

TD110a $\pm 50\text{Nm}$



Description

Dimensions



Technical Data

Basis Data

Type	bending spring
Rated torque	50 Nm
Bending moment limit	20 Nm
Maximum operating torque	150 %FS
Breaking torque	400 %FS
Rated torsion angle	0.7 °/FS
Axial force limit	500 N
Lateral force limit	500 N
Torque introduction	pitch circle
Dimension 1	Ø50
drehmomentausleitung	pitch circle
Dimension 2	Ø100
Diameter	110 mm
laenge	13 mm
Material	Stainless steel

Electrical Data

Input resistance	700 Ohm
Tolerance input resistance	10 Ohm
Output resistance	700 Ohm
Tolerance output resistance	10 Ohm
Insulation resistance	5 GOhm
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	1 mV/V / FS

Precision

Accuracy class	0,1%
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
Name of the connection	Unitronic FD CP Plus / 4x0,14
Cable length	3 m

Temperature

Rated temperature range f	-10 ... 60 °C
Operating temperature range f	-10 ... 85 °C
Storage temperature range f	-10 ... 85 °C



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

Pressure load: positive output signal.

Shield: transparent.

accessories

Description	Description	
	Factory calibration certificate Nm/50/5	Detection of the characteristic value and the traceability to DKD torque device
	Factory calibration certificate Nm/50/5/System	Proof of the characteristic value and the traceability on DAkkS torque device, including system calibration