

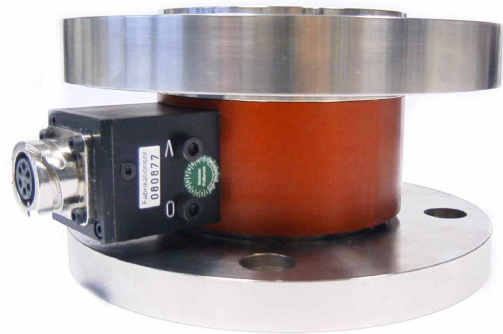
## Reactional torque transducer type 0153 RD torque measurement of valves for function control

### Application:

In many hazardous processes of power generation systems it is vital to know that control valves will operate successfully when required. Monitoring of start, stop and run torque provides a reliable, non-invasive means of determining valve health and performance.

#### Installation:

Easily installed between the valve motor drive and valve drive shaft without modifications to existing equipment.



Reactional torque transducer type 0153 RD

### Features:

- Strain gauge enclosed reactional torque transducer
- Built-in amplifier with current output
- High accuracy
- Operation temperature up to 100 °C
- Flange couplings acc. to DIN 3210
- Large hole for shaft adapter
- Installation without constructional modifications possible
- Protection class: IP 54
- Rust-resistant, material: 1.4542

### Example of order:

Data sheet	Nominal torque	part# Version B	part# Version G
0153 RD	120	13979	13984
	500	13980	13985
	1000	13981	13986
	2000	13982	13987
	4000	13983	13988

Example of order: 0153 - 500 Nm - 13980 - B

Version B (Valve sided flange with holes)

Version G (Valve sided flange with threads)



Test installation with valves type 0153 RD

## Technical specifications:

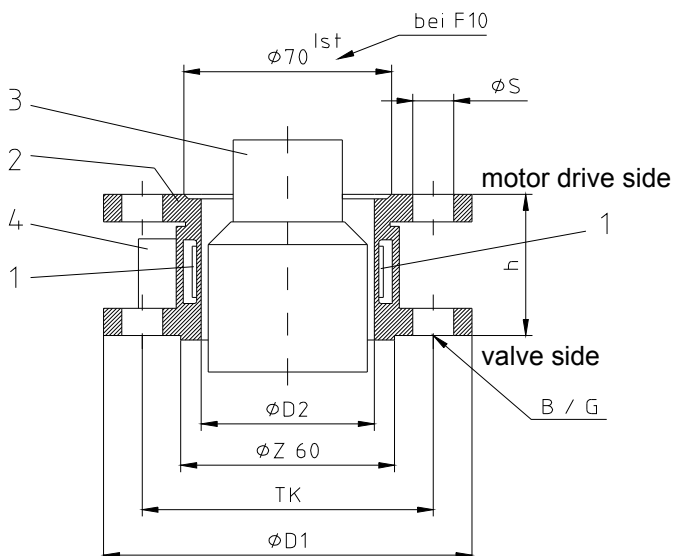
Excitation:	24V=
Rated temperature range (continuous operation):	0 ... +60°C
max. operation temperature range:	0 ... +100°C
Current output:	4 ... 20 mA
100 % cw-torque in valves:	20 mA
Without torque:	12 mA
100 % ccw-torque in valves:	4 mA
Electrical calibration:	20 mA
Load resistance:	0 ... 600 Ω
Limit frequency:	20 Hz
Sensitivity:	0,5 mV/V
Accuracy:	± 1% of full scale
Overloadability:	1,5 x rated torque
max. permissible relative humidity of surrounding air:	80 %

## Mechanical connection:

Nominal torque in Nm	Flanges acc. to DIN 3210	valve sided flange		Ø S motor drive side	Ø TK	Ø Z	Ø D1	Ø D2	h	Mass in kg (app.)	max. mass of motor drive in kg
		Version B (holes)	Version G (threads)								
120	F10	4 x Ø11	4 x M10	4 x Ø11	102	60	125	50	70	2,7	35
500	F14	4 x Ø18	4 x M16	4 x Ø18	140	100	175	70	95	7,4	76
1000	F16	4 x Ø22	4 x M20	4 x Ø22	165	130	210	90	125	12,6	142
2000	F25	8 x Ø18	8 x M16	8 x Ø18	(254)	160	300	130	125	31,5	309
4000	F30	8 x Ø22	8 x M20	8 x Ø22	(298)	180	350	150	145	43,2	373

Ø Z with adapter ring of Ø60 to Ø70  
Option 3542.11-005, part#: 9955

- 1 Strain gauge
- 2 Torsional socket
- 3 Adapter (addition customer)
- 4 Amplifier



## Electrical connection:

Built-in plug Cannon 6-poles

PIN	disignation
A	0V excitation
B	+24V excitation
C	shield
D	output
E	calibration
F	code

Mating connector 6-pole Cannon part#: 689