

L Series - Miniature Jaw Style Coupling

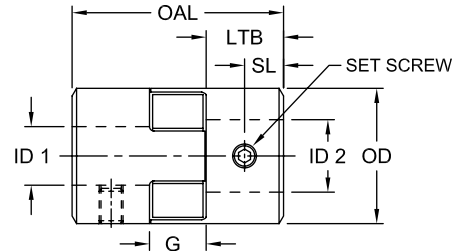
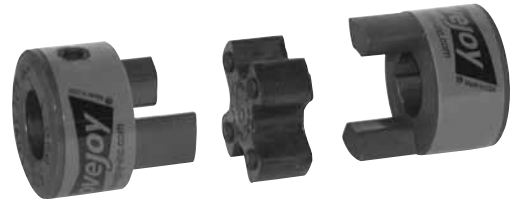
The Lovejoy Miniature Jaw coupling provides positive engagement resulting in great strength because of the large area of contact of the elastomer or “spider” center member with the interlocking jaws. This Miniature coupling provides “fail safe” operations and is the only coupling that will continue to run, even if the elastomer “spider” fails. Torque will continue to be transmitted through the metal jaw contact.

Good torsional stiffness is provided due to high compression loading. Vibration control is provided through the elastomer center member “spider” and its excellent damping ability. Raised “dots”, a Lovejoy feature, designed into the elastomer center member “spider”, separate the jaw of one hub from the face of the other hub, and automatically set the spacing between the hubs.

The Jaw type coupling design provides rubber in compression which accommodates much more load without failure than rubber in shear or tension.

The Miniature Jaw coupling is radially stiff when misaligned beyond its limits of .015 offset and 1° angular. Radial stiffness results in radial loads on the bearings, called reactionary loads. As the elastomer “set” takes place, the radial loads are eased.

The L-line Miniature Jaw coupling consists of two hubs and one spider.



Elastomer Materials

NBR (SOX) Rubber – Nitrile Butadiene Rubber NBR (SOX) is a flexible insert material that is oil resistant, resembles natural rubber in resilience and elasticity and operates effectively in a temperature range of -40° to 212° F (-40° to 100° C). NBR (SOX) also provides good resistance to oil and is the standard Jaw coupling elastomer.

Urethane – Urethane has greater torque capability (1.5 times) than NBR (SOX), provides less damping effect, and operates at a temperature range of - 30° to 160° F (-34° to 71° C) and has good resistance to oil and chemicals.

Hytrel® – Hytrel is a flexible elastomer designed for high torque and high temperature operations. Hytrel can operate in temperatures of -60° to 250° F (- 51° to 121° C) and has an excellent resistance to oil and chemicals.

Bronze – Bronze is a rigid, porous, oil-impregnated metal insert exclusively for slow speed (maximum 250 RPM) applications requiring high torque capabilities. Bronze operations are not affected by extreme temperatures, water, oil or dirt.

Hub Material:	Sintered iron		
Center Material:	NBR (SOX) Rubber	L035 & L050	
	Urethane	L050 only	
	Hytrel®	L050 only	
	Bronze	L050 only	

Features

- Positive engagement with jaw interlocking
- Fail safe
- Good torsional stiffness
- Vibration damping ability
- Easy to install
- Center elastomer dits keep hubs form touching
- Exceptional overload capacity
- Spider arms are in compression
- Widely distributed
- Choice in center elastomer hardness

L Series Dimensional Data

Size	Torque Nominal Sox in-lbs	OAL		LTB		SL		ID1 - ID2			
		in	mm	in	mm	in	mm	Min Bore		Max Bore	
								in	mm	in	mm
L-035	3.5	0.752	19.1	0.276	7	33	3	0.118	3	0.394	10
L-050	26.3	1.34	20.3	0.472	12	128	8	0.236	6	0.630*	16

L Series Dimensional Data

Continued

Size	G		OD		Approximate Weight (lbs)		Moment of Inertia lb-in ² (solid)	Set Screw Size mm
	in	mm	in	mm	Solid lbs	Max Bore lbs		
L-035	0.276	7	0.630	16	0.1	0.083	0.003	M2
L-050	0.630	16	1.063	27	0.3	0.240	0.054	M2.5

- Notes:
- * indicates: Maximum bore without keyway.
 - Specify keyway size if needed when ordering.
 - Specify bore sizes ID1 and ID2 when ordering.