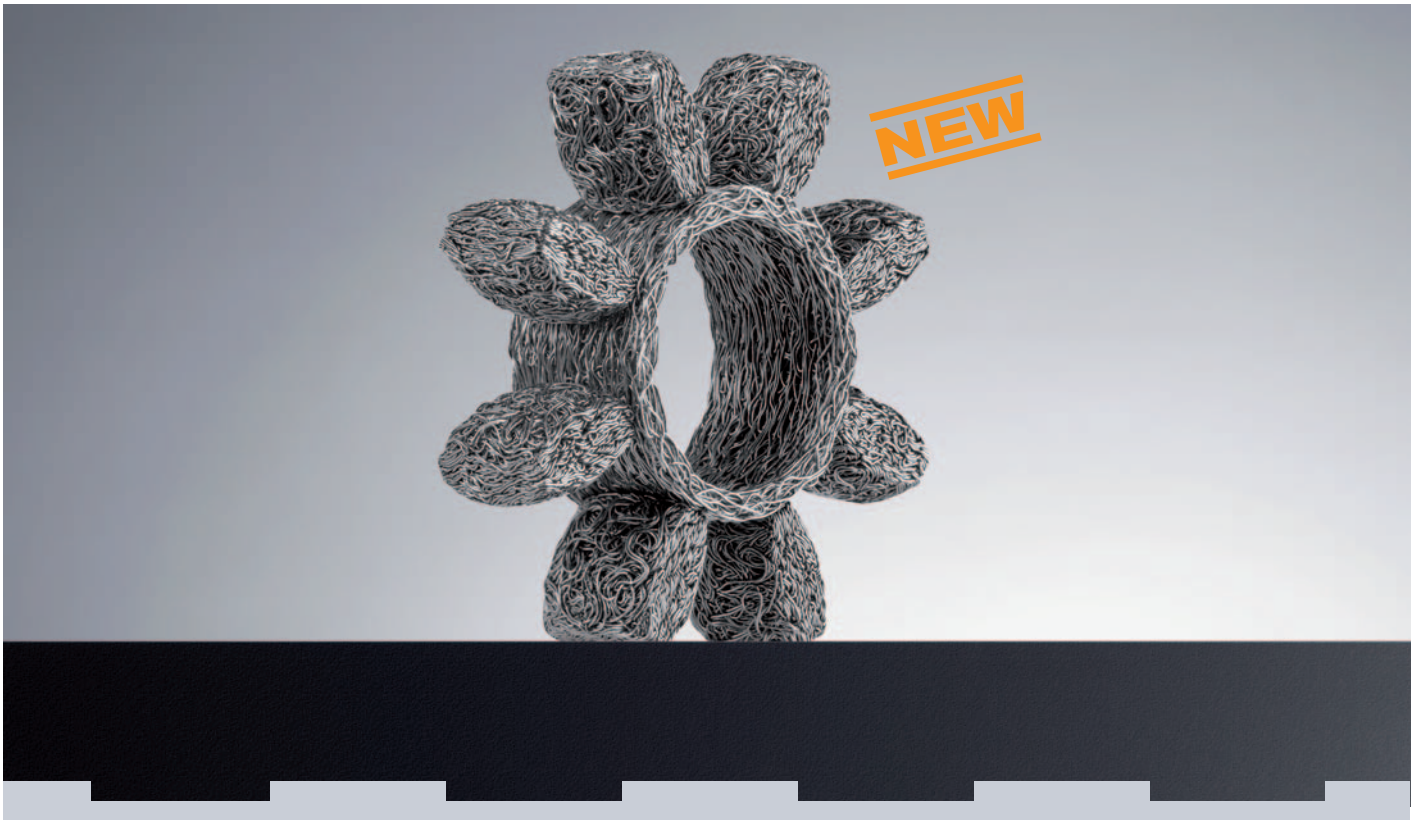
ROTEX®
Torsionally flexible coupling

Made for Motion KTR



The new spider from wire for ROTEX®

The standard material of KTR elastomer spiders is thermoplastic polyurethane for applications in the temperature range between – 30 °C and + 90 °C. It is produced in different kinds of Shore hardness, depending on the damping capacity on the one hand and torsional stiffness on the other hand. Both parameters are closely linked with temperature.

In order to extend the potential applications of couplings damping vibrations, a spider made from wire knitting was developped for our ROTEX® coupling. Damping as a primary characteristic of ROTEX® remains the same and the characteristic figures of torque capacity and torsional stiffness remain almost invariable even under permanent loads.

The benefits of the knitted spiders mainly become obvious with applications in the high-temperature range of T > 120 °C as well as applications in a corrosive environment, since stainless material is used.
The spider from wire can be used with steel, cast iron and hard-coated aluminium hubs.

Characteristics:
- Material: knitted special steel wire
- High temperature resistance up to 250 °C with almost invariable torque capacity, torsional stiffness and damping
- Resistance to chemicals and other aggressive environmental influences
- Electro-conductive

Applications:
- Mechanical engineering
- Chemical industry
- Food-processing industry
- Automobile industry
- Medical and pharmaceutical industry
- Hydraulic power packs
- Steel mills

Technical data

Size	Torque [Nm]		
	Rated torque T_{KN}	Max. torque $T_{Kmax.}$	Alternating torque T_{KW}
14	12,5	25	3,3
19	17	34	4,4
24	60	120	16
28	160	320	42
38	325	650	85
42	450	900	117
48	525	1050	137
55	685	1370	178
65	940	1880	244
75	1920	3840	499
90	3600	7200	936

Permissible displacements

Size	Max. axial ΔKa [mm]	Max. radial with n=1500 rpm ΔKr [mm]	Max. angular with n=1500 rpm ΔKw [°]
14	-0,5 / +1,0	0,15	1,0
19	-0,5 / +1,2	0,10	1,0
24	-0,5 / +1,4	0,14	1,0
28	-0,7 / +1,5	0,15	1,0
38	-0,7 / +1,8	0,17	1,0
42	-1,0 / +2,0	0,19	1,0
48	-1,0 / +2,1	0,23	1,0
55	-1,0 / +2,2	0,24	1,0
65	-1,0 / +2,6	0,26	0,9
75	-1,5 / +3,0	0,30	0,9
90	-1,5 / +3,4	0,32	0,9

The displacement figures mentioned are maximum figures which must not arise in parallel. If radial and angular displacements arise at the same time, the permissible displacement figures may only beused proportionally.

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