

AMGZ Series Force Measuring Journal with Dead Shaft Adapter

10-times overload protection

No recalibration required

20 : 1 force measuring range

Wide measuring capability

Nominal forces from 100 – 2250 N

Sizes available for every application

Stainless steel sensor, single bolt mounting

**Corrosion resistant, ultra-durable,
user friendly**



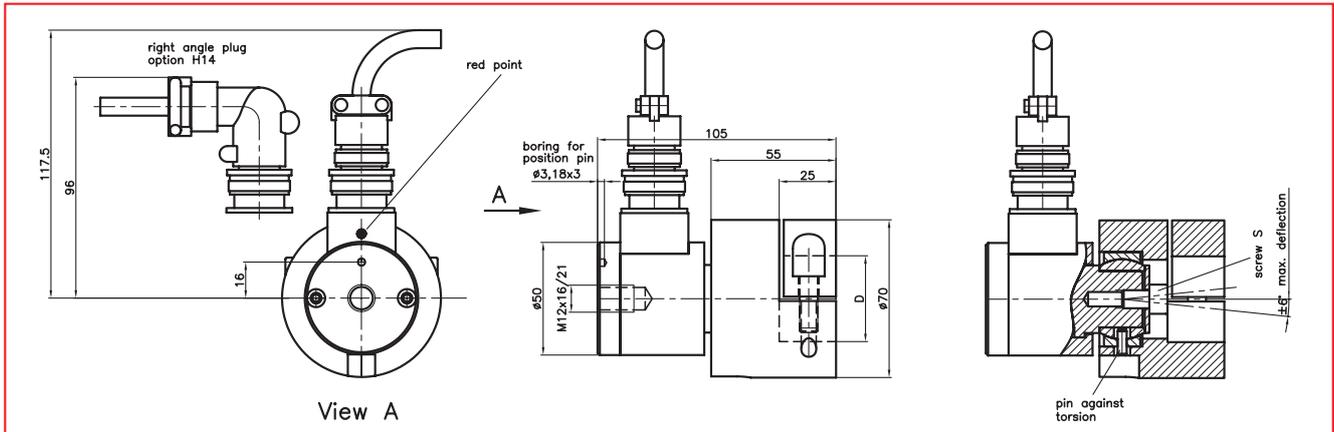
● AMGZ

The AMGZ Series sensors are designed as dead shaft sensors to allow easy roller change in continuous material processing applications. They can be easily mounted with 1 bolt to the machine frame. The red point on the connector part of the sensor indicates the positive measuring direction. The high accuracy design ensures that even with low material wrap angles and high roller weights, tension can still be measured accurately.

● Functional description

Foil type strain gauges mounted in a full Wheatstone Bridge configuration in each sensor perform the actual tension measurement. The flexion beam design ensures accurate measurement. This combination guarantees the highest accuracy and reliability. The shaft adapter can be turned against the sensor such that the sensor can be placed in measuring direction and the shaft can be inserted from top.

AMGZ Series • Dimensions in mm



AMGZ Series • Specifications

Sensor Type	Nominal force N	Thread size S	Weight incl. adapter kg
AMGZ205.100	100	M4 x 8	2.4
AMGZ205.200	200	M4 x 8	2.4
AMGZ205.375	375	M4 x 8	2.4
AMGZ205.500	500	M8 x 12	2.4
AMGZ205.750	750	M8 x 12	2.4
AMGZ205.1500	1500	M8 x 12	2.4
AMGZ205.2250	2250	M8 x 12	2.4

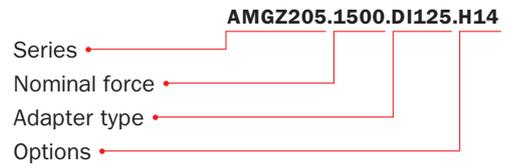
Options:

- H14** = Right angle plug
- H15** = Connection plug opposite to the red point
- H16** = Temperature range of sensor with PG-gland up to 150 °C. Connectors up to 120 °C
- H18** = Straight waterproof plug
- H29** = Modified wiring and sealing for use in aggressive media (mostly acids)
- H30** = Modified wiring and sealing for use in hydrocarbon media (mostly oils and fuels)

AMGZ Series • Adapter

Adapter Type	D mm	D in.
AMGZ205.DM25	25.00	0.98"
AMGZ205.DI125	31.75	1.25"
AMGZ205.DI150	38.10	1.50"

Order code (example):



AMGZ Series • Technical data

Sensitivity	1.8 mV/V
Tolerance of sensitivity	$\pm 0.2\%$
Accuracy class	$\pm 0.5\%$ ($F_{nominal}$)
Temperature coefficient	$\pm 0.1\%$ / 10 K
Temperature range	- 10...+ 60 °C (option H16: - 10...+150 °C)
Input resistance	350 Ω
Supply voltage	1...12 VDC
Maximum overload	10 times rated nominal force
Sensor material	Stainless steel

Scope of delivery:

- Straight connection plug, fixing screw, spacer
- Special sizes available on request

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