Tippkemper®

ISO 9001:2000 / ATEX

Matrix elektronik ag

CE 0158

Ex II 2 G c T6
II 3 D c IP68 T90°C

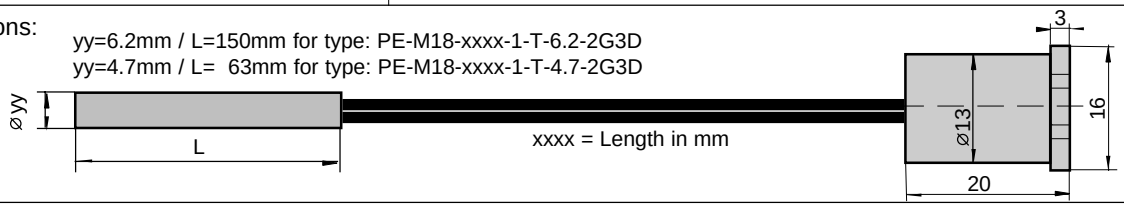
POF type PE-M18-xxxx-1-T-yy-2G3D

- POF with PMMA core and PE protection sheath
- For rotation speed detection together wit the sensor type PSD-LTD-GD
- Applicable in Ex zones 1,2 and 22 up to 60°C ambient temperature

Technical data / Type	PE-M18-xxxx-1-T-yy-2G3D
	(xxxxx=Length in mm) / yy=Diameter of the probe in mm)
Standard length	3000mm
Type of Ex protection	Protection by constructional safety, at EN 13463-5:2002
Applicable in Ex zones	Zones 1,2 and 22
Ex designation	II 2G3D IIB T90°C (T6)
Requirement on connected sensors	Type PSD-LTD-GD (Limited optical power at DMT 99 ATEX E056)
Maximum optical input power	<=3.9mW
Maximum potential radiant intensity	<= 5mW/mm²
Active fibre optic diameter	1mm
Active cross-sectional area	0.785mm²
Optical loss	0.16dB/m, at 650nm light wave length
Connection damping	appr. 3dB / cut edge
Optical aperture	app. 30°, at 650nm light wave length
Minimum bending radius	50mm (Single bend)
Tensile strength	100N
Compression strength	20N/cm
Operating temperature range TA	-20°C < TA < +60°C
Enclosure rating an EN 60529	IP 68
Construction	2 x single fibre optics, protection covered
Material, core	PMMA
Material, protection sheath	PE
Material, adapter and probe	Stainless steel 1.4305
Options	- Other length up to 20m maximum on request
ATEX related designations for Ex fibre optics	CE 0158 Type: PE-..-2G3D TA: 0°C < TA < 60°C Manufacturer with address Ex II 2 G c T6, II 3 D c IP68 T90°C Production date: Numerals 4 to 7of the serial number

Dimensions:

yy=6.2mm / L=150mm for type: PE-M18-xxxx-1-T-6.2-2G3D
yy=4.7mm / L= 63mm for type: PE-M18-xxxx-1-T-4.7-2G3D



Operating Manual / EC - Declaration of Conformity:

Ex protection:

General regulations for Ex devices:

The fibre optics series PE-M18-xxxx-1-T-yy-2G3D are only applicable in the Ex zones 1, 2 and 22. The fibre optics must be operated with ATEX certificated sensors with limited optical output power, at DMT 99 ATEX E056. It is necessary to take into consideration the valid international and national rules and regulations. The maximum rated optical input power must not be exceeded. 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 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 fibre optics series PE-M18-xxxx-1-T-yy-2G3D are designed for the ration speed detection in hazardous locations and for high voltage field areas. The fibre optics can only be operated with the certificated Matrix sensor type PSD-LTD-GD, with an optical wave length of 650nm.

Mounting prescriptions:

The fibre optics must not be buckled or laid with a small radius. Buckled or bad laid fibre optics results to a strong decrease of performance. Avoid performance decreasing and failures caused by wear, by a functional mounting of the fibre optics. The fibre optics must be placed non-spinning and without tensile load.

Maintenance

Protect the fibre optic adaptor and the probe against pollution. If the fibre optic is contaminated, clean with alcohol. Do not use aggressive solvents. Plastic optical fibres can be destroyed by strong solvents. Equipment must only be repaired or serviced by the manufacturer.

General Notes

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. It neither emit or contain any damaging or siliconized substances and use a minimum of energy and resources. 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. ATEX 118a, ElexV, TRbF, TRD, UVV, EX-RL(BGR104), BetrSichV, single directive 1999/92/EG.

Standards met:
- EN 13463-1:2002, EN 13463-5:2002, EN 1197-1:1997; IEC 60079-28 Ed.1.0 CDV; EN 60529:2000
- Ex-Protection: 94/9/EG (ATEX 100a)
- Machine directive: 98/37/EG
- Tech. File Ref.: AN_EXLWL
- RoHS, 2002/95/EG

Declaration of Conformity

Certification of manufacturer PE-..-2G3D: Tech. File Ref.: AN_EXLWL

The conformity of the devices with the EC standards and directives and the observation of the Quality Safety System ISO 9001:2000 with the ATEX module "Production", declares:

Hans Bracher, Matrix Elektronik AG

PE-M18-xxxx-1-T-yy-2G3D_e1/AUG.25,2006/HB

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