

FFP STRAIN GAUGE MEASURING PLATE

Properties

- High sensitivity, fast response time, high signal stability
- Design as Wheatstone bridge circuit, thus thermally stable
- Direct recording of the cutting forces thanks to mounting in the main force flow
- Easy mounting between sliding bed and turret
- Degree of protection IP65
- Measures feed forces of one or two axes
- Linear response

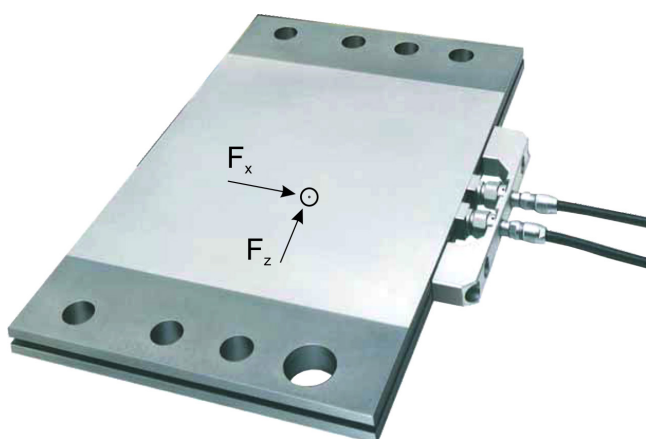


Illustration similar

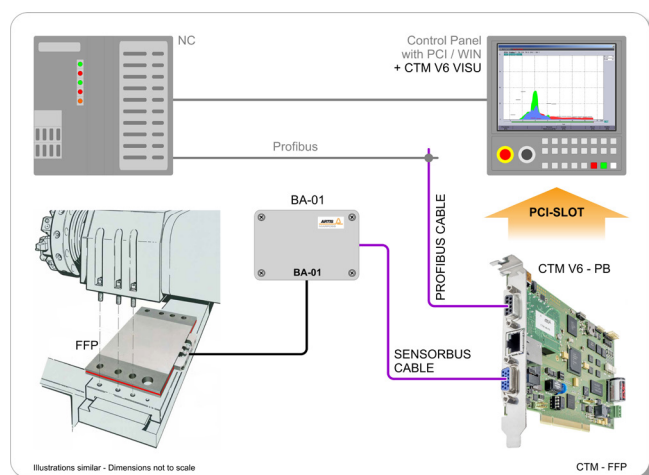
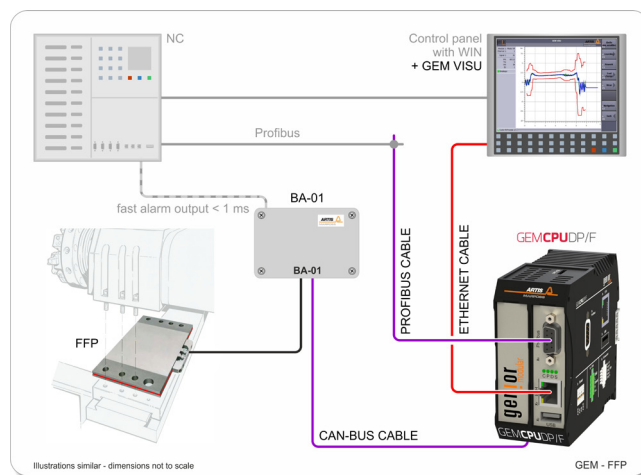


Illustration similar

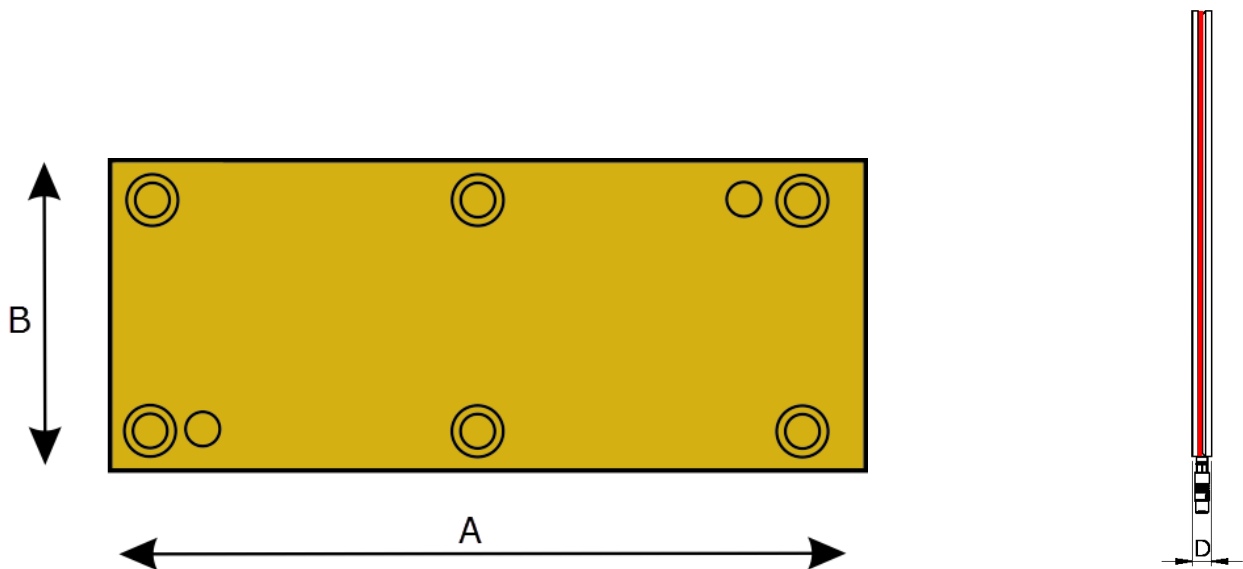


Application example:

FFP Strain Gauge Measuring Plate with BA-01 Bridge Amplifier in the CTM Tool and Process Monitoring System

Application example:

FFP Strain Gauge Measuring Plate with BA-01 Bridge Amplifier in the GENIOR MODULAR Tool and Process Monitoring System



03PZ0912PPP

(PPP = Variant code, variants on request)

SUMMARY	The FFP strain gauge measuring plate exists in two basic variants: single-axis and dual-axis. Based on these two basic versions, the dimensions of the FFP measuring plates are adapted to the machine design. The basic conditions listed below apply. Further special designs on request.
---------	---

GENERAL CONDITIONS valid for both variants: - for one-axis measuring - for two-axis measuring	Thickness D (mm)	Area A x B mm ²	Type/size 1-axis	Type/size 2-axes
	12/15	< 32 000	FFP – 4301 S1	FFP – 4301 S2
	12/15	< 50 000	FFP – 4302 S1	FFP – 4302 S2
	15	< 90 000	FFP – 4303 S1	FFP – 4303 S2
	15	< 130 000	FFP – 4304 S1	FFP – 4304 S2
	15	< 200 000	FFP – 4305 S1	FFP – 4305 S2

SIZE	Customized to requirements – minimum size 115 x 150 x 15 mm, max. size on request
RANGE OF NOMINAL FORCE (FN)	2 kN to 100 kN (higher ranges on request)
MEASURING DEVICE	Strain gauges, Wheatstone bridge design with four active elements
DEGREE OF PROTECTION	IP65
LINEAR EXPANSION ϵ	~ 0.000047 at nominal force
SENSITIVITY	~ 0.2 mV/V

LINEARITY DEVIATION	< ± 1 %
BRIDGE POWER SUPPLY	10 VDC
BRIDGE RESISTANCE	350 Ω
MAXIMUM LOAD LIMIT	800 % of nominal force
CONFORMITY	CE, UKCA


SENSOR CONNECTION	Color	Description
	black	Supply voltage -
	white	Signal -
	red	Signal +
	blue	Supply voltage +



www.marposs.com

For a full list of address locations, please consult the Marposs official website

ODN6397EN05 – Edition 01/2025 – Specifications are subject to modifications
© Copyright 2010-2025 MARPOSS S.p.A. (Italy) – All rights reserved.

MARPOSS,  and Marposs product names/signs mentioned or shown herein are registered trademarks or trademarks of Marposs in the United States and other countries. The rights, if any, of third parties on trademarks or registered trademarks mentioned in this publication are acknowledged to the respective owners.

Marposs has an integrated system for Company quality, environmental and safety management, with ISO 9001, ISO 14001 and OHSAS 18001 certification.



Download the latest version
of this document

