

## 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
length	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



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Environmental protection

IP65

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*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