PIEZOELETRIC STRAIN SENSOR
FOR DETECTING COLLISION EVENTS IN MACHINE TOOLS

Properties

- Piezoelectric strain sensor with very high sensitivity for measuring the surface strain of structures
- Optimal for collision monitoring with the system GEM**CMS**
- Two protective tube variants available
- Different cable lengths available
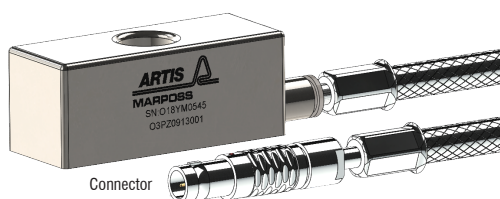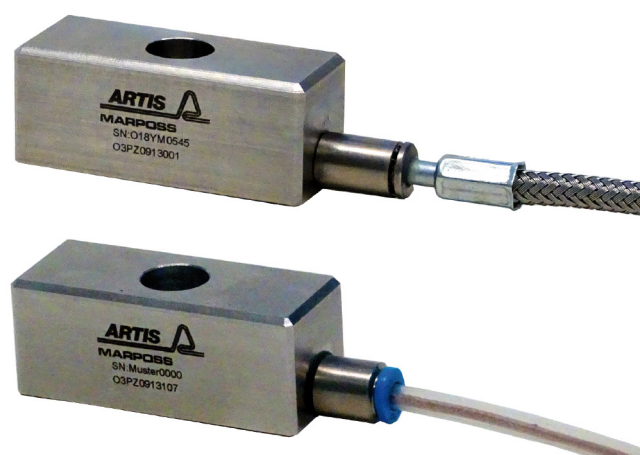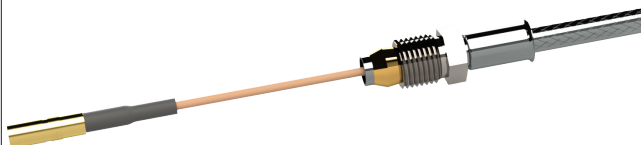- Degree of protection IP65

Connector

Illustration similar

Strain sensor DA for GEMCMS

- with steel netting mesh tube
- with ODU 3 pole plug, mounted
- installation kit included

- or or Mini Coax connector (for external amplifier), ready mounted
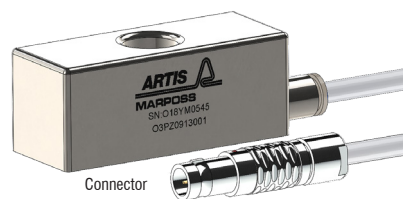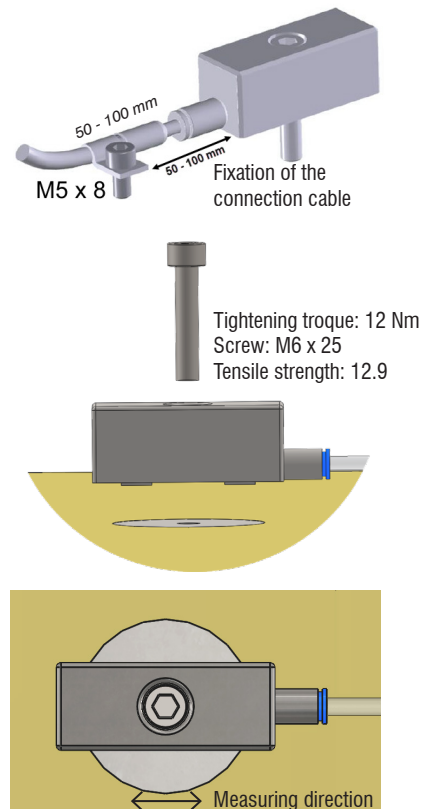

Connector

Illustration similar

Strain sensor DA for GEMCMS

- cable with PUR sheating
- with ODU 3 pole plug, mounted
- installation kit included

- or Mini Coax connector (for external amplifier), ready mounted

Mounting instruction

M5, 10 Tief

ca. 75 bis 100

50 - 100 mm

M5 x 8

50 - 100 mm

Fixation of the connection cable

Tightening troque: 12 Nm
Screw: M6 x 25
Tensile strength: 12.9

90°   90°

M6   M5

ca. 75 bis 100

Measuring direction

ARTICLE NUMBERS		
VARIANTS WITH		
STEEL NETTING MESH TUBE	15 M	O3PZ0913108
	20 M	O3PZ0913112
FOR EXT. AMPLIFIER	10 M	O3PZ0913110
VARIANTS WITH (PUR)	15 M	O3PZ0913107
POLYURETHANE TUBE	20 M	O3PZ0913111
FOR EXT. AMPLIFIER	10 M	O3PZ0913109

DIMENSIONS	
DIMENSIONS	(L x W x H)
SENSOR ONLY	50 x 20 x 21 mm
SENSOR WITH CONNECTOR	83 x 20 x 21 mm

SENSOR AND CONNECTOR	
SENSOR WEIGHT	~ 120 g (without cable)
SENSOR MATERIAL	stainless steel
CONNECTOR DIAMETER	9 mm
LENGTH, CONNECTOR ONLY	35 mm
LENGTH, WITH COUPLING	51 mm

CABLE DIAMETER	
Ø CABLE WITH STEEL NETTING MESH	< 5.25 mm
Ø CABLE WITH PUR SHEATING	4 mm

BENDING RADIUS	
STATIC	10 x outer diameter
DYNAMIC	15 x outer diameter

INSTALLATION AND OPERATION	
CONTACTING	Plug connection
SURFACE REQUIREMENTS	Ra 1,6 , flatness 0,05
TIGHTENING TORQUE	12 Nm (M6 x 25)
OPERATING TEMPERATURE	0 °C ... + 60 °C
DEGREE OF PROTECTION	IP65
	(only if correctly assembled acc. to ARTIS guidelines)
MEASURING RANGE	+/- 300 µε (typical)
SENSITIVITY	2000 pC/µε (typical)
CONFORMITY	CE, UKCA