

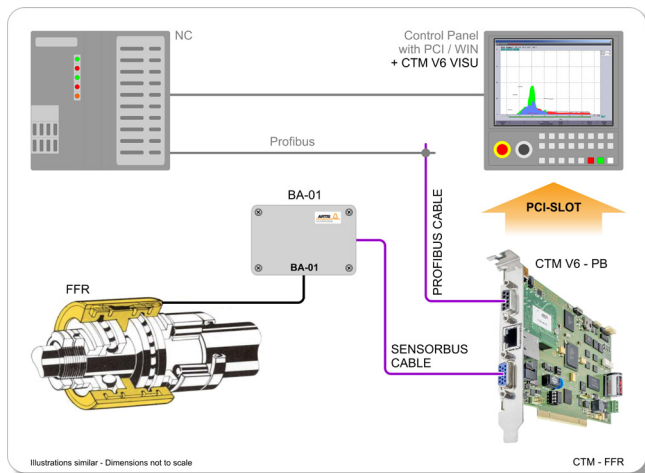
FFR STRAIN GAUGE MEASURING RING

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

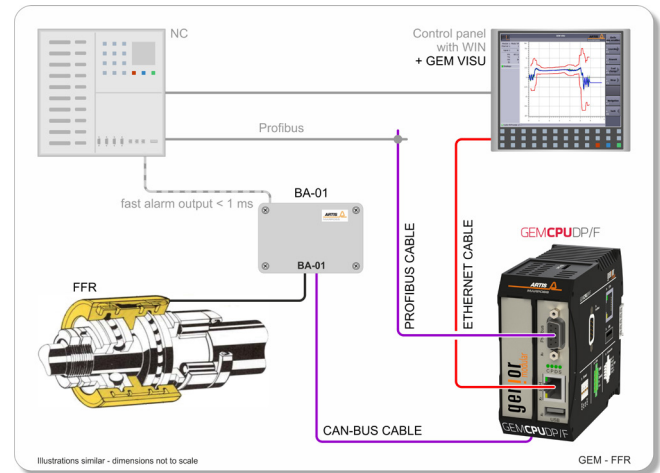


Illustration similar



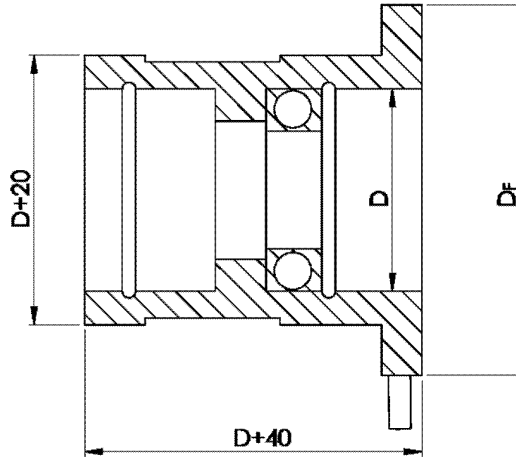
Application example:

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



Application example:

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



03PZ0712RRR
(RRR = Variant code, variants on request)

SUMMARY	The FFR strain gauge measuring ring is available in two versions: with and without flange. Based on these basic versions the dimensions of the FFR measuring ring are adapted to the design of the machine. Please refer to the general requirements listed below. Any further information available on request.
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MEASURING RING GENERAL CONDITIONS	Type/size 1-axis		Type/size 2-axes	
	without flange	D = bearing Ø (mm)	with flange	D = bearing Ø / D _f (mm)
	FFR-FS 1001	40 – 64.99	FFR-FS 1201	40 – 64.99 / 110
	FFR-FS 1002	65 – 84.99	FFR-FS 1202	65 – 84.99 / 140
	FFR-FS 1003	85 – 109.99	FFR-FS 1203	85 – 109.99 / 170
	FFR-FS 1004	110 – 150	FFR-FS 1204	110 – 150 / 200

REQUIRED SPACE	D + 20 mm
RANGE OF NOMINAL FORCE (FN)	1 kN bis 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	~ 0,3 mV/V to 2 mV/V
LINEAR DEVIATION	< ± 1 %

BRIDGE POWER SUPPLY	10 V Ref.
BRIDGE RESISTANCE	360 Ω
OVERLOAD LIMIT	800 % of nominal force (additional overload protection on request)
CONFORMITY	CE, UKCA

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



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

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