

SMO Flexible Oldham Type Coupling

Features



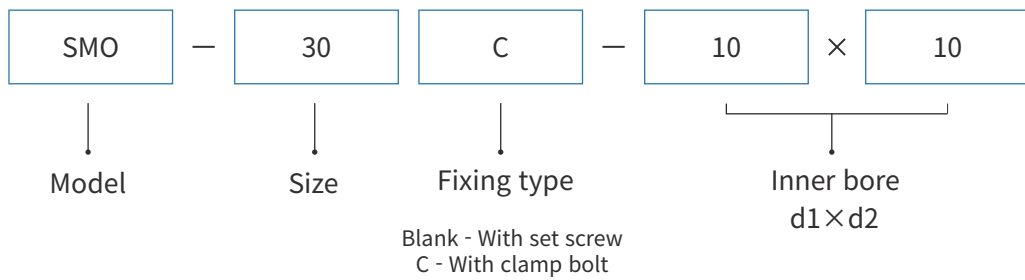
- Shaft ends load is reduced due to small radial load caused by parallel misalignment.
- Allows large parallel and angular misalignment due to hub and element slip properties.
- It has electrical insulation.
- Simple structure and easy assembly.

Structure



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How to order



Standard bores diameter

Model	Standard bores diameter d1 × d2 (mm)																			
	3	4	5	6	6.35	8	9.53	10	12	14	15	16	18	20	22	24	25	26	28	30
SMO-15/15C	●	●	●	●	●															
SMO-20/20C			●	●	●	●														
SMO-25/25C				●	●	●	●	●												
SMO-30/30C				○	○	●	●	●	●	●										
SMO-40/40C								●	●	●	●	●	●	○						
SMO-50/50C								○	○	●	●	●	●	●	●	●	●			
SMO-60/60C											○	●	●	●	●	●	●	●	●	●

※ Standard type is always available in stock.

Allowable Transmission torque(Tc) for fixing with clamp bolt

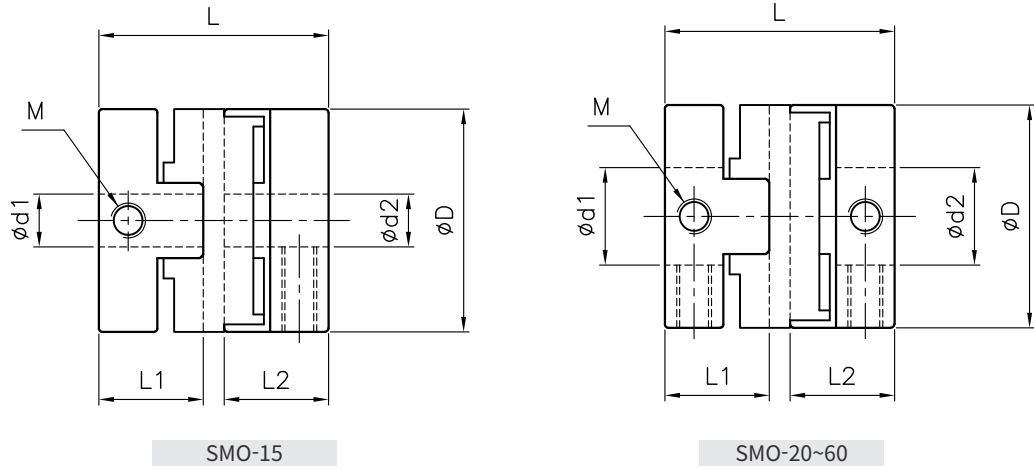
Model	Standard bores diameter d1 × d2 (mm) and Allowable Transmission torque (Nm)																			
	3	4	5	6	6.35	8	9.53	10	12	14	15	16	18	20	22	24	25	26	28	30
SMO-15C	1.4	1.4	1.4	1.4	1.4															
SMO-20C			2.4	2.4	2.4	2.4														
SMO-25C				3.9	3.9	4	4	4												
SMO-30C				8	8	9	9	9	9	9										
SMO-40C								18	18	18	18	18	18							
SMO-50C								26	27	30	31	32	34	35	36	36	36	36		
SMO-60C											57	59	62	64	67	70	71	72	72	72

Note)

1. Shaft tolerances are based on h7, transmitted torque may be decreased in case of small shaft size.
2. According to operating condition(Fixing type, Acc./Dec. Frequency, Temperature), Transmission Torque may be decreased, Therefore it is recommended to apply after testing with actual mounting to the devices.

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Specifications/ Dimensions



※ Specifications and Dimensions in the Catalog might be modified without any notice for performance improvement, Contact NARA before using the couplings.

Specifications(SMO)

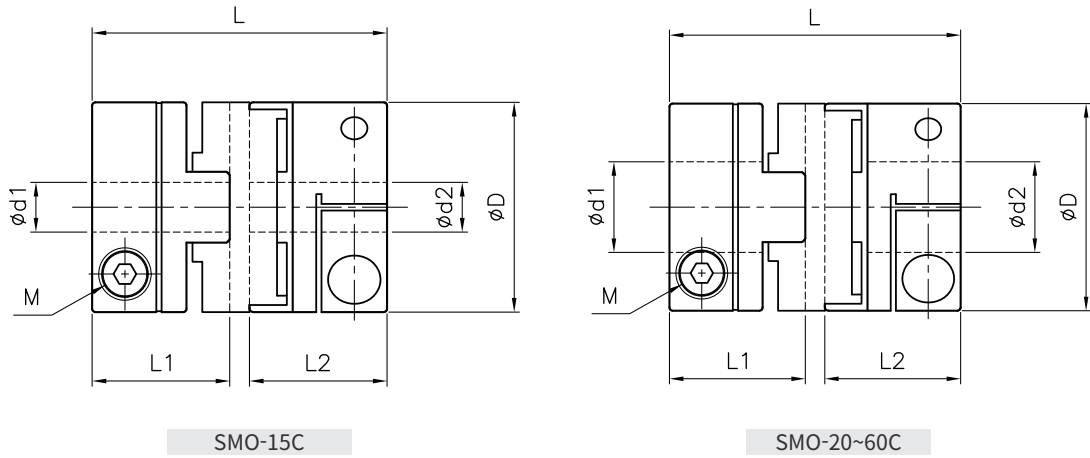
Model	Rated Torque (Nm)	Max Torque (Nm)	Max speed (rpm)	Torsional stiffness (Nm/rad)	Moment of inertia (kg m ²)	Maximum allowable misalignment			Mass (g)
						Parallel misalignment (mm)	Angular misalignment (°)	Axial displacement (mm)	
SMO-15	0.6	1.2	8,000	33	2.6×10^{-7}	1	3	±0.1	7.5
SMO-20	1.1	2.2	7,000	57	7.6×10^{-7}	1.5	3	±0.1	15
SMO-25	2	4	6,000	99	2.4×10^{-6}	2	3	±0.1	22
SMO-30	4	8	4,000	341	6.6×10^{-6}	2.5	3	±0.15	48
SMO-40	9	18	4,000	575	3.8×10^{-5}	3	3	±0.15	160
SMO-50	19	38	3,000	876	1.0×10^{-4}	3.5	3	±0.2	265
SMO-60	30	60	3,000	1,109	1.7×10^{-4}	4	3	±0.2	395

Dimensions(SMO)

Model	D	L	Inner bore		L1, L2	M	bolt tightening torque (Nm)
			d1	d2			
SMO-15	16.5	18	3~6.35	3~6.35	8	M3	0.7
SMO-20	20.5	20	5~8	5~8	9	M4	1.7
SMO-25	26	26	6~10	6~10	12	M4	1.7
SMO-30	32	33	6~15	6~15	15	M5	3.6
SMO-40	43	52	10~19	10~19	24	M5	3.6
SMO-50	54	58	10~25	10~25	27	M6	7
SMO-60	57.5	77	15~30	15~30	37	M8	15

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Specifications/ Dimensions



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Specifications(SMO-C)

Model	Rated Torque (Nm)	Max Torque (Nm)	Max speed (rpm)	Torsional stiffness (Nm/rad)	Moment of inertia (kg m ²)	Maximum allowable misalignment			Mass (g)
						Parallel misalignment (mm)	Angular misalignment (°)	Axial displacement (mm)	
SMO-15C	0.6	1.2	8,000	33	3.5×10^{-7}	1	3	±0.1	10
SMO-20C	1.1	2.2	7,000	57	9.8×10^{-7}	1.5	3	±0.1	18
SMO-25C	2	4	6,000	99	3.3×10^{-6}	2	3	±0.1	37
SMO-30C	4	8	4,000	341	9.9×10^{-6}	2.5	3	±0.15	81
SMO-40C	9	18	4,000	575	3.8×10^{-5}	3	3	±0.15	150
SMO-50C	19	38	3,000	876	1.0×10^{-4}	3.5	3	±0.2	260
SMO-60C	30	60	3,000	1,109	1.7×10^{-4}	4	3	±0.2	395

Dimensions(SMO-C)

Model	D	L	Inner bore		L1, L2	M	bolt tightening torque (Nm)
			d1	d2			
SMO-15C	16.5	24	3~6.35	3~6.35	11	M2.5	1
SMO-20C	20.5	26	5~8	5~8	12	M2.5	1
SMO-25C	26	32	6~10	6~10	15	M3	1.5
SMO-30C	32	45	6~15	6~15	21	M4	3.4
SMO-40C	43	52	10~19	10~19	24	M5	7
SMO-50C	54	58	10~25	10~25	27	M5	7
SMO-60C	57.5	77	15~30	15~30	37	M6	14