


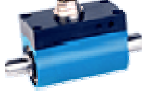




Torque Sensors, Torque Transducers

Rotating with Slipping



Image	Type	Measuring Range [N·m]	Accuracy Class	Speed/Angle	Mechanical Connection
	DR-1	1..5000	0.1	-	Male Square Drive / Female Square Drive
	DR-2	1..500	0.1	-	Shaft with Keyway
	DR-12	1..5000	0.1	x	Male Square Drive / Female Square Drive
	DR-20	1..500	0.1	x	Shaft with Keyway
	DR-2291	1..20	0.1	-	¼" Hexagon Drive / Quick Change Chuck
	DR-2335	1..20	0.1	x	¼" Hexagon Drive / Quick Change Chuck

Rotating Contactless


Image	Type	Measuring Range [N·m]	Accuracy Class	Speed/Angle	Mechanical Connection
	DR-3000	0.5..1000 USB Torque Sensor	0.1	x	Shaft
	DR-2112 DR-2412	0.1..20000	0.1	x	Shaft
	DR-2112-R DR-2412-R	0.1..1000	0.2	x	Shaft
	DR-2477	0.2..200	0.25	-	Shaft
	DR-2113 DR-2413	0.1..5000	0.1	x	Male Square Drive / Female Square Drive
	DR-2493	0.1..5000	0.25	x	Male Square Drive / Female Square Drive
	DR-2114 DR-2414	0.1..20	0.1	-	¼" Hexagon Drive / Quick Change Chuck
	DR-2153 DR-2453	0.1..20	0.1	x	¼" Hexagon Drive / Quick Change Chuck
	DR-2494	0.1..20	0.25	x	¼" Hexagon Drive / Quick Change Chuck

Rotating Contactless

Image	Type	Measuring Range [N·m]	Accuracy Class	Speed/Angle	Mechanical Connection
	DR-2212 DR-2512	0.1..20000	0.1	x	Shaft
	DR-2212-R DR-2512-R	0.1..1000	0.2	x	Shaft
	DR-2554	50..1000 Bearingless	0.05..0.15	x	Clamping Ring Hub / Radial Clamping Hub Keyway
	MR-12	20..5000 Sensor for Belt-Pulleys	0.1	x	Mounting-Hole with Keyway
	DR-2500 DR-2600	0.005..150 Miniature Torque Sensor without Bearings	0.1	x	Shaft
	DR-2481	260	0.5	-	External / Internal Spline Drive

Dual Range Sensor	Type	Measuring Range [N·m]	Accuracy Class	Speed/Angle	Mechanical Connection
	DR-2208 DR-2508	0.5 / 5..2000 / 20000 Dual Range Sensor	0.1	x	Shaft
	DR-2531 DR-2831	0.5 / 5..2000 / 20000 Dual Range Sensor	0.1	x	Shaft

Non-Rotating (Static)

Image	Type	Measuring Range [N·m]	Accuracy Class	Range of Application	Mechanical Connection
	DV-14	2..5000	0.1..0.2	Survey of Assembly Tools for Screws and Nuts	Male Square Drive / Female Square Drive
	DH-15	0.005..20	0.1..0.2	For Very Small Ranges	Flange with Spigot / Shaft
	D-2452	0.005..20000	0.1	Reaction Torque Measurement, e.g. Extruder	Shaft
	D-2431	0.2..20	0.1	Survey of Assembly Tools for Screws and Nuts	¼" Hexagon Drive / Quick Change Chuck
	DFW-25	5..1000	0.1..0.2	Compact Design	Flange with Center Hole / Shaft with Keyway
	D-2553	10..200	0.1	Compact Design	Flange with Large Through Hole and Center Counter Bore
	D-2209	1..5	0.2	Compact Design	Flange with Spigot
	DF-30	10..20000	0.05..0.1	Compact Design	Flange with Center Hole
	DFW-35	2..2000	0.1..0.2	Survey of Assembly Tools for Screws and Nuts	Flange with Center Hole / Square
	D-2223	2..5000	0.1..0.2	Survey of Assembly Tools for Screws and Nuts	Flange with Center Hole / Square Socket
	D-2268	100..5000	0.1	Short Design	Flange


Multi-Component Sensors

Torque static / Force Sensors

Image	Type	Measuring Range	Accuracy Class	Range of Application
	M-2416	0.1 N·m / 20 N 0.5 N·m / 50 N	0.2 (F); 0.2 (Mt)	E.g. the Optimization of the Granulation of Abrasives
	M-1902	100 N·m / 100 N·m / 100 kN	0.2	Screw Testing: Thread Friction Torque, Screw Head Friction Torque and Preload
	M-2230	100 N·m / 100 N·m / 100 kN	0.2	Screw Testing: Thread Friction Torque, Screw Head Friction Torque and Preload
	M-1983	60 N·m / 60 N·m / 40 kN	0.5	Screw Testing: Thread Friction Torque, Screw Head Friction Torque and Preload
	M-2396	0,5 kN / 5 N·m; 0,5 kN / 50 N·m; 1 kN / 10 N·m; 1 kN / 30 N·m; 20 kN / 20 N·m; 2 kN / 50 N·m	0.3 (F) 0.2 (Mt)	E.g. Optimization of the Cutting Force of Drills
	M-2025	10 kN / 10 N·m 20 kN / 20 N·m	0.2 (F) 0.2 (Mt)	E.g. Survey of the Characteristics of Elastomers
	M-2354	10 kN / 10 N·m	0.2 (F) 0.2 (Mt)	E.g. Survey of the Bearing Friction of Ball Bearings

Multi-Component Sensors

Torque Rotary / Force

Image	Type	Measuring Range	Accuracy Class	Speed / Angle	Range of Application
	M-2371	2 N·m / 100N....5 N·m / 500 N	0.4 (F) 0.2 (Mt)	x	Torque -, Force -, Speed-, and Angle of Rotation Measurement; e.g. for Continuous Stress Test of Pumps and Master Key Systems