

TA125 $\pm 15\text{Nm}$, $\pm 50\text{Nm}$, $\pm 120\text{Nm}$, $\pm 350\text{Nm}$, $\pm 600\text{Nm}$

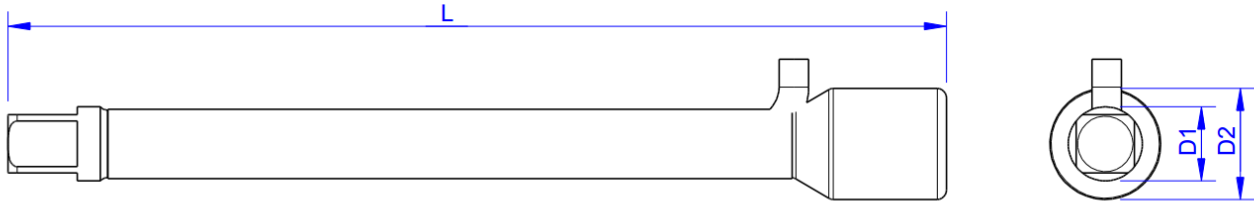


Description

The torque sensor TA125 is suitable for measuring the reaction torque up to a nominal torque of 600Nm (corded, non-rotating).

The torque sensor TA125 is used to monitor torques in quality assurance.

Dimensions



Technical Data

Electrical Data

| | |
|---|-----------------------|
| Input resistance | 350 Ohm |
| Tolerance input resistance | 5 ± |
| Output resistance | 350 Ohm |
| Tolerance output resistance | 5 ± |
| Insulation resistance | 5x10 ⁹ Ohm |
| Rated range of excitation voltage f | 2.5 ... 5 V |
| Operating range of excitation voltage f | 1 ... 10 V |
| Zero signal | 0.05 mV/V |
| Rated output | 2.3 mV/V / FS |

Precision

| | |
|--|------------|
| Accuracy class | 1% |
| Relative linearity error | 0.1 %FS |
| Relative zero signal hysteresis | 0.1 %FS |
| Temperature effect on zero signal | 0.01 %FS/K |
| Temperature effect on characteristic value | 0.01 %RD/K |
| Relative creep | 0.05 %FS |

Connection Data

| | |
|-----------------|------------------|
| Connection type | 4 conductor open |
|-----------------|------------------|

Temperature

| | |
|-------------------------------|---------------|
| Rated temperature range f | -10 ... 60 °C |
| Operating temperature range f | -10 ... 85 °C |
| Storage temperature range f | -10 ... 85 °C |
| Environmental protection | IP65 |

Basis Data

| | |
|--------------------------|---------------|
| Type | full cylinder |
| Maximum operating torque | 150 %FS |
| Breaking torque | 400 %FS |
| Rated torsion angle | 0.7 °/FS |
| Torque introduction | Außenvierkant |
| Dimension 1 | 1/4" |
| drehmomentausleitung | Innenvierkant |
| Dimension 2 | 1/4" |
| Material | Tool steel |

Abbreviation : RD: „Reading“; FS: „Full Scale“;

1) The exact nominal sensitivity is indicated in the test report.










Pin Configuration

| Symbol | Description | Wire colour |
|--------|------------------------|-------------|
| +Us | positive bridge supply | brown |
| -Us | negative bridge supply | white |
| +Ud | positive bridge output | green |
| -Ud | negative bridge output | yellow |

*Compressive load: positive output signal.
Shield- transparent.*

accessories

| Description | Description |
|---|---|
|  | Factory calibration certificate Nm/50/5 Detection of the characteristic value and traceability on DAkKS torque device; 0.025Nm... 50Nm |
|  | Factory calibration certificate Nm/50/5/System Detection of the characteristic value and traceability on DAkKS torque device; 0.025Nm... 50Nm; incl. calibration, torque sensor + amplifier |
|  | Factory calibration certificate Nm/200/5 Detection of the characteristic value and traceability on DAkKS torque device; 51Nm... 200Nm |
|  | Factory calibration certificate Nm/200/5/System Detection of the characteristic value and traceability on DAkKS torque device; 51Nm... 200Nm; incl. calibration, torque sensor + amplifier |
|  | Factory calibration certificate Nm/500/5 Detection of the characteristic value and traceability on DAkKS torque device; 201Nm... 500Nm |
|  | Factory calibration certificate Nm/500/5/System Detection of the characteristic value and traceability on DAkKS torque device; 201Nm... 500Nm; incl. calibration, torque sensor + amplifier |
|  | DAkKS Calibration Certificate 600Nm DAkKS calibration of torque sensors, 5 points, up to 600 Nm |