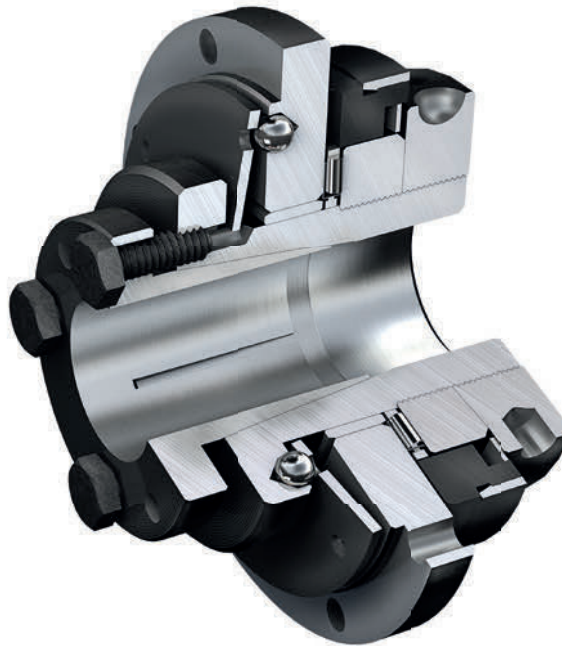


SYNTEX®

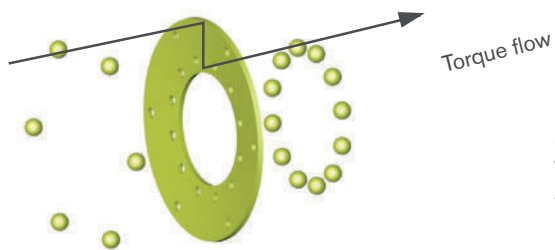
Backlash-free overload systems

Structure and operation

- Backlash-free, torsionally rigid overload protection up to 400 Nm, suitable for reversing operation
- Disconnection of the drive in case of overload
- Reduction of torque peaks
- High response accuracy, even after a long operating period
- Easy integration of customer components
- Compact design, low mass moment of inertia
- Variable due to modular system
- Special disk springs available for special applications



- Low-cost protection even for simple drives
- Easy assembly and torque setting
- Maintenance-free
- Insensitive to oil and grease
- Long service life due to small internal loads
- Backlash-free shaft-hub-connections
- Any or synchronous re-engagement
- Automatically operative



SYNTEX® is an overload system with positive locking operation. The punched disk spring is a component serving for transmitting the torque.

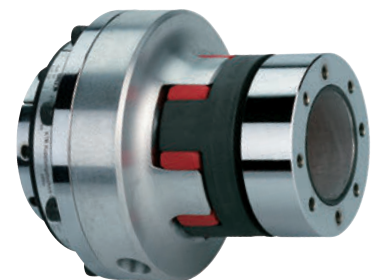
SYNTEX®
Overload system with mounting flange



SYNTEX®
Overload system with sprocket



SYNTEX®
Overload system with ROTEX® GS

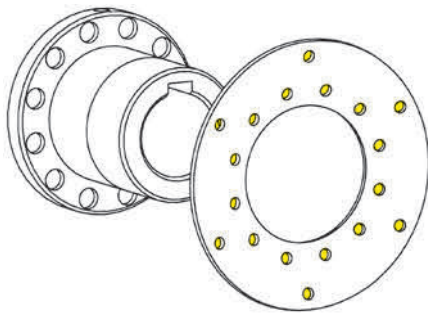


SYNTEX®

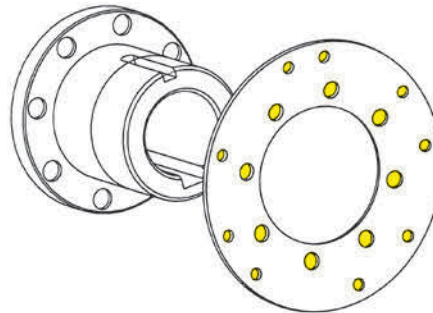
Backlash-free overload systems

Operating principles

Ratchet design DK



Synchronous design SK



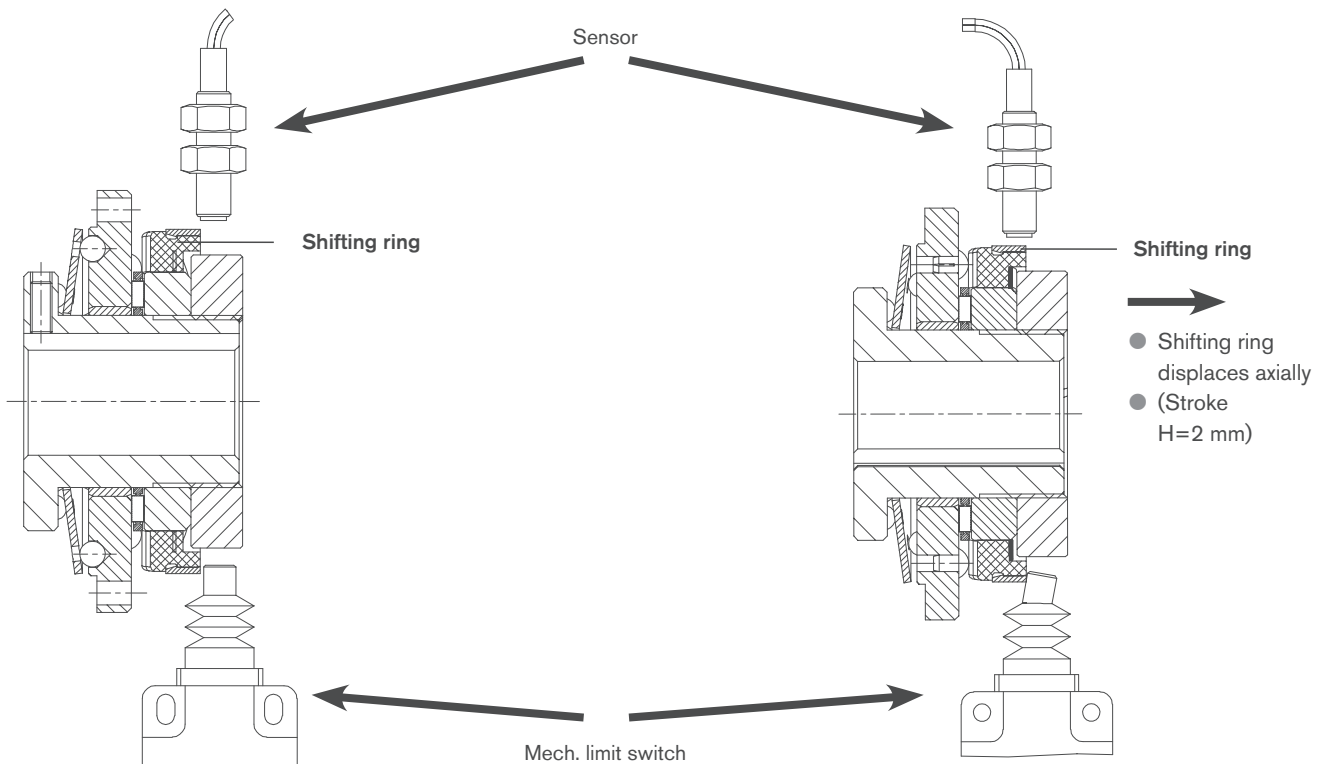
If the torque set is exceeded, a relative movement is generated between the driving and driven side. The transmittable torque is reduced to a minimum.

The balls leave the indentations of the disk springs. After eliminating the overload, the balls engage automatically with the next following ball indentation of the disk springs.

If the torque set is exceeded, a relative movement is generated between the driving and driven side. The transmittable torque is reduced to a minimum.

The balls leave the indentations of the disk springs. After eliminating the overload, the balls re-engage automatically with the disk springs after a rotation of 360° subject to their special pitch. Driving and driven side are always placed in the same position to each other (other degrees of re-engagement, for example 180°, are also possible).

Signal by limit switch or sensor in case of overload



Normal operation:

No signal by sensor or mechanical limit switch.

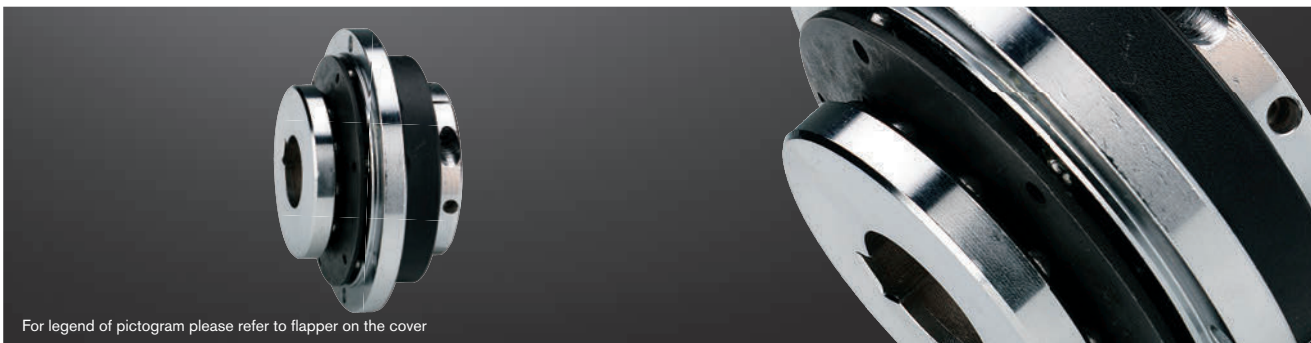
In case of overload:

The axial motion of the shifting ring activates the sensor or mechanical limit switch, respectively. The resulting signal can be used for control operation (e. g. motor stop).

SYNTEX®

Backlash-free overload systems

Flange type



For legend of pictogram please refer to flapper on the cover



Technical data – dimensions

Size	Torques [Nm]				Max. speed ¹⁾ [rpm]	Dimensions [mm]															
	Ratchet design DK		Synchronous design SK			Max. bore d	D	D ₁	D ₂	D ₃	D ₄	D _A	l ₁	l ₂	l ₃	l ₄	l ₅	d _L	L	z	H=stroke
	DK1	DK2	SK1	SK2																	
20	6-20	15-30	10-20	20-65	1500	20	48	54	61.5	65	71	80	8	2	16	6	35	4.5	45	8	2
25	20-60	45-90	25-65	40-100	1500	25	60	68	80	81	89	98	8	2	17	8	39	5.5	50	8	2
35	25-80	75-150	30-100	70-180	1000	35	75	78	91	102	110	120	10	2	21	10	42	5.5	60	12	2
50	60-180	175-300	80-280	160-400	1000	50	105	108	121	142	152	162	12	2	25	13	56	6.6	70	12	2

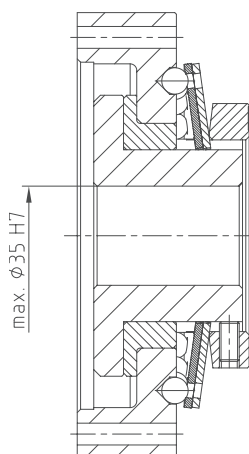
Dimensions – Hub type 4.5

Size	Dimensions [mm]							Clamping screws	Tightening torque T _A [Nm]
	d ₁ max.	l ₆	l ₇	l ₈	L ₁	s			
20	20	9	3.5	23	54	3	4 x M5	8.5	
25	25	11	4.0	28	61	4	4 x M6	14	
35	35	10	4.0	31	70	4	4 x M6	14	
50	50	12	4.0	37	82	6	4 x M6	14	

Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 4.5

Size	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø23	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	
20	45	62	71	81	92	103	115	127															
25		72	83	95	107	120	133	148	179	196	213	231											
35									127	139	152	165	207	237	270	323							
50																238	281	311	343	394	448	486	

¹⁾ See comments on page 249



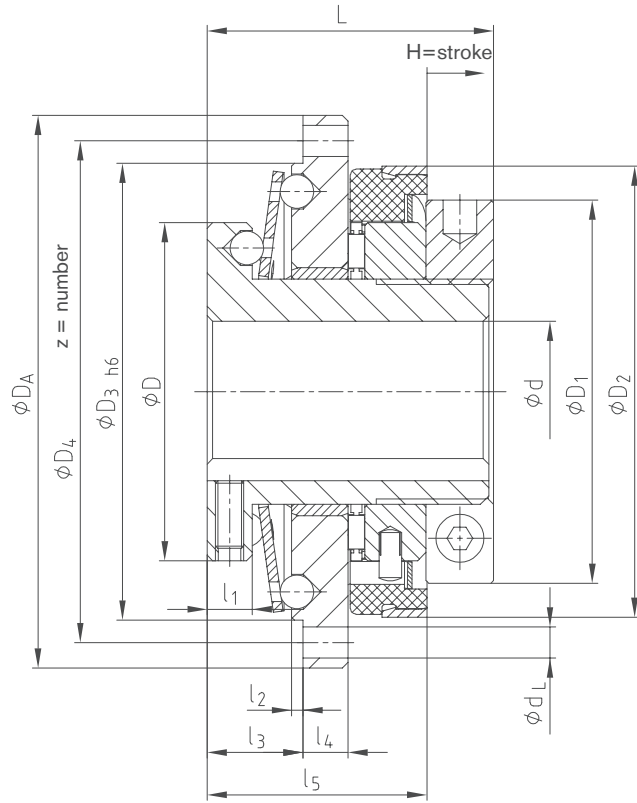
Special type:

- SYNTEX® 35 spec. with integrated flange
- Performance range up to 360 Nm
- Adjustment of flange to ambient components possible

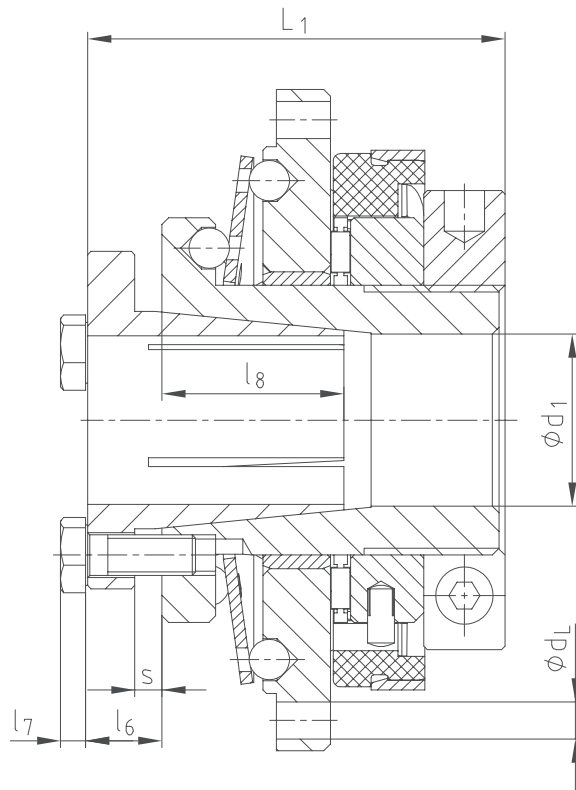
Ordering example:

SYNTEX® 25	d Ø20	DK1	1.0	45 Nm
Type/size	Bore	Type (DK/SK)	Hub type	Torque set

Hub type 1.0



Hub type 4.5



RUFLEX®

KTR-SI

SYNTEX®

SYNTEX®-NC

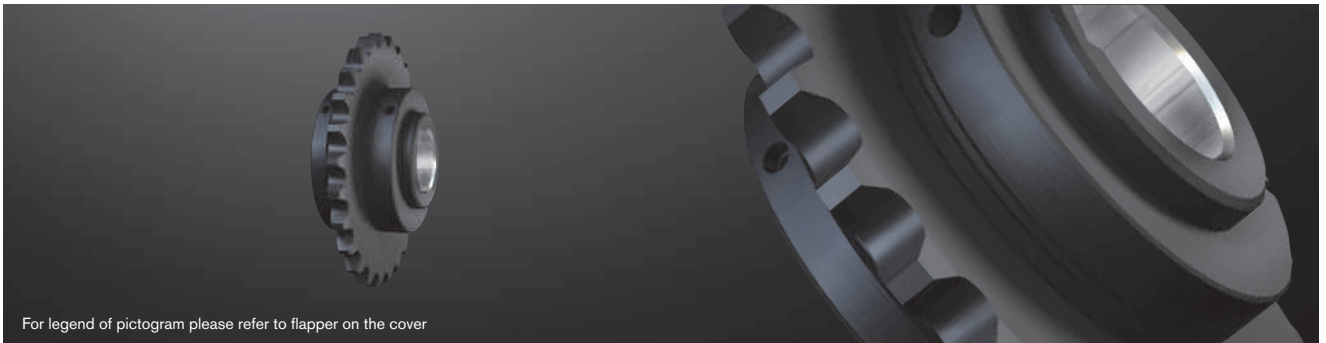
KTR-SI Compact

Torque limiters

SYNTEX®

Backlash-free overload systems

With sprocket



For legend of pictogram please refer to flapper on the cover



Technical data – dimensions

Size	Torque [Nm]				Max. speed ²⁾ [rpm]	Dimensions [mm]													
	Ratchet design DK		Synchronous design SK			Max. bore d	Standard sprocket ¹⁾					D	D ₁	D ₂	l ₁	l ₃	l ₅	L	H=stroke
	DK1	DK2	SK1	SK2															
20	6-20	15-30	10-20	20-65	1500	20	06 B-1 (³ / ₈ x ⁷ / ₃₂) z = 25					48	54	61.5	8	14	33	45	2
25	20-60	45-90	25-65	40-100	1500	25	08 B-1 (¹ / ₂ x ⁵ / ₁₆) z = 24					60	68	80	8	15	37	50	2
35	25-80	75-150	30-100	70-180	1000	35	08 B-1 (¹ / ₂ x ⁵ / ₁₆) z = 29					75	78	91	10	19	41	60	2
50	60-180	175-300	80-280	160-400	1000	50	12 B-1 (³ / ₄ x ⁷ / ₁₆) z = 27					105	108	121	12	23	52	70	2

Dimensions – Hub type 4.5

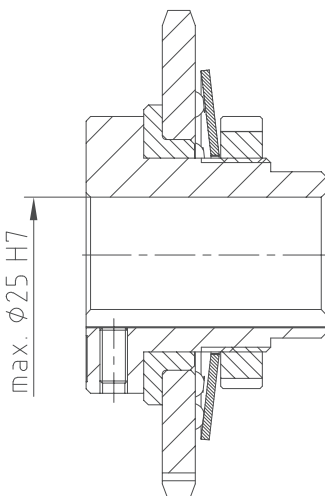
Size	Dimensions [mm]							Tightening torque T _A [Nm]
	d ₁ max.	l ₆	l ₇	l ₈	L ₁	s	Clamping screws	
20	20	9	3.5	23	54	3	4 x M5	8.5
25	25	11	4.0	28	61	4	4 x M6	14
35	35	10	4.0	31	70	4	4 x M6	14
50	50	12	4.0	37	82	6	4 x M6	14

Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 4.5

Size	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø23	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	
20	45	62	71	81	92	103	115	127															
25		72	83	95	107	120	133	148	179	196	213	231											
35									127	139	152	165	207	237	270	323							
50																238	281	311	343	394	448	486	

¹⁾ z = min. number of teeth required / Other sprockets available on request

²⁾ See comments on page 249



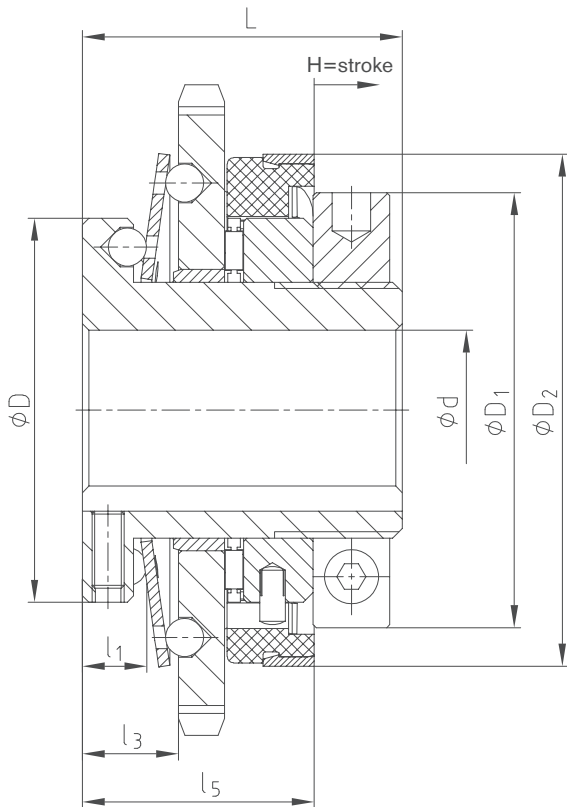
Special type:

- Standard SYNTEX® with integrated belt drive or sprocket
- Available ready for assembly with the torque set
- Reduction of components by integration of components
- Available both as a ratchet and synchronous design
- Torque setting possible while in place
- Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [JS9]
- Also available with a frictionally engaged shaft-hub-connection (hub type 4.5)

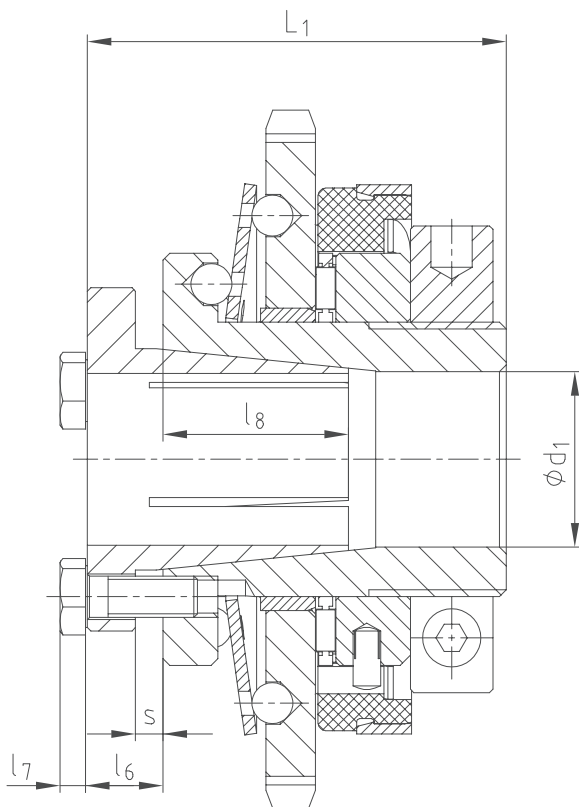
Ordering example:

SYNTEX® 25	DK1	1.0	d Ø20	08 B-1 (¹ / ₂ x ⁵ / ₁₆), z = 29	45 Nm
Type/size	Type (DK/SK)	Hub type	Bore	Sprocket	Torque set

Hub type 1.0



Hub type 4.5



KTR-SI

SYNTEX®

SYNTEX®-NC

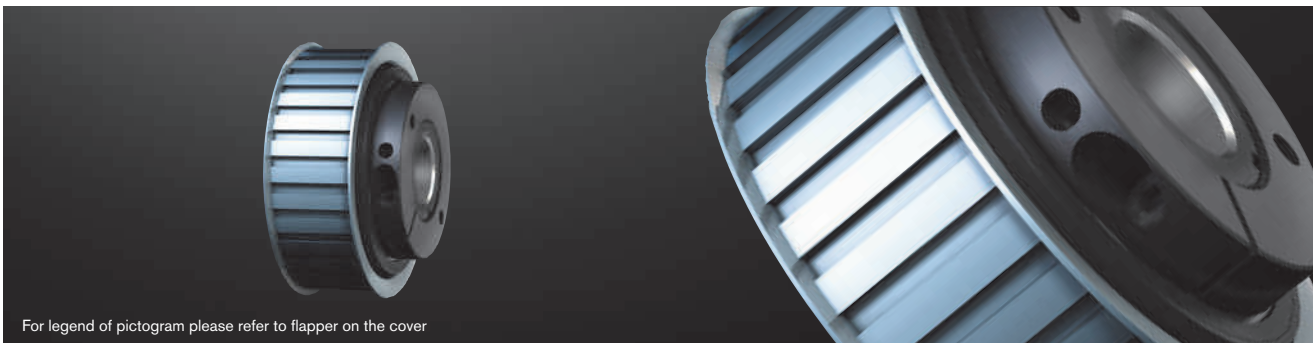
KTR-SI Compact

Torque limiters

SYNTEX®

Backlash-free overload systems

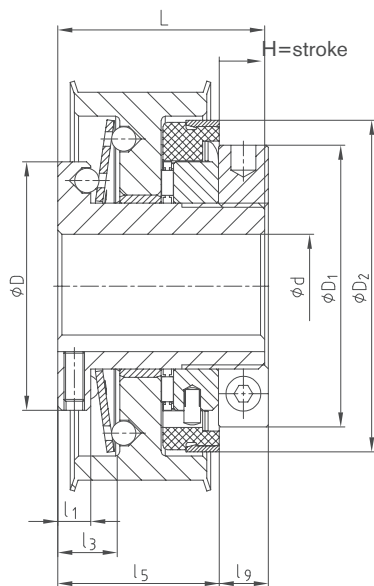
With toothed belt pulley



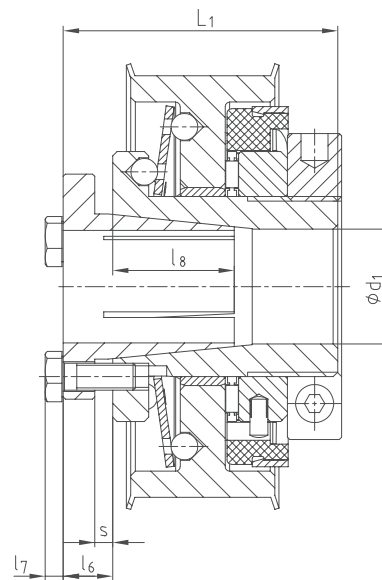
For legend of pictogram please refer to flapper on the cover



Hub type 1.0



Hub type 4.5



Technical data – dimensions

Size	Torques [Nm]				Max. speed ²⁾ [rpm]	Dimensions [mm]										
	Ratchet design DK		Synchronous design SK			Max. bore	Toothed belt pulley		D	D ₁	D ₂	l ₁	l ₃	l ₅	L	H=stroke
	DK1	DK2	SK1	SK2			d	T10 ¹⁾								
20	6-20	15-30	10-20	20-65	1500	20	T10, z = 24	AT10, z = 24	48	54	61.5	8	14	35	45	2
25	20-60	45-90	25-65	40-100	1500	25	T10, z = 30	AT10, z = 30	60	68	80	8	15	39	50	2
35	25-80	75-150	30-100	70-180	1000	35	T10, z = 36	AT10, z = 36	75	78	91	10	19	42	60	2
50	60-180	175-300	80-280	160-400	1000	50	T10, z = 48 ³⁾	AT10, z = 48 ³⁾	105	108	121	12	23	56	70	2

Dimensions – Hub type 4.5

Size	Max. bore	Dimensions [mm]						Clamping screws	Tightening torque T _A [Nm]
	d ₁	l ₆	l ₇	l ₈	l ₉	L ₁	s		
20	20	9	3.5	23	10	54	3	4 x M5	8.5
25	25	11	4.0	28	11	61	4	4 x M6	14
35	35	10	4.0	31	13	70	4	4 x M6	14
50	50	12	4.0	37	14	82	6	4 x M6	14

Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 4.5

Size	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø23	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50
20	45	62	71	81	92	103	115	127														
25		72	83	95	107	120	133	148	179	196	213	231										
35									127	139	152	165	207	237	270	323						
50															238	281	311	343	394	448	486	

¹⁾ z = min. number of teeth required / Other sizes available on request

²⁾ See comments on page 249

³⁾ Without flanged wheel

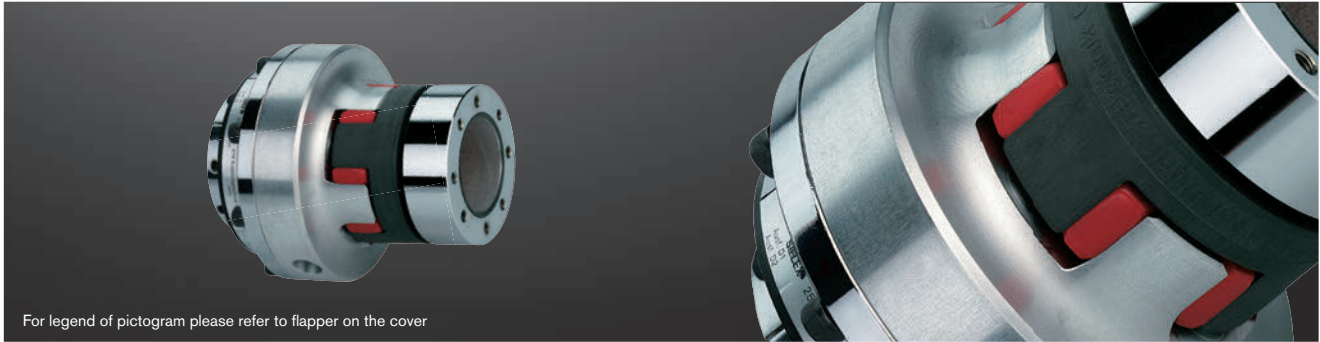
Ordering example:

SYNTEX® 25	DK1	1.0	d Ø20	AT10, z = 24	32	45 Nm
Type/size	Type (DK/SK)	Hub type	Bore	Toothed belt pulley	Width of toothed belt pulley	Torque set

SYNTEX®

Backlash-free overload systems

With backlash-free ROTEX® GS



For legend of pictogram please refer to flapper on the cover

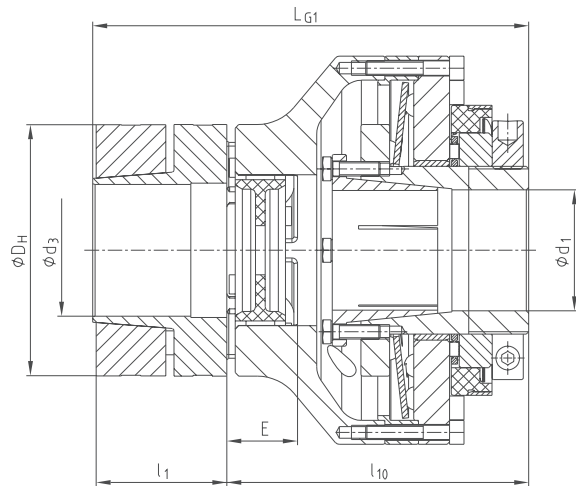
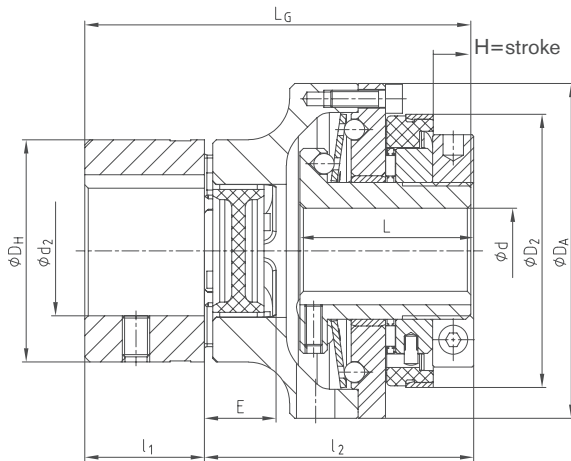


Hub type 1.0

Hub type 1.0

Hub type 6.0

Hub type 4.5



Technical data – dimensions

SYNTEX® size	ROTEX® GS size	Torques [Nm]							Max. speed ²⁾ [rpm]	Dimensions [mm]													
		Ratchet design DK		Synchronous design SK		ROTEX® GS ¹⁾ 98 ShA-GS		Max. bore				D ₂	D _H	D _A	l ₁	l ₂	l ₁₀	E	L	L _G	L _{G1}	H=stroke	
		DK1	DK2	SK1	SK2	T _{KN}	T _{K max}	d		d ₁	d ₂												d ₃
20	24	6-20	15-30	10-20	20-65	60	120	1500	20	20	28	28 ³⁾	61.5	55	80	30	70	83	18	45	100	113	2
25	28	20-60	45-90	25-65	40-100	160	320	1500	25	25	38	38 ³⁾	80	65	98	35	78	91	20	50	113	126	2
35	38	25-80	75-150	30-100	70-180	325	650	1000	35	35	45	48 ³⁾	91	80	120	45	91	105.5	24	60	136	150.5	2
50	48	60-180	175-300	80-280	160-400	525	1050	1000	50	50	62	55 ³⁾	121	105	162	56	111	126	28	70	167	182	2

Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 4.5

Size	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø23	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	
20	45	62	71	81	92	103	115	127															
25		72	83	95	107	120	133	148	179	196	213	231											
35									127	139	152	165	207	237	270	323							
50																238	281	311	343	394	448	486	

¹⁾ See selection of ROTEX® GS couplings on page 22 et seqq.

²⁾ See comments on page 249

³⁾ For transmittable friction torques T_R [Nm] of ROTEX® GS hub type 2.8 or 6.0 refer to mounting instructions of ROTEX® GS

Ordering example:

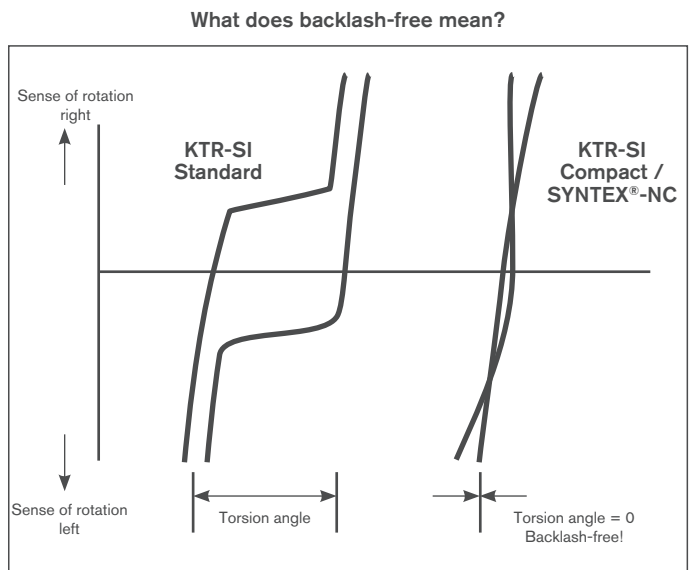
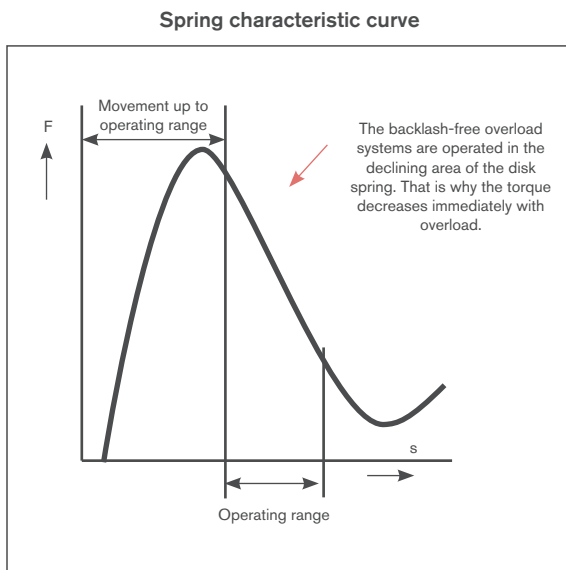
SYNTEX® 25	DK1	1.0	d Ø20	ROTEX® GS 28	98 ShA-GS	1.0	d ₂ Ø25	50 Nm
Type/size	Type	Hub type	Bore	Type/size	Spider	Hub type	ROTEX® GS bore	Torque set

SYNTEX®-NC / KTR-SI Compact Backlash-free overload systems

Structure and operation

The design of the backlash-free overload systems SYNTEX®-NC and KTR-SI Compact is based on a spring-preloaded and positive-locking ball-ratchet-principle allowing for high repeating accuracy and short reaction times. Moreover, an integrated groove ball bearing provides for the option of direct assembly of toothed belt pulleys, special flanges or other components. Main applications are latest machine tools, control and positioning technology as well as packaging machines and special purpose machinery.

Both systems make use of disk springs with a declining spring characteristic the preset prestress of which drops during the disengaging process. As a result driving and driven end are reliably separated from each other within some milliseconds with the wear on the components being reduced to a minimum simultaneously.



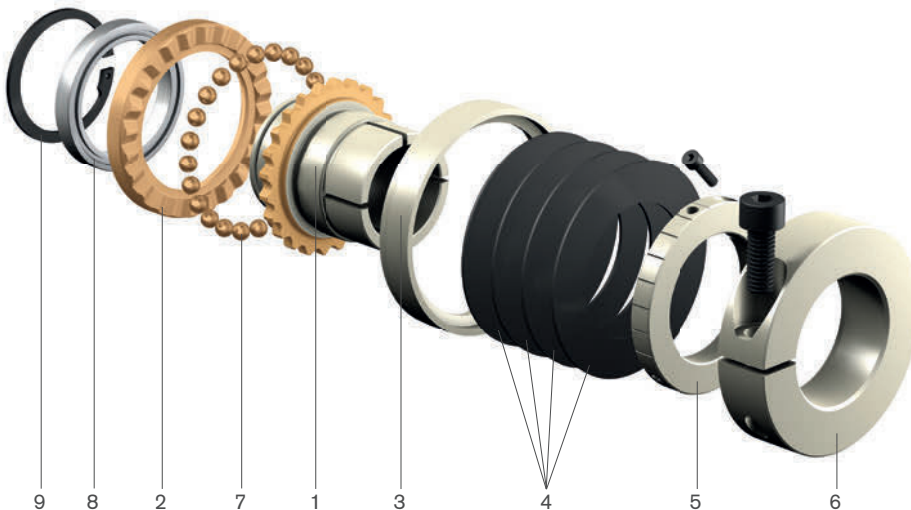
Ratchet design DK

Any engagement after an overload. After eliminating the overload, the balls engage automatically with the next following ball indentation.

Synchronous design SK

Synchronous engagement after an overload. After eliminating the overload, the balls re-engage automatically with the disk springs after a rotation of 360°. Driving and driven side are always placed in the same position to each other. Other degrees of re-engagement, for example 180°, are also possible.

● = The core of the backlash-free overload systems



List of components:

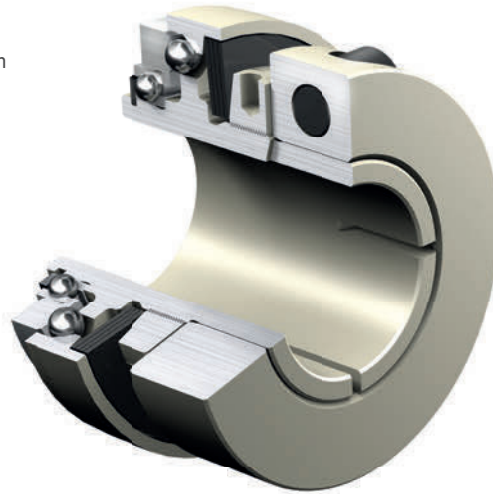
1. Hub with keyway to DIN (type 1.0) or with clamping ring (type 6.1)
2. Flange ring
3. Shifting ring
4. Disk spring
5. Setting nut
6. Clamping ring
7. Balls
8. Groove ball bearing
9. Circlip

SYNTEX®-NC / KTR-SI Compact Backlash-free overload systems

Operating principle

SYNTEX®-NC

- Overload protection up to 550 Nm
- Backlash-free torque transmission
- Light-weight design
- Declining spring characteristic
- Low mass moment of inertia
- Large bore diameters
- Short reaction times
- High power density



- Clamping ring design easy to assemble
- Available both as a ratchet (DK) and synchronous design (SK)
- Backlash-free shaft-hub-connection
- In combination with the backlash-free ROTEX® GS or backlash-free, torsionally rigid TOOLFLEX®
- Direct assembly of toothed belt pulley, as an example, possible (integrated groove ball bearing)

KTR-SI Compact

- Overload protection up to 3,100 Nm
- Backlash-free overload system with a declining spring characteristic
- Solid design
- Accurate disengagement with high repeating accuracy
- Accurate backlash-free torque transmission even in case of wear
- Shifting ring with setting scale for accurate torque setting



- Easy torque setting by torque scale on the coupling
- Connection flange with ball bearing
- Hardened ratchet surfaces for a long service life
- Backlash-free shaft-hub-connection via taper bush
- Can be used with the proven ROTEX® GS as a shaft-to-shaft connection

RUFLEX®

KTR-SI

SYNTEX®

SYNTEX®-NC

KTR-SI Compact

Torque
limiters

SYNTEX®-NC

Backlash-free overload systems

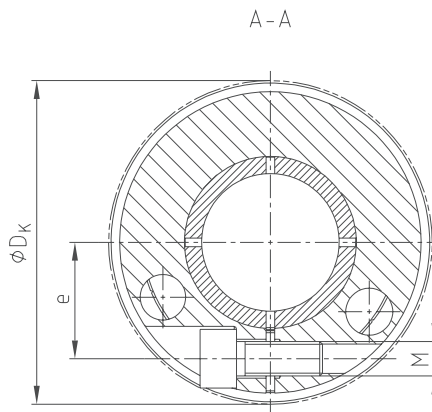
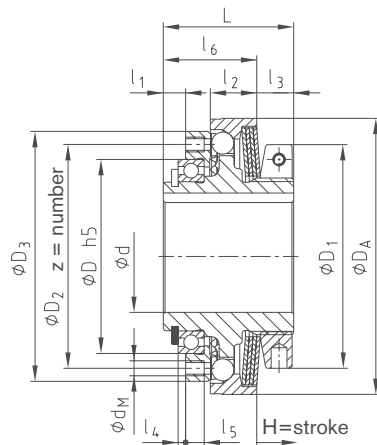
Hub type



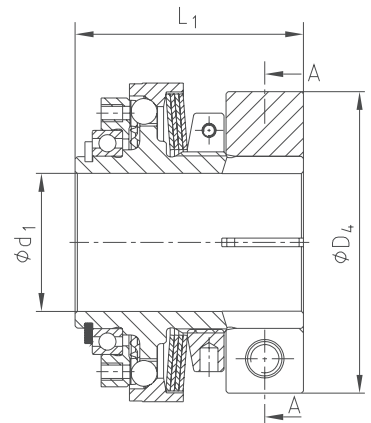
For legend of pictogram please refer to flapper on the cover



Hub type 1.0 (keyway acc. to DIN 6885)



Hub type 6.1 (clamping ring)



Technical data – dimensions

Size	Max. speed ³⁾ [rpm]	Torques [Nm]			Max. bore d	Dimensions [mm]											z x d _M	H=stroke	
		T1	T2	T3		D _{h5}	D ₁	D ₂	D ₃	D _A	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆			L
15	3500	2-3.5	3.5-7	7-14	12	32	33	37	42	42	5.0	7.0	9.2	2	4	18.8	28	12xM3	0.8
25	3000	9-15	20-35	40-65	20 (22) ¹⁾	42	50	48	56	61	5.5	11.5	9.1	2	5	23.9	33	8xM4	1.2
32	3000	25-38	50-75	100-150	27 (30) ¹⁾	52	60	60	67	74	6	12.5	9.9	2	5	25.1	35	8xM4	1.5
42	2500	30-65	60-135	120-265	36 (38) ¹⁾	65	72	75	83	90	7	16	11.2	2	6	31.8	43	8xM5	1.5
60 ⁴⁾	2000	70-140	120-180	220-550	50	90	96	100	113	116	8	21	11.8	2	7	38.2	52	12xM6	1.8

Dimensions – Hub type 6.1

Size	Bore d ₁		Dimensions [mm]						Weight with max. bore [kg]	Mass moment of inertia ²⁾ J _{total} [kgm ²]
	Pilot bore	Max.	D ₄	DK	L ₁	e	M	T _A [Nm]		
15	7.5	15	40	43	38	15	M4	1.7	0.124	0.029 x 10 ⁻³
25	9.5	25	55	-	45	21	M6	14	0.282	0.14 x 10 ⁻³
32	13.5	32	70	-	53	27	M8	34	0.471	0.35 x 10 ⁻³
42	18.5	42	86	91.2	63	33	M10	67	0.815	0.95 x 10 ⁻³
60 ⁴⁾	24	60	112	119.4	75	45	M12	115	3.04	5.9 x 10 ⁻³

Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 6.1

Size	Ø8	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø36	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60
15	8	12	14	16	22	24																				
25		30	35	42	55	62	69	48	53	58	69	80	86													
32						74	83	104	114	125	148	116	125	153	172	192										
42										149	178	209	225	275	310	264	309	324	356	389	422					
60 ⁴⁾													247	310	356	405	485	513	571	633	394	452	514	558	675	803

¹⁾ The figure in brackets specifies the max. bore with keyway to DIN 6885 sheet 3 (low-rise design)

²⁾ With max. bore

³⁾ See comments on page 249

⁴⁾ Material steel

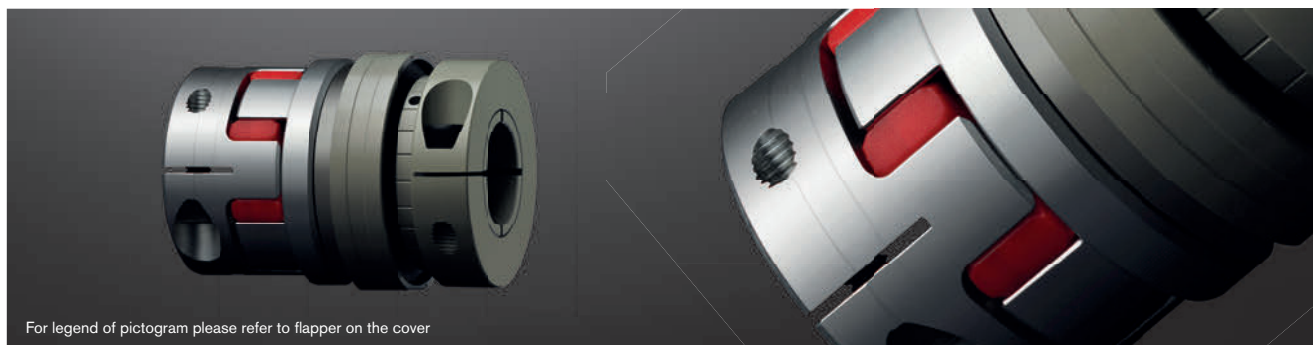
Ordering
example:

SYNTEX®-NC 32	SK	6.1	T3	d ₁ Ø25	120
Type/size	Type (DK/SK)	Hub type	Disk springs	Bore	Torque set

SYNTEX®-NC

Backlash-free overload systems

With backlash-free ROTEX® GS

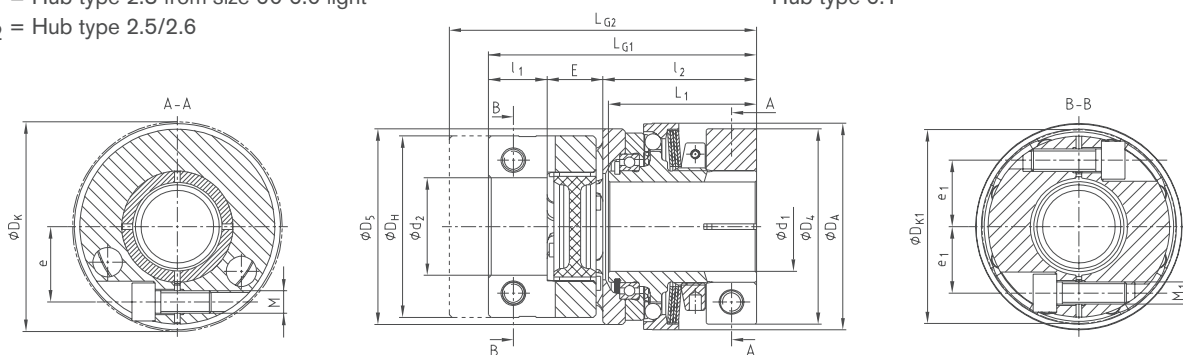


For legend of pictogram please refer to flapper on the cover



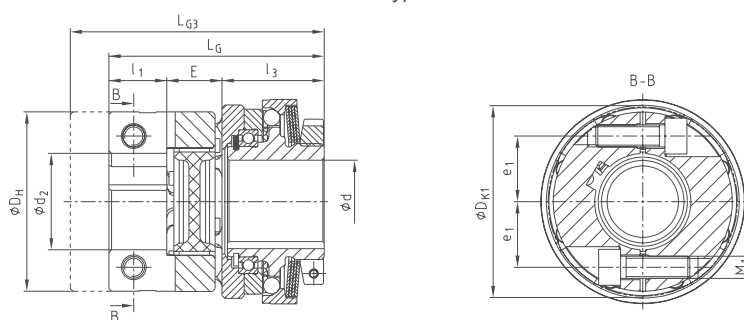
LG1 = Hub type 2.8 from size 60 6.0 light
LG2 = Hub type 2.5/2.6

Hub type 6.1



LG = Hub type 2.9 from size 60 1.0
LG3 = Hub type 2.5/2.6

Hub type 1.0



Technical data – dimensions

Size	ROTEX® GS size ¹⁾	Torques [Nm]			Max. speed ²⁾ [rpm]	Max. bore			Dimensions [mm]																			
		T1	T2	T3		d	d ₁	d ₂	D ₅	D _H	DK	D _{K1}	D _A	l ₁	l ₂	l ₃	E	e	e ₁	LG	L ₁	LG1	LG2	LG3	M	T _A [Nm]	M ₁	T _{A1} [Nm]
15	19	2-3.5	3.5-7	7-14	3500	12	15	24 ³⁾	45	40	-	46.7	42	17	40	30	16	15	15.5	63	38	73	81	71	M4	1.7	M5	6
25	24	9-15	20-35	40-65	3000	20 (22) ⁴⁾	25	32 ³⁾	58	55	-	57.5	61	18	47.5	35.5	18	21	20	71.5	45	83.5	95.5	83.5	M6	14	M6	10
32	28	25-38	50-75	100-150	3000	27 (30) ⁴⁾	32	35 ³⁾	70	65	-	69	74	21	55	37	20	27	23.8	78	53	96	110	92	M8	34	M8	25
42	38	30-65	60-135	120-265	2500	36 (38) ⁴⁾	42	45 ³⁾	88	80	91.2	86	90	26	66	46	24	33	30.5	96	63	116	135	115	M10	67	M10	49
60 ⁵⁾	48	70-140	120-280	220-550	2000	50	60	55 ³⁾	113	105	119.4	-	116	56	83	60	28	45	-	144	75	167	167	144	M12	115	M10	49

Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 6.1

Size	Ø8	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø36	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60
15	8	12	14	16	22	24																				
25		30	35	42	55	62	69	48	53	58	69	80	86													
32					74	83	104	114	125	148	116	125	153	172	192											
42									149	178	209	225	275	310	264	309	324	356	389	422						
60 ⁵⁾												247	310	356	405	485	513	571	633	394	452	514	558	675	803	

¹⁾ See selection of ROTEX® GS couplings on page 22 et seqq.

²⁾ See comments on page 249

³⁾ For transmittable friction torques T_R [Nm] of ROTEX® GS hub type 2.8 or 6.0 refer to mounting instructions of ROTEX® GS

⁴⁾ The figure in brackets specifies the max. bore with keyway to DIN 6885 sheet 3 (low-rise design)

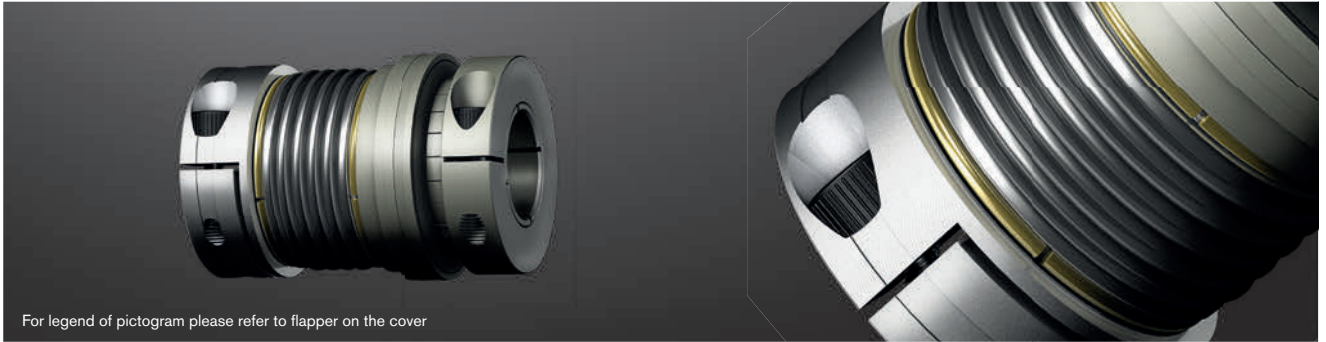
⁵⁾ Material steel

Ordering example:	SYNTEX®-NC 32	SK	6.1	T3	d ₁ Ø25	28	2.8	d ₂ Ø20	120
	Type/size	Type	Hub type	Disk springs	SYNTEX®-NC bore	ROTEX® GS size	Hub type	ROTEX® GS bore	Torque set

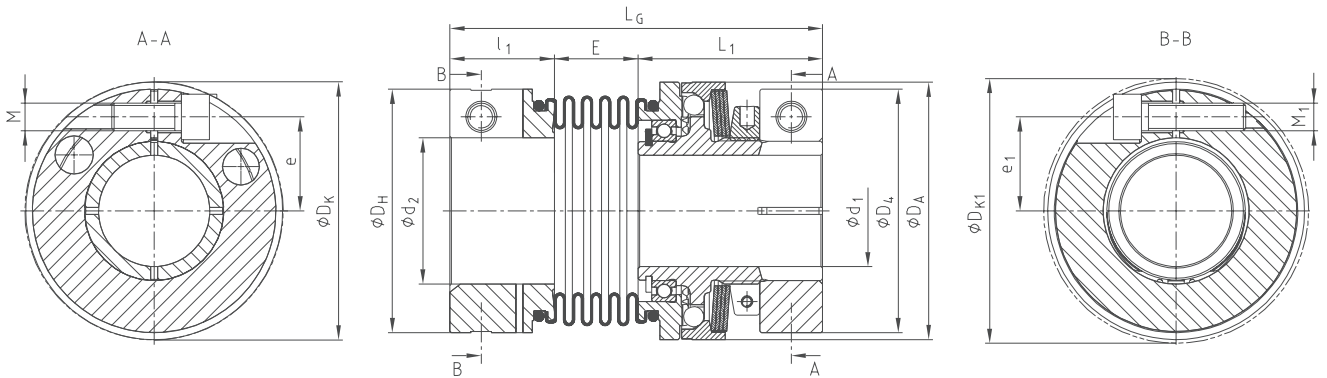
SYNTEX®-NC

Backlash-free overload systems

With torsionally stiff TOOLFLEX® S



For legend of pictogram please refer to flapper on the cover



Technical data – dimensions																							
Size	TOOLFLEX® size ¹⁾	Torques [Nm]			Speed ²⁾ [rpm]	Max. bore		Dimensions [mm]															
		T1	T2	T3		d1	d2	D4	DH	DA	DK	DK1	l1	L1	E	e	e1	LG	M	TA [Nm]	M1	TA1 [Nm]	
15	20	2-3.5	3.5-7	7-14	3500	15	20 ³⁾	40	40	52	43	43.5	21.5	38	16.5	15	14.5	76	M4	1.7	M5	6	
25	38	9-15	20-35	40-65	3000	25	38 ³⁾	55	65	61	-	72.6	25.5	45	18	21	25	88	M6	14	M8	25	
32	42	25-38	50-75	100-150	3000	32	42 ³⁾	70	70	74	-	76.1	30	53	24	27	27	107	M8	34	M8	25	
42	45	30-65	60-135	120-265	2500	42	45 ³⁾	86	83	90	91.2	89	32	63	22.5	33	30	114	M10	67	M10	49	
60 ⁴⁾	65	70-140	120-280	220-550	2000	60	65 ³⁾	112	125	140	119.4	127.1	45	84	36	45	45	165	M12	115	M14	185	

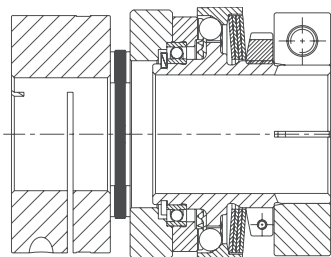
Transmittable friction torques T_R [Nm] (fitting tolerance H7/h6) of hub type 6.1																										
Size	Ø8	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø36	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60
15	8	12	14	16	22	24																				
25		30	35	42	55	62	69	48	53	58	69	80	86													
32					74	83	104		114	125	148	116	125	153	172	192										
42										149	178	209	225	275	310	264	309	324	356	389	422					
60 ⁴⁾													247	310	356	405	485	513	571	633	394	452	514	558	675	803

¹⁾ See selection of TOOLFLEX® couplings on page 22 et seqq.

²⁾ See comments on page 249

³⁾ For transmittable friction torques T_R [Nm] of TOOLFLEX® hub type 2.5 refer to mounting instructions of TOOLFLEX®

⁴⁾ Material steel



Special type:

- SYNTEX®-NC with RADEX®-NC

Ordering example:	SYNTEX®-NC 32	SK	6.1	T3	d1 Ø25	42-S	2.5	d2 Ø20	120
Type/size	Type	Hub type	Disk springs	SYNTEX®-NC bore	TOOLFLEX® size	Hub type	TOOLFLEX® bore	Torque set	