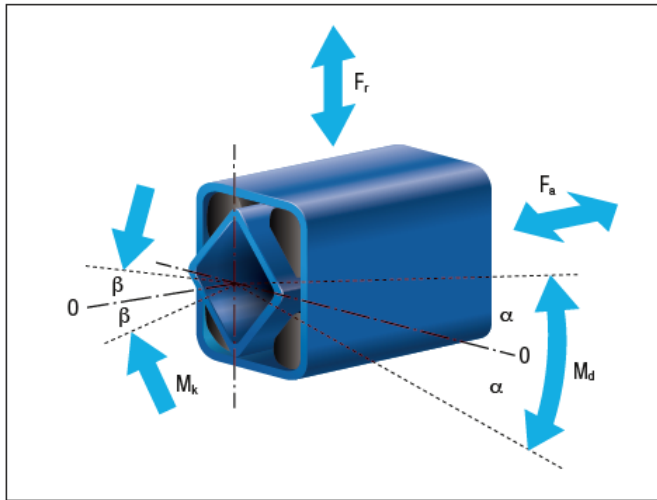


List of torque and loads



The values stated in the below mentioned list have been measured statically and are valid for the standard rubber quality «Rubmix 10». Intermediate values can be interpolated.

By applications with combined dynamic forces and high angles of oscillation please see chapter 7 «Technology» or contact ROSTA.

Element			Torque						Cardanic	Radial		Axial	
Nominal size	×	Length	Md [Nm] angle ±α°						Mk [Nm] angle ±β°	Deflection ± sr	Load Fr	Deflection ± sa	Load Fa
			5°	10°	15°	20°	25°	30°	1°	[mm]	[N]	[mm]	[N]
11	×	20	0.4	1.0	1.6	2.4	3.5	4.8	0.4	0.25	200	0.25	60
11	×	30	0.5	1.4	2.4	3.7	5.2	7.2	1.1	0.25	340	0.25	80
11	×	50	0.8	2.4	4.1	6.1	8.6	12.0	5.6	0.25	600	0.25	150
15	×	25	0.7	1.6	2.6	4.0	5.7	8.2	0.6	0.25	200	0.25	70
15	×	40	1.1	2.5	4.2	6.4	9.2	13.2	2.0	0.25	300	0.25	100
15	×	60	1.6	3.8	6.3	9.6	13.8	19.8	5.5	0.25	500	0.25	160
18	×	30	1.9	4.5	7.5	11.0	15.0	20.6	1.6	0.25	400	0.25	80
18	×	50	3.2	7.5	12.5	18.3	25.0	34.4	7.0	0.25	700	0.25	160
18	×	80	5.1	12.0	20.0	29.3	40.0	55.0	28.0	0.25	1000	0.25	300
27	×	40	4.7	10.7	17.5	26.9	39.5	57.0	3.8	0.5	800	0.5	200
27	×	60	7.0	16.0	26.3	40.3	59.3	85.5	11.5	0.5	1300	0.5	300
27	×	100	11.7	26.7	43.8	67.2	98.8	142.5	48.0	0.5	2400	0.5	600
38	×	60	13.0	30.4	50.6	78.0	113.0	162.0	11.4	0.5	1500	0.5	300
38	×	80	17.3	40.5	67.5	104.0	151.0	216.0	24.7	0.5	2000	0.5	500
38	×	120	26.0	60.8	101.2	156.0	226.0	324.0	76.0	0.5	3000	0.5	600
45	×	80	27.6	62.4	104.0	160.0	222.0	320.0	28.0	0.5	1900	0.5	560
45	×	100	34.5	78.0	130.0	200.0	278.0	400.0	54.0	0.5	3000	0.5	700
45	×	150	51.8	117.0	195.0	300.0	420.0	600.0	140.0	0.5	4800	0.5	1000
50	×	120	51	133	250	395	570	780	80	0.5	2800	0.5	800
50	×	160	77	197	363	570	820	1115	145	0.5	4500	0.5	950
50	×	200	102	260	475	745	1070	1450	250	0.5	6300	0.5	1100
50	×	300	150	385	700	1100	1590	2160	1200	0.5	8600	0.5	2200
60	×	150	75	170	300	460	700	1010	90	1.0	5400	1.0	1600
60	×	200	95	220	385	610	930	1380	250	1.0	7200	1.0	2200
60	×	300	140	365	630	995	1550	2240	900	1.0	9400	1.0	3200
70	×	200	140	380	650	1040	1490	2120	280	1.0	9000	1.0	2200
70	×	300	190	525	910	1470	2160	3150	1200	1.0	12000	1.0	3600
70	×	400	250	765	1315	2160	3175	4750	2200	1.0	14000	1.0	4000
80	×	200	200	500	850	1300	1900	2700	680	1.0	10000	1.0	2500
80	×	300	300	800	1300	2000	2900	4100	1500	1.0	15000	1.0	3800
80	×	400	400	1060	1800	2800	3900	5600	4600	1.0	19000	1.0	4700
100	×	250	400	1080	1800	2800	4100	6300	1200	1.0	15000	1.0	3200
100	×	400	640	1700	2900	4500	6600	10000	4300	1.0	28000	1.0	5800
100	×	500	800	2160	3600	5600	8200	12000	8000	1.0	38000	1.0	7500

Rubber qualities

The majority of all ROSTA rubber suspension elements are equipped with the standard quality «Rubmix 10» rubber inserts. This rubber quality is based on a high content of natural rubber, offers good shape memory, low settling factors (cold flow), high mechanical strength and moderate aging behaviour (little embrittlement/hardening of the rubber inserts).

Where high oil consistency, heat resistance or even greater torques are required, other resilient inserts with the corresponding characteristics can be installed in the rubber suspension elements.

Special qualities on request.

Rubber quality	Factor in relation to the list «torque and loads» (chapter 2 rubber suspension elements)	Working temperature	Material	Comments
Rubmix 10	1.0	-40° to +80°C	NR	<ul style="list-style-type: none"> - Standard quality - Highest elasticity - Lowest cold flow
Rubmix 20	approx. 1.0	-30° to +90°C	CR	<ul style="list-style-type: none"> - Good oil-resistance - Elements marked with yellow dot or R20
Rubmix 40	approx. 0.6	-35° to +120°C	EPDM-Silicone	<ul style="list-style-type: none"> - High temperature resistance - Elements marked with red dot or R40
Rubmix 50	approx. 3.0	-35° to +90°C	PUR	<ul style="list-style-type: none"> - Max. oscillation angle $\pm 20^\circ$ - Limited oscillation frequencies - No permanent water contact - Elements marked with green dot or R50