MOL Series - Oldham Style Coupling

The Lovejoy Oldham coupling is a precision engineered, torsionally stiff, three-piece coupling suitable for a great many applications ranging from incremental control of fluid valves to highly dynamic drives in closed loop servo systems. It accommodates misalignment mechanically through a floating disc that engages tenons machined out of the hubs. As the coupling rotates, the floating disc aligns with each hub alternately to an extent demanded by the alignment error.

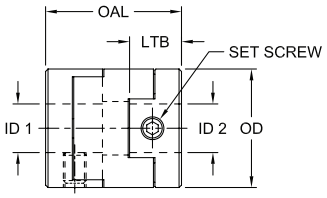
Because parallel misalignment is accommodated by lateral displacement, the Lovejoy Oldham coupling can handle severe alignment errors within a short space envelope. This is a valuable feature in densely packaged and blind assemblies, or where misalignment can accelerate the erosion of shaft bearings.

The Lovejoy Oldham coupling features raised dots on both sides of the floating disc which act as an effective spacer. The dots keep the face of the tenon from contacting the bottom of the floating disc and allows the coupling greater angular misalignment capability. A very important effect is that the spacer dots will greatly reduce the bending load on the shafts because of the freedom of the floating disc.

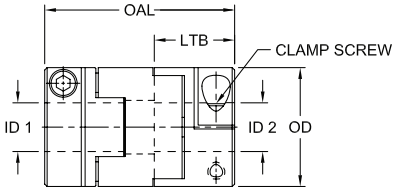
The MOL Coupling consists of two hubs and one center member.

Features

- High torsional stiffness
- Maximum temperature 176° F (80° C)
- Aluminum hubs with a Polyacetal insert
- Available in setscrew or clamping style hubs



Clamping Type



Set Screw Type

MOL Series Performance Data

Size	Torque Nominal in-lbs*	Torsional Stiffness in-lb/rad*	Max RPM	Weight* oz	Weight* g	Moment of Inertia* lb-in2	Misalignment Angular	Misalignment Parallel in	Misalignment Axial in
MOL-16	6.2	620	24,000	0.2	7	0.001	3°	0.40	N/A
MOL-16C	6.2	620	9,500	0.4	11	0.001	3°	0.40	N/A
MOL-20	10.6	974	19,000	0.5	15	0.003	3°	0.60	N/A
MOL-20C	10.6	974	7,600	0.8	22	0.004	3°	0.60	N/A
MOL-25	17.7	1,770	15,000	1.0	28	0.008	3°	0.80	N/A
MOL-25C	17.7	1,770	6,100	1.4	40	0.011	3°	0.80	N/A
MOL-32	39.8	7,877	12,000	1.9	55	0.025	3°	0.10	N/A
MOL-32C	39.8	7,877	4,800	2.6	75	0.034	3°	0.10	N/A

Notes:
- * indicates: Nominal torque, torsional stiffness, weight and moment of inertia are based on minimum bore size.
- N/A indicates: Not Applicable.
- Specify Bore sizes ID1 and ID2 when ordering.

MOL Series Dimensional Data

Size	Attachment	OAL in	OAL mm	LTB in	LTB mm	ID1 - ID2 Min Bore in	ID1 - ID2 Min Bore mm	ID1 - ID2 Max Bore in	ID1 - ID2 Max Bore mm	OD in	OD mm	Set Screw/ Clamp Screw Size mm
MOL-16	Set Screw	0.709	18	0.276	7.0	0.118	3	0.236	6	0.630	16	M3
MOL-16C	Clamp	1.142	29	0.492	12.5	0.118	3	0.236	6	0.630	16	M2.6
MOL-20	Set Screw	0.906	23	0.354	9.0	0.118	3	0.315	8	0.787	20	M4
MOL-20C	Clamp	1.299	33	0.551	14.0	0.118	3	0.315	8	0.787	20	M2.6
MOL-25	Set Screw	1.102	28	0.433	11.0	0.197	5	0.394	10	0.984	25	M5
MOL-25C	Clamp	1.535	39	0.650	16.5	0.197	5	0.394	10	0.984	25	M3
MOL-32	Set Screw	1.299	33	0.512	13.0	0.315	8	0.551	14	1.260	32	M6
MOL-32C	Clamp	1.772	45	0.748	19.0	0.315	8	0.551	14	1.260	32	M4