

Datasheet

Torque Transducer

DRN ¼" - 1"

Torque range 2 Nm to 1000 Nm

for static applications

active or passive-model



Features

- accuracy 0.15 % full scale
- protection IP50
- square drive DIN3121
- input for checking the device chain

Suitable for

- testing torque wrenches
- precisely tightening screws
- measurement of screwings on badly reachable places
- measuring torque on screwings that are hard to reach
- measuring the friction factor
- measuring the load on flap valve

This non-rotating torque transducer is suitable for checking different types of screwing tools or for use as a reference transducer in test benches. It is a low-cost alternative to the rotating torque

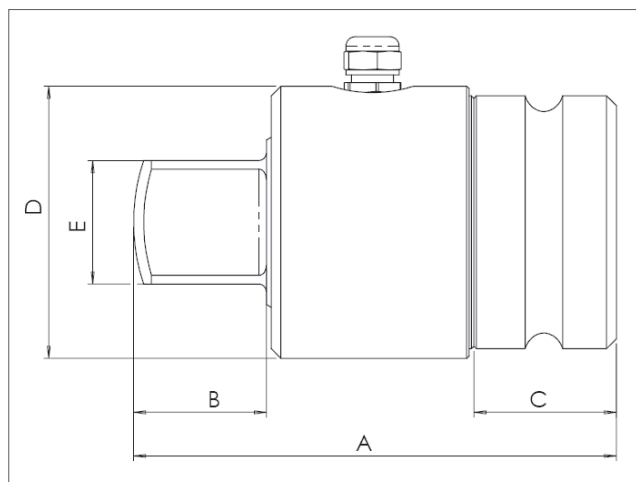
transducer. When the supply voltage is input to the transducer and the transducer is not loaded a control signal is output which can be used to adjust the chain.

Electrical Specifications DRN ¼" - 1"

Model:	active	passive
Supply voltage:	12 - 28 V DC	12 V max.
Power consumption:	60 - 100 mA	35 mA max.
Rise time 10 - 90 %	120 μs	--
Limit frequency -3 dB:	3 kHz	--
Voltage output:	0 ± 5 V	approx. 1 mV / V
Nonlinearity:	0.15 %	0.15 %
Hysteresis:	0.1 %	0.1 %
Deviation at zero point:	≤ ± 100 mV	≤ ± 0.01 mV / V
Internal resistance:	--	350 Ω nominal
Compensated temperature range:	5 - 45 °C	5 - 45 °C
Operating temperature:	0 - 60 °C	0 - 60 °C
Temperature error		
Zero point:	0.02 % / K	0.02 % / K
Sensitivity:	0.01 % / K	0.01 % / K
Mechanical overload:	40 %	40 %
Internal protection:	IP 50	IP 50
Connection:	12pin-connector	flying leads
Cable lenght:	2.5 m	2.5 m
	Amplifier integrated in the cable	
Calibration: Works certificate with 25% steps cw and ccw. Other calibrations upon request.		

Mechanical Dimensions DRN ¼" - 1"

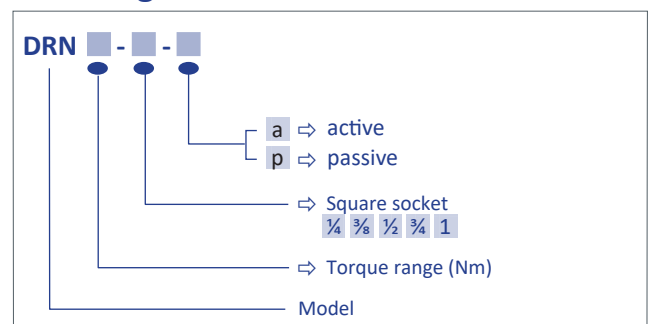
Model	DRN ¼"	DRN ⅜"	DRN ½"	DRN ¾"	DRN 1"
Torque ranges: (Nm)	2 5 10 12 15 20	20 30 50 63	100 160 200	200 300 500	1000
Dimensions: (other ranges upon request; General tolerances DIN 2768-m)					
A (mm)	45	53	65	90	100
B (mm)	7.2	10.5	15.1	22.6	27.5
C (mm)	9.8	12.5	16	24.4	29.5
D (mm)	Ø 30	Ø 35	Ø 45	Ø 55	Ø 64
E (mm)	6.35	9.525	12.7	19.05	25.4
square DIN 3121 outside and inside	¼"	⅜"	½"	¾"	1"
Weight (approx.) g	60	120	270	640	1000



Available Accessories

Measuring cable extension
Supply and display unit
Adapter

Ordering Code



Datasheet

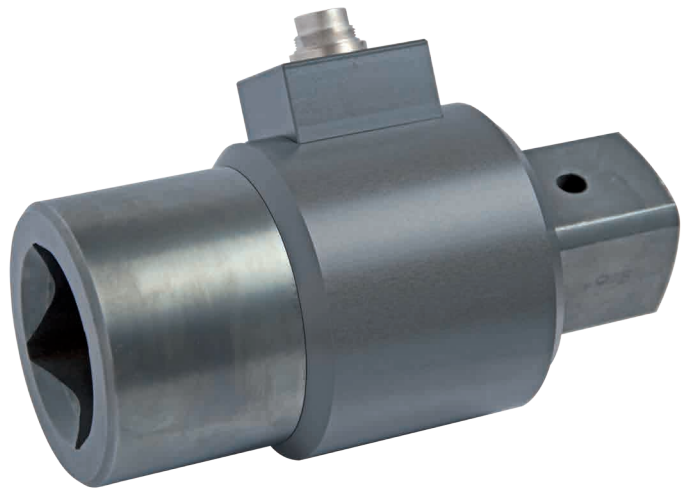
Torque Transducer

DRN 1½" - 2½"

Torque range 2000 to 20,000 Nm

for static applications

active oder passive-model



Features

- lateral force insensitive
- accuracy 0.15 % full scale
- Degree of protection optionally
IP 50 (dust-protected) or IP 55 (jet-proof)
- square DIN 3121

suitable for

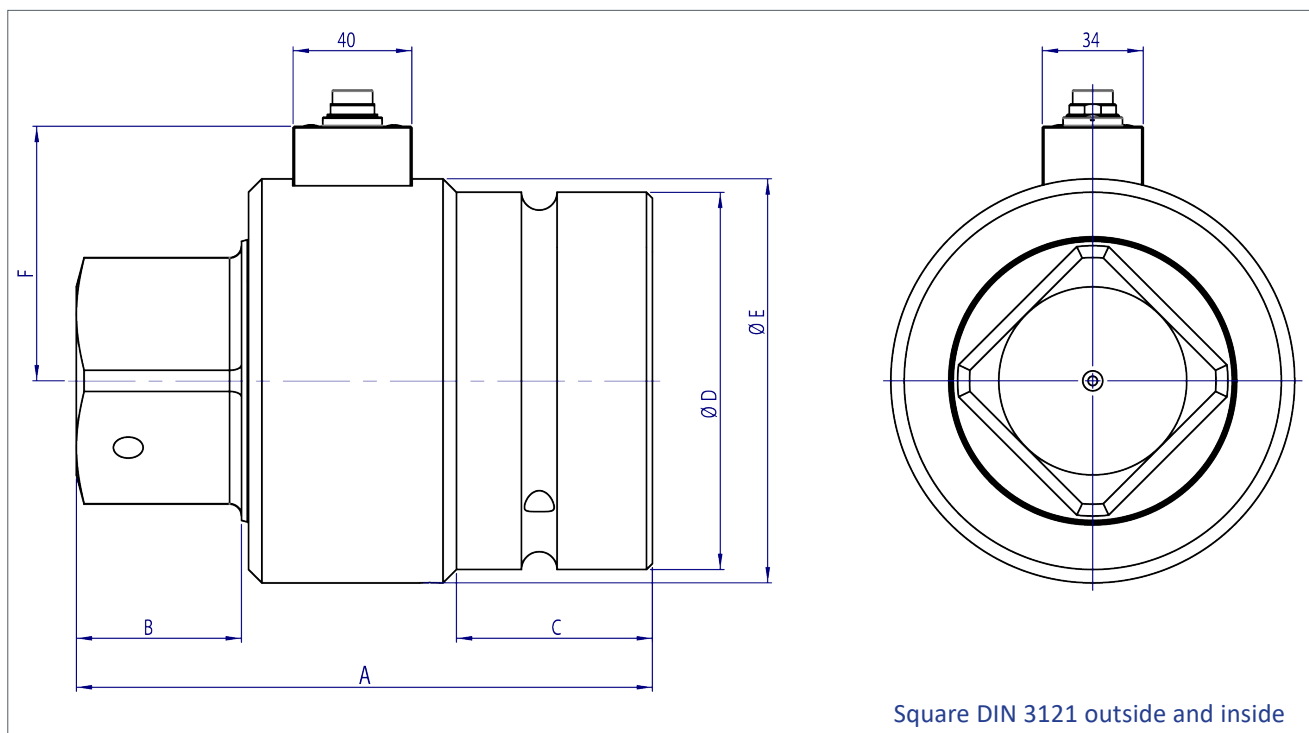
- non-rotating applications
- test facilities
- torque reference recording

Electrical Specifications DRN 1½" - 2½"

Model:	active	passive
Supply voltage:	12 - 28 V DC	12 V max.
Power consumption:	60 - 100 mA	35 mA max.
Rise time 10 - 90 %	120 µs	--
Limit frequency -3 dB:	3 kHz	--
Measurement signal:	0 ± 5 V	2 mV / V
Nonlinearity:	0.15 %	0.15 %
Hysteresis	0.1 %	0.1 %
Deviation at zero point:	≤ ± 100 mV	≤ ± 0.01 mV / V
Internal resistance:	---	350 Ω nominal
Compensated temperature range:	5 - 45 °C	5 - 45 °C
Operating temperature:	0 - 60 °C	0 - 60 °C
Temperature error		
Zero point:	0.02 % / K	0.02 % / K
Sensitivity:	0.01 % / K	0.01 % / K
Mechanical overload:	50 %	50 %
Internal protection:	IP50 or IP55	IP50 or IP55
Connection:	12pin- connector	6pin- connector

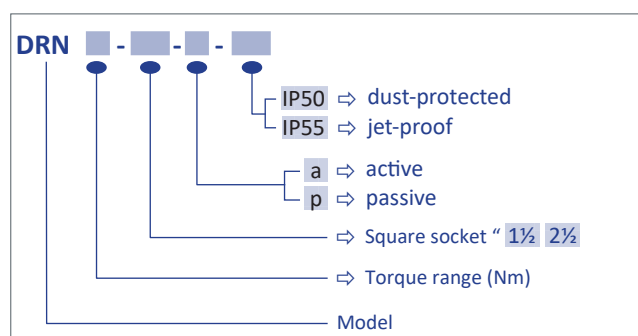
Calibration: Works certificate with 25% steps cw and ccw. Other calibrations upon request.

Mechanical Dimensions DRN 1½" - 2½"



Model	DRN 1½"	DRN 2½"
Torque ranges: (Nm)	2000 3000 4000 5000	10,000 15,000 20,000
Dimensions:	(other ranges upon request; General tolerances DIN 2768-m)	
A (mm)	162	194
B (mm)	39.3	55.6
C (mm)	50	66
D (mm)	Ø 70	Ø 127
E (mm)	Ø 80	Ø 136
F (mm)	56.2	85.7
Square DIN 3121 outside and inside	1½"	2½"
Weight (approx.) g	3000	11,000

Ordering Code



Available Accessories

Measuring cable extension
Supply and display unit
Adapter