

Original operating manual: Glass rod prism GS/KM-4--V2A-SR-OP1/OP2-S289**

IECEx BVS 14.0108X



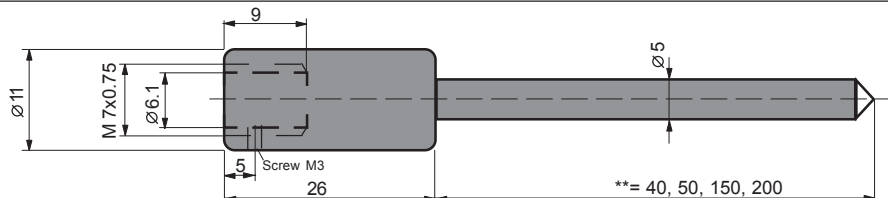
- Accessory to fibre optics, for optical level detection of liquids
- GS/KM-4-**-V2A-SR-OP1-S289: For use in Ex zones 0, 1, 2, 20, 21, 22
- GS/KM-4-**-V2A-SR-OP2-S289: For use in Ex zones 1, 2, 21, 22
- GS/KM-4-**-V2A-SR-S289: Not for applications in Ex zones

II 1G IIC T4 Ga, II 1D IIIB T135°C Da or II 2G IIB T4 Gb, II 2D IIIB 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	GS4-**-V2A-SR(-OP1/OP2)-S289		
Designation, Length (Length of the glass rod with protection tube)	**=Length in mm, 40, 50, 150, 200mm		
Length tolerance	+1mm		
Type of Ex protection, Gas, according to 2014/34/EU	II 1G IIC T4 Ga	II 2G IIB T4 Gb	NONE
Type of Ex protection, Dust, according to 2014/34/EU	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)-S289: Glass rod material with highly refined cladding. - Types KM-4-**-V4A-SR(-OP1/OP2)-S289: Protection tube, stainless steel 1.4404. Glass rod material with highly refined cladding. - Types GS-6-**-V2A-SR(-OP1/OP2)-S289: Glass rod diameter: 6mm - Types KM-6-**-V2A-SR(-1GD/-2GD)-S289: 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 Date of production: Numerals 5 to 8 of the serial number (year/calendar week)
 Type: GS/KM-4-**-V2A-SR-OP1-S289 II 1G IIC T4 Ga, II 1D IIIB T135°C Da ATEX-Certification No. BVS 10 ATEX E 130 X. DEKRA
 Type: GS/KM-4-**-V2A-SR-OP2-S289 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-S289 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-S289 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, EN 60079-31:2010, EN 60529:2014, 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 EXAM 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/QAR21.0009/00. 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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