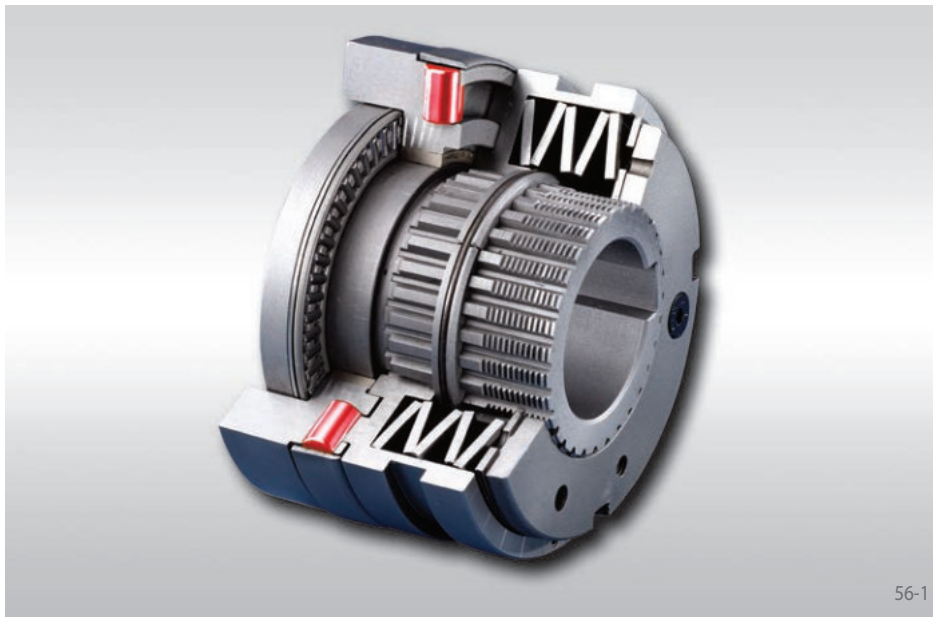


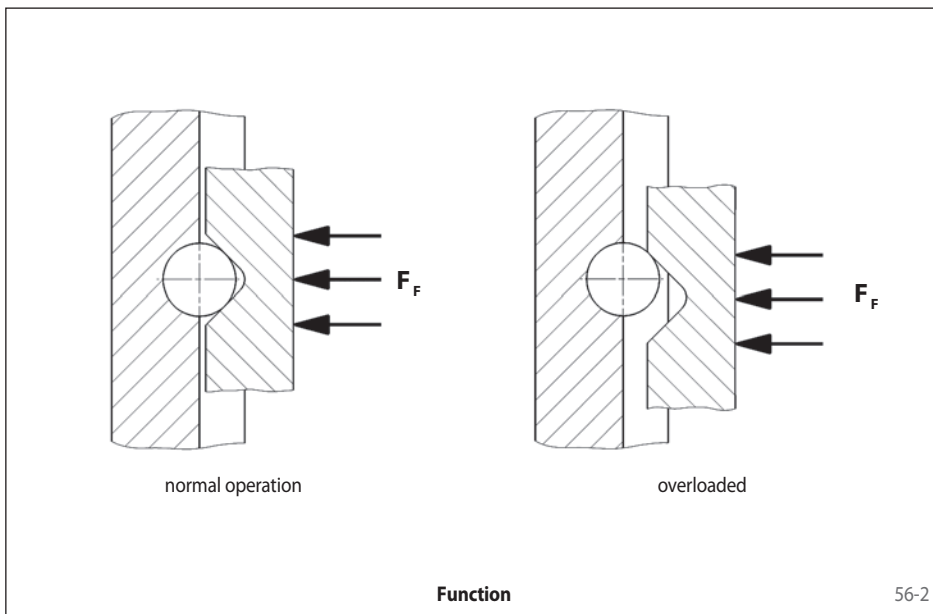
Non-disengaging SIKUMAT® SL ...

with single rollers



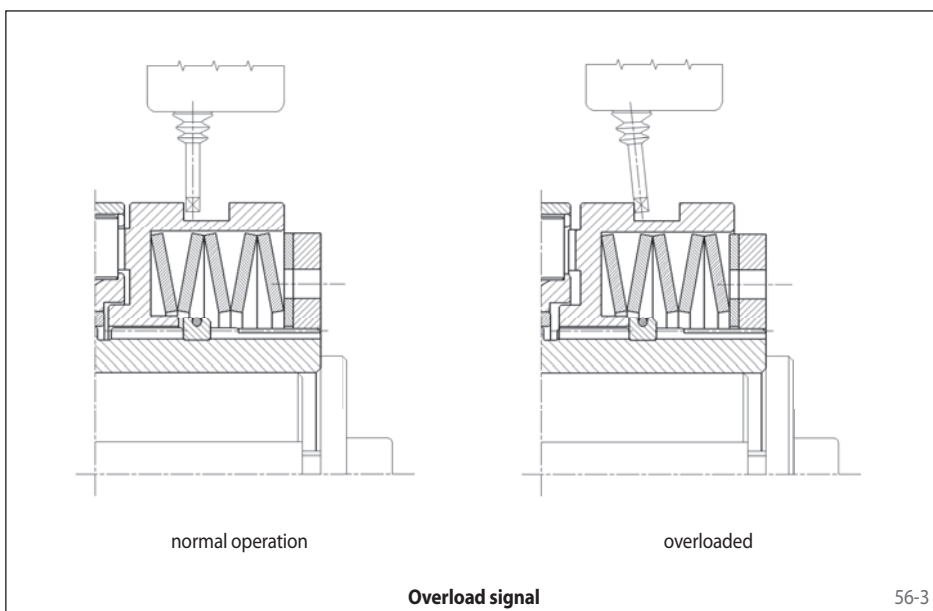
Advantages

- Output is fully driven even in case of overload
- Integral fixed bearing
- Driving keyway in the connecting flange for maximum torque capacity
- Calibrated micro adjustment of torque setting possible, even post-installation
- Cost effective



The Single Roller Principle

The torque is transmitted via rollers which are pressed by Belleville springs into detents. When the preset limit torque has been reached, the detent ring is displaced but is prevented by its particular design from disengaging completely. There is therefore no disengaging of input and output.



Function

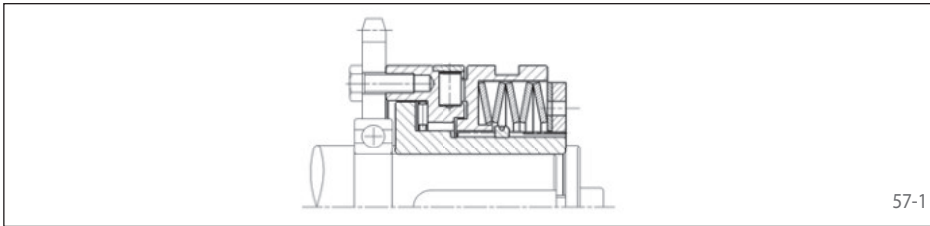
- When the preset limit torque has been reached, a limit sensor indicates the overload.
- There is no interruption of torque transmission between drive and output.

Non-disengaging SIKUMAT® SL ...

with single rollers

Types

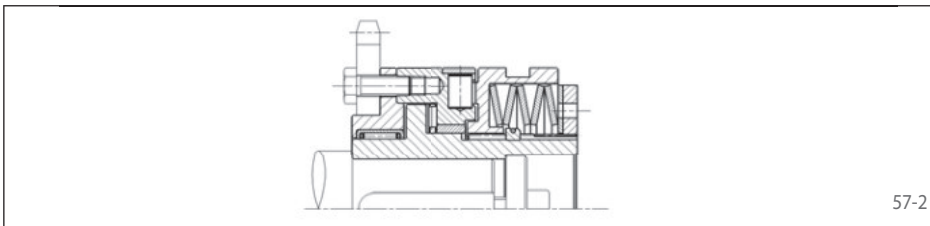
Series SL - Basic version with flange connection



For attaching chain wheels, belt pulleys, gear wheels etc. Bearing of attached component on the shaft to be provided by the customer.

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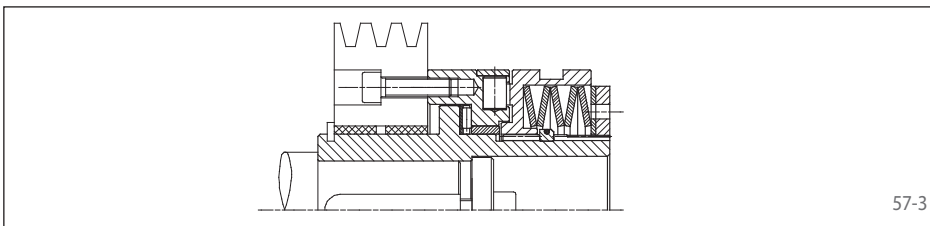
Series SLR - with short hub and integral needle bearing



With short hub and needle bearing for narrow components to be connected.

Page 59

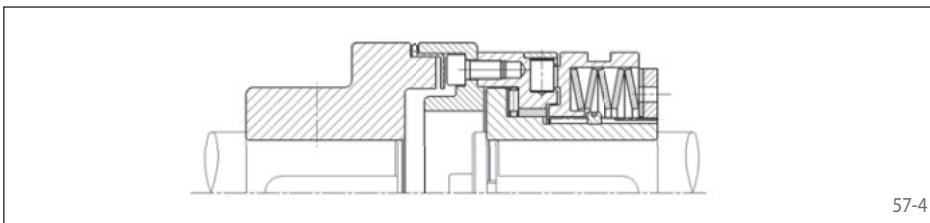
Series SLG - with long hub



With long hub for wide components to be connected. Bearing of the attached component in the form of plain or needle bearing to be provided by the customer.

Page 60

Series SLE - with flexible shaft coupling



For torsionally rigid connection of two shafts. Possibility to compensate for large radial and angular displacements.

Page 61

Notes

Torque setting

The limit torque can be set at the factory on request. Setting or modification of the limit torque can also be carried out by the customer. See operating instructions for further details.

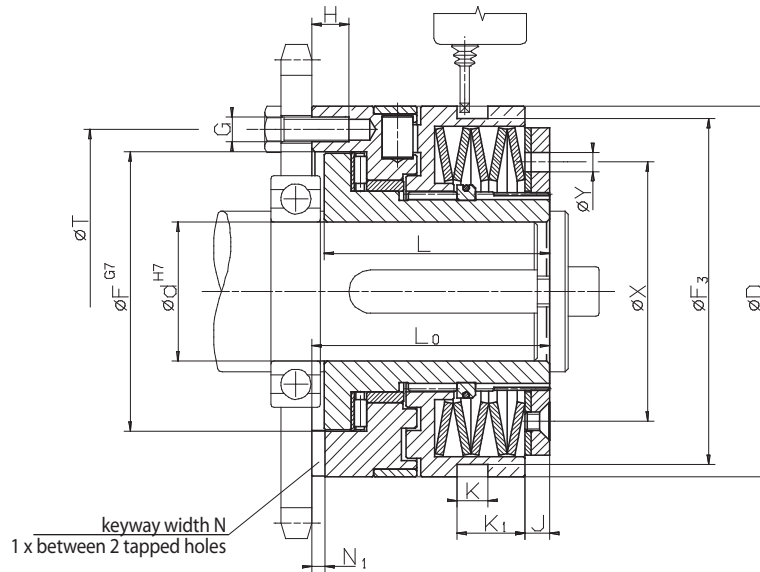
Proximity switch

The overload can be indicated by a non-contact or a mechanical proximity switch. Further details on pages 62 and 63.

Non-disengaging SIKUMAT® SL

with single rollers

Basic version with flange connection



Z = number of tapped holes G on pitch circle T

58-1

Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number
SL 32.x	4470-020xxx	5 - 10	4000	701	10 - 20	4000	702	20 - 40	3000	703
SL 40.x	4470-025xxx	12 - 25	3900	701	25 - 50	3900	702	50 - 100	2900	703
SL 55.x	4470-035xxx	25 - 50	3300	701	50 - 100	3300	702	100 - 200	2400	703
SL 65.x	4470-045xxx	50 - 100	2800	701	100 - 200	2800	702	200 - 450	2000	703
SL 80.x	4470-055xxx	100 - 200	2300	701	200 - 400	2300	702	400 - 800	1600	703
SL 90.x	4470-065xxx	170 - 450	1800	701	350 - 900	1800	702	600 - 1800	1400	703

Dimensions

Type	Art.-No.	Bore d		D	F	F ₃	G	H	J	K	K ₁	L	L ₀	N	N ₁	T	X	Y	Z	Engage-ment travel mm
		min. mm	max. mm																	
SL 32.x	4470-020xxx	7	20	55	41	50	M 5	6,5	3	9	13,5	35	38,5	6	3,1	48	38,5	5	6	0,6
SL 40.x	4470-025xxx	10	25	82	60	72,5	M 5	8	6	9	14,5	48	52	6	3,1	70	54	6	6	0,8
SL 55.x	4470-035xxx	14	35	100	78	90,5	M 6	10	6	9	15	56	61	8	3,6	89	70	6	6	1,1
SL 65.x	4470-045xxx	18	45	120	90,5	112	M 8	12	8,5	10	22,5	72	78	10	4,1	105	84	6	6	1,2
SL 80.x	4470-055xxx	24	55	146	105	140	M 10	15	11	9	25	93,5	100	12	4,1	125	108	7	6	1,2
SL 90.x	4470-065xxx	30	70 ¹⁾	176	120,5	170	M 12	17	12	9	30	107	113,5	14	4,6	155	129	10	6	1,6

Keyway as per DIN 6885, page 1 · Tolerance of keyway width JS9

¹⁾ Keyway as per DIN 6885, page 3 · Tolerance of keyway width JS9

Example for Ordering

Type	Art.-No.	Preset limit torque	Bore d	with proximity switch
SL 32. 1	4470-020 701	9 Nm	14 mm	See pages 62 and 63

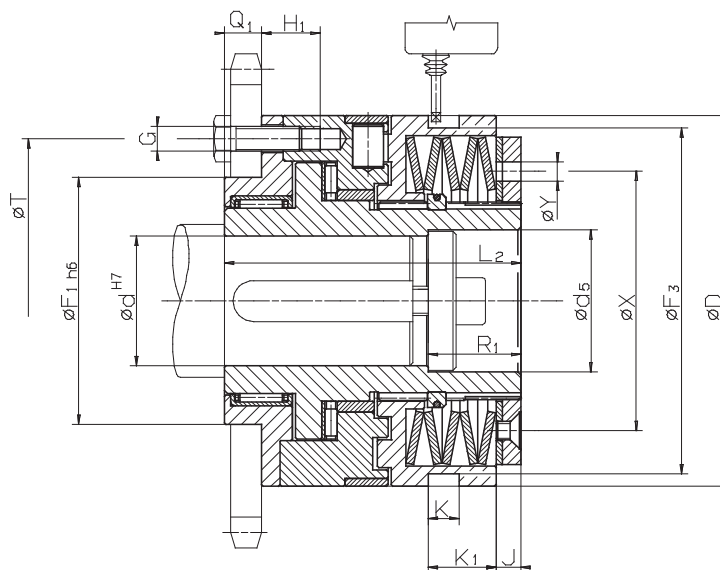
└─┬─┘
Torque type

└─┬─┘
End number

Non-disengaging SIKUMAT® SLR

with single rollers

with short hub and integral needle bearing



Z = number of tapped holes G on pitch circle T

59-1

Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number
SLR 32.x	4470-920xxx	5 - 10	4000	701	10 - 20	4000	702	20 - 40	3000	703
SLR 40.x	4470-925xxx	12 - 25	3900	701	25 - 50	3900	702	50 - 100	2900	703
SLR 55.x	4470-935xxx	25 - 50	3300	701	50 - 100	3300	702	100 - 200	2400	703
SLR 65.x	4470-945xxx	50 - 100	2800	701	100 - 200	2800	702	200 - 450	2000	703
SLR 80.x	4470-955xxx	100 - 200	2300	701	200 - 400	2300	702	400 - 800	1600	703
SLR 90.x	4470-965xxx	170 - 450	1800	701	350 - 900	1800	702	600 - 1800	1400	703

Dimensions

Type	Art.-No.	Bore d		d ₅	D	F ₁	F ₃	G	H ₁	J	K	K ₁	L ₂	Q ₁	R ₁	T	X	Y	Z	Engage-ment travel mm
		min. mm	max. mm																	
SLR 32.x	4470-920xxx	7	20	21	55	38	50	M5	11,5	3	9	13,5	51,5	8	15	48	38,5	5	6	0,6
SLR 40.x	4470-925xxx	10	25	26	82	50	72,5	M5	16	6	9	14,5	70	10	20	70	54	6	6	0,8
SLR 55.x	4470-935xxx	14	35	36	100	60	90,5	M6	15	6	9	15	78	12	25	89	70	6	6	1,1
SLR 65.x	4470-945xxx	18	45	46	120	80	112	M8	18	8,5	10	22,5	96	12	30	105	84	6	6	1,2
SLR 80.x	4470-955xxx	24	55	56	146	100	140	M10	23,5	11	9	25	124,5	16	30	125	108	7	6	1,2
SLR 90.x	4470-965xxx	30	70 ¹⁾	66	176	120	170	M12	25,5	12	9	30	140	18	30	155	129	10	6	1,6

Keyway as per DIN 6885, page 1 · Tolerance of keyway width JS9

¹⁾ Keyway as per DIN 6885, page 3 · Tolerance of keyway width JS9

Example for Ordering

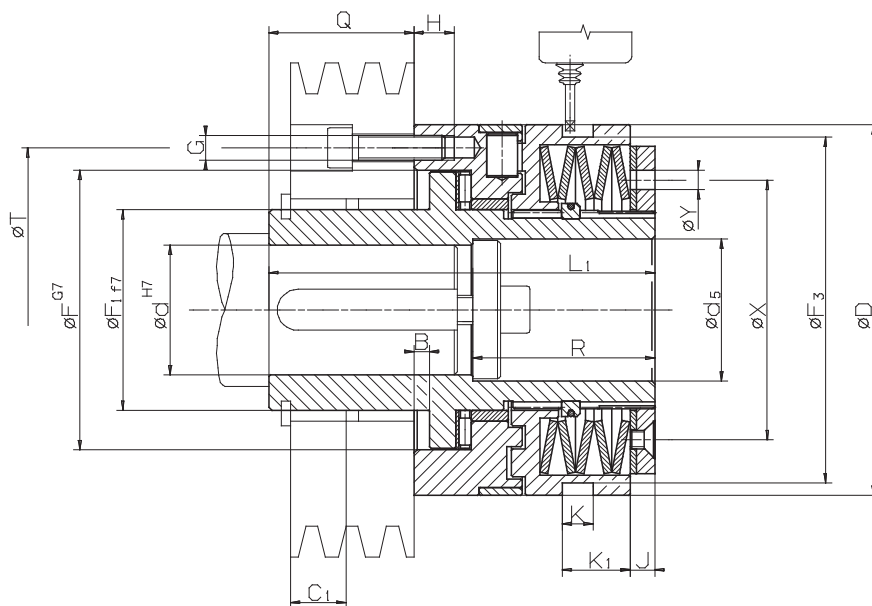
Type	Art.-No.	Preset limit torque	Bore d	with proximity switch
SLR 32. 1	4470-920 701	9 Nm	18 mm	See pages 62 and 63

└─┬─┘
Torque type

└─┬─┘
End number

Non-disengaging SIKUMAT® SLG

with single rollers
with long hub



Z = number of tapped holes G on pitch circle T

60-1

Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number
SLG 32.x	4470-120xxx	5 - 10	4000	701	10 - 20	4000	702	20 - 40	3000	703
SLG 40.x	4470-125xxx	12 - 25	3900	701	25 - 50	3900	702	50 - 100	2900	703
SLG 55.x	4470-135xxx	25 - 50	3300	701	50 - 100	3300	702	100 - 200	2400	703
SLG 65.x	4470-145xxx	50 - 100	2800	701	100 - 200	2800	702	200 - 450	2000	703
SLG 80.x	4470-155xxx	100 - 200	2300	701	200 - 400	2300	702	400 - 800	1600	703
SLG 90.x	4470-165xxx	170 - 450	1800	701	350 - 900	1800	702	600 - 1800	1400	703

Dimensions

Type	Art.-No.	Bore d		d ₅	B	D	F	F ₁	F ₃	G	H	J	K	K ₁	L ₁	Q	R	T	X	Y	Z	Engage-ment travel mm
		min. mm	max. mm																			
SLG 32.x	4470-120xxx	7	20	21	4	55	41	28	50	M 5	6,5	3	9	13,5	66	27,5	25,5	48	38,5	5	6	0,6
SLG 40.x	4470-125xxx	10	25	26	4	82	60	38	72,5	M 5	8	6	9	14,5	83	33	35	70	54	6	6	0,8
SLG 55.x	4470-135xxx	14	35	36	5	100	78	52	90,5	M 6	10	6	9	15	100	39	45	89	70	6	6	1,1
SLG 65.x	4470-145xxx	18	45	46	5	120	90,5	65	112	M 8	12	8,5	10	22,5	125	47	59	105	84	6	6	1,2
SLG 80.x	4470-155xxx	24	55	56	6,5	146	105	78	140	M 10	15	11	9	25	152,5	52,5	60	125	108	7	6	1,2
SLG 90.x	4470-165xxx	30	70 ¹⁾	66	6,5	176	120,5	90	170	M 12	17	12	9	30	171	57,5	60	155	129	10	6	1,6

Keyway as per DIN 6885, page 1 · Tolerance of keyway width JS9

¹⁾ Keyway as per DIN 6885, page 3 · Tolerance of keyway width JS9

Example for Ordering

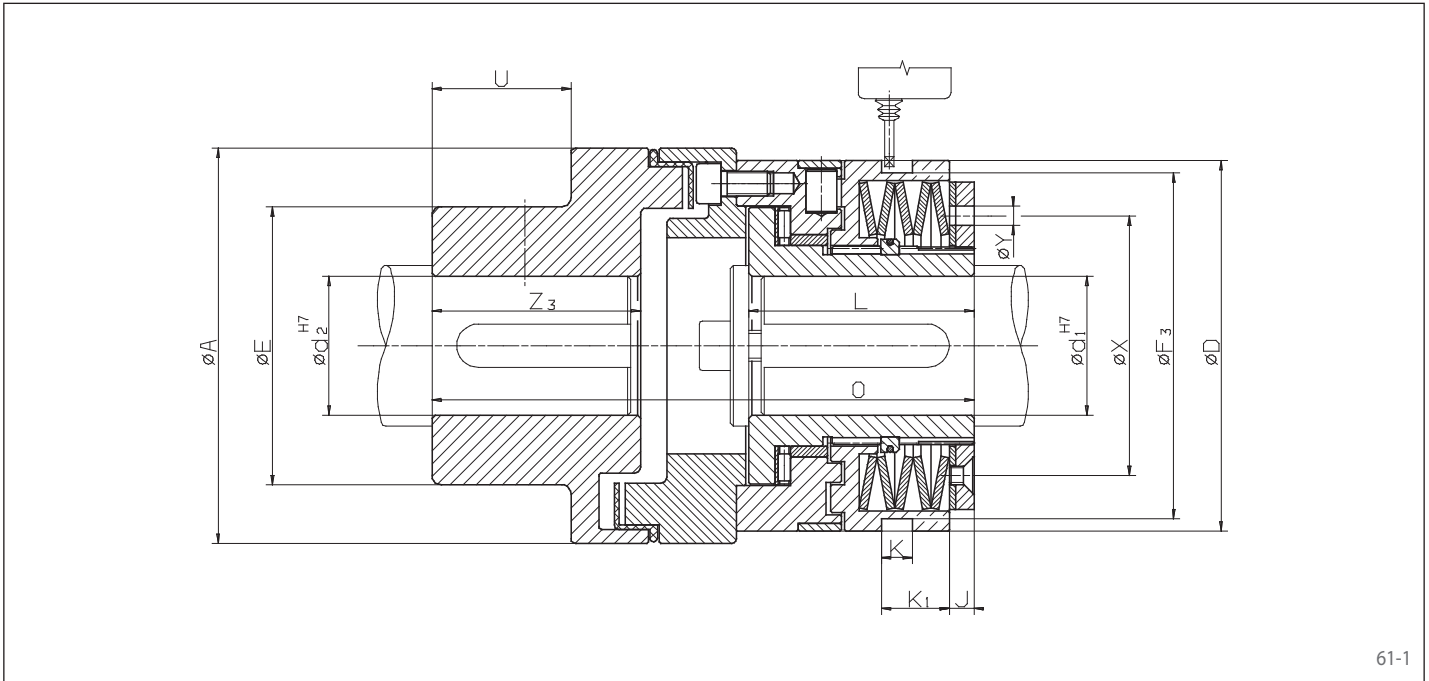
Type	Art.-No.	Preset limit torque	Bore d	with proximity switch
SLG 32. 1	4470-120 701	9 Nm	14 mm	See pages 62 and 63

Torque type

End number

Non-disengaging SIKUMAT® SLE

with single rollers
with flexible shaft coupling



61-1

Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number	Limit torque Nm	max. speed min ⁻¹	End number
SLE 32.x	4470-620xxx	5 - 10	4000	701	10 - 20	4000	702	20 - 40	3000	703
SLE 40.x	4470-625xxx	12 - 25	3900	701	25 - 50	3900	702	50 - 100	2900	703
SLE 55.x	4470-635xxx	25 - 50	3300	701	50 - 100	3300	702	100 - 200	2400	703
SLE 65.x	4470-645xxx	50 - 100	2800	701	100 - 200	2800	702	200 - 450	2000	703
SLE 80.x	4470-655xxx	100 - 200	2300	701	200 - 400	2300	702	400 - 800	1600	703
SLE 90.x	4470-665xxx	170 - 450	1800	701	350 - 900	1800	702	600 - 1800	1400	703

Dimensions

Type	Art.-No.	Bore d ₁		d ₂ max. mm	A mm	E mm	D mm	F ₃ mm	J mm	K mm	K ₁ mm	L mm	O mm	U mm	X mm	Y mm	Z ₃ mm	Engage- ment travel mm
		min. mm	max. mm															
SLE 32.x	4470-620xxx	7	20	30	67	46	55	50	3	9	13,5	35	86	15	38,5	5	28	0,6
SLE 40.x	4470-625xxx	10	25	50	112	79	82	72,5	6	9	14,5	48	137,5	38	54	6	58	0,8
SLE 55.x	4470-635xxx	14	35	50	112	79	100	90,5	6	9	15	56	147	38	70	6	58	1,1
SLE 65.x	4470-645xxx	18	45	60	128	90	120	112	8,5	10	22,5	72	176,5	45	84	6	67	1,2
SLE 80.x	4470-655xxx	24	55	60	148	90	146	140	11	9	25	93,5	211,5	45	108	7	67	1,2
SLE 90.x	4470-665xxx	30	70 ¹⁾	70	177	107	176	170	12	9	30	107	242,5	52	129	10	75	1,6
SLE 90.3	4470-665xxx	30	70 ¹⁾	90	198	140	176	170	12	9	30	107	272	52	129	10	75	3,0

Keyway as per DIN 6885, page 1 - Tolerance of keyway width JS9

¹⁾ Keyway as per DIN 6885, page 3 - Tolerance of keyway width JS9

Example for Ordering

Type	Art.-No.	Preset limit torque	Bore d ₁	Bore d ₂	with proximity switch
SLE 32. 1	4470-620 701	8 Nm	11 mm	21 mm	See pages 62 and 63

Torque type

End number

Morskate®



Any questions? Please contact us.

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