

The LK Series coupling is a simple two-piece design consisting of an element and hub. The couplings are designed to be used with engine driven, flange mounted, hydraulic pump systems. The couplings are “torsionally stiff” enabling hydraulic pumps and similar equipment with low mass or inertia to operate below critical speeds. The “torsionally stiff” LK Series coupling raises the critical speed above the operating range providing a system free of harmful torsional vibrations. The LK Series is ideal for hydrostatic drives on construction equipment, cranes, forklifts, excavators, vibratory rollers, tractors, etc. Virtually all engine driven hydraulic systems in the low to mid power range can use the LK Series coupling.

Element Features

- Fiberglass reinforced polyamide construction
- Impact and oil resistant
- -40° to 320° F temperature range
- SAE J620 flywheel sizes 6.5 through 14 and various metric sizes
- Universal element can be mounted to an adapter plate
- Blind assembly, no lubrication

Hub Features

- High quality powdered-metal construction
- Splined hubs available with L-LOC clamping system
- Engagement “dogs” are slightly crowned to avoid edge pressure when slight misalignment occurs
- Available in bore with keyway and spline connections

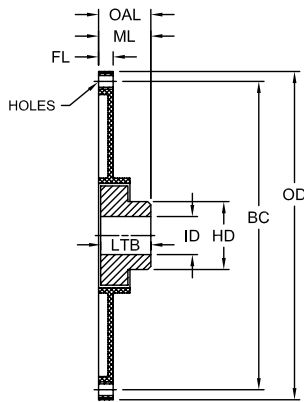


Typical Applications

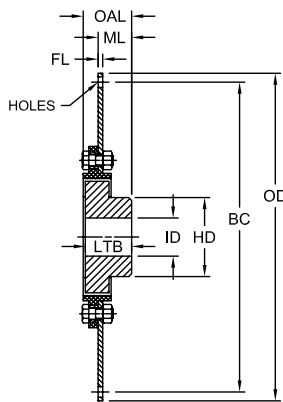
Applications where a hydraulic pump is directly connected to the engine such as wheel loaders, hydraulic excavators, vibration rollers, fork lift trucks, concrete cutters, compact loaders, asphalt finishers and mobile cranes.

LK Series Performance Data

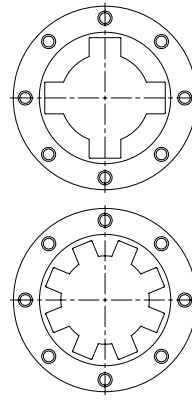
Size	SAE Flywheel Size	Nominal Torque T _{KN}		Maximum Torque T _{Kmax}		Maximum Speed RPM	Dynamic Torsional Stiffness								Relative Damping Ψ
							C _{Tdyn}								
							0.25T _{KN}		0.50T _{KN}		0.75T _{KN}		1.00T _{KN}		
in-lb	Nm	in-lb	Nm	lb-in/rad	kNm/rad	lb-in/rad	kNm/rad	lb-in/rad	kNm/rad	lb-in/rad	kNm/rad	lb-in/rad	kNm/rad		
LK80	—	1,080	125	2,880	330	6,000	Consult Lovejoy								0.4
LK100	6.5, 7.5, 8, 10	3,540	400	7,080	800	5,000	490	55	550	62	800	90	1,060	120	
LK125	10, 11.5	7,080	800	14,160	1 600	4,500	1,370	155	1,590	180	2,800	315	4,070	460	
LK150	11.5, 14	10,620	1 200	26,400	3 000	4,000	2,300	260	2,480	280	3,700	420	7,950	900	
LK150D	14	21,240	2 400	58,200	6 000	4,000	4,600	520	4,960	560	7,400	840	15,900	1 800	



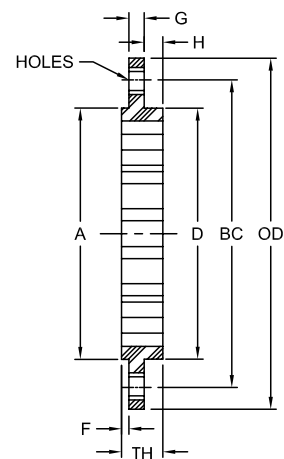
1-Piece Flange



2-Piece Flange
Universal + Plate



4, 6 and 8 Dog Patterns
Dependent on Size



LK Series - SAE J620 Flywheel Application Dimensional Data

Size	Nominal Torque Rating in-lb Nm	ID				Flange Dimensions								Hubstar Dimensions		Assembly Dimensions								
		Min Bore		Max Bore		SAE Flywheel Size		Flange Style		Number & Dia of Holes		Flange Thickness		in mm		in mm		Mounting Length						
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm					
		in mm		in mm		in mm		in mm		in mm		in mm		in mm		in mm		in mm						
LK100	3,540 400	0.563	15	1.563	40	6.5	1-PIECE	8.500	215.9	7.875	200.0	6 x 0.33	6 x 8.5	0.55	14	2.56	65	—	—	—	—	—	—	
						7.5	1-PIECE	9.500	241.3	8.750	222.3	8 x 0.33		0.55	14			1.26	32	1.34	34	0.906 ± 0.118	23+/-3	
						8	1-PIECE	10.375	263.5	9.625	244.5	6 x 0.41		6 x 10.5	0.55			14	2.20	56	2.28	58	2.284 ± 0.118	58+/-3
						10	1-PIECE	12.375	314.3	11.625	295.3	8 x 0.41		0.55	14			1.89	48	1.97	50	1.969 ± 0.118	50+/-3	
LK125	7,080 800	0.813	20	2.125	55	10	1-PIECE	12.375	314.3	11.625	295.3	8 x 0.41	8 x 10.5	0.79	20	3.35	85	1.89	48	1.97	50	1.969 ± 0.118	50+/-3	
						11.5	1-PIECE	13.875	352.4	13.125	333.4	8 x 0.41		0.19	20			1.97	42	2.05	46	1.417 ± 0.118	36+/-3	
LK150	10,260 1 200	1.000	25	2.750	70	11.5	1-PIECE	13.875	352.4	3.125	333.4	8 x 0.41	8 x 12.7	0.79	20	4.33	110	2.09	53	2.09	53	1.299 ± 0.118	33+/-1	
						14	2-PIECE	18.375	466.7	17.250	438.2	8 x 0.50		0.19	5			2.09	53	2.09	53	0.984 ± 0.118	25+/-1	
LK150D	21,240 2 400	1.188	30	2.750	70	14	**	18.375	466.7	17.250	438.2	8 x 0.50	8 x 12.7	0.19	5	4.33	110	2.05	52	2.13	54	0.984 ± 0.118	25+/-1	

Notes: ■ * indicates: Other shorter or longer hub lengths available for special requirements.
 ■ ** indicates: LK 150D uses 2 Zytel® elements in parallel with 1 steel plate.

LK Series Universal Elements Dimensional Data

Size	G		H		TH		E		OD		BC		D		A		Number of Holes	S Hole Diameter	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		in	mm
LK80-6-106	0.55	14.0	0.38	9.7	0.19	4.8	1.12	2.84	5.910	150	5.118	130	3.600	91.4	4.173	106	5	0.33	8.4
LK80-6-135	0.39	9.9	0.61	15.5	*	*	1.00	25.4	5.315	135	3.937	100	3.629	92.2	5.315	135	3	0.41	10.4
LK100-165	0.39	10.0	0.79	20.0	0.16	4.0	1.34	34.0	6.850	174	5.591	142	4.921	125.0	4.921	125	3	0.49	12.5
LK100-072	0.39	10.0	0.79	20.0	0.16	4.0	1.34	34.0	7.870	200	6.496	165	4.330	110.0	2.835	72	3	0.65	16.5
LK125-195	0.39	10.0	0.55	14.0	0.24	6.0	1.18	30.0	7.680	195	6.496	165	5.315	135.0	5.135	135	6	0.49	12.5
LK150-230	0.39	10.0	0.47	12.0	0.20	5.0	1.06	27.0	9.060	230	7.874	200	6.500	165.0	6.496	165	8	0.49	12.5

Notes: ■ * indicates: LK80-6-135 pilots on the O.D.
 ■ Dimensions for universal elements (for non-SAE flywheels, etc.).