

## Reaction torque transducer

### 1. Application

The construction was optimized concerning the length, weight (moment of inertia) and volume, to minimize axial forces and bending load on the measuring element.

For special measuring assignments, the construction of our torque transducers can also be adjusted to the respective applications.



Torque transducer type 0150 RD

### 2. General information

Reaction torque transducers type 0150 RD are used for static and quasi-static applications.

A recording of reaction torques at rotating machine elements is also possible.

By that way a maintenance-free torque measuring is possible.

The applications are used for adjusting torque at machine elements, measuring of stirring devices and checking motors as well as hydraulic pumps. These models are suitable for all flange mounting situations.

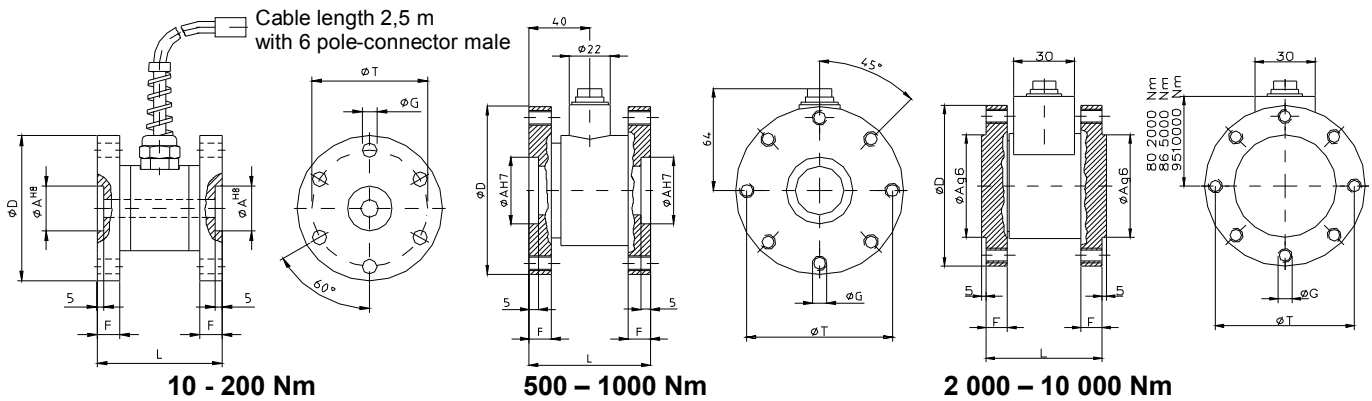
### 3. Special features

- Nominal range 10 to 10000 Nm
- Accuracy 0.2 % of full scale
- Standardized output signal
- Easy to handle
- Compact design

## 4. Technical specifications

Excitation:	5..12 V DC
Rated output:	1 mV/V
Bridge resistance:	350 Ω, nominal
Nominal temperature range:	-5 ...+45°C
Operating temperature range:	-15 ..+55°C
Temperature influence at nominal range:	± 0,002 % of nominal range/K (characteristics)
On zero signal:	≤± 0,01 % f.s. / k
Characteristic	≤±0,003 % f.s. / k
Linearity and hysteresis	≤± 0,2 % f.s.
Overload capacity:	150 % of nominal range
Rupture torque:	>300 % of nominal range
Dynamic performance:	70 % of capacity
Protection class:	IP 45

## 5. Mechanical dimensions



Nominal-torque in Nm	Dimensions [mm]						Numbers of holes of T	Part #	tightening torque Nm	
	L	Ø D	F	Ø A	Ø T	G				
0... ± 10 Nm	65	70	12	20 <sup>H7</sup>	58	M 8	6 x 60°	16594	1,5	
0... ± 25 Nm	65	70	12	20 <sup>H7</sup>	58	M 8	6 x 60°	17445	3	
0... ± 50 Nm	65	70	12	20 <sup>H7</sup>	58	M 8	6 x 60°	17446	6	
0... ± 100 Nm	65	70	12	20 <sup>H7</sup>	58	M 8	6 x 60°	17447	12	
0... ± 200 Nm	65	70	12	20 <sup>H7</sup>	58	M 8	6 x 60°	17448	20	
0... ± 500 Nm	80	100	15	40 <sup>H7</sup>	82	M 10	8 x 45°	17451	35	
0... ± 1.000 Nm	80	100	15	40 <sup>H7</sup>	82	M 10	8 x 45°	17452	70	
0... ± 2.000 Nm	110	150	20	70 <sup>G6</sup>	120	M 12	6 x 60°	21054	110	
0... ± 5.000 Nm	140	250	25	100 <sup>G6</sup>	220	M 12	8 x 45°	21055	150	
0... ± 10.000 Nm	180	280	35	180 <sup>G6</sup>	240	M 18	8 x 45°	21481	250	
> 10.000 Nm	On request									

## 6. Electrical connections

- PIN 1 - excitation
  - PIN 2 + excitation
  - PIN 3 shield (open)
  - PIN 4 + output signal
  - PIN 5 - output signal
  - PIN 6 100 % calibration signal
- Mating connector 6-pin connector, female  
Part # : 822, (Binder type: 99-2022.09-6)

## 7. Example of order

0150 - RD - 100 - 17447

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data sheet    typ    nominal torque    article-no.