

Original operating manual: Glass rod prism GS/KM-4-V2A-SR-OP1/OP2**

IECEx BVS 14.0108X



- Accessory to fibre optics, for optical level detection of liquids
- GS/KM-4**-V2A-SR-OP1: Authorized for Ex zones 0, 1, 2, 20, 21, 22
- GS/KM-4**-V2A-SR-OP2: Authorized for Ex zones 1, 2, 21, 22
- GS/KM-4**-V2A-SR: Not for applications in Ex zones

II 1G IIC T4 Ga, II 1D IIIB T135°C Da or II 2G IIB T4 Gb, II 2D IIIA T135°C Db

| Type | GS-4**-V2A-SR-OP1 | GS-4**-V2A-SR-OP2 | GS-4**-V2A-SR |
|---|--|-------------------------|------------------|
| | Authorized for Ex zones | Authorized for Ex zones | Not for Ex zones |
| Technical data | | | |
| Designation, Length (Length of the glass rod with protection tube) | GS4**-V2A-SR(-1GD-2GD) **=Length in mm, 40, 50, 150, 200mm | | |
| Length tolerance | +1mm | | |
| Type of Ex protection, Gas | II 1G IIC T4 Ga | II 2G IIB T4 Gb | NONE |
| Type of Ex protection, Dust | II 1D IIIB T135°C Da | II 2D IIIB T135°C Db | NONE |
| Authorized for Ex zones | 0, 1, 2, 20, 21, 22 | 1, 2, 21, 22 | NONE |
| Maximum permitted optical input power | <=15mW | <=35mW | NOT LIMITED |
| Maximum possible irradiance | <= 5mW/mm ² | <= 5mW/mm ² | NOT LIMITED |
| Requirement at connected sensors | Ex op is Ga/Da | Ex op is Gb/Db | NONE |
| Active diameters of the glass rod | 4 mm | | |
| Allowed operation temperature range T _{amb} | -20°C < T _{amb} < +120°C | | |
| Enclosure rating, according to EN 60529 | IP 68 | | |
| Material, fastening sleeve | Stainless steel, 1.4301 | | |
| Material, protection tube | Stainless steel, 1.4301 | | |
| Material, glass rod prism | Borosilicate glass DURAN | | |
| Options | - Types KM-4**-V2A-SR(-OP1/OP2): Glass rod material with highly refined cladding. - Types KM-4**-V4A-SR(-OP1/OP2): Protection tube, stainless steel 1.4404. Glass rod material with highly refined cladding. - Types GS-6**-V2A-SR(-OP1/OP2): Glass rod diameter: 6mm - Types KM-6**-V2A-SR(-1GD/-2GD): Glass rod diameter: 6mm. Glass rod material with highly refined cladding. | | |

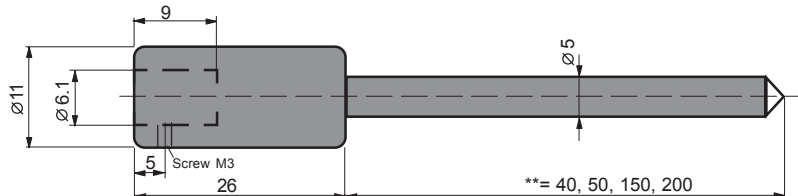
ATEX/IECEx RELATED MARKINGS
CE 1258 T_{amb}= -20°C < T_{amb} < +120°C

Manufacturer with address

Date of production: Numerals 5 to 8 of the serial number (year/calendar week)

Type: GS/KM-4**-V2A-SR-OP1 II 1G IIC T4 Ga, II 1D IIIB T135°C Da EC-Certification No. BVS 10 ATEX E 130 X. DEKRA
 Type: GS/KM-4**-V2A-SR-OP2 II 2G IIB T4 Gb, II 2D IIIB T135°C Db IECEx-Certification No. IECEx 14.0108X
 (X designation of the certification number: Fibre optics must only be applied with sensors with certificated limited optical power)

Dimensions:



Operating Manual / EU - Declaration of Conformity:

Ex protection:

The glass rods series GS-4**-V2A-SR-OP1 may only be operated with certificated fibre optics in Ex zones 0, 1, 2, 20, 21, 22. The glass rods series GS-4**-V2A-SR-OP2 may only be operated with certificated fibre optics in Ex zones 1, 2, 21, 22. It is necessary to take into consideration the valid international and national rules and regulations (EN 60079-14). The maximum rated optical input power must not be exceeded. The local equipotential bonding have to be done by grounding the fixed fixed fibre optic and sensor, reliable and noncorrosive. Use only original manufactured fibre optics, other additional optical lenses are not allowed in hazardous locations. Other then original manufacturer, additional optical lenses are not allowed in hazardous locations. The fibre optics have to be installed in a manner to avoid tensile stress and frictional heat. If glass rods with fibre optics and associated sensors are not mounted in the same hazardous location, the change over of the different areas must be realized in accordance with the valid regulations.

Function

The glass rod prism, with connected fibre optics, are applicable for optical level detection of liquids in Ex hazardous locations and can be operated with certificated fibre optics and sensors, with a wavelength of 500nm to 900nm.

Maintenance

The glass rod prism are maintenance-free. Protect the fibre optics against pollution. If they are contaminated, clean with alcohol. Do not use aggressive solvents. Equipment must only be repaired or serviced by the manufacturer.

General Notes, disposal

We reserve the right to modify our equipment. Our equipment is designed such way, that it has the least possible adverse effect on the environment. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.

Safety Informations

When installing and operating, it is necessary to take into consideration the relevant international and other national regulations. EN 60079-14, ATEX 118a, single directive 1999/92/EC.

Standards met:

- EN 13463-1:2009, EN 60079-0:2012 + A11:2013, EN 60079-28:2007, ATEX directive: 2014/34/EU, Machine directive: 2006/42/EC, RoHS directive: 2011/65/EU

EU-Declaration of Conformity

IECEx certification No. BVS 14.0108X.
 ATEX certification: Certification No. BVS 10 ATEX E 130 X, DEKRA Testing & Certification GmbH, Zertifizierungsstelle, Carl-Beyling-Haus, Dinendahlstrasse 9, D-44809 Bochum, Ident No. 0158.
 ATEX certification of quality type production of Ex devices in accordance to the directive 2014/34/EU, CE 1258, Eurofins. Certification No: SEV 21 ATEX 4580, QAR No.: CH/SEV/QAR21.0009/01. The conformity of the devices with the EC standards and directives and the EC-type examination certificate and the observation of the Quality Safety System ISO 9001:2015 with the ATEX module "Production", declares:

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GS-4-yy-V2A-SR-OP1-IECEx_e5/2023-11-23/MP