

# HITEX COUPLINGS



## HKK CURVED JAW COUPLINGS

**HITEX**  
POWER TRANSMISSION COMPONENTS



# CURVED JAW COUPLINGS



## Specifications

- Torque range  
10 - 7.500 Nm
- Torsionally flexible
- Failsafe
- Vibration reducing
- Axial plug-in

## Coupling selection

The HKK jaw coupling selection should be made according to DIN 740-2. Proper dimensioning of the coupling should be done to ensure that the permissible coupling load never is exceeded in any operating condition.

Verify the rated torque of the application ( $T_N$ ) by the following formula:

$$T_N \text{ (Nm)} = 9550 \cdot \frac{P \text{ (kW)}}{n \text{ (rpm)}}$$

The nominal torque of the coupling ( $T_{KN}$ ) should be equal or higher to the application torque taking the ambient temperature in consideration.

$$T_{KN} \geq T_N \cdot S_t$$

The maximum torque of the coupling ( $T_{KNmax}$ ) should be equal or higher to the peak torque ( $T_s$ ) multiplied by the servicefactors for temperature ( $S_t$ ), starting frequency ( $S_z$ ) and shocks ( $S_U$ ).

$$T_{KNmax} \geq T_s \cdot S_t \cdot S_z \cdot S_U$$

The vibratory torque which the coupling ( $T_{KW}$ ) can bear should be equal or higher to the vibratory torque of the application ( $T_w$ ) multiplied by the Servicefactor for temperature  $S_t$ .

$$T_{KW} \geq T_w \cdot S_t$$

## Servicefactors

Servicefactor for starting frequency $S_z$				
Starting frequency per hour	100	200	400	800
$S_z$	1,0	1,2	1,4	1,6

Servicefactor for temperature $S_t$				
Temperature range	-30° C +30° C	+40° C	+60° C	+80° C
$S_t$	1,0	1,2	1,4	1,6

Servicefactor for shocks $S_U$	
Gentle shock load	1,5
Medium shock load	1,8
Heavy shock load	2,5

## Shaft-hub connection

The shaft-hub connection should always be verified by the customer. The maximum torque of the drive should always be lower than the torque which the shaft-hub connection can bear. In case of keyway connection it is recommended to verify the permissible surface pressure of the coupling hub.



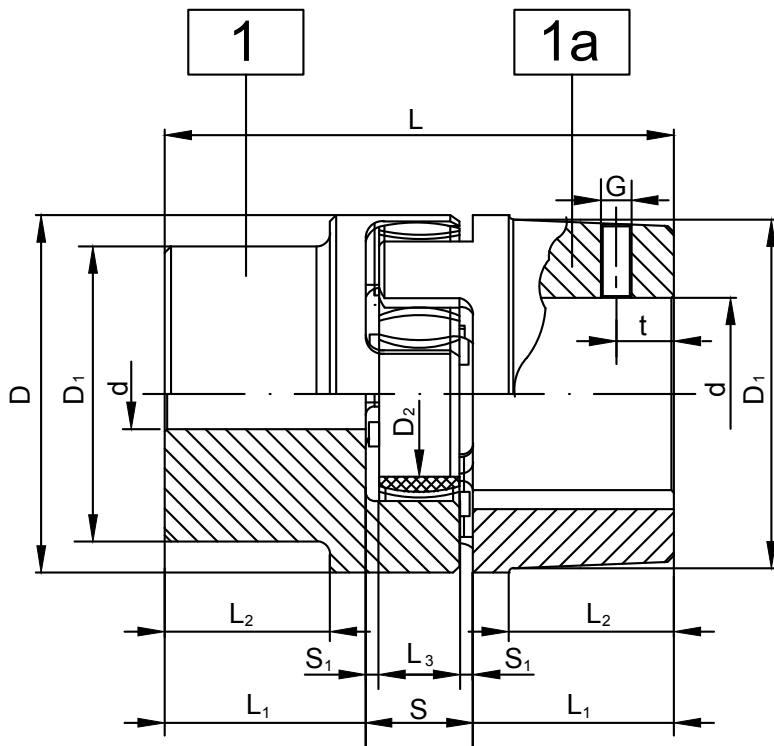
### Technical data

Size	Rated Torque (Nm)									Max. speed		Max. displacements (92 and 98 Sh-A)		
	92 Shore-A			95/98 Shore-A			64 Shore-D							
	Rated $T_{KN}$	Max. $T_{KNmax}$	Vibratory $T_{KW}$	Rated $T_{KN}$	Max. $T_{KNmax}$	Vibratory $T_{KW}$	Rated $T_{KN}$	Max. $T_{KNmax}$	Vibratory $T_{KW}$	V=30 m/s iron	V=40 m/s steel	Axial $\Delta ka$ (mm)	Radial $\Delta kr$ (mm)	Angular $\Delta kw$ (°)
19	10	20	3	17	34	4	21	42	5,5	14.000	19.000	1,2	0,20	1,2
24	35	70	9	60	120	16	75	150	20	10.600	14.000	1,4	0,22	0,9
28	95	190	25	160	320	42	200	400	52	8.500	11.800	1,5	0,25	0,9
38	190	380	49	325	650	85	405	810	105	7.100	9.500	1,8	0,28	1,0
42	265	530	69	450	900	120	560	1.120	145	6.000	8.000	2,0	0,32	1,0
48	310	620	81	525	1.050	137	655	1.310	170	5.600	7.100	2,1	0,36	1,1
55	375	750	93	625	1.250	163	750	1.500	195	4.750	6.300	2,2	0,38	1,1
65	625	850	111	900	1.300	169	800	1.600	208	4.250	5.600	2,6	0,42	1,2
75	975	1.950	254	1.500	3.000	390	1.830	3.660	476	3.550	4.750	3,0	0,48	1,2
90	2.400	4.800	624	3.600	7.200	963	4.500	9.000	1.170	2.800	3.750	3,4	0,50	1,2
100	3.300	6.600	858	4.950	9.900	1.287				2.500	3.350	3,8	0,52	1,2
110	4.000	8.000	1.040	6.000	12.000	1.560				2.240	3.000	4,2	0,55	1,3
125	5.000	10.000	1.300	7.500	15.000	1.950				2.000	2.650	4,6	0,60	1,3

### Standard programme cylindrical finish bore [mm] H7 keyway to DIN 6885 sheet 1 [J59] with thread for setscrew

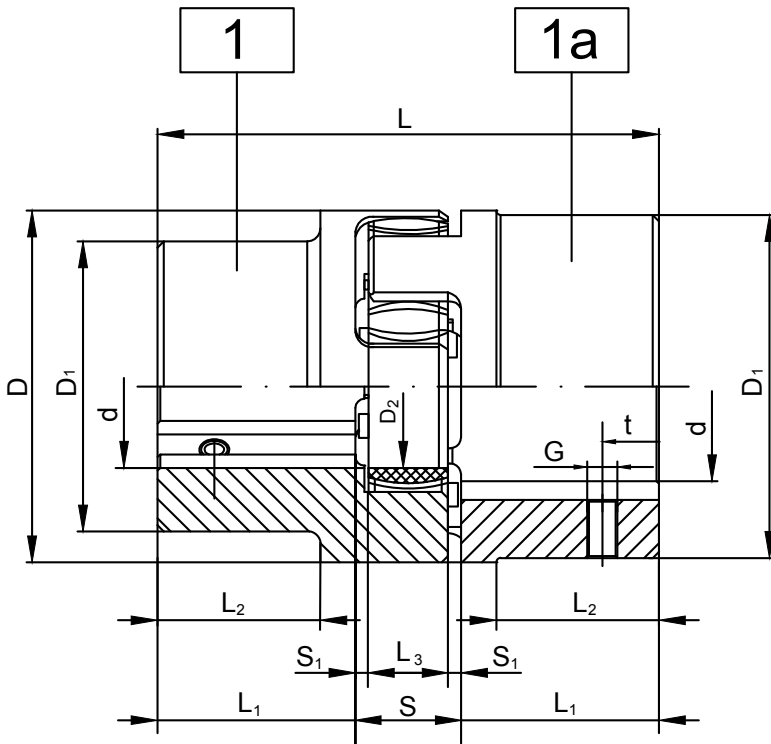
Size	Material	Unbored	Ø8	Ø9	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø26	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø75	Ø80	Ø85	Ø90	Ø100		
19	AL-D	•	•		•	•	•	•	•	•	•	•	•	•	•	•																							
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																						
24	AL-D	•			•	•	•	•	•	•	•	•	•	•	•	•	•																						
	St	•			•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
28	AL-D	•					•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	St	•					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
38	GG	•								•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	St	•								•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
42	GG	•										•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	St	•										•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
48	GG	•														•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	St	•														•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
55	GG	•															•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	St	•																					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
65	GG	•																					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	St	•																						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
75	GG	•																						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	St	•																						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
90	GG	•																							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	St	•																							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

# CURVED JAW COUPLINGS



## HKK Aluminium (Al-D)

Size	Hub type	Spider			Finish bore d (min-max)	Dimensions (mm)										Thread for setscrews		
		92 Sh-A	98 Sh-A	64 Sh-D		D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	S	S <sub>1</sub>	G	t	T <sub>A</sub> (Nm)	
19	1	10	17	-	6 - 19	41	32	18	66	25	20	12	16	2	M5	10	2	
	19 - 24				41													
24	1	35	60	-	9 - 24	56	40	27	78	30	24	14	18	2	M5	10	2	
	22 - 28				55													
28	1	95	160	-	10 - 28	66	48	30	90	35	28	15	20	2,5	M8	15	10	
	28 - 38				66													



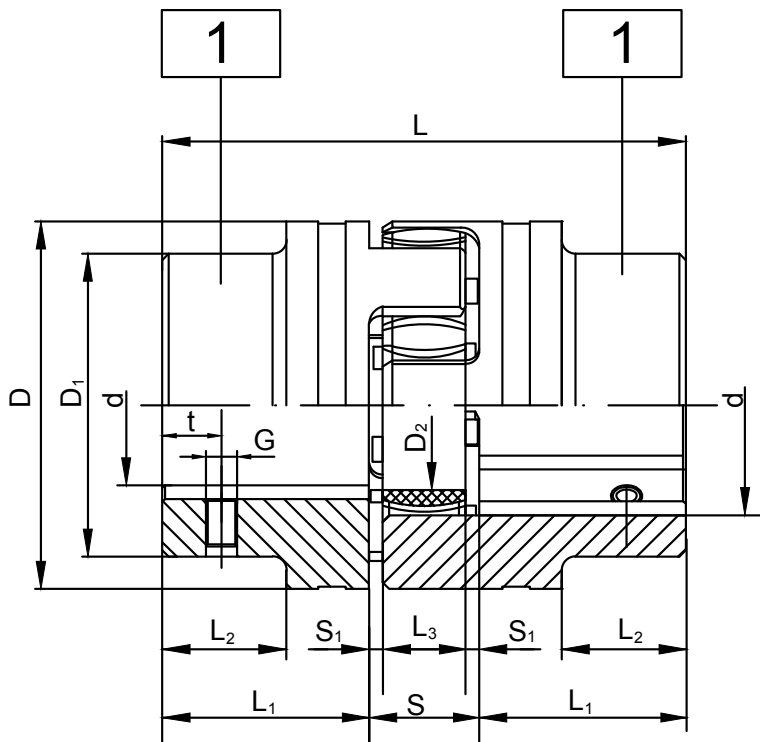
### HKK Cast iron (GJL)

Size	Hub type	Spider			Finish bore d (min-max)	Dimensions (mm)										Thread for setscrews		
		Rated torque (Nm)				D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	S	S <sub>1</sub>	G	t	T <sub>A</sub> (Nm)	
		92 Sh-A	98 Sh-A	64 Sh-D														
38	1	190	325	405	12 - 40	80	66	38	114	45	37	18	24	3	M8	15	10	
	38 - 48				78													
42	1	265	450	560	14 - 45	95	75	46	126	50	40	20	26	3	M8	20	10	
	42 - 55				94													
48	1	310	525	655	15 - 52	105	85	51	140	56	45	21	28	3.5	M8	20	10	
	48 - 62				104													
55	1	410	685	825	20 - 60	120	98	60	160	65	52	22	30	4	M10	20	17	
	55 - 74				118													
65	1	625	940	1.175	22 - 70	135	115	68	185	75	61	26	35	4.5	M10	20	17	
75	1	1.280	1.920	2.400	30 - 80	160	135	80	210	85	69	30	40	5	M10	25	17	
90	1	2.400	3.600	4.500	40 - 97	200	160	100	245	100	81	34	45	5.5	M12	30	40	

### HKK Nodular iron (GJS)

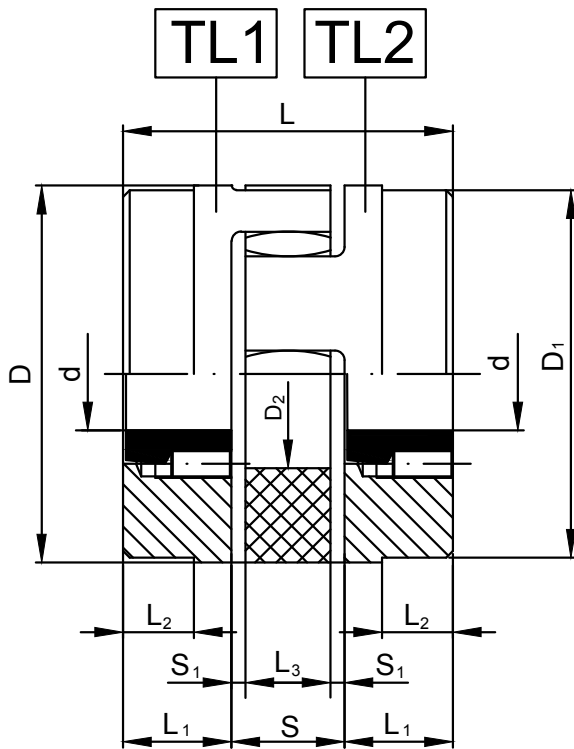
Size	Hub type	Spider			Finish bore d (min-max)	Dimensions (mm)										Thread for setscrews		
		Rated torque (Nm)				D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	S	S <sub>1</sub>	G	t	T <sub>A</sub> (Nm)	
		92 Sh-A	98 Sh-A	64 Sh-D														
100	1	3.300	4.950	6.185	50 - 115	225	180	113	270	110	89	38	50	6	M12	30	40	
110	1	4.800	7.200	9.000	60 - 125	255	200	127	295	120	96	42	55	6.5	M16	35	80	
125	1	6.650	10.000	12.500	60 - 145	290	230	147	340	140	112	46	60	7	M16	40	80	

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## HKK Steel (St)

Size	Hub type	Spider			Finish bore d (min-max)	Dimensions (mm)										Thread for setscrews		
		Rated torque (Nm)				D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	S	S <sub>1</sub>	G	t	T <sub>A</sub> (Nm)	
		92 Sh-A	98 Sh-A	64 Sh-D														
19	1a	10	17	21	0 - 25	40	40	18	66	25	-	12	16	2	M5	10	2	
24	1a	35	60	75	0 - 35	55	55	27	78	30	-	14	18	2	M5	10	2	
28	1a	95	160	200	0 - 40	65	65	30	90	35	-	15	20	2,5	M8	15	10	
38	1	190	325	405	0 - 48	80	70	38	114	45	27	18	24	3	M8	15	10	
42	1	265	450	560	0 - 55	95	85	46	126	50	28	20	26	3	M8	20	10	
48	1	310	525	655	0 - 62	105	95	51	140	56	32	21	28	3,5	M8	20	10	
55	1	410	685	825	0 - 74	120	110	60	160	65	37	22	30	4	M10	20	17	
65	1	625	940	1.175	0 - 80	135	115	68	185	75	47	26	35	4,5	M10	20	17	
75	1	1.280	1.920	2.400	0 - 95	160	135	80	210	85	53	30	40	5	M10	25	17	
90	1	2.400	3.600	4.500	0 - 110	200	160	100	245	100	62	34	45	5,5	M12	30	40	



### HKK-TL Taper clamping bush

Size	Taper bush	Dimensions (mm)									Fixing screw for taper bush		
		D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	S	S <sub>1</sub>	Lenght	Number	T <sub>A</sub> (Nm)
28	1108	65	65	30	66	23		15	20	2,5	13	2	5,7
38	1108	80	78	38	70	23	15	18	24	3	13	2	5,7
42	1610	95	94	46	78	26	16	20	26	3	16	2	20
48	1615	105	104	51	106	39	28	21	28	3,5	16	2	20
55	2012	120	118	60	96	33	20	22	30	4	22	2	31
75	2517	160	135	80	144	52	36	30	40	5	25	2	49
	32										2	92	

\* Only available in TL2 design



### Taper clamping bush

Size	Available bore dimensions d (mm) H7 keyway to DIN 6885 sheet 1 [JS9]																										
	Ø10	Ø11	Ø12	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø70	Ø75		
1108	•	•	•	•	•	•	•	•	•	•	•																
1610				•	•	•	•	•	•	•	•	•	•	•	•	•	•										
1615				•	•	•	•	•	•	•	•	•	•	•	•	•	•										
2012				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
2517					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
3020											•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

# PRODUCT GROUPS



Couplings



Locking Assemblies



Universal Joints



Clutches & Brakes



Brakes



Collars

## Skilled to get your ideas fulfilled

HITEX is a range of power transmission components dedicated to add value to all OEM industrial creations.

HITEX is produced using the latest technology & rich experience of its factories to provide innovative and cost-effective engineered solutions.

Honored to have the opportunity to serve OEM customers worldwide, HITEX provides prompt and reliable deliveries to meet all aftersales requirements.

## Our best technology is human

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Company**

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**HITEX**

POWER TRANSMISSION COMPONENTS

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