

Reaction torque transducer Type DRT3 und DRT4 for static application



Suitable for:

- test of pulsed tools
- torque wrenches
- electric screwdriver

Description:

This transducer was developed for static test of pulsed tools, torque wrenches, electric screwdrivers and so on. In combination with the universal torque meter GMV2 it is possible to detect the first peak of a measurement to prevent falsifying of measurement values by overdrawing of a torque wrench.

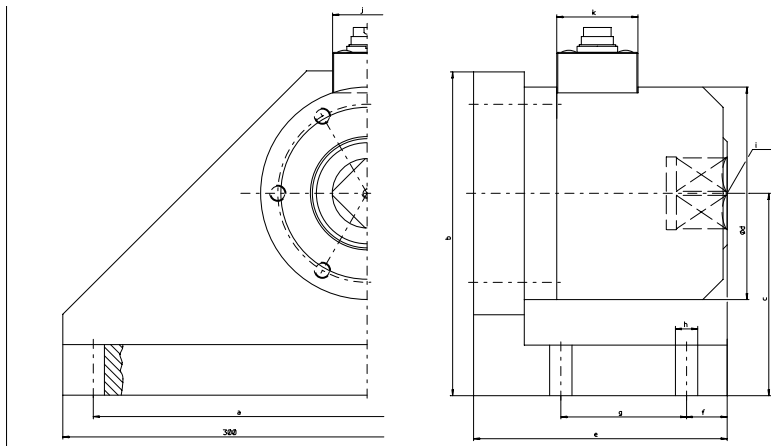
Special features:

- insensitive for bending force
- for fixed mounting
- replaceable adapter

According to the tool to be tested, it can be arranged any way you like.

For connect the tools are various adapters available. The shaft of the torque transducer are insensitive for bending force, because of specially applied strain gage bridges and additional ball bearings.

Mechanical dimensions:



	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	g [mm]	h [mm]	i [Inner square DIN3121]	j [mm]	k [mm]	Weight [kg]
DRT 3	270	160	100	Ø105	125	20	62	11	1" (¾")	34	40	17
DRT 4	248	250	150	Ø178	200	30	130	17,5	2 ½"	40	60	52

Technical Data:

Type:	(a)ctive	(p)assive	Permissible Load		
Measurement Range:	DRT3 DRT4	500; 1000; 2000; 3000 Nm 4000; 5000; 6000 Nm	Measure- ment Range (Nm)	Axial (N)	Radial (N)
Supply Voltage:	12V DC+/-10%	12 V max.	500	4070	8150
Current Consumption:	approx. 20 mA	35 mA max.	1000	6790	8150
Voltage Output:	0- ±5V	2 mV/V	2000	11300	8150
Nonlinearity:	<0,15 %	<0,15 %	3000	14310	8150
Hysteresis:	<0,1 %	<0,1 %	4000	17670	27000
Deviation at zero point:	≤ ± 100 mV	≤ ± 0,01 mV/V	5000	20610	27000
Internal Resistance:	---	350 Ω nominal	6000	23370	27000
Compensated Temperature Range:	5-45°C	5-45°C	Hexagonal Connector (only DRT3): SW22 to SW55 DIN ISO 272 Square Connector: 3/4" DIN 3121-H		
Operating Temperature	0-60°C	0-60°C			
Temperature fault					
Zero Point:	0,02 % / K	0,02 % / K			
Sensitivity:	0,01 % / K	0,01 % / K			
Mechanical Overload:	50%	50%			
Connection:	12 pin Connector	6 pin Connector			
Protection:	IP 40 DIN 40050	IP 40 DIN 40050			

1. Ordering Example: DRT3 p-1000-SW36

Torque transducer passiv measuring range 1000 Nm Hexagonal Connector SW 36 DIN ISO 272

2. Ordering Example: DRT3 a-1000-A-SW36

Torque transducer aktiv measuring range 1000 Nm Hexagonal Connector SW 36 DIN ISO 272

Please ask for connectors not listed above.

Attention: To order for supply and display unit type GMV1 without index „A“!

Available Accessories: Connectors, measuring cable, supply and display unit, screwing simulators