













Overview spiders

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Colour	Spider type	hardness shore	Material	Perm. temperature range (°C)		Properties				
				Continuous temp.	Max. temp. short time					
 	92Sh-A (T-PUR)		T-PUR	-50 °C to 120 °C	-50 °C to 150 °C	<ul style="list-style-type: none"> – significantly longer service life – very good temperature resistance – improved damping of vibrations – good damping, average elasticity 				
	92 Sh-A		Polyurethane (PUR)	-40 °C to 90 °C	-50 °C to 120 °C	– good damping, average elasticity				
 	98Sh-A (T-PUR)		T-PUR	-50 °C to 120 °C	-50 °C to 150 °C	<ul style="list-style-type: none"> – significantly longer service life – very good temperature resistance – improved damping of vibrations – transmission of high torques with average damping 				
	98Sh-A		Polyurethane (PUR)	-30 °C to 90 °C	-40 °C to 120 °C	– transmission of high torques with average damping				
 	64Sh-D (T-PUR)		T-PUR	-50 °C to 120 °C	-50 °C to 150 °C	<ul style="list-style-type: none"> – significantly longer service life – very good temperature resistance – improved damping of vibrations – transmission of very high torques with low damping 				
	64Sh-D-F		Polyurethane (PUR)	-30 °C to 110 °C	-30 °C to 130 °C	<ul style="list-style-type: none"> – transmission of very high torques with low damping – suitable for displacing critical speeds 				
	PA ¹⁾		Polyamide	-20 °C to 130 °C ¹⁾	-30 °C to 150 °C ¹⁾	<ul style="list-style-type: none"> – low twisting angles and high torsion spring stiffness – transmission of very high torques with very low damping – very good to good resistance to chemicals ¹⁾ 				
	PEEK		Polyetheretherketone	to + 180 °C (ATEX to 160 °C)	to + 250 °C	<ul style="list-style-type: none"> – low twisting angles and high torsion spring stiffness – transmission of very high torques with very low damping – highly temperature resistant – good resistance to chemicals – resistant to hydrolysis 				
	Spider from wire		Stainless steel	to + 250 °C	–	<ul style="list-style-type: none"> – transmission of high torques with average damping – highly temperature resistant – very good resistance to chemicals – resistant to hydrolysis – technical data according to 98 Sh A 				

¹⁾ different properties depending on compound

Torque of spiders

ROTEX® Size	increasing hardness →									
	92 Shore A		98 Shore A		64 Shore D		PA, PEEK		Spider from wire	
	T _{KN}	T _{K max}	T _{KN}	T _{K max}	T _{KN}	T _{K max}	T _{KN}	T _{K max}	T _{KN}	T _{K max}
14	7,5	15	12,5	25	16	32	–	–	12,5	25
19	10	20	17	34	21	42	30	60	17	34
24	35	70	60	120	75	150	105	210	60	120
28	95	190	160	320	200	400	280	560	160	320
38	190	380	325	650	405	810	565	1130	325	650
42	265	530	450	900	560	1120	785	1570	450	900
48	310	620	525	1050	655	1310	915	1830	525	1050
55	410	820	685	1370	825	1650	1200	2400	685	1370
65	625	1250	940	1880	1175	2350	1645	3290	940	1880
75	1280	2560	1920	3840	2400	4800	2560	5130	1920	3840
90	2400	4800	3600	7200	4500	9000	6300	12600	3600	7200
100	3300	6600	4950	9900	6185	12370	8650	17300	–	–
110	4800	9600	7200	14400	9000	18000	10500	21000	–	–
125	6650	13300	10000	20000	12500	25000	13000	26000	–	–
140	8550	17100	12800	25600	16000	32000	–	–	–	–
160	12800	25600	19200	38400	24000	48000	–	–	–	–
180	18650	37300	28000	56000	35000	70000	–	–	–	–