

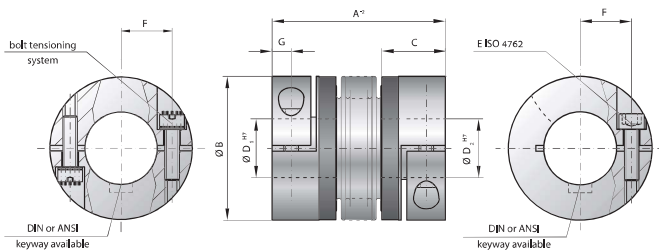


קופלונגים מדויקים ללא חופש | Precision Couplings Zero Backlash

- 246 - 252 Bellows Couplings • קופלונג גמיש עם קפיץ
- 253 - 257 Miniature Bellows Couplings • קופלונג מיניאטורי גמיש עם קפיץ
- 258 - 263 Elastomer Couplings • קופלונג 3 חלקים עם מחבר
- 264 - 276 Torque Limiters Couplings • קופלונג מגביל מומנט
- 277 - 280 Line Shaft Couplings • קופלונג עם ציר מקשר

אפיון מוצר

	BK2	80	94	20	22.23	XX
Model	●					Special designation only (e.g. anodized hubs).
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	
For custom features place an XX at the end of the part number and describe the special requirements (e.g. BKH/80/94/20/22.23/XX ; XX=finely balanced for 25,000 rpm)						



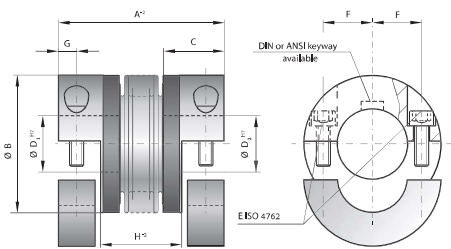
15-10,000 Nm **BK2**

חומר
גרמושקה: נירוסטה
נבה: ראה טבלה

SIZE			15			30			60			80			150			200			300			500			800			1500			4000			6000			10000		
Rated torque	(Nm)	T _{KN}	15			30			60			80			150			200			300			500			800			1500			4000			6000			10000		
Overall length	(mm)	A ²	59	66	99	69	77	113	83	93	130	94	106	143	95	107	144	105	117	163	111	125	200	133	146	169	140	179	166	230	225	252	288								
Outside diameter	(mm)	B	49			55			66			81			81			90			110			124			134			157			200			253			303		
Fit length	(mm)	C	22			27			31			36			36			41			43			51			45			55			85			107			129		
Inside diameter possible from Ø to Ø H7	(mm)	D ₁ / D ₂	8-28			10-30			12-35			14-42			19-42			22-45			24-60			35-60			40-75			50-80			50-90			60-140			70-180		
Fastening screw ISO 4762		E	M5			M6			M8			M10			M10			M12			M12			M16			2x M16*			2x M20*			2x M24*			2x M24*			2x M30*		
Tightening torque of the fastening screw	(Nm)		8			15			40			50			70			120			130			200			250			470			1200			1200			2400		
Distance between centerlines	(mm)	F	17			19			23			27			27			31			39			41			2x48			2x55			2x65			2x90			2x117		
Distance	(mm)	G	6.5			7.5			9.5			11			11			12.5			13			16.5			18			22.5			28			35			42		
Moment of inertia (10 ⁻³ kgm ²)		J _{rot}	0.06	0.07	0.08	0.12	0.13	0.14	0.32	0.35	0.4	0.8	0.85	0.9	1.9	2	2.1	3.2	3.4	3.6	7.6	7.9	8.3	14.3	14.6	14.8	16.2	17	43	45	165	495	1214								
Hub material			Al optional steel			Al optional steel			Al optional steel			Al optional steel			steel optional AL			steel optional AL			steel optional AL			steel optional AL			steel			steel			steel			steel			steel		
Approximate weight	(kg)		0.16			0.26			0.48			0.8			1.85			2.65			4			6.3			5.7			11.5			28.8			49.4			80.9		
Torsional stiffness (10 ³ Nm/rad)		C _T	20	15	14	39	28	27	76	55	54	129	85	84	175	110	97	191	140	135	450	350	340	510	500	400	780	711	1304	1180	3400	5700	10950								
Axial ± (mm)			1	2	3	1	2	3	1.5	2	3	2	3	4	2	3	4	2	3	4	2.5	3.5	4.5	2.5	3.5	4.5	3.5	4.5	3.5	4.5	3.5	3	3								
Lateral ± (mm)		Max. values	0.15	0.2	1	0.2	0.25	1	0.2	0.25	1	0.2	0.25	1	0.2	0.25	1	0.25	0.3	1	0.25	0.3	1	0.3	0.35	1	0.35	1	0.35	1	0.4	0.4	0.4								
Angular ± (degree)			1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1.5	2	1.5	2	1.5	1.5	1.5								
Axial spring stiffness	(N/mm)	C _s	25	15	84	50	30	118	72	48	165	48	32	144	82	52	130	90	60	280	105	71	605	70	48	85	100	285	320	440	565	1030	985								
Lateral spring stiffness	(N/mm)	C _r	475	137	140	900	270	224	1200	420	337	920	290	401	1550	435	500	2040	610	750	3750	1050	1200	2500	840	614	2000	1490	3600	1700	6070	19200	21800								

* 180° opposed in each clamping hub.

נבה חצויה עם הידוק צביטה

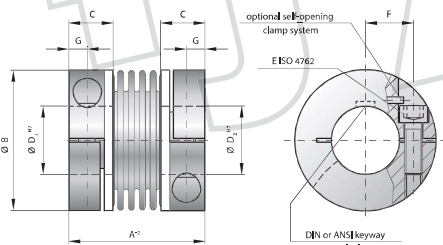


15-4,000 Nm BKH

חומר
גרמושקה: נירוסטה
נבה: ראה טבלה



SIZE			15		30		60		80		150		200		300		500		800		1500		4000	
Rated torque	(Nm)	T _{KH}	15		30		60		80		150		200		300		500		800		1500		4000	
Overall length	(mm)	A ⁻²	59	66	69	77	83	93	94	106	95	107	105	117	111	125	133	146	140	166	225			
Outside diameter	(mm)	B	49		55		65		81		81		90		110		124		134		157		200	
Fit length	(mm)	C	22		27		31		36		36		41		43		51		45		55		85	
Inside diameter possible from Ø to Ø H7	(mm)	D _I /D ₂	8-28		10-30		12-35		14-42		19-42		22-45		24-60		35-60		40-75		50-80		50-90	
Fastening screw ISO 4762		E	M5		M6		M8		M10		M10		M12		M12		M16		M16		M20		M24	
Tightening torque of the fastening screw	(Nm)		8		15		40		50		70		120		130		200		250		470		1200	
Distance between centerlines	(mm)	F	17.5		19		23		27		27		31		39		41		48		55		65	
Distance	(mm)	G	7		7.5		9.5		12		12		12.5		14		16.5		18		22.5		28	
Distance	(mm)	H ⁻²	29	36	35	43	41	51	47	59	48	60	50	62	55	69	61	75	65.5	71	109			
Moment of inertia	(10 ⁻³ kgm²)	J _{gss}	0.07	0.08	0.14	0.15	0.23	0.26	0.65	0.67	2.5	3.2	4.5	5.4	8.5	10.5	17.3	19.6	24.3	49.2	165			
Hub material			Al optional steel		Al optional steel		Al optional steel		Al optional steel		steel optional AL		steel optional AL		steel optional AL		steel optional AL		steel		steel		steel	
Approximate weight	(kg)		0.15		0.3		0.4		0.8		1.7		2.5		4		7.5		7		12		28	
Torsional stiffness	(10 ³ Nm/rad)	C _T	20	15	39	28	76	55	129	85	175	110	191	140	450	350	510	500	780	1304	3400			
Axial ± (mm)			1	2	1	2	1.5	2	2	3	2	3	2	3	2.5	3.5	2.5	3.5	3.5	3.5	3.5			
Lateral ± (mm)			0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.3	0.25	0.3	0.3	0.35	0.35	0.35	0.4			
Angular ± (degree)			1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1.5	1.5	1.5			
Axial spring stiffness	(N/mm)	C _s	25	15	50	30	72	48	48	32	82	52	90	60	105	71	70	48	100	320	565			
Lateral spring stiffness (N/mm)		C _r	475	137	900	270	1200	420	920	290	1550	435	2040	610	3750	1050	2500	840	2000	3600	6070			

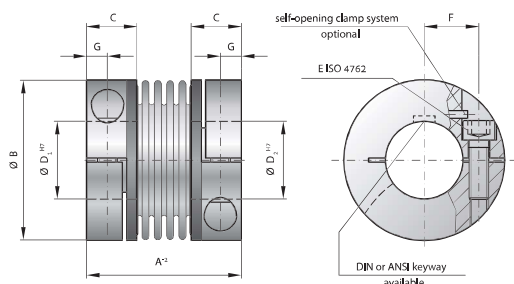


2-500 Nm BKL

חומר
גרמושקה: נירוסטה
נבה: ראה טבלה



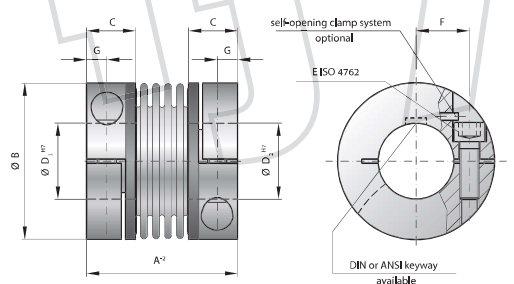
SIZE			2	4.5	10	15	30	60	80	150	300	500			
Rated torque	(Nm)	T _{KN}	2	4.5	10	15	30	60	80	150	300	500			
Overall length	(mm)	A ⁻²	30	40	44	58	68	79	92	92	109	114			
Outside diameter	(mm)	B	25	32	40	49	56	66	82	82	110	123			
Fit length	(mm)	C	10	13	13	21.5	26	28	32.5	32.5	41	42.5			
Inside diameter possible from Ø to Ø H7	(mm)	D _{1/2}	4-12.7	6-16	6-24	8-28	10-32	14-35	16-42	19-42	24-60	35-62			
Fastening screw ISO 4762		E	M3	M4	M4	M5	M6	M8	M10	M10	M12	M16			
Tightening torque of the fastening screw	(Nm)		2.3	4	4.5	8	15	40	70	85	120	200			
Distance between centerlines	(mm)	F	8	11	14	17	20	23	27	27	39	41			
Distance	(mm)	G	4	5	5	6.5	7.5	9.5	11	11	13	17			
Moment of inertia	(10 ⁻³ kgm ²)	J _{ges}	0.002	0.007	0.016	0.065	0.12	0.3	0.75	1.8	0.8	7.5	3.1	11.7	4.9
Hub material			AL optional steel	AL optional steel	AL optional steel	AL optional steel	AL optional steel	AL optional steel	AL optional steel	steel optional AL	steel optional AL	steel optional AL			
Approximate weight	(kg)		0.02	0.05	0.06	0.16	0.25	0.4	0.7	1.7	0.75	3.8	1.6	4.9	2.1
Torsional stiffness	(10 ³ Nm/rad)	C _T	1.5	7	9	23	31	72	80	141	157	290			
Axial	± (mm)	Max. values	0.5	1	1	1	1	1.5	2	2	2	2.5			
Lateral	± (mm)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2			
Angular	± (degree)		1	1	1	1	1	1	1	1	1	1			
Axial spring stiffness	(N/mm)	C _s	8	35	30	30	50	67	44	77	112	72			
Lateral spring stiffness	(N/mm)	C _r	50	350	320	315	366	679	590	960	2940	1450			



15-500 Nm **BKS**

חומר
גרמושקה: נירוסטה
נבה: נירוסטה

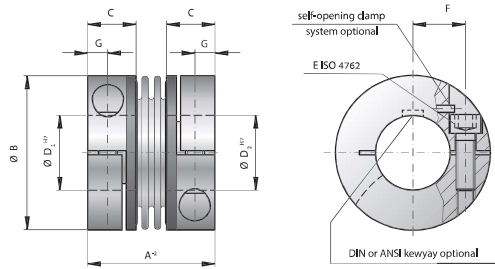
SIZE			15	30	60	150	300	500
Rated torque (Nm)	T_{KN}		15	30	60	150	300	500
Overall length (mm)	A^{-2}		45	52	66	76	89	95
Outside diameter (mm)	B		49	56	66	82	110	123
Fit length (mm)	C		17	20	24	30	34	35
Inside diameter* possible from ϕ to ϕ H7 (mm)	D_1/D_2		12-28	14-32	16-35	19-42	24-60	32-75
Fastening screw ISO 4762			M5	M6	M8	M10	M12	M12
Tightening torque of the fastening screw (Nm)	E		8	15	40	75	120	125
Distance between centerlines (mm)	F		17.5	20	23	27	39	45
Distance (mm)	G		6	7.5	9.5	11	13	13
Moment of inertia (10^{-3} kgm ²)	J_{ges}		0.1	0.2	0.53	1.5	5.5	8.1
Approximate weight (kg)			0.27	0.42	0.78	1.5	2.9	3.5
Torsional stiffness (10^3 Nm/rad)	C_T		23	31	72	141	157	290
Axial $\pm$ (mm)			1	1	1.5	2	2	2.5
Lateral $\pm$ (mm)	Max. values		0.2	0.2	0.2	0.2	0.2	0.2
Angular $\pm$ (degree)			1	1	1	1	1	1
Axial spring stiffness (N/mm)	C_a		30	50	67	77	112	72
Lateral spring stiffness (N/mm)	C_r		315	366	679	960	2940	2200
Speed max. with balancing (min ⁻¹)			60,000	50,500	50,000	40,500	40,000	30,000



15-500 Nm **BKC**

חומר
גרמושקה: נירוסטה
נבה: ראה טבלה

SIZE			15	30	60	150	300	500
Rated torque (Nm)	T_{KN}		15	30	60	150	300	500
Overall length (mm)	A^{-2}		48	58	67	78	94	100
Outside diameter (mm)	B		49	56	66	82	110	123
Fit length (mm)	C		16.5	21	23	27.5	34	34
Inside diameter possible from ϕ to ϕ H7 (mm)	D_1/D_2		8-28	12-32	14-35	19-42	24-60	32-75
Fastening screw ISO 4762			M5	M6	M8	M10	M12	M12
Tightening torque of the fastening screw (Nm)	E		8	15	40	75	120	125
Distance between centerlines (mm)	F		17.5	20	23	27	39	45
Distance (mm)	G		6.5	7.5	9.5	11	13	13
Moment of inertia (10^{-3} kgm ²)	J_{ges}		0.05	0.1	0.26	0.65	6.3	9
Hub material			AL	AL	AL	AL	steel	steel
Approximate weight (kg)			0.13	0.21	0.37	0.72	3.26	3.52
Torsional stiffness (10^3 Nm/rad)	C_T		23	31	72	141	157	290
Axial $\pm$ (mm)			1	1	1.5	2	2	2.5
Lateral $\pm$ (mm)	Max. values		0.2	0.2	0.2	0.2	0.2	0.2
Angular $\pm$ (degree)			1	1	1	1	1	1
Axial spring stiffness (N/mm)	C_a		30	50	67	77	112	72
Lateral spring stiffness (N/mm)	C_r		315	366	679	960	2940	2200
Speed max. with balancing (min ⁻¹)			80,000	70,000	60,000	50,000	40,000	30,000

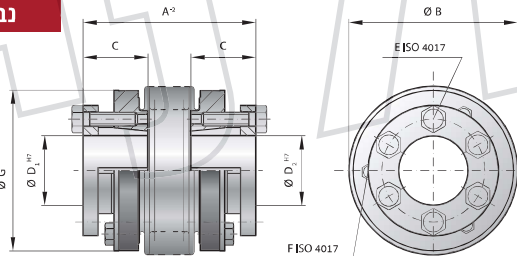


20-1,000 Nm **BKM**

חומר
גרמושקה: נירוסטה
נבה: ראה טבלה

SIZE		20	200	400	1000
Rated torque (Nm)	T_{RN}	20	200	400	1000
Overall length (mm)	A^{-2}	40	59	75	89
Outside diameter (mm)	B	49	66	82	110
Fit length (mm)	C	16.5	23	27.5	34
Inside diameter possible from ϕ to ϕ H7 (mm)	D_{V2}	15-28	24-35	32-42	40-60
Fastening screw ISO 4762		M5	M8	M10	M12
Tightening torque of the fastening screw (Nm)	E	8	40	60	130
Distance between centerlines (mm)	F	17	23	27	39
Distance (mm)	G	6	9.5	11	13
Moment of inertia (10^{-3} kgm ²)	J_{ges}	0.05	0.18	0.62	7.2
Hub material		AL	AL	AL	steel
Approximate weight (kg)		0.13	0.4	0.7	3.5
Torsional stiffness (10^3 Nm/rad)	C_T	41.9	138	170	570
Axial $\pm$ (mm)	Max. values	1	1.5	1	2
Lateral $\pm$ (mm)		0.06	0.08	0.1	0.1
Angular $\pm$ (degree)		0.5	0.5	0.5	0.5
Axial spring stiffness (N/mm)	C_a	55.8	153	114	148
Lateral spring stiffness (N/mm)	C_r	3,710	11,000	6,058	9,010
Speed max. with balancing (min ⁻¹)		80,000	60,000	50,000	40,000

נבה קונית

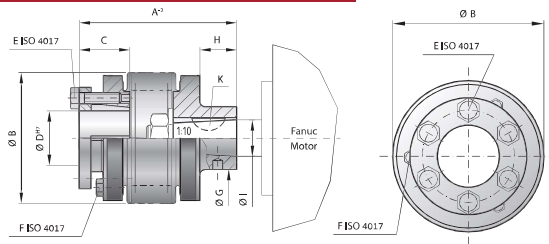


15-10,000 Nm **BK3**

חומר
גרמושקה: נירוסטה
נבה: פלדה

SIZE		15		30		60		150		200		300		500		800		1500		4000		6000		10000		
Rated torque	(Nm)	T _{RN}	15		30		60		150		200		300		500		800		1500		4000		6000		10000	
Overall length	(mm)	A ⁻²	48	55	57	65	66	76	75	87	78	90	89	103	97	110	114	141	195	210	217					
Outside diameter	(mm)	B	49		55		66		81		90		110		124		133		157		200		253		303	
Fit length	(mm)	C	19		22		27		32		32		41		41		50		61		80		85		92	
Inside diameter possible from Ø to Ø H7	(mm)	D _{V2}	10-22		12-23		12-29		15-38		15-44		24-56		24-60		30-60		35-70		50-100		60-140		70-180	
Fastening screw ISO 4017		E	6 x M4		6 x M5		6 x M5		6 x M6		6 x M6		6 x M8		6 x M8		6 x M10		6 x M12		6 x M16		6 x M16		8 x M16	
Tightening torque of the fastening screw	(Nm)		4		6		8		12		14		18		25		40		70		120		150		160	
Jack screw ISO 4017		F	3 x M4		3 x M4		3 x M5		3 x M5		3 x M6		3 x M6		3 x M6		3 x M8		6 x M8		6 x M10		6 x M10		4 x M10	
Outside diameter of hub	(mm)	G	49		55		66		81		90		110		122		116		135		180		246		295	
Moment of inertia (10 ⁻³ kgm²)		J _{ges}	0.07	0.08	0.15	0.16	0.39	0.41	1.2	1.6	1.7	2.5	5.1	5.9	9.1	9.9	13.2	34.9	85.5	254	629					
Approximate weight	(kg)		0.25		0.4		0.8		1.2		1.8		3		4.2		5.6		8.2		23		32.6		45.5	
Torsional stiffness (10 ³ Nm/rad)		C _T	20	15	39	28	76	55	175	110	191	140	450	350	510	500	780	1304	3400	5700	10950					
Axial ± (mm)		Max. values	1	2	1	2	1.5	2	2	3	2	3	2.5	3.5	2.5	3.5	3.5	3.5	3.5	3.5	3	3				
Lateral ± (mm)			0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.3	0.25	0.3	0.3	0.35	0.35	0.35	0.35	0.4	0.4	0.4				
Angular ± (degree)			1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Axial spring stiffness	(N/mm)	C _a	25	15	50	30	72	48	82	52	90	60	105	71	70	48	100	320	565	1030	985					
Lateral spring stiffness	(N/mm)	C _r	475	137	900	270	1200	420	1500	435	2040	610	3750	1050	2500	840	2000	3600	6070	19200	21800					

עבור ציר עם קוטר משתנה (tapered shaft)

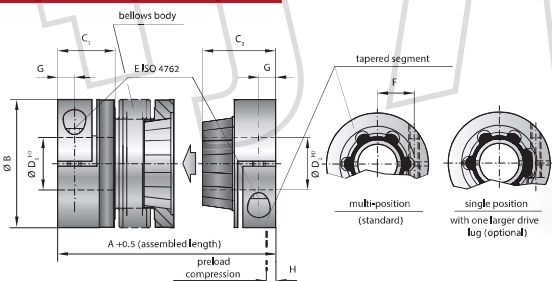


15-150 Nm **BK4**

חומר
גרמושקה: נירוסטה
נבה: פלדה

SIZE			15		30		60		150	
Rated torque	(Nm)	T _{KN}	15		30		60		150	
Overall length	(mm)	A ⁻²	47	54	68	76	72	82	82	94
Outside diameter	(mm)	B	49		55		66		81	
Fit length	(mm)	C	19		22		27		32	
Inside diameter possible from ∅ to ∅ H7	(mm)	D	10-22		12-23		12-29		15-37	
Fastening screw ISO 4017		E	6 x M4		6 x M5		6 x M5		6 x M6	
Tightening torque of the fastening screw	(Nm)		4		6		8		12	
Jack screw ISO 4017		F	3 x M4		3 x M4		3 x M5		3 x M5	
Outside diameter of hub	(mm)	G	20		27		30		30	
Hub length	(mm)	H	8.5		22		18		20	
Moment of inertia (10 ⁻³ kgm ²)		J _{ges}	0.10	0.12	0.22	0.27	0.58	0.61	1.1	1.4
Approximate weight	(kg)		0.25		0.4		0.8		1.35	
Torsional stiffness (10 ³ Nm/rad)		C _T	20	15	39	28	76	55	175	110
Axial ± (mm)		Max. values	1	2	1	2	1.5	2	2	3
Lateral ± (mm)			0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25
Angular ± (degree)			1	1.5	1	1.5	1	1.5	1	1.5
Axial spring stiffness	(N/mm)	C _a	25	15	50	30	72	48	82	52
Lateral spring stiffness	(N/mm)	C _r	475	137	900	270	1200	420	1500	435
Cone ∅ (Fanuc Motor)	(mm)	I	11		16		16		16	
Key width	(mm)	K	4		5		5		5	

נבה עם מקשר פלסטי קשיח



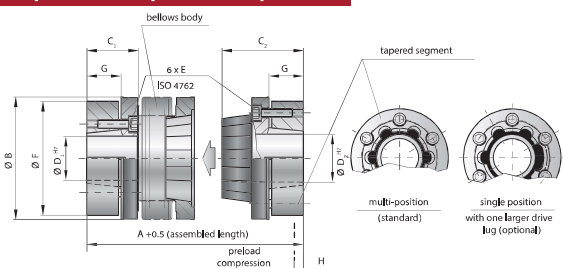
15-1,500 Nm **BK5**

חומר
גרמושקה: נירוסטה
נבה: גודל 150 ומעלה -
פלדה, יתר הגדלים -
אלומיניום

SIZE			15		30		60		80		150		300		500		800		1500	
Rated torque	(Nm)	T _{KN}	15		30		60		80		150		300		500		800		1500	
Overall length (inserted)	(mm)	A ^{+0.5}	60	67	71	79	85	95	94	106	95	107	114	128	136	149	150	172		
Outside diameter	(mm)	B	49		55		66		81		81		110		124		133		157	
Fit length	(mm)	C ₁	22		27		32		36		36		43		51		45		55	
Fit length	(mm)	C ₂	28		33		39		43		43		52		61		74		94	
Inside diameter possible from Ø to Ø H7	(mm)	D ₁	8-28		10-30		12-32		14-42		14-42		24-60		35-60		40-75		50-80	
Inside diameter possible from Ø to Ø H7	(mm)	D ₂	8-22		10-25		12-32		14-38		14-38		24-58		35-60		40-62		50-75	
Fastening screw ISO 4762		E	M5		M6		M8		M10		M10		M12		M16		2 x M16**		2 x M20**	
Tightening torque of the fastening screw	(Nm)		8		15		40		50		70		130		200		250		470	
Distance between centerlines	(mm)	F	17		19		23		27		27		39		41		2 x 48**		2 x 55**	
Distance	(mm)	G	6.5		7.5		9.5		11		11		13		16.5		18		22.5	
Preload compression	(mm)	H	0.2 - 1.0		0.5 - 1.0		0.5 - 1.5		0.5 - 1.5		0.5 - 1.5		0.5 - 1.5		1.0 - 2.0		1.0 - 2.5		0.5 - 1.5	
Axial recovery force at maximum pretensioning	(N)		20	12	50	30	70	45	48	32	82	52	157	106	140	96	200	650		
Moment of inertia (10 ⁻³ kgm²)		J _{ges}	0.07	0.08	0.14	0.15	0.23	0.26	0.65	0.67	2.2	2.4	7.4	7.9	13.7	14.4	26.2	51.4		
Approximate weight	(kg)		0.1	0.1	0.3	0.3	0.4	0.4	0.9	0.9	1.8	1.8	4	4	6.5	6.7	8.2	15.3		
Torsional stiffness (10 ³ Nm/rad)		C _T	10	8	20	14	38	28	65	43	88	55	225	175	255	245	400	650		
Axial* ± (mm)		Max. values	0.5	1	0.5	1	0.5	1	1	2	1	2	1.5	2	2.5	3.5	3	2		
Lateral ± (mm)			0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.3	0.3	0.35	0.35	0.35		
Angular ± (degree)			1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1.5	1.5		
Lateral spring stiffness	(N/mm)	C _r	475	137	900	270	1200	420	920	290	1550	435	3750	1050	2500	840	2000	3600		

*in addition to maximum allowable pretension **180° opposed in each clamping hub.

בנה קונית עם מקשר פלסטי קשיח



15-1,500 Nm **BK6**

חומר
גרמושקה: נירוסטה
בנה: פלדה

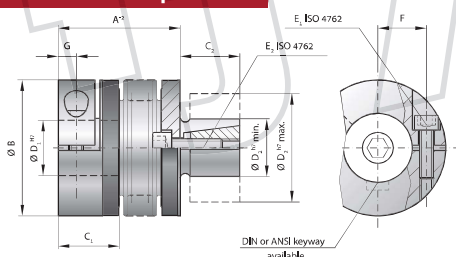


SIZE		15	30	60	150	300	500	800	1500
Rated torque (Nm)	T_{KN}	15	30	60	150	300	500	800	1500
Overall length (gesteckt) (mm)	$A^{+0.5}$	58 65	68 76	79 89	97 109	113 127	132 145	140 158	158
Outside diameter (mm)	B	49	55	66	81	110	124	133	157
Fit length (mm)	C_1	13.5	21.5	18	23.5	27	32	42	53
Fit length (mm)	C_2	29	34	39	49.5	59	68	74	90.5
Inside diameter possible from Ø to Ø H7 (mm)	D_1	10-22	12-24	12-32	15-40	24-56	30-60	40-62	50-75
Inside diameter possible from Ø to Ø H7 (mm)	D_2	10-22	12-24	12-32	15-40	24-56	30-60	40-62	50-75
Fastening screw ISO 4762		M4	M5	M5	M6	M8	M8	M10	M12
Tightening torque of the fastening screw (Nm)	E	3.5	6.5	8	12	30	32	55	110
Diameter of clamping ring (mm)	F	46.5	51	60	74	102	114	126	146
Clamping ring length (mm)	G	9.5	10.5	11.5	17.5	20	23	27	32
Preload compression (mm)		0.2 - 1.0	0.5 - 1.0	0.5 - 1.5	0.5 - 1.5	0.5 - 1.5	1.0 - 2.0	1.0 - 2.0	0.5 - 1.5
Axial recovery force at maximum pretensioning (N)	H	20	12	50	30	70	45	82	52
Moment of inertia (10^{-3} kgm^2)	J_{ges}	0.1	0.12	0.2	0.25	0.4	0.45	2.0	2.5
Approximate weight (kg)		0.3	0.32	0.5	0.52	0.82	0.84	1.6	1.7
Torsional stiffness (10^3 Nm/rad)	C_T	10	8	20	14	38	28	88	55
Axial* ($\pm$ mm)		0.5	1	0.5	1	0.5	1	1	2
Lateral ($\pm$ mm)		0.15	0.2	0.2	0.25	0.2	0.25	0.25	0.3
Angular ($\pm$ degree)		1	1.5	1	1.5	1	1.5	1	1.5
Lateral spring stiffness (N/mm)	C_r	475	137	900	270	1200	420	1550	435
		3750	1050	2500	840	2000	3600		

* in addition to maximum allowable pretension

Higher torques upon request

קופלונג עם ציר



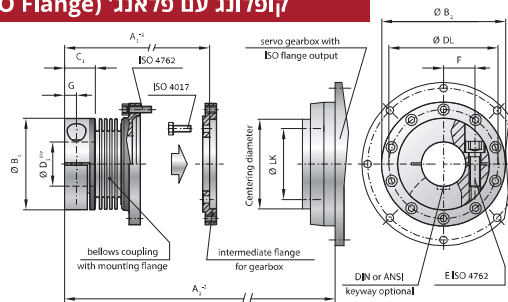
15-300 Nm **BK7**

חומר
גרמושקה: נירוסטה
בנה: ראה טבלה
ציר: פלדה



SIZE		15	30	60	150	300
Rated torque (Nm)	T_{KN}	15	30	60	150	300
Overall length (mm)	A^{-2}	45 52	53 61	62 72	71 83	84 98
Outside diameter (mm)	B	49	55	66	81	110
Fit length (mm)	C_1	22	27	31	36	43
Fit length (mm)	C_2	20	25	27	32	45
Inside diameter possible from Ø to Ø H7 (mm)	D_1	8-28	10-30	12-35	19-42	30-60
Shaft diameter from Ø to Ø h7 (mm)	D_2	13-25	14-30	23-38	26-42	38-60
Fastening screw ISO 4762	$E_{1/2}$	M5	M6	M8	M10	M12
Tightening torque of the fastening screw (Nm)	$E_{1/2}$	8	14	38	65	120
Distance between centerlines (mm)	F	17	19	23	27	39
Distance (mm)	G	6.5	7.5	9.5	11	13
Moment of inertia (10^{-3} kgm^2)	J_{ges}	0.07	0.08	0.14	0.15	0.23
Hub material		Al	Al	Al	steel	steel
Approximate weight (kg)		0.15	0.3	0.4	1.7	4
Torsional stiffness (10^3 Nm/rad)	C_T	20	15	39	28	76
Axial ($\pm$ mm)		1	2	1	2	1.5
Lateral ($\pm$ mm)		0.15	0.2	0.2	0.25	0.2
Angular ($\pm$ degree)		1	1.5	1	1.5	1
Axial spring stiffness (N/mm)	C_s	20	12	50	30	72
Lateral spring stiffness (N/mm)	C_r	315	108	730	230	1200
		1050	3750	1050	435	3750

קופלונג עם פלאנג' (ISO Flange)



50-2,600 Nm

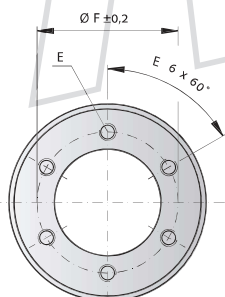
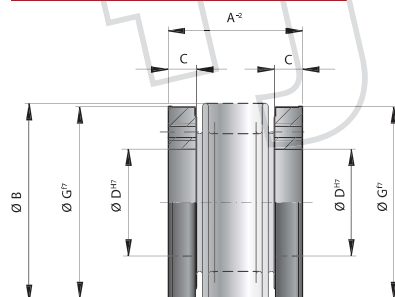
BK8

חומר
גרמושקה: נירוסטה
נבה: גודל 1,500 - פלדה,
יתר הגדלים - אלומיניום
מתאם לפלאנג' - פלדה

SIZE		15	60	150	300	1500
Flange centering diameter	(mm)	40 h7	63 h7	80 h7	100 h7	160 h7
Flange bolt circle / thread ϕ	(mm)	31.5 / 8 x M5	50 / 8 x M6	63 / 12 x M6	80 / 12 x M8	125 / 12 x M10
Maximum torque*	(Nm)	50	210	380	750	2600
Length -2	(mm) A ₁	48.5	67	72	90	140
Length -2	(mm) A ₂	68	97	101	128	190
Outside diameter of hub	(mm) B ₁	49	66	82	110	157
Flange diameter	(mm) B ₂	63.5	86	108	132	188
Fit length	(mm) C ₁	16.5	23	27.5	34	55
Inside diameter possible from ϕ to ϕ H7	(mm) D ₁	12-28	14-35	19-42	24-60	50-80
Hub bolt circle	(mm) DL	56.5	76	97	120	170
Fastening threads	(mm)	10 x M4	10 x M5	10 x M6	12 x M6	16 x M8
Fastening screws ISO 4762		1 x M5	1 x M8	1 x M10	1 x M12	2 x M20
Tightening torque of the fastening screw	(Nm) E ₁	8	45	80	120	470
Distance between centerlines	(mm) F	1 x 17.5	1 x 23	1 x 27	1 x 39	2 x 55
Distance	(mm) G	6.5	9.5	11	13	22.5
Approximate weight	(kg)	0.3	0.7	1	2.8	10
Moment of inertia	(10 ⁻³ kgm ²) J _{ges}	0.15	0.65	1.3	5.5	45
Lateral	$\pm$ (mm)	0.25	0.25	0.25	0.25	0.25
Angular	$\pm$ (degree) Max. values	1	1	1	1	1
Axial	$\pm$ (mm)	1	1.5	2	2.5	3

* maximum torque transmittable only for brief periods and requires maximum bore for clamping strength

קופלונג עם פלאנג' כפול



15-10,000 Nm

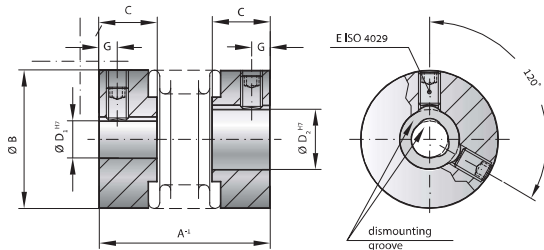
BK1

חומר
גרמושקה: נירוסטה
נבה: פלדה

SIZE		15	30	60	150	200	300	500	800	1500	4000	6000	10000
Rated torque	(Nm) T _{KN}	15	30	60	150	200	300	500	800	1500	4000	6000	10000
Overall length	(mm) A ²	30	37	36	44	43	53	50	62	53	65	56	70
Outside diameter of bellows	(mm) B	49	55	66	81	90	110	124	133	157	200	253	303
Fit length/thread depth	(mm) C	7.5	10	11	13	14.5	15	16	18	22	30	30	36
Inside diameter H7	(mm) D	25	28	38	50	58	65	70	75	85	100	145	190
Fastening threads	E	6 x M5	6 x M5	6 x M6	6 x M6	6 x M6	6 x M8	6 x M8	6 x M10	6 x M16	6 x M20	8 x M20	8 x M24
Bolt circle diameter $\pm$ 0.2	(mm) F	35	37	46	62	70	80	94	90	110	140	190	234
Outside diameter f7	(mm) G	49	55	66	81	90	110	122	116	140	182	235	295
Moment of inertia	(10 ⁻³ kgm ²) J _{ges}	0.07	0.08	0.14	0.15	0.30	0.32	0.90	0.95	1.30	1.40	1.95	2.10
Approximate weight	(kg)	0.15	0.2	0.3	0.6	0.8	1.35	1.8	1.9	3.3	8.9	13.9	23.7
Torsional stiffness	(10 ³ Nm/rad) C _t	20	15	39	28	76	55	175	110	191	140	450	350
Axial	$\pm$ (mm)	1	2	1	2	1.5	2	2	3	2	3	2.5	3.5
Lateral	$\pm$ (mm)	0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.3	0.25	0.3	0.35
Angular	$\pm$ (degree)	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5
Axial spring stiffness	(N/mm) C _s	25	15	50	30	72	48	82	52	90	60	105	71
Lateral spring stiffness	(N/mm) C _r	475	137	900	270	1200	420	1550	435	2040	610	3750	1050

נבה עם ברגי הידוק

0.05-10 Nm **MK1**

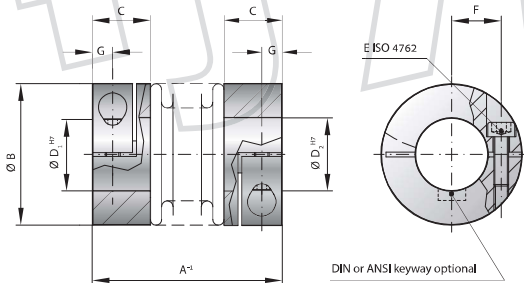


חומר
גרמושקה: גודל
tombac - 0.5
יתר הגדלים - נירוסטה
נבה: אלומיניום
מהירות מקסימלית:
20,000 rpm

SIZE		0.5	1	5	10	15	20	45	100
Rated torque (Nm)	T_{KN}	0.05	0.1	0.5	1.0	1.5	2.0	4.5	10
Overall length (mm)	A^{-1}	14	20	20 23 26	22 25 28	24 29	26 31 35	37 45	43 53
Outside diameter (mm)	B	6.5	10	15	15	19	25	32	40
Fit length (mm)	C	4	5	6.5	6.5	7.5	11	13	15
Inside diameter possible from ϕ to ϕ H7 (mm)	$D_{1/2}$	1-3	1-5	3-9	3-9	3-12	3-16	6-22	6-28
Clamping screw ISO 4029		1xM2	1xM2.5	1xM3	1xM3	2xM3	2xM4	2xM5	2xM6
Tightening torque of the fastening screw (Nm)	E	0.35	0.75	1.3	1.3	1.3	2.5	4	6
Distance (mm)	G	1.5	1.8	2	2	2	2.5	3.5	4
Moment of inertia (gcm ²)	J_{gas}	0.1	0.4	1.1 1.2 1.3	1.3 1.8 2	4.7 5.5	15 18 20	65 70	180 220
Approximate weight (g)		1	5	6 6 6	6 7 8	12 14	22 24 26	54 58	106 114
Torsional stiffness (Nm/rad)	C_T	50	70	280 210 170	510 380 320	750 700	1200 1300 1200	7000 5000	9050 8800
Axial (mm)		0.4	0.4	0.4 0.5 0.6	0.4 0.5 0.6	0.5 0.7	0.5 0.6 0.7	0.7 1	1 1.2
Lateral (mm)		0.1	0.15	0.15 0.2 0.25	0.15 0.2 0.25	0.15 0.2	0.15 0.2 0.25	0.2 0.25	0.2 0.3
Angular (degree)		1	1	1 1.5 2	1 1.5 2	1.5 1.5	1.5 1.5 2	1.5 2	1.5 2

נבה חצוייה עם הידוק צביטה באדום

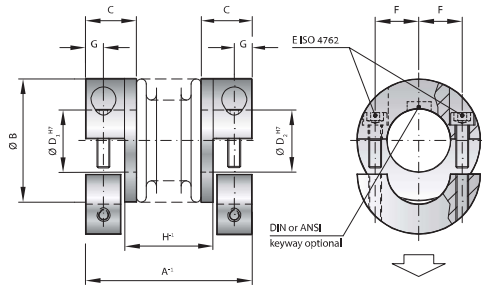
0.5-10 Nm **MK2**



חומר
גרמושקה: נירוסטה
נבה: אלומיניום

SIZE		5	10	15	20	45	100
Rated torque (Nm)	T_{KN}	0.5	1.0	1.5	2.0	4.5	10
Overall length (mm)	A^{-1}	25 28 31	27 30 33	30 35	35 40 44	46 54	50 60
Outside diameter (mm)	B	15	15	19	25	32	40
Fit length (mm)	C	9	9	11	13	16	16
Inside diameter possible from ϕ to ϕ H7 (mm)	$D_{1/2}$	3-7	3-7	3-8	3-12.7	5-16	5-24
Fastening screw ISO 4762		M2	M2	M2.5	M3	M4	M4
Tightening torque of the fastening screw (Nm)	E	0.43	0.43	0.85	2.3	4	4.5
Distance between centerlines (mm)	F	4.5	4.5	6	8	10	15
Distance (mm)	G	3	3	3.5	4	5	5
Moment of inertia (gcm ²)	J_{gas}	2.6 2.8 3	3 3.4 3.6	8.5 9.5	25 27 29	100 108	160 205
Approximate weight (g)		9 9 9	9 10 11	22 24	36 38 40	74 78	120 130
Torsional stiffness (Nm/rad)	C_T	280 210 170	510 380 320	750 700	1200 1300 1200	7000 5000	9050 8800
Axial (mm)		0.4 0.5 0.6	0.4 0.5 0.6	0.5 0.7	0.5 0.6 0.7	0.7 1	1 1.2
Lateral (mm)		0.15 0.2 0.25	0.15 0.2 0.25	0.15 0.2	0.15 0.2 0.25	0.2 0.25	0.2 0.3
Angular (degree)		1 1.5 2	1 1.5 2	1.5 1.5	1.5 1.5 2	1.5 2	1.5 2

נבה חצויה עם הידוק צביטה

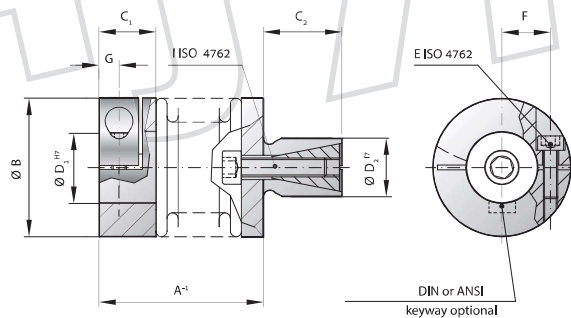


0.5-10 Nm **MKH**

חומר
גרמושקה: נירוסטה
נבה: אלומיניום

SIZE			5			10			15		20			45		100	
Rated torque (Nm)	T_{KN}		0.5			1.0			1.5		2.0			4.5		10	
Overall length (mm)	A^{-1}		25	28	31	27	30	33	30	35	35	40	44	46	54	50	60
Outside diameter (mm)	B		15			15			19		25			32		40	
Fit length (mm)	C		9			9			11		13			16		16	
Inside diameter possible from ϕ to ϕ H7 (mm)	$D_{1/2}$		3-7			3-7			3-8		3-12.7			5-16		5-24	
Fastening screw ISO 4762	E		M2			M2			M2.5		M3			M4		M4	
Tightening torque of the fastening screw (Nm)			0.43			0.43			0.85		2.3			4		4.5	
Distance between centerlines (mm)	F		4.5			4.5			6		8			10		15	
Distance (mm)	G		3			3			3.5		4			5		5	
Distance (H)	H^{-1}		12	15	18	14	17	20	14.5	19.5	17	22	26	23.5	31.5	27.5	37.5
Moment of inertia (gcm^2)	J_{ges}		2.6	2.8	3	3	3.4	3.6	8.5	9.5	25	27	29	100	108	160	205
Approximate weight (g)			9	9	9	9	10	11	22	24	36	38	40	74	78	120	130
Torsional stiffness (Nm/rad)	C_T		280	210	170	510	380	320	750	700	1200	1300	1200	7000	5000	9050	8800
Axial (mm)	Max. values		0.4	0.5	0.6	0.4	0.5	0.6	0.5	0.7	0.5	0.6	0.7	0.7	1	1	1.2
Lateral (mm)			0.15	0.2	0.25	0.15	0.2	0.25	0.15	0.2	0.15	0.2	0.25	0.2	0.25	0.2	0.3
Angular (degree)			1	1.5	2	1	1.5	2	1.5	1.5	1.5	1.5	2	1.5	2	1.5	2

קופולונג עם ציר

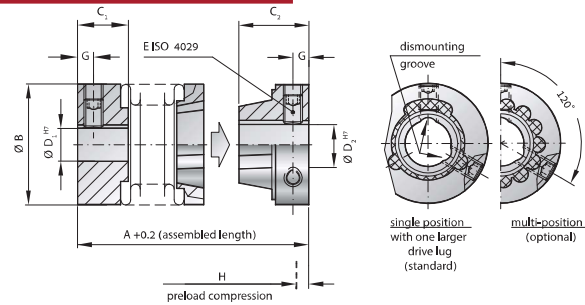


0.5-10 Nm **MK3**

חומר
גרמושקה: נירוסטה
נבה: אלומיניום
ציר: פלדה

SIZE			5			10			15		20			45		100	
Rated torque (Nm)	T_{KN}		0.5			1			1.5		2			4.5		10	
Overall length (mm)	A^{-1}		20	23	26	22	25	28	24	30	27	33	36	36	44	41	51
Outside diameter (mm)	B		15			15			19		25			32		40	
Fit length (mm)	C_1		9			9			11		13			16		16	
Shaft length (mm)	C_2		10			10			12		12			15		20	
Inside diameter possible from ϕ to ϕ H7 (mm)	D_1		3-7			3-7			4-8		4-12.7			5-16		6-24	
Standard shaft possible from ϕ to ϕ f7 (mm)	D_2		8-10			8-10			10-14		10-16			14-20		16-24	
Fastening screw ISO 4762	E		M2			M2			M2.5		M3			M4		M4	
Tightening torque of the fastening screw (Nm)			0.43			0.43			0.85		2.3			4		4.5	
Distance between centerlines (mm)	F		4.5			4.5			6		8			10		15	
Distance (mm)	G		3			3			3.5		4			5		5	
Fastening screw ISO 4762	I		M3			M3			M4		M4			M5		M6	
Tightening torque of the fastening screw (Nm)			1.5			1.5			3		4			6.5		11	
Moment of inertia (gcm^2)	J_{ges}		2.6	2.8	3.0	3.0	3.4	3.6	8.5	9.5	25	27	29	100	108	160	205
Torsional stiffness (Nm/rad)	C_T		280	210	170	510	380	320	750	700	1200	1300	1200	7000	5000	9050	8800
Axial (mm)	Max. values		0.4	0.5	0.6	0.4	0.5	0.6	0.5	0.7	0.5	0.6	0.7	0.7	1	1	1.2
Lateral (mm)			0.15	0.2	0.25	0.15	0.2	0.25	0.15	0.2	0.15	0.2	0.25	0.2	0.25	0.2	0.3

נבה עם מקשר פלסטי קשיח



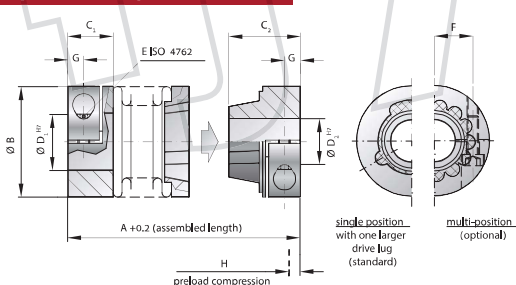
0.5-10 Nm **MK4**

חומר
גרמושקה: נירווסטה
נבה: אלומיניום
מהירות מקסימלית:
20,000 rpm



SIZE		5			15		20			45		100	
Rated torque (Nm)	T_{KN}	0.5			1.5		2			4.5		10	
Overall length (inserted) (mm)	$A^{+0.2}$	22	25	28	26	31	28	33	37	39	47	46	56
Outside diameter (mm)	B	15			19		25			32		40	
Fit length (mm)	C_1	6.5			7.5		11			13		15	
Fit length (mm)	C_2	9			10		11			14		16	
Inside diameter possible from Ø to Ø H7 (mm)	D_1	3-9			3-12		3-16			6-22		6-28	
Inside diameter possible from Ø to Ø H7 (mm)	D_2	3-6.35			3-9		3-12.7			6-16		6-20	
Clamping screw ISO 4029	E	1xM3			2xM3		2xM4			2xM5		2xM6	
Tightening torque of the fastening screw (Nm)		1.3			1.3		2.5			4		6	
Distance (mm)	G	2			2		2.5			3.5		4	
Preload compression (mm)	H	0.4			0.5		0.5			0.7		1	
Axial recovery force at max. preload compression (N)		5	3	2	4	3	3	4	3	15	10	25	30
Moment of inertia (gcm ²)	J_{ges}	2.0	2.2	2.5	5.5	6.0	21	23	25	80	85	200	210
Torsional stiffness (Nm/rad)	C_T	280	210	170	750	700	1200	1300	1200	7000	5000	9050	8800
Axial* (mm)	Max. values	0.4	0.5	0.6	0.5	0.7	0.5	0.6	0.7	0.7	1	1	1.2
Lateral (mm)		0.15	0.2	0.25	0.15	0.2	0.15	0.2	0.25	0.2	0.25	0.2	0.3
Angular (degree)		1	1.5	2	1.5	1.5	1.5	1.5	2	1.5	2	1.5	2

נבה עם מקשר פלסטי קשיח



0.5-10 Nm **MK5**

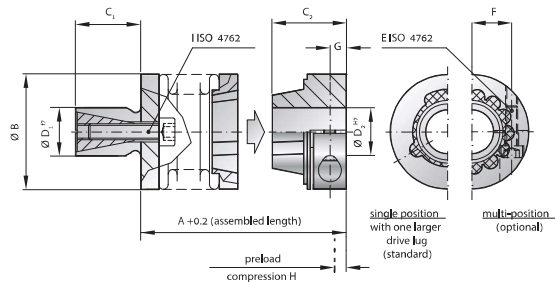
חומר
גרמושקה: נירווסטה
נבה: אלומיניום



SIZE		5			15		20			45		100	
Rated torque (Nm)	T_{KN}	0.5			1.5		2			4.5		10	
Overall length (inserted) (mm)	$A^{+0.2}$	27	30	33	34	39	37	43	46	49	57	55	65
Outside diameter (mm)	B	15			19		25			32		40	
Fit length (mm)	C_1	9			11		13			16		16	
Fit length (mm)	C_2	12			14		16			20		21.5	
Inside diameter possible from Ø to Ø H7 (mm)	$D_{1/2}$	3-6.35			3-8		3-12.7			5-16		5-20	
Fastening screw ISO 4762	E	M2			M2.5		M3			M4		M4	
Tightening torque of the fastening screw (Nm)		0.43			0.85		2.3			4		4.5	
Distance between centerlines (mm)	F	4.5			6		8			10		15	
Distance (mm)	G	3			3.5		4			5		5	
Preload compression (mm)	H	0.4			0.5		0.5			0.7		1	
Axial recovery force at max. preload compression (N)		5	3	2	4	3	3	4	3	15	10	25	30
Moment of inertia (gcm ²)	J_{ges}	3.0	3.2	3.5	9.0	10	28	30	33	110	120	220	230
Torsional stiffness (Nm/rad)	C_T	280	210	170	750	700	1200	1300	1200	7000	5000	9050	8800
Axial* (mm)	Max. values	0.4	0.5	0.6	0.5	0.7	0.5	0.6	0.7	0.7	1	1	1.2
Lateral (mm)		0.15	0.2	0.25	0.15	0.2	0.15	0.2	0.25	0.2	0.25	0.2	0.3
Angular (degree)		1	1.5	2	1.5	1.5	1.5	1.5	2	1.5	2	1.5	2

* in addition to maximum pretensioning

נבה עם מקשר פלסטי קשיח וציר



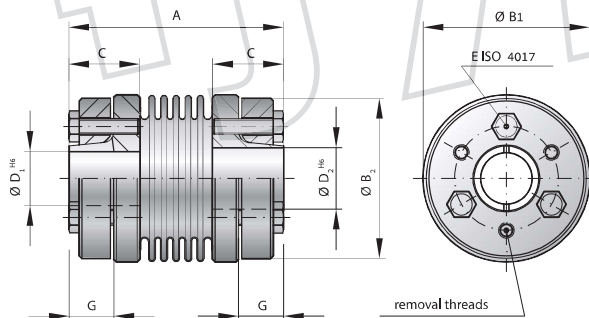
0.5-10 Nm **MK6**

חומר
גרמושקה: נירוסטה
נבה: אלומיניום
ציר: פלדה



SIZE		5			15		20			45		100	
Rated torque	(Nm)	0.5			1.5		2			4.5		10	
Overall length (inserted)	(mm)	A ^{4,2}			27		28			38		45	
Outside diameter	(mm)	15			19		25			32		40	
Shaft length	(mm)	C ₁			12		12			15		20	
Fit length	(mm)	C ₂			14		16			20		21.5	
Standard shaft ϕ f7	(mm)	D ₁			10-14		10-16			14-20		16-24	
Inside diameter possible from ϕ to ϕ H7	(mm)	D ₂			3-8		3-12.7			5-16		5-20	
Fastening screw ISO 4762		M2			M2.5		M3			M4		M4	
Tightening torque of the fastening screw	(Nm)	0.43			0.85		2.3			4		4.5	
Distance between centerlines	(mm)	F			6		8			10		15	
Distance	(mm)	G			3.5		4			5		5	
Preload compression	(mm)	H			0.5		0.5			0.7		1	
Axial recovery force at max. preload compression	(N)	5	3	2	4	3	3	4	3	15	10	25	30
Fastening screw ISO 4762		M3			M4		M4			M5		M6	
Tightening torque of the fastening screw	(Nm)	1.5			3		4			6.5		11	
Moment of inertia	(gcm ²)	3.0	3.2	3.5	9.0	10	28	30	33	110	120	220	230
Torsional stiffness	(Nm/rad)	280	210	170	750	700	1200	1300	1200	7000	5000	9050	8800
Lateral	(mm)	Max. values	0.15	0.2	0.25	0.15	0.2	0.15	0.2	0.25	0.2	0.25	0.3
Angular	(degree)	values	1	1.5	2	1.5	1.5	1.5	1.5	2	1.5	2	2

קופלונג עם טבעת הידוק קונית למהירויות גבוהות



4.5-10 Nm **MKS**

חומר
גרמושקה: נירוסטה
נבה וטבעות הידוק: אלומיניום
מהירות מקסימלית: 120,000 rpm



SIZE		45		100	
Rated torque	(Nm)	4.5		10	
Overall length	(mm)	A		48	
Outside diameter	(mm)	B ₁		40	
Outside diameter of hub	(mm)	B ₂		38	
Fit length	(mm)	C		16	
Inside diameter possible from ϕ to ϕ H6	(mm)	D _{1,2}		8-14	
Fastening screw ISO 4017	(mm)	3x M3		4x M3	
Tightening torque of the fastening screw	(Nm)	E		1.3	
Distance	(mm)	G		9.5	
Moment of inertia	(gcm ²)	J _{ges.}		160	
Masse	(g)	51		75	
Torsional stiffness	(Nm/rad)	C _T		9050	
Axial	(mm)	0.5		0.75	
Lateral	(mm)	Max. values	0.1	0.05*	0.1
Angular	(degree)	values	0.5	0.05*	0.5

מיסבים

מערכות ליניאריות

שינוע והרמה

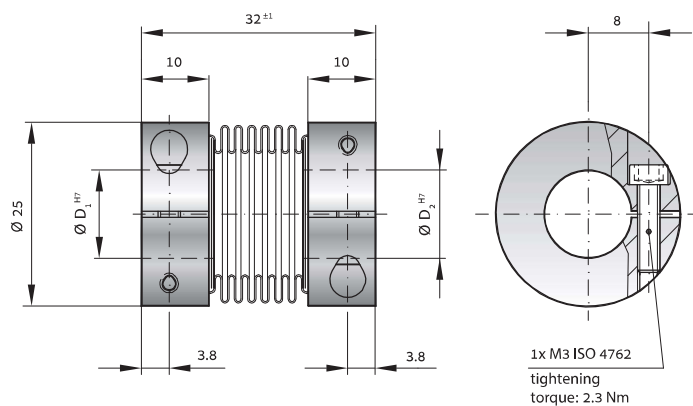
מקשרים / קופלונגים

זיוד

בלגים

בלגלי זימון וחבורות

Ecoflex דגם



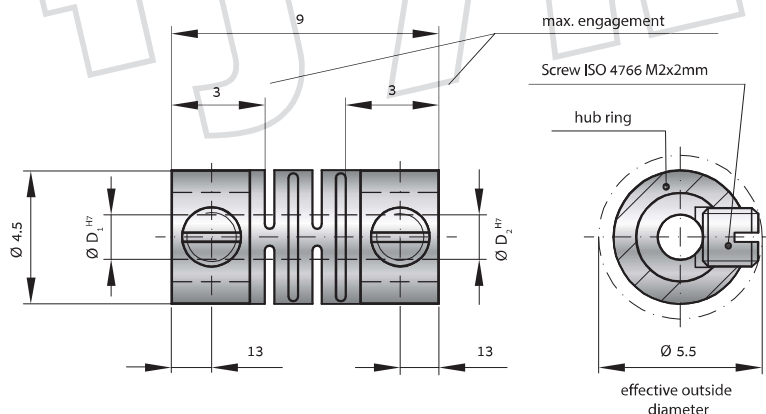
3 Nm BKL/003

חומר
גרמושקה: נירוסטה
נבה: אלומיניום



SIZE			3
Rated torque	(Nm)	T_{KN}	3
Standard bore diameters H7	(mm)	D_1, D_2	3 to 12.7
Moment of inertia	(gcm ²)	$J_{ges.}$	20
Approximate weight	(g)		23
Tightening torque of the fastening screws	(Nm)		2.3
Torsional stiffness	(Nm/rad)	C_T	994
Axial	(mm)	Max. values	1
Lateral	(mm)		0.2
Angular	(degree)		2

דגם Microflex עם ברגי הידוק



1 Ncm דגם Microflex עם ברגי הידוק

FK1

חומר
אלמנט גמיש: פוליאמיד
נבה: נירוסטה

* אופציה להקטנת הקוטר האפקטיבי החיצוני ל- 4.5 מ"מ על ידי שימוש בבורג M2X1.5 מ"מ



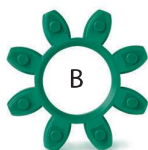
SIZE			1
Rated torque	(Ncm)	T_{KN}	1
Standard bore H7	(mm)	D_1, D_2	1.5 / 1.5 or 2 / 1.5 additional bore diameters available upon request
Moment of inertia	(gcm ²)	$J_{ges.}$	5.39
Approximate weight	(g)		0.47
Torsional stiffness	(Ncm/rad)	C_T	23 (measured at +20° C)
Axial	(mm)	Max. values	0.2
Lateral	(mm)		0.1
Angular	(degree)		1.5

סוגי גומיות

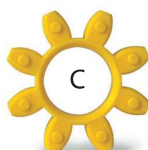
SIZES 2 - 800



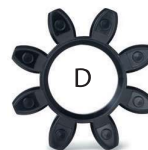
Shore hardness 98 A



Shore hardness 64 Sh D



Shore hardness 80 Sh A



Shore hardness 65 Sh D



Shore hardness 64 Sh D

SIZES 2500 - 9500



Shore hardness 98 A



Shore hardness 64 Sh D



Shore hardness 64 Sh D

תכונות גומיות

Type	Shore hardness	Color	Material	Relative damping (Ψ)	Temperature range	Features
A	98 Sh A	red	TPU	0.4 - 0.5	-30°C to +100°C	high damping
B	64 Sh D	green	TPU	0.3 - 0.45	-30°C to +120°C	high torsional stiffness
C	80 Sh A	yellow	TPU	0.3 - 0.4	-30°C to +100°C	very high damping
D	65 Sh D	black	TPU	0.3 - 0.45	-10°C to + 70°C	electrically conductive
E	64 Sh D	beige	Hytrel	0.3 - 0.45	-50°C to +150°C	temperature resistant

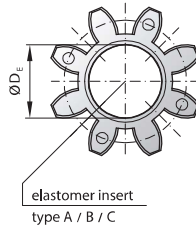
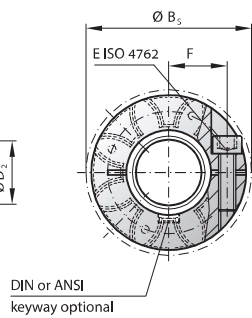
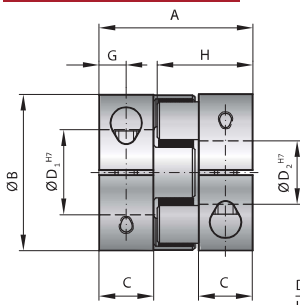
אפיון מוצר

	EKL	60	A	12.7	24	XX
Model	•					Special designation only (e.g. special bore tolerance).
Size		•				
Elastomer insert type			•			
Bore D1 H7				•		
Bore D2 H7					•	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. EKH/60/A/12.7/24/XX;

XX=anodized aluminum)

דגם קומפקטי



0.5-2,150 Nm

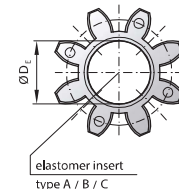
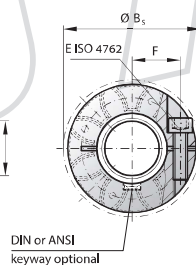
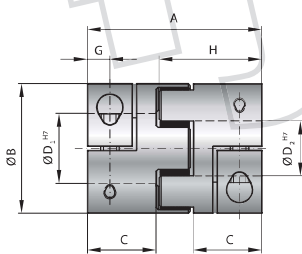
EKL

חומר
נבה:

גודל 800 - פלדה
יתר הגדלים - אלומיניום
גומיה: פוליאיוריתן
תרמופלסטי TPU

SIZE		2			5			10			20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm)	T_{KN}	2	2.4	0.5	9	12	2	12.5	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque* (Nm)	T_{Kmax}	4	4.8	1	18	24	4	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A		20			26			32			50			58			62			86			94			123	
Outside diameter (mm)	B		16			25			32			42			56			66.5			82			102			136.5	
Outside diameter with screw head (mm)	B_s		17			25			32			44.5			57			68			85			105			139	
Mounting length (mm)	C		6			8			10.3			17			20			21			31			34			46	
Inside diameter range H7 (mm)	D_{H7}		3 - 8			4 - 12.7			4 - 16			8 - 25			12 - 32			19 - 36			20 - 45			28 - 60			35 - 80	
Inside diameter of elastomer (mm)	D_E		6.2			10.2			14.2			19.2			26.2			29.2			36.2			46.2			60.5	
Clamping screw (ISO 4762)	E		M2			M3			M4			M5			M6			M8			M10			M12			M16	
Tightening torque of the clamping screw (Nm)			0.6			2			4			8			15			35			70			120			290	
Distance between centers (mm)	F		5.5			8			10.5			15.5			21			24			29			38			50.5	
Distance (mm)	G		3			4			5			8.5			10			11			15			17.5			23	
Hub length (mm)	H		12			16.7			20.7			31			36			39			52			57			74	
Moment of inertia per hub (10^{-3} kgm^2)	J_{J_2}		0.0003			0.002			0.003			0.01			0.04			0.08			0.3			0.66			8	
Approx. weight (kg)			0.008			0.02			0.05			0.12			0.3			0.5			0.9			1.5			8.5	
Speed standard (min^{-1})			15,000			15,000			13,000			12,500			11,000			10,000			9,000			8,000			4,000	
Speed balanced (10^3 min^{-1})			60			67			45			57			65			43			53			63			40	

נבה חצויה עם הידוק צביטה



6-2,150 Nm

EK2

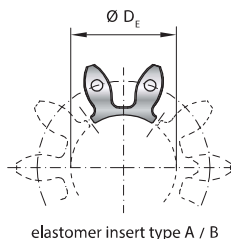
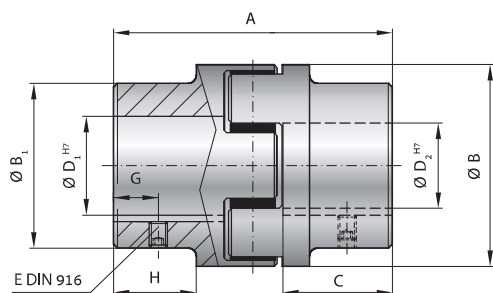
חומר

נבה: עד גודל 450 -
אלומיניום קשיח,
גודל 800 - פלדה
גומיה: פוליאיוריתן
תרמופלסטי TPU

SIZE		20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm)	T_{KN}	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque* (Nm)	T_{Kmax}	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A		66			78			90			114			126			162	
Outside diameter (mm)	B		42			56			66.5			82			102			136.5	
Outside diameter with screw head (mm)	B_s		44.5			57			68			85			105			139	
Mounting length (mm)	C		25			30			35			45			50			65	
Inside diameter range H7 (mm)	D_{H7}		8 - 25			12 - 32			19 - 36			20 - 45			28 - 60			35 - 80	
Inside diameter of elastomer (mm)	D_E		19.2			26.2			29.2			36.2			46.2			60.5	
Clamping screw (ISO 4762)	E		M5			M6			M8			M10			M12			M16	
Tightening torque of the clamping screw (Nm)			8			15			35			70			120			290	
Distance between centers (mm)	F		15.5			21			24			29			38			50.5	
Distance (mm)	G		8.5			10			12			15			17.5			23	
Hub length (mm)	H		39			46			52.5			66			73			93.5	
Moment of inertia per hub (10^{-3} kgm^2)	J_{J_2}		0.016			0.05			0.13			0.4			0.9			9.5	
Approx. weight (kg)			0.15			0.35			0.6			1.1			1.7			10	
Speed standard (min^{-1})			12,500			11,000			10,000			9,000			8,000			4,000	
Speed balanced (10^3 min^{-1})			45			60			35			31			31			25	

נבה עם קדח שגם וברגי הידוק

1,950-25,000 Nm **EK1**

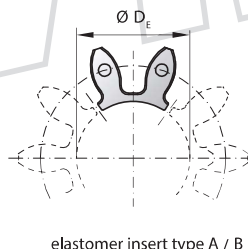
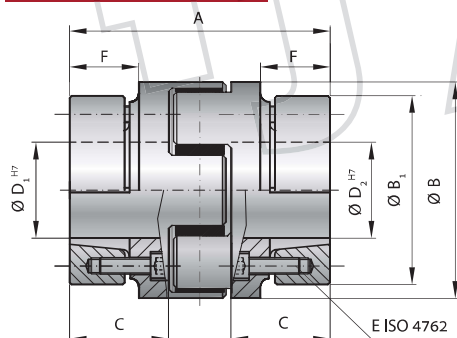


חומר
נבה: ברזל יצוק
גומיה: פוליאוריתן
TPU תרמופלסטי

SIZE		2500		4500		9500	
Type (Elastomer insert)		A	B	A	B	A	B
Rated torque (Nm)	T _{KN}	1950	2450	5000	6200	10000	12500
Max. torque (Nm)	T _{KNmax}	3900	4900	10000	12400	20000	25000
Overall length (mm)	A	213		272		341	
Outside diameter (mm)	B/B ₁	160 / 154		225 / 190		290 / 240	
Mounting length (mm)	C	88		113		142	
Inside diameter (pilot bored) (mm)	D _V	30		40		50	
Inside diameter range H7 (mm)	D _{H2}	30 - 95		40 - 130		50 - 170	
Inside diameter of elastomer(mm)	D _E	80		111		145	
Set screws (DIN 916)	E	see table (depending on bore Ø)**					
Distance (mm)	G	25		30		40	
Possible shortening length (mm)	H	69		89		110	
Moment of inertia per hub (10 ⁻³ kgm²)	J _f /J ₂	40		147		480	
Approx. weight (kg)		12.5		25		53	
Speed standard (min ⁻¹)		3,500		3,000		2,000	
Speed balanced (10³min ⁻¹)		10	10	8	8	6.5	6.5

נבה עם טבעות הידוק

1,950-25,000 Nm **EK6**



חומר
נבה: ברזל יצוק
גומיה: פוליאוריתן
TPU תרמופלסטי

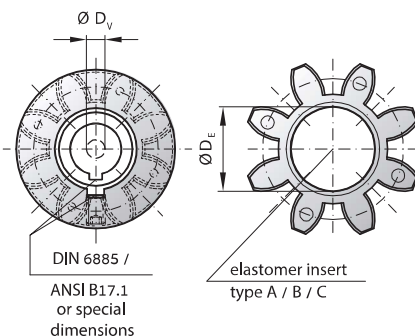
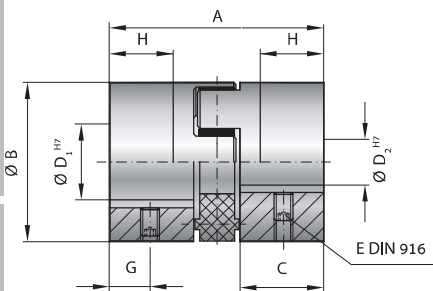
SIZE		2500		4500		9500	
Type (Elastomer insert)		A	B	A	B	A	B
Rated torque (Nm)	T_{KN}	1950	2450	5000	6200	10000	12500
Max. torque (Nm)	T_{Kmax}	3900	4900	10000	12400	20000	25000
Overall length (mm)	A	177		227		282	
Outside diameter (mm)	B/B ₁	160 / 159		225 / 208		285	
Mounting length (mm)	C	70		90		112	
Inside diameter range H7 (mm)	D _{1/2}	40 - 95		50 - 130		60 - 170	
Inside diameter of elastomer (mm)	D _E	80		111		145	
Clamping screw (ISO 4762)	E	10x M10		10x M12		10x M16	
Tightening torque of the clamping screw (Nm)		60		100		160	
Distance (mm)	F	51		66		80	
Moment of inertia per hub (10 ⁻³ kgm ²)	J _{1/2}	31.7		135.7		469.2	
Approx. weight (kg)		15		35		73	
Speed standard (min ⁻¹)		3,500		3,000		2,000	
Speed balanced (10 ³ min ⁻¹)		10	10	8	8	6.5	6.5

נבה עם קדח שגם וברגי הידוק

0.5-2,150 Nm

EK1

חומר
נבה: עד גודל 450 -
אלומיניום קשיח,
גודל 800 - פלדה
יתר הגדלים -
אלומיניום
גומיה: פוליאיוריתן
תרמופלסטי TPU



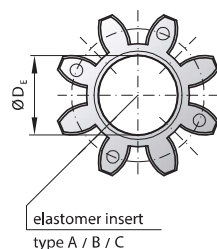
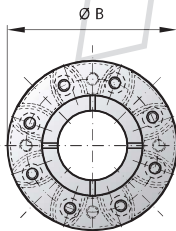
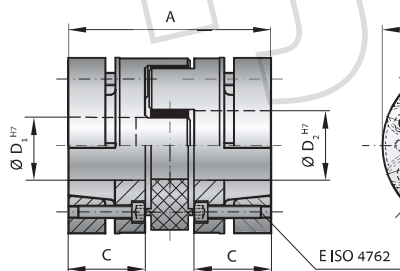
SIZE		2			5			10			20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm)	T_{RN}	2	2.4	0.5	9	12	2	12.5	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque (Nm)	T_{Kmax}	4	4.8	1	18	24	4	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A	20			34			35			66			78						114			126			162		
Outside diameter (mm)	B/B ₁	15			25			32			42			56			66.5			82			102			136.5		
Mounting length (mm)	C	6.5			12			12			25			30			35			45			50			65		
Inside diameter (pilot bored) (mm)	D _v	3			4			6			7			9			14			16			22			29		
Inside diameter range H7 (mm)	D _{1/2}	3 - 9			6 - 15			6 - 18			8 - 25			12 - 32			19 - 38			20 - 45			28 - 60			32 - 80		
Inside diameter of elastomer (mm)	D _e	6.2			10.2			14.2			19.2			26.2			29.2			36.2			46.2			60.5		
Set screws (DIN 916)	E	see table (depending on bore ϕ)**																										
Distance (mm)	G	3			5			6			9			11			12			15			17			30		
Possible shortening length (mm)	H	4			6			6			19			22			26			32			37			43		
Moment of inertia per hub (10^{-3} kgm^2)	J_1/J_2	0.0001			0.001			0.003			0.02			0.06			0.1			0.4			1.1			12		
Approx. weight (kg)		0.008			0.03			0.08			0.15			0.35			0.6			1.1			1.7			11		
Speed standard (min^{-1})		15,000			15,000			13,000			12,500			11,000			10,000			9,000			8,000			4,000		
Speed balanced (10^3 min^{-1})		60	67	45	57	65	43	53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	16	17	12	13	13	8

נבה עם טבעות הידוק

4-2,150 Nm

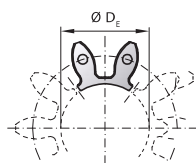
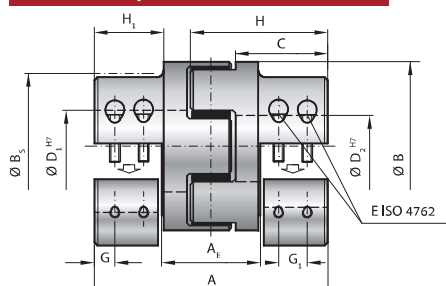
EK6

חומר
נבה: עד גודל 450 -
אלומיניום קשיח,
גודל 800 - פלדה
גומיה: פוליאיוריתן
תרמופלסטי TPU



SIZE		10			20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm)	T_{RN}	12.5	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque (Nm)	T_{Kmax}	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A	42			56			64			76			96			110			138		
Outside diameter (mm)	B/B ₁	32			43			56			66.5			82			102			136.5		
Mounting length (mm)	C	15			20			23			28			36			42			53		
Inside diameter range H7 (mm)	D _{1/2}	6 - 16			8 - 24			12 - 32			19 - 35			20 - 45			28 - 55			32 - 80		
Inside diameter of elastomer (mm)	D _e	14.2			19.2			26.2			29.2			36.2			46.2			60.5		
Clamping screw (ISO 4762)		3x M3			6x M4			4x M5			8x M5			8x M6			8x M8			8x M10		
Tightening torque of the clamping screw (Nm)	E	2			3			6			7			12			35			55		
Distance (mm)	F																					
Moment of inertia per hub (10^{-3} kgm^2)	J_1/J_2	0.004			0.015			0.05			0.1			0.3			0.85			9.2		
Approx. weight (kg)		0.08			0.12			0.3			0.5			0.9			1.5			9.6		
Speed standard (min^{-1})		20,000			19,000			14,000			13,000			10,000			9,000			4,000		
Speed balanced (10^3 min^{-1})		53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	16	17	12	13	13	8

נבחר חצויה עם הידוק צביטה



elastomer insert type A / B

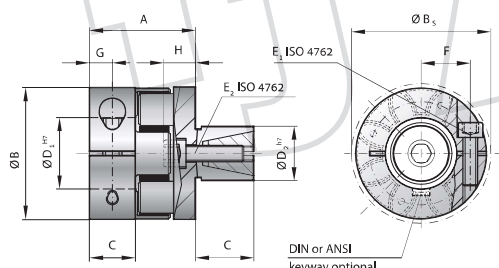


1,950-25,000 Nm EKH

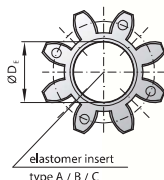
חומר
נבה: ברזל יצוק
גומיה: פוליאוריתן
תרמופלסטי TPU

SIZE		2500		4500		9500	
Type (Elastomer insert)		A	B	A	B	A	B
Rated torque (Nm)	T_{KN}	1950	2450	5000	6200	10000	12500
Max. torque* (Nm)	T_{Kmax}	3900	4900	10000	12400	20000	25000
Overall length (mm)	A	213		272		341	
Length of center section (mm)	A_E	78		104		131	
Outside diameter (mm)	B	160		225		290	
Outside diameter with screw head (mm)	B_S	156		190		243	
Mounting length (mm)	C	85		110		140	
Inside diameter range H7 (mm)	$D_{1/2}$	35 - 90		40 - 120		50 - 140	
Inside diameter of elastomer (mm)	D_E	80		111		145	
Clamping screw (ISO 4762)		8 x M16		8 x M20		8 x M24	
Tightening torque of the clamping screw (Nm)	E	300		600		1100	
Distance between centers (mm)	F	57		72.5		90	
Distance (mm)	G/G ₁	36		24 / 34		30 / 48	
Hub length (mm)	H/H ₁	120 / 69		154 / 80		193 / 110	
Moment of inertia per hub (10^{-3} kgm^2)	J_1/J_2	40		147		480	
Approx. weight (kg)		12.5		25		53	
Speed standard (min^{-1})		3,000		3,500		2,000	
Speed balanced (10^3 min^{-1})		10		8		6.5	

קופלונג עם ציר



DIN or ANSI
keyway optional



elastomer insert
type A / B / C

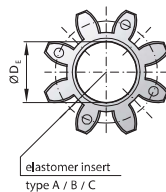
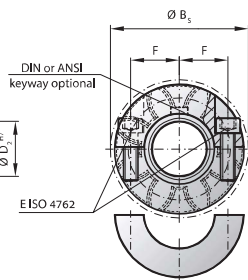
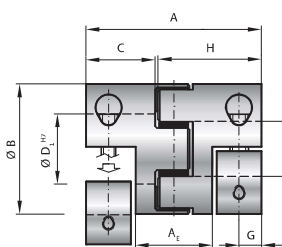


2-2,150 Nm EK7

חומר
נבה: עד גודל 450 - אלומיניום קשיח,
גודל 800 - פלדה
גומיה: פוליאוריתן תרמופלסטי TPU
ציר - פלדה

SIZE		5			10			20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C			
Rated torque (Nm)	T _{KN}	9	12	2	12.5	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque* (Nm)	T _{Kmax}	18	24	4	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A	22			28			40			46			51			68			76			94		
Outside diameter (mm)	B	25			32			42			56			66.5			82			102			136.5		
Outside diameter with screw head (mm)	B _s	25			32			44.5			57			68			85			105			139		
Mounting length (mm)	C ₁	8			10.3			17			20			21			31			34			46		
Mounting length (mm)	C ₂	12			20			25			27			32			45			55			60		
Inside diameter range H7 (mm)	D ₁	4 - 12.7			5 - 16			8 - 25			12 - 32			19 - 36			20 - 45			28 - 60			35 - 80		
Outside diameter range h7 (mm)	D ₂	10 - 16			13 - 25			14 - 30			23 - 38			26 - 42			38 - 60			42 - 70			42 - 80		
Inside diameter of elastomer (mm)	D _E	10.2			14.2			19.2			26.2			29.2			36.2			46.2			60.5		
Clamping screw (ISO 4762)	E ₁	M3			M4			M5			M6			M8			M10			M12			M16		
Tightening torque (Nm)		2			4			8			15			35			70			120			290		
Clamping screw (ISO 4762)	E ₂	M4			M5			M6			M8			M10			M12			M16			M16		
Tightening torque (Nm)		4			9			12			32			60			110			240			300		
Distance between centers (mm)	F	8			10.5			15.5			21			24			29			38			50.5		
Distance (mm)	G	4			5			8.5			10			11			15			17.5			23		
Length (mm)	H	7			7			10			11			16			20			27			27		
Moment of inertia D ₁ (10 ⁻³ kgm ²)	J ₁	0.002			0.003			0.01			0.04			0.08			0.3			0.66			8		
Moment of inertia D ₂ (10 ⁻³ kgm ²)	J ₂	0.002			0.01			0.04			0.1			0.2			1			2.6			9		
Approx. weight (kg)		0.04			0.05			0.12			0.3			0.5			0.9			1.5			7.6		
Speed standard (min ⁻¹)		15,000			13,000			12,500			11,000			10,000			9,000			8,000			4,000		
Speed balanced (10 ⁻³ min ⁻¹)		57	65	43	53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	16	17	12	13	13	8

נבנה חצויה עם הידוק צביטה

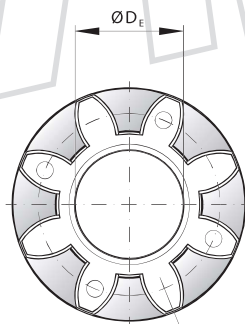
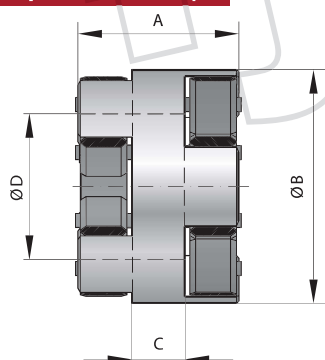


4-2,150 Nm EKH

חומר
נבנה: עד גודל 450 -
אלומיניום קשיח,
גודל 800 - פלדה
גומיה: פוליאוריתן
תרמופלסטי TPU

SIZE		10			20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm)	T_{KN}	12.6	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque* (Nm)	T_{Kmax}	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A	53			66			78			90			114			126			162		
Length of center section (mm)	A_E	20			28			33			37			49			51			65		
Outside diameter (mm)	B	32			42			56			66.5			82			102			136.5		
Outside diameter with screw head (mm)	B_5	32			44.5			57			68			85			105			139		
Mounting length (mm)	C	20			25			30			35			45			50			65		
Inside diameter range H7 (mm)	$D_{1/2}$	6 - 16			8 - 25			12 - 32			19 - 36			20 - 45			28 - 60			35 - 80		
Inside diameter of elastomer (mm)	D_E	14.2			19.2			26.2			29.2			36.2			46.2			60.5		
Clamping screw (ISO 4762)		4 x M4			4 x M5			4 x M6			4 x M8			4 x M10			4 x M12			4 x M16		
Tightening torque of the clamping screw (Nm)	E	4			8			15			35			70			120			290		
Distance between centers (mm)	F	10.5			15.5			21			24			29			38			50.5		
Distance (mm)	G/G ₂	7.5			8.5			10			12			15			17.5			23		
Hub length (mm)	H/H ₁	31			39			46			52.5			66			73			93.5		
Moment of inertia per hub (10^{-3} kgm^2)	J_1/J_2	0.005			0.02			0.06			0.1			0.4			1			9.5		
Approx. weight (kg)		0.08			0.15			0.35			0.6			1.1			1.7			10		
Speed standard (min^{-1})		13,000			12,500			11,000			10,000			9,000			8,000			4,000		
Speed balanced (10^3 min^{-1})		53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	16	17	12	13	13	8

חפולונג עם spacer

elastomer insert
type A / B / C

0.5-2,150 Nm EKZ

חומר
נבנה: אלומיניום קשיח
גומיה: פוליאוריתן
תרמופלסטי TPU

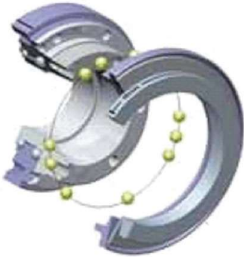
SIZE		2			5			10			20			60			150			300			450			800		
Type (Elastomer insert)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm)	T_{KN}	2	2.4	0.5	9	12	2	12.5	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque (Nm)	T_{Kmax}	4	4.8	1	18	24	4	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm)	A	20			26			30			39			48			53			62			86			81		
Outside diameter (mm)	B	16			25			32			42			56			66.5			82			102			136.5		
Hub length (mm)	C	9			9			9			10			16			18			20			40			25		
Inside diameter (mm)	D	9			15			18			25			32			38			45			60			80		
Inside diameter of elastomer (mm)	D_E	6.2			10.2			14.2			19.2			26.2			29.2			36.2			46.2			60.5		
Moment of inertia (10^{-3} kgm^2)	J_1/J_2	0.0001			0.0005			0.002			0.008			0.03			0.05			0.1			0.6			1.1		
Approx. weight (kg)		0.007			0.02			0.04			0.09			0.21			0.33			0.58			1.38			2.09		
Speed standard (min^{-1})		15,000			15,000			13,000			12,500			11,000			10,000			9,000			8,000			4,000		

מערכות הגבלת המומנט

מיקום יחיד / SINGLE POSITION

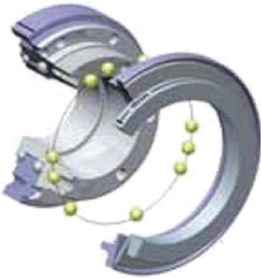
גירסא סטנדרטית

- לאחר שעומס היתר הוסר מעל המערכת, הקלאץ' ישתלב אוטומטית ובאופן מדויק במיקום ההתחלתי שלו.
- שמירה על סנכרון מיקומו של הצייר.
- לוח המתגים מופעל על מנת להתריע על עומס היתר.
- למערכת פטנט ייחודי עבור preload שמונע חופש (backlash).
- מותאם למנגנוני הנעה מדויקים.



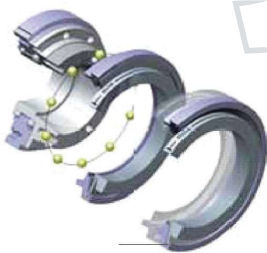
מיקום זוויתי משתנה / MULTI-POSITION

- לאחר שעומס היתר הוסר מעל המערכת, הקלאץ' ישתלב אוטומטית ובאופן מדויק באחד מן המיקומים הזוויתיים האפשריים: 30, 45, 90, 120 מעלות.
- חזרה מיידית לפעולה לאחר הסרת העומס.
- לוח המתגים מופעל על מנת להתריע על עומס היתר.
- צימוד מחדש בגירסא הסטנדרטית במיקום זוויתי של 60 מעלות.
- למערכת פטנט ייחודי עבור preload שמונע חופש (backlash).
- מותאם למנגנוני הנעה מדויקים.



ניתוק מוחלט / FULL DISENGAGEMENT

- ניתוק מוחלט בין הכניסה והיציאה לקופלונג במצב של עומס יתר. הצייר יסתובב באופן חופשי עד לעצירתו.
- קפיצי הדיסקה מתנתקים ממיקומם ההתחלתי, ומסירים לחלוטין כוחות על מערכת הקלאץ'.
- לוח המתגים מופעל על מנת להתריע על עומס היתר.
- הקופלונג דורש צימוד ידני לאחר הסרת העומס. מיקום זוויתי סטנדרטי – 60 מעלות.
- מיקומים זוויתיים אחרים לפי בקשה.
- מותאם לאפליקציות למהירויות גבוהות.

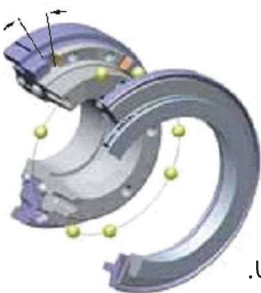


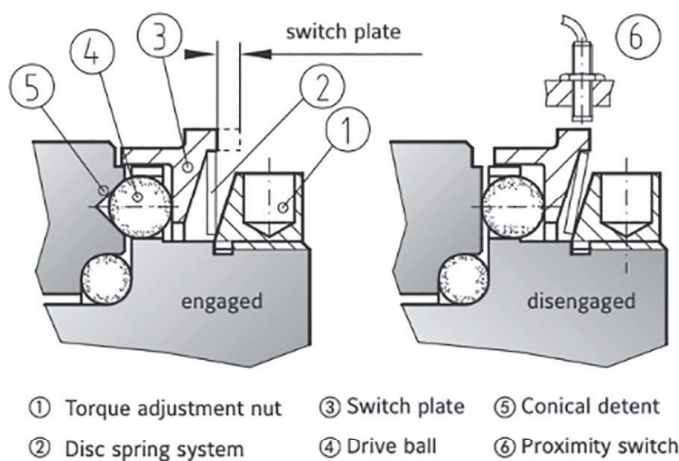
הקפיץ במצב של ניתוק

* ניתן להזמין את הקופלונג עם מערכת ניתוק ידנית לפי בקשה.

השהיית העומס / LOAD HOLDING / LOAD BLOCKING

- התקן עוזר לזיהוי עומס היתר
- תנועה סיבובית חלקית בלבד בכניסה וביציאה לקופלונג, שמספיקה עבור הפעלת מערכת הבלימה וניתוק המערכת.
- צימוד מחדש (לאחר הסרת עומס היתר) במיקום המקורי המדויק בו נעשתה ההינתקות.
- לוח המתגים מופעל על מנת להתריע על עומס היתר.
- שימושי במיוחד במערכות הרמה ואפליקציות בהן העומס חייב להיתמך לאחר שחרור מהיר של המומנט.





אפיון מוצר

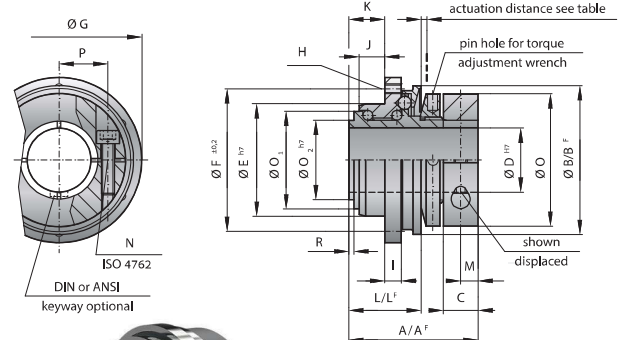
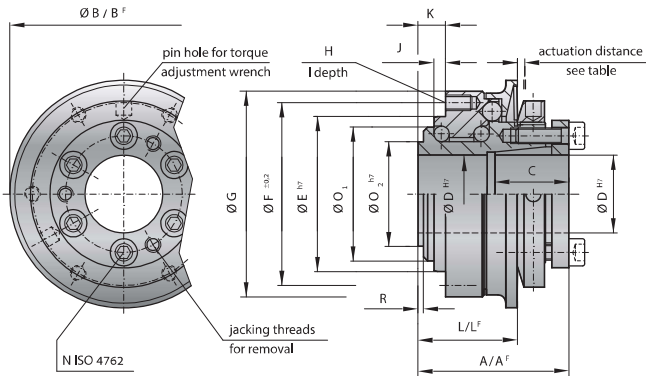
	SK1	10	W	12.7	4	2-6	XX
Model	•						Special designation only (e.g. special bore / keyway dimensions).
Size		•					
Function system			•				
Bore D1 H7				•			
Disengagement torque Nm					•		
Torque adjustment range Nm						•	
For custom features place an XX at the end of the part number and describe the special requirements (e.g. SK1/10/W/12.7/4/2-6/X							X; XX=stainless steel)

מגביל מומנט עם תותב הידוק קוני/טבעת הידוק

דגם סטנדרטי | 15 - 2,500

דגם קטן | 1.5 - 10

0.1-2,800 Nm SK1



חומר
מערכת הגבלת מומנט: פלדה קשיחה
עבור הדגם הקטן: טבעות הידוק מאלומיניום
עבור הדגם הסטנדרטי: תותבי הידוק מפלדה

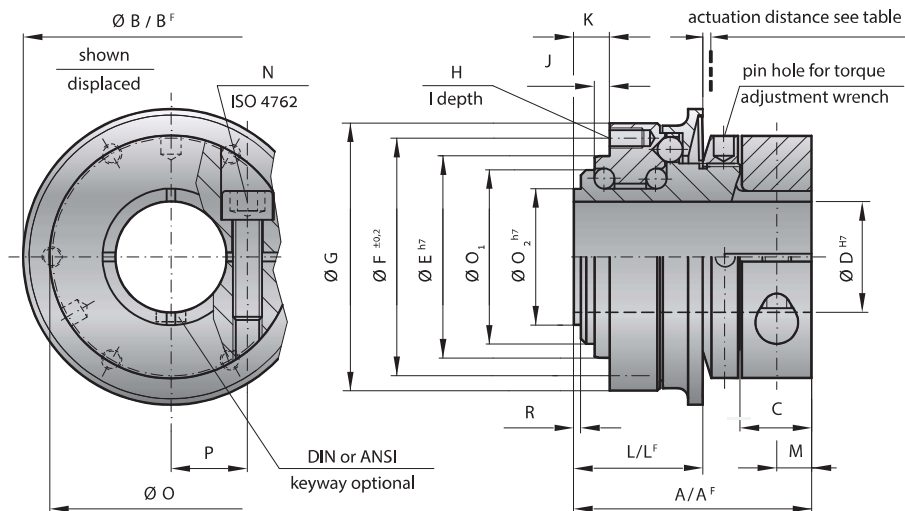
SIZE		1.5	2	4.5	10	15	30	60	150	200	300	500	800	1500	2500
Adjustment range available from - to (approx. values) (Nm)	T_{KN}	0.1-0.6 0.4-1 0.8-2	0.2-1.5 0.5-2.2 1.5-3.5	1-3 2-4.5 3-7	2-6 4-12 7-18	5-15 12-25 20-40 35-70	5-20 10-30 20-60 50-100	10-30 25-80 50-115	20-70 45-150 80-225	30-90 60-160 140-280 250-400	100-200 150-240 220-440	80-200 200-350 320-650	400-650 500-800 650-950	600-800 700-1200 1000-1800	1500-2000 2000-2500 2300-2800
Adjustment range available from - to (approx. values) ("F" Version) (Nm)	T_{KN}	0.3-0.8 or 0.6-1.3	0.2-1 or 0.7-2	2.5-4.5	2-5 4-10 8-15	7-15	8-20 or 16-30	10-30 20-40 30-60	20-60 40-80 80-150	80-140 or 130-200	120-180 160-300 300-450	50-150 100-300 250-500	200-400 or 450-850	1000-1250 or 1250-1500	1400-2200 or 1800-2700
Overall length (mm)	A	23	28	32	39	40	50	54	58	63	70	84	95	109	146
Overall length ("F" Version) (mm)	A ^F	23	28	32	39	40	50	54	58	66	73	88	95	117	152
Actuation ring $\varnothing$ (mm)	B	23	29	35	45	55	65	73	92	99	120	135	152	174	242
Actuation ring $\varnothing$, ("F" Version) (mm)	B ^F	24	32	42	51.5	62	70	83	98	117	132	155	177	187	258
Clamping fit length (mm)	C	7	8	11	11	19	22	27.5	32	32	41	41	49	61	80
Inner diameter from $\varnothing$ to $\varnothing H7$ (mm)	D	4-8	4-12	5-14	6-20	8-22	12-22	12-29	15-37	20-44	25-56	25-56	30-60	35-70	50-100
Pilot diameter h7 (mm)	E	14	22	25	34	40	47	55	68	75	82	90	100	125	168
Bolt-hole circle diameter ± 0.2 (mm)	F	22	28	35	43	47	54	63	78	85	98	110	120	148	202
Flange outside diameter -0.2 (mm)	G	26	32	40	50	53	63	72	87	98	112	128	140	165	240
Thread	H	4xM2	4xM2.5	6xM2.5	6xM3	6xM4	6xM5	6xM5	6xM6	6xM6	6xM8	6xM8	6xM10	6xM12	6xM16
Thread depth (mm)	I	3	4	4	5	6	8	9	10	10	10	12	15	16	24
Centering length -0.2 (mm)	J	2.5	3.5	5	8	3	5	5	5	5	6	9	10	13.5	20
Distance (mm)	K	5	6	8	11	8	11	11	12	12	15	21	19	25	34
Distance (mm)	L	11	15	17	22	27	35	37	39	44	47	59	67	82	112
Distance, ("F" Version) (mm)	L ^F	11.5	16	18	24	27	37	39	41.5	47	51.5	68	75	94	120
Distance	M	3.5	4	5	5										
Screw ISO 4762	N	1xM2.5	1xM3	1xM4	1xM4	6xM4	6xM5	6xM5	6xM6	6xM6	6xM8	6xM8	6xM10	6xM12	6xM16
Tightening torque (Nm)		1	2	4	4.5	4	6	8	12	14	18	25	40	70	120
Outside diameter clamp ring $\varnothing$ (mm)	O	20	25	32	40										
Diameter (mm)	O ₁	13	18	21	30	35	42	49	62	67	75	84	91	112	154
Diameter h7 (mm)	O ₂	11	14	17	24	27	32	39	50	55	65	72	75	92	128
Distance between centers (mm)	P	6.5	8	10	15										
Distance (mm)	R	1	1.3	1.5	1.5	2.5	2.5	2.5	2.5	3	3	4	4	4.5	6
Moment of inertia (10 ⁻³ kgm ²)	J _{BSS}	0.01	0.02	0.05	0.07	0.15	0.25	0.50	1.60	2.70	5.20	8.6	20	31.5	210
Approx. weight (kg)		0.03	0.065	0.12	0.22	0.4	0.7	1.0	1.3	2.0	3.0	4.0	5.5	10	28
Actuation distance (mm)		0.7	0.8	0.8	1.2	1.5	1.7	1.7	1.9	2.2	2.2	2.2	2.2	3.0	3.0

מגביל מומנט עם צווארון הידוק

5-1,800 Nm

SKN

חומר
מערכת הגבלת מומנט:
פלדה קשיחה
צווארון הידוק: עד גודל
500 - אלומיניום, גודל
800 ומעלה - פלדה



SIZE		15	30	60	150	200	300	500	800	1500
Adjustment range available from - to (approx. values)	(Nm) T_{KN}	5-10 or 8-20	10-25 or 20-40	10-30 or 25-80	20-70 45-150 80-180	30-90 60-160 120-240	100-200 150-240 200-320	80-200 200-350 300-500	400-650 500-800 600-850	600-800 700-1200 1000-1800
Adjustment range available from - to (approx. values) ("F" Version)	(Nm) T_{KN}	7-15	8-20 or 16-30	10-30 20-40 30-60	20-60 40-80 80-150	80-140 or 130-200	120-180 or 160-300	50-150 100-300 250-500	200-400 or 450-800	1000-1250 or 1250-1500
Overall length	(mm) A	47	59	65	71	80	84	101	115	145
Overall length, ("F" Version)	(mm) A ^F	47	59	65	73	83	87	107	126	160
Actuation ring Ø	(mm) B	55	65	73	92	99	120	135	152	174
Actuation ring Ø, ("F" Version)	(mm) B ^F	62	70	83	98	117	132	155	177	187
Clamping fit length	(mm) C	13.5	16	20	23	26	26	30	35	46
Inside diameter from Ø to Ø H7	(mm) D	12-22*	14-25.4*	16-32	19-40*	24-44	30-56*	35-60*	40-62*	50-72*
Pilot diameter h7	(mm) E	40	47	55	68	75	82	90	100	125
Bolt-hole circle diameter ± 0.2	(mm) F	47	54	63	78	85	98	110	120	148
Flange outside diameter -0.2	(mm) G	53	63	72	87	98	112	128	140	165
Thread	H	6xM4	6xM5	6xM5	6xM6	6xM6	6xM8	6xM8	6xM10	6xM12
Thread depth	(mm) I	6	8	9	10	10	10	12	15	16
Centering length -0.2	(mm) J	3	5	5	5	5	6	9	10	13.5
Distance	(mm) K	8	11	11	12	12	15	21	19	25
Distance	(mm) L	27	35	37	39	44	47	59	67	82
Distance, ("F" Version)	(mm) L ^F	27	37	39	41.5	47	51.5	68	75	94
Distance	M	6.5	7.5	9.5	11	13	13	14.5	18	22.5
Screw ISO 4762	N	M5	M6	M8	M10	M12	M12	M14	M16	M20
Tightening torque		8	15	40	70	120	130	210	270	500
Clamp ring Ø	O	49	55	67	85	94	110	121	134	157
Diameter	(mm) O ₁	35	42	49	62	67	75	84	91	112
Diameter h7	(mm) O ₂	27	36	39	50	55	65	72	75	92
Distance between centers	(mm) P	17.5	19	23.5	30	32.5	39	43.5	45	52
Distance	(mm) R	2.5	2.5	2.5	2.5	3	3	4	4	4.5
Moment of inertia	(10 ⁻³ kgm ²) J_{ges}	0.15	0.25	0.50	1.60	2.70	5.20	8.60	20	31.5
Approx. weight	(kg)	0.4	0.7	1.0	1.3	2.0	3.0	4.0	5.5	10
Actuation distance	(mm)	1.5	1.5	1.7	1.9	2.2	2.2	2.2	2.2	3.0

מגביל מומנט עם קדח שגם

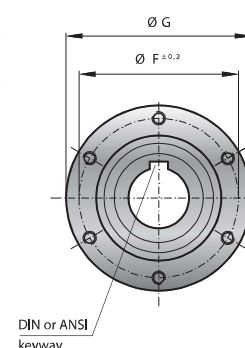
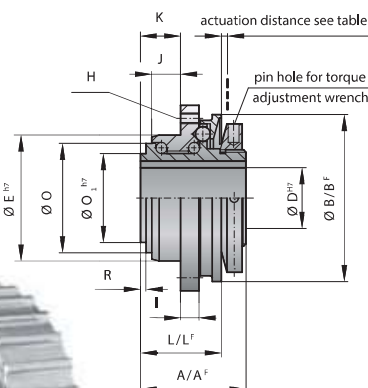
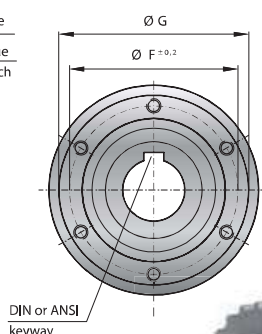
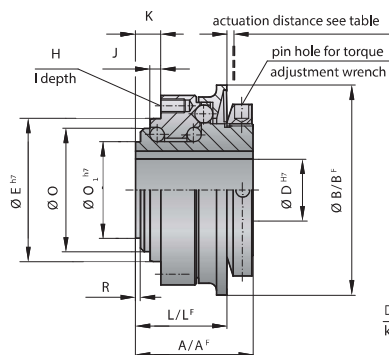
דגם סטנדרטי | 15 - 2,500

דגם קטן | 1.5 - 10

0.1-2,800 Nm SKP

מערכת הגבלת מומנט: פלדה קשיחה
Keyway: DIN 6885 or ANSI B17.1

Standard with keyway mounting



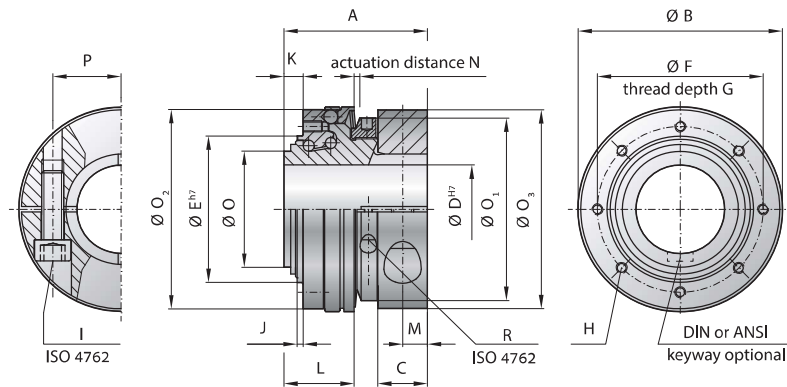
Timing belt or chain sprocket only
included upon request.

SIZE		1.5	2	4.5	10	15	30	60	150	200	300	500	800	1500	2500
Adjustment range available from - to (approx. values)	(Nm) T_{KN}	0.1-0.6 0.4-1 0.8-2	0.2-1.5 0.5-2.2 1.5-3.5	1-3 2-4.5 3-7	2-6 4-12 7-18	5-15 12-25 20-40 35-70	5-20 10-30 20-60 50-100	10-30 25-80 20-60 50-115	20-70 45-150 80-225	30-90 60-160 140-280 250-400	100-200 150-240 220-440	80-200 200-350 320-650	400-650 500-800 650-950	600-800 700-1200 1000-1800	1500-2000 2000-2500 2300-2800
Adjustment range available from - to (approx. values) ("F" Version)	(Nm) T_{KN}	0.3-0.8 or 0.6-1.3	0.2-1 or 0.7-2	2.5-4.5	2-5 4-10 8-15	7-15	8-20 or 16-30	10-30 20-40 30-60	20-60 40-80 80-150	80-140 or 130-200	120-180 160-300 300-450	50-150 100-300 250-400	200-400 or 450-850	1000-1250 or 1250-1500	1400-2200 or 1800-2700
Overall length A	(mm) A	15.5	20	22	28	34	43	46	48.5	54	57	71.5	80	99	135
Overall length ("F" Version)	(mm) A ^F	15.5	20	22	28	34	43	46	48.5	57	60	75	91	110	141
Actuation ring Ø	(mm) B	23	29	35	45	55	65	73	92	99	120	135	152	174	242
Actuation ring Ø, ("F" Version)	(mm) B ^F	24	32	42	51.5	62	70	83	98	117	132	155	177	187	258
Inner diameter from Ø to Ø H7	(mm) D	4-8*	4-10*	4-12*	4-16*	8-18	12-25.4	12-28	15-38	20-42	25-50	25-58	30-60	35-73	50-98
Inner diameter with keyway DIN 6885-3 (flat)	(mm) D	-	-	-	16-18	18-20	25.4-27	28-30	38-40	42-44	50-52	58-60	60-63	73-75	98-100
Pilot diameter h7	(mm) E	14	22	25	34	40	47	55	68	75	82	90	100	125	168
Bolt-hole circle diameter ± 0.2	(mm) F	22	28	35	43	47	54	63	78	85	98	110	120	148	202
Flange outside diameter -0.2	(mm) G	26	32	40	50	53	63	72	87	98	112	128	140	165	240
Thread	H	4xM2	4xM2.5	6xM2.5	6xM3	6xM4	6xM5	6xM5	6xM6	6xM6	6xM8	6xM8	6xM10	6xM12	6xM16
Thread depth	(mm) I	3	4	4	5	6	8	9	10	10	10	12	15	16	24
Centering length -0.2	(mm) J	2.5	3.5	5	8	3	5	5	5	5	6	9	10	13.5	20
Distance	(mm) K	5	6	8	11	8	11	11	12	12	15	21	19	25	34
Distance	(mm) L	11	15	17	22	27	35	37	39	44	47	59	67	82	112
Distance, ("F" Version)	(mm) L ^F	11.5	16	18	24	27	37	39	41.5	47	51.5	68	75	94	120
Diameter	(mm) O	13	18	21	30	35	42	49	62	67	75	84	91	112	154
Diameter h7	(mm) O ₁	11	14	17	24	27	32	39	50	55	65	72	75	92	128
Distance	(mm) R	1	1.3	1.5	1.5	2.5	2.5	2.5	2.5	3	3	4	4	4.5	6
Moment of inertia (10 ⁻³ kgm ²)	J_{GOS}	0.01	0.02	0.05	0.07	0.15	0.25	0.50	1.60	2.70	5.20	8.6	20	31.5	210
Approx. weight	(kg)	0.03	0.065	0.12	0.22	0.4	0.7	1.0	1.3	2.0	3.0	4.0	5.5	10	28
Actuation distance	(mm)	0.7	0.8	0.8	1.2	1.5	1.5	1.7	1.9	2.2	2.2	2.2	2.2	3.0	3.0

מגביל מומנט עם צווארון הידוק ובורג הידוק

10-700 Nm

SLN



SIZE			30	60	150	300
Adjustment range* from - to (Nm)	T	KN	10-35 30-80 40-135	30-80 60-120 100-200	40-100 100-200 150-300	200-350 300-450 400-550 550-700
Overall length (mm)	A		45	53	63	72
Actuation ring Ø (mm)	B		63	74	92	118
Clamping fit length (mm)	C		15	18	22	24
Bore diameter from Ø to Ø H7 (mm)	D		12-30	16-35	19-48	22-60
Bore diameter with keyway DIN 6885 from Ø to Ø H7 (mm)	D		12-25.4	16-32	19-44	22-54
Pilot diameter h7 (mm)	E		43	53	68	85
Bolt-hole circle diameter ± 0.2 (mm)	F		48	60	75	95
Thread depth +1 (mm)	G		5	6	7	9
Fastening threads	H		8x M4	8x M4	8x M5	8x M6
Screw ISO 4762	I		M6	M8	M10	M12
Tightening torque (Nm)	I		15	40	75	130
Centering length -0.2 (mm)	J		2	2	3	3
Distance (mm)	K		6	7	9	9
Distance to actuation ring edge (mm)	L		23	26	32	36
Distance (mm)	M		7.5	9	11	12
Actuation distance (mm)	N		1.3	1.5	1.8	2
Ø Base element (mm)	O		35	42	54	70
Ø Adjustment nut (mm)	O ₁		55	66	82	100
Ø Flange -0.2 (mm)	O ₂		58	72	87	110
Ø Clamp ring (mm)	O ₃		59	72	90	112
Distance between centers (mm)	P		21.5	25	33	41
Adjustment nut's clamp screw ISO 4762	R		M3	M3	M3	M4
Tightening torque (Nm)	R		2	2	2	4.5
Approx. weight (kg)			0.3	0.5	0.8	1.5
Approx. moment of inertia at D max (10 ⁻³ Kg m ²)	J _{ges}		0.15	0.3	1	3

Maximum transmittable torque of the clamping hub depends on the bore diameter

מיסבים

מערכות ליניאריות

שינוע והרמה

מקשרים / קופלונגים

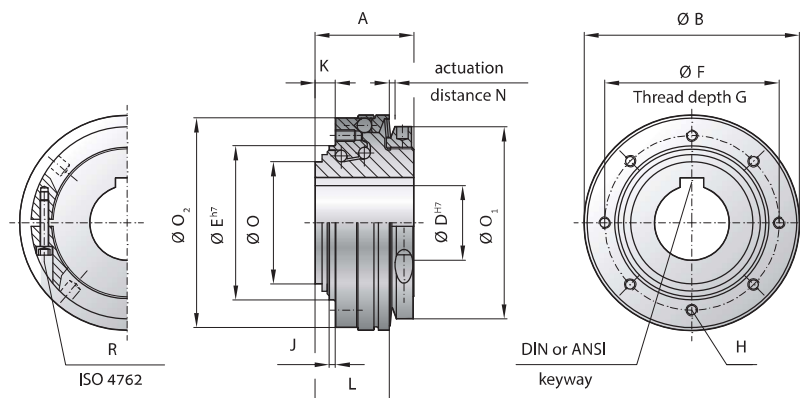
זיוד

גלגלי זימון וחגורות

מגביל מומנט עם קדח שגם

10-700 Nm SLP

Keyway: DIN 6885 or ANSI B17.1

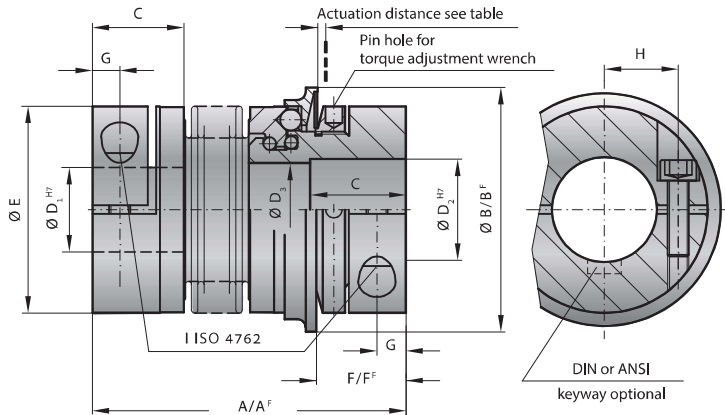


SIZE			30	60	150	300
Adjustment range* from - to	(Nm)	T _{KN}	10-35 30-80 40-135	30-80 60-120 100-200	40-100 100-200 150-300	200-350 300-450 400-550 550-700
Overall length	(mm)	A	30	35	41	48
Actuation ring diameter	(mm)	B	63	74	92	118
Bore diameter from Ø to Ø H7	(mm)	D	12-25.4 (28)*	16-32 (34)*	19-44 (46)*	22-54 (58)*
Pilot diameter h7	(mm)	E	43	53	68	85
Bolt-hole circle diameter ± 0.2	(mm)	F	48	60	75	95
Thread depth +1	(mm)	G	5	6	7	9
Fastening threads		H	8x M4	8x M4	8x M5	8x M6
Centering length -0.2	(mm)	J	2	2	3	3
Distance	(mm)	K	6	7	9	9
Distance to actuation ring edge	(mm)	L	23	26	32	36
Actuation distance	(mm)	N	1.3	1.5	1.8	2
Ø Base element	(mm)	O	35	42	54	70
Ø Adjustment nut	(mm)	O ₁	55	66	82	100
Ø Flange -0.2	(mm)	O ₂	58	72	87	110
Adjustment nut's clamp screw ISO 4762		R	M3	M3	M3	M4
Tightening torque	(Nm)		2	2	2	4.5
Approx. weight	(kg)		0.2	0.35	0.7	1.1
Approx. moment of inertia at D max.	(10 ⁻³ kgm ²)	J _{gms}	0.1	0.4	1.1	2.3

maximum bore diameters shown are only available with shallow keyway*

נבה עם בורג הידוק

0.1-1,800 Nm SK2

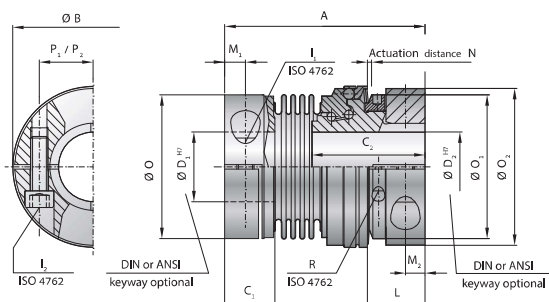


חומר
גרמושקה: נירוסטה
מערכת הגבלת מומנט:
פלדה קשיחה
נבה: גודל 150 ומעלה - פלדה
יתר הגדלים - אלומיניום

SIZE		1.5	2	4.5	10	15	30	60	80	150	200	300	500	800	1500												
Adjustment range available from - to (approx. values)	T _{KN} (Nm)	0.1-0.6 0.4-1 0.8-1.5	0.2-1.5 0.5-2	1-3 or 3-6	2-6 or 4-12	5-10 or 8-20	10-25 or 20-40	10-30 or 25-80	20-70 or 30-90	20-70 45-150 80-180	30-90 60-160 120-240	100-200 150-240 200-320	80-200 200-350 300-500	400-650 500-800 650-850	650-800 700-1200 1000-1800												
Adjustment range available from - to (approx. values) ("F" Version)	T _{KN} (Nm)	0.3-0.8 or 0.6-1.3	0.2-1 or 0.7-2	2.5-4.5	2-5 or 5-10	7-15	8-20 or 16-30	20-40 or 30-60	20-60 or 40-80	20-60 40-80 80-150	80-140 or 130-200	120-180 or 160-300	60-150 100-300 250-500	200-400 or 450-800	1000-1250 or 1250-1500												
Overall length	(mm)	A	42	46	51	57	65	65	74	75	82	87	95	102	112	115	127	116	128	128	140	139	153	163	177	190	223
Overall length, ("F" Version)	(mm)	A ^F	42	46	51	57	65	65	74	75	82	87	95	102	112	117	129	118	130	131	143	142	156	167	181	201	232
Actuation ring Ø	(mm)	B	23	29	35	45	55	65	73	92	92	99	120	135	152	174											
Actuation ring Ø, ("F" Version)	(mm)	B ^F	24	32	42	51.5	62	70	83	98	98	117	132	155	177	187											
Clamping fit length	(mm)	C	11	13	16	16	22	27	31	35	35	40	42	51	48	67											
Inside diameter from Ø to Ø H7	(mm)	D ₁ /D ₂	3-8*	4-12*	5-14*	6-16*	10-26	12-30	15-32	19-42	19-42	24-45	30-60	35-60	40-75	50-80											
Diameter	(mm)	D ₃	9.1	12.1	14.1	20.1	21.1	24.1	32.1	36.1	36.1	42.1	58.1	60.1	60.1	68.1											
Outside diameter of coupling	(mm)	E	19	25	32	40	49	55	66	81	81	90	110	123	134	157											
Distance	(mm)	F	12	13	15	17	19	24	28	31	31	35	35	45	50	63											
Distance, ("F" Version)	(mm)	F ^F	11.5	12	14	16	19	22	29	31	30	33	35	43	54	61											
Distance	(mm)	G	3.5	4	5	5	6.5	7.5	9.5	11	11	12.5	13	17	18	22.5											
Distance between centers	(mm)	H	6	8	10	15	17	19	23	27	27	31	39	41	2x48	2x55											
Screw ISO 4762		I	M2.5	M3	M4	M4	M5	M6	M8	M10	M10	M12	M12	M16	2xM16	2xM20											
Tightening torque	(Nm)		1	2	4	4.5	8	15	40	50	70	120	130	200	250	470											
Approx. weight	(kg)		0.047	0.07	0.2	0.3	0.4	0.6	1.0	2.0	2.4	4.0	5.9	9.6	14	21											
Moment of inertia (10 ⁻³ kgm²)	J _{PK}		0.01	0.01	0.01	0.02	0.02	0.06	0.07	0.10	0.15	0.27	0.32	0.75	0.80	1.80	1.90	2.50	2.80	5.10	5.30	11.5	11.8	22.8	23.0	42.0	83.0
Torsional stiffness (10 ³ Nm/rad)	C _T		0.7	1.2	1.3	7	5	9	8	20	15	39	28	76	55	129	85	175	110	191	140	420	350	510	500	780	1304
Lateral ± (mm)	max. values		0.15	0.15	0.20	0.20	0.25	0.20	0.30	0.15	0.20	0.20	0.25	0.20	0.25	0.20	0.25	0.20	0.25	0.30	0.25	0.30	0.30	0.35	0.35	0.35	0.35
Angular ± (Degree)			1	1	1.5	1.5	2	1.5	2	1	1.5	1	1.5	1	1.5	1.5	2	1.5	1.5	2	1.5	2	2	2.5	2.5	2.5	2.5
Lateral spring stiffness (N/mm)			70	40	30	290	45	280	145	475	137	900	270	1200	420	920	255	1550	435	2040	610	3750	1050	2500	840	2000	3600
Actuation distance	(mm)		0.7	0.8	0.8	1.2	1.5	1.5	1.7	1.9	1.9	2.2	2.2	2.2	2.2	3											

נבה עם הידוק צביטה

* אופציה לנבה עם צווארון הידוק



10-400 Nm

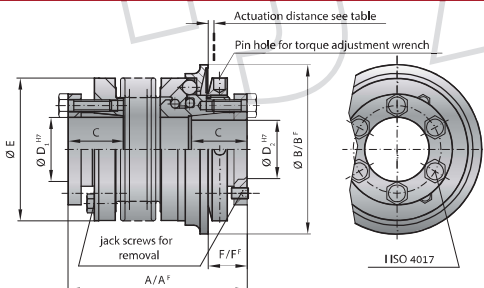
SL2



SIZE		30	60	150	300
Adjustment range* from - to	(Nm) T_{KN}	10-35 30-80	20-50 40-100	40-100 100-200	100-250 200-350 300-400
Overall length	(mm) A	80	93	112	126
Actuation ring diameter	(mm) B	63	74	92	118
Hub length	(mm) C_1/C_2	21/45	23/53	28 / 63	34/72
Bore diameter from $\emptyset$ to $\emptyset$ H7	(mm) D	12-32/12-30	16-35 / 16-35	19-42 / 19-48	22-60 / 22-60
Screw ISO 4762	(mm) I_1/I_2	M6	M8	M10	M12
Tightening torque	(Nm)	15	40	75	130
Distance to actuation ring edge	(mm) L	22	26	32	35
Distance	(mm) M_1/M_2	7.5/7.5	9.5/9	11/11	13/12
Actuation distance	(mm) N	1.3	1.5	1.8	2
$\emptyset$ Clamping hub $\emptyset$, (coupling end)	(mm) O	55.5	66	82	110
$\emptyset$ Adjustment nut	(mm) O_1	55	66	82	100
Clamping ring $\emptyset$, (torque limiter end)	(mm) O_2	59	72	90	112
Distance between centers, bellows side/safety element	(mm) P_1/P_2	20/21.5	23 / 25	27/33	39/41
Adjustment nut's clamp screw ISO 4762	R	M3	M3	M3	M4
Tightening torque	(Nm)	2	2	2	4.5
Approx. weight	(kg)	0.4	0.7	1.2	2.8
Approx. moment of inertia at D max. (10^{-3} Kg m^2)	J_{ges}	0.2	0.8	1.4	6.2
Torsional stiffness	(10^{-3} Nm/rad)	31	72	141	157
Lateral $\pm$ max. (mm)		0.2	0.2	0.2	0.25

Maximum transmittable torque of the clamping hub depends on the bore diameter

מגביל מומנט עם תותב הידוק קונו ו-6 ברגי הידוק



5-2,800 Nm

SK3



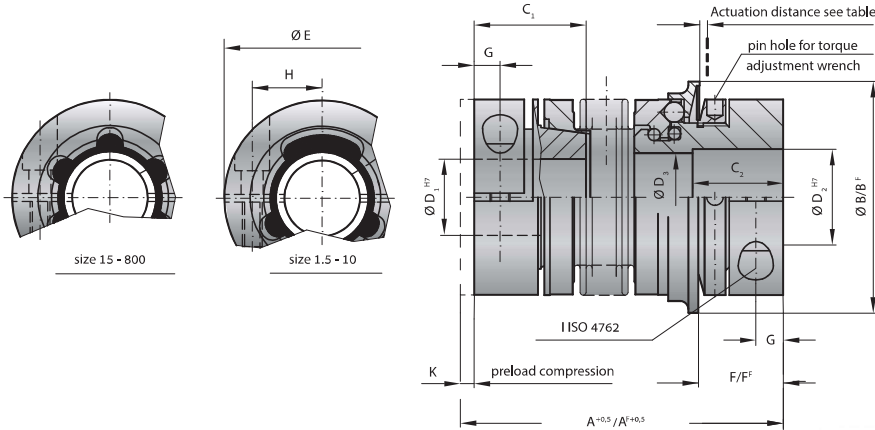
חומר
גרמושקה:נירוסטה
מערכת הגבלת מומנט:
פלדה קשיחה
נבה, תותבים:פלדה

SIZE		15	30	60	150	200	300	500	800	1500	2500
Adjustment range available from (approx. values)	(Nm) T_{KN}	5-10 or 8-20	10-25 or 20-40	10-30 or 25-80	20-70 45-150 80-200	30-90 60-160 140-280	100-200 150-240 220-400	80-200 200-350 300-500	400-650 500-800 600-900	650-850 700-1200 1000-1800	1500-2000 2000-2500 2300-2800
Adjustment range available from (approx. values) ("F" Version)	(Nm) T_{KN}	7-15	8-20 or 16-30	20-40 or 30-60	20-60 40-80 80-150	80-140 or 130-200	120-180 or 160-300	60-150 100-300 250-500	200-400 or 450-800	1000-1250 or 1250-1500	1400-2200 or 1800-2700
Overall length ± 2	(mm) A	62 69	72 80	84 94	93 105	99 111	114 128	123 136	151	175	246
Overall length, ("F" Version) ± 2	(mm) A^F	62 69	72 80	84 94	93 105	102 114	117 131	127 140	151	184	252
Actuation ring $\emptyset$	(mm) B	55	65	73	92	99	120	135	152	174	243
Actuation ring $\emptyset$, ("F" Version)	(mm) B^F	62	70	83	98	117	132	155	177	187	258
Clamping fit length (mm)	C	19	22	27	32	32	41	41	49	61	80
Inside diameter from $\emptyset$ to $\emptyset$ H7	(mm) D_1/D_2	10-22	12-23	12-29	15-37	20-44	25-56	25-60	30-60	35-70	50-100
Outside diameter of coupling	(mm) E	49	55	66	81	90	110	123	133	157	200
Distance	(mm) F	13	16	18	19	19	23	25	31	30	34
Distance, ("F" Version)	(mm) F^F	13	14	17	18	17	20	22	20	26	31
6x Screw ISO 4017	I	M4	M5	M5	M6	M6	M8	M8	M10	M12	M16
Tightening torque	(Nm)	4	6	8	12	14	18	25	40	70	120
Approx. weight	(kg)	0.3	0.4	1.2	2.3	3.0	5.0	6.5	9.0	16.3	35
Moment of inertia (10^{-3} kg m^2)	J_{ges}	0.10 0.15	0.28 0.30	0.75 0.80	1.90 2.00	2.80 3.00	5.50 6.00	11.0 12.8	20	42	257
Torsional stiffness	(10^3 Nm/rad) C_t	20 15	39 28	76 55	175 110	191 140	420 350	510 500	780	1304	3400
Lateral	max. values	0.15 0.20	0.20 0.25	0.20 0.25	0.20 0.25	0.25 0.30	0.25 0.30	0.30 0.35	0.35	0.35	0.35
Angular		1 1.5	1 1.5	1 1.5	1 1.5	1.5 2	1.5 2	2 2.5	2.5	2.5	2.5
Lateral spring stiffness		475 137	900 270	1200 380	1550 435	2040 610	3750 1050	2500 840	2000	3600	6070
Actuation distance		1.5	1.5	1.7	1.9	2.2	2.2	2.2	2.2	3	3

נבה עם מקשר פלסטי קשיח

0.1-850 Nm

SK5



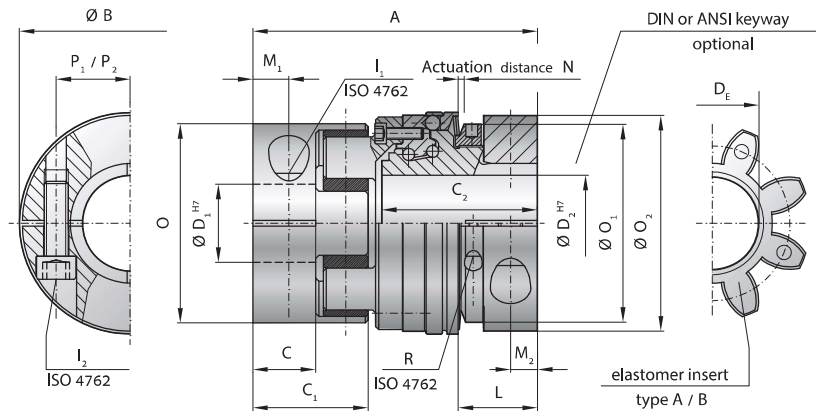
חומר
גרמושקה:נירוסטה
מערכת הגבלת מומנט:
פלדה קשיחה
נבה: גודל 150 ומעלה - פלדה
יתר הגדלים - אלומיניום



Size		1.5	2	4.5	10	15	30	60	80	150	300	500	800													
Adjustment range available from ~ to (approx. values)	(Nm)	T _{KN}	0.1-0.6 0.4-1 0.8-1.5	0.2-1.5 or 0.5-2	1-3 or 3-6	2-6 or 4-12	5-10 or 8-20	10-25 or 20-40	10-30 or 25-80	20-70 or 30-90	20-70 or 45-150	100-200 150-240 200-320	80-200 200-350 300-500	400-650 500-800 650-850												
Adjustment range available from ~ to (approx. values) ("F" Version)	(Nm)	T _{KN}	0.3-0.8 or 0.6-1.3	0.2-1 or 0.7-2	2.5-4.5	2-5 or 5-10	7-15	8-20 or 16-30	20-40 or 30-60	20-60 or 40-80	80-150	120-200 or 160-300	60-150 100-300 250-500	200-400 or 450-800												
Overall length +0.5	(mm)	A	44	48	54	60	68	70	79	76	83	89	97	105	115	115	127	116	128	143	157	166	180	196		
Overall length +0.5 ("F" Version)	(mm)	A ^F	44	48	54	60	68	70	79	76	83	89	97	105	115	117	129	118	130	146	160	170	184	207		
Actuation ring Ø	(mm)	B	23	29		35	45		55	65	73	92		92		92		92		120		135		152		
Actuation ring Ø ("F" Version)	(mm)	B ^F	24	32		42	51.5		62	70	83	98		98		98		98		132		155		177		
Clamping fit length C ₁ /C ₂	(mm)	C ₁ /C ₂	14	11	16	13	19	16	21	16	28	22	33	27	39	31	43	35	43	35	52	42	61	52	74	48
Bore Diameter from Ø to Ø H7	(mm)	D ₁	3-8*	4-12*	5-16*	5-20*	8-22*	10-25*	12-32	14-38*	14-38*	30-56	35-60	40-62*												
Bore Diameter from Ø to Ø H7	(mm)	D ₂	3-8*	4-12*	5-14*	5-20*	8-26	10-30	12-32	14-42	14-42	30-60	35-60	40-75												
Diameter	(mm)	D ₃	9.1	12.1	14.1	20.1	21.1	24.1	32.1	36.1	36.1	58.1	60.1	60.1												
Outside diameter	(mm)	E	19	25	32	40	49	55	66	81	81	110	123	134												
Distance	(mm)	F	12	13	15	17	19	24	28	31	31	35	45	50												
Distance ("F" Version)	(mm)	F ^F	11.5	12	14	16	19	22	29	31	30	36	43	54												
Distance	(mm)	G	3.5	4	5	5	6.5	7.5	9.5	11	11	13	17	18												
Distance between centers	(mm)	H	6	8	10	15	17	19	23	27	27	39	41	2x48												
Screw ISO 4762		I	M2.5	M3	M4	M4	M5	M6	M8	M10	M10	M12	M16	2xM16												
Tightening torque	(Nm)	I	1	2	4	4.5	8	15	40	50	70	130	200	250												
Pretensioning, approx	(mm)	K	0.1 - 0.5	0.2 - 0.7	0.2 - 0.7	0.2 - 1.0	0.2 - 1.0	0.3 - 1.5	0.5 - 1.5	0.5 - 1.0	0.5 - 1.0	0.5 - 1.5	0.5 - 2.0	0.8 - 2.0												
Axial recovery of coupling max.	(N)		4	8	5	15	10	25	30	20	12	50	30	70	45	48	32	82	52	157	106	140	96	200		
Approx. weight	(kg)		0.038	0.07	0.2	0.3	0.4	0.6	1.4	2	2.4	5.9	9.6	15												
Moment of inertia (10 ⁻³ kgm²)		J _{ges}	0.01	0.01	0.01	0.02	0.02	0.06	0.07	0.10	0.15	0.27	0.32	0.75	0.80	1.80	1.90	2.50	2.80	6.50	7.00	13.0	17.0	50		
Torsional stiffness (10³ Nm/rad)		C _T	0.7	1.2	1.3	7	5	8	7	12	10	18	16	40	31	68	45	90	60	220	190	260	250	390		
Lateral	± (mm)	max. values	0.15	0.15	0.20	0.20	0.25	0.20	0.30	0.15	0.20	0.20	0.25	0.20	0.25	0.20	0.25	0.20	0.25	0.25	0.30	0.30	0.35	0.35		
Angular	± (Degree)		1	1	1.5	1.5	2	1.5	2	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1.5	2	2	2.5	2.5		
Lateral spring stiffness	(N/mm)		70	40	30	290	45	280	145	475	137	900	270	1200	420	920	290	1550	435	3750	1050	2500	840	2000		
Actuation distance	(mm)		0.7	0.8	0.8	1.2	1.5	1.5	1.7	1.9	1.9	2.2	2.2	2.2												

נבה עם צווארון ובורג הידוק

10-700 Nm SLE



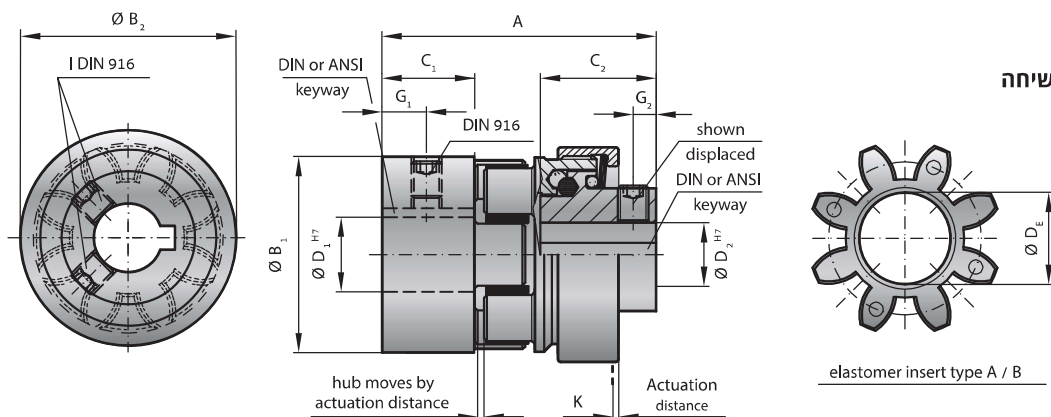
SIZE		30		60		150		300	
Type (elastomer insert)		A	B	A	B	A	B	A	B
Rated torque	T_{KN}	60	75	160	200	325	405	530	660
Max. torque	$T_{KN max}$	120	150	320	400	650	810	1060	1350
Adjustment range* possible from -to	(Nm) T_{KN}	10-35 30-80 40-135		30-80 60-120 100-200		40-100 100-200 150-300		200-350 300-450 400-550 550-700	
Overall length	(mm) A	85		93		122		135	
Actuation ring diameter	(mm) B	63		74		92		118	
Hub length (coupling hub end)	(mm) C/C1	20 / 36		21 / 39		31 / 52		34 / 57	
Length of hub (torque limiting portion)	(mm) C2	45		53		63		72	
Bore diameter from Ø to Ø H7	(mm) D1/D2	12-32 / 12-30		16-36 / 16-35		19-45 / 19-48		22-60 / 22-60	
Inner diameter (elastomer insert)	(mm) D1	26.2		29.2		36.2		46.2	
ISO 4762 screw, coupling side / torque limiter side	I1/I2	M6		M8		M10		M12	
Tightening torque	(Nm) I1/I2	15		40		75		130	
Distance to actuation ring edge	(mm) L	22		26		32		35	
Distance	(mm) M1/M2	10 / 7.5		12 / 9		15 / 11		17.5 / 12	
Actuation distance	(mm) N	1.3		1.5		1.8		2	
Clamping hub Ø, elastomer coupling	O	56		66.5		82		102	
Ø Adjustment nut	O1	55		66		82		100	
Clamping hub Ø, safety coupling	O2	59		72		90		112	
Distance to clamping screw, coupling side / torque limiter side	P1/P2	21 / 21.5		24 / 25		29 / 33		38 / 41	
Adjustment nut's clamp screw ISO 4762	R	M3		M3		M3		M4	
Tightening torque	(Nm) R	2		2		2		4.5	
Approx. weight	(kg)	0.4		0.8		1.5		2.9	
Approx. moment of inertia at D max.(10 ⁻³ Kg m ²)	J _{grs}	0.3		1		1.8		5	
Static torsional rigidity	(Nm/rad)	3290	9750	4970	10600	12400	18000	15100	27000
Dynamic torsional rigidity	(Nm/rad)	7940	11900	13400	29300	23700	40400	55400	81200
Lateral ± approx.	(mm)	0.12	0.1	0.15	0.12	0.18	0.14	0.2	0.18

נבה עם קדח שגם

1-150 Nm

ESL

חומר
מערכת הגבלת מומנט: פלדה קשיחה
נבה: אלומיניום



Size			5		10		20		60		150	
Type (Elastomer insert)			A	B	A	B	A	B	A	B	A	B
Rated torque	(Nm)	T _{Kn}	9	12	12.5	16	17	21	60	75	160	200
Torque setting possible* from - to	(Nm)	T _{Kn}	1-6		1-12		3-19		5-60		20-150	
Overall length	(mm)	A	34		45		64		80		90	
Diameter of the hub	(mm)	B ₁	25		32		42		56		66.5	
Diameter of the hub	(mm)	B ₂	29		32		46		59		75	
Clamping fit length	(mm)	C ₁	12.5		12		25		30		35	
Clamping fit length	(mm)	C ₂	11.5		20		22		31		35	
Inside diameter from Ø to Ø H7	(mm)	D ₁	6-15		6-18		8-25		12-32		19-38	
Inside diameter from Ø to Ø H7	(mm)	D ₂	6-10		6-12		8-19		12-24		19-32	
Inside diameter max. (elastomer)	(mm)	D _E	10.5		14.2		19.2		26.2		29.2	
Distance	(mm)	G ₁	5		6		9		11		12	
Distance	(mm)	G ₂	2.5		3.5		4		4		4	
Screws DIN 916**		I	depending on bore diameter see below table									
Approx. weight	(kg)		0.05		0.15		0.2		0.5		1	
Moment of inertia	(10 ⁻³ kgm²)	J ₁ /J ₂	0.01		0.02		0.08		0.15		0.5	
Actuation distance	(mm)	K	0.6		0.6		0.7		1.1		1.4	

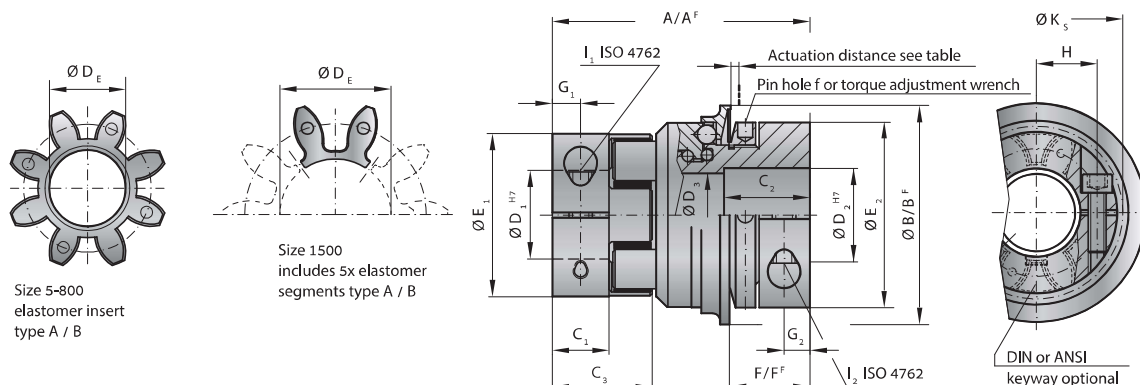
Disengagement torque is permanently set at the factory*

נבה עם בורג הידוק

1-1,800 Nm ES2

חומר

מערכת הגבלת מומנט - פלדה קשיחה
נבה D1: עד גודל 450 - אלומיניום, אחרת - פלדה
נבה D2: עד גודל 60 - אלומיניום, אחרת - פלדה



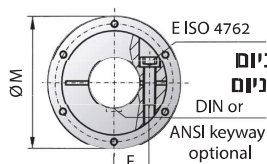
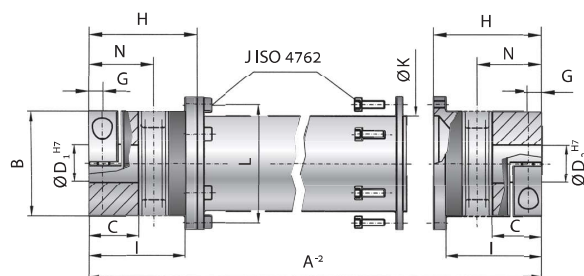
Size		5		10		20		60		150		300		450		800		1500		
Type (Elastomer insert)		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
Rated torque	(Nm)	T _{KN}	9	12	12.5	16	17	21	60	75	160	200	325	405	530	660	950	1100	1950	2450
Max. torque*	(Nm)	T _{Kmax}	18	24	25	32	34	42	120	150	320	400	650	810	1060	1350	1900	2150	3900	4900
Adjustment range possible from -to	(Nm)	T _{KN}	1-3 or 3-6	2-6 or 4-12	10-25 or 20-40	10-30 or 25-80	20-70 or 45-150 80-180	100-200 or 150-240 200-320	80-200 or 200-350 300-500	400-650 or 500-800 600-900	600-850 or 700-1200 1000-1800									
Adjustment range ("F" Version) possible from -to	(Nm)	T _{KN} ^F	2.5 - 4.5	2-5 or 5-10	8-20 or 16-30	20-40 or 30-60	20-60 or 40-80 80-150	120-180 or 180-300	60-150 or 100-300 250-500	200-400 or 450-800	1000-1250 or 1250-1500									
Overall length	(mm)	A	50	60	86	96	106	140	164	179	245									
Overall length ("F" Version)	(mm)	A _F	50	60	86	96	108	143	168	190	257									
Actuation ring Ø	(mm)	B	35	45	65	73	92	120	135	152	174									
Outside diameter of actuation ring ("F" Version)	(mm)	B _F	42	51.5	70	83	98	132	155	177	187									
Clamping fit length	(mm)	C ₁	8	10.3	17	20	21	31	34	46	67									
Fit length	(mm)	C ₂	14	16	27	31	35	42	51	45	16									
Length of hub	(mm)	C ₃	16.7	20.7	31	36	39	52	57	74	120									
Inside diameter from Ø to Ø H7	(mm)	D ₁	4 - 12.7**	5 - 16**	8 - 25	12 - 32	19 - 36	20 - 45	28 - 60	35 - 80	35 - 90									
Inside diameter from Ø to Ø H7	(mm)	D ₂	6 - 14**	6 - 20**	12 - 30	15 - 32	19 - 42	30 - 60	35 - 60	40 - 75	50 - 80									
Diameter Ø	(mm)	D ₃	14.1	20.1	24.1	32.1	36.1	58.1	60.1	60.1	68.1									
Inside diameter (Elastomer insert)	(mm)	D ₄	10.2	14.2	19.2	26.2	29.2	36.2	46.2	60.5	79									
Diameter of the hub	(mm)	E ₁	25	32	42	56	66.5	82	102	136.5	160									
Diameter of the hub	(mm)	E ₂	19	40	55	66	81	110	123	132	157									
Distance	(mm)	F	15	17	24	28	31	35	45	50	63									
Distance ("F" Version)	(mm)	F _F	14	16	22	29	30	35	43	54	61									
Distance	(mm)	G ₁	4	5	8.5	10	11	15	17.5	23	36									
Distance	(mm)	G ₂	5	5	7.5	9.5	11	13	17	18	22.5									
Distance between centers	(mm)	H ₁	8	10.5	15	21	24	29	38	50.5	2x 57									
Screws (ISO 4762)		I ₁	M3	M4	M5	M6	M8	M10	M12	M16	4x M16***									
Tightening torque	(Nm)		2	4.5	8	15	35	70	120	290	300									
Distance between centers D2 side	(mm)	H ₂	10	15	19	23	27	39	41	48	2x 55									
Screws (ISO 4762)		I ₂	M4	M4	M6	M8	M10	M12	M16	2x M16	2x M20									
Tightening torque	(Nm)		4	4.5	15	40	70	130	200	250	470									
Diameter with screwhead	(mm)	K _S	25	32	44.5	57	68	85	105	139	155									
Approx. weight	(kg)		0.2	0.3	0.6	1.0	2.4	5.8	9.3	14.3	26									
Moment of inertia	(10 ⁻³ kgm²)	J _{ges}	0.02	0.06	0.25	0.7	2.3	11	22	33.5	185									
Actuation distance	(mm)		0.8	1.2	1.5	1.7	1.9	2.2	2.2	2.2	3.0									

איפיון מוצר

ORDERING EXAMPLE	ZA	10	1551	18	19.05	XX
Model	●					Special designation only (e.g. special bore tolerance).
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	
For custom features place an XX at the end of the part number and describe the special requirements (e.g. ZA/10/1551/18/19.05/X						X; XX=anodized aluminum)

10-800 Nm

ZA



חומר
גרמושקה: נירוסטה
ציר: גודל 300 ומעלה - פלדה, יתר הגדלים - אלומיניום
נבה: גודל 150 ומעלה - פלדה, יתר הגדלים - אלומיניום

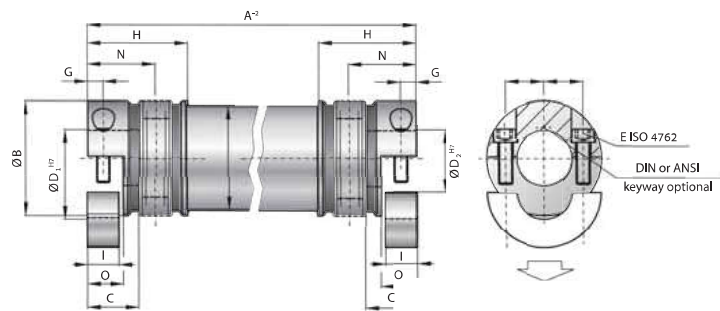


SIZE		10	30	60	150	200	300	500	800
Rated torque (Nm)	T_{KN}	10	30	60	150	200	300	500	800
Overall length min. to max. (mm)	A^{-2}	110 - 6000	140 - 6000	170 - 6000	215 - 6000	215 - 6000	250 - 6000	260 - 6000	260 - 6000
Outside diameter clamping hub (mm)	B	40	55	66	81	90	110	123	134
Fit length (mm)	C	16	27	31	35.5	40.5	43	50	48
Inside diameter from ϕ to ϕ H7 (mm)	D_{H7}	5 - 20	10 - 28	12 - 32	19 - 42	22 - 45	30 - 60	35 - 60	40 - 72
With keyway max. ϕ H7 (mm)	$D_{H7/2}$	17	23	29	36	45	60	60	66
ISO 4762 clamping screw	E	M4	M6	M8	M10	M12	M12	M16	2x M16
Tightening torque (Nm)		5	15	40	70	110	130	200	250
Distance between centers (mm)	F	15	19	23	27	31	39	41	48
Distance (mm)	G	5	7.5	9.5	11	12.5	13	17	18
Length bellows body (mm)	H	44.5	57.5	71	78	86	94	110	101
Distance (mm)	I	38.5	51	61	69	75.5	81	96	89
ISO 4762 clamping screw	J	4x M4	6x M4	6x M5	8x M6	8x M6	8x M8	8x M8	10x M8
Tightening torque (Nm)		3	4	7	10	12	30	30	40
Outside diameter tube section (mm)	K	35	50	60	76	90	100	110	120
Bolt hole circle ϕ (mm)	L	45	62.5	71.5	88	100	120	132	138
Outside diameter flange (mm)	M	52	70	80	98	110	135	148	153
Shaft average value (mm)	N	25	34	41	47	52	56	66	64

נבה חצויה עם הידוק צביטה

10-800 Nm

ZAE



חומר
גרמושקה: נירוסטה
ציר: גודל 300 ומעלה - פלדה, יתר הגדלים - אלומיניום
נבה: גודל 150 ומעלה - פלדה, יתר הגדלים - אלומיניום



SIZE		10	30	60	150	300	500	800
Rated torque (Nm)	T_{KN}	10	30	60	150	300	500	800
Overall length min. to max. (mm)	A ²	100 - 6000	130 - 6000	160 - 6000	180 - 6000	240 - 6000	250 - 6000	250 - 6000
Outside diameter clamping hub (mm)	B	40	55	66	81	110	123	133
Fit length (mm)	C	16	27	31	34.5	42	50	47
Inside diameter from Ø to Ø H7 (mm)	D _{1/2}	5 - 20	10 - 28	12 - 32	19 - 42	30 - 60	35 - 60	40 - 72
Max. inside diameter clamping hub (mm)	D _{max}	24	30	32	42	60	60	75
With keyway - max Ø H7 (mm)	D _{1/2}	17	23	29	36	60	60	66
ISO 4762 clamping screws	E	M4	M6	M8	M10	M12	M16	M16
Tightening torque (Nm)		5	15	40	70	130	200	250
Distance between centers (mm)	F	15	19	23	27	39	41	48
Distance (mm)	G	5	7.5	9.5	12	14	17	19
Length bellows body (mm)	H	39.5	52	64	72	83	96	95
Clamping length (mm)	I	10	15	19	22	28	33.5	37.5
Outside diameter tube section (mm)	K	35	50	60	76	100	110	120
Length (mm)	O	11.5	17	21	24	30	35	40
Shaft average value (mm)	N	25	34	41	47	56	66	65

נבה חצויה עם הידוק צביטה

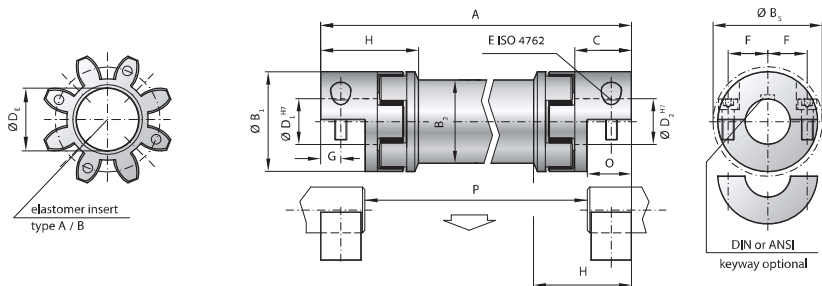
12.5-25,000 Nm

EZ2

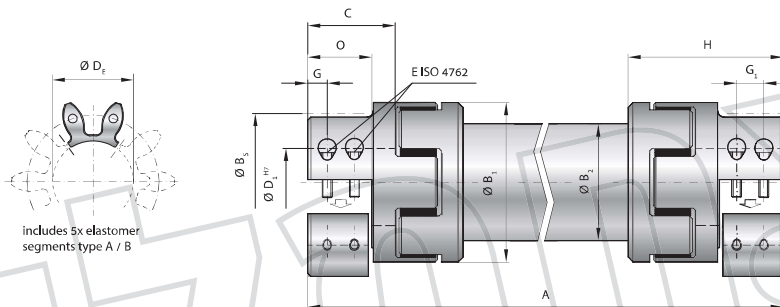


חומר
נבה: עד גודל - 450 אלומיניום קשיח, גודל 800 - פלדה,
גודל 2500 ומעלה - ברזל יצוק
ציר: גודל - 800 ומעלה - פלדה, יתר הגדלים אלומיניום

דגם קטן | 10 - 800



דגם סטנדרטי | 2,500 - 9,500



SIZE		10	20	60	150	300	450	800	2500	4500	9500
Type (Elastomer insert)		A B	A B	A B	A B	A B	A B	A B	A B	A B	A B
Rated torque (Nm)	T_{RN}	12.5 16	17 21	60 75	160 200	325 405	530 660	950 1,100	1,950 2,450	5,000 6,200	10,000 12,500
Max. torque* (Nm)	T_{Kmax}	25 32	34 42	120 150	320 400	650 810	1060 1350	1,900 2,150	3,900 4,900	10,000 12,400	20,000 25,000
Overall length (mm)	A	95-4,000	130-4,000	175-4,000	200-4,000	245-4,000	280-4,000	320-4,000	460-4,000	580-4,000	710-4,000
Outside diameter hub (mm)	B_1	32	42	56	66.5	82	102	136.5	160	225	290
Outside diameter tube (mm)	B_2	28	35	50	60	76	90	120	150	175	220
Outside diameter with screwhead (mm)	B_3	32	44.5	57	68	85	105	139	155	190	243
Fit length (mm)	C	20	25	40	47	55	65	79	85	110	140
Inside diameter range from Ø to Ø H7 (mm)	$D_{1/2}$	5-16	8-25	14-32	19-36	19-45	24-60	35-80	35-90	40-120	50-140
Max. inside diameter (Elastomer insert) (mm)	D_E	14.2	19.2	26.2	29.2	36.2	46.2	60.5	80	111	145
Mounting screw ISO 4762	E	4 x M4	4 x M5	4 x M6	4 x M8	4 x M10	4 x M12	4 x M16	4 x M16	8 x M16	8 x M24
Tightening torque (Nm)		4	8	15	35	70	120	290	300	300	980
Distance between centers (mm)	F	10.5	15.5	21	24	29	38	50.5	57	72.5	90
Distance (mm)	G/G ₁	7.5	8.5	15	17.5	20	25	30	36	24 / 34	30 / 48
Coupling length (mm)	H	34	46	63	73	86	99	125	142	181	229
Moment of inertia per hub (10^{-3} kgm ²)	J_1/J_2	0.01	0.02	0.15	0.21	1.02	2.3	17	30	140	450
Inertia of tube per meter (10^{-3} kgm ²)	J_3	0.075	0.183	0.66	1.18	2.48	10.6	38	360	750	1,800
Combined dynamic torsional stiffness of the inserts (Nm/rad)	C_{Tdyn}^E	270 825	1,270 2,220	3,970 5,950	6,700 14,650	11,850 20,200	27,700 40,600	41,300 90,000	87,500 108,000	168,500 371,500	590,000 670,000
Torsional stiffness of tube per meter (Nm/rad)	C_T^{ZWR}	321	1,530	6,632	11,810	20,230	65,340	392,800	1,000,000	2,500,000	5,000,000
Shaft average value (mm)	N	26	33	49	57	67	78	94	108	137	171
Length (mm)	O	16.6	18.6	32	37	42	52	62	67	85	105

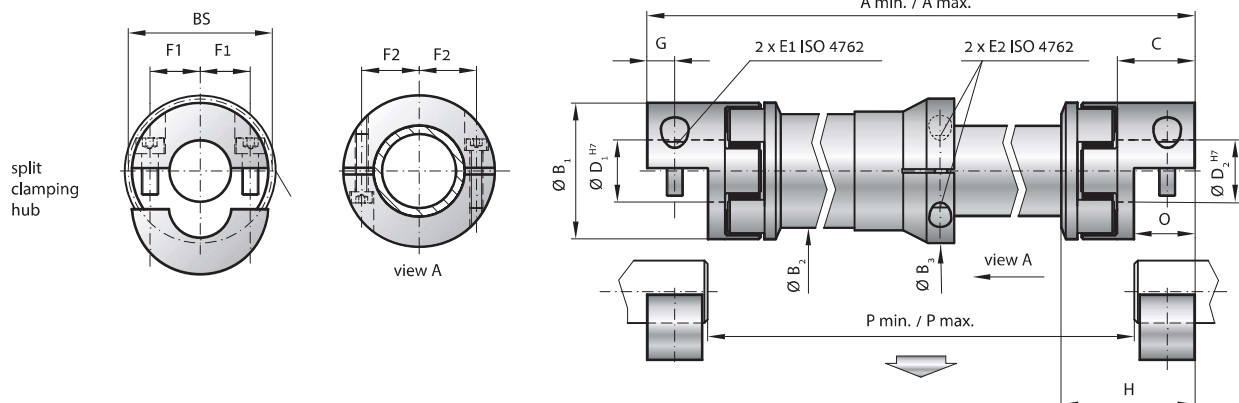
Maximum transmittable torque of the clamping hub depends on the bore diameter *

ציר טלסקופי

12.5-1,200 Nm

EZV

חומר
נבה: אלומיניום קשיח
ציר: אלומיניום



SIZE		10		20		60		150		300		450	
Type (Elastomer Insert)		A	B	A	B	A	B	A	B	A	B	A	B
Rated torque	(Nm) T_{RN}	12.5	16	17	21	60	75	160	200	325	405	530	660
Max. torque*	(Nm) T_{Kmax}	25	32	34	42	120	150	320	400	650	810	1060	1200
Inserted min. length from - to	(mm) A_{min}	150 - 2,055		200 - 2,075		250 - 2,095		300 - 2,115		350 - 2,130		400 - 2,150	
Extended over all length from - to	(mm) A_{max}	190 - 4,000		250 - 4,000		310 - 4,000		370 - 4,000		440 - 4,000		500 - 4,000	
Measurement	(mm) $X1+X2$	115		156		197		240		280		312	
Outside diameter clamping hub	(mm) B_1	32		42		56		66.5		82		102	
Outside diameter tube	(mm) B_2	28		35		50		60		80		90	
Outside diameter center hub	(mm) B_3	41.5		47		67		77		102		115	
Outside diameter with screwhead	(mm) B_s	32		44.5		57		68		85		105	
Fit length	(mm) C	20		25		40		47		55		65	
Inside diameter from $\varnothing$ to $\varnothing H7$	(mm) $D_{1/2}$	5 - 16		8 - 25		14 - 32		19 - 35		19 - 45		24 - 60	
Screw ISO 4762	E_1	M4		M5		M6		M8		M10		M12	
Tightening torque	(Nm)	4		8		15		35		70		120	
Screw ISO 4762	E_2	M4		M4		M5		M6		M8		M10	
Tightening torque	(Nm)	4		4.5		8		18		35		70	
Distance between centers	(mm) $F_{30.5}$	10.5		15.5		21		24		29		38	
Distance between centers	(mm) F_2	15		18		26		31		41		45	
Distance	(mm) G	7.5		8.5		15		17.5		20		25	
Coupling length	(mm) H	34		46		63		73		86		99	
Shaft average value	(mm) N	26		33		49		57		67		78	
Length	(mm) O	16.6		18.6		32		37		42		52	
Moment of inertia coupling half	(10^{-8} kgm ²) J_1/J_2	0.01		0.02		0.15		0.21		1.02		2.3	
Inertia of tube per meter	(10^{-8} kgm ²) J_3	0.075		0.183		0.66		1.18		2.48		10.6	
Combined dynamic torsional stiffness of the inserts	(Nm/rad) C_{dyn}^E	270	825	1,270	2,220	3,970	5,950	6,700	14,650	11,850	20,200	27,700	40,600
Torsional stiffness of tube per meter	(Nm/rad) C_{TW}^E	321		1,530		6,632		11,810		20,230		65,340	

Maximum transmittable torque of the clamping hub depends on the bore diameter*



Couplings | קופלונגים

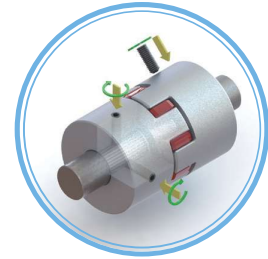
282 - 287 Zero Backlash Oldham Couplings • [סדרה SOH] קופלונג ללא חופש

288 - 289 Couplings Slit Type • [סדרה SRB] קופלונג גמיש מחורץ

אפשרויות חיבור הקופלונג לציר

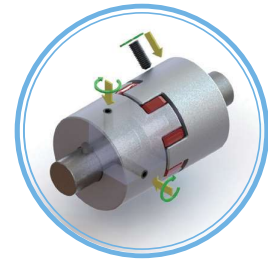
נבה עם ברגי הידוק Set-screw type

חיבור הקופלונג ישירות לציר באמצעות ברגים בלבד
ברגי ההידוק עלולים לפגוע בציר בעקבות המגע הישיר



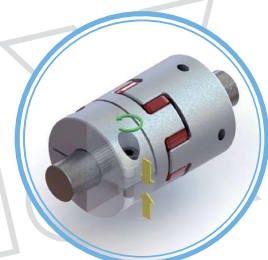
נבה עם חריץ לשגם וברגי הידוק keyway type

חיבור הקופלונג לציר באמצעות נעילתו בחריץ מובנה
רצוי להשתמש באמצעי זה בתור מנגנון נעילה נוסף לברגי ההידוק או הידוק צביטה

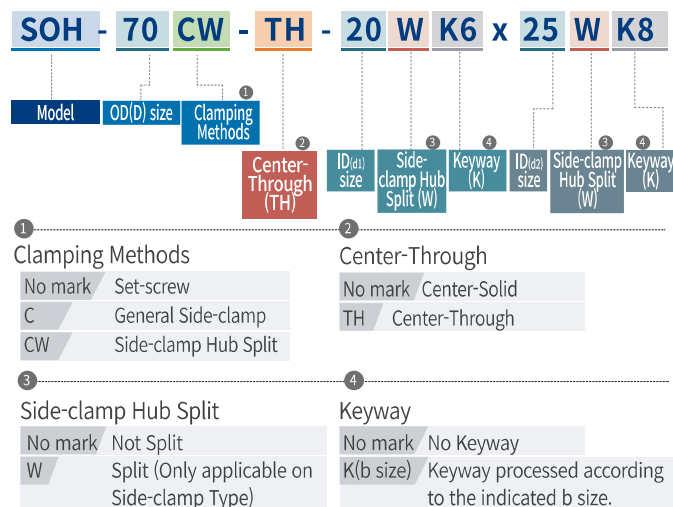


נבה עם הידוק צביטה Side-clamp type

הידוק הקופלונג בצורה אנכית באמצעות ברגי הידוק
יש לשים לב לטולרנס המומלץ על מנת למנוע שחרור הקופלונג



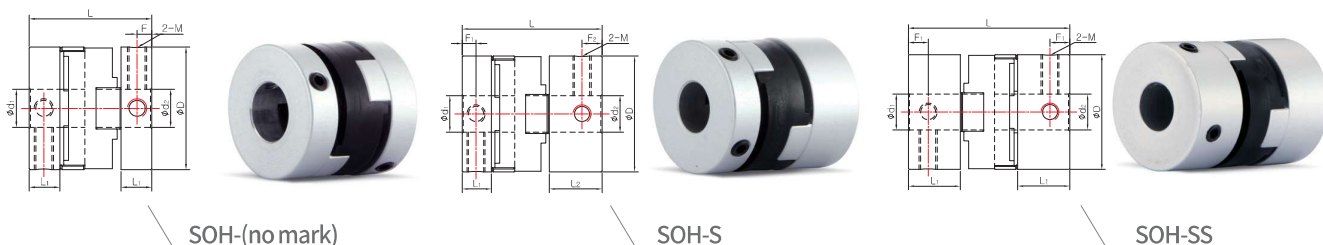
אפיון מוצר



Set-Screw

SOH

נבה: אלומיניום
 גומי: POM
 בורג הידוק: SCM435



SOH-(no mark)

Model	Size ($\pm 0.3\text{mm}$)				Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOH-6	5.9	8.4	2.5	1.3	M2	0.3	0.2	0.4	22,000	2.5×10^{-9}	5	0.5	1.5	0.5	0.05
SOH-8	7.9	9.8	2.5	1.3	M2	0.3	0.5	1	20,000	8.4×10^{-9}	10	0.9	1.5	0.7	0.05
SOH-10	9.9	10.4	2.9	1.5	M2	0.3	0.7	1.4	18,000	2.4×10^{-8}	25	1.7	1.5	0.9	0.05
SOH-12	11.9	14.5	3.9	2	M3	0.7	0.9	1.8	15,000	6.3×10^{-8}	55	3	1.5	1	0.05
SOH-16	16	17.9	4.7	2.2	M3	0.7	1	2	13,000	2.4×10^{-7}	65	7	1.5	1	0.1
SOH-20	20	19.9	5.1	2.4	M4	1.7	1.5	3	11,000	6.4×10^{-7}	120	12	1.5	1.5	0.1
SOH-25	25.5	25.4	6.9	3.1	M4	1.7	2.5	5	10,000	2.2×10^{-6}	200	24	1.5	2	0.1
SOH-32	32	31.9	8	3.8	M5	4	7	14	9,000	6.3×10^{-6}	620	41	1.5	2.5	0.2
SOH-43	43	52	16.5	7.1	M5	4	12.5	25	8,000	3.7×10^{-5}	1,200	135	1.5	3	0.15
SOH-53	53	58.3	19.5	7.5	M6	7	20	40	7,000	1.0×10^{-4}	1,400	228	1.5	3.2	0.15
SOH-57	57	76.2	26.9	9.9	M8	15	34	68	6,000	1.8×10^{-4}	2,600	345	1.5	3.5	0.2
SOH-70	73	75.5	25	12.2	M8	15	60	120	4,500	4.5×10^{-4}	4,800	567	1.5	3.5	0.2

SOH-S

Model	Size ($\pm 0.3\text{mm}$)						Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	L ₂	F ₁	F ₂	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOH-16S	16	20.9	4.7	7.7	2.2	3.8	M3	0.7	1	2	13,000	2.7×10^{-7}	65	7.9	1.5	1	0.1
SOH-20S	20	22.8	5.1	8	2.4	3.6	M4	1.7	1.5	3	11,000	7.5×10^{-7}	120	13	1.5	1.5	0.1
SOH-25S	25.5	28.7	6.9	10.2	3.1	4.9	M4	1.7	2.5	5	10,000	2.6×10^{-6}	200	27.2	1.5	2	0.1
SOH-32S	32	38.3	8	14.4	3.8	5.5	M5	4	7	14	9,000	8.1×10^{-6}	620	52	1.5	2.5	0.2

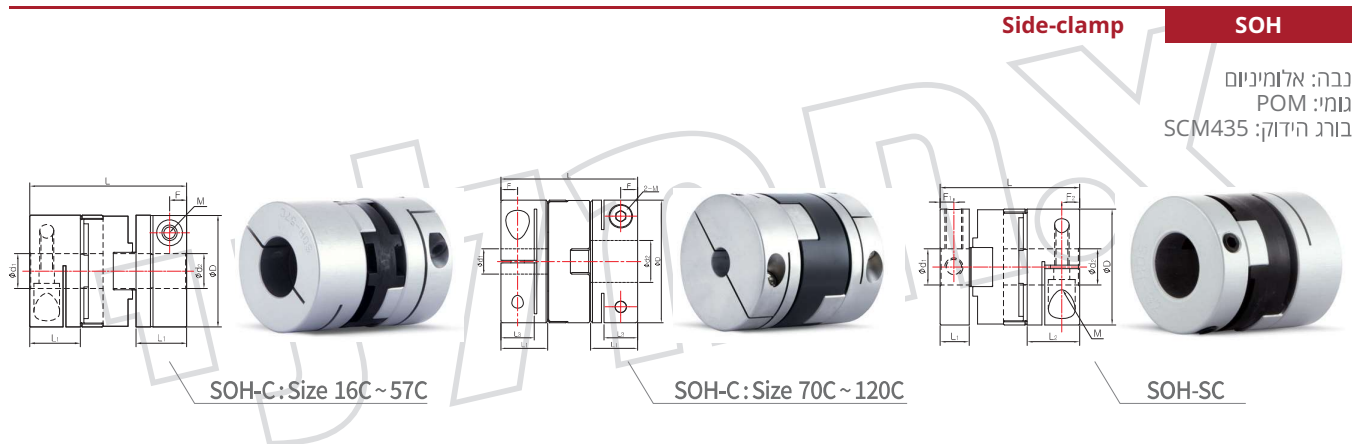
SOH-SS

Model	Size ($\pm 0.3\text{mm}$)						Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	L ₂	F ₁	F ₂	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOH-8SS	7.9	12.6	4.6	4.6	2.3	2.3	M3	0.7	0.5	1	20,000	1.3×10^{-8}	10	1.5	1.5	0.7	0.05
SOH-16SS	16	23.9	7.7	7.7	3.8	3.8	M3	0.7	1	2	13,000	3.4×10^{-7}	65	9.3	1.5	1	0.1
SOH-20SS	20	25.7	8	8	3.6	3.6	M4	1.7	1.5	3	11,000	8.9×10^{-7}	120	15	1.5	1.5	0.1
SOH-25SS	25.5	32	10.2	10.2	4.9	4.9	M4	1.7	2.5	5	10,000	2.9×10^{-6}	200	31	1.5	2	0.1
SOH-32SS	32	44.7	14.4	14.4	5.5	5.5	M5	4	7	14	9,000	9.5×10^{-6}	620	63	1.5	2.5	0.2

Model	Standard Inner Diameter (d ₁ , d ₂) (mm)																	
	1	1.5	2	2.5	3	4	4.5	5	6	6.35	8	9	9.525	10	11	12	14	15
SOH-6□□	●	●	●															
SOH-8□□	●		●	●	●													
SOH-10□□			●		●	●												
SOH-12□□					●	●	●	●										
SOH-16□□					●	●		●	●									
SOH-20□□						●		●	●	●	●							
SOH-25□□								●	●	●	●	●	●	●				
SOH-32□□									●	●	●	●	●	●	●	●	●	●

Model	Standard Inner Diameter (d ₁ , d ₂) (mm)																	
	8	9	9.525	10	11	12	14	15	16	18	19	20	22	24	25	25.4	28	30
SOH-43□□	●	●	●	●	●	●	●	●	●	●	●							
SOH-53□□				●	●	●	●	●	●	●	●	●	●	●	●			
SOH-57□□								●	●	●	●	●	●	●	●	●	●	
SOH-70								●	●	●	●	●	●	●	●	●	●	●

חרוץ לשבם אופציונלי
טולרנס מומלץ לציר h7



SOH-C

Model	Size (±0.3mm)					Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min ⁻¹)	Moment of Inertia (kg·m ²)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	L ₃	F	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOH-16C	16	23.9	7.7	-	2.7	M2.6	1	1	2	13,000	3.1×10 ⁻⁷	65	8.5	1.5	1	0.1
SOH-20C	20	25.7	8	-	2.8	M2.6	1	1.5	3	11,000	8.2×10 ⁻⁷	120	14.2	1.5	1.5	0.1
SOH-25C	25.5	32	10.2	-	3.5	M3	1.7	2.5	5	10,000	2.7×10 ⁻⁶	200	29.3	1.5	2	0.1
SOH-32C	32	44.7	14.4	-	4.9	M4	3.5	7	14	9,000	9.2×10 ⁻⁶	620	59.6	1.5	2.5	0.15
SOH-43C	43	52	16.5	-	5.8	M5	8	12.5	25	8,000	3.4×10 ⁻⁵	1,200	127	1.5	3	0.15
SOH-53C	53	58.3	19.5	-	6.3	M5	8	20	40	7,000	9.1×10 ⁻⁵	1,400	217	1.5	3.2	0.2
SOH-57C	57	76.2	26.9	-	7.7	M6	13	34	68	6,000	1.6×10 ⁻⁴	2,600	329	1.5	3.5	0.2
SOH-70C	73	81.5	28	20	10	M8	30	65	130	4,500	5.4×10 ⁻⁴	2,000	670	1.5	3.5	0.3
SOH-90C	88	97	33.5	25	12	M10	50	105	210	4,500	1.2×10 ⁻³	2,500	1,240	1.5	4	0.35
SOH-120C	118	138	40.5	26.5	13	M12	90	200	400	3,500	6.5×10 ⁻³	6,300	2,600	1.5	4.5	0.4

SOH-SC (Combination)

Model	Size (±0.3mm)						Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min ⁻¹)	Moment of Inertia (kg·m ²)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	L ₂	F ₁	F ₂	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOH-16SC	16	20.9	4.7	7.7	2.2	2.7	M3/M2.6	0.7/1	1	2	13,000	2.9×10 ⁻⁷	65	7.5	1.5	1	0.1
SOH-20SC	20	22.8	5.1	8	2.4	2.8	M4/M2.6	1.7/1	1.5	3	11,000	7.2×10 ⁻⁷	120	12.6	1.5	1.5	0.1
SOH-25SC	25.5	28.7	6.9	10.2	3.1	3.5	M4/M3	1.7/1.7	2.5	5	10,000	2.6×10 ⁻⁶	200	26	1.5	2	0.1
SOH-32SC	32	38.3	8	14.4	3.8	4.9	M5/M4	4/3.5	7	14	9,000	7.8×10 ⁻⁶	620	50.3	1.5	2.5	0.2

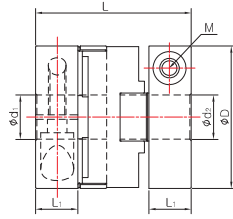
Model	Standard Inner Diameter (d ₁ , d ₂) (mm)																															
	3	4	5	6	6.35	8	9	9.525	10	11	12	14	15	16	18	19	20	22	24	25	25.4	28	30	32	35	40	42	45	50	55	60	
SOH-16□□	●	●	●	●																												
SOH-20□□		●	●	●	●	●																										
SOH-25□□			●	●	●	●	●	●	●																							
SOH-32□□				●	●	●	●	●	●	●	●	●	●																			
SOH-43□□						●	●	●	●	●	●	●	●	●	●	●																
SOH-53□□									●	●	●	●	●	●	●	●	●	●	●	●												
SOH-57□□													●	●	●	●	●	●	●	●	●	●	●									
SOH-70□□													●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
SOH-90□□													●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
SOH-120□□																				●	●	●	●	●	●	●	●	●	●	●	●	

חריץ לשבם אופציונלי
טולרנס מומלץ לציר h7

Model	Max. Torque (N.m)	Slip Torque (N.m) by Inner Diameter (d ₁ , d ₂)																		
		3	4	5	6	6.35	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25
SOH-16C	2	1.9																		
SOH-20C	3		2.3	2.4																
SOH-25C	5			3.1	3.5	3.9														
SOH-32C	14				7.2	8.4														
SOH-43C	25						15	15.7	18.5	18.2	21									
SOH-53C	40								22	22.4	23.8									
SOH-57C	68												42	46.2	49	51.8	56.7			
SOH-70C	130												121							
SOH-90C	210												168	192						
SOH-120C	400																			344

Side-clamp

SOHM



נבה: אלומיניום
גומי: POM
בורג הידוק: SCM435

Model	Size ($\pm 0.3\text{mm}$)				Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOHM-12C	11.9	16.5	5	2.5	M2	0.5	0.9	1.8	15,000	7.4×10^{-8}	55	3.5	1.5	1	0.05
SOHM-16C	16	20.7	6.1	3	M2.6	1	1	2	13,000	2.6×10^{-7}	65	7.4	1.5	1	0.1
SOHM-20C	20	21.9	6.1	2.9	M2.6	1	1.5	3	11,000	6.8×10^{-7}	120	12	1.5	1.5	0.1
SOHM-25C	25.5	26.4	7.4	3.7	M3	1.7	2.5	5	10,000	2.2×10^{-6}	200	23	1.5	2	0.1
SOHM-32C	32	34.9	9.5	4.7	M4	3.5	7	14	9,000	6.8×10^{-6}	620	44	1.5	2.5	0.2
SOHM-43C	43	47	14.7	7.3	M5	8	12.5	25	8,000	3.0×10^{-5}	1,200	114	1.5	3	0.15
SOHM-53C	53	53.1	16.9	8.3	M5	8	20	40	7,400	8.3×10^{-5}	1,400	197	1.5	3.2	0.15
SOHM-57C	57	56.8	18	8.7	M6	13	34	68	6,000	1.2×10^{-4}	2,600	232	1.5	3.5	0.2
SOHM-70C	73	75.5	25	12.3	M8	30	60	120	4,500	4.5×10^{-4}	4,800	547	1.5	3.5	0.2

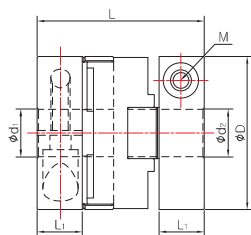
Model	Standard Inner Diameter (d_1, d_2) (mm)																			
	3	4	4.5	5	6	6.35	8	9	9.525	10	11	12	14	15	16	18	19	20	22	24
SOHM-12C	●	●	●	●																
SOHM-16C	●	●		●	●															
SOHM-20C		●		●	●	●	●													
SOHM-25C				●	●	●	●	●	●	●										
SOHM-32C					●	●	●	●	●	●	●	●	●	●						
SOHM-43C							●	●	●	●	●	●	●	●	●	●	●			
SOHM-53C										●	●	●	●	●	●	●	●	●	●	●
SOHM-57C														●	●	●	●	●	●	●
SOHM-70C														●	●	●	●	●	●	●

חריץ לשגם אופציונלי
טולרנס מומלץ לציר H7

Model	Max. Torque (N·m)	Slip Torque (N·m) by Inner Diameter (d_1, d_2)															
		3	4	4.5	5	6	6.35	8	9.525	10	11	12	14	15	16	18	
SOHM-12C	1.8	0.5	0.6	1	1.2												
SOHM-16C	2	0.6	1		1.2	1.4											
SOHM-20C	3		1.4		1.5	1.8	2.7										
SOHM-25C	5				1.8	2.6	3.6										
SOHM-32C	14					5	5.9	6.8	8.4	12.5	13.4						
SOHM-43C	25							14.7	18.8	22.6							
SOHM-53C	40									24.8	26.4	29	33.3				
SOHM-57C	68													49.6	57.6	62.4	
SOHM-70C	130													96	112		

Side-clamp

SOHMP



נבה: אלומיניום
גומי: PEEK (Polyether Ether Ketone)
בורג הידוק: SUSXM7

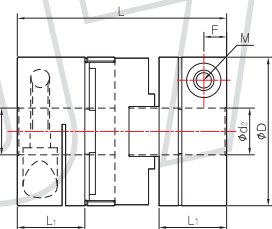
Model	Size ($\pm 0.3\text{mm}$)				Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOHMP-20C	20	21.9	6.1	2.9	M2.6	1	1.2	2.4	11,000	6.8×10^{-7}	80	12	1.5	1.5	0.1
SOHMP-25C	25.5	26.4	7.4	3.7	M3	1.7	2	4	10,000	2.2×10^{-6}	120	23	1.5	2	0.1
SOHMP-32C	32	34.9	9.5	4.7	M4	3.5	5.6	11.2	9,000	6.8×10^{-6}	300	44	1.5	2.5	0.2

Model	Standard Inner Diameter (d ₁ , d ₂) (mm)												
	3	4	5	6	6.35	8	9	9.525	10	11	12	14	15
SOHMP-20C		●	●	●	●	●							
SOHMP-25C			●	●	●	●	●	●	●				
SOHMP-32C				●	●	●	●	●	●	●	●	●	●

חרץ לשבם אופציונלי
הולרנס מומלץ לציר h7

Side-clamp

SOHV



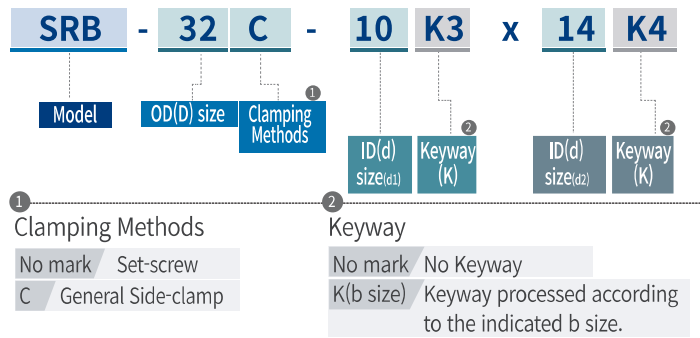
נבה: אלומיניום
מאריך: Vespel (פוליאימיד)
בורג הידוק: SUSXM7

Model	Size ($\pm 0.3\text{mm}$)				Screw		Rated Torque (N·m)	Max. Torque (N·m)	Max. rpm (min^{-1})	Moment of Inertia ($\text{kg}\cdot\text{m}^2$)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N·m)							Angular (°)	Parallel (mm)	End-play (mm)
SOHV-20C	20	25.7	8	2.8	M2.6	1	0.8	1.6	11,000	1.7×10^{-6}	96	31	1.5	1.5	0.1
SOHV-25C	25.5	32	10.2	3.5	M3	1.7	1.4	2.7	10,000	5.7×10^{-6}	144	62	1.5	2	0.1
SOHV-32C	32	44.7	14.4	4.9	M4	3.5	3.8	7.6	9,000	1.8×10^{-5}	360	125	1.5	2.5	0.2

Model	Standard Inner Diameter (d ₁ , d ₂) (mm)												
	3	4	5	6	6.35	8	9	9.525	10	11	12	14	15
SOHV-20C		●	●	●	●	●							
SOHV-25C			●	●	●	●	●	●	●				
SOHV-32C				●	●	●	●	●	●	●	●	●	●

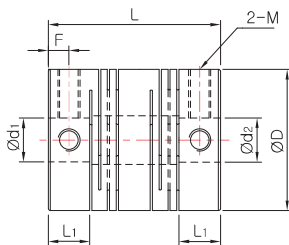
חרץ לשבם אופציונלי
הולרנס מומלץ לציר h7

אפיון מוצר

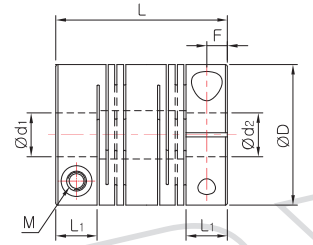


SRB

Set-Screw (SRB-no mark)



Side-clamp (SRB-C)



נבה: אלומיניום T6-7075 AL
בורג הידוק: SCM435

Set-screw

Model	Size (±0.3mm)				Screw		Rated Torque (N-m)	Max. Torque (N-m)	Max. rpm (min ⁻¹)	Moment of Inertia (kg·m ²)	Static Torsional Stiffness (N-m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N-m)							Angular (°)	Parallel (mm)	End-play (mm)
SRB-8	7.9	14	3.5	1.7	M2	0.3	0.1	0.2	50,000	1.2 × 10 ⁻⁸	16	1.5	2.5	0.1	±0.2
SRB-12	12.7	18	4.5	2.2	M2.5	0.5	0.2	0.4	40,000	1.1 × 10 ⁻⁷	40	4.4	2.5	0.1	±0.3
SRB-16	16	18.5	4.7	2.3	M3	0.7	0.4	0.8	30,000	2.8 × 10 ⁻⁷	75	7.2	2.5	0.15	±0.3
SRB-19	19.1	22	6	2.9	M3	0.7	0.6	1.2	24,000	6.4 × 10 ⁻⁷	150	12	2.5	0.15	±0.3
SRB-22	22.2	25	6.5	3.2	M4	1.7	1	2	20,000	1.4 × 10 ⁻⁶	200	17.4	2.5	0.15	±0.4
SRB-26	26.2	30	7.7	3.4	M4	1.7	2	4	18,000	3.1 × 10 ⁻⁶	340	29.2	2.5	0.2	±0.4
SRB-32	31.8	39	9.4	4.7	M5	4	3.8	7.6	18,000	9.4 × 10 ⁻⁶	450	56.8	2.5	0.2	±0.4
SRB-39	39	56	16	5.9	M5	4	7	14	12,000	2.8 × 10 ⁻⁵	640	124	2.5	0.25	±0.4
SRB-49	49	70	19.8	9.4	M6	7	15	30	10,000	1.0 × 10 ⁻⁴	1,500	280	2.5	0.25	±0.5
SRB-60	60	88	19	9	M8	15	30	60	8,500	2.7 × 10 ⁻⁴	2,500	500	2.5	0.3	±0.5

Side-clamp

Model	Size (±0.3mm)				Screw		Rated Torque (N-m)	Max. Torque (N-m)	Max. rpm (min ⁻¹)	Moment of Inertia (kg·m ²)	Static Torsional Stiffness (N-m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N-m)							Angular (°)	Parallel (mm)	End-play (mm)
SRB-12C	12.7	19	5	2.5	M2	0.5	0.2	0.4	35,000	1.1 × 10 ⁻⁷	40	4.4	2.5	0.1	±0.3
SRB-16C	16	21.5	6.1	3	M2.6	1	0.4	0.8	27,000	3.1 × 10 ⁻⁷	75	8.2	2.5	0.15	±0.3
SRB-19C	19.1	23	6.2	3.1	M2.6	1	0.6	1.2	20,000	6.4 × 10 ⁻⁷	150	12	2.5	0.15	±0.3
SRB-22C	22.2	26.5	7.2	3.6	M3	1.7	1	2	18,000	1.4 × 10 ⁻⁶	200	17.9	2.5	0.15	±0.4
SRB-26C	26.2	31.5	7.5	3.7	M3	1.7	2	4	17,000	3.2 × 10 ⁻⁶	340	29.9	2.5	0.2	±0.4
SRBA-32C	31.8	39	9.4	4.7	M4	3.5	3.8	7.6	14,000	8.6 × 10 ⁻⁶	450	54.9	2.5	0.2	±0.4
SRBB-32C	31.8	44	9.4	4.7	M4	3.5	3.8	7.6	14,000	1.0 × 10 ⁻⁵	450	62.3	2.5	0.2	±0.4
SRBA-39C	39	43	10.7	5.3	M5	8	7	14	10,000	2.1 × 10 ⁻⁵	640	87.8	2.5	0.25	±0.4
SRBB-39C	39	56	12	5.5	M5	8	7	14	10,000	2.8 × 10 ⁻⁵	640	117	2.5	0.25	±0.4
SRBA-49C	49	63.5	15.1	7.5	M6	13	15	30	10,000	8.4 × 10 ⁻⁵	1,500	236	2.5	0.25	±0.5
SRBB-49C	49	70	14.5	7.2	M6	13	15	30	8,400	1.0 × 10 ⁻⁴	1,500	258	2.5	0.25	±0.5
SRBA-60C	60	76.2	19	9.4	M8	30	30	60	7,000	2.2 × 10 ⁻⁴	2,500	407	2.5	0.25	±0.5
SRBB-60C	60	88	19	9.4	M8	30	30	60	7,000	2.6 × 10 ⁻⁴	2,500	483	2.5	0.25	±0.5

מיסבים

מערכות ליניאריות

שינוע והרמה

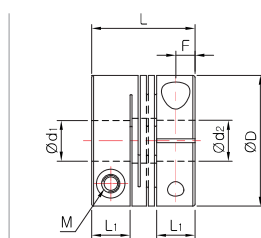
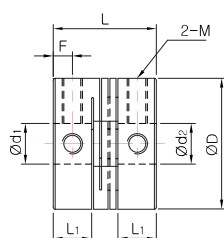
מקשרים / קופלונגים

זיוד

גלגלי זימון ומגורות

Model	Standard Inner Diameter (d ₁ , d ₂) (mm)																			
	2	3	4	5	6	6.35	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25
SRB-8□	●	●																		
SRB-12□		●	●	●																
SRB-16□		●	●	●	●															
SRB-19□			●	●	●	●	●													
SRB-22□				●	●	●	●	●	●											
SRB-26□				●	●	●	●	●	●	●	●									
SRB□-32□							●	●	●	●	●	●	●							
SRB□-39□									●	●	●	●	●	●	●	●				
SRB□-49□											●	●	●	●	●	●	●			
SRB□-60□													●	●	●	●	●	●	●	●

 חריץ לשנם אופציונלי
 סולרנס מומלץ לציר 77

Set-Screw (SRBM-no mark)
Side-clamp (SRBM-C)
SRBM

 נבה: אלומיניום AL-7075-T6
 בורג הידוק: SCM435

Set-screw

Model	Size (±0.3mm)				Screw		Rated Torque (N-m)	Max. Torque (N-m)	Max. rpm (min ⁻¹)	Moment of Inertia (kg-m ²)	Static Torsional Stiffness (N-m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N-m)							Angular (°)	Parallel (mm)	End-play (mm)
SRBM-12	12.7	13	4.5	2.2	M2.5	0.5	0.2	0.4	40,000	8.0×10 ⁻⁸	60	3.2	1	-	±0.15
SRBM-16	16	14	5	2.4	M3	0.7	0.4	0.8	30,000	2.2×10 ⁻⁷	130	5.8	1	-	±0.15
SRBM-19	19.1	17	6.3	3.1	M3	0.7	0.6	1.2	24,000	5.3×10 ⁻⁷	160	10	1	-	±0.15
SRBM-22	22.2	19	6.9	3.3	M4	1.7	1	2	20,000	1.1×10 ⁻⁶	180	14	1	-	±0.15
SRBM-26	26.2	22	7.9	3.8	M4	1.7	2	4	18,000	2.5×10 ⁻⁶	480	25	1	-	±0.15
SRBM-32	31.8	29	10.5	5.1	M5	4	3.8	7.6	16,000	6.9×10 ⁻⁶	780	44.9	1	-	±0.15

Side-clamp

Model	Size (±0.3mm)				Screw		Rated Torque (N-m)	Max. Torque (N-m)	Max. rpm (min ⁻¹)	Moment of Inertia (kg-m ²)	Static Torsional Stiffness (N-m/rad)	Mass (g)	Permissible Misalignment		
	D	L	L ₁	F	Size	Fastening Torque (N-m)							Angular (°)	Parallel (mm)	End-play (mm)
SRBM-12C	12.7	14	5	2.5	M2	0.5	0.2	0.4	35,000	7.9×10 ⁻⁸	60	3.2	1	-	±0.15
SRBM-16C	16	16	6	3	M2.6	1	0.4	0.8	27,000	2.3×10 ⁻⁷	130	6.3	1	-	±0.15
SRBM-19C	19.1	17	6.3	3.1	M2.6	1	0.6	1.2	20,000	5.0×10 ⁻⁷	160	9.2	1	-	±0.15
SRBM-22C	22.2	20	7.4	3.7	M3	1.7	1	2	18,000	1.1×10 ⁻⁶	180	15	1	-	±0.15
SRBM-26C	26.2	23	8.4	4.1	M3	1.7	2	4	17,000	2.5×10 ⁻⁶	480	25	1	-	±0.15
SRBM-32C	31.8	30	11	5.4	M4	3.5	3.8	7.6	14,000	6.8×10 ⁻⁶	780	44	1	-	±0.15

Model	Standard Inner Diameter (d ₁ , d ₂) (mm)											
	3	4	5	6	6.35	8	9.525	10	11	12	14	15
SRBM-12□	●	●	●									
SRBM-16□	●	●	●	●								
SRBM-19□		●	●	●	●	●						
SRBM-22□			●	●	●	●	●	●				
SRBM-26□			●	●	●	●	●	●	●	●		
SRBM-32□				●	●	●	●	●	●	●	●	●

 חריץ לשנם אופציונלי
 סולרנס מומלץ לציר 77