

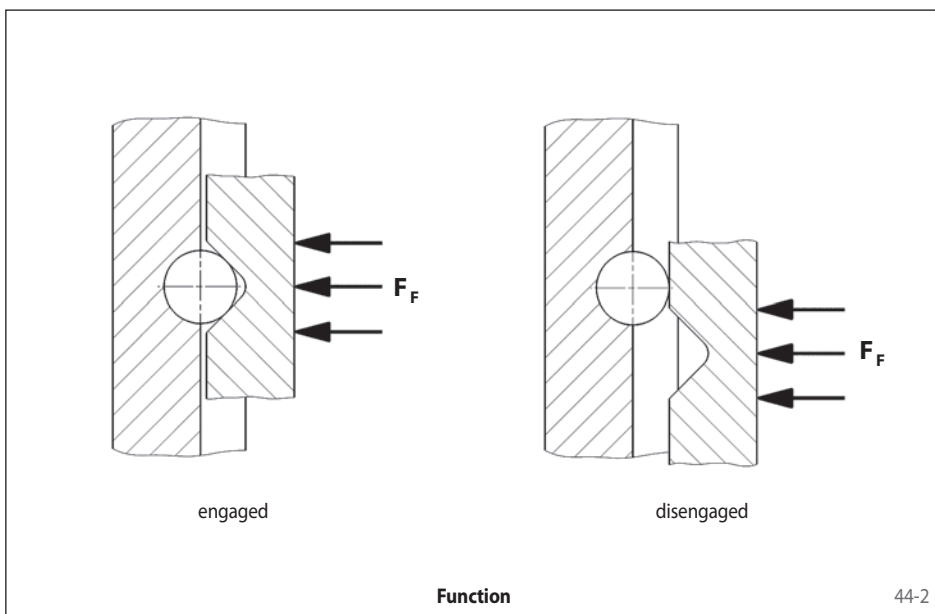
# Disengaging SIKUMAT® SR ...

with single rollers



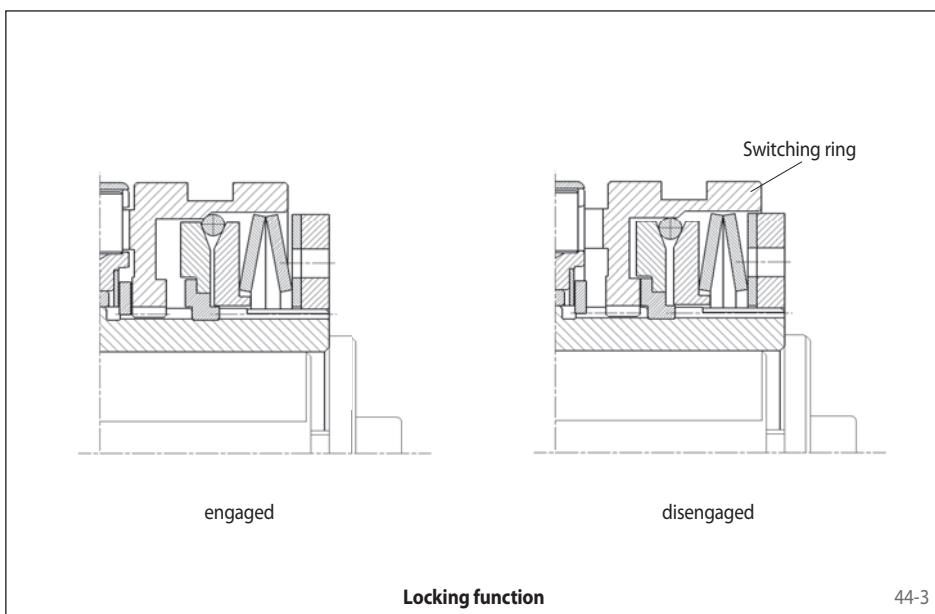
## Advantages

- Disengages in case of overload – separation of input and output
- Integral fixed bearing
- Keyway in 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 into detents by Belleville springs. When the preset limit torque has been reached, the detent ring moves axially and the SIKUMAT® disengages. A locking mechanism holds the detent ring while it is in disengaged mode.

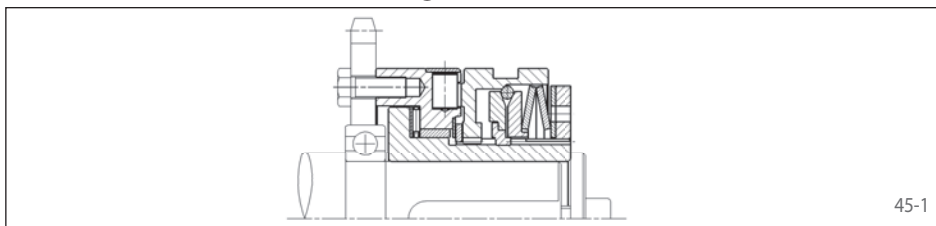


## Function

- When the preset limit torque has been reached the SIKUMAT® disengages the input and output.
- After the overload has been eliminated the SIKUMAT® can be switched on again manually.
- This means that an axial switching force must be applied to the switching ring.

### Types

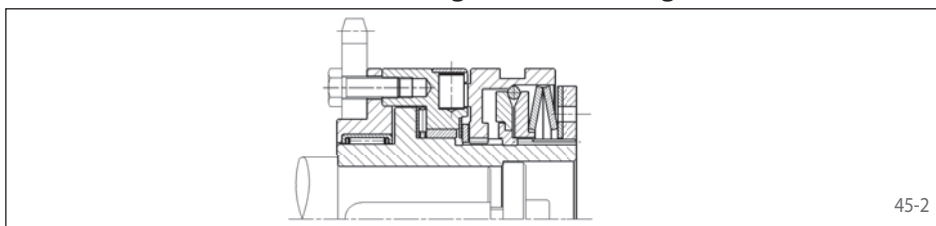
#### Series SR - Basic version with flange connection



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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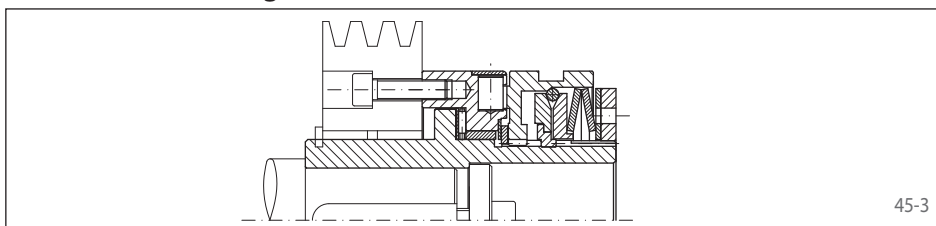
#### Series SRR - with short hub and integral roller bearing



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

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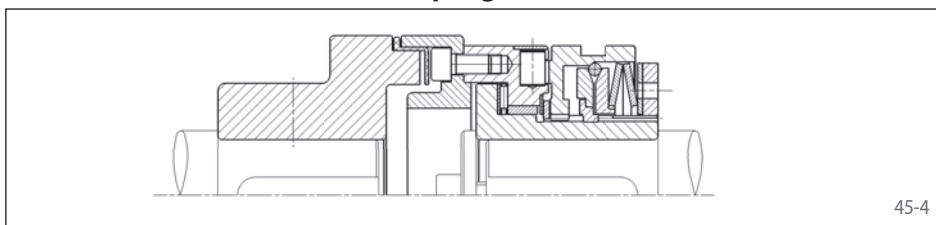
#### Series SRG - with long hub



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.

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#### Series SRE - with flexible shaft coupling



For flexible connection of two shafts. The flexible parts are oil-proof.

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### Notes

#### Torque setting

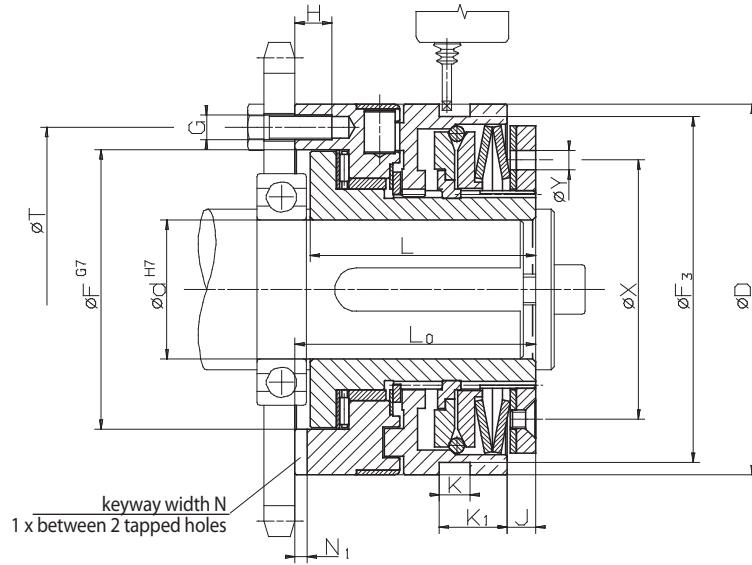
The limit torque can be set at the factory on request. Setting or modification of the limit torque can also be carried out by the customer. See operating instructions for further details.

#### Proximity switch

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

with single rollers

Basic version with flange connection



Z = number of tapped holes G on pitch circle T

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## Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed $\text{min}^{-1}$	End number	Limit torque Nm	max. speed $\text{min}^{-1}$	End number	Limit torque Nm	max. speed $\text{min}^{-1}$	End number
SR 32.x	4470-020xxx	5 - 10	6000	601	10 - 20	6000	602	20 - 40	6000	603
SR 40.x	4470-025xxx	12 - 25	5000	601	25 - 50	5000	602	50 - 100	5000	603
SR 55.x	4470-035xxx	25 - 50	4000	601	50 - 100	4000	602	100 - 200	4000	603
SR 65.x	4470-045xxx	50 - 100	3500	601	100 - 200	3500	602	200 - 450	3500	603
SR 80.x	4470-055xxx	100 - 200	3000	601	200 - 400	3000	602	400 - 800	3000	603
SR 90.x	4470-065xxx	170 - 450	2300	601	350 - 900	2300	602	600 - 1800	2300	603

## Dimensions

Type	Art.-No.	Bore d		D	F	F <sub>3</sub>	G	H	J	K	K <sub>1</sub>	L	L <sub>0</sub>	N	N <sub>1</sub>	T	X	Y	Z	Engage-ment travel mm
		min. mm	max. mm																	
SR 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	1,2
SR 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	1,8
SR 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	2,0
SR 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	2,2
SR 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	2,5
SR 90.x	4470-065xxx	30	70 <sup>1)</sup>	176	120,5	170	M 12	17	12	9	30	107	113,5	14	4,6	155	129	10	6	3,0

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

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

## Example for Ordering

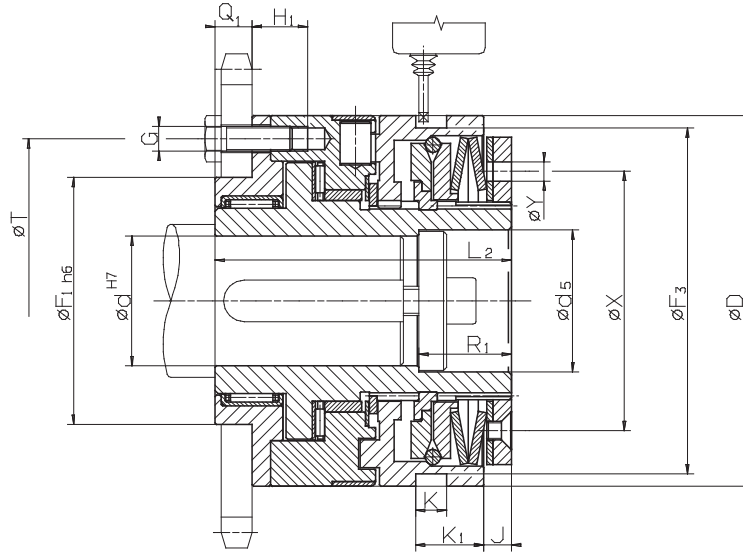
Type	Art.-No.	Preset limit torque	Bore d	with proximity switch
SR 40. 2	4470-025 602	30 Nm	21 mm	See pages 62 and 63

└─┬─┘  
Torque type

└─┬─┘  
End number

# Disengaging SIKUMAT® SRR

with single rollers  
with short hub and integral needle bearing



Z = number of tapped holes G on pitch circle T

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## Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min <sup>-1</sup>	End number	Limit torque Nm	max. speed min <sup>-1</sup>	End number	Limit torque Nm	max. speed min <sup>-1</sup>	End number
SRR 32.x	4470-920xxx	5 - 10	6000	601	10 - 20	6000	602	20 - 40	6000	603
SRR 40.x	4470-925xxx	12 - 25	5000	601	25 - 50	5000	602	50 - 100	5000	603
SRR 55.x	4470-935xxx	25 - 50	4000	601	50 - 100	4000	602	100 - 200	4000	603
SRR 65.x	4470-945xxx	50 - 100	3500	601	100 - 200	3500	602	200 - 450	3500	603
SRR 80.x	4470-955xxx	100 - 200	3000	601	200 - 400	3000	602	400 - 800	3000	603
SRR 90.x	4470-965xxx	170 - 450	2300	601	350 - 900	2300	602	600 - 1800	2300	603

## Dimensions

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

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

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

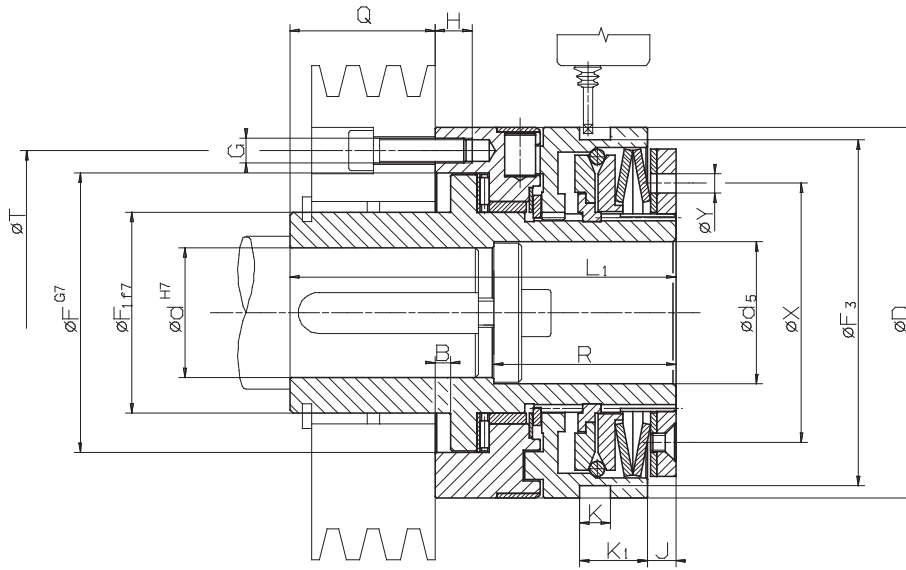
## Example for Ordering

Type	Art.-No.	Preset limit torque	Bore d	with proximity switch
SRR 40. 2	4470-925 602	31 Nm	21 mm	See pages 62 and 63

└  
Torque type

└  
End number

with single rollers  
with long hub



Z = number of tapped holes G on pitch circle T

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## Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min <sup>-1</sup>	End number	Limit torque Nm	max. speed min <sup>-1</sup>	End number	Limit torque Nm	max. speed min <sup>-1</sup>	End number
SRG 32.x	4470-120xxx	5 - 10	6000	601	10 - 20	6000	602	20 - 40	6000	603
SRG 40.x	4470-125xxx	12 - 25	5000	601	25 - 50	5000	602	50 - 100	5000	603
SRG 55.x	4470-135xxx	25 - 50	4000	601	50 - 100	4000	602	100 - 200	4000	603
SRG 65.x	4470-145xxx	50 - 100	3500	601	100 - 200	3500	602	200 - 450	3500	603
SRG 80.x	4470-155xxx	100 - 200	3000	601	200 - 400	3000	602	400 - 800	3000	603
SRG 90.x	4470-165xxx	170 - 450	2300	601	350 - 900	2300	602	600 - 1800	2300	603

## Dimensions

Type	Art.-No.	Bore d		d <sub>5</sub>	B	D	F	F <sub>1</sub>	F <sub>3</sub>	G	H	J	K	K <sub>1</sub>	L <sub>1</sub>	Q	R	T	X	Y	Z	Engage-ment travel mm	
		min. mm	max. mm																				
SRG 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	6	1,2
SRG 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	6	1,8
SRG 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	6	2,0
SRG 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	6	2,2
SRG 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	6	2,5
SRG 90.x	4470-165xxx	30	70 <sup>1)</sup>	66	6,5	176	120,5	90	170	M 12	17	12	9	30	171	57,5	60	155	129	10	6	6	3,0

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

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

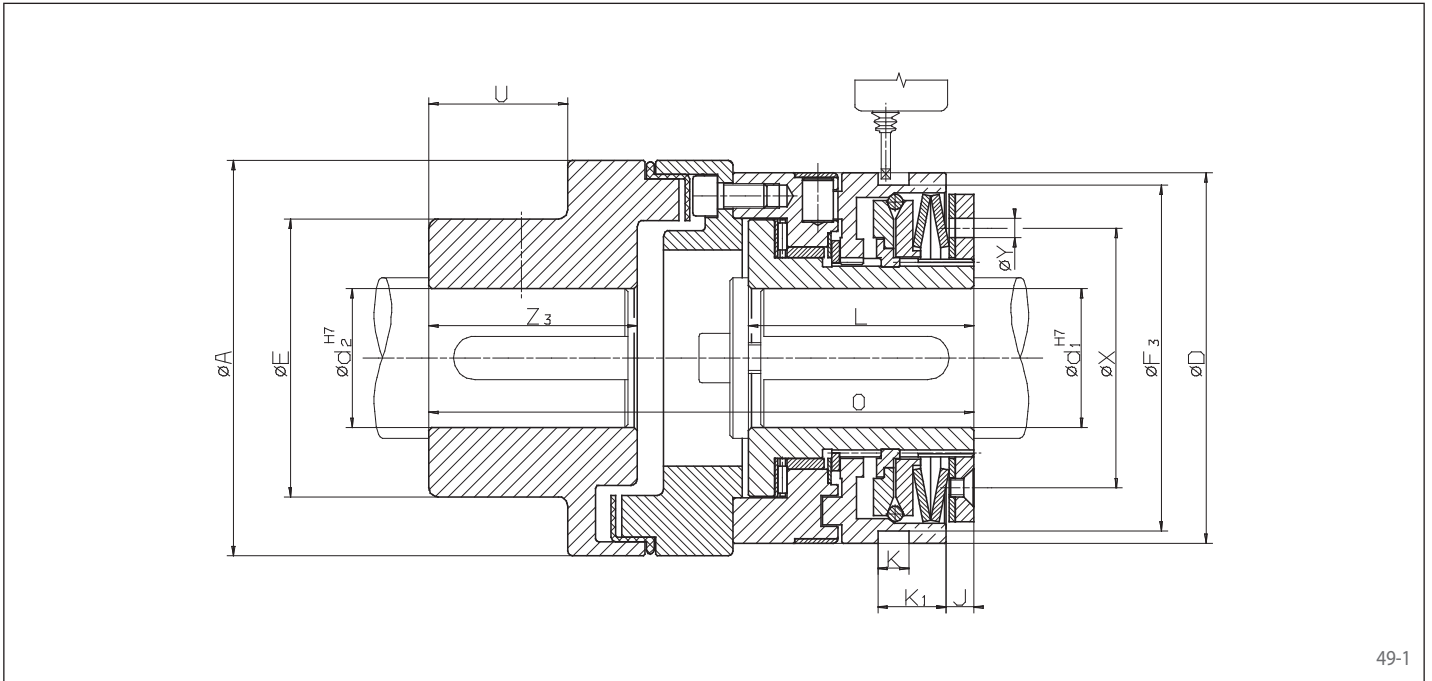
## Example for Ordering

Type	Art.-No.	Preset limit torque	Bore d	with proximity switch
SRG 40. 2	4470-125 602	30 Nm	21 mm	See pages 62 and 63

Torque type

End number

with single rollers  
with flexible shaft coupling



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## Technical Data

Type	Art.-No.	Torque type 1			Torque type 2			Torque type 3		
		Limit torque Nm	max. speed min <sup>-1</sup>	End number	Limit torque Nm	max. speed min <sup>-1</sup>	End number	Limit torque Nm	max. speed min <sup>-1</sup>	End number
SRE 32.x	4470-620xxx	5 - 10	6000	601	10 - 20	6000	602	20 - 40	6000	603
SRE 40.x	4470-625xxx	12 - 25	5000	601	25 - 50	5000	602	50 - 100	5000	603
SRE 55.x	4470-635xxx	25 - 50	4000	601	50 - 100	4000	602	100 - 200	4000	603
SRE 65.x	4470-645xxx	50 - 100	3500	601	100 - 200	3500	602	200 - 450	3500	603
SRE 80.x	4470-655xxx	100 - 200	3000	601	200 - 400	3000	602	400 - 800	3000	603
SRE 90.x	4470-665xxx	170 - 450	2300	601	350 - 900	2300	602	600 - 1800	2300	603

## Dimensions

Type	Art.-No.	Bore d <sub>1</sub>		d <sub>2</sub> max. mm	A mm	E mm	D mm	F <sub>3</sub> mm	J mm	K mm	K <sub>1</sub> mm	L mm	O mm	U mm	X mm	Y mm	Z <sub>3</sub> mm	Engage- ment travel mm
		min. mm	max. mm															
SRE 32.x	4470-620xxx	7	20	30	67	46	55	50	3	9	13,5	35	86	15	38,5	5	28	1,6
SRE 40.x	4470-625xxx	10	25	50	112	79	82	72,5	6	9	14,5	48	137,5	38	54	6	58	2,3
SRE 55.x	4470-635xxx	14	35	50	112	79	100	90,5	6	9	15	56	147	38	70	6	58	3,0
SRE 65.x	4470-645xxx	18	45	60	128	90	120	112	8,5	10	22,5	72	176,5	45	84	6	67	3,5
SRE 80.x	4470-655xxx	24	55	60	148	90	146	140	11	9	25	93,5	211,5	45	108	7	67	3,8
SRE 90.x	4470-665xxx	30	70 <sup>1)</sup>	70	177	107	176	170	12	9	30	107	242,5	52	129	10	75	4,5
SRE 90.3	4470-665xxx	30	70 <sup>1)</sup>	90	198	140	176	170	12	9	30	107	272	52	129	10	75	4,5

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

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

## Example for Ordering

Type	Art.-No.	Preset limit torque	Bore d <sub>1</sub>	Bore d <sub>2</sub>	with proximity switch
SRE 40. 2	4470-625 602	35 Nm	21 mm	35 mm	See pages 62 and 63

Torque type

End number