

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

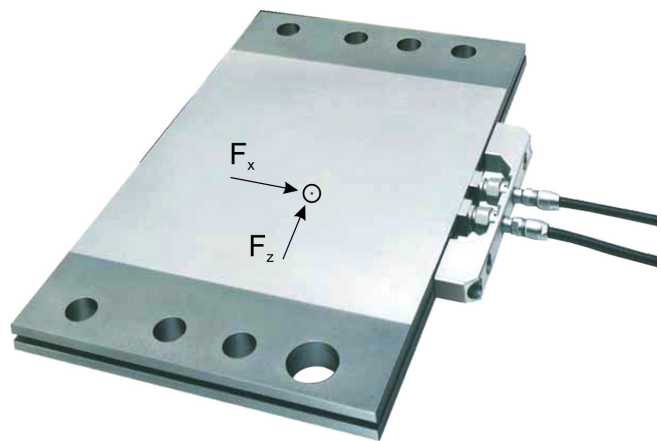


Illustration similar

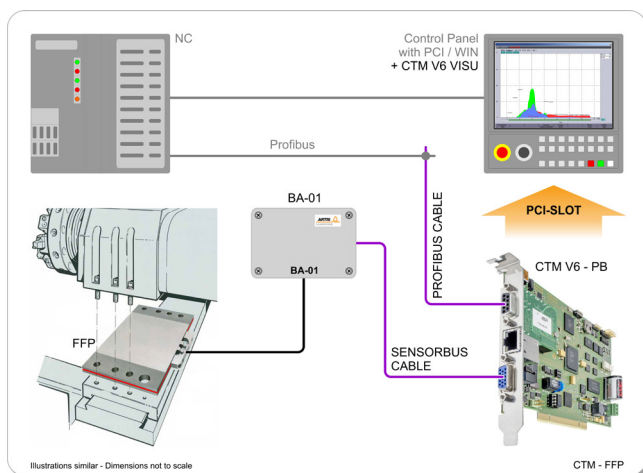
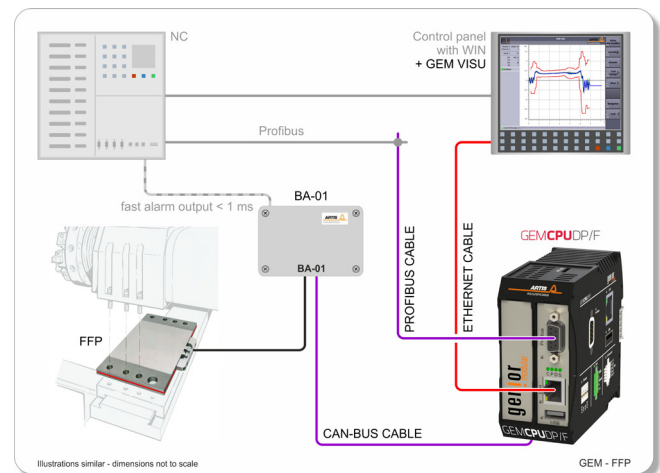


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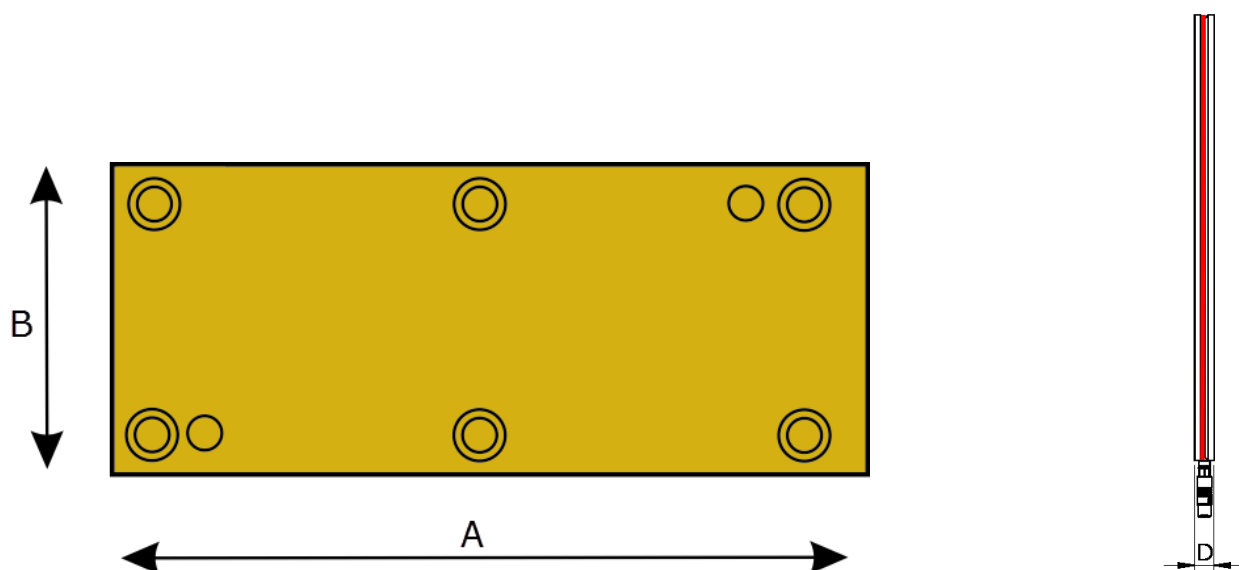
Application example:

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.
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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 +



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

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