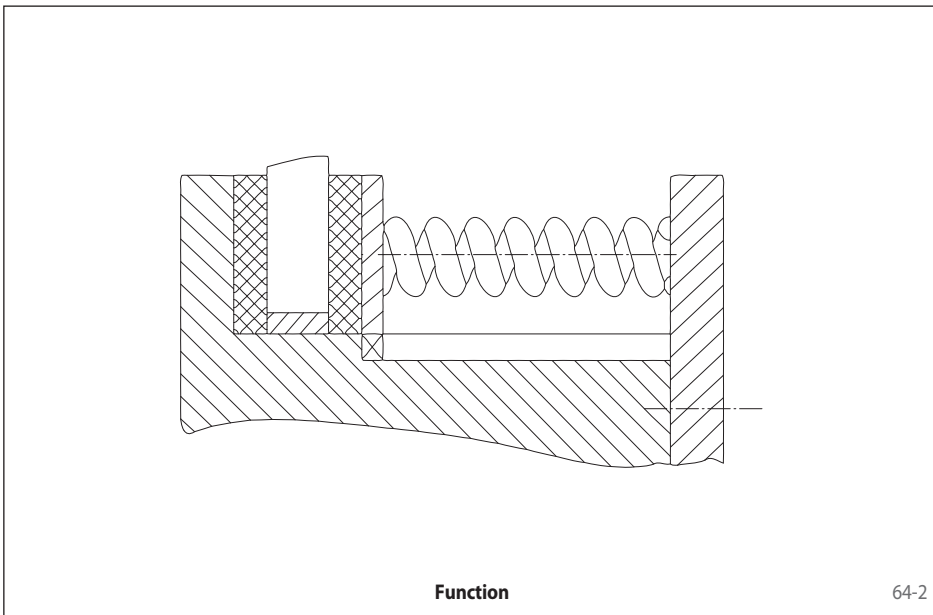


64-1

Advantages

- Particularly suitable in applications with frequent slipping
- Better stability of slipping torque than Belleville spring torque limiters over duration of the operating period
- Adjustment of slipping torque setting according to the number of active springs – not through modification of spring pressure

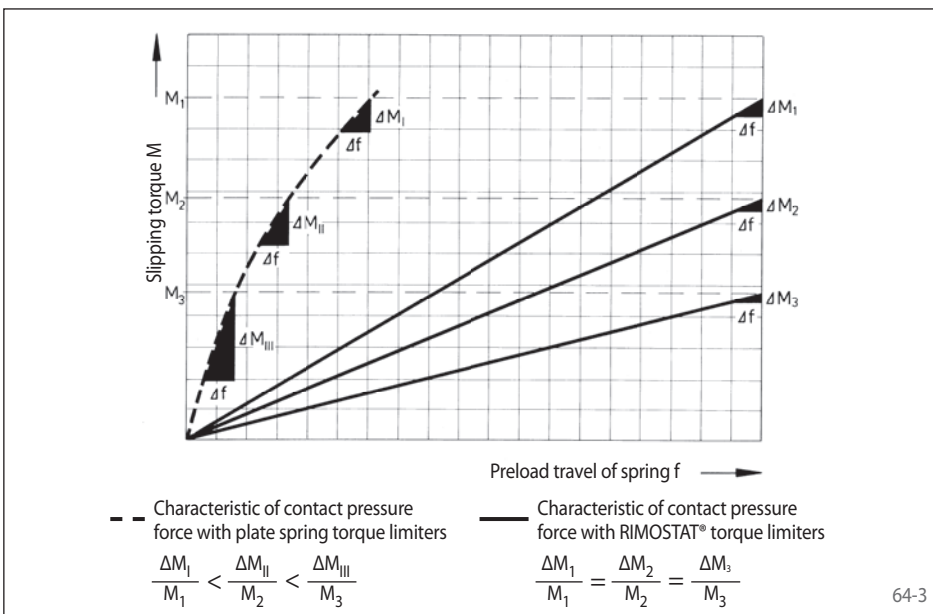


Function

64-2

The RIMOSTAT® Principle

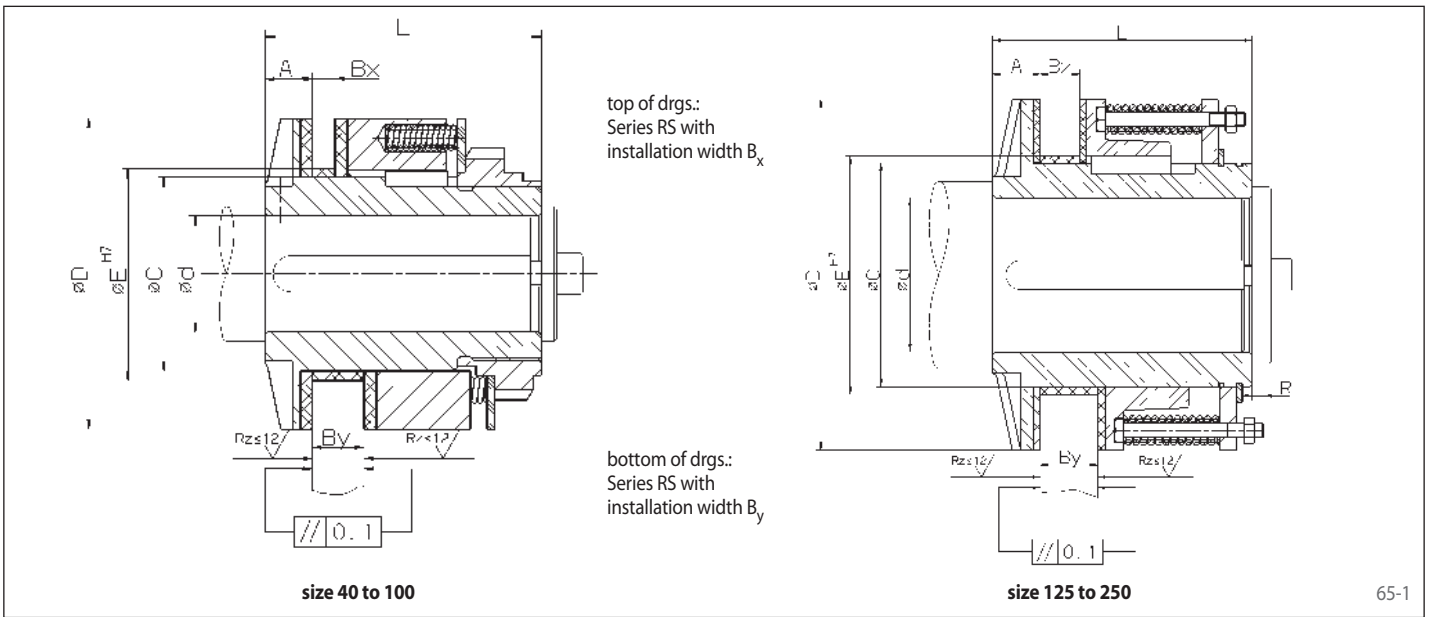
The contact pressure on the friction surfaces is produced by long coil springs. Because of the RIMOSTAT® Torque Limiter's linear, flat-angle characteristic of the pressure force, practically no reduction of the slipping torque occurs even when friction linings are subjected to wear. As the diagram 64-3 shows, compared with Belleville spring torque limiters, assuming a friction wear of Δf the reduction of the slipping torque ΔM is negligible.



64-3

Function

- When the preset slipping torque has been reached the built-in component (e. g. chain wheel) slips
- During the slipping process, input and output rotate relative to each other and the preset slipping torque continues to be transmitted
- Inherent in the slipping process is a high energy consumption
- Re-engagement is not necessary



Technical Data and Dimensions

Type	Art.-No.	Slipping torque Nm	Max. speed ¹⁾ min ⁻¹	Bore d ^{H7}		A mm	B _x mm	B _y mm	C ²⁾ mm	D mm	E ²⁾ mm	L mm	R mm
				min. mm	max. mm								
RS 40.1	4474-040820	2 - 12	13000	8	16	8	4,4	7,0	25	40	28	35,5	-
RS 40.2	4474-040920	4 - 25	13000	8	16	8	4,4	7,0	25	40	28	35,5	-
RS 50.1	4474-050820	4 - 25	10500	9	20	8	5,2	8,7	32	50	36	45	-
RS 50.2	4474-050920	8 - 50	10500	9	20	8	5,2	8,7	32	50	36	45	-
RS 63.1	4474-063820	8 - 50	8500	9	25	10	5,8	10,5	40	63	44	56	-
RS 63.2	4474-063920	16 - 100	8500	9	25	10	5,8	10,5	40	63	44	56	-
RS 80.1	4474-080820	10 - 100	6700	15	32	12	5,8	15,3	50	80	55	71	-
RS 80.2	4474-080920	20 - 200	6700	15	32	12	5,8	15,3	50	80	55	71	-
RS 100.1	4474-081820	20 - 200	5350	25	40	15	8,7	18,0	65	100	70	90	-
RS 100.2	4474-081920	40 - 375	5350	25	40	15	8,7	18,0	65	100	70	90	-
RS 125.1	4474-082820	40 - 375	4300	22	55	17	15,3	23,0	80	125	85	105	2,5
RS 125.2	4474-082920	75 - 750	4300	22	55	17	15,3	23,0	80	125	85	105	2,5
RS 160.1	4474-083820	75 - 750	3350	40	70	22	15,3	28,0	100	160	105	130	5,5
RS 160.2	4474-083920	150 - 1500	3350	40	70	22	15,3	28,0	100	160	105	130	5,5
RS 200.1	4474-084820	150 - 1500	2700	50	90	27	23	34,0	125	200	130	160	7,5
RS 200.2	4474-084920	300 - 3000	2700	50	90	27	23	34,0	125	200	130	160	7,5
RS 250.1	4474-085820	300 - 3000	2100	55	115	34	28	41,0	160	250	165	185	9,0
RS 250.2	4474-085920	600 - 6000	2100	55	115	34	28	41,0	160	250	165	185	9,0

¹⁾ The max. speed relates to the design straight of the Torque Limiter; the max. permissible speed differential Δn should be checked according to the heat calculation on page 73.

²⁾ If the part to be coupled is used without bearing bush, the bore should be made to dimension C (tolerance F8).

Keyway as per DIN 6885, page 1 · Tolerance of keyway width P9. Further sizes available on request.

Width of parts to be connected

Components may be connected with either width B_x or B_y.

Supply

Unless requested otherwise, the Torque Limiters are supplied pilot bored, a full complement of springs, without slipping torque setting and without bearing bush. Factory slipping torque setting is only possible when the order includes a finish bore.

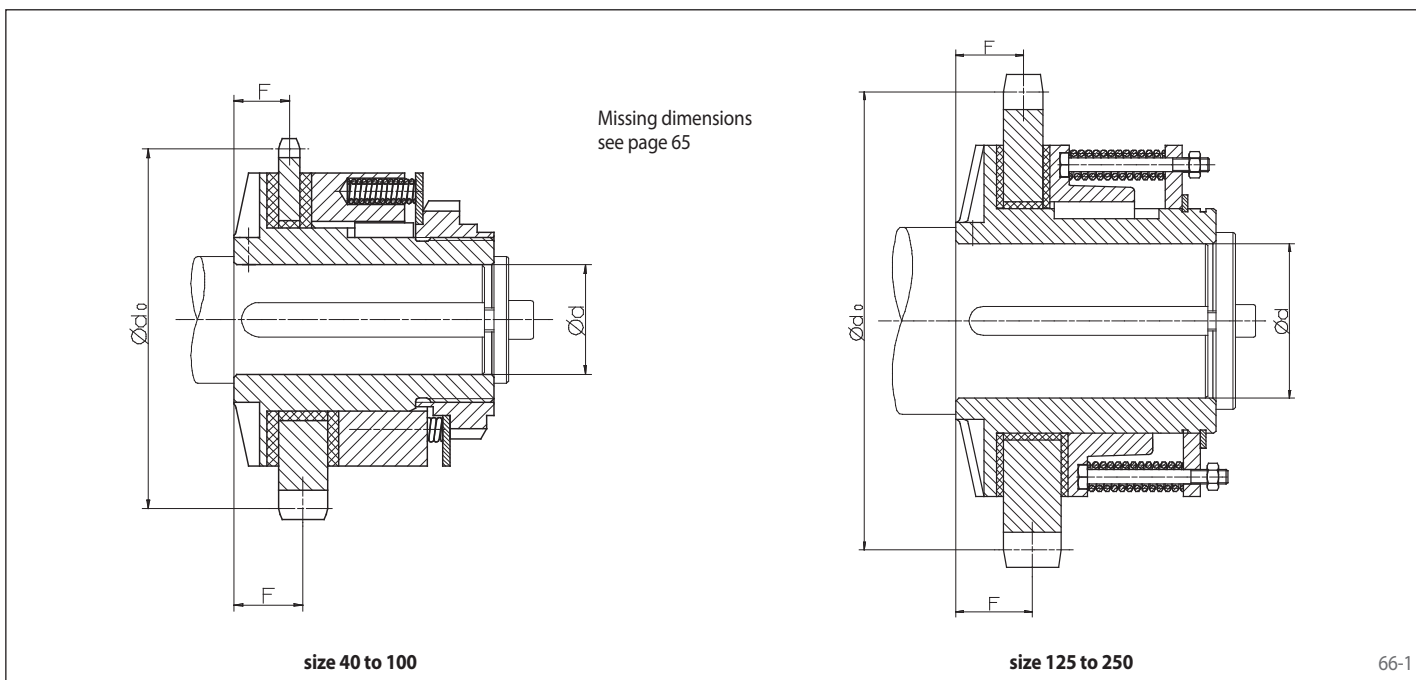
Accessories

- Width B_x or B_y bearing bushes
- Standard tools are normally sufficient for adjusting the slipping torque. Only sizes 125 and 160 require a tool adapter which can be ordered from us.

Please specify when ordering

- Type of Torque Limiter
- Diameter d, if finish bore is requested
- Width of bearing bush B_x or B_y
- Slipping torque to be preset, if required

with chain wheel

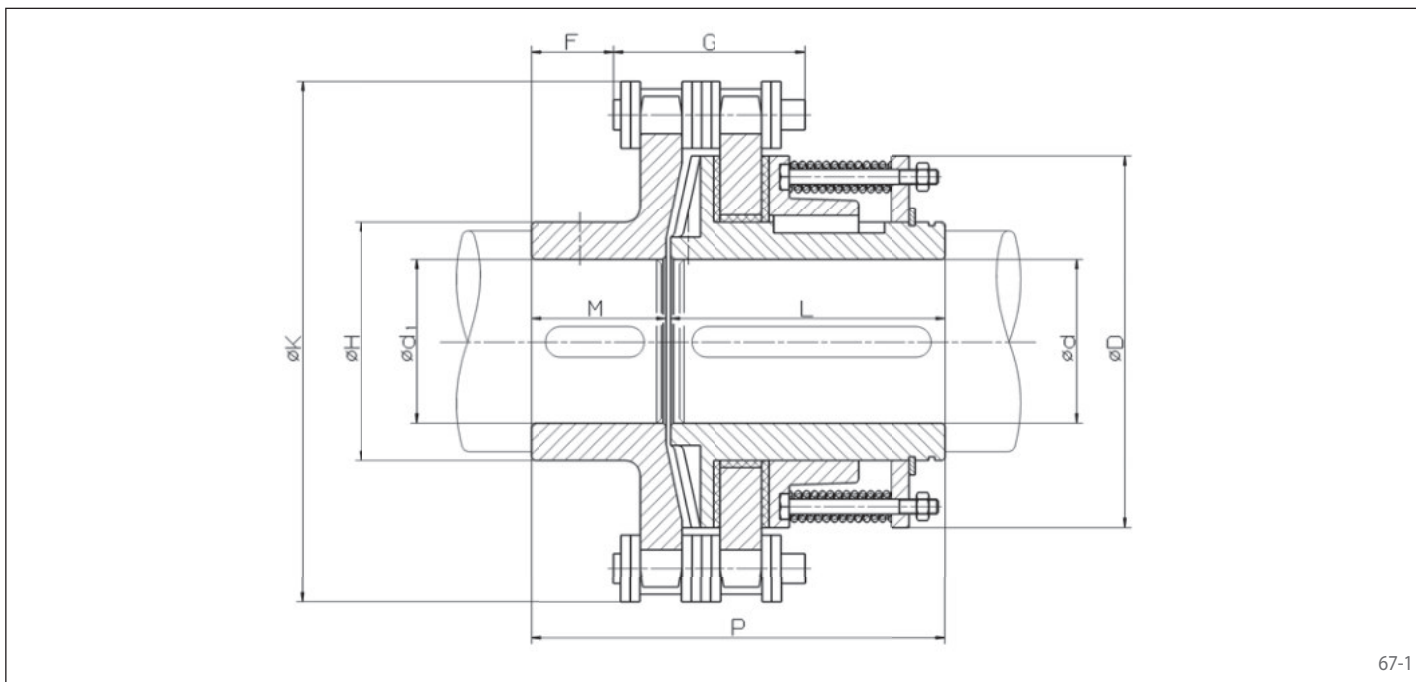


Technical Data and Dimensions

Type	Art.-No.	Slipping torque Nm	Bore d ^{H7}		Chainwheel suitable for simple roller chain as per DIN 8154 or DIN 8187						F mm
			min. mm	max. mm	Roller chain dimensions			N° of teeth Z mm	Pitch circle-ø d ₀ mm	Chainwheel- width B mm	
Pitch mm	Inner width mm	Roller-ø mm									
RSK 40.1	4474-040822	2 - 12	8	16	9,525	x 4,77	x 5,08	17	51,8	4,4	10,2
RSK 40.2	4474-040922	4 - 25	8	16	9,525	x 4,77	x 5,08	17	51,8	4,4	10,2
RSK 40.1	4474-040823	2 - 12	8	16	12,70	x 7,75	x 8,51	14	57,1	7,0	11,5
RSK 40.2	4474-040923	4 - 25	8	16	12,70	x 7,75	x 8,51	14	57,1	7,0	11,5
RSK 50.1	4474-050821	4 - 25	9	20	9,525	x 5,72	x 6,35	20	60,9	5,2	10,6
RSK 50.2	4474-050921	8 - 50	9	20	9,525	x 5,72	x 6,35	20	60,9	5,2	10,6
RSK 50.1	4474-050823	4 - 25	9	20	15,87	x 9,65	x 10,16	14	71,3	8,7	12,4
RSK 50.2	4474-050923	8 - 50	9	20	15,87	x 9,65	x 10,16	14	71,3	8,7	12,4
RSK 63.1	4474-063822	8 - 50	9	25	12,70	x 6,40	x 8,51	20	81,2	5,8	12,9
RSK 63.2	4474-063922	16 - 100	9	25	12,70	x 6,40	x 8,51	20	81,2	5,8	12,9
RSK 63.1	4474-063823	8 - 50	9	25	19,05	x 11,68	x 12,07	14	85,6	10,5	15,0
RSK 63.2	4474-063923	16 - 100	9	25	19,05	x 11,68	x 12,07	14	85,6	10,5	15,0
RSK 80.1	4474-080822	10 - 100	15	32	12,70	x 6,40	x 8,51	23	93,3	5,8	15,0
RSK 80.2	4474-080922	20 - 200	15	32	12,70	x 6,40	x 8,51	23	93,3	5,8	15,0
RSK 80.1	4474-080823	10 - 100	15	32	25,40	x 17,02	x 15,88	13	106,1	15,3	19,8
RSK 80.2	4474-080923	20 - 200	15	32	25,40	x 17,02	x 15,88	13	106,1	15,3	19,8
RSK 100.1	4474-081821	20 - 200	25	40	15,87	x 9,65	x 10,16	24	121,6	8,7	19,5
RSK 100.2	4474-081921	40 - 375	25	40	15,87	x 9,65	x 10,16	24	121,6	8,7	19,5
RSK 100.1	4474-081823	20 - 200	25	40	31,75	x 19,56	x 19,05	13	132,7	18,0	24,1
RSK 100.2	4474-081923	40 - 375	25	40	31,75	x 19,56	x 19,05	13	132,7	18,0	24,1
RSK 125.1	4474-082821	40 - 375	22	55	25,40	x 17,02	x 15,88	19	154,3	15,3	24,8
RSK 125.2	4474-082921	75 - 750	22	55	25,40	x 17,02	x 15,88	19	154,3	15,3	24,8
RSK 125.1	4474-082823	40 - 375	22	55	38,10	x 25,40	x 25,40	14	171,2	23,0	28,7
RSK 125.2	4474-082923	75 - 750	22	55	38,10	x 25,40	x 25,40	14	171,2	23,0	28,7
RSK 160.1	4474-083821	75 - 750	40	70	25,40	x 17,02	x 15,88	23	186,5	15,3	29,7
RSK 160.2	4474-083921	150 - 1500	40	70	25,40	x 17,02	x 15,88	23	186,5	15,3	29,7
RSK 160.1	4474-083823	75 - 750	40	70	50,80	x 30,99	x 29,21	13	212,3	28,0	36,0
RSK 160.2	4474-083923	150 - 1500	40	70	50,80	x 30,99	x 29,21	13	212,3	28,0	36,0
RSK 200.1	4474-084821	150 - 1500	50	90	38,10	x 25,40	x 25,40	20	243,6	23,0	38,5
RSK 200.2	4474-084921	300 - 3000	50	90	38,10	x 25,40	x 25,40	20	243,6	23,0	38,5
RSK 200.1	4474-084823	150 - 1500	50	90	63,50	x 38,10	x 39,37	13	265,4	34,0	44,0
RSK 200.2	4474-084923	300 - 3000	50	90	63,50	x 38,10	x 39,37	13	265,4	34,0	44,0
RSK 250.1	4474-085821	300 - 3000	55	115	44,45	x 30,99	x 27,94	21	298,3	28,0	48,0
RSK 250.2	4474-085921	600 - 6000	55	115	44,45	x 30,99	x 27,94	21	298,3	28,0	48,0
RSK 250.1	4474-085823	300 - 3000	55	115	76,20	x 45,72	x 48,26	14	342,4	41,0	54,5
RSK 250.2	4474-085923	600 - 6000	55	115	76,20	x 45,72	x 48,26	14	342,4	41,0	54,5

Keyway as per DIN 6885, page 1 • Tolerance of keyway width P9

The glidebush is incorporated as standard. Further chainwheels available on request. Factory slipping torque setting only possible for orders incl. finished bore. Further notes please refer to page 65.



67-1

Technical Data and Dimensions

Type	Art.-No.	Slipping torque Nm	Max. speed min ⁻¹	Bore d ^{H7}		Bore d ₁ ¹⁾		D mm	F mm	G mm	H mm	K mm	L mm	M mm	P mm
				min. mm	max. mm	min. mm	max. mm								
RSC 40.1	4474-240820	2 - 12	6300	8	16	10	24	40	15	23	35	61	35,5	19,0	55,5
RSC 40.2	4474-240920	4 - 25	6300	8	16	10	24	40	15	23	35	61	35,5	19,0	55,5
RSC 50.1	4474-250820	4 - 25	5300	9	20	13	30	50	16	25	45	70	45	21,5	67,5
RSC 50.2	4474-250920	8 - 50	5300	9	20	13	30	50	16	25	45	70	45	21,5	67,5
RSC 63.1	4474-263820	8 - 50	4250	9	25	17	44	63	17	33	60	94	56	25,5	83,0
RSC 63.2	4474-263920	16 - 100	4250	9	25	17	44	63	17	33	60	94	56	25,5	83,0
RSC 80.1	4474-280820	10 - 100	3350	15	32	17	50	80	19	33	70	106	71	24,0	97,0
RSC 80.2	4474-280920	20 - 200	3350	15	32	17	50	80	19	33	70	106	71	24,0	97,0
RSC 100.1	4474-281820	20 - 200	2650	25	40	17	58	100	25	38	80	137	90	30,0	123,0
RSC 100.2	4474-281920	40 - 375	2650	25	40	17	58	100	25	38	80	137	90	30,0	123,0
RSC 125.1	4474-282820	40 - 375	2120	22	55	26	75	125	25	75	100	180	105	46,5	154,5
RSC 125.2	4474-282920	75 - 750	2120	22	55	26	75	125	25	75	100	180	105	46,5	154,5
RSC 160.1	4474-283820	75 - 750	1700	40	70	26	82	160	35	75	110	211	130	51,5	184,5
RSC 160.2	4474-283920	150 - 1500	1700	40	70	26	82	160	35	75	110	211	130	51,5	184,5
RSC 200.1	4474-284820	150 - 1500	1320	50	90	26	105	200	37	113	140	280	160	70,0	233,0
RSC 200.2	4474-284920	300 - 3000	1320	50	90	26	105	200	37	113	140	280	160	70,0	233,0
RSC 250.1	4474-285820	300 - 3000	1120	55	115	26	120	250	55	129	160	336	185	90,0	280,0
RSC 250.2	4474-285920	600 - 6000	1120	55	115	26	120	250	55	129	160	336	185	90,0	280,0

¹⁾ Check the stress of the keyway in the case of smaller finish bores d₁ and high slipping torques.
Keyway according to DIN 6885, p. 1 - Tolerance of keyway width P9

Application

As slipping shaft coupling to compensate for minor misalignments.

Supply

Unless specified otherwise, the Torque Limiters are supplied with a pilot bore, a full complement of springs and without slipping torque setting. Factory slipping torque setting is only possible when the order includes a finish bore.

Accessories

- Standard tools are normally sufficient for adjusting the slipping torque. Only sizes 125 and 160 require a tool adapter which can be ordered from us.

Please specify when ordering

- Type of Torque Limiting chain coupling
- Diameter d and d₁, if finish bore is requested
- Slipping torque to be preset, if required

Morskate®



Any questions? Please contact us.

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