MOL/MOS Flexible Couplings - Oldham Type

Electrical Insulation | High Allowable Misalignment | Small Eccentric Reaction Force

Structure

● Set Screw Type

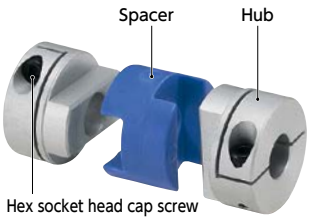
MOL Outside diameter ϕ16 - ϕ32 ➡ P.xxxx

MOL Outside diameter ϕ40 - ϕ63

MOS ➡ P.xxxx

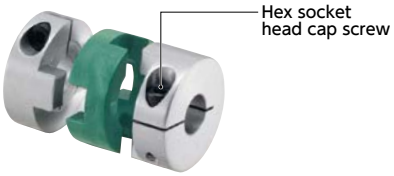
● Clamping Type

MOL-C Outside diameter ϕ16 - ϕ32 ➡ P.xxxx



MOL-C Outside diameter ϕ40 - ϕ63

MOS-C ➡ P.xxxx



GOOD DESIGN

● Applicable motors

	MOL	MOS
Servomotor	–	–
Stepping Motor	–	–
General-purpose Motor	◎	◎

◎: Excellent

● Property

	MOL	MOS
Allowable Misalignment	◎	◎
Electrical Insulation	◎	◎
Allowable Operating Temperature	−20℃ to 80℃	−20℃ to 80℃

◎: Excellent ○: Very good

- This is an oldham type flexible coupling.
- Slippage of hubs and a spacer allows large eccentricity and angular misalignment to be accepted.
- The load on the shaft generated by misalignment is small and the burden on the shaft is reduced.
- It has electrical insulation.
- Standard type **MOL** and short type **MOS** are available.

● Application

Parts feeder / Transport device

● Material/Finish

RoHS

	MOL / MOL-C / MOS / MOS-C
Hub	A2017 Anodized*1
Spacer	Polyacetal
Hex Socket Set Screw	SCM435 Ferrosoferric Oxide Film (Black)
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)

*1 : Due to manufacturing process requirements, couplings may have bores with or without surface treatment. This does not affect the performance of the couplings.

● **Slip Torque**

For set screw type **MOL** **MOS**, see Aluminum Alloy Coupling under "Slip Torque of Coupling - Set Screw Type" for details.

● Part number specification

MOL - 20C - 6-8

Product Code | Size | Bore Diameter

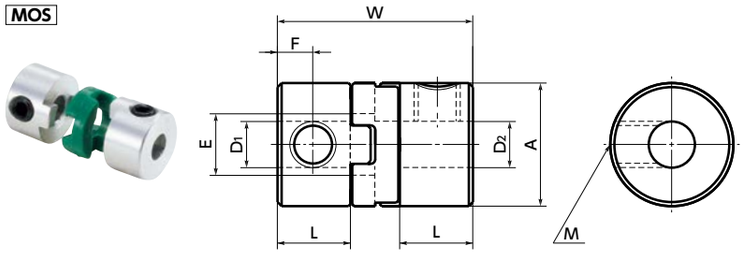
Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.xxxx	Cleanroom Wash & Packaging ➡ P.xxxx	Change to Stainless Steel Screw ➡ P.xxxx
Available / Add'l charge	Please feel free to contact us	Available / Add'l charge

MOS/MOS-C Flexible Couplings - Oldham Type - Set Screw Type / Clamping Type

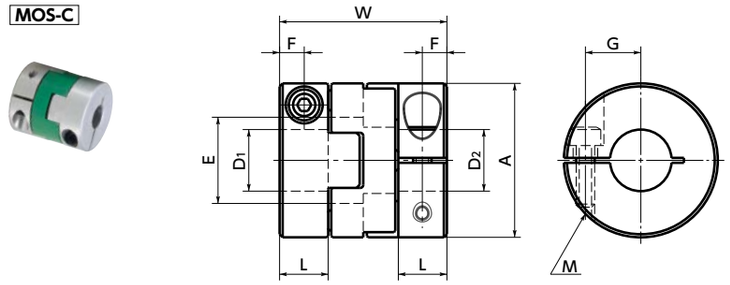
Electrical Insulation　High Allowable Misalignment　Small Eccentric Reaction Force

MOS



Outside diameter ϕ8

MOS-C



Outside diameter ϕ12 - ϕ32

Dimensions

Unit : mm

Part Number [1]	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
MOS-8	8	4.8	12.7	4	2.3		M3	0.7
MOS-12C	12	5	14.9	6	2.5	4	M2	0.5
MOS-16C	16	7	21	8	3.5	5	M2.5	1
MOS-20C	20	7	22.1	10	3.5	6.5	M2.5	1
MOS-25C	25	8	27.2	14	4	9	M3	1.5
MOS-32C	32	10	33.3	18	5	11	M4	2.5

Part Number	Standard Bore Diameter D1/D2 [2]													
	1	2	2.5	3	4	5	6	6.35	7	8	10	11	12	14
MOS-8	●	●	●	●										
MOS-12C				●	●	●								
MOS-16C				●	●	●	●							
MOS-20C						●	●	●	●	●				
MOS-25C								●	●	●	●			
MOS-32C								●		●	●	●	●	●

- All products are provided with hex socket set screw **MOS-8** or hex socket head cap screw **MOS-C**.
- Tolerance of shaft bore on **MOS-8** is H8.
- Recommended tolerance for shaft diameters is h6 and h7.
- For the shaft insertion amount to the coupling, see Mounting/maintenance.

Precautions for Use

- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.xxxx
- There are sizes where the hex socket head bolt exceeds the outer diameter of the coupling and the rotating diameter is larger than the outer diameter. Please be careful of the interference of coupling. ➡ P.xxxx

Additional Keyway at Shaft Hole ➡ P.xxxx	Cleanroom Wash & Packaging ➡ P.xxxx	Change to Stainless Steel Screw ➡ P.xxxx
Available / Add'l charge	Please feel free to contact us	Available / Add'l charge

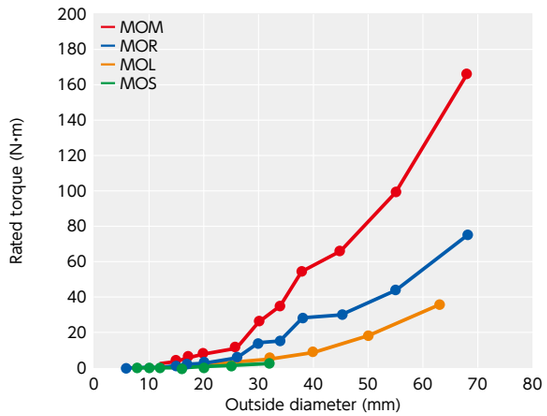
Performance

Part Number	Max. Bore Diameter (mm)	Rated Torque *1 (N・m)	Maximum Torque *1 (N・m)	Max. Rotational Frequency (min^{-1})	Moment *2 of Inertia ($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Mass *3 (g)
MOS-8	3	0.08	0.16	78000	1.2×10^{-8}	2	0.5	2	2
MOS-12C	5	0.2	0.4	52000	7.1×10^{-8}	9	0.6	2	3
MOS-16C	6	0.4	0.8	39000	3.0×10^{-7}	30	1	2	8
MOS-20C	8	0.7	1.4	31000	7.4×10^{-7}	47	1.3	2	13
MOS-25C	10	1.2	2.4	25000	2.2×10^{-6}	85	1.5	2	24
MOS-32C	14	2.8	5.6	19000	7.3×10^{-6}	190	2	2	48

*1 : Values with no load fluctuation and rotation in a single direction. If there is large load fluctuation, or both normal and reverse rotation, select a size with some margin. If ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the following table. The allowable operating temperature of **MOS** and **MOS-C** is −20℃ to 80℃.

*2 : These are values with max. bore diameter.

● Comparison of rated torque



● Ambient Temperature / Temperature Correction Factor

Ambient Temperature	Temperature Correction Factor
−20℃ to 30℃	1.00
30℃ to 40℃	0.80
40℃ to 60℃	0.70
60℃ to 80℃	0.55

● Part number specification

MOS-20C - 6.35 - 8 **1 Set**

[1] [2]

MOS - 20 - SPCR **Single Spacer**

Product Code / Outside Diameter (Dimension A) / Single Spacer