

Jaw In-Shear 6pin

Jaw In-Shear 6 Pin Reduces Downtime, Maintenance, And Inventory Costs

Lovejoy's commitment to continual product improvement is demonstrated in the next generation of the Jaw In-Shear (JIS) coupling - the new Jaw In-Shear 6 Pin. This new design features a unique 6 pin locking system that allows for even easier locking of the element. Lovejoy's L-Type and C-Type Jaw hubs are utilized with this design. No tools are needed, because the element is radially removable, neither hub (for the driver or driven equipment) has to be moved to replace the element.



Choose From 16 Jaw In-Shear 6 Pin Sizes and New Spacer Design

The Jaw In-Shear 6 Pin coupling is available in bore sizes up to 180 mm. The JIS 6 Pin Spacer coupling is designed specifically as a drop-in replacement for a grid spacer coupling. The adapter hubs allow a grid spacer design to be replaced with a non-lubricated JIS 6 Pin Spacer coupling. The JIS 6 Pin Spacer coupling is available in sizes LS090 - CS350. These sizes cover B.S.E. (between shaft end measurement) of 100, 140, and 180 mm depending on coupling size.

Jaw In-Shear 6 Pin Stainless Steel Option

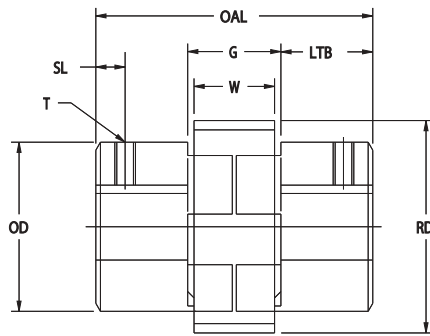
For highly corrosive, heavy washdown environments, the JIS 6 Pin design combined with Lovejoy's stainless steel jaw hubs creates a totally stainless steel coupling.



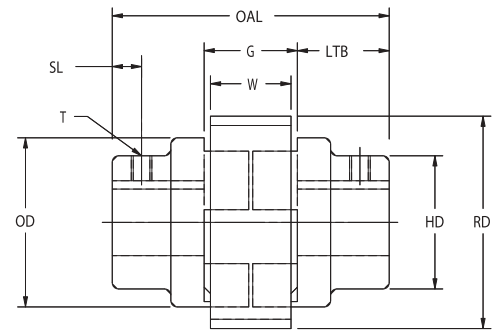
The JIS 6 Pin Coupling Advantage:

- 2 degree angular misalignment capability
 - 0.762 mm - 2.3876 mm parallel misalignment capability
 - Torsional wind-up of 5 degrees at full load
 - 50D shore Urethane material – maximum temperature of 93 C (200 F)
 - The retaining ring is made from #347 cast stainless steel
 - Stainless steel hubs are available for sizes SS075-SS150 from stock
- All other stainless steel hub sizes are available as made to order
- Can be used with AL-type aluminum jaw coupling hubs for AL090/095, AL099, AL100 and AL110
 - The original JIS locking ring is interchangeable with the new JIS 6 Pin elastomer

JIS 6 Pin Coupling Standard Style



Style 1



Style 2

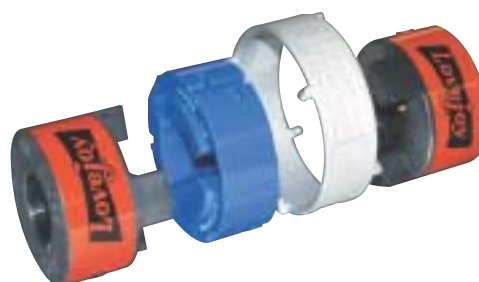
JIS 6 Pin Coupling — Dimensional Chart – mm

Size	Style	OD	OAL	G	LTB	HD	SL	RD	W	T
LS090	1	54	67	25	21	54	11	70	21	M6
LS095	1	54	76	25	25	54	11	70	21	M8
LS099	1	65	89	36	27	65	11	81	31	M8
LS100	1	65	106	36	35	65	11	81	31	M8
LS110	1	84	127	42	43	84	19	102	37	M10
LS150	1	95	138	49	44	95	19	119	43	M10
LS190	2	114	148	49	49	102	22	140	43	M12
LS225	2	127	160	49	55	108	25	156	43	M12
LS276	2	157	240	81	79	127	40	188	75	M12
CS280	2	191	240	81	79	140	40	227	75	M12
CS285	2	216	272	81	95	165	44	254	75	M16
CS300	2	254	311	108	102	184	50	281	130	CSL
CS310	2	279	311	108	114	210	57	307	126	CSL
CS350	2	318	448	124	162	235	81	345	145	CSL
CS400	2	362	512	137	187	273	94	389	157	CSL
CS500	2	419	619	162	229	337	114	446	183	CSL

CSL - Consult Lovejoy

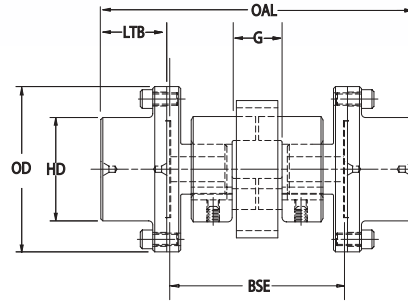
JIS 6 Pin Part Numbers And List Prices

Size	Spider	Ring
LS090/095	71706	71679
LS099/100	71707	71680
LS110	71708	71681
LS150	71709	71682
LS190	71710	71683
LS225	71711	71684
LS276	71712	71685
CS280	71713	71686
CS285	71714	71687
CS300*	72170	72175
CS310*	72171	72176
CS350*	72172	72177
CS400*	72173	72178
CS500*	72174	72179



* 6 Piece Cushion Set

JIS 6 Pin Coupling Spacer Style



Spacer Design

JIS 6 Pin Spacer Coupling — Dimensional Data Chart — mm

Spacer Coupling Size	OD	OAL	G	BSE	Grid Hub Size	LTB	HD	Max Bore Size
LS090	102	170	25	100	1020	35	52	35
		210		140				
		250		180				
LS095	102	170	25	100	1020	35	52	35
		210		140				
		250		180				
LS099	102	170	36	100	1020	35	52	35
		210		140				
		250		180				
LS100	102	170	36	100	1020	35	52	35
		210		140				
		250		180				
LS110	111	223	42	140	1030	41	59	41
		262		180				
LS150	117	248	49	140	1040	54	78	54
		288		180				
LS190	138	260	49	140	1050	60	87	60
LS225	151	326	49	180	1060	73	103	73

Total Service Factor = (K1) x (K2) x (K3)

The torque ratings and service factors are unique for Jaw In-Shear.

Application Service Factor (K1)

Driven Machine Examples	Prime Mover: Electric Motor	
	Std. Torque	High Torque
(a) Uniform operation, with small masses to be accelerated. Hydraulic and centrifugal pumps, light generators, blowers, fans, ventilators, belt/screw conveyors	1.0	1.4
(b) Uniform operation, with medium masses to be accelerated. Sheet metal bending machines, wood working machines, mills, textile machines, mixers	1.4	1.8
(c) Medium masses to be accelerated & irregular operation. Rotating ovens, printing presses, generators, shredders, winders, spinning machines, pumps for viscous fluids	1.7	2.0
(d) Medium masses to be accelerated, irregular operation & shocks. Concrete mixers, drop hammers, cable cars, paper mills, compression pumps, propeller pumps, rope winders, centrifuges	2.0	2.2
(e) Large masses to be accelerated, irregular operation & heavy shocks. Excavators, hammer mills, piston pumps, presses, rotary boring machines, shears, forge presses, stamping presses	2.2	2.4
(f) Very large masses to be accelerated, irregular operation & heavy shocks. Piston type compressors and pumps without speed variations, heavy roll sets, welding machines, brick presses, stone crushers	2.3	2.8

Application Service Factor (K2) For Operation Period

Uninterrupted Time Of Operation	Factor
Up to 8 hours per day	1.0
More than 8 hours, up to 16 hours/day	1.1
More than 16, up to 24 hours/day	1.15

Application Service Factor (K3) For Starts Per Hour

Operation, Per Table (K1):	a-c	d-f
Up to 10 starts/stops per hour	1.0	1.0
More than 10, up to 40 per hour	1.5	1.4
More than 40, up to 125 per hour	1.8	2.0
More than 125, up to 250 per hour	2.2	2.5

Jaw In-Shear Six Pin Coupling Ratings

Size	Max. Bore		Nom. Torque		Max Torque		Coupling Weight kg	Max Speed RPM	mm - Max Misalignment	
	Inch	mm	in-lbs	Nm	in-lbs	Nm			Parallel	Axial
LS090	1.000	25	335	38	670	76	0.68	9,200	0.762	0.787
LS095	1.125	28	335	38	670	76	0.68	9,200	0.762	0.787
LS099	1.188	30	560	63	1,110	125	1.18	7,700	0.762	0.787
LS100	1.375	35	560	63	1,110	125	1.32	7,700	0.762	0.787
LS110	1.625	42	1,090	123	2,180	246	2.68	5,900	0.762	0.787
LS150	1.875	48	1,810	205	3,620	409	3.90	5,200	0.762	0.787
LS190	2.125	55	2,920	330	5,830	659	6.62	4,300	1.194	1.194
LS225	2.625	65	4,200	475	8,400	949	7.71	3,900	1.194	1.194
LS276	2.875	73	7,460	843	14,920	1,686	17.10	3,100	1.194	1.600
CS280	3.000	76	13,300	1,503	26,600	3,006	24.27	2,600	1.194	1.600
CS285	4.000	102	18,760	2,120	37,500	4,237	36.56	2,300	1.194	1.600
CS300	4.875	109	33,000	3,728	66,000	7,457	48.44	2,300	1.600	2.388
CS310	5.625	143	50,000	5,649	100,000	11,298	63.19	2,100	1.600	2.388
CS350	6.375	162	83,333	9,415	166,666	18,831	103.51	1,900	1.600	3.175
CS400	7.375	187	126,667	14,311	253,334	28,623	156.53	1,800	1.600	3.175
CS500	9.000	229	183,333	20,714	366,666	41,428	267.44	1,500	1.600	3.175

Fast Element Replacement



Step 1
Remove element and align hubs.



Step 2
Insert new element.



Step 3
Slide locking ring over element.



Step 4
Twist locking ring to secure.

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