

OPERATING INSTRUCTION

GMF 735 IR RS485-BUS-Sensor

BUS-Sensor with infrared sensor in stainless steel housing (chloride resistant)



GMF 735 IR

Important!

The handling of the device required the knowledge and observance of this manual.

Sensoric technology

The sensor GMF 735 IR is powered by using infrared sensors.
The sensor signal is processed digitally and is available as information for reading via RS 485 BUS and analysis via a BUS center.

Mounting

The sensor is suitable for surface wall mounting.

Sensor connection

The gas sensor GMF 735 IR can be operated with an unregulated DC voltage of 12-35 V.

For connection, the shielded cable JY (St) 2x2x0.8 mm is used.
The wire colors can be assigned as follows:

Terminal 1: +24V	=> red
Terminal 2: RS485 Terminal A	=> white
Terminal 3: RS485 Terminal B	=> yellow
Terminal 4: 0V	=> black
Terminal 5: shield cable bushing	=> drain wire

The drain wire in the cable is connected to the shield.

CAUTION: When installing, make sure that bare wire and the bare drain wire be covered with insulation and can not come into contact with the circuit.

Maintenance

The sensor is preset at the factory with calibration gas.
Regular maintenance is required to obtain its functionality.

Maintenance aids

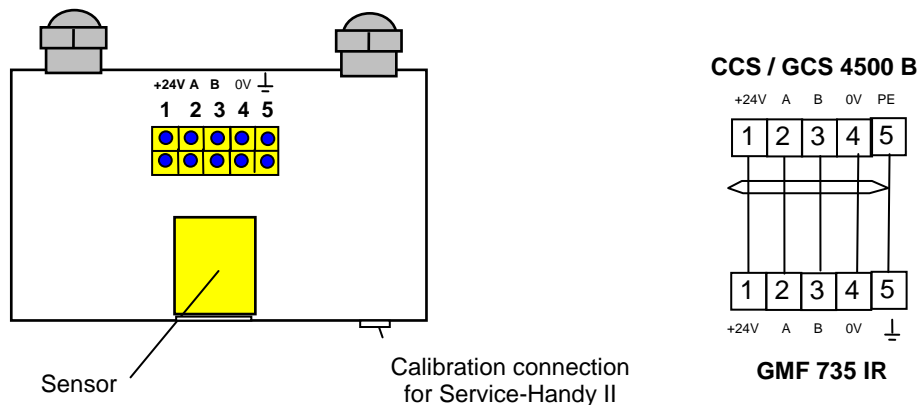
Operating element "Service Handy II"
Test gas ((known gas concentration)
Gas feed adapter
Flow controller, flow meter 0-1 liters / min

Justage

The sensor can be calibrated using any known gas concentration:

1. For this, the Service Handy is connected to the jack socket, that displays the current gas concentration.
2. Use test gas adapter for feeding test gas (about. 0,2 l/min)
3. The balance is carried out by means of the adjustment trimmer on Service Handy until the required gas concentration is displayed

Connection diagram



Commissioning

The setting of the sensor must be checked during commissioning by a test gas feeding.

Maintenance

Regular maintenance is required to maintain its functionality. The maintenance interval can be seen from the test sticker on the evaluation unit. There is a maximum of 1 year.

Decommissioning

If the sensor is for longer than 4 weeks out of operation, it must be checked after a week uptime using test gas or be recalibrated.

Technical Data: GMF 735 IR

Suitability:	food industry, meat processing industry wet areas with high pressure washer kit breweries, wineries
Measuring principle:	infrared absorption with reference channel
Gas type:	CO2 and others
Measuring range:	0..5 vol% and others
Accuracy:	<+-1% of measuring range
Response time T90:	< 30 sec
Temperature range:	-20..+50°C (ambient)
Humidity range:	0..95% RH
Pressure range:	700-1300 hPa
Housing:	steel, stainless and acid resistand, LxWxD: 110x110x70mm
Protection type:	housing: IP66 K
Gas entry:	diffusion, teflon filter
Output signal:	digital via RS 485 BUS
CE-conformity:	emission: residential area, immunity: industrial area
Weight:	400 g
Supply:	12..36 V DC
Current consumption:	60mA @ 24 V DC
Connection line:	up to 1200 m: JY (ST) Y 2x2x0,8 mm ²

Order no.	Gas type	Measuring range
GMF 735 IR CO2 5V	Carbon dioxide	0...5 vol%
GMF 735 IR CO2 10V	Carbon dioxide	0...10 vol%
GMF 730 IR HC UEG	Carbon hydride	0...100 LEL
GMF 730 IR PRP UEG	Propane	0...100 LEL

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Subject to technical changes