated electronic circuits for voltage stabilization, signal transmission and temperature compensation. This results in stable measurement signals, even in case of considerable temperature changes.

Transmitter EC 25 Ex with GMA300



- Can be operated as stand-alone, or in connection with a GfG controller
- Electrochemical sensor
- Ex-proof EEx ia IIC T6
- Digital display
- Sensors with long-term stability
- Highly selective
- Plug-in sensor cell in stainless steel sleeve, replaceable without opening the casing
- Service lid for:
 - Simple one-man calibration on-site
 - Measurement of output signal
 - Service switch for output signal suppression allows maintenance without alarm activation
- Function tested

Transmitter EC 24 with GMA41



- For use in non-hazardous areas
- Electrochemical sensor
- Sensors with long lifetime
- Highly selective
- Solid aluminium casing, IP 54 (optionally IP 68)
- Plug-in sensor cell in stainless steel sleeve, replaceable without opening the casing
- Service lid for:
 - Simple one-man calibration on-site
 - Measurement of output signal

Transmitter ZD 21 with GMA81A



- For use in non-hazardous areas
- Very high selectivity
- Solid aluminium casing, IP 54
- Expected lifetime: 5 years
- Extremely fast response time: $t_{90} < 2$ sec.
- Maintenance free. Low follow-up costs
- No influences from pressure, humidity or temperature
- Zirconia sensor

Calibration adapter



During periodic sensitivity checks, the transmitters are exposed to certain test gases. The calibration adapter, which is screwed on the transmitter, allows for a reliable and steady gas supply.

Weather protection



The transmitters' protective casing is durable in harsh environments where there's dirt, rain and unstable temperatures.

Sampling system



The sampling system supplies gases to the transmitter from inaccessible areas. There are special filters available to protect the transmitter from dust, condensation and corrosive compounds. The Ex-proof model of the sampling system can also be used for explosive gas mixtures.

Tested and Calibrated

The transmitters are subject to a 100% quality control. Installation is easy; since the transmitters are calibrated before shipment, the service engineer does a quick readjustment when putting them into operation.

Technical data	EC 24	EC 25 Ex	ZD 21
Detection range	0 .. 25 Vol.-%	0 .. 25 Vol.-%	0 .. 25 Vol.-%
Detection principle	Elektrochemical	Elektrochemical	Zirconia
Gas supply	Diffusion	Diffusion	Diffusion
Protection	IP54 (optionally IP68)	IP54	IP54
Pressure	900 .. 1100 hPa	900 .. 1100 hPa	900 .. 1100 hPa
Ex-approval	-	EEx ia IIC T6	-
Type approval	-	DMT-BVS-Nr. 91C2033	-
Expected sensor life	> 2 years	> 2 years	> 5 years
Response time t_{90}	< 10 seconds	< 10 seconds	< 2 seconds
Power supply	10 .. 28 V, 4 .. 20 mA	12 .. 24 V, 4 .. 20 mA	10 .. 28 V, 3 W
Humidity	0 .. 99% r. h.	0 .. 99% r. h.	0 .. 99% r. h.
Output signal	0.2 .. 1 mA / 4 .. 20 mA	0.2 .. 1 mA / 4 .. 20 mA	0.2 .. 1 mA / 4 .. 20 mA
Dimensions (WxHxD)	80 x 125 x 60 mm	120 x 122 x 95 mm	100 x 100 x 57 mm
Ambient temperature	-20 .. +50°C	-20 .. +50°C	-25 .. +50°C
Cable gland	PG 9	PG 9	PG 11
Cable lengths to controller	< 300 m (3 x 0,75 mm ²) > 300 m (3 x 1,5 mm ²)	< 300 m (3 x 0,75 mm ²) > 300 m (3 x 1,5 mm ²)	< 300 m (3 x 0,75 mm ²) > 300 m (3 x 1,5 mm ²)



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