Stronger, Easier to Use

Disc-Type Coupling

XHW/XHS/XHW-L

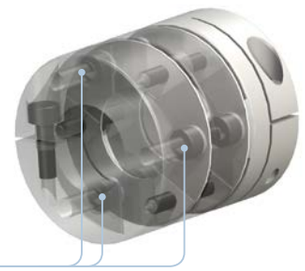
1. Transmission torque has improved by 1.5 times.

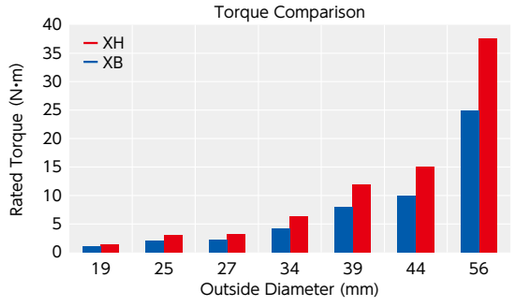
- The number of disc fixing bolts on one side, which was two for conventional XB series products, has been changed to three for XH series products.
  The increased disc fixing power has enhanced transmission torque by 1.5 times.

XB Series

Fixing Bolts for Disc

XH Series





- XH series is the successor to XB series.
- Total length / outside diameter, and max. bore diameter are the same as XBW.
- Affordable price compared with identical sizes of XB series products.

XBW Part Number	Total Length (mm)	Rated Torque (N•m)	XHW Part Number	Total Length (mm)	Rated Torque (N•m)	XHW-L Part Number	Total Length (mm)	Rated Torque (N•m)
XBW-19C	25.5	1	**XHW-19C**	25.7	1.5	**XHW-19C-L**	34	1.5
XBW-25C	32.2	2	**XHW-25C**	32.2	3	**XHW-25C-L**	42	3
XBW-27C	32.2	2.2	**XHW-27C**	32.2	3.3	**XHW-27C-L**	42	3.3
XBW-34C	37.4	4.2	**XHW-34C**	36.8	6.3	**XHW-34C-L**	44	6.3
XBW-39C	46.6	8	**XHW-39C**	46.6	12	**XHW-39C-L**	55	12
XBW-44C	46.6	10	**XHW-44C**	46.6	15	–	–	–
XBW-56C	60.4	25	**XHW-56C**	61.2	37.5	–	–	–

2. Compact and Lower Cost

- Downsizing and cost reduction of couplings can be achieved by selecting XH series when servomotors' instantaneous maximum torque improve by 350%.

Servomotor Specifications			instantaneous maximum torque (N•m)	XBW Part Number	Total Length (mm)	Rated Torque (N•m)	XHW Part Number	Total Length (mm)	Rated Torque (N•m)	XHW-L Part Number	Total Length (mm)	Rated Torque (N•m)
Rated Output (W)	Shaft Diameter (ϕ)	Rated Torque (N•m)										
100	8	0.32	1.1	**XBW-25C**	32.2	2	**XHW-19C**	25.7	1.5	**XHW-19C-L**	34	1.5
200	14	0.64	2.2	**XBW-34C**	37.4	4.2	**XHW-27C**	32.2	3.3	**XHW-27C-L**	42	3.3
400	14	1.3	4.5	**XBW-39C**	46.6	8	**XHW-34C**	36.8	6.3	**XHW-34C-L**	44	6.3
750	16 - 19	2.4	8.4	**XBW-44C**	46.6	10	**XHW-39C**	46.6	12	**XHW-39C-L**	55	12

3. Expansion of Standard Bore Diameter

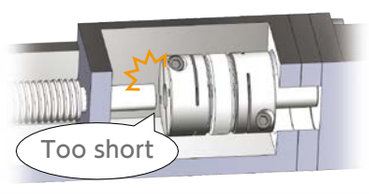
- Standard bore diameters, which are not in XB series, have been added.
  (● indicates standardized bore diameters newly added in XH series.)
  ① Minimum bore diameter has been added
  ② Inch sizes (ϕ6.35・ϕ9.525) have been added
  ③ Inside bearing diameter of ϕ17 has been added

Part Number	3	4	5	6	6.35	8	9.525	10	11	12	14	15	16	17	18	19	20	22	24	25	28
XH-19C	●	●	●	●	●	●															
XH-25C		●	●	●	●	●	●	●	●	●											
XH-27C		●	●	●	●	●	●	●	●	●	●										
XH-34C			●	●	●	●	●	●	●	●	●	●	●								
XH-39C				●	●	●	●	●	●	●	●	●	●	●	●	●	●				
XH-44C						●	●	●	●	●	●	●	●	●	●	●	●	●			
XH-56C						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

4. Standardization of Long Type XHW-L

- If the coupling cannot reach the shaft when connecting an electric actuator and a motor, usually a special product with its total length elongated is used. However, in XH series, long type XHW-L has been standardized.
- With its improved torque transmission capability, XH series will enable downsizing from conventional products. If XHW does not provide sufficient total length, use long type XHW-L instead.

XHW



Long Type XHW-L

Couplicon®

XHW / XHW-L Flexible Coupling - Disk - type

Additional Size

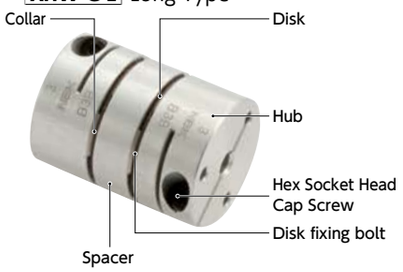
WEB Selection Tool　WEB CAD Download　Zero Backlash　High torque　High Rigidity

Structure

● Clamping type ➡ P.69

XHW-C Standard Type

XHW-C-L Long Type



● Material/Finish　RoHS2 Compliant

	XHW-C / XHW-C-L
Hub	A2017 Alumite Treatment
Spacer	A2017 Alumite Treatment
Disk fixing bolt	SCM435 Ferrosoferric Oxide Film (Black)
Disk	SUS304
Collar	SUS304
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)

● Recommended applicable motor

	XHW / XHW-L
Servomotor	◎
Stepping Motor	◎
General-Purpose Motor	△

◎: Excellent ○: Very good △: Available

● Property

	XHW / XHW-L
Zero Backlash	◎
High gain supported	○
High Torque	◎
High Torsional Stiffness	◎
Allowable Misalignment	○

◎: Excellent ○: Very good

- This is a disk-type flexible coupling.
- High-torque specification with rated torque 1.5 times higher than conventional products.
- This is the most appropriate for a servomotor with the instantaneous max. torque of 350%.
- The stainless steel Disk allows the eccentricity, angular misalignment, and end-play.

● Application

Actuator / Surface-mount machine / High precision XY stage / Index table

● Part number specification

XHW - 34C - 10-11

Product code　Size　bore diameter

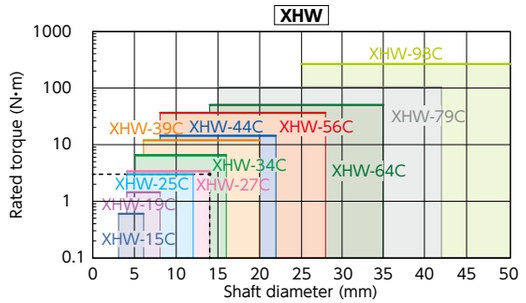
Please refer to dimensional table for part number specification.

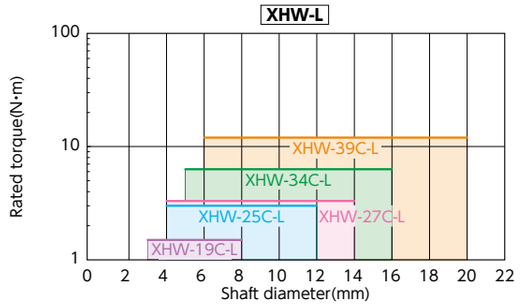
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Please feel free to contact us

Selection

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.





● Selection Example

In case of selected parameters of shaft diameter of ϕ 14 and load torque of 3 N•m, the selected size is **XHW-27C**.

● Selection based on the rated output of the servomotor

XHW supports the servomotor with instantaneous max. torque increased to 350% of the rated torque and the size can be more reduced than the size of conventional product **XBW**.

Rated Output (W)	Servomotor type				Servomotor Specifications*1			selection size	
	Mitsubishi Electric Corporation	YASKAWA Electric Corporation	SANYO DENKI Co., Ltd.	KEYENCE CORPORATION	Diameter of Motor Shaft (mm)	Rated Torque (N・m)	Instantaneous Max. Torque (N・m)	XHW-C	XBW-C
100	HG-KR	SGMJV	R2	SV	8	0.32	1.1	XHW-19C	XBW-25C
200					14	0.64	2.2	XHW-27C	XBW-34C
400					14	1.3	4.5	XHW-34C	XBW-39C
750					16 - 19	2.4	8.4	XHW-39C	XBW-44C

*1: Motor specifications are based on general values. For details, see the motor manufacturer's catalogs. This is the size for cases where devices such as reduction gears are not used.

Couplicon®

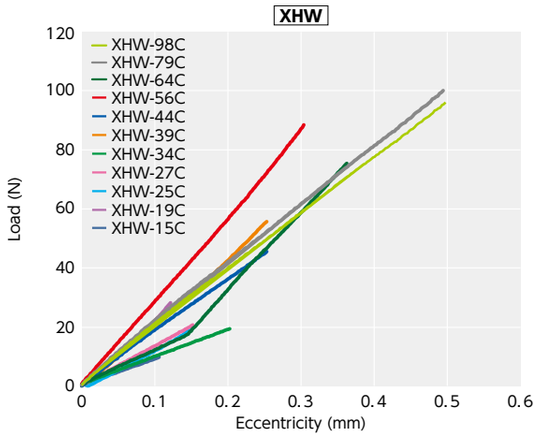
XHW / XHW-L Flexible Coupling - Disk - type

Additional Size

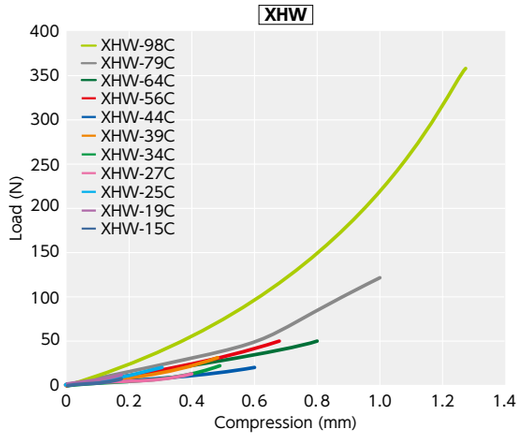
WEB Selection Tool　WEB CAD Download　Zero Backlash　High torque　High Rigidity

Technical Information

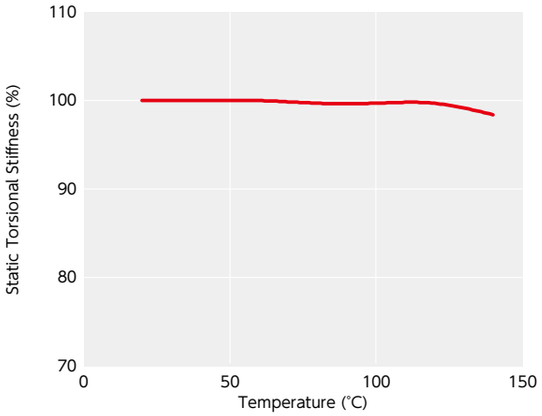
● Eccentric Reaction Force



● Thrust Reaction Force



● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of **XHW** in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used at higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

● Slip Torque

Concerning the sizes shown in the table, please note that the shaft's slip torque is smaller than the rated torque of **XHW-C** **XHW-C-L**.

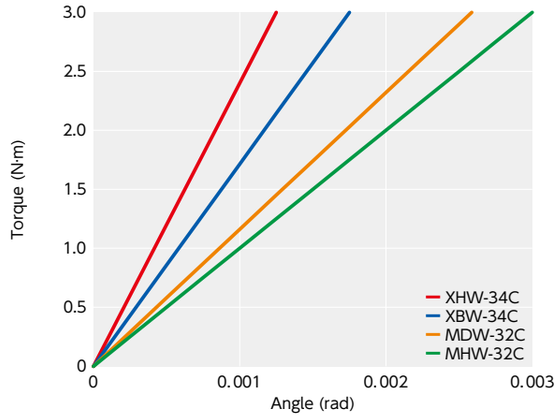
Unit : N・m

Part Number	Bore diameter (mm)								
	3	4	5	6	6.35	8	9.525	10	11
XHW-19C	0.7								
XHW-25C		2.5							
XHW-27C		2	2.9						
XHW-34C			3.5	4.9	5.5				
XHW-39C				6	8				
XHW-44C						8	13		
XHW-56C						22	34	37	
XHW-64C								23	42
XHW-19C-L	0.7								
XHW-25C-L		2.5							
XHW-27C-L		2	2.9						
XHW-34C-L			3.5	4.9	5.5				
XHW-39C-L				6	8				

● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: from 34 - 40 HRC, and screw tightening torque of the values described in **XHW-C** **XHW-C-L** dimensional table.

● Comparison of static torsional stiffness (double disk-type)

XHW have high torsional stiffness and responsiveness.
Optimal for high-speed and precision positioning for servomotors, etc.



Couplicon®

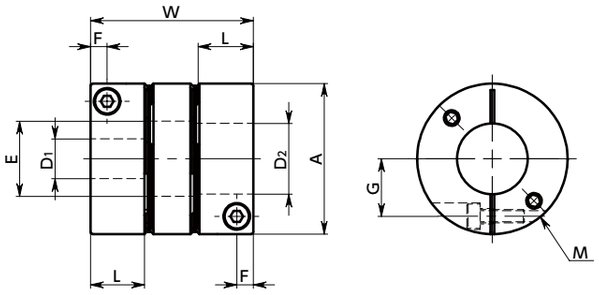
XHW-C / XHW-C-L Flexible Coupling - Disk - type

Additional Size

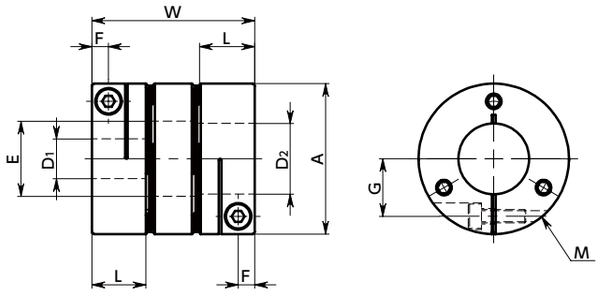
WEB Selection Tool　WEB CAD Download　Zero Backlash　High torque　High Rigidity

XHW-C

XHW-C-L



Outside diameter ϕ15



Outside diameter ϕ19 - ϕ98

Dimensions

Unit : mm

Part Number ①	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
XHW-15C	15	7.5	21.6	6.3	2.1	5	M2	0.45
XHW-19C	19	9.2	25.7	8.5	2.6	7	M2	0.5
XHW-25C	25	11	32.2	12.5	3.3	9.25	M2.5	1
XHW-27C	27	11	32.2	14.5	3.3	10.25	M2.5	1
XHW-34C	34	12.5	36.8	16.5	3.75	13	M3	1.5
XHW-39C	39	15.5	46.6	20.5	4.5	14.5	M4	3.5
XHW-44C	44	15.5	46.6	22.5	4.5	17	M4	3.5
XHW-56C	56	20.5	61.2	28.5	6	21	M5	8
XHW-64C	64	24	74.4	36	7	24	M6	13
XHW-79C	79	30	97.2	43	8.75	29	M8	28
XHW-98C	98	32	104	51	8.7	38	M8	28
XHW-19C-L	19	9.2	34	8.5	2.6	7	M2	0.5
XHW-25C-L	25	11	42	12.5	3.3	9.25	M2.5	1
XHW-27C-L	27	11	42	14.5	3.3	10.25	M2.5	1
XHW-34C-L	34	12.5	44	16.5	3.75	13	M3	1.5
XHW-39C-L	39	15.5	55	20.5	4.5	14.5	M4	3.5

Part Number	Standard Bore Diameter D1・D2 ②																											
	3	4	5	6	6.35	8	9.525	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50
XHW-15C	●	●	●	●																									
XHW-19C	●	●	●	●	●	●																							
XHW-25C		●	●	●	●	●	●	●	●	●																			
XHW-27C		●	●	●	●	●	●	●	●	●	●																		
XHW-34C			●	●	●	●	●	●	●	●	●	●	●																
XHW-39C				●	●	●	●	●	●	●	●	●	●	●	●	●	●												
XHW-44C						●	●	●	●	●	●	●	●	●	●	●	●	●											
XHW-56C						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
XHW-64C								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
XHW-79C											●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
XHW-98C																				●	●	●	●	●	●	●	●	●	●
XHW-19C-L	●	●	●	●	●	●																							
XHW-25C-L		●	●	●	●	●	●	●	●	●																			
XHW-27C-L		●	●	●	●	●	●	●	●	●	●																		
XHW-34C-L			●	●	●	●	●	●	●	●	●	●	●																
XHW-39C-L				●	●	●	●	●	●	●	●	●	●	●	●	●	●												

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Please feel free to contact us

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
XHW-15C	6	0.6	42000	3.0×10^{-7}	100	0.1	1.4	±0.2	9.4
XHW-19C	8	1.5	33000	8.8×10^{-7}	300	0.12	2	±0.2	17
XHW-25C	12	3	25000	3.4×10^{-6}	1000	0.15	2	±0.3	35
XHW-27C	14	3.3	23000	4.4×10^{-6}	1400	0.15	2	±0.4	39
XHW-34C	16	6.3	18000	1.3×10^{-5}	2500	0.2	2	±0.5	75
XHW-39C	20	12	16000	2.9×10^{-5}	4700	0.25	2	±0.5	123
XHW-44C	22	15	14000	4.7×10^{-5}	6400	0.25	2	±0.6	156
XHW-56C	28	37.5	11000	1.7×10^{-4}	12000	0.3	2	±0.7	340
XHW-64C	35	50	9800	3.3×10^{-4}	15000	0.35	2	±0.9	490
XHW-79C	42	100	7900	1.0×10^{-3}	22000	0.5	2	±1.1	1100
XHW-98C	50	280	6400	2.6×10^{-3}	47000	0.5	2	±1.3	1740
XHW-19C-L	8	1.5	33000	1.2×10^{-6}	300	0.25	2	±0.2	22
XHW-25C-L	12	3	25000	4.3×10^{-6}	1000	0.3	2	±0.3	45
XHW-27C-L	14	3.3	23000	5.8×10^{-6}	1400	0.3	2	±0.4	50
XHW-34C-L	16	6.3	18000	1.6×10^{-5}	2500	0.3	2	±0.5	89
XHW-39C-L	20	12	16000	3.4×10^{-5}	4700	0.4	2	±0.5	144

*1: Correction of rated torque due to load fluctuation is not required.
*2: These are values with max. bore diameter.

- Part number specification

XHW-25C-L - 8-10
① ②

Couplicon®

XHS Flexible Coupling - Single Disk Type

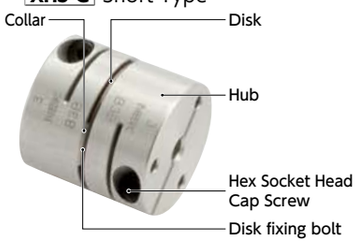
Additional Size

WEB Selection Tool　WEB CAD Download　Zero Backlash　High torque　High Rigidity

Structure

● Clamping type ➡ P.75

XHS-C Short Type



● Recommended applicable motor

	XHS
Servomotor	◎
Stepping Motor	◎
General-Purpose Motor	△

◎: Excellent ○: Very good △: Available

● Property

	XHS
Zero Backlash	◎
High gain supported	○
High Torque	◎
High Torsional Stiffness	◎
Allowable Misalignment	○

◎: Excellent ○: Very good

- This is a single disk type flexible coupling.
- High-torque specification with rated torque 1.5 times higher than conventional products.
- This is the most appropriate for a servomotor with the instantaneous max. torque of 350%.
- The stainless steel disk allows the eccentricity, angular misalignment, and end-play.

● Application

Actuator / Surface-mount machine / High precision XY stage / Index table

● Material/Finish　RoHS2 Compliant

	XHS
Hub	A2017 Alumite Treatment
Disk fixing bolt	SCM435 Ferrosoferric Oxide Film (Black)
Disk	SUS304
Collar	SUS304
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)

● Part number specification

XHS-27C-10-11

Product code　Size　bore diameter

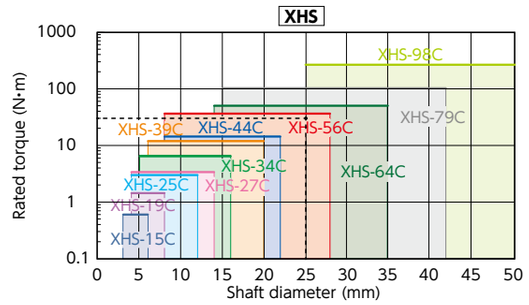
Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Please feel free to contact us

Selection

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.



● Selection Example

In case of selected parameters of shaft diameter of ϕ 25 and load torque of 30 N•m, the selected size is **XHS-56C**.

● Selection based on the rated output of the servomotor

XHS supports the servomotor with instantaneous max. torque increased to 350% of the rated torque and the size can be more reduced than the size of conventional product **XBS**.

Rated Output (W)	Servomotor type				Servomotor Specifications*1			selection size	
	Mitsubishi Electric Corporation	YASKAWA Electric Corporation	SANYO DENKI Co., Ltd.	KEYENCE CORPORATION	Diameter of Motor Shaft (mm)	Rated Torque (N・m)	Instantaneous Max. Torque (N・m)	XHS-C	XBS-C
100	HG-KR	SGMJV	R2	SV	8	0.32	1.1	XHS-19C	XBS-25C
200					14	0.64	2.2	XHS-27C	XBS-34C
400					14	1.3	4.5	XHS-34C	XBS-39C
750					16 - 19	2.4	8.4	XHS-39C	XBS-44C

*1： Motor specifications are based on general values. For details, see the motor manufacturer's catalogs. This is the size for cases where devices such as reduction gears are not used.

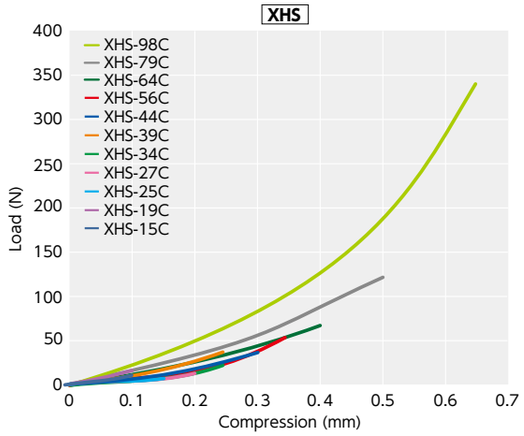
XHS Flexible Coupling - Single Disk Type

Additional Size

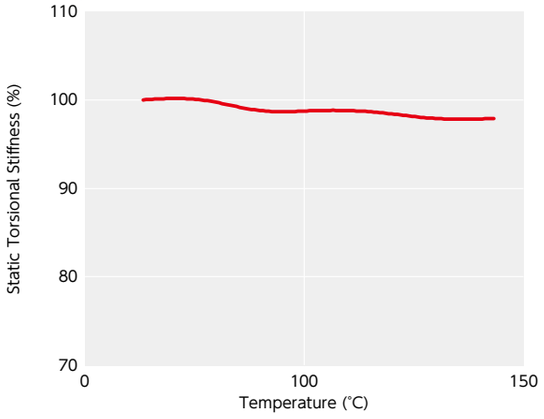
Selection Tool | CAD Download | Zero Backlash | High torque | High Rigidity

Technical Information

● Thrust Reaction Force



● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of XHS in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used at higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

● Slip Torque

Concerning the sizes shown in the table, please note that the shaft's slip torque is smaller than the rated torque of XHS-C.

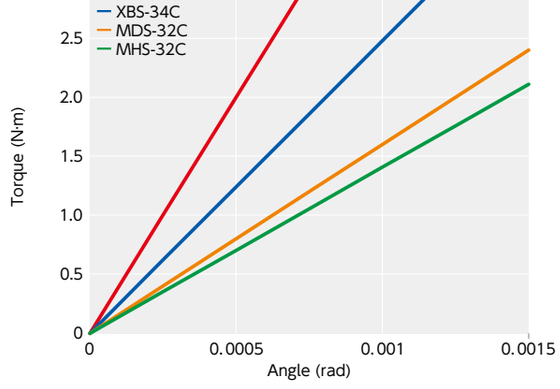
Unit : N・m

Part Number	Bore Diameter (mm)								
	3	4	5	6	6.35	8	9.525	10	11
XHS-19C	0.7								
XHS-25C		2.5							
XHS-27C		2	2.9						
XHS-34C			3.5	4.9	5.5				
XHS-39C				6	8				
XHS-44C						8	13		
XHS-56C						22	34	37	
XHS-64C								23	42

● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: from 34 - 40 HRC, and screw tightening torque of the values described in XHS-C dimensional table.

● Comparison of static torsional stiffness (single disk-type)

XHS have high torsional stiffness and responsiveness.
Optimal for high-speed and precision positioning for servomotors, etc.



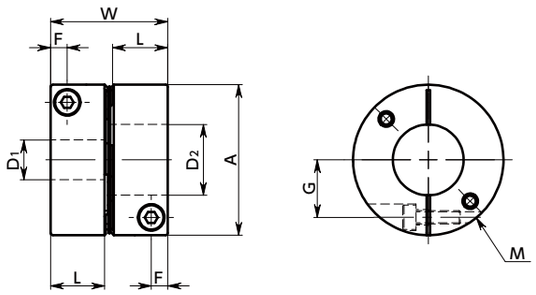
Couplicon®

XHS-C Flexible Coupling - Single Disk Type

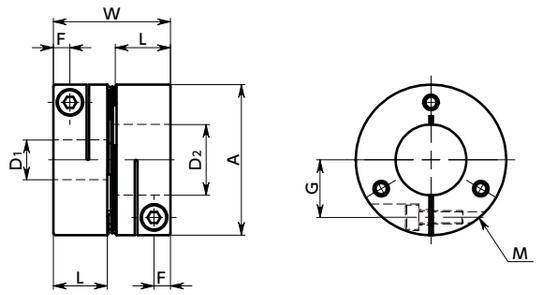
Additional Size

WEB Selection Tool | WEB CAD Download | Zero Backlash | High torque | High Rigidity

XHS-C



Outside diameter ϕ15



Outside diameter ϕ19 - ϕ98

Dimensions

Unit : mm

Part Number ◀1	A	L	W	F	G	M	Screw Tightening Torque (N・m)
XHS-15C	15	7.5	15.8	2.1	5	M2	0.45
XHS-19C	19	9.2	19.4	2.6	7	M2	0.5
XHS-25C	25	11	23.1	3.3	9.25	M2.5	1
XHS-27C	27	11	23.1	3.3	10.25	M2.5	1
XHS-34C	34	12.5	26.5	3.75	13	M3	1.5
XHS-39C	39	15.5	32.8	4.5	14.5	M4	3.5
XHS-44C	44	15.5	32.8	4.5	17	M4	3.5
XHS-56C	56	20.5	43.2	6	21	M5	8
XHS-64C	64	24	51.2	7	24	M6	13
XHS-79C	79	30	63.6	8.75	29	M8	28
XHS-98C	98	32	69	8.7	38	M8	28

Part Number	Standard Bore Diameter D1・D2 ◀2																												
	3	4	5	6	6.35	8	9.525	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50
XHS-15C	●	●	●	●																									
XHS-19C	●	●	●	●	●	●																							
XHS-25C		●	●	●	●	●	●	●	●	●																			
XHS-27C		●	●	●	●	●	●	●	●	●	●																		
XHS-34C			●	●	●	●	●	●	●	●	●	●	●																
XHS-39C				●	●	●	●	●	●	●	●	●	●	●	●	●	●												
XHS-44C						●	●	●	●	●	●	●	●	●	●	●	●	●											
XHS-56C						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
XHS-64C								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
XHS-79C											●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
XHS-98C																				●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Please feel free to contact us

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
XHS-15C	6	0.6	42000	2.2×10^{-7}	110	0.01	0.7		6.6
XHS-19C	8	1.5	33000	6.3×10^{-7}	330	0.02	1	±0.1	13
XHS-25C	12	3	25000	2.3×10^{-6}	1200	0.02	1	±0.15	25
XHS-27C	14	3.3	23000	3.1×10^{-6}	1800	0.02	1	±0.2	27
XHS-34C	16	6.3	18000	9.2×10^{-6}	3900	0.02	1	±0.25	52
XHS-39C	20	12	16000	2.0×10^{-5}	6000	0.02	1	±0.25	84
XHS-44C	22	15	14000	3.3×10^{-5}	7900	0.02	1	±0.3	107
XHS-56C	28	37.5	11000	1.1×10^{-4}	14000	0.02	1	±0.35	233
XHS-64C	35	50	9800	2.2×10^{-4}	16000	0.02	1		328
XHS-79C	42	100	7900	6.7×10^{-4}	23000	0.02	1		748
XHS-98C	50	280	6400	1.7×10^{-3}	52000	0.02	1	±0.65	1120

*1: Correction of rated torque due to load fluctuation is not required.
*2: These are values with max. bore diameter.

- Part number specification

XHS-27C - 8-10
◀1 ◀2

Couplicon®

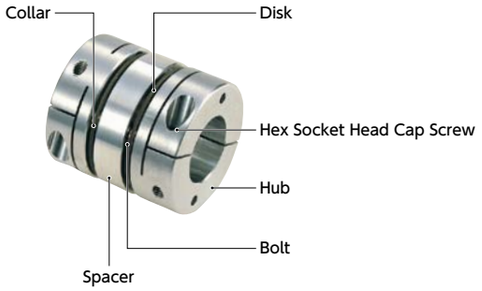
XBWS Flexible Coupling - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash　High Rigidity　SUS Stainless steel

Structure

● Clamping type ➡ P.81

XBWS-C Made of all stainless steel



● Recommended applicable motor

	XBWS
Servomotor	◎
Stepping motor	◎
General-purpose motor	△

◎: Excellent　○: Very good　△: Available

● Property

	XBWS
Zero Backlash	◎
High Torque	○
High Torsional Stiffness	◎
Allowable Misalignment	○
Corrosion Resistance (All S.S.)	◎

◎: Excellent　○: Very good

- This is a disk type flexible coupling.
- The stainless steel disk allows the eccentricity, angular misalignment and end-play.
- Wide variation of outside diameter ϕ 15 - ϕ 104 and bore diameter ϕ 3 - ϕ 50.
- **XBWS** is the all stainless steel type with stainless steel hubs.

● Application

Actuator/ Surface-mount machine/ High precision XY stage/ Index table

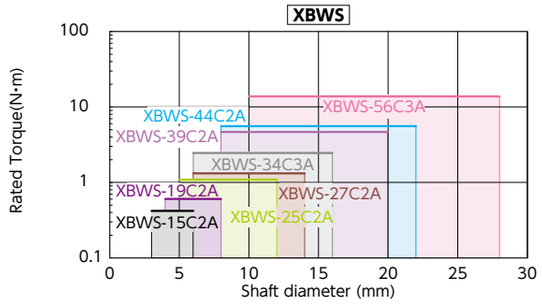
● Material/Finish　RoHS2 Compliant

	XBWS-C
Hub	SUS303
Spacer	SUS303
Bolt	SUSXM7
Disk	SUS304
Collar	SUS304
Hex Socket Head Cap Screw	SUSXM7

Selection

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.



GOOD DESIGN

● Selection example

In case of selected parameters of shaft diameter of ϕ15 and load torque of 2 N•m, the selection size is **XBWS-34C3A**.

● Selection based on the rated output of the servomotor

Rated output (W)	Servomotor specifications*1			Selection size
	Diameter of motor shaft (mm)	Rated torque (N・m)	Instantaneous max. torque (N・m)	XBWS-C Made of all stainless steel
10	5 - 6	0.032	0.096	XBWS-15C
20	5 - 6	0.064	0.19	XBWS-15C
30	5 - 7	0.096	0.29	XBWS-19C
50	6 - 8	0.16	0.48	XBWS-19C
100	8	0.32	0.95	XBWS-25C
200	9 - 14	0.64	1.9	XBWS-34C
400	14	1.3	3.8	XBWS-39C
750	16 - 19	2.4	7.2	XBWS-56C

*1: Motor specifications are based on general values. For details, please refer to catalogs of each motor manufacturers. Recommended sizes are for the cases where reduction gears are not used.

● Related Products

The Double-Disk type Flexible Coupling **XHW** is compatible with the servomotor with 350% instantaneous max. torque is available.
➡ P.65

● Part number specification

XBWS - 25C2A - 8-8

Product Code　Size　Bore Diameter

Please refer to dimensional table for part number specification.

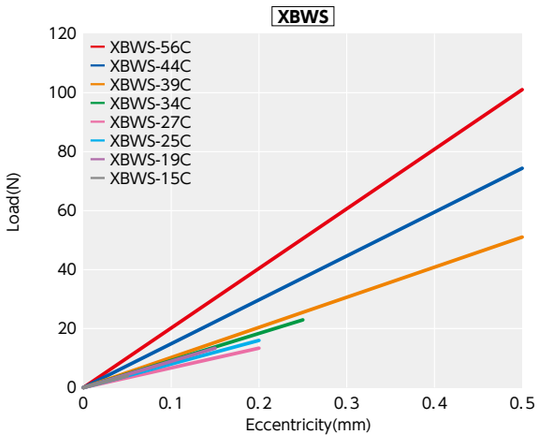
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

XBWS Flexible Coupling - Disk Type

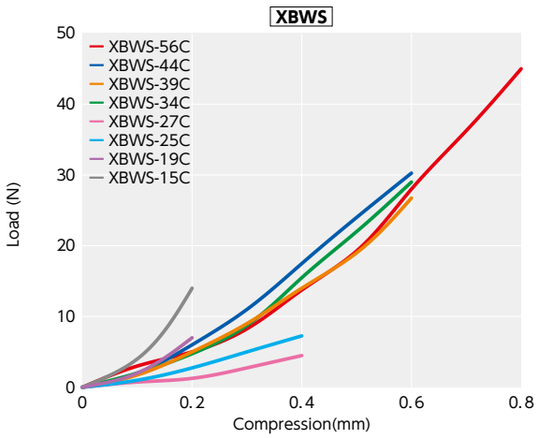
Selection Tool | CAD Download | SUS Stainless steel | Zero Backlash | High Rigidity

Technical Information

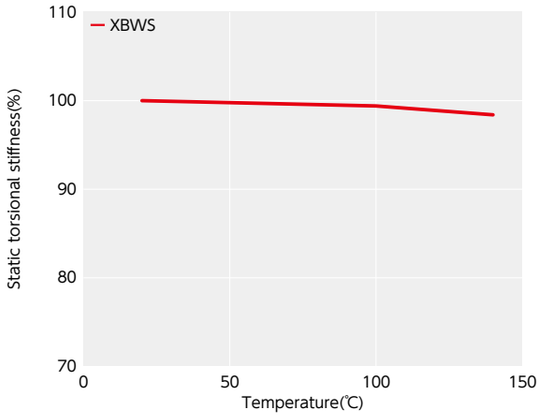
● Eccentric Reaction Force



● Thrust Reaction Force



● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of **XBWS** in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used at higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the rated torque of **XBWS-C**.

Unit : N・m

Part Number	Bore Diameter (mm)		
	8	10	11
XBWS-44C2A	4.5		
XBWS-56C3A		9	13

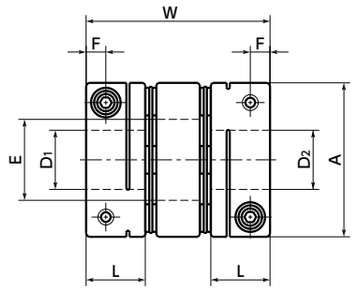
- These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **XBWS-C** Dimension table.

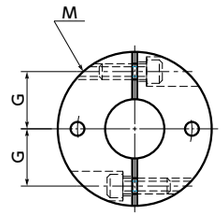
Couplicon®

XBWS-C Flexible Coupling - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash　High Rigidity

XBWS-C Made of all stainless steel





Dimensions

Part Number ◀1	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
XBWS-15C2A	15	7.5	22	6.1	2.3	5.25	M2	0.5
XBWS-19C2A	19	9	25.5	8.5	2.5	7.1	M2	0.5
XBWS-25C2A	25	11	32.2	12.5	3.5	9.25	M2.5	1
XBWS-27C2A	27	11	32.2	14.5	3.5	10.25	M2.5	1
XBWS-34C3A	34	12	37.4	16.5	4	13	M3	1.5
XBWS-39C2A	39	15	46.6	20.5	5	14.5	M4	3.5
XBWS-44C2A	44	15	46.6	23	5	17	M4	3.5
XBWS-56C3A	56	20	60.4	29	6	21.25	M5	8

Part Number	Standard Bore Diameter D1・D2 ◀2																	
	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28
XBWS-15C2A	●	●	●	●														
XBWS-19C2A		●	●	●	●													
XBWS-25C2A			●	●	●	●	●	●										
XBWS-27C2A				●	●	●	●	●	●									
XBWS-34C3A				●	●	●	●	●	●	●	●							
XBWS-39C2A					●	●	●	●	●	●	●	●	●	●				
XBWS-44C2A					●	●	●	●	●	●	●	●	●	●	●			
XBWS-56C3A						●	●	●	●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
XBWS-15C2A	6	0.42	42000	5.0×10^{-7}	300	0.05	1	±0.2	20
XBWS-19C2A	8	0.6	33000	1.6×10^{-6}	550	0.15	2	±0.2	38
XBWS-25C2A	12	1.1	25000	6.1×10^{-6}	1100	0.2	2	±0.4	71
XBWS-27C2A	14	1.3	23000	8.2×10^{-6}	1300	0.2	2	±0.4	88
XBWS-34C3A	16	2.5	18000	2.5×10^{-5}	1800	0.25	2	±0.6	160
XBWS-39C2A	20	4.8	16000	5.1×10^{-5}	3500	0.3	2	±0.6	260
XBWS-44C2A	22	5.6	14000	8.9×10^{-5}	5500	0.3	2	±0.6	400
XBWS-56C3A	28	14	11000	2.9×10^{-4}	10000	0.3	2	±0.8	800

*1: Correction of rated torque and max. torque due to load fluctuation is not required.

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

- Part number specification

XBWS-27C2A - 11-12
◀1　◀2

Couplicon®

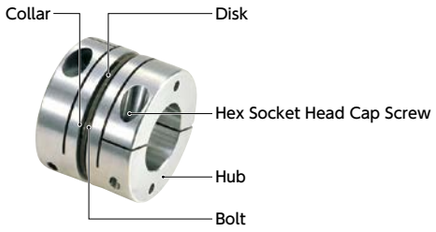
XBSS Flexible Coupling - Single - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash　High Rigidity　SUS Stainless steel

Structure

● Clamping type ➡ P.87

XBSS-C Made of all stainless steel



● Recommended applicable motor

	XBSS
Servomotor	◎
Stepping motor	◎
General-purpose motor	△

◎: Excellent　○: Very good　△: Available

● Property

	XBSS
Zero Backlash	◎
High Torque	○
High Torsional Stiffness	◎
Allowable Misalignment	○
Corrosion Resistance (All S.S.)	◎

◎: Excellent　○: Very good

- This is a disk type flexible coupling.
- It has compact design with short entire length.
- The stainless steel disk allows the eccentricity, angular misalignment and end-play.
- Wide variation of outside diameter ϕ 15 - ϕ 104 and bore diameter ϕ 3 - ϕ 50.
- **XBSS** is the all stainless steel type with stainless steel hubs.

● Application

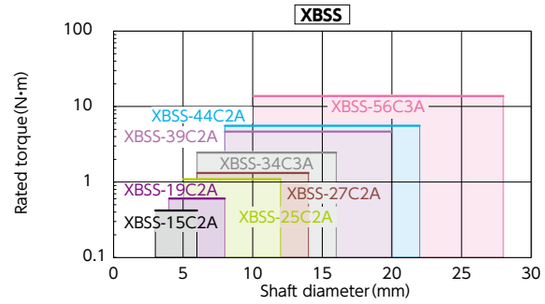
Actuator / Surface-mount machine / High precision XY stage / Index table

● Material/Finish　RoHS2 Compliant

	XBSS-C
Hub	SUS303
Bolt	SUSXM7
Disk	SUS304
Collar	SUS304
Hex Socket Head Cap Screw	SUSXM7

Selection

● Selection based on shaft diameter and rated torque



● Selection example

In case of selected parameters of shaft diameter of ϕ15 and load torque of 2 N•m, the selected size is **XBSS-34C3A**.

● Selection based on the rated output of the servomotor

Rated output (W)	Servomotor specifications*1			Selection size
	Diameter of motor shaft (mm)	Rated torque (N・m)	Instantaneous max. torque (N・m)	**XBSS-C** Made of all stainless steel
10	5 - 6	0.032	0.096	XBSS-15C
20	5 - 6	0.064	0.19	XBSS-15C
30	5 - 7	0.096	0.29	XBSS-19C
50	6 - 8	0.16	0.48	XBSS-19C
100	8	0.32	0.95	XBSS-25C
200	9 - 14	0.64	1.9	XBSS-34C
400	14	1.3	3.8	XBSS-39C
750	16 - 19	2.4	7.2	XBSS-56C

*1: Motor specifications are based on general values. For details, please refer to catalogs of each motor manufacturers. Recommended sizes are for the cases where reduction gears are not used.

GOOD DESIGN

● Related Products

The Single-Disk type Flexible Coupling **XHS** is compatible with the servomotor with 350% instantaneous max. torque is available.
➡ P.71

● Part number specification

XBSS - 25C2A - 8-8

Product Code　Size　Bore Diameter

Please refer to dimensional table for part number specification.

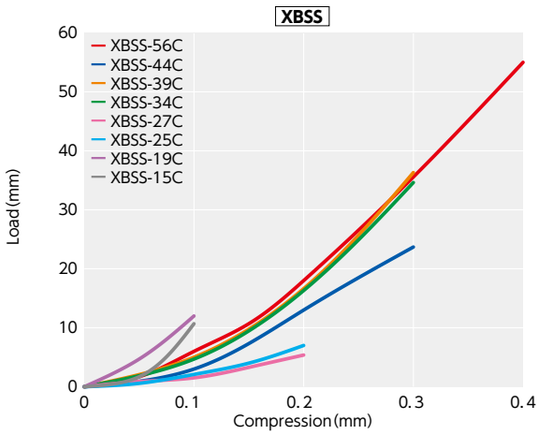
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

XBSS Flexible Coupling - Single - Disk Type

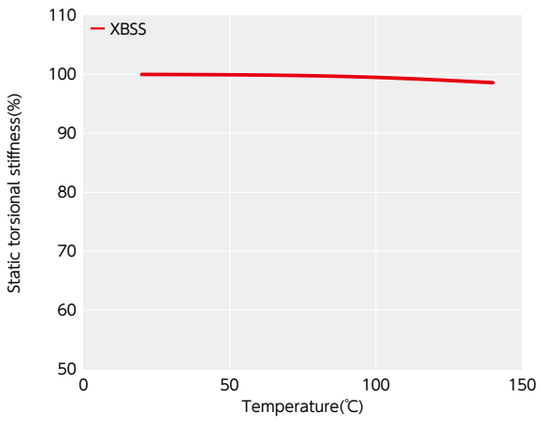
Selection Tool | CAD Download | SUS Stainless steel | Zero Backlash | High Rigidity

Technical Information

● Thrust Reaction Force



● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of **XBSS** in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used at higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the rated torque of **XBSS-C**

Unit : N・m

Part Number	Bore Diameter (mm)		
	8	10	11
XBSS-44C2A	4.5		
XBSS-56C3A		9	13

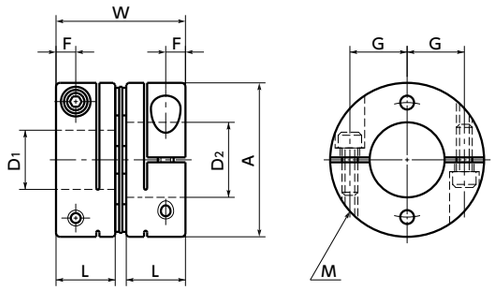
- These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **XBSS-C** Dimension table.

Couplicon®

XBSS-C Flexible Coupling - Single - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash　High Rigidity

XBSS-C Made of all stainless steel



Dimensions

Part Number [1]	A	L	W	F	G	M	Screw Tightening Torque (N・m)
XBSS-15C2A	15	7.5	16	2.3	5.25	M2	0.5
XBSS-19C2A	19	9	19	2.5	7.1	M2	0.5
XBSS-25C2A	25	11	23.6	3.5	9.25	M2.5	1
XBSS-27C2A	27	11	23.6	3.5	10.25	M2.5	1
XBSS-34C3A	34	12	26.2	4	13	M3	1.5
XBSS-39C2A	39	15	32.8	5	14.5	M4	3.5
XBSS-44C2A	44	15	32.8	5	17	M4	3.5
XBSS-56C3A	56	20	43.2	6	21.25	M5	8

Part Number	Stock Bores D1-D2 [2]																	
	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28
XBSS-15C2A	●	●	●	●														
XBSS-19C2A		●	●	●	●													
XBSS-25C2A			●	●	●	●	●	●										
XBSS-27C2A				●	●	●	●	●	●									
XBSS-34C3A				●	●	●	●	●	●	●	●							
XBSS-39C2A					●	●	●	●	●	●	●	●	●	●				
XBSS-44C2A					●	●	●	●	●	●	●	●	●	●	●			
XBSS-56C3A						●	●	●	●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
XBSS-15C2A	6	0.42	42000	2.3×10^{-7}	500	0.02	0.5	±0.1	15
XBSS-19C2A	8	0.6	33000	7.4×10^{-7}	1000	0.02	1	±0.1	29
XBSS-25C2A	12	1.1	25000	2.8×10^{-6}	1500	0.02	1	±0.2	53
XBSS-27C2A	14	1.3	23000	3.8×10^{-6}	2100	0.02	1	±0.2	67
XBSS-34C3A	16	2.5	18000	1.1×10^{-5}	3800	0.02	1	±0.3	115
XBSS-39C2A	20	4.8	16000	2.3×10^{-5}	5500	0.02	1	±0.3	185
XBSS-44C2A	22	5.6	14000	3.9×10^{-5}	7000	0.02	1	±0.3	305
XBSS-56C3A	28	14	11000	1.4×10^{-4}	15000	0.02	1	±0.4	610

*1: Correction of rated torque and max. torque due to load fluctuation is not required.

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

- Part number specification

XBSS-39C2A - 12-14
[1] [2]

Couplicon®

MDW Flexible Coupling - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

Structure

● Clamping type

MDW-C

● Applicable motors..

	MDW
Servomotor	◎
Stepping motor	◎
General-purpose motor	◎

◎: Excellent　○: Very good

● Property

	MDW
Zero Backlash	◎
Allowable Misalignment	○

◎: Excellent　○: Very good

- This is a disk type flexible coupling.
- The stainless steel disk allows the eccentricity, and angular misalignment, and end-play.

● Application

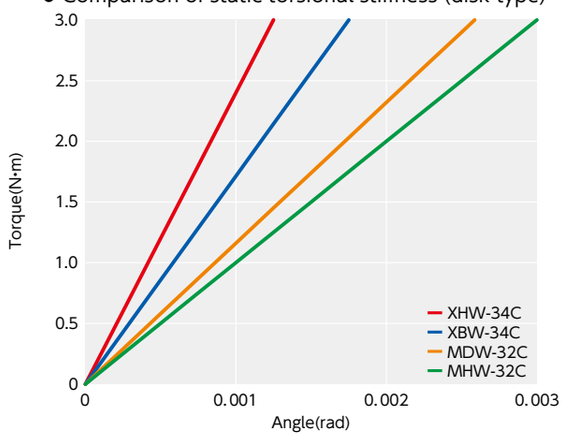
Actuator/XY stage

● Material/Finish

RoHS2 Compliant

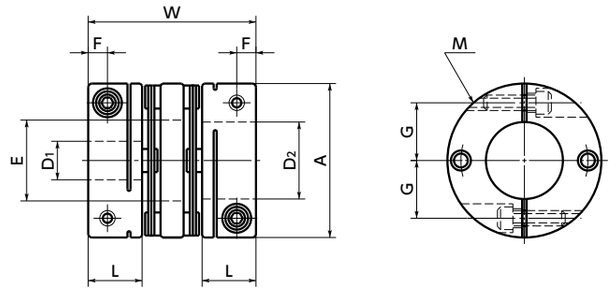
	MDW-C
Hub	A2017 Alumite Treatment
Spacer	A2017 Alumite Treatment
Disk	SUS304
Pin	SUS303
Collar	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Comparison of static torsional stiffness (disk-type)



Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

MDW-C



Dimensions

Unit : mm

Part Number 1	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
MDW-19C	19	8	27	8.5	2.5	6.5	M2	0.5
MDW-25C	25	10	31	12.5	3.5	9	M2.5	1
MDW-32C	32	12	40	16	4	11	M3	1.5
MDW-40C	40	14	44	21	5	15	M4	2.5
MDW-50C	50	18	57	26	6	18	M5	7
MDW-63C	63	20	61	35	7	24	M6	12

Part Number	Standard Bore Diameter D1・D2 2																					
	4	5	6	6.35	7	8	9	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30
MDW-19C	●	●	●		●	●																
MDW-25C			●	●		●	●	●	●	●												
MDW-32C						●		●	●	●	●	●										
MDW-40C						●		●	●	●	●	●	●	●	●	●						
MDW-50C											●	●	●	●	●	●	●	●	●	●		
MDW-63C												●	●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MDW-19C	8	0.7	33000	8.7×10^{-7}	200	0.12	1.5	±0.5	18
MDW-25C	12	1	25000	2.7×10^{-6}	450	0.12	1.5	±0.5	25
MDW-32C	15	2.5	19000	9.6×10^{-6}	1100	0.15	1.5	±0.5	60
MDW-40C	20	3.5	15000	1.9×10^{-5}	1400	0.15	1.5	±0.5	100
MDW-50C	25	9	12000	8.1×10^{-5}	2200	0.15	1.5	±0.5	210
MDW-63C	30	12.5	10000	2.1×10^{-4}	3000	0.15	1.5	±0.5	340

*1: Correction of rated torque due to load fluctuation is not required.
*2: These are values with max. bore diameter.

● Related Products

The Double-Disk type Flexible Coupling **XHW** is compatible with the servomotor with 350% instantaneous max. torque is available.
➡ P.65

● Part number specification

MDW-25C - 6-8
1　2

Couplicon®

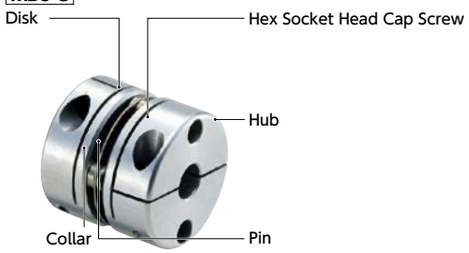
MDS Flexible Coupling - Single - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash

Structure

● Clamping type

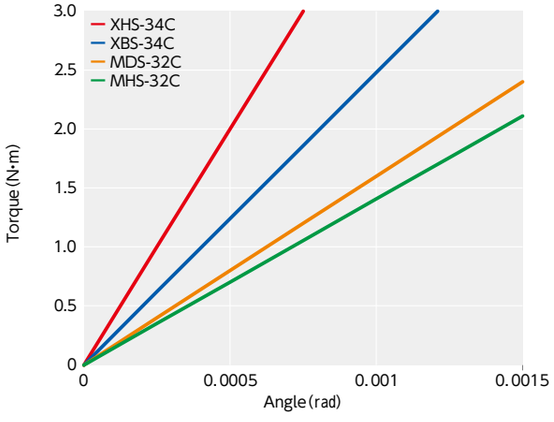
MDS-C



● Material/Finish　RoHS2 Compliant

	MDS-C
Hub	A2017 Alumite Treatment
Disk	SUS304
Pin	SUS303
Collar	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Comparison of static torsional stiffness (single disk-type)



● Applicable motors

	MDS
Servomotor	◎
Stepping motor	◎
General-purpose motor	◎

◎: Excellent　○: Very good

● Property

	MDS
Zero Backlash	◎
Allowable Misalignment	○

◎: Excellent　○: Very good

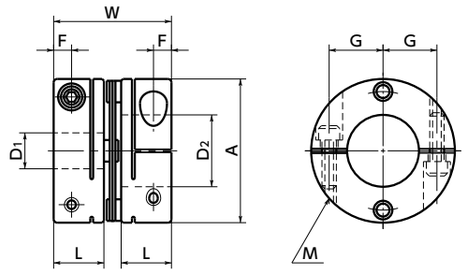
- This is a disk type flexible coupling.
- It has compact design with short entire length.
- The stainless steel disk allows the eccentricity, and angular misalignment, and end-play.

● Application

Actuator/XY stage

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

MDS-C



Dimensions

Unit : mm

Part Number 1	A	L	W	F	G	M	Screw Tightening Torque (N·m)
MDS-19C	19	8	20	2.5	6.5	M2	0.5
MDS-25C	25	10	24	3.5	9	M2.5	1
MDS-32C	32	12	29	4	11	M3	1.5
MDS-40C	40	14	33	5	15	M4	2.5
MDS-50C	50	18	42	6	18	M5	7
MDS-63C	63	20	46	7	24	M6	12

Part Number	Standard Bore Diameter D1・D2 2																						
	4	5	6	6.35	7	8	9	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30
MDS-19C	●	●	●		●	●																
MDS-25C			●	●		●	●	●	●	●												
MDS-32C						●		●	●	●	●	●										
MDS-40C						●		●	●	●	●	●	●	●	●	●	●					
MDS-50C											●	●	●	●	●	●	●	●	●	●		
MDS-63C												●	●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N·m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N·m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MDS-19C	8	0.7	33000	6.3×10^{-7}	280	0.02	0.7	±0.2	9
MDS-25C	12	1	25000	2.1×10^{-6}	630	0.02	0.7	±0.2	19
MDS-32C	15	2.5	19000	7.2×10^{-6}	1600	0.02	0.7	±0.2	41
MDS-40C	20	3.5	15000	1.3×10^{-5}	2600	0.02	0.7	±0.2	68
MDS-50C	25	9	12000	6.1×10^{-5}	3100	0.02	0.7	±0.2	140
MDS-63C	30	12.5	10000	1.7×10^{-4}	4200	0.02	0.7	±0.2	250

*1: Correction of rated torque due to load fluctuation is not required.
*2: These are values with max. bore diameter.

● Related Products

The Single-Disk type Flexible Coupling **XHS** is compatible with the servomotor with 350% instantaneous max. torque is available.
➡ P.71

● Part number specification

MDS-32C - 10-12
1　2

Couplicon®

MHW Flexible Coupling - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash

Structure

● Clamping type

MHW-C

● Applicable motors

	MHW
Servomotor	–
Stepping motor	◎
General-purpose motor	◎

◎: Excellent　○: Very good

● Property

	MHW
Zero Backlash	◎
Allowable Misalignment	○

◎: Excellent　○: Very good

- This is a disk type flexible coupling.
- The stainless steel disk allows the eccentricity, and angular misalignment, and end-play.

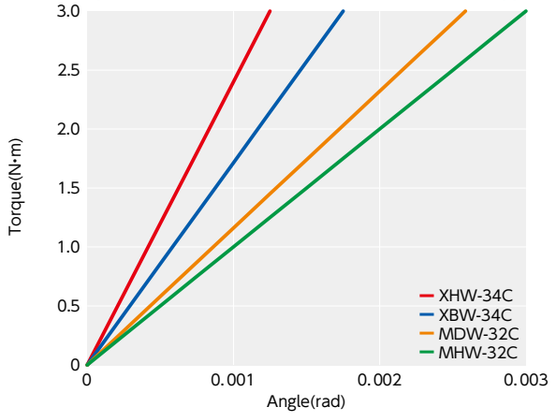
● Application

XY stage/Transport device

● Material/Finish　RoHS2 Compliant

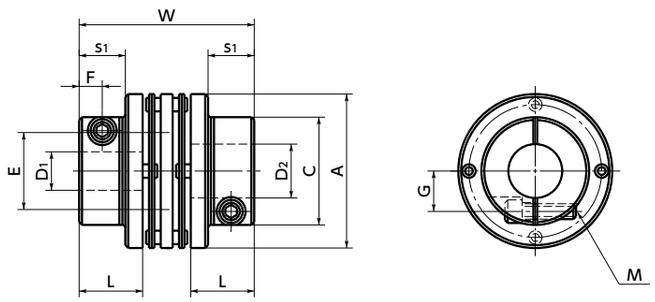
	MHW-C
Hub	A2017 Alumite Treatment
Spacer	A2017 Alumite Treatment
Disk	SUS301
Pin	SUS303
Collar	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Comparison of static torsional stiffness (disk-type)



Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

MHW-C



Dimensions

Unit : mm

Part Number 1	A	L	W	C	s1	E	F	G	M	Screw Tightening Torque (N·m)
MHW-32C	32	13.7	40	22	9	15	4	8	M3	1.5
MHW-40C	40	16.5	46	28	12	20	6	10.5	M4	2.5
MHW-50C	50	19.4	52	39	15	25	7	14.75	M5	7
MHW-63C	63	22.3	58	45	18	32	8	17	M6	12

Part Number	Standard Bore Diameter D1・D2 2											
	6	8	10	11	12	14	15	16	18	19	20	25
MHW-32C	●	●	●									
MHW-40C		●	●	●	●	●						
MHW-50C					●	●	●	●	●	●	●	
MHW-63C							●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N·m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N·m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MHW-32C	10	2	19000	6.2×10^{-6}	1000	0.15	2	±0.4	48
MHW-40C	14	4	15000	1.6×10^{-5}	1500	0.2	2	±0.5	81
MHW-50C	20	7.5	12000	4.6×10^{-5}	2000	0.2	2	±0.6	150
MHW-63C	25	10	10000	1.1×10^{-4}	2500	0.3	2	±0.8	230

*1: Correction of rated torque due to load fluctuation is not required.
*2: These are values with max. bore diameter.

● Related Products

The Double-Disk type Flexible Coupling **XHW** is compatible with the servomotor with 350% instantaneous max. torque is available.
➡ P.65

● Part number specification

MHW-32C - 8-10
1　2

Couplicon®

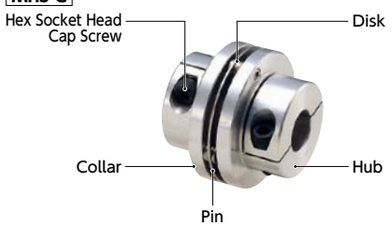
MHS Flexible Coupling - Single - Disk Type

WEB Selection Tool　WEB CAD Download　Zero Backlash

Structure

● Clamping type

MHS-C



● Applicable motors

	MHS
Servomotor	–
Stepping motor	◎
General-purpose motor	◎

◎: Excellent　○: Very good

● Property

	MHS
Zero Backlash	◎
Allowable Misalignment	○

◎: Excellent　○: Very good

- This is a disk type flexible coupling.
- The stainless steel disk allows the eccentricity, and angular misalignment and end-play.

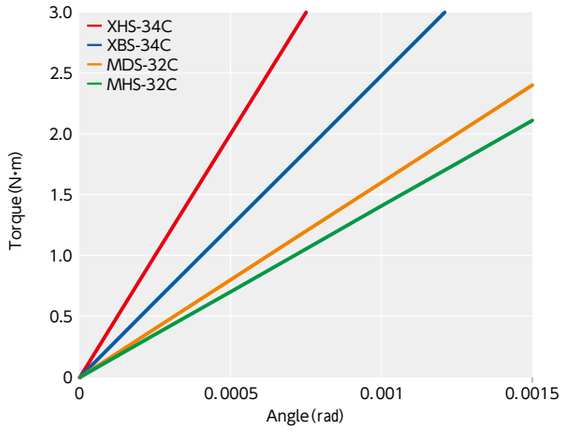
● Application

XY stage/Transport device

● Material/Finish　RoHS2 Compliant

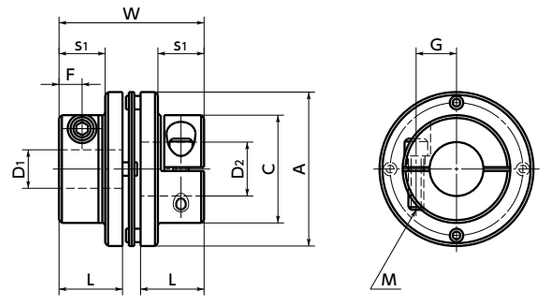
	MHS-C
Hub	A2017 Alumite Treatment
Disk	SUS301
Pin	SUS303
Collar	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Comparison of static torsional stiffness (single disk-type)



Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

MHS-C



Dimensions

Unit : mm

Part Number 1	A	L	W	C	s1	F	G	M	Screw Tightening Torque (N·m)
MHS-32C	32	13.7	32	22	9	4	8	M3	1.5
MHS-40C	40	16.5	38	28	12	6	10.5	M4	2.5
MHS-50C	50	19.4	44	39	15	7	14.75	M5	7
MHS-63C	63	22.3	50	45	18	8	17	M6	12

Part Number	Standard Bore Diameter D1・D2 2											
	6	8	10	11	12	14	15	16	18	19	20	25
MHS-32C	●	●	●									
MHS-40C		●	●	●	●	●						
MHS-50C					●	●	●	●	●	●	●	
MHS-63C							●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N·m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N·m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MHS-32C	10	2	19000	4.5×10^{-6}	1300	0.02	1	±0.2	38
MHS-40C	14	4	15000	1.2×10^{-5}	2800	0.02	1	±0.2	66
MHS-50C	20	7.5	12000	3.7×10^{-5}	3700	0.02	1	±0.2	120
MHS-63C	25	10	10000	8.4×10^{-5}	5000	0.02	1	±0.2	190

*1: Correction of rated torque due to load fluctuation is not required.
*2: These are values with max. bore diameter.

● Related Products

The Single-Disk type Flexible Coupling **XHS** is compatible with the servomotor with 350% instantaneous max. torque is available.
➡ P.71

● Part number specification

MHS-32C - 8-10
1　2

Couplicon®

MSX Flexible coupling - Slit - type

WEB Selection Tool　WEB CAD Download　Zero Backlash　High Rigidity

Structure

● Set Screw type

MSX ➡ P.101

● Clamping type

MSX-C ➡ P.103

● Applicable motors

	MSX
Servomotor	◎
Stepping motor	◎
General-purpose motor	◎

◎: Excellent　○: Very good

● Property

	MSX
Zero Backlash	◎
High Torque	○
High Torsional Stiffness	◎

◎: Excellent　○: Very good

- This is a metal spring coupling with single-piece construction. A slit is inserted into a cylindrical material.
- It has an extremely high torsional stiffness and low moment of inertia.
- Extra super duralumin (A7075) featuring the highest strength among aluminum alloy is adopted.
- A plate spring formed by a slit allows eccentricity, angular misalignment, and end-play to be accepted.

● Application

Actuator/High precision XY stage/Index table

● Material/Finish　RoHS2 Compliant

	MSX / MSX-C
Main Body	A7075 Alumite Treatment
Hex Socket Set Screw	SCM435 Ferrosoferric oxide film
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Related Products

The slit-type coupling **MSXP** in PEEK material can be used in an environment or cleanroom where heat and chemical resistance are required, such as FPD and semiconductor equipments.
➡ P.231

● Part number specification

MSX-19C-5-6

Product Code　size　Bore diameter

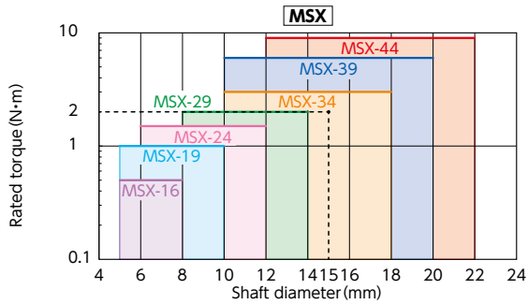
Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Selection

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.



● Selection example

In case of selected parameters of shaft diameter of ϕ 15 and load torque of 2 N•m, the selected size is **MSX-34** or **MSX-34C**.

● Selection based on the rated output of the servomotor

Rated output (W)	Servomotor Specifications*1			Selection size	
	Diameter of motor shaft (mm)	Rated torque (N•m)	Instantaneous max. torque (N•m)	MSX Set Screw Type	MSX-C Clamping type
10	5 - 6	0.032	0.096	MSX-16	MSX-16C
20	5 - 6	0.064	0.19	MSX-16	MSX-16C
30	5 - 7	0.096	0.29	MSX-19	MSX-19C
50	6 - 8	0.16	0.48	MSX-19	MSX-19C
100	8	0.32	0.95	MSX-19	MSX-19C
200	9 - 14	0.64	1.9	MSX-29	MSX-34C
400	14	1.3	3.8	MSX-39	MSX-39C
750	16 - 19	2.4	7.2	MSX-44	MSX-44C

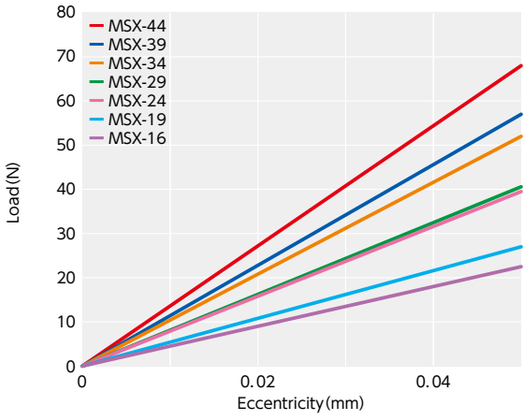
*1: Motor specifications are based on general values. For details, see the motor manufacturer's catalogs.This is the size for cases where devices such as reduction gears are not used.

MSX Flexible coupling - Slit - type

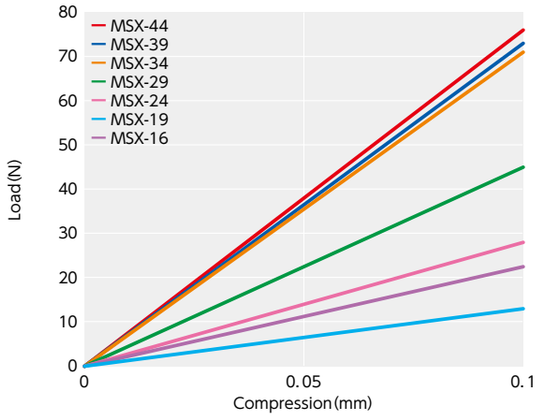
Selection Tool | CAD Download | Zero Backlash | High Rigidity

Technical Information

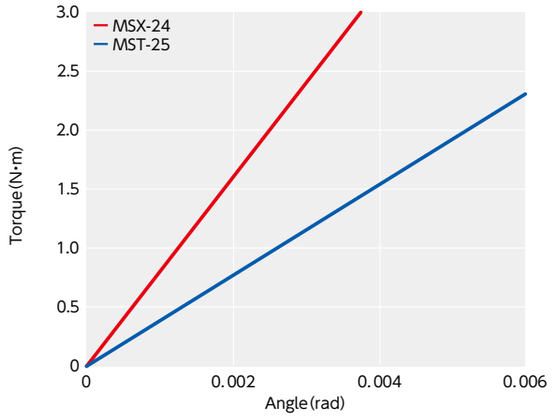
● Eccentric Reaction Force



● Thrust Reaction Force

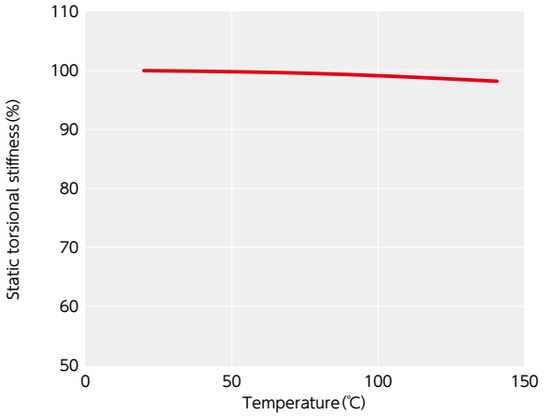


● Comparison of static torsional stiffness (slit-type)



MSX have high torsional stiffness and responsiveness.
Optimal for high-speed and precision positioning for servomotors, etc.

● Change in static torsional stiffness due to temperature

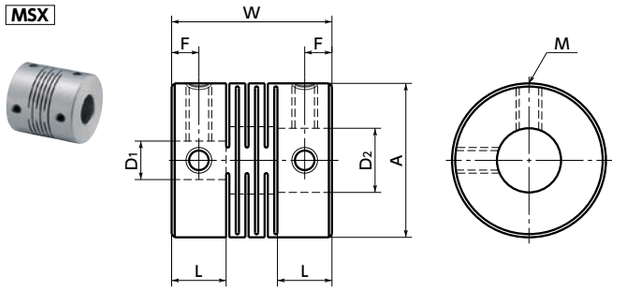


This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
MSX's change in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used under higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

MSX Flexible coupling - Slit - type - Set screw type

Selection Tool | CAD Download | Zero Backlash | High Rigidity

MSX



Dimensions

Unit : mm

Part Number 1	A	L	W	F	M	Screw Tightening Torque (N·m)
MSX-16	16	6	17.4	3	M3	0.7
MSX-19	19	6.8	20	3.4	M3	0.7
MSX-24	24	8.5	25	4.25	M4	1.7
MSX-29	29	10.2	30	5.1	M4	1.7
MSX-34	34	12	35	6	M5	4
MSX-39	39	13.5	40	6.75	M5	4
MSX-44	44	15.5	45	7.75	M6	7

Part Number	Standard Bore Diameter (dimensional allowance H8) D1-D2 2							
MSX-16	5 - 5	5 - 6	6 - 6					
MSX-19	5 - 5 6.35 - 6.35	5 - 6 6.35 - 8	5 - 7 8 - 8	5 - 8 8 - 10	6 - 6 10 - 10	6 - 6.35	6 - 7	6 - 8
MSX-24	6 - 6 8 - 9.525	6 - 8 8 - 10	6 - 10 9.525 - 10	6.35 - 6.35 10 - 10	6.35 - 8 10 - 11	6.35 - 10 10 - 12	7 - 8 11 - 12	8 - 8 12 - 12
MSX-29	8 - 8 11 - 12	8 - 10 11 - 14	8 - 11 12 - 12	8 - 12 12 - 14	10 - 10	10 - 11	10 - 12	10 - 14
MSX-34	10 - 14 15 - 15	11 - 14 15 - 16	12 - 12 16 - 16	12 - 14	12 - 16	14 - 14	14 - 15	14 - 16
MSX-39	10 - 14 15 - 15	12 - 12 15 - 16	12 - 14 16 - 16	12 - 15	12 - 16	12 - 19	14 - 14	14 - 15
MSX-44	12 - 12 15 - 19	12 - 14 15 - 20	12 - 19 20 - 20	14 - 14	14 - 15	14 - 16	15 - 15	15 - 16

- All products are provided with hex socket set screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MSX-16	8	0.5	39000	2.8×10^{-7}	200	0.05	0.5	±0.1	7
MSX-19	10	1	33000	6.2×10^{-7}	270	0.05	0.5	±0.1	10
MSX-24	12	1.5	26000	2.0×10^{-6}	790	0.05	0.5	±0.1	22
MSX-29	14	2	21000	5.2×10^{-6}	1400	0.05	0.5	±0.1	40
MSX-34	18	3	18000	1.1×10^{-5}	2200	0.05	0.5	±0.1	64
MSX-39	20	6	16000	2.9×10^{-5}	4100	0.05	0.5	±0.1	90
MSX-44	22	9	14000	5.5×10^{-5}	5100	0.05	0.5	±0.1	133

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Part number specification

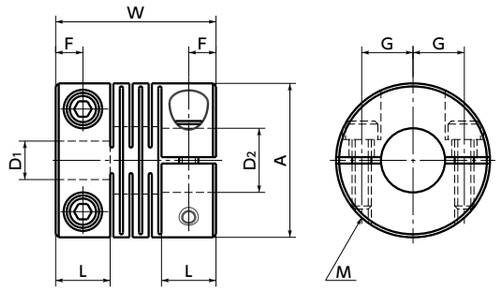
MSX-19 - 5-6
1 2

Couplicon®

MSX-C Flexible coupling - Slit - type - Clamping type

WEB Selection Tool　WEB CAD Download　Zero Backlash　High Rigidity

MSX-C Made of aluminum alloy



Dimensions

Unit : mm

Part Number ①	A	L	W	F	G	M	Screw Tightening Torque (N・m)
MSX-16C	16	6	17.4	3	4.74	M2	0.5
MSX-19C	19	6.8	20	3.4	5.6	M2.5	1
MSX-24C	24	8.5	25	4.25	8	M3	1.5
MSX-29C	29	10.2	30	5.1	9	M3	1.5
MSX-34C	34	12	35	6	11	M3	1.5
MSX-39C	39	13.5	40	6.75	14	M4	2.5
MSX-44C	44	15.5	45	7.75	16	M4	2.5

Part Number	Standard Bore Diameter D_1-D_2 ②							
MSX-16C	5 - 5	5 - 6	6 - 6					
MSX-19C	5 - 5 6.35 - 6.35	5 - 6 6.35 - 8	5 - 7 8 - 8	5 - 8	6 - 6	6 - 6.35	6 - 7	6 - 8
MSX-24C	6 - 6 8 - 9.525	6 - 8 8 - 10	6 - 10 9.525 - 10	6.35 - 6.35 10 - 10	6.35 - 8	6.35 - 10	7 - 8	8 - 8
MSX-29C	8 - 8 12 - 12	8 - 10	8 - 11	8 - 12	10 - 10	10 - 11	10 - 12	11 - 12
MSX-34C	10 - 14 15 - 15	11 - 14 15 - 16	12 - 12 16 - 16	12 - 14	12 - 16	14 - 14	14 - 15	14 - 16
MSX-39C	10 - 14 15 - 15	12 - 12 15 - 16	12 - 14 16 - 16	12 - 15	12 - 16	12 - 19	14 - 14	14 - 15
MSX-44C	12 - 12 15 - 19	12 - 14 15 - 20	12 - 19 20 - 20	14 - 14	14 - 15	14 - 16	15 - 15	15 - 16

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MSX-16C	6	0.5	39000	2.5×10^{-7}	200	0.05	0.5	±0.1	7
MSX-19C	8	1	33000	5.8×10^{-7}	270	0.05	0.5	±0.1	12
MSX-24C	10	1.5	26000	1.8×10^{-6}	790	0.05	0.5	±0.1	23
MSX-29C	12	2	21000	4.7×10^{-6}	1400	0.05	0.5	±0.1	41
MSX-34C	16	3	18000	1.1×10^{-5}	2200	0.05	0.5	±0.1	62
MSX-39C	20	6	16000	2.3×10^{-5}	4100	0.05	0.5	±0.1	88
MSX-44C	22	9	14000	4.3×10^{-5}	5100	0.05	0.5	±0.1	128

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Part number specification

MSX-39C - 14-15
① ②

Couplicon®

MST/MSTS Flexible coupling - Slit - type

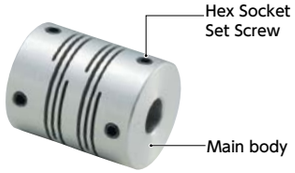
WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

Structure

● Set Screw type ➡ P.109

MST Made of aluminum alloy

MSTS Made of all stainless steel



● Clamping type ➡ P.111

MST-C Made of aluminum alloy

MSTS-C Made of all stainless steel

Outside diameter ϕ40 - ϕ63

MSTS-C

Outside diameter ϕ 12 - ϕ 32

● Set Screw + Key type ➡ P.113

MST-K Made of aluminum alloy

MSTS-K Made of all stainless steel

● Recommended applicable motor

	MST	MSTS
Servomotor	–	–
Stepping motor	◎	◎
General-purpose motor	△	△

◎: Excellent　○: Very good　△: Available

● Property

	MST	MSTS
Zero Backlash	◎	◎
High Torque	○	○
High Torsional Stiffness	○	○
Allowable Misalignment	○	○
Corrosion Resistance (All S.S.)	–	◎

◎: Excellent　○: Very good

- This is a metal spring coupling with single-piece construction. Slits are made into a cylindrical material.
- A plate spring formed by slits allows eccentricity, angular misalignment, and end-play to be accepted.
- There are two types of units made of aluminum alloy or all stainless steel.
- Wide variation of outside diameter ϕ 8 - ϕ 63.

● Application

Transport device/XY stage/Parts feeder

● Material/Finish　RoHS2 Compliant

	MST / MST-C / MST-K	MSTS / MSTS-C / MSTS-K
Main Body	A2017 Alumite Treatment	SUS303
Hex Socket Set Screw	SCM435 Ferrosoferric oxide film	SUSXM7
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film	SUSXM7

Related Products

Slit-type flexible coupling **MSX** with excellent torsional stiffness is available.
➡ P.97

XSTS SUS316L material finished with clean washing and clean packaging, which is best suited for FPD and semiconductor manufacturing equipment, is available.
➡ P.227

● Part number specification

MST-32K-12-12

Product Code　Size　Bore Diameter

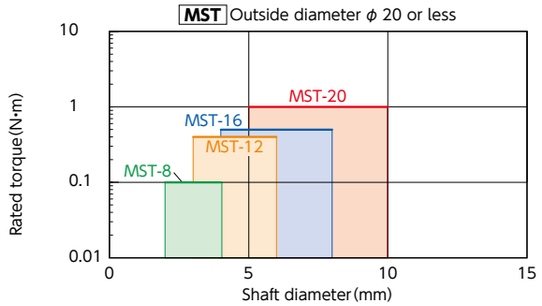
Please refer to dimensional table for part number specification.

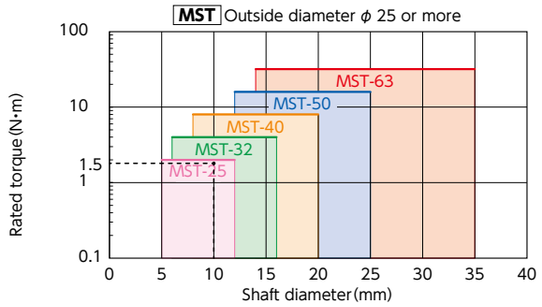
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

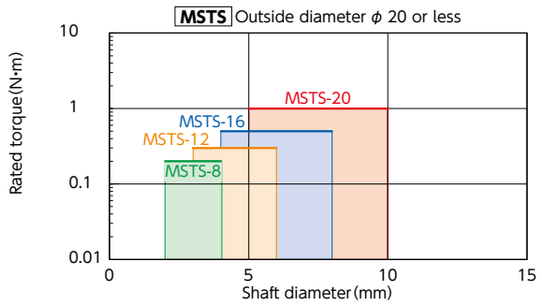
Selection

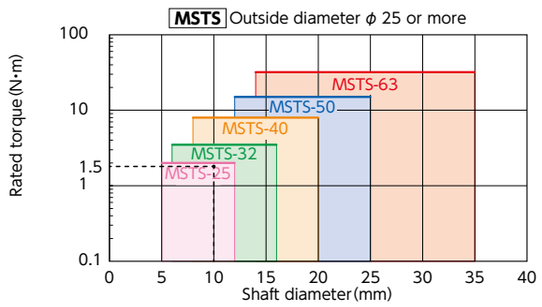
Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.









● Selection example

In case of selected parameters of shaft diameter of ϕ 10 and load torque of 1.5 N•m, the selected size for **MST** **MSTS** is **MST-25** **MSTS-25**

GOOD DESIGN

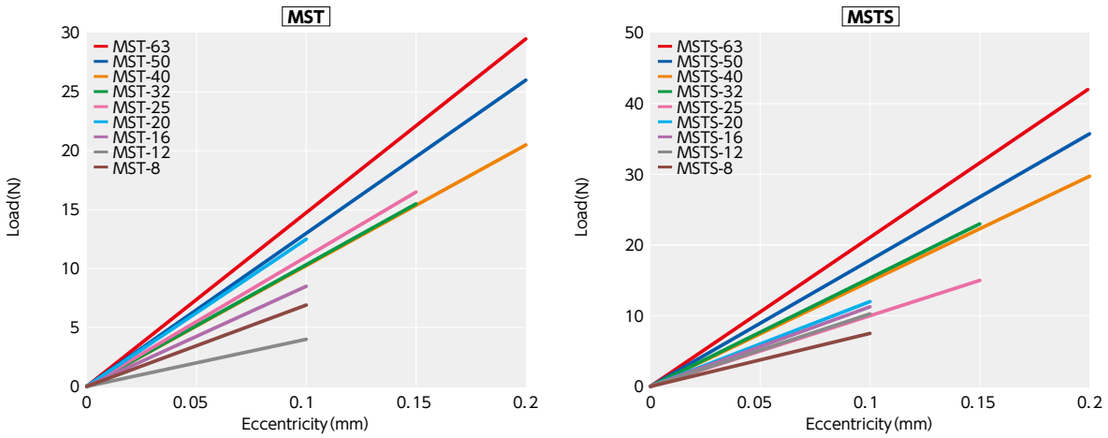
Couplicon®

MST/MSTS Flexible coupling - Slit - type

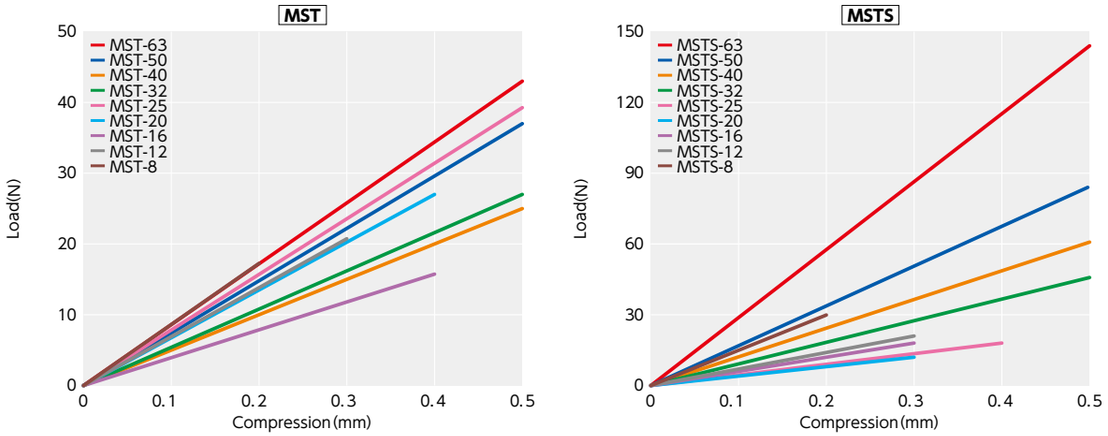
WEB Selection Tool WEB CAD Download SUS Stainless steel Zero Backlash

Technical Information

● Eccentric Reaction Force

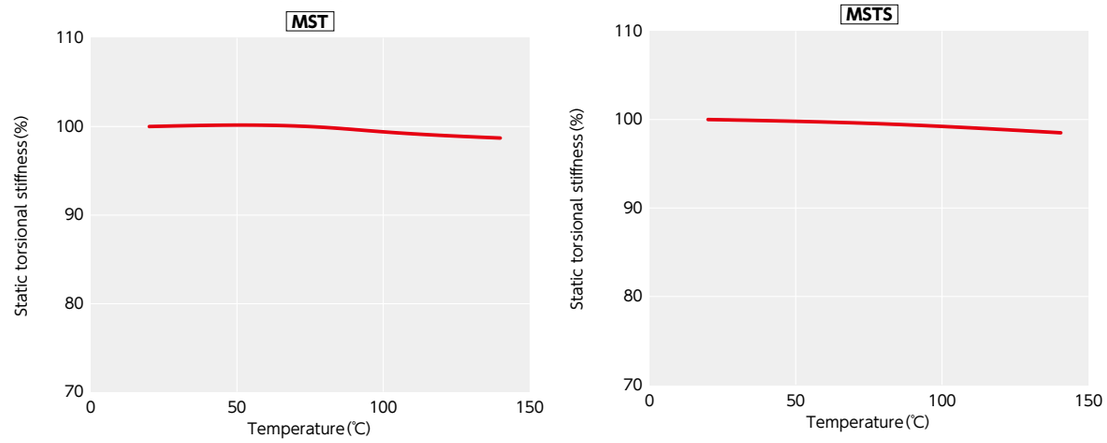


● Thrust Reaction Force



● Change in static torsional stiffness due to temperature

This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of **MST** **MSTS** in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used at higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.



● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the rated torque of **MST-C** **MSTS-C**.

Unit : N・m

Part Number	Bore Diameter (mm)							
	5	6	6.35	8	9.525	10	11	14
MST-40C				7.1				
MSTS-25C	0.7	0.7	0.9	1.7				
MSTS-32C				1.2	2.1	2.7	2.9	
MSTS-63C								28.8

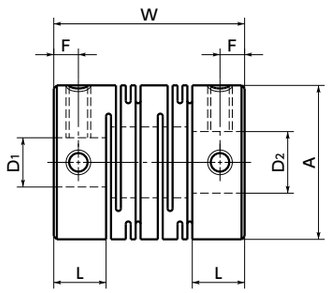
● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **MST-C** **MSTS-C** Dimension table.

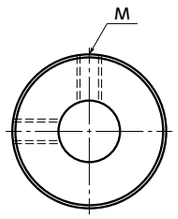
Couplicon®

MST/MSTS Flexible coupling - Slit - type - Set screw type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

MST Made of aluminum alloy
MSTS Made of all stainless steel





Dimensions

Unit : mm

Part Number 1	A	L	W	F	M	Screw Tightening Torque (N・m)
MST-8	8	3.5	14	1.7	M2	0.3
MST-12	12	5	18.5	2.5	M2.5	0.5
MST-16	16	6.5	23	3	M3	0.7
MST-20	20	7.5	26	3	M3	0.7
MST-25	25	8.5	31	4	M4	1.7
MST-32	32	12	41	6	M4	1.7
MST-40	40	17	56	8.5	M5	4
MST-50	50	21	71	10.5	M6	7
MST-63	63	26	90	13	M8	15
MSTS-8	8	3.5	14	1.7	M2	0.3
MSTS-12	12	5	18.5	2.5	M2.5	0.5
MSTS-16	16	6.5	23	3	M3	0.7
MSTS-20	20	7.5	26	3	M3	0.7
MSTS-25	25	8.5	31	4	M4	1.7
MSTS-32	32	12	41	6	M4	1.7
MSTS-40	40	17	56	8.5	M5	4
MSTS-50	50	21	71	10.5	M6	7
MSTS-63	63	26	90	13	M8	15

Part Number		Standard Bore Diameter (dimensional allowance H8) D_1-D_2 2							
MST-8	**MSTS-8**	2 - 2	2 - 3	3 - 3					
MST-12	**MSTS-12**	3 - 3	3 - 4	4 - 4	4 - 5	4.5 - 5	5 - 5	5 - 6	
MST-16	**MSTS-16**	4 - 4 6 - 6.35	4 - 5 6 - 7	4 - 6 6 - 8	4.5 - 5 6.35 - 8	5 - 5	5 - 6	5 - 8	6 - 6
MST-20	**MSTS-20**	5 - 5 6.35 - 8	5 - 6 8 - 8	5 - 8 8 - 9.525*1	6 - 6 8 - 10	6 - 6.35 10 - 10	6 - 7	6 - 8	6 - 10
MST-25	**MSTS-25**	5 - 6 8 - 9.525*1	6 - 6 8 - 10	6 - 6.35 8 - 12	6 - 8 9.525 - 10	6 - 10 10 - 10	6.35 - 8 10 - 11*1	6.35 - 10 10 - 12	8 - 8 12 - 12
MST-32	**MSTS-32**	6 - 8 10 - 12	6.35 - 8 10 - 14	8 - 8 12 - 12	8 - 10 12 - 14	8 - 12 14 - 14	9.525 - 12 14 - 16	10 - 10	10 - 11
MST-40	**MSTS-40**	8 - 9.525	10 - 10	12 - 12	14 - 14	15 - 15	16 - 16	16 - 18*1	18 - 18
MST-50	**MSTS-50**	12 - 12	14 - 14	15 - 15	16 - 18				
MST-63	**MSTS-63**	14 - 14							

- All products are provided with hex socket set screw.
- In a case where the bore diameter is ϕ 4 or less, the set screw is used in only one place.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

*1 : Only **MSTS-**** is standard product. For **MST-**** , use the additional modification service **BT**. ➡ P.803

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MST-8	4	0.1	78000	1.2×10^{-8}	25	0.1	2	±0.2	1.4
MST-12	6	0.4	52000	8.3×10^{-8}	45	0.1	2	±0.3	3.7
MST-16	8	0.5	39000	3.3×10^{-7}	80	0.1	2	±0.4	8.1
MST-20	10	1	31000	9.0×10^{-7}	170	0.1	2	±0.4	14
MST-25	12	2	25000	2.6×10^{-6}	380	0.15	2	±0.5	27
MST-32	16	4	19000	9.6×10^{-6}	500	0.15	2	±0.5	60
MST-40	20	8	15000	3.2×10^{-5}	700	0.2	2	±0.5	130
MST-50	25	16	12000	1.0×10^{-4}	1800	0.2	2	±0.5	260
MST-63	35	32	10000	3.2×10^{-4}	3100	0.2	2	±0.5	490
MSTS-8	4	0.2	78000	3.1×10^{-8}	50	0.1	2	±0.2	3
MSTS-12	6	0.3	52000	2.1×10^{-7}	64	0.1	2	±0.3	9.3
MSTS-16	8	0.5	39000	8.4×10^{-7}	85	0.1	2	±0.3	21
MSTS-20	10	1	31000	2.4×10^{-6}	250	0.1	2	±0.3	38
MSTS-25	12	2	25000	6.8×10^{-6}	330	0.15	2	±0.4	71
MSTS-32	16	3.5	19000	2.6×10^{-5}	850	0.15	2	±0.5	160
MSTS-40	20	8	15000	8.7×10^{-5}	1000	0.2	2	±0.5	350
MSTS-50	25	15	12000	2.7×10^{-4}	1400	0.2	2	±0.5	700
MSTS-63	35	35	10000	8.4×10^{-4}	1800	0.2	2	±0.5	1300

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Part number specification

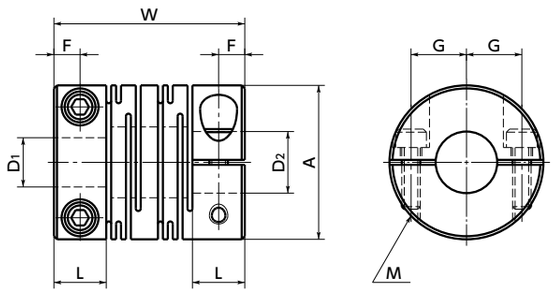
MSTS-25 - 9.525-10
1　2

Couplicon®

MST-C/MSTS-C Flexible coupling - Slit - type - Clamping type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

MST-C Made of aluminum alloy
MSTS-C Made of all stainless steel
Outside diameter ϕ40 - ϕ63



Dimensions

Unit : mm

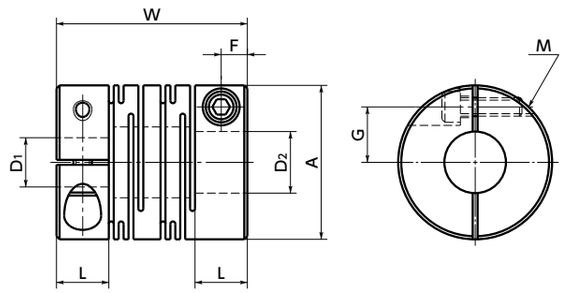
Part Number 1	A	L	W	F	G	M	Screw Tightening Torque (N・m)
MST-12C	12	5	18.5	2.5	4	M2	0.5
MST-16C	16	6.5	23	3.25	5	M2.5	1
MST-20C	20	7.5	26	3.75	6.5	M2.5	1
MST-25C	25	8.5	31	4.25	9	M3	1.5
MST-32C	32	12	41	6	11	M4	2.5
MST-40C	40	17	56	8.5	14	M5	4
MST-50C	50	21	71	10.5	18	M6	8
MST-63C	63	26	90	13	24	M8	16
MSTS-12C	12	5	18.5	2.5	4	M2	0.5
MSTS-16C	16	6.5	23	3.25	5	M2.5	1
MSTS-20C	20	7.5	26	3.75	6.5	M2.5	1
MSTS-25C	25	8.5	31	4.25	9	M3	1.5
MSTS-32C	32	12	41	6	11	M4	2.5
MSTS-40C	40	17	56	8.5	14	M5	4
MSTS-50C	50	21	71	10.5	18	M6	8
MSTS-63C	63	26	90	13	24	M8	16

Part Number		Standard Bore Diameter D_1-D_2 2							
MST-12C	**MSTS-12C**	4 - 4	4 - 5	4.5 - 5	5 - 5				
MST-16C	**MSTS-16C**	4.5 - 5	4.5 - 6	5 - 5	5 - 6	6 - 6			
MST-20C	**MSTS-20C**	5 - 6 6.35 - 8	5 - 6.35 8 - 8	5 - 7	5 - 8	6 - 6	6 - 6.35	6 - 7	6 - 8
MST-25C	**MSTS-25C**	5 - 6 8 - 9.525	6 - 6 8 - 10	6 - 6.35 9.525 - 10	6 - 8 10 - 10	6 - 10	6.35 - 8	6.35 - 10	8 - 8
MST-32C	**MSTS-32C**	8 - 8 10 - 12	8 - 9.525 10 - 14	8 - 10 12 - 12	8 - 12 12 - 14	9.525 - 10	9.525 - 12	10 - 10	10 - 11
MST-40C	**MSTS-40C**	8 - 8 15 - 16	8 - 10 16 - 16	10 - 10	12 - 12	12 - 14	14 - 14	14 - 16	15 - 15
MST-50C	**MSTS-50C**	12 - 14	14 - 14	15 - 15	16 - 16	18 - 18			
MST-63C	**MSTS-63C**	14 - 14	16 - 16	18 - 18					

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258
- **MST-C** has variable slit shapes depending on the size. See the Slit Details.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

MSTS-C Made of all stainless steel
Outside diameter ϕ12 - ϕ32



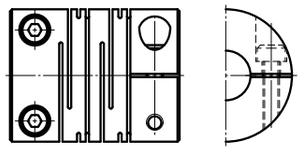
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MST-12C	5	0.4	52000	7.8×10^{-8}	45	0.1	2	±0.3	3.6
MST-16C	6	0.5	39000	3.4×10^{-7}	80	0.1	2	±0.4	9.2
MST-20C	8	1	31000	9.1×10^{-7}	170	0.1	2	±0.4	16
MST-25C	10	2	25000	2.6×10^{-6}	380	0.15	2	±0.5	28
MST-32C	14	4	19000	9.7×10^{-6}	500	0.15	2	±0.5	64
MST-40C	18	8	15000	3.3×10^{-5}	700	0.2	2	±0.5	140
MST-50C	22	16	12000	1.0×10^{-4}	1800	0.2	2	±0.5	270
MST-63C	30	32	10000	3.2×10^{-4}	3100	0.2	2	±0.5	530
MSTS-12C	5	0.3	52000	2.2×10^{-7}	64	0.1	2	±0.2	10
MSTS-16C	6	0.5	39000	9.0×10^{-7}	85	0.1	2	±0.3	25
MSTS-20C	8	1	31000	2.5×10^{-6}	250	0.1	2	±0.3	43
MSTS-25C	10	2	25000	7.1×10^{-6}	330	0.15	2	±0.4	78
MSTS-32C	14	3.5	19000	2.7×10^{-5}	850	0.15	2	±0.5	170
MSTS-40C	18	8	15000	9.0×10^{-5}	1000	0.2	2	±0.5	370
MSTS-50C	22	15	12000	2.8×10^{-4}	1400	0.2	2	±0.5	750
MSTS-63C	30	35	10000	8.8×10^{-4}	1800	0.2	2	±0.5	1400

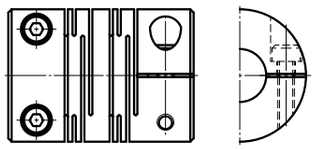
*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Slit Details

MST-C



Outside diameter ϕ 12-ϕ 32



Outside diameter ϕ40 - ϕ63

- Part number specification

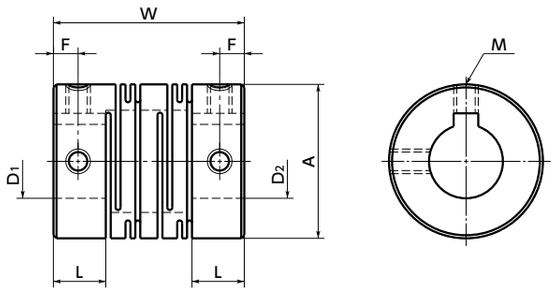
MST-40C - 12-14
1　2

Couplicon®

MST-K/MSTS-K Flexible coupling - Slit - type - Set screw + Key type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

MST-K Made of aluminum alloy
MSTS-K Made of all stainless steel



Dimensions

Unit : mm

Part Number 1	A	L	W	F	M	Screw Tightening Torque (N・m)
MST-32K	32	12	41	6	M4	1.7
MST-40K	40	17	56	8.5	M5	4
MST-50K	50	21	71	10.5	M6	7
MST-63K	63	26	90	13	M8	15
MSTS-32K	32	12	41	6	M4	1.7
MSTS-40K	40	17	56	8.5	M5	4
MSTS-50K	50	21	71	10.5	M6	7
MSTS-63K	63	26	90	13	M8	15

Part Number	Standard Bore Diameter (dimensional allowance H8) D1-D2 2		
MST-32K	12 - 12	14 - 14	
MST-40K	14 - 14	16 - 16	18 - 18
MST-50K	16 - 16	18 - 18	20 - 20
MST-63K	20 - 20	25 - 25	30 - 30
MSTS-32K	12 - 12	14 - 14	
MSTS-40K	14 - 14	16 - 16	18 - 18
MSTS-50K	16 - 16	18 - 18	20 - 20
MSTS-63K	20 - 20	25 - 25	

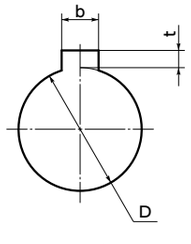
- All products are provided with hex socket set screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MST-32K	14	4	19000	9.6×10^{-6}	500	0.15	2	±0.5	59
MST-40K	18	8	15000	3.2×10^{-5}	700	0.2	2	±0.5	130
MST-50K	20	16	12000	1.0×10^{-4}	1800	0.2	2	±0.5	270
MST-63K	30	32	10000	3.2×10^{-4}	3100	0.2	2	±0.5	490
MSTS-32K	14	3.5	19000	2.6×10^{-5}	850	0.15	2	±0.5	160
MSTS-40K	18	8	15000	8.6×10^{-5}	1000	0.2	2	±0.5	340
MSTS-50K	20	15	12000	2.8×10^{-4}	1400	0.2	2	±0.5	730
MSTS-63K	30	35	10000	8.5×10^{-4}	1800	0.2	2	±0.5	1300

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

● Details of Shaft Hole



Unit : mm

Standard bore diameter D	Keyway b Standard Dimension	Keyway b Allowance (JS9)	Keyway t Standard Dimension	Keyway t Allowance (JS9)	Key Nominal Dimension b×h
12	4	±0.0150	1.8	$^{+0.1}_{0}$	4×4
14・16	5	±0.0150	2.3	$^{+0.1}_{0}$	5×5
18・20	6	±0.0150	2.8	$^{+0.1}_{0}$	6×6
25・30	8	±0.0180	3.3	$^{+0.2}_{0}$	8×7

- Excerpt from JIS B 1301

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

● Part number specification

MST-32K - 12-12
1　2

Couplicon®

MWS/MWSS Flexible coupling - Slit - type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

Structure

- Set Screw type ➡ P.119

MWS Made of aluminum alloy

MWSS Made of all stainless steel

- Clamping type ➡ P.121

MWS-C Made of aluminum alloy

MWSS-C Made of all stainless steel

- Recommended applicable motor

	MWS	MWSS
Servomotor	–	–
Stepping motor	◎	◎
General-purpose motor	△	△

◎: Excellent　○: Very good　△: Available

- Property

	MWS	MWSS
Zero Backlash	◎	◎
High Torque	○	○
High Torsional Stiffness	○	○
Corrosion Resistance (All S.S.)	–	◎

◎: Excellent　○: Very good

- This is a metal spring coupling with single-piece construction. Slits are made into a cylindrical material.
- A plate spring formed by slits allows angular misalignment, and end-play to be accepted.
- There are two types of units made of aluminum alloy or all stainless steel.

- Application

Transport device/XY stage/Parts feeder

- Material/Finish

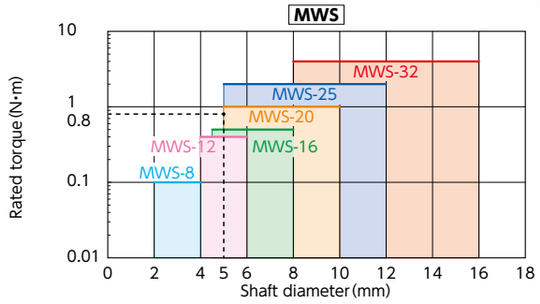
RoHS2 Compliant

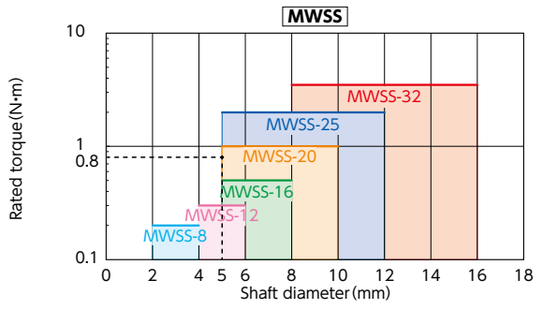
	MWS / MWS-C	MWSS / MWSS-C
Main body	A2017 Alumite Treatment	SUS303
Hex Socket Set Screw	SCM435 Ferrosoferric oxide film	SUSXM7
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film	SUSXM7

Selection

- **Selection based on shaft diameter and rated torque**

The area bounded by the shaft diameter and rated torque indicates is the selection size.





- Selection example

In case of selected parameters of shaft diameter of ϕ 5 and load torque of 0.8 N•m, the selected size for **MWS** **MWSS** is **MWS-20** **MWSS-20**.

Related Products

The slit-type coupling **XWSS** SUS316L material, finished with clean washing and clean packaging, which is best suited to FPD and semiconductor manufacturing equipments is available.
➡ P.227

- Part number specification

MWS-20C-5-6

Product Code　Size　Bore Diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

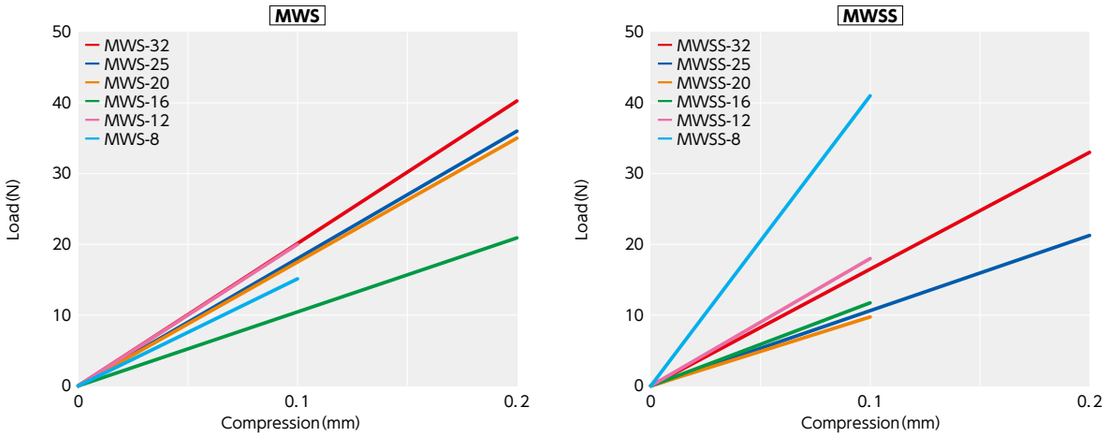
Couplicon®

MWS/MWSS Flexible coupling - Slit - type

WEB Selection Tool　WEB CAD Download　SUS Stainless steel　Zero Backlash

Technical Information

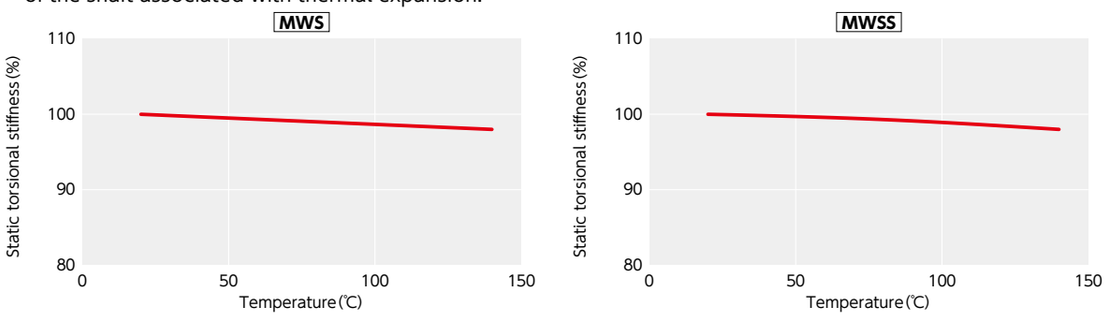
● Thrust Reaction Force



● Change in static torsional stiffness due to temperature

This is a value under the condition where the static torsional stiffness at 20℃ is 100%.

MWS **MWSS** 's change in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used under higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.



● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the rated torque of **MWSS-C** .

Unit : N・m

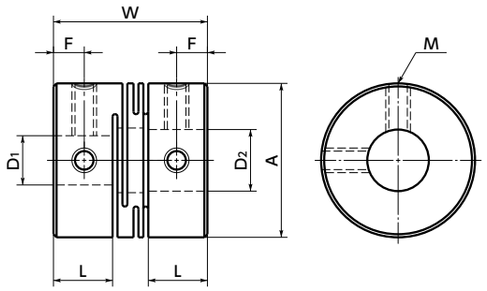
Part Number	Bore Diameter (mm)				
	5	6	8	10	12
MWSS-20C	0.9				
MWSS-25C	1.2	1.4	1.9		
MWSS-32C			1.9	2.4	3.4

● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **MWSS-C** Dimension table.

MWS/MWSS Flexible coupling - Slit - type - Set screw type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

MWS Made of aluminum alloy
MWSS Made of all stainless steel



Dimensions

Unit : mm

Part Number 1	A	L	W	F	M	Screw Tightening Torque (N・m)	Standard Bore Diameter (dimensional allowance H8) D1-D2 2					
MWS-8	8	3.4	10	1.7	M2	0.3	2 - 2	3 - 3				
MWS-12	12	5.2	14	2.5	M2.5	0.5	4 - 4	4 - 5	4.5 - 5	5 - 5		
MWS-16	16	6.8	18	3	M3	0.7	4.5 - 5	5 - 5	5 - 6	6 - 6		
MWS-20	20	7.65	20	3	M3	0.7	5 - 6	5 - 8	6 - 6	6 - 8	8 - 8	
MWS-25	25	9.6	25	4	M4	1.7	5 - 6	6 - 6	6 - 8	8 - 8	8 - 10	10 - 10
MWS-32	32	12.6	32	6	M4	1.7	8 - 8	8 - 10	10 - 10	10 - 12	12 - 12	12 - 14
MWSS-8	8	3.4	10	1.7	M2	0.3	2 - 2	3 - 3				
MWSS-12	12	5.2	14	2.5	M2.5	0.5	4 - 4	4 - 5	4.5 - 5	5 - 5		
MWSS-16	16	6.8	18	3	M3	0.7	5 - 5	5 - 6	6 - 6			
MWSS-20	20	7.65	20	3	M3	0.7	5 - 6	5 - 8	6 - 6	6 - 8	8 - 8	
MWSS-25	25	9.6	25	4	M4	1.7	5 - 6	6 - 6	6 - 8	8 - 8	8 - 10	10 - 10
MWSS-32	32	12.6	32	6	M4	1.7	8 - 8	8 - 10	10 - 10	10 - 12	12 - 12	12 - 14

- All products are provided with hex socket set screw.
- In a case where the bore diameter is ϕ 4 or less, the set screw is used in only one place.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg \cdot m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MWS-8	4	0.1	78000	1.0×10^{-8}	24	1	±0.1	1
MWS-12	6	0.4	52000	7.0×10^{-8}	80	1	±0.1	3.1
MWS-16	8	0.5	39000	2.8×10^{-7}	180	1	±0.2	7.4
MWS-20	10	1	31000	7.5×10^{-7}	200	1	±0.2	12
MWS-25	12	2	25000	2.3×10^{-6}	780	1	±0.2	24
MWS-32	16	4	19000	8.0×10^{-6}	1100	1	±0.2	50
MWSS-8	4	0.2	78000	2.4×10^{-8}	49	1	±0.1	2.7
MWSS-12	6	0.3	52000	1.8×10^{-7}	140	1	±0.1	7.8
MWSS-16	8	0.5	39000	7.2×10^{-7}	240	1	±0.1	18
MWSS-20	10	1	31000	2.0×10^{-6}	330	1	±0.1	32
MWSS-25	12	2	25000	6.1×10^{-6}	720	1	±0.2	63
MWSS-32	16	3.5	19000	2.1×10^{-5}	1300	1	±0.2	130

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Part number specification

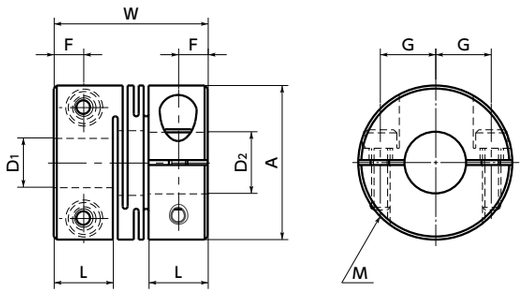
MWSS-32 - 10-12
1　2

Couplicon®

MWS-C/MWSS-C Flexible coupling - Slit - type - Clamping type

WEB Selection Tool　WEB CAD Download　Zero Backlash　SUS Stainless steel

MWS-C Made of aluminum alloy



Dimensions

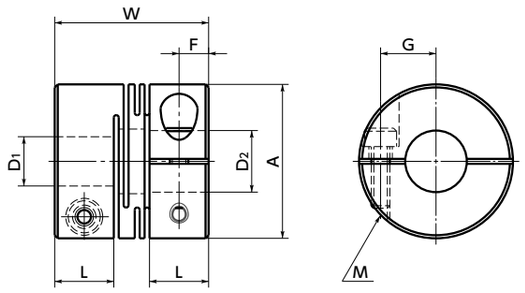
Unit : mm

Part Number 1	A	L	W	F	G	M	Screw Tightening Torque (N・m)	Standard Bore Diameter D1-D2 2						
MWS-12C	12	5.2	14	2.6	4	M2	0.5	4 - 4	4 - 5	4.5 - 5	5 - 5			
MWS-16C	16	6.8	18	3.4	5	M2.5	1	4.5 - 5	5 - 5	5 - 6	6 - 6			
MWS-20C	20	7.65	20	3.8	6.5	M2.5	1	5 - 6	5 - 8	6 - 6	6 - 8	8 - 8		
MWS-25C	25	9.6	25	4.8	9	M3	1.5	5 - 6	6 - 6	6 - 8	6 - 10	8 - 8	8 - 10	10 - 10
MWS-32C	32	12.6	32	6.3	11	M4	2.5	8 - 8	8 - 10	10 - 10	10 - 12	12 - 12	12 - 14	
MWSS-12C	12	5.2	14	2.6	4	M2	0.5	4 - 4	4 - 5	4.5 - 5	5 - 5			
MWSS-16C	16	6.8	18	3.4	5	M2.5	1	4.5 - 5	5 - 5	5 - 6	6 - 6			
MWSS-20C	20	7.65	20	3.8	6.5	M2.5	1	5 - 6	5 - 8	6 - 6	6 - 7	6 - 8	8 - 8	
MWSS-25C	25	9.6	25	4.8	9	M3	1.5	5 - 6	6 - 6	6 - 8	6 - 10	8 - 8	8 - 10	10 - 10
MWSS-32C	32	12.6	32	6.3	11	M4	2.5	8 - 8	8 - 10	10 - 10	10 - 12	12 - 14	12 - 14	

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

MWSS-C Made of all stainless steel



Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)
MWS-12C	5	0.4	52000	6.4×10^{-8}	80	1	±0.1	3
MWS-16C	6	0.5	39000	2.9×10^{-7}	180	1	±0.2	8
MWS-20C	8	1	31000	7.5×10^{-7}	200	1	±0.2	13
MWS-25C	10	2	25000	2.3×10^{-6}	780	1	±0.2	25
MWS-32C	14	4	19000	8.1×10^{-6}	1100	1	±0.2	53
MWSS-12C	5	0.3	52000	1.8×10^{-7}	140	1	±0.1	8.5
MWSS-16C	6	0.5	39000	7.8×10^{-7}	240	1	±0.1	21
MWSS-20C	8	1	31000	2.1×10^{-6}	330	1	±0.1	36
MWSS-25C	10	2	25000	6.3×10^{-6}	720	1	±0.2	69
MWSS-32C	14	3.5	19000	2.2×10^{-5}	1300	1	±0.2	150

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Part number specification

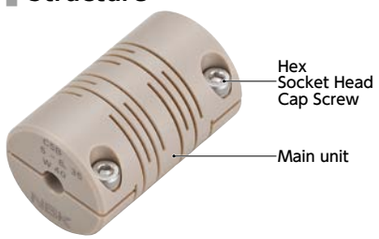
MWS-16C - 5-6
1　2

Couplicon®

MSXP-C-W-SP Coupling for Vacuum Variable Capacitor NEW

WEB Selection Tool　WEB CAD Download　Zero Backlash　Electrical Insulation

Structure



- This is a resin spring coupling with single-piece construction. A slit is inserted into a cylindrical material.
- PEEK superior in physical properties and electrical insulation is adopted.
- A plate spring formed by a slit allows eccentricity, argument, and end-play to be accepted.

- Property

	MSXP-C-W-SP
Zero Backlash	◎
Allowable Misalignment	○
Electrical Insulation	◎
Allowable Operating Temperature	−20℃ to 120℃

- Application

High frequency power / Matching box

- Material/Finish　RoHS2 Compliant

	MSXP-C-W-SP
Main unit	PEEK (Polyether ether ketone)
Hex Socket Head Cap Screw	SUSXM7

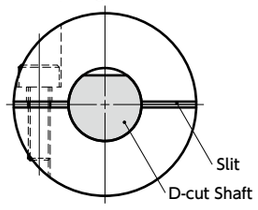
⚠ Precautions for Use

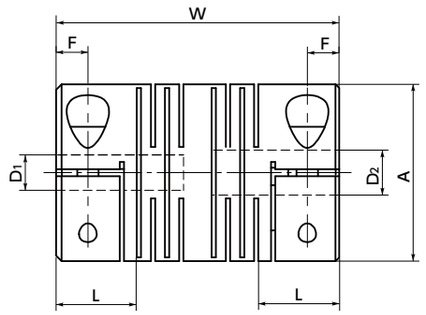
- Mounting on D-cut shaft

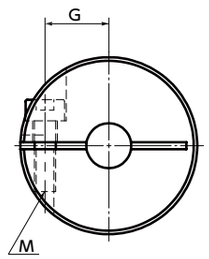
In principle, use a round shaft.

If a D-cut shaft is used, an excessive load due to tightening by the hex socket head cap screw may damage the coupling, depending on the mounting position of the D-cut surface of the shaft.

When using a D-cut shaft, mount so that the D-cut surface of the shaft avoids contact with the coupling slit as much as possible.







Dimensions

Unit : mm

Part Number 1	A	L	W	F	G	M	D1	D2	Screw Tightening Torque (N・m)
MSXP-25C-W40-5-6.35-SP3	25	11.4	40	4.5	9	M3	5	6.35	0.6

- All products are provided with hex socket head cap screw. ➡ P.258

Performance

Part Number	Rated torque*1 (N・m)	Max. torque*1 (N・m)	Max. Rotational Frequency (min^{-1})	Moment of Inertia($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment(°)	Max. Axial Misalignment (mm)	Mass(g)
MSXP-25C-W40-5-6.35-SP3	1.3	2.6	6000	1.9×10^{-6}	50	0.3	1.2	±0.33	23

*1 : Correction of rated torque and max. torque due to load fluctuation is not required.

- Part number specification

MSXP-25C-W40-5-6.35-SP3

1

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Not Available	Available / Add'l charge	Changed to the S.S. screw

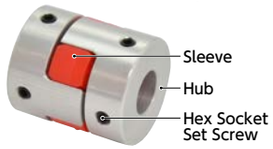
MJC Flexible Coupling - Jaw - type

Selection Tool | CAD Download | High torque | Vibration absorption | Electrical Insulation

Couplicon®

Structure

● Set Screw Type ➡ P.131
MJC--**** Tight Fit
MJC--E**** Easy Fit



● Clamping Type ➡ P.133
MJC-CS-**** Tight Fit
MJC-CS-E**** Easy Fit

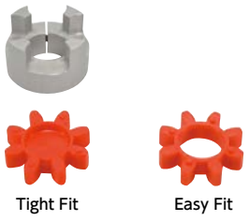
● Set Screw + Key Type ➡ P.135
MJC-K-**** Tight Fit
MJC-K-E**** Easy Fit

● Clamping + Key Type ➡ P.137
MJC-CSK-**** Tight Fit
MJC-CSK-E**** Easy Fit

● Sleeve
Outside Diameter: ϕ14 - ϕ30

Outside Diameter: ϕ40

Outside Diameter: ϕ55 - ϕ95



● Material/Finish

RoHS2 Compliant

	MJC / MJC-CS / MJC-K / MJC-CSK
Hub	A2017 Alumite Treatment
Sleeve	Polyurethane
Hex Socket Set Screw	SCM435 Ferrosoferric Oxide Film (Black)
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)

● Part number specification

MJC - 30CSK - ERD - 10-11

Product Code | Size | Sleeve Type | bore diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

● Applicable motors

	Tight Fit	Easy Fit
Servomotor	◎	○
Stepping Motor	◎	◎
General-Purpose Motor	◎	◎

◎: Excellent ○: Very good

● Property

	Tight Fit	Easy Fit
Zero Backlash	○	–
High Torque	◎	◎
Allowable Misalignment	○	○
Vibration Absorption	◎	◎
Electrical Insulation	◎	◎
Assembling	○	◎
Allowable Operating Temperature	−20℃ to 60℃	−20℃ to 60℃

◎: Excellent ○: Very good

- This is a jaw type flexible coupling.
- Tight Fit enables transmission with zero backlash at low torque.
- Easy fit allows you to assemble and partition the hub and sleeve smoothly.
- Excellent flexibility allows eccentricity, angular misalignment and twisting vibration to be accepted.
- It has electrical insulation. Resistance value: Not less than 2 MΩ
- There are four types of sleeve hardness. Please select desirable units according to usage conditions including torque and misalignment.

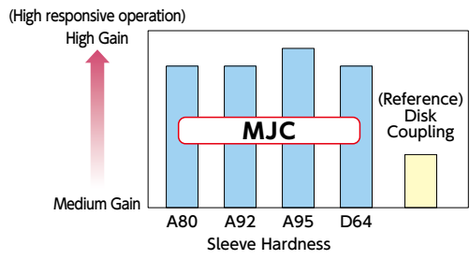
● Sleeve Type

Sleeve Type	Sleeve Hardness (JIS)			
	A80	A92	A98	D64
Tight Fit	BL	WH	RD	GR
Easy Fit	EBL	EWH	ERD	EGR

Small ← Rated Torque / Max. Torque → Large
Large ← Allowable Misalignment → Small

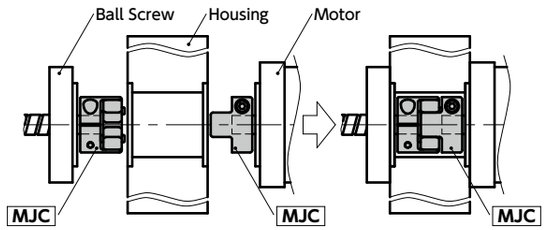
● Tight Fit
The hub and sleeve are press-fit and can be used under zero backlash*1.Since the sleeve's vibration absorption can raise the gain of a servomotor, this unit can achieve high responsive operation exceeding the Disk coupling.

*1: For the torque used under zero backlash, please refer to dimensional table.



● Tight Fit Applications
XY stage / Index table / Machine tool / Injection molding machine

● Easy Fit
This unit allows you to easily assemble and partition the hub and sleeve. This allows you to reduce the time of assembling the unit and maintenance.It is possible to mount a hub on the shaft in advance and easily assemble the unit even in a location where the coupling is less-visible.



● Easy Fit Applications
Transport device / Mixer / Ventilator / Pump / Dispenser

Couplicon®

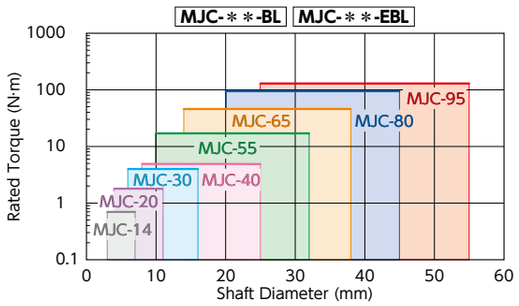
MJC Flexible Coupling - Jaw - type

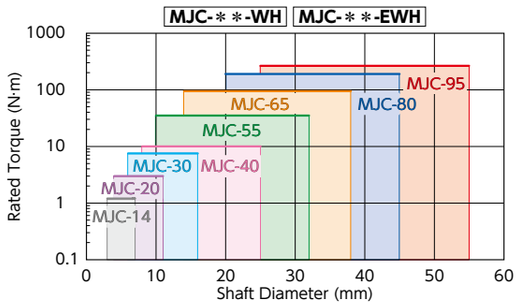
Selection Tool | CAD Download | High torque | Vibration absorption | Electrical Insulation

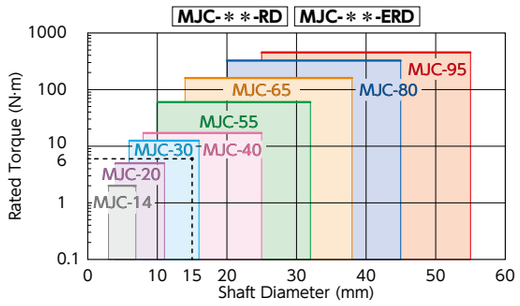
Selection

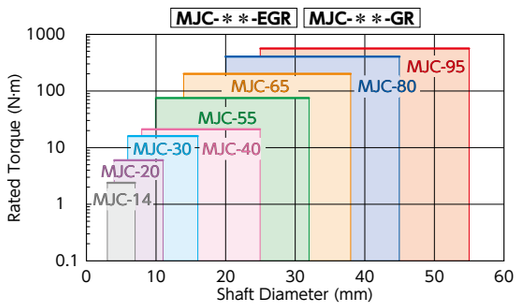
● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.









● Selection Example

In case of selected parameters of shaft diameter of ϕ15 and load torque of 6 N•m, the selected size for **[MJC-＊＊-RD]**, **[MJC-＊＊-ERD]** is **[MJC-30-RD]**, **[MJC-30-ERD]**.

● Selection based on the rated output of the servomotor

Rated Output (W)	Servomotor Specifications			Selection Outside Diameter Size			
	Diameter of Motor Shaft (mm)	Rated Torque (N・m)	Instantaneous Max. Torque (N・m)	MJC-**-BL MJC-**-EBL	MJC-**-WH MJC-**-EWH	MJC-**-RD MJC-**-ERD	MJC-**-GR MJC-**-EGR
10	5 - 6	0.032	0.096	14	14	14	14
20	5 - 6	0.064	0.19	14	14	14	14
30	5 - 7	0.096	0.29	14	14	14	14
50	6 - 8	0.16	0.48	20	20	20	20
100	8	0.32	0.95	20	20	20	20
200	9 - 14	0.64	1.9	30	30	30	30
400	14	1.3	3.8	30	30	30	30
750	16 - 19	2.4	7.2	–	40	40	40

● Motor specifications are based on general values.For details, see the motor manufacturer's catalogs.This is the size for cases where devices such as reduction gears are not used.

● Selection Example

In case of motor specification of shaft diameter of ϕ9 and rated torque of 0.64 N•m, the selected size of **[MJC-＊＊-BL]** is as follows.

- Set Screw Type —— **[MJC-30-BL]**
- Clamping Type —— **[MJC-30CS-BL]**
- Set Screw + Key Type —— **[MJC-30K-BL]**
- Clamping + Key Type —— **[MJC-30CSK-BL]**

Couplicon®

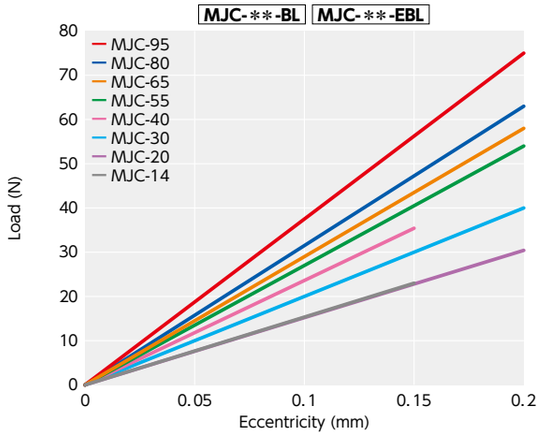
MJC Flexible Coupling - Jaw - type

Selection Tool | CAD Download | High torque | Vibration absorption | Electrical Insulation

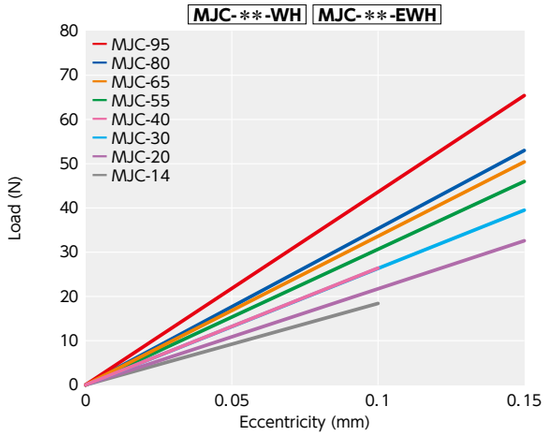
Technical Information

● Eccentric Reaction Force

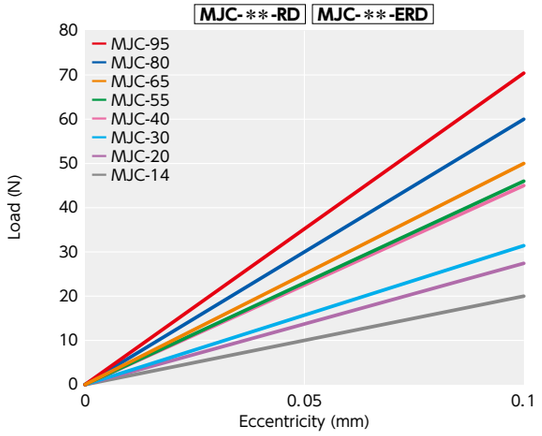
MJC--BL** **MJC-**-EBL**



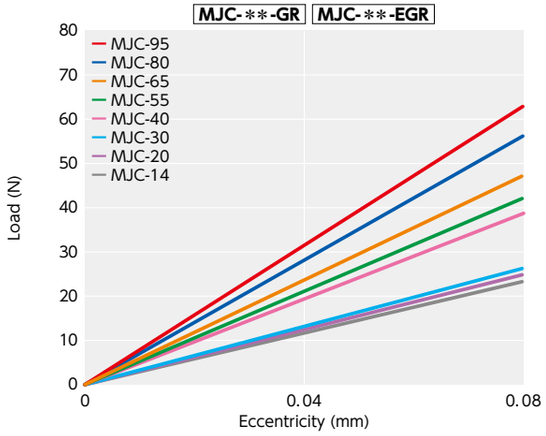
MJC--WH** **MJC-**-EWH**



MJC--RD** **MJC-**-ERD**

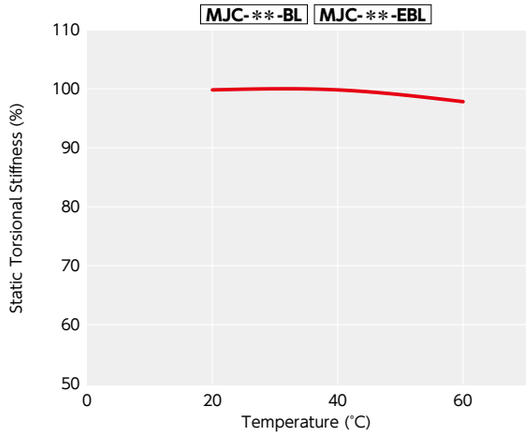


MJC--GR** **MJC-**-EGR**

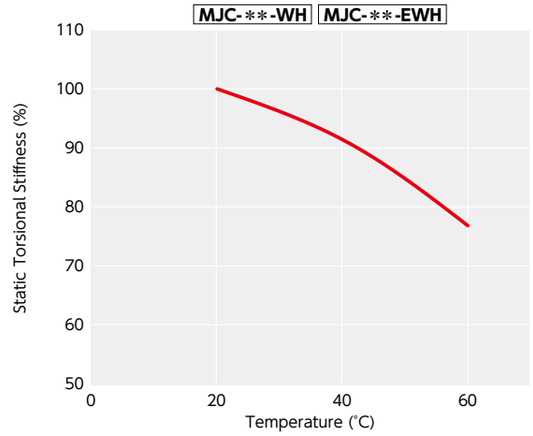


● Change in static torsional stiffness due to temperature

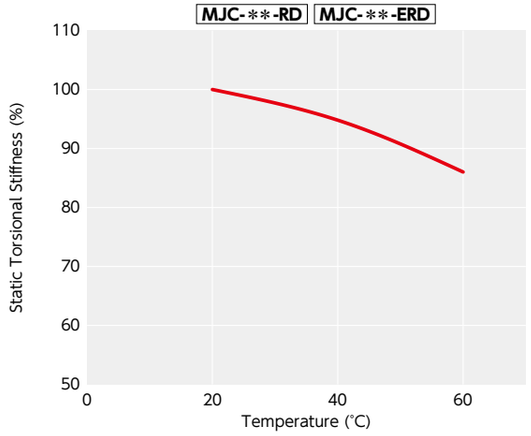
MJC--BL** **MJC-**-EBL**



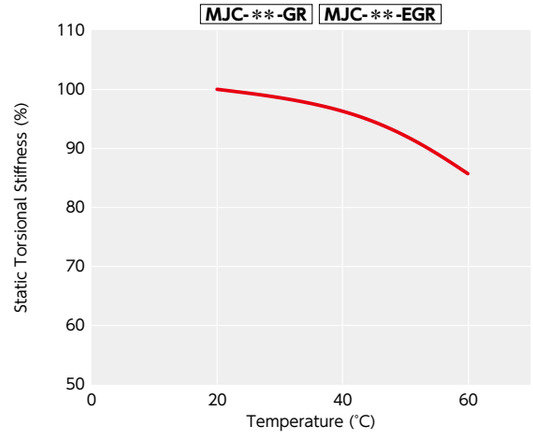
MJC--WH** **MJC-**-EWH**



MJC--RD** **MJC-**-ERD**



MJC--GR** **MJC-**-EGR**



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of torsional stiffness within the range of allowable operating temperature is as shown in the graph.
Before using the unit, be aware of the deterioration of responsiveness.

● Slip Torque

Concerning the sizes shown in the table, please note that the shaft's slip torque is smaller than the max. torque of **MJC-CS**.

Unit : N・m

Part Number	Bore Diameter (mm)																														
	3	4	4.5	5	6	6.35	7	8	9.525	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
MJC-14CS	0.8	1.4	1.7	2.1	1.3	1.4	1.5																									
MJC-20CS		3.4	4.1	4.9	6.4	6.9	7.9	9.4	5.1	6	8																					
MJC-30CS					4	4.9	6.6	9.3	13.4	14.6	17.3	20	15.3	21.2	27.2																	
MJC-40CS								18	23.2	24.8	28.2	31.7	38.5																			
MJC-55CS									29.9	33	39.5	46	59	65.5	72	78.5	85	91.5	98	111	124	130		117	124							
MJC-65CS													104	118	133	148	162	177	192	221	251	265	310	339	368	185	200					
MJC-80CS																			151	170	189	198	227	246	265	293	322	341	360	500		
MJC-95CS																						347	415	460	500	500	500	500	500	500	500	500

● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: from 34 - 40 HRC, and screw tightening torque of the values described in **MJC-CS** dimensional table.

● Slip Torque

Concerning the sizes shown in the table, please note that the shaft's slip torque is smaller than the max. torque of **MJC-CS**.

Unit : N・m

Part Number	Bore Diameter (inch)																					
	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4
MJC-14CS	0.9	1.9	1.4																		
MJC-20CS		4.5	6.9	9.3	5.1																
MJC-30CS			4.9	9.1	13.4	17.6	7.5	17	26.4												
MJC-40CS				17.7	23.2	28.6	34.1	39.5													
MJC-55CS					29.9	40.2	50.5	60.8	71.1	81.5	91.8	102	112	122	133	112	123				
MJC-65CS							85	108	131	155	178	201	225	248	271	318	365	184	200		
MJC-80CS								96	111	126	141	157	172	187	202	232	262	292	322	353	500
MJC-95CS												249	285	320	356	428	500	500	500	500	500

● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: from 34 - 40 HRC, and screw tightening torque of the values described in **MJC-CS** dimensional table.

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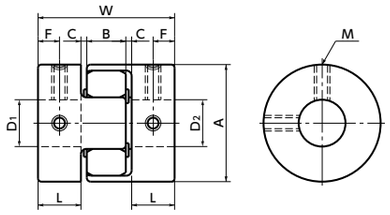
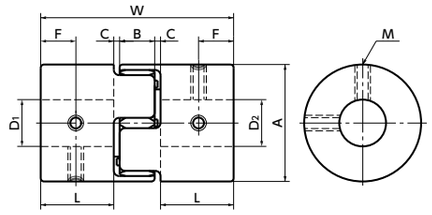
MJC Flexible coupling - Jaw-type - Set screw type

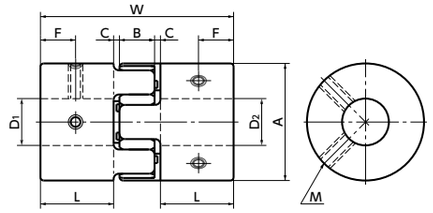
WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation



Outside Diameter: ϕ14 - ϕ30

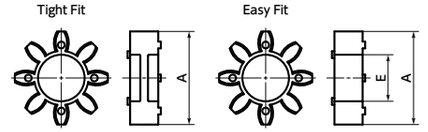


Outside Diameter: ϕ40



Outside Diameter: ϕ55 - ϕ95

● Sleeve Details



● 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

Dimensions

Unit : mm

Part Number ◀1	A	L	W	B	C*1	Sleeve E	F	M	Screw Tightening Torque (N・m)
MJC-14	14	7	22	6	1	4.5	3.5	M3	0.7
MJC-20	20	10	30	8	1	7	5	M3	0.7
MJC-30	30	11	35	10	1.5	11	5.5	M4	1.7
MJC-40	40	25	66	12	2	18	12.5	M5	4
MJC-55	55	30	78	14	2	27.5	15	M6	7
MJC-65	65	35	90	15	2.5	31	17.5	M8	15
MJC-80	80	45	114	18	3	37	22.5	M8	15
MJC-95	95	50	126	20	3	45.5	25	M8	15

*1 : Use with C Dimension

Part Number	Standard metric bore diameter (dimensional allowance H8) D1・D2 ◀3																													
	3	4	4.5	5	6	6.35	7	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
MJC-14	●	●	●	●	●	●	●																								
MJC-20		●	●	●	●	●	●	●	●	●	●																				
MJC-30					●	●	●	●	●	●	●	●	●	●	●																
MJC-40								●	●	●	●	●	●	●	●	●	●	●	●	●	●										
MJC-55										●	●	●	●	●	●	●	●	●	●	●	●	●	●								
MJC-65													●	●	●	●	●	●	●	●	●	●	●	●	●						
MJC-80																		●	●	●	●	●	●	●	●	●	●	●			
MJC-95																					●	●	●	●	●	●	●	●	●	●	●

Part Number	Standard inch bore diameter (dimensional allowance H7) D1・D2 ◀3																						
	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4
MJC-14	●	●	●																		
MJC-20		●	●	●	●																
MJC-30			●	●	●	●	●	●	●												
MJC-40				●	●	●	●	●	●	●	●										
MJC-55					●	●	●	●	●	●	●	●	●	●	●						
MJC-65							●	●	●	●	●	●	●	●	●	●	●	●	●		
MJC-80											●	●	●	●	●	●	●	●	●	●	●
MJC-95															●	●	●	●	●	●	●

- All products are provided with hex socket set screw.
- In a case where the bore diameter are ϕ3,ϕ4 and ϕ 1/8, the setscrew is used in only one place.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with set screw type for one side and clamping type or other type for the other side is available upon request.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Sleeve ◀2 Tight Fit	Sleeve ◀2 Easy Fit	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Zero Backlash*3 Allowable Transmission Torque (N・m)	Max. Rotational Frequency (min-1)	Moment*2 of Inertia (kg・m2)	Static Torsional Stiffness (N・m / rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
MJC-14	BL	EBL	7	0.7	1.4	0.1	45000	2.0 x 10-7	8	0.15	1	+0.6 0	6.6	A80
MJC-20	BL	EBL	11	1.8	3.6	0.2	31000	1.1 x 10-6	16	0.2	1	+0.8 0	17	
MJC-30	BL	EBL	16	4	8	0.5	21000	6.2 x 10-6	46	0.2	1	+1.0 0	44	
MJC-40	BL	EBL	25	4.9	9.8	1.2	15000	3.7 x 10-5	380	0.15	1	+1.2 0	130	
MJC-55	BL	EBL	32	17	34		11000	1.6 x 10-4	1400	0.2	1	+1.4 0	320	
MJC-65	BL	EBL	38.1	46	92		9000	3.6 x 10-4	2800	0.2	1	+1.5 0	520	
MJC-80	BL	EBL	45	95	190		7000	1.1 x 10-3	3200	0.2	1	+1.8 0	1000	
MJC-95	BL	EBL	55	130	260		6000	2.3 x 10-3	3600	0.2	1	+2.0 0	1500	
MJC-14	WH	EWH	7	1.2	2.4	0.1	45000	2.0 x 10-7	14	0.1	1	+0.6 0	6.6	A92
MJC-20	WH	EWH	11	3	6	0.2	31000	1.1 x 10-6	29	0.15	1	+0.8 0	17	
MJC-30	WH	EWH	16	7.5	15	0.5	21000	6.2 x 10-6	73	0.15	1	+1.0 0	44	
MJC-40	WH	EWH	25	10	20	1.2	15000	3.7 x 10-5	570	0.1	1	+1.2 0	130	
MJC-55	WH	EWH	32	35	70		11000	1.6 x 10-4	1600	0.15	1	+1.4 0	320	
MJC-65	WH	EWH	38.1	95	190		9000	3.6 x 10-4	3000	0.15	1	+1.5 0	520	
MJC-80	WH	EWH	45	190	380		7000	1.1 x 10-3	5300	0.15	1	+1.8 0	1000	
MJC-95	WH	EWH	55	265	530		6000	2.3 x 10-3	6200	0.15	1	+2.0 0	1500	
MJC-14	RD	ERD	7	2	4	0.1	45000	2.0 x 10-7	22	0.1	1	+0.6 0	6.6	A98
MJC-20	RD	ERD	11	5	10	0.2	31000	1.1 x 10-6	55	0.1	1	+0.8 0	17	
MJC-30	RD	ERD	16	12.5	25	0.5	21000	6.2 x 10-6	130	0.1	1	+1.0 0	44	
MJC-40	RD	ERD	25	17	34	1.2	15000	3.7 x 10-5	1200	0.1	1	+1.2 0	130	
MJC-55	RD	ERD	32	60	120		11000	1.6 x 10-4	2600	0.1	1	+1.4 0	320	
MJC-65	RD	ERD	38.1	160	320		9000	3.6 x 10-4	4900	0.1	1	+1.5 0	520	
MJC-80	RD	ERD	45	325	650		7000	1.1 x 10-3	6500	0.1	1	+1.8 0	1000	
MJC-95	RD	ERD	55	450	900		6000	2.3 x 10-3	8900	0.1	1	+2.0 0	1500	
MJC-14	GR	EGR	7	2.4	4.8	0.1	45000	2.0 x 10-7	66	0.08	1	+0.6 0	6.6	D64
MJC-20	GR	EGR	11	6	12	0.2	31000	1.1 x 10-6	87	0.08	1	+0.8 0	17	
MJC-30	GR	EGR	16	16	32	0.5	21000	6.2 x 10-6	200	0.08	1	+1.0 0	44	
MJC-40	GR	EGR	25	21	42	1.2	15000	3.7 x 10-5	3000	0.08	1	+1.2 0	130	
MJC-55	GR	EGR	32	75	150		11000	1.6 x 10-4	9000	0.08	1	+1.4 0	320	
MJC-65	GR	EGR	38.1	200	400		9000	3.6 x 10-4	13000	0.08	1	+1.5 0	520	
MJC-80	GR	EGR	45	405	810		7000	1.1 x 10-3	14000	0.08	1	+1.8 0	1000	
MJC-95	GR	EGR	55	560	1120		6000	2.3 x 10-3	15000	0.08	1	+2.0 0	1500	

*1 : Correction of rated torque and max. torque due to load fluctuation is not required. However, if ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the table. MJC 's allowable operating temperature is −20℃ to 60℃.

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

*3 : For transmission with Zero Backlash, please use a tight fit sleeve.

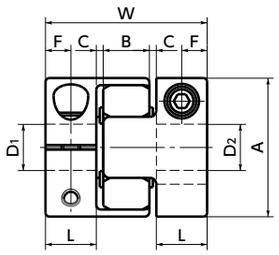
● Part number specification

MJC-95 - EBL - 40-45
◀1 ◀2 ◀3

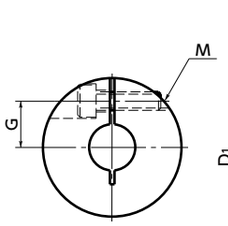
Couplicon®

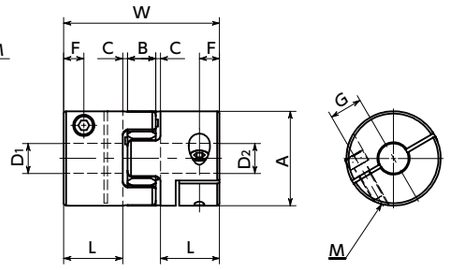
MJC-CS Flexible coupling - Jaw-type - Clamping type

WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation

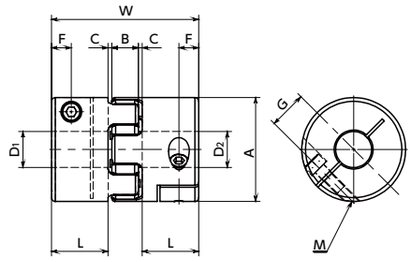


Outside Diameter: ϕ14 - ϕ30





Outside Diameter: ϕ40



Outside Diameter: ϕ55 - ϕ95

Dimensions

Unit : mm

Part Number ❶	Bore Diameter	A	L	W	B	C*1	Sleeve E	F	G	M	Screw Tightening Torque (N・m)
MJC-14CS	3 - 5	14	7	22	6	1	4.5	3.5	4	M2	0.5
	6 - 7								5	M1.6	0.25
MJC-20CS	4 - 8	20	10	30	8	1	7	5	6.5	M2.5	1
	9.525 - 11								7.5	M2	0.5
MJC-30CS	6 - 12	30	11	35	10	1.5	11	5.5	10	M4	3.5
	12.7 - 16								11	M3	1.5
MJC-40CS	7.9375 - 20	40	25	66	12	2	18	8.5	14	M5	8
	22 - 25								15.75	M4	3.5
MJC-55CS	9.525 - 28	55	30	78	14	2	27.5	10.5	20	M6	13
	30 - 32								21	M5	8
MJC-65CS	12.7 - 32	65	35	90	15	2.5	31	13	24	M8	28
	34.925 - 38.1								25	M6	13
MJC-80CS	19.05 - 42	80	45	114	18	3	37	15	30	M8	28
	45								31		
MJC-95CS	0.05	95	50	126	20	3	45.5	18	34	M10	55
	50 - 55								36		

*1： Use with C Dimension

Part Number	Standard metric bore diameter D1・D2 ❸																													
	3	4	4.5	5	6	6.35	7	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
MJC-14CS	●	●	●	●	●	●	●																								
MJC-20CS		●	●	●	●	●	●	●	●	●	●																				
MJC-30CS					●	●	●	●	●	●	●	●	●	●	●																
MJC-40CS								●	●	●	●	●	●	●	●	●	●	●	●	●	●										
MJC-55CS										●	●	●	●	●	●	●	●	●	●	●	●	●	●								
MJC-65CS													●	●	●	●	●	●	●	●	●	●	●	●	●	●					
MJC-80CS																		●	●	●	●	●	●	●	●	●	●	●	●		
MJC-95CS																					●	●	●	●	●	●	●	●	●	●	●

Part Number	Standard inch bore diameter D1・D2 ❸																					
	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4
MJC-14CS	●	●	●																		
MJC-20CS		●	●	●	●																
MJC-30CS			●	●	●	●	●	●	●												
MJC-40CS				●	●	●	●	●	●	●	●										
MJC-55CS					●	●	●	●	●	●	●	●	●	●	●						
MJC-65CS							●	●	●	●	●	●	●	●	●	●	●	●	●		
MJC-80CS											●	●	●	●	●	●	●	●	●	●	●
MJC-95CS															●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping type for one side and set screw type or other type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Sleeve ❷ Tight Fit	Sleeve ❷ Easy Fit	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Zero Backlash*3 Allowable Transmission Torque(N・m)	Max.Rotational Frequency (min-1)	Moment*2 of Inertia (kg・m2)	Static Torsional Stiffness (N・m / rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
MJC-14CS	BL	EBL	7	0.7	1.4	0.1	45000	1.9 x 10-7	8	0.15	1	+0.6 0	6.2	A80
MJC-20CS	BL	EBL	11	1.8	3.6	0.2	31000	1.0 x 10-6	16	0.2	1	+0.8 0	16	
MJC-30CS	BL	EBL	16	4	8	0.5	21000	6.0 x 10-6	46	0.2	1	+1.0 0	42	
MJC-40CS	BL	EBL	25	4.9	9.8	1.2	15000	3.6 x 10-5	380	0.15	1	+1.2 0	130	
MJC-55CS	BL	EBL	32	17	34		11000	1.6 x 10-4	1400	0.2	1	+1.4 0	310	
MJC-65CS	BL	EBL	38.1	46	92		9000	3.5 x 10-4	2800	0.2	1	+1.5 0	500	
MJC-80CS	BL	EBL	45	95	190		7000	1.0 x 10-3	3200	0.2	1	+1.8 0	1000	
MJC-95CS	BL	EBL	55	130	260		6000	2.3 x 10-3	3600	0.2	1	+2.0 0	1600	
MJC-14CS	WH	EWH	7	1.2	2.4	0.1	45000	1.9 x 10-7	14	0.1	1	+0.6 0	6.2	A92
MJC-20CS	WH	EWH	11	3	6	0.2	31000	1.0 x 10-6	29	0.15	1	+0.8 0	16	
MJC-30CS	WH	EWH	16	7.5	15	0.5	21000	6.0 x 10-6	73	0.15	1	+1.0 0	42	
MJC-40CS	WH	EWH	25	10	20	1.2	15000	3.6 x 10-5	570	0.1	1	+1.2 0	130	
MJC-55CS	WH	EWH	32	35	70		11000	1.6 x 10-4	1600	0.15	1	+1.4 0	310	
MJC-65CS	WH	EWH	38.1	95	190		9000	3.5 x 10-4	3000	0.15	1	+1.5 0	500	
MJC-80CS	WH	EWH	45	190	380		7000	1.0 x 10-3	5300	0.15	1	+1.8 0	1000	
MJC-95CS	WH	EWH	55	265	530		6000	2.3 x 10-3	6200	0.15	1	+2.0 0	1600	
MJC-14CS	RD	ERD	7	2	4	0.1	45000	1.9 x 10-7	22	0.1	1	+0.6 0	6.2	A98
MJC-20CS	RD	ERD	11	5	10	0.2	31000	1.0 x 10-6	55	0.1	1	+0.8 0	16	
MJC-30CS	RD	ERD	16	12.5	25	0.5	21000	6.0 x 10-6	130	0.1	1	+1.0 0	42	
MJC-40CS	RD	ERD	25	17	34	1.2	15000	3.6 x 10-5	1200	0.1	1	+1.2 0	130	
MJC-55CS	RD	ERD	32	60	120		11000	1.6 x 10-4	2600	0.1	1	+1.4 0	310	
MJC-65CS	RD	ERD	38.1	160	320		9000	3.5 x 10-4	4900	0.1	1	+1.5 0	500	
MJC-80CS	RD	ERD	45	325	650		7000	1.0 x 10-3	6500	0.1	1	+1.8 0	1000	
MJC-95CS	RD	ERD	55	450	900		6000	2.3 x 10-3	8900	0.1	1	+2.0 0	1600	
MJC-14CS	GR	EGR	7	2.4	4.8	0.1	45000	1.9 x 10-7	66	0.08	1	+0.6 0	6.2	D64
MJC-20CS	GR	EGR	11	6	12	0.2	31000	1.0 x 10-6	87	0.08	1	+0.8 0	16	
MJC-30CS	GR	EGR	16	16	32	0.5	21000	6.0 x 10-6	200	0.08	1	+1.0 0	42	
MJC-40CS	GR	EGR	25	21	42	1.2	15000	3.6 x 10-5	3000	0.08	1	+1.2 0	130	
MJC-55CS	GR	EGR	32	75	150		11000	1.6 x 10-4	9000	0.08	1	+1.4 0	310	
MJC-65CS	GR	EGR	38.1	200	400		9000	3.5 x 10-4	13000	0.08	1	+1.5 0	500	
MJC-80CS	GR	EGR	45	405	810		7000	1.0 x 10-3	14000	0.08	1	+1.8 0	1000	
MJC-95CS	GR	EGR	55	560	1120		6000	2.3 x 10-3	15000	0.08	1	+2.0 0	1600	

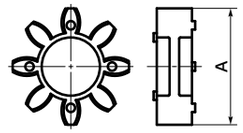
*1： Correction of rated torque and max. torque due to load fluctuation is not required. However, if ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the table. MJC-CS's allowable operating temperature is −20℃ to 60℃.

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

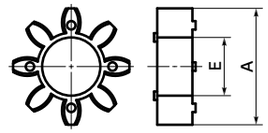
*3： For transmission with Zero Backlash, please use a tight fit sleeve.

● Sleeve Details

Tight Fit



Easy Fit



● 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

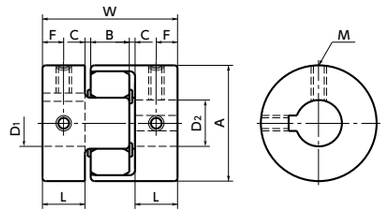
● Part number specification

MJC-30CS - GR - 7-8
❶ ❷ ❸

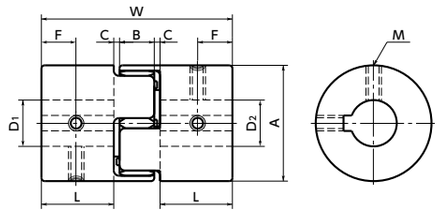
Couplicon®

MJC-K Flexible Coupling - Jaw-type - Set Screw + Key Type

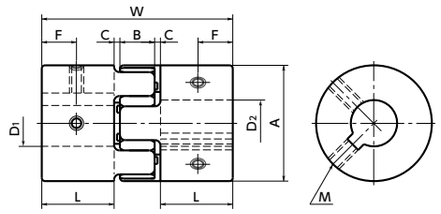
WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation



Outside Diameter: ϕ30



Outside Diameter: ϕ40



Outside Diameter: ϕ55 - ϕ95

Dimensions

Unit : mm

Part Number [1]	A	L	W	B	C*1	Sleeve E	F	M	Screw Tightening Torque (N・m)
MJC-30K	30	11	35	10	1.5	11	5.5	M4	1.7
MJC-40K	40	25	66	12	2	18	12.5	M5	4
MJC-55K	55	30	78	14	2	27.5	15	M6	7
MJC-65K	65	35	90	15	2.5	31	17.5	M8	15
MJC-80K	80	45	114	18	3	37	22.5	M8	15
MJC-95K	95	50	126	20	3	45.5	25	M8	15

Part Number	Standard Bore Diameter (dimensional allowance H8) D1・D2 [3]																						
	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
MJC-30K	●	●	●	●	●	●																	
MJC-40K	●	●	●	●	●	●	●	●	●	●	●	●											
MJC-55K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
MJC-65K				●	●	●	●	●	●	●	●	●	●	●	●	●	●						
MJC-80K									●	●	●	●	●	●	●	●	●	●	●	●			
MJC-95K												●	●	●	●	●	●	●	●	●	●	●	●

Part Number	Standard Bore Diameter (dimensional allowance H7) D1・D2 [3]														
	1 / 2	9 / 16	5 / 8	11 / 16	3 / 4	13 / 16	7 / 8	15 / 16	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4
MJC-30K	●	●	●												
MJC-40K	●	●	●	●	●										
MJC-55K	●	●	●	●	●	●	●	●	●						
MJC-65K	●	●	●	●	●	●	●	●	●	●	●	●	●		
MJC-80K					●	●	●	●	●	●	●	●	●	●	●
MJC-95K									●	●	●	●	●	●	●

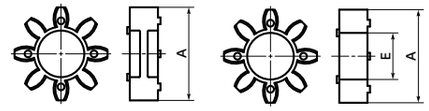
- All products are provided with hex socket set screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with key type for one side and clamping type or other type for the other side is available upon request.

● Part number specification

MJC-40K - EGR - 11-12
[1] [2] [3]

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

● Sleeve Details



● 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

Performance

Part Number	Sleeve [2] Tight Fit	Sleeve [2] Easy Fit	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Zero Backlash*3 Allowable Transmission Torque(N・m)	Max. Rotational Frequency (min-1)	Moment*2 of Inertia (kg・m2)	Static Torsional Stiffness (N・m / rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
MJC-30K	BL	EBL	16	4	8	0.5	21000	6.1 x 10-6	46	0.2	1	+1.0 0	43	A80
MJC-40K	BL	EBL	25	4.9	9.8	1.2	15000	3.6 x 10-5	380	0.15	1	+1.2 0	130	
MJC-55K	BL	EBL	32	17	34		11000	1.6 x 10-4	1400	0.2	1	+1.4 0	310	
MJC-65K	BL	EBL	38.1	46	92		9000	3.6 x 10-4	2800	0.2	1	+1.5 0	510	
MJC-80K	BL	EBL	45	95	190		7000	1.1 x 10-3	3200	0.2	1	+1.8 0	1000	
MJC-95K	BL	EBL	55	130	260		6000	2.3 x 10-3	3600	0.2	1	+2.0 0	1500	
MJC-30K	WH	EWH	16	7.5	15	0.5	21000	6.1 x 10-6	73	0.15	1	+1.0 0	43	A92
MJC-40K	WH	EWH	25	10	20	1.2	15000	3.6 x 10-5	570	0.1	1	+1.2 0	130	
MJC-55K	WH	EWH	32	35	70		11000	1.6 x 10-4	1600	0.15	1	+1.4 0	310	
MJC-65K	WH	EWH	38.1	95	190		9000	3.6 x 10-4	3000	0.15	1	+1.5 0	510	
MJC-80K	WH	EWH	45	190	380		7000	1.1 x 10-3	5300	0.15	1	+1.8 0	1000	
MJC-95K	WH	EWH	55	265	530		6000	2.3 x 10-3	6200	0.15	1	+2.0 0	1500	
MJC-30K	RD	ERD	16	12.5	25	0.5	21000	6.1 x 10-6	130	0.1	1	+1.0 0	43	A98
MJC-40K	RD	ERD	25	17	34	1.2	15000	3.6 x 10-5	1200	0.1	1	+1.2 0	130	
MJC-55K	RD	ERD	32	60	120		11000	1.6 x 10-4	2600	0.1	1	+1.4 0	310	
MJC-65K	RD	ERD	38.1	160	320		9000	3.6 x 10-4	4900	0.1	1	+1.5 0	510	
MJC-80K	RD	ERD	45	325	650		7000	1.1 x 10-3	6500	0.1	1	+1.8 0	1000	
MJC-95K	RD	ERD	55	450	900		6000	2.3 x 10-3	8900	0.1	1	+2.0 0	1500	
MJC-30K	GR	EGR	16	16	32	0.5	21000	6.1 x 10-6	200	0.08	1	+1.0 0	43	D64
MJC-40K	GR	EGR	25	21	42	1.2	15000	3.6 x 10-5	3000	0.08	1	+1.2 0	130	
MJC-55K	GR	EGR	32	75	150		11000	1.6 x 10-4	9000	0.08	1	+1.4 0	310	
MJC-65K	GR	EGR	38.1	200	400		9000	3.6 x 10-4	13000	0.08	1	+1.5 0	510	
MJC-80K	GR	EGR	45	405	810		7000	1.1 x 10-3	14000	0.08	1	+1.8 0	1000	
MJC-95K	GR	EGR	55	560	1120		6000	2.3 x 10-3	15000	0.08	1	+2.0 0	1500	

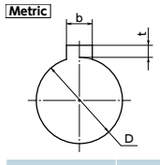
*1: Correction of rated torque and max. torque due to load fluctuation is not required. However, if ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the table. MJC-K's allowable operating temperature is −20℃ to 60℃.

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

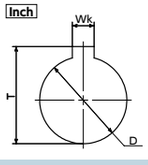
*3: For transmission with Zero Backlash, please use a tight fit sleeve.

● Details of Shaft Hole

Metric



Inch



Unit : mm

Standard Bore Diameter D	keyway b Standard Dimension	keyway b allowance (JS9)	keyway t Standard Dimension	keyway t allowance	Key Nominal Dimension b x h
10・11・12	4	±0.0150	1.8	+0.1 0	4×4
14・15・16	5	±0.0150	2.3	+0.1 0	5×5
18・19・20・22	6	±0.0150	2.8	+0.1 0	6×6
24・25・28・30	8	±0.0180	3.3	+0.2 0	8×7
32・35・38	10	±0.0180	3.3	+0.2 0	10×8
40・42	12	±0.0215	3.3	+0.2 0	12×8
45・48・50	14	±0.0215	3.8	+0.2 0	14×9
55	16	±0.0215	4.3	+0.2 0	16×10

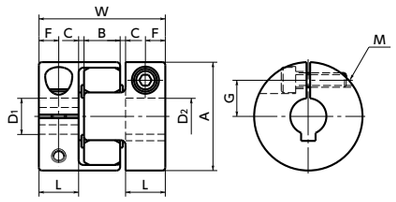
Unit : inch

Standard Inch Bore Diameter D	Keyway Wk Standard Dimension	Keyway Wk Allowance	Keyway T Standard Dimension	Keyway T Allowance
1/2	1 / 8	+0.002 0	0.560	+0.01 0
9/16	1 / 8	+0.002 0	0.623	+0.01 0
5/8	3 / 16	+0.002 0	0.709	+0.01 0
11/16	3 / 16	+0.002 0	0.773	+0.01 0
3/4	3 / 16	+0.002 0	0.837	+0.01 0
13/16	3 / 16	+0.002 0	0.900	+0.01 0
7/8	3 / 16	+0.002 0	0.964	+0.01 0
15/16	1 / 4	+0.002 0	1.051	+0.01 0
1	1 / 4	+0.002 0	1.114	+0.01 0
1 1/8	1 / 4	+0.002 0	1.241	+0.01 0
1 1/4	1 / 4	+0.002 0	1.367	+0.01 0
1 3/8	5 / 16	+0.002 0	1.518	+0.01 0
1 1/2	3 / 8	+0.002 0	1.669	+0.01 0
1 5/8	3 / 8	+0.002 0	1.796	+0.01 0
1 3/4	3 / 8	+0.002 0	1.922	+0.01 0

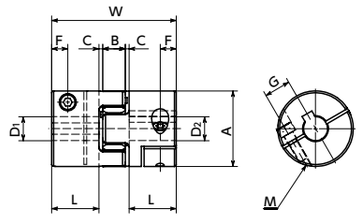
Couplicon®

MJC-CSK Flexible Coupling - Jaw-type - Clamping + Key Type

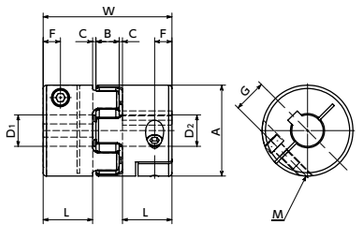
WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation



Outside Diameter: ϕ30

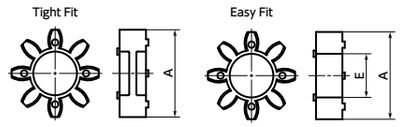


Outside Diameter: ϕ40



Outside Diameter: ϕ55 - ϕ95

● Sleeve Details



● 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

Dimensions

Unit : mm

Part Number 1	Bore Diameter	A	L	W	B	C*1	Sleeve E	F	G	M	Screw Tightening Torque (N・m)
MJC-30CSK	10 - 12	30	11	35	10	1.5	11	5.5	10	M4	3.5
	14 - 16								11	M3	1.5
MJC-40CSK	10 - 20	40	25	66	12	2	18	8.5	14	M5	8
	22 - 25								15.75	M4	3.5
MJC-55CSK	10 - 28	55	30	78	14	2	27.5	10.5	20	M6	13
	30 - 32								21	M5	8
MJC-65CSK	12.7 - 32	65	35	90	15	2.5	31	13	24	M8	28
	34.925 - 38.1								25	M6	13
MJC-80CSK	19.05 - 42	80	45	114	18	3	37	15	30	M8	28
	44.45 - 45								31		
MJC-95CSK	25 - 48	95	50	126	20	3	45.5	18	34	M10	55
	50 - 55								36		

*1 : Use with C Dimension

Part Number	Standard metric bore diameter D1・D2 3																					
	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
MJC-30CSK	●	●	●	●	●	●																	
MJC-40CSK	●	●	●	●	●	●	●	●	●	●	●	●											
MJC-55CSK	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
MJC-65CSK				●	●	●	●	●	●	●	●	●	●	●	●	●	●						
MJC-80CSK									●	●	●	●	●	●	●	●	●	●	●	●			
MJC-95CSK												●	●	●	●	●	●	●	●	●	●	●	●

Part Number	Standard inch bore diameter D1・D2 3														
	1 / 2	9 / 16	5 / 8	11 / 16	3 / 4	13 / 16	7 / 8	15 / 16	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4
MJC-30CSK	●	●	●												
MJC-40CSK	●	●	●	●	●										
MJC-55CSK	●	●	●	●	●	●	●	●	●						
MJC-65CSK	●	●	●	●	●	●	●	●	●	●	●	●	●		
MJC-80CSK					●	●	●	●	●	●	●	●	●	●	●
MJC-95CSK									●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping + key type for one side and clamping type or other type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

● Part number specification

MJC-80CSK - EWH - 22-24
1　2　3

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

Performance

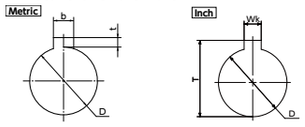
Part Number	Sleeve 2		Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Zero Backlash*3 Allowable Transmission Torque(N・m)	Max. Rotational Frequency (min-1)	Moment*2 of Inertia (kg・m2)	Static Torsional Stiffness (N・m / rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
	Tight Fit	Easy Fit												
MJC-30CSK	BL	EBL	16	4	8	0.5	21000	5.9 x 10-6	46	0.2	1	+1.0 0	41	A80
MJC-40CSK	BL	EBL	25	4.9	9.8	1.2	15000	3.5 x 10-5	380	0.15	1	+1.2 0	130	
MJC-55CSK	BL	EBL	32	17	34		11000	1.5 x 10-4	1400	0.2	1	+1.4 0	300	
MJC-65CSK	BL	EBL	38.1	46	92		9000	3.5 x 10-4	2800	0.2	1	+1.5 0	490	
MJC-80CSK	BL	EBL	45	95	190		7000	1.0 x 10-3	3200	0.2	1	+1.8 0	990	
MJC-95CSK	BL	EBL	55	130	260		6000	2.3 x 10-3	3600	0.2	1	+2.0 0	1500	
MJC-30CSK	WH	EWH	16	7.5	15	0.5	21000	5.9 x 10-6	73	0.15	1	+1.0 0	41	A92
MJC-40CSK	WH	EWH	25	10	20	1.2	15000	3.5 x 10-5	570	0.1	1	+1.2 0	130	
MJC-55CSK	WH	EWH	32	35	70		11000	1.5 x 10-4	1600	0.15	1	+1.4 0	300	
MJC-65CSK	WH	EWH	38.1	95	190		9000	3.5 x 10-4	3000	0.15	1	+1.5 0	490	
MJC-80CSK	WH	EWH	45	190	380		7000	1.0 x 10-3	5300	0.15	1	+1.8 0	990	
MJC-95CSK	WH	EWH	55	265	530		6000	2.3 x 10-3	6200	0.15	1	+2.0 0	1500	
MJC-30CSK	RD	ERD	16	12.5	25	0.5	21000	5.9 x 10-6	130	0.1	1	+1.0 0	41	A98
MJC-40CSK	RD	ERD	25	17	34	1.2	15000	3.5 x 10-5	1200	0.1	1	+1.2 0	130	
MJC-55CSK	RD	ERD	32	60	120		11000	1.5 x 10-4	2600	0.1	1	+1.4 0	300	
MJC-65CSK	RD	ERD	38.1	160	320		9000	3.5 x 10-4	4900	0.1	1	+1.5 0	490	
MJC-80CSK	RD	ERD	45	325	650		7000	1.0 x 10-3	6500	0.1	1	+1.8 0	990	
MJC-95CSK	RD	ERD	55	450	900		6000	2.3 x 10-3	8900	0.1	1	+2.0 0	1500	
MJC-30CSK	GR	EGR	16	16	32	0.5	21000	5.9 x 10-6	200	0.08	1	+1.0 0	41	D64
MJC-40CSK	GR	EGR	25	21	42	1.2	15000	3.5 x 10-5	3000	0.08	1	+1.2 0	130	
MJC-55CSK	GR	EGR	32	75	150		11000	1.5 x 10-4	9000	0.08	1	+1.4 0	300	
MJC-65CSK	GR	EGR	38.1	200	400		9000	3.5 x 10-4	13000	0.08	1	+1.5 0	490	
MJC-80CSK	GR	EGR	45	405	810		7000	1.0 x 10-3	14000	0.08	1	+1.8 0	990	
MJC-95CSK	GR	EGR	55	560	1120		6000	2.3 x 10-3	15000	0.08	1	+2.0 0	1500	

*1 : Correction of rated torque and max. torque due to load fluctuation is not required. However, if ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the table. MJC-CSK's allowable operating temperature is −20℃ to 60℃.

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

*3 : For transmission with Zero Backlash, please use a tight fit sleeve.

● Details of Shaft Hole



Unit : mm

Standard Metric Bore Diameter D	Keyway b		Keyway t		Key Nominal Dimension b x h
	Standard Dimension	Allowance (JS9)	Standard Dimension	Allowance	
10・11・12	4	±0.0150	1.8	+0.1 0	4×4
14・15・16	5	±0.0150	2.3	+0.1 0	5×5
18・19・20・22	6	±0.0150	2.8	+0.1 0	6×6
24・25・28・30	8	±0.0180	3.3	+0.2 0	8×7
32・35・38	10	±0.0180	3.3	+0.2 0	10×8
40・42	12	±0.0215	3.3	+0.2 0	12×8
45・48・50	14	±0.0215	3.8	+0.2 0	14×9
55	16	±0.0215	4.3	+0.2 0	16×10

Unit : inch

Standard Inch Bore Diameter D	Keyway Wk		Keyway T	
	Standard Dimension	Allowance	Standard Dimension	Allowance
1/2	1 / 8	+0.002 0	0.560	+0.01 0
9/16	1 / 8	+0.002 0	0.623	+0.01 0
5/8	3 / 16	+0.002 0	0.709	+0.01 0
11/16	3 / 16	+0.002 0	0.773	+0.01 0
3/4	3 / 16	+0.002 0	0.837	+0.01 0
13/16	3 / 16	+0.002 0	0.900	+0.01 0
7/8	3 / 16	+0.002 0	0.964	+0.01 0
15/16	1 / 4	+0.002 0	1.051	+0.01 0
1	1 / 4	+0.002 0	1.114	+0.01 0
1 1/8	1 / 4	+0.002 0	1.241	+0.01 0
1 1/4	1 / 4	+0.002 0	1.367	+0.01 0
1 3/8	5 / 16	+0.002 0	1.518	+0.01 0
1 1/2	3 / 8	+0.002 0	1.669	+0.01 0
1 5/8	3 / 8	+0.002 0	1.796	+0.01 0
1 3/4	3 / 8	+0.002 0	1.922	+0.01 0

Couplicon®

MJS Flexible Coupling - Jaw-type (Short)

WEB Selection Tool | WEB CAD Download | High torque | Vibration absorption | Electrical Insulation

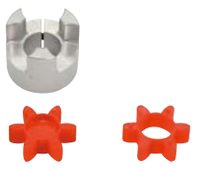
Structure

● Clamping Type ➡ P.143
MJS-CS-**** Tight Fit
MJS-CS-E**** Easy Fit

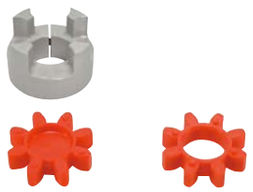
● Clamping + Key Type ➡ P.145
MJS-CSK-**** Tight Fit
MJS-CSK-E**** Easy Fit

● Sleeve

Outside Diameter: ϕ40



Outside Diameter: ϕ55 - ϕ95



● Applicable motors

	Tight Fit	Easy Fit
Servomotor	◎	○
Stepping Motor	◎	◎
General-Purpose Motor	◎	◎

◎: Excellent ○: Very good

● Property

	Tight Fit	Easy Fit
Zero Backlash	○	–
High Torque	◎	◎
Allowable Misalignment	○	○
Vibration Absorption	◎	◎
Electrical Insulation	◎	◎
Assembling	○	◎
Allowable Operating Temperature	−20℃ to 60℃	−20℃ to 60℃

◎: Excellent ○: Very good

- This is a jaw type flexible coupling.
- It is a short type and more compact than **MJC**.
- Tight Fit enables transmission with zero backlash at low torque.
- Easy fit allows assembling and separation of hubs.
- Excellent flexibility allows eccentricity, angular misalignment and twisting vibration to be accepted.
- It has electrical insulation. Resistance value: Not less than 2 MΩ

● Sleeve Type

Sleeve Type	Sleeve Hardness (JIS) A80	A92	A98	D64
Tight Fit	BL	WH	RD	GR
Easy Fit	EBL	EWH	ERD	EGR

Small ← Rated Torque / Maximum Torque → Large
Large ← Allowable Misalignment → Small

● Material/Finish

RoHS2 Compliant

	MJS-CS / MJS-CSK
Hub	A2017 Alumite Treatment
Sleeve	Polyurethane
Hex Socket Head Cap Screw	SCM435 Ferrosoferric Oxide Film (Black)

● Part number specification

MJS-40CSK-ERD-10-11

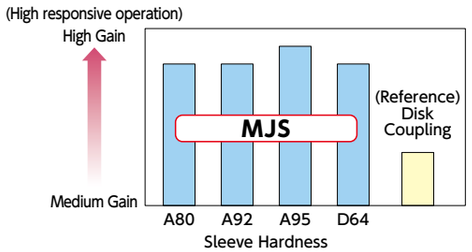
Product Code | Size | Sleeve Type | bore diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

● Tight Fit
The hub and sleeve are press-fit and can be used under zero backlash*1.Since the sleeve's vibration absorption can raise the gain of a servomotor, this unit can achieve high responsive operation exceeding the Disk coupling.

*1: For the torque used under zero backlash, please refer to Performance table.



● Tight Fit Applications
XY stage / Index table / Machine tool / Injection molding machine

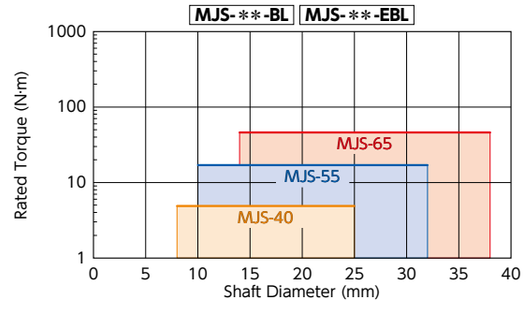
● Easy Fit
This unit allows you to easily assemble and partition the hub and sleeve.
This allows you to reduce the time of assembling the unit and maintenance.
It is possible to mount a hub on the shaft in advance and easily assemble the unit even in a location where the coupling is less-visible.

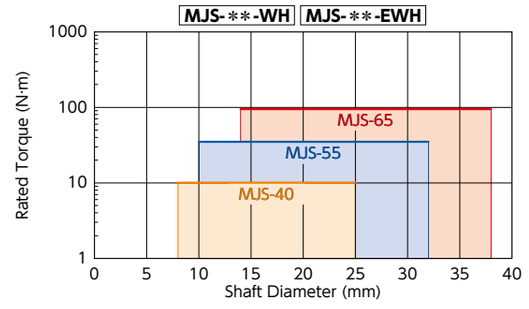
● Easy Fit Applications
Transport device / Mixer / Ventilator / Pump / Dispenser

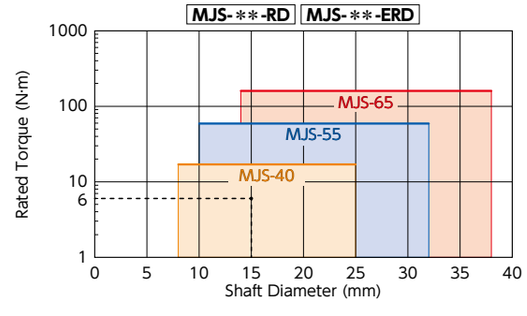
Selection

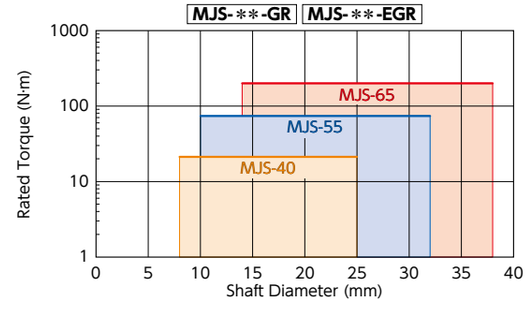
● **Selection based on shaft diameter and rated torque**

The area bounded by the shaft diameter and rated torque indicates is the selection size.









● Selection Example
In case of selected parameters of shaft diameter of ϕ15 and load torque of 6 N•m, the selected size for **MJS-**CS-RD**, **MJS-**CS-ERD** is **MJS-40CS-RD**, **MJS-40CS-ERD**.

Couplicon®

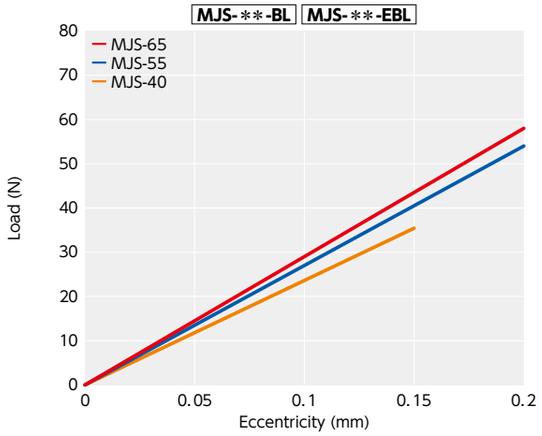
MJS Flexible Coupling - Jaw-type (Short)

Selection Tool | CAD Download | High torque | Vibration absorption | Electrical Insulation

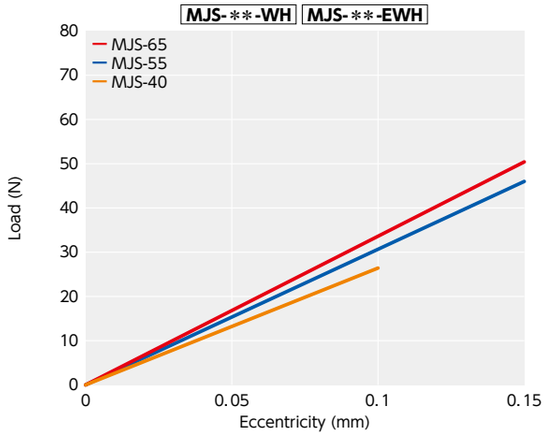
Technical Information

● Eccentric Reaction Force

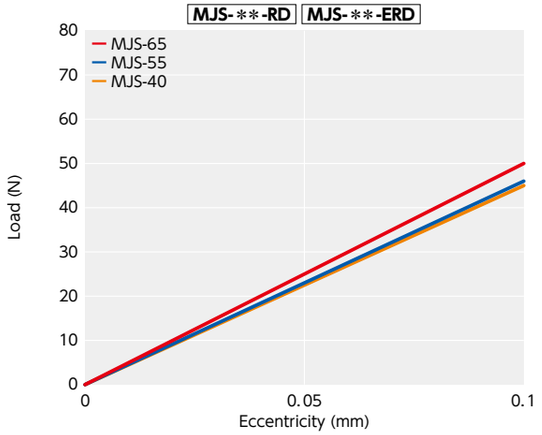
MJS--BL** **MJS-**-EBL**



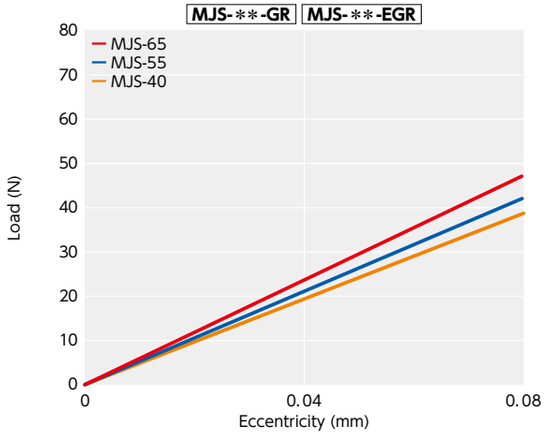
MJS--WH** **MJS-**-EWH**



MJS--RD** **MJS-**-ERD**

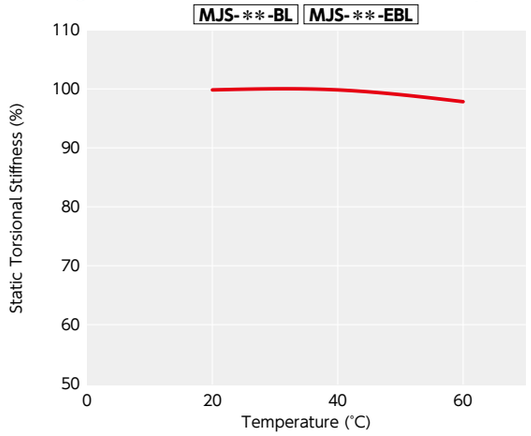


MJS--GR** **MJS-**-EGR**

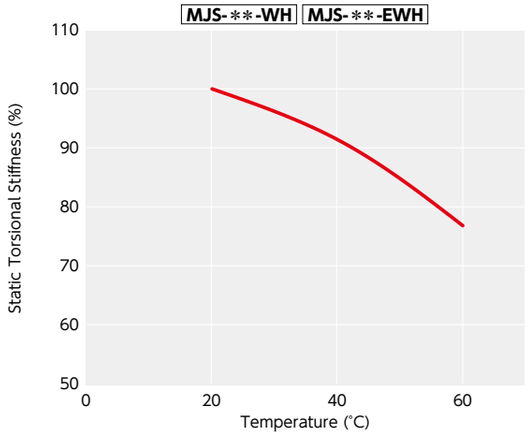


● Change in static torsional stiffness due to temperature

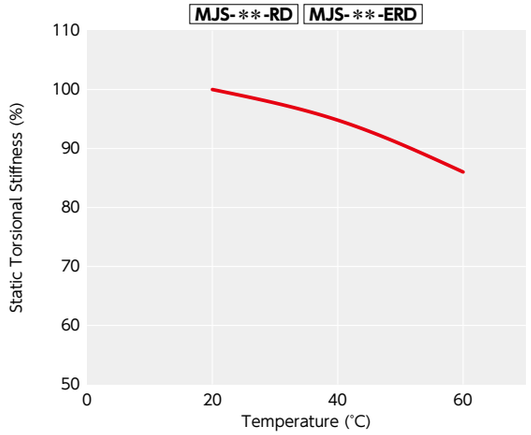
MJS--BL** **MJS-**-EBL**



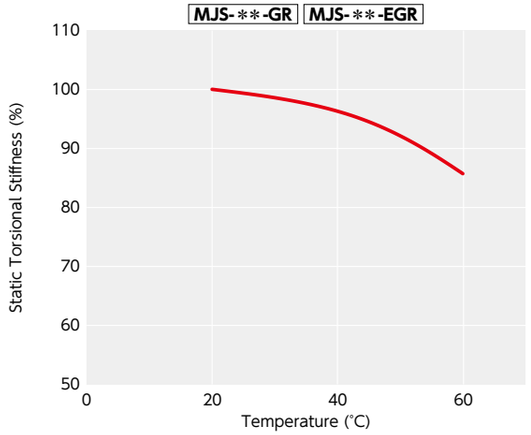
MJS--WH** **MJS-**-EWH**



MJS--RD** **MJS-**-ERD**



MJS--GR** **MJS-**-EGR**



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of torsional stiffness within the range of allowable operating temperature is as shown in the graph.
Before using the unit, be aware of the deterioration of responsiveness.

● Slip Torque

Concerning the sizes shown in the table, please note that the shaft's slip torque is smaller than the max. torque of **MJS-CS**.

Unit : N・m

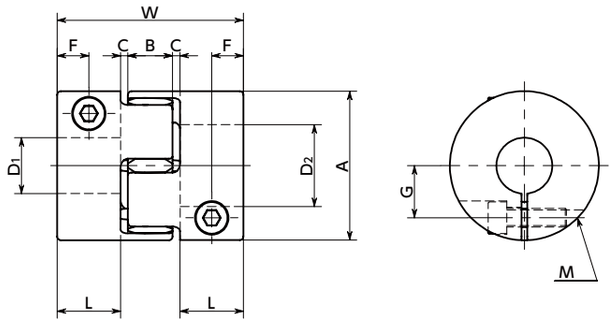
Part Number	Bore Diameter (mm)																		
	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38
MJS-40CS	28.9	35.6	37.7																
MJS-55CS			40.2	46.7	53.2	66.1	72.6	79	92	98.4	104	117	130	137		145			
MJS-65CS						113	123	134	155	165	176	197	218	228	260	281	302	300	300

● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: from 34 - 40 HRC, and screw tightening torque of the values described in **MJS-CS** dimensional table.

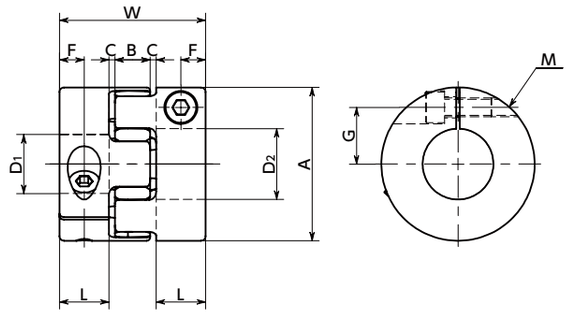
Couplicon®

MJS-CS Flexible Coupling - Jaw - type (Short) - Clamping Type

WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation



Outside Diameter: ϕ40



Outside Diameter: ϕ55 / ϕ65

Dimensions

Unit : mm

Part Number 1	Bore Diameter	A	L	W	B	C*1	Sleeve E	F	G	M	Screw Tightening Torque (N・m)
MJS-40CS	8 - 20	40	17	50	12	2	18	8.5	14	M5	8
	22 - 25								15.75	M4	3.5
MJS-55CS	10 - 28	55	18	54	14	2	27.5	9	20	M6	13
	30 - 32								21	M5	8
MJS-65CS	14 - 32	65	21	62	15	2.5	31	10.5	24	M8	28
	35 - 38								25	M6	13

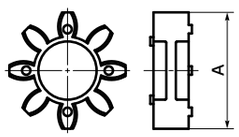
*1 : Use with C Dimension

Part Number	Standard Bore Diameter D1・D2 3																		
	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38
MJS-40CS	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
MJS-55CS			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
MJS-65CS						●	●	●	●	●	●	●	●	●	●	●	●	●	●

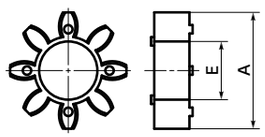
- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping type for one side and clamping + key type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

- Sleeve Details

Tight Fit



Easy Fit



Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Sleeve 2		Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Zero Backlash*3 Allowable Transmission Torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
	Tight Fit	Easy Fit												
MJS-40CS	BL	EBL	25	4.9	9.8	1.2	15000	2.7×10^{-5}	380	0.15	1	$^{+1.2}_{0}$	100	
MJS-55CS	BL	EBL	32	17	34		11000	1.1×10^{-4}	1400	0.2	1	$^{+1.4}_{0}$	210	A80
MJS-65CS	BL	EBL	38	46	92		9000	2.4×10^{-4}	2800	0.2	1	$^{+1.5}_{0}$	340	
MJS-40CS	WH	EWH	25	10	20	1.2	15000	2.7×10^{-5}	570	0.1	1	$^{+1.2}_{0}$	100	
MJS-55CS	WH	EWH	32	35	70		11000	1.1×10^{-4}	1600	0.15	1	$^{+1.4}_{0}$	210	A92
MJS-65CS	WH	EWH	38	95	190		9000	2.4×10^{-4}	3000	0.15	1	$^{+1.5}_{0}$	340	
MJS-40CS	RD	ERD	25	17	34	1.2	15000	2.7×10^{-5}	1200	0.1	1	$^{+1.2}_{0}$	100	
MJS-55CS	RD	ERD	32	60	120		11000	1.1×10^{-4}	2600	0.1	1	$^{+1.4}_{0}$	210	A98
MJS-65CS	RD	ERD	38	160	320		9000	2.4×10^{-4}	4900	0.1	1	$^{+1.5}_{0}$	340	
MJS-40CS	GR	EGR	25	21	42	1.2	15000	2.7×10^{-5}	3000	0.08	1	$^{+1.2}_{0}$	100	
MJS-55CS	GR	EGR	32	75	150		11000	1.1×10^{-4}	9000	0.08	1	$^{+1.4}_{0}$	210	D64
MJS-65CS	GR	EGR	38	200	400		9000	2.4×10^{-4}	13000	0.08	1	$^{+1.5}_{0}$	340	

*1 : Correction of rated torque and max. torque due to load fluctuation is not required. However, if ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the table. MJS-CS's allowable operating temperature is −20℃ to 60℃.
*2 : These are values with max. bore diameter.
*3 : For transmission with Zero Backlash, please use a tight fit sleeve.

- 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

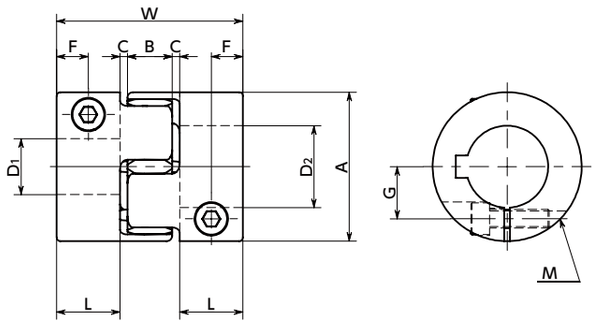
- Part number specification

MJS-55CS - EGR - 14-16
1　2　3

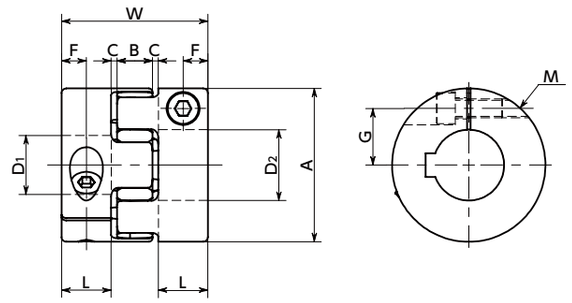
Couplicon®

MJS-CSK Flexible Coupling - Jaw-type (Short) - Clamping + Key Type

WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation



Outside Diameter: ϕ40



Outside Diameter: ϕ55 / ϕ65

Dimensions

Unit : mm

Part Number 1	Bore Diameter	A	L	W	B	C*1	Sleeve E	F	G	M	Screw Tightening Torque (N・m)
MJS-40CSK	10 - 20	40	17	50	12	2	18	8.5	14	M5	8
	22 - 25								15.75	M4	3.5
MJS-55CSK	10 - 28	55	18	54	14	2	27.5	9	20	M6	13
	30 - 32								21	M5	8
MJS-65CSK	14 - 32	65	21	62	15	2.5	31	10.5	24	M8	28
	35 - 38								25	M6	13

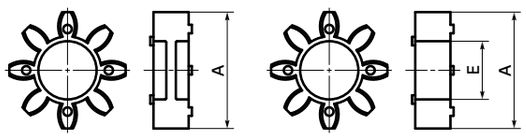
*1 : Use with C Dimension

Part Number	Standard Bore Diameter D1・D2 3																
	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38
MJS-40CSK	●	●	●	●	●	●	●	●	●	●	●	●					
MJS-55CSK	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
MJS-65CSK				●	●	●	●	●	●	●	●	●	●	●	●	●	●

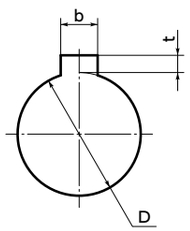
- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping + key type for one side and clamping type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

● Sleeve Details

Tight Fit　Easy Fit



● Details of Shaft Hole



Unit : mm

Standard Bore Diameter D	Keyway b Standard Dimension	Keyway b Allowance (JS9)	Keyway t Standard Dimension	Keyway t Allowance	Key Nominal Dimension b x h
10・11・12	4	±0.0150	1.8	$^{+0.1}_{0}$	4×4
14・15・16	5	±0.0150	2.3	$^{+0.1}_{0}$	5×5
18・19・20・22	6	±0.0150	2.8	$^{+0.1}_{0}$	6×6
24・25・28・30	8	±0.0180	3.3	$^{+0.2}_{0}$	8×7
32・35・38	10	±0.0180	3.3	$^{+0.2}_{0}$	10×8

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

Performance

Part Number	Sleeve 2 Tight Fit	Sleeve 2 Easy Fit	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Zero Backlash*3 Allowable Transmission Torque (N・m)	Max. Rotational Frequency (min-1)	Moment*2 of Inertia (kg・m2)	Static Torsional Stiffness (N・m / rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
MJS-40CSK	BL	EBL	25	4.9	9.8	1.2	15000	2.7 x 10-5	380	0.15	1	$^{+1.2}_{0}$	96	
MJS-55CSK	BL	EBL	32	17	34		11000	1.0 x 10-4	1400	0.2	1	$^{+1.4}_{0}$	210	A80
MJS-65CSK	BL	EBL	38	46	92		9000	2.3 x 10-4	2800	0.2	1	$^{+1.5}_{0}$	330	
MJS-40CSK	WH	EWH	25	10	20	1.2	15000	2.7 x 10-5	570	0.1	1	$^{+1.2}_{0}$	96	
MJS-55CSK	WH	EWH	32	35	70		11000	1.0 x 10-4	1600	0.15	1	$^{+1.4}_{0}$	210	A92
MJS-65CSK	WH	EWH	38	95	190		9000	2.3 x 10-4	3000	0.15	1	$^{+1.5}_{0}$	330	
MJS-40CSK	RD	ERD	25	17	34	1.2	15000	2.7 x 10-5	1200	0.1	1	$^{+1.2}_{0}$	96	
MJS-55CSK	RD	ERD	32	60	120		11000	1.0 x 10-4	2600	0.1	1	$^{+1.4}_{0}$	210	A98
MJS-65CSK	RD	ERD	38	160	320		9000	2.3 x 10-4	4900	0.1	1	$^{+1.5}_{0}$	330	
MJS-40CSK	GR	EGR	25	21	42	1.2	15000	2.7 x 10-5	3000	0.08	1	$^{+1.2}_{0}$	96	
MJS-55CSK	GR	EGR	32	75	150		11000	1.0 x 10-4	9000	0.08	1	$^{+1.4}_{0}$	210	D64
MJS-65CSK	GR	EGR	38	200	400		9000	2.3 x 10-4	13000	0.08	1	$^{+1.5}_{0}$	330	

*1 : Correction of rated torque and max. torque due to load fluctuation is not required. However, if ambient temperature exceeds 30℃, be sure to correct the rated torque and max. torque with temperature correction factor shown in the table. MJS-CSK 's allowable operating temperature is −20℃ to 60℃.
*2 : These are values with max. bore diameter.
*3 : For transmission with Zero Backlash, please use a tight fit sleeve.

● 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

● Part number specification

MJS-40CSK - EBL - 14-16
1　2　3

Couplicon®

MJB Flexible Coupling - Jaw - type (Bushing)

Selection Tool | CAD Download | High torque | Vibration absorption | Electrical Insulation

Structure

● Bushing type

MJB ➡ P.153

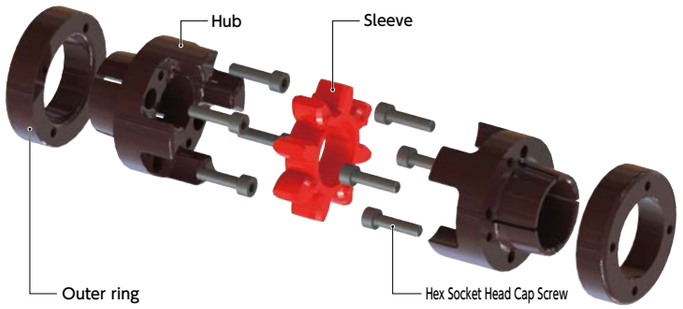
● Sleeve

Outside diameter ϕ40

Tight Fit Easy Fit

Outside diameter ϕ55 -ϕ95

Tight Fit Easy Fit



● Material/Finish

RoHS2 Compliant

	MJB
Hub	S45C Ferrosoferric Oxide Film (Black)
Outer ring	S45C Ferrosoferric Oxide Film (Black)
Sleeve	Polyurethane
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Part number specification

MJB - 55 - RD - 10-10

Product Code | Size | Sleeve Type | Bore Diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Not Available	Not Available

● Applicable motors

	Tight fit	Easy Fit
Servomotor	◎	○
Stepping Motor	◎	◎
General-purpose motor	◎	◎

◎: Excellent ○: Very good

● Property

	Tight fit	Easy Fit
High torque	◎	◎
Allowable Misalignment	○	○
Vibration absorption	◎	◎
Electrical insulation	◎	◎
Assembling	○	◎
Allowable operating temperature	−20℃ to 60℃	−20℃ to 60℃

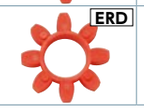
◎: Excellent ○: Very good

- This is a jaw type flexible coupling.
- This superior high torque transmission is the most appropriate for the spindle of a machine tool.
- Excellent flexibility allows eccentricity, and angular misalignment and vibration to be accepted.
- It has electrical insulation. Resistance value: not less than 2 MΩ.
- There are four types of sleeve hardness. Please select desirable units according to usage conditions including torque and misalignment.
- Since the sleeve's vibration absorption can raise the gain of a servomotor, tight fit can achieve high responsive operation exceeding the Disk coupling.
- Easy fit allows you to assemble and partition the hub and sleeve smoothly. This allows you to reduce the time of assembling the unit and maintenance.

● Application

Machine tool / Spindle

● Sleeve type

Sleeve Type	Sleeve Hardness (JIS)			
	A80	A92	A98	D64
Tight Fit	 BL	 WH	 RD	 GR
Easy Fit	 EBL	 EWH	 ERD	 EGR

Small ← Rated torque and max. torque → Large

Large ← Allowable Misalignment → Small

MJB Flexible Coupling - Jaw - type (Bushing)

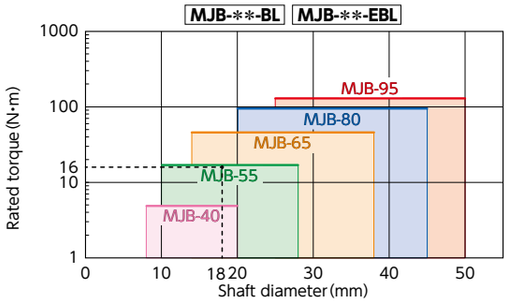
Selection Tool | CAD Download | High torque | Vibration absorption | Electrical Insulation

Selection

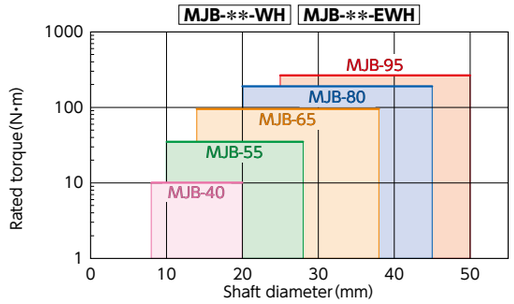
● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.

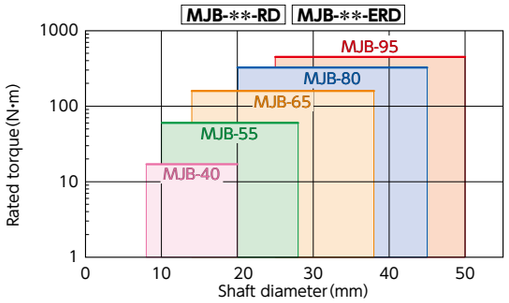
MJB--BL** **MJB-**-EBL**



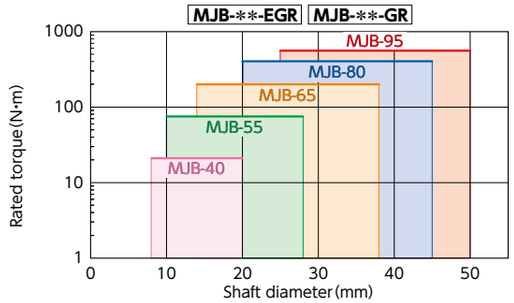
MJB--WH** **MJB-**-EWH**



MJB--RD** **MJB-**-ERD**



MJB--EGR** **MJB-**-GR**



● Selection example

In case of selected parameters of shaft diameter of ϕ 18 and load torque of 16 N•m, the selected size for **MJB-**-BL** **MJB-**-EBL** is **MJB-55-BL** **MJB-55-EBL**

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Not Available	Not Available

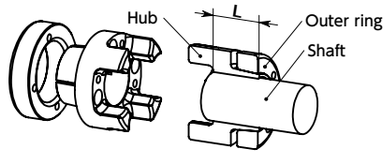
● Mounting / Removing

● Mounting

①Clean up the fitting surfaces of hub, outer ring and shaft.

②Apply light oil thinly on the surfaces. Avoid molybdenum base oil as it reduces the fastening power seriously.

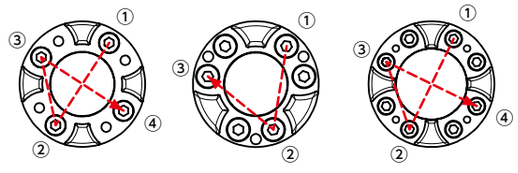
③Insert the shaft to the dimension L. ➡ **Table 1**



④Tighten the hexagon socket head bolts with 50% of the tightening torque in **Table 1**, each for once, following the sequence in **Fig.1**

⑤In the same sequence as in④, tighten the hexagon socket head bolts with 100% of the tightening torque in **Table 1**, each for once.

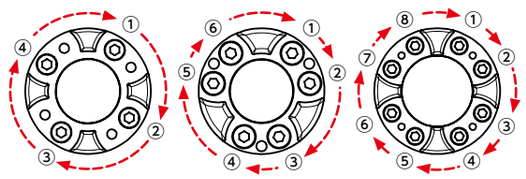
Diagram 1 Tighten in diagonal sequence



Number of bolts=4 Number of bolts=6 Number of bolts=8

⑥Tighten all hexagon socket head bolts with the tightening torque in **Table 1**, following the sequence in **Fig.2**

Diagram 2 Tighten all bolts



Number of bolts=4 Number of bolts=6 Number of bolts=8

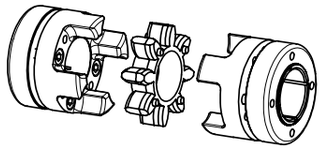
⑦Repeat ⑥ until all hex socket head cap screws securely fixed.

As a guide, the rotation of a hex socket head screw, when tightened, should be less than 20 degrees.

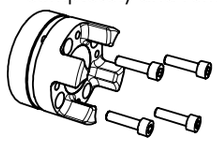
⚠ Use a torque wrench to tighten bolts.

● Removal

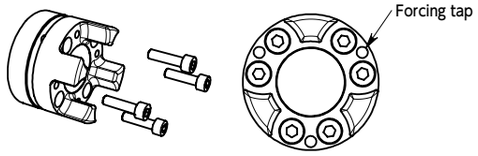
①Disassemble the hub and the sleeve.



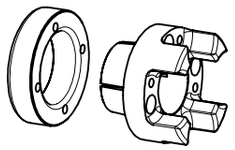
②Confirm that there is no torque or thrust load, then loosen all hexagon socket head bolts completely and remove them.



③Insert one of the removed bolts in ②to a forcing tap, and tighten little by little, avoiding uneven clamping.



④ Repeating ③ will lead to sharply reduced tightening torque. Remove the coupling from the shaft, as the fastening force from the tapered surface is reduced.



● **Table 1**

Part Number	L	Hex Socket Head Cap Screw		Screw Tightening Torque (N・m)
		Diameter of Thread	Number of bolts	
MJB-40	25	M4	6	4
MJB-55	30	M5	4	8.5
MJB-65	35	M5	8	8.5
MJB-80	45	M6	8	14
MJB-95	50	M8	8	35

Couplicon®

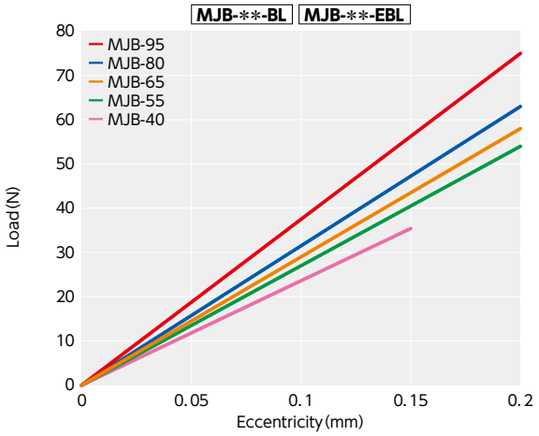
MJB Flexible Coupling - Jaw - type (Bushing)

WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation

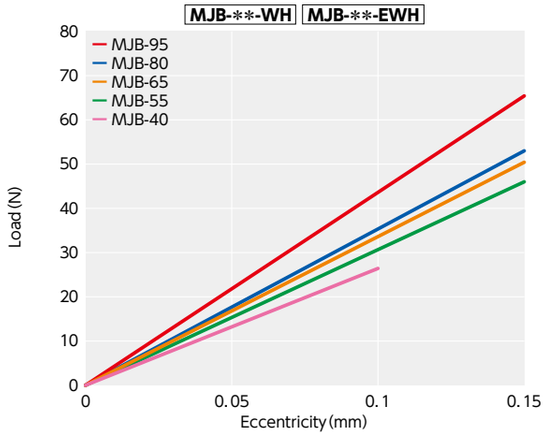
Technical Information

● Eccentric Reaction Force

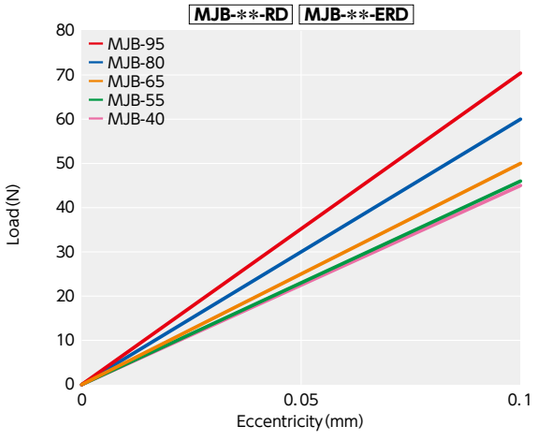
MJB--BL** **MJB-**-EBL**



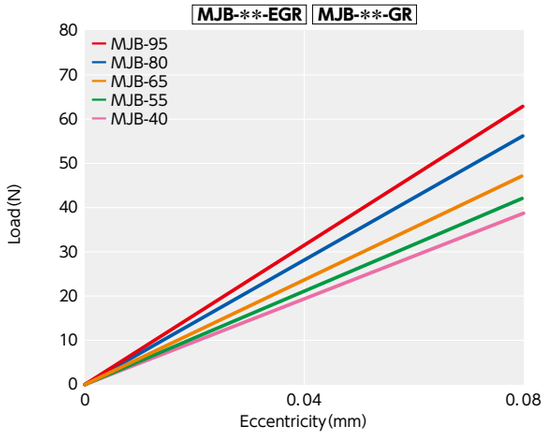
MJB--WH** **MJB-**-EWH**



MJB--RD** **MJB-**-ERD**

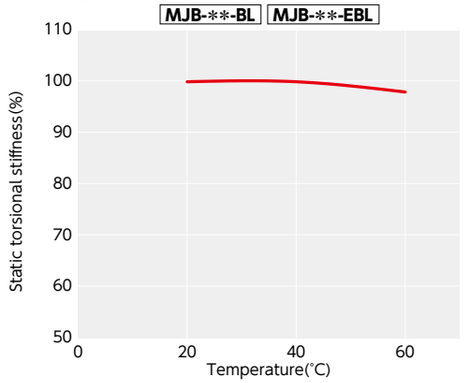


MJB--EGR** **MJB-**-GR**

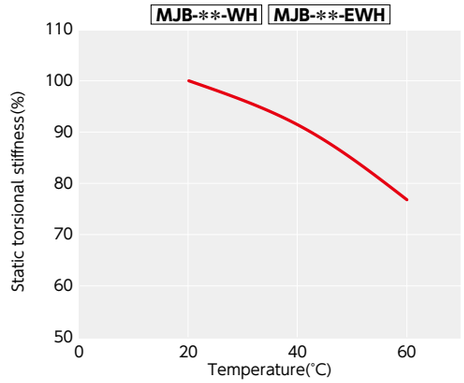


● Change in static torsional stiffness due to temperature

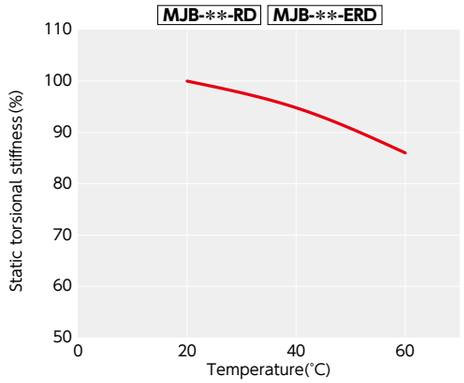
MJB--BL** **MJB-**-EBL**



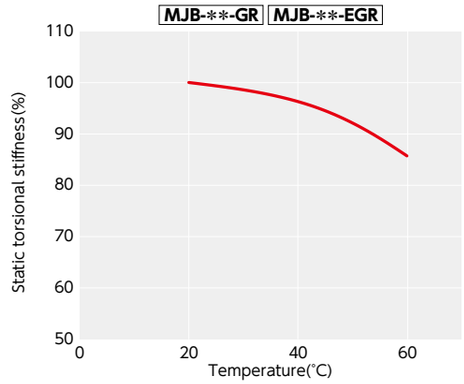
MJB--WH** **MJB-**-EWH**



MJB--RD** **MJB-**-ERD**



MJB--GR** **MJB-**-EGR**



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of torsional stiffness within the range of allowable operating temperature is as shown in the graph.
Before using the unit, be aware of the deterioration of responsiveness.

● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the max. torque of **MJB** .

Unit : N・m

Part Number	Bore (mm)																					
	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50
MJB-55	32.8	54	75.2	117	138																	
MJB-65				161	171	181	202	212	222	243	264	274	305	325	346	377						
MJB-80									285	335	385	411	486	500	500	500	500	500	500	500		
MJB-95												500	500	500	500	500	500	500	500	500	500	500

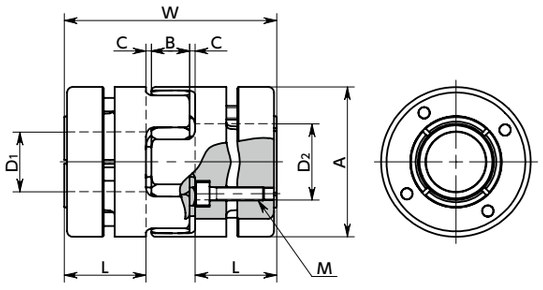
● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **MJB** Dimension table.

Couplicon®

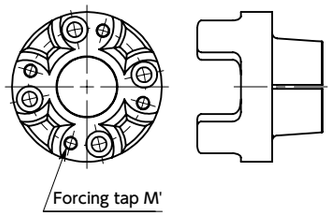
MJB Flexible Coupling - Jaw - type (Bushing)

WEB Selection Tool　WEB CAD Download　High torque　Vibration absorption　Electrical Insulation

MJB



● Details of hub



Dimensions

Unit : mm

Part Number 1	A	L	W	B	C*1	Sleeve E	M	Number of bolts	Forcing tap M'	Screw Tightening Torque (N·m)
MJB-40	40	25	66	12	2	17	M4	6	M4	4
MJB-55	55	30	78	14	2	26	M5	4	M5	8.5
MJB-65	65	35	90	15	2.5	29.5	M5	8	M5	8.5
MJB-80	80	45	114	18	3	35.5	M6	8	M6	14
MJB-95	95	50	126	20	3	44	M8	8	M8	35

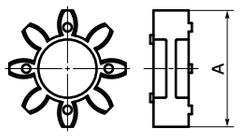
*1 : Use with C Dimension

Part Number	Standard Bore Diameter D1・D2 3																							
	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50
MJB-40	●	●	●	●	●	●	●	●	●	●	●													
MJB-55			●	●	●	●	●	●	●	●	●	●	●	●	●									
MJB-65						●	●	●	●	●	●	●	●	●	●	●	●	●	●					
MJB-80											●	●	●	●	●	●	●	●	●	●	●	●	●	
MJB-95														●	●	●	●	●	●	●	●	●	●	●

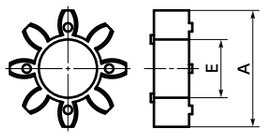
- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

● Sleeve Details

Tight Fit



Easy Fit



Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Not Available	Not Available

Performance

Part Number	Sleeve 2 Tight Fit	Sleeve 2 Easy Fit	Max. Bore Diameter (mm)	Rated*1 Torque (N·m)	Max.*1 Torque (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 (°)	Max. Axial Misalignment (mm)	Mass*2 (g)	Sleeve Hardness (JIS)
MJB-40	BL	EBL	20	4.9	9.8	23000	3.9×10^{-5}	380	0.15	1	$^{+1.2}_{0}$	400	
MJB-55	BL	EBL	28	17	34	17000	1.6×10^{-4}	1400	0.2	1	$^{+1.4}_{0}$	800	
MJB-65	BL	EBL	38	46	92	14000	3.8×10^{-4}	2800	0.2	1	$^{+1.5}_{0}$	1100	A80
MJB-80	BL	EBL	45	95	190	11000	1.0×10^{-3}	3200	0.2	1	$^{+1.8}_{0}$	2300	
MJB-95	BL	EBL	50	130	260	10000	2.3×10^{-3}	3600	0.2	1	$^{+2.0}_{0}$	4000	
MJB-40	WH	EWH	20	10	20	23000	3.9×10^{-5}	570	0.1	1	$^{+1.2}_{0}$	400	
MJB-55	WH	EWH	28	35	70	17000	1.6×10^{-4}	1600	0.15	1	$^{+1.4}_{0}$	800	
MJB-65	WH	EWH	38	95	190	14000	3.8×10^{-4}	3000	0.15	1	$^{+1.5}_{0}$	1100	A92
MJB-80	WH	EWH	45	190	380	11000	1.0×10^{-3}	5300	0.15	1	$^{+1.8}_{0}$	2300	
MJB-95	WH	EWH	50	265	530	10000	2.3×10^{-3}	6200	0.15	1	$^{+2.0}_{0}$	4000	
MJB-40	RD	ERD	20	17	34	23000	3.9×10^{-5}	1200	0.1	1	$^{+1.2}_{0}$	400	
MJB-55	RD	ERD	28	60	120	17000	1.6×10^{-4}	2600	0.1	1	$^{+1.4}_{0}$	800	
MJB-65	RD	ERD	38	160	320	14000	3.8×10^{-4}	4900	0.1	1	$^{+1.5}_{0}$	1100	A98
MJB-80	RD	ERD	45	325	650	11000	1.0×10^{-3}	6500	0.1	1	$^{+1.8}_{0}$	2300	
MJB-95	RD	ERD	50	450	900	10000	2.3×10^{-3}	8900	0.1	1	$^{+2.0}_{0}$	4000	
MJB-40	GR	EGR	20	21	42	23000	3.9×10^{-5}	3000	0.08	1	$^{+1.2}_{0}$	400	
MJB-55	GR	EGR	28	75	150	17000	1.6×10^{-4}	9000	0.08	1	$^{+1.4}_{0}$	800	
MJB-65	GR	EGR	38	200	400	14000	3.8×10^{-4}	13000	0.08	1	$^{+1.5}_{0}$	1100	D64
MJB-80	GR	EGR	45	405	810	11000	1.0×10^{-3}	14000	0.08	1	$^{+1.8}_{0}$	2300	
MJB-95	GR	EGR	50	560	1120	10000	2.3×10^{-3}	15000	0.08	1	$^{+2.0}_{0}$	4000	

*1 : Correction of rated torque and max. torque due to load fluctuation is not required.However, 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 MJB is −20℃ to 60℃.

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

● 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

● Part number specification

MJB-65 - EWH - 16-20 (1 set)
1　2　3

MJ - 40 - RD - SLV (Single Sleeve)
Sleeve Symbol　Outside Diameter (A Dimension)　2　Sleeve Symbol

Couplicon®

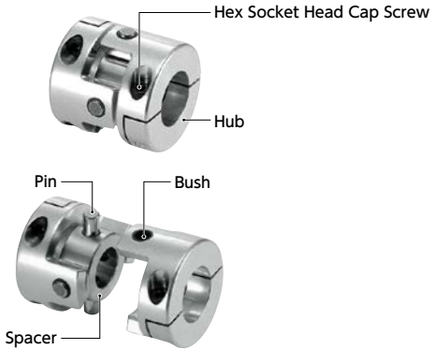
XUT Flexible Coupling - Cross joint - type

WEB Selection Tool　WEB CAD Download　High Rigidity　Vibration absorption

Structure

● Clamping type

XUT-C ➡ P.159



The high accuracy fitting of pin and bush allows the extremely small backlash.
For the bush of XUT the polyimide resin with excellent abrasion-resistance is adopted.
The backlash at the initial stage is maintained for a long period.

● Recommended applicable motor

	XUT
Servomotor	◎
Stepping Motor	◎
General-purpose motor	△

◎: Excellent　○: Very good　△: Available

● Property

	XUT
Zero Backlash	○
High torque	○
High Torsional Stiffness	◎
Allowable Misalignment	○
Vibration absorption	◎

◎: Excellent　○: Very good

- This is a Cross joint-type flexible coupling.
- Slippage of the bush built in the hubs and the pins of the spacer allows eccentricity and angular misalignment to be accepted.
- The high accuracy fitting of pin and bush allows the extremely small backlash.
- The load on the shaft generated by misalignment is small and the burden on the shaft is reduced.

● Application

Actuator/XY stage/Index table

● Material/Finish　RoHS2 Compliant

	XUT-C
Hub	A2017*1
Spacer	SUS304
Pin	SUJ2
Bush	Polyimide
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

*1: Manufacturing alumite treatment products is also possible. Please feel free to contact our customer service.

● Part number specification

XUT - 25C - 6-8

Product Code　Size　Bore Diameter

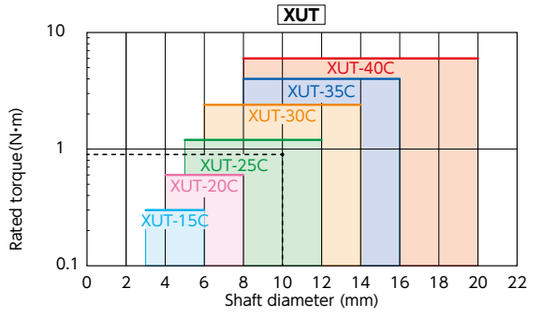
Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Please feel free to contact us	Available / Add'l charge

Selection

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.



● Selection example

In case of selected parameters of shaft diameter of ϕ 10 and load torque of 0.9 N•m, the selected size is XUT-25C

● Selection based on the rated output of the servomotor

Rated output (W)	Servomotor Specifications*1			Selection size
	Diameter of motor shaft (mm)	Rated torque (N・m)	Instantaneous maximum torque (N・m)	XUT-C
10	5 - 6	0.032	0.096	XUT-15C
20	5 - 6	0.064	0.19	XUT-15C
30	5 - 7	0.096	0.29	XUT-20C
50	6 - 8	0.16	0.48	XUT-20C
100	8	0.32	0.95	XUT-25C
200	9 - 14	0.64	1.9	XUT-30C
400	14	1.3	3.8	XUT-35C
750	16 - 19	2.4	7.2	–

*1: Motor specifications are based on general values. For details, see the motor manufacturer's catalogs.This is the size for cases where devices such as reduction gears are not used.

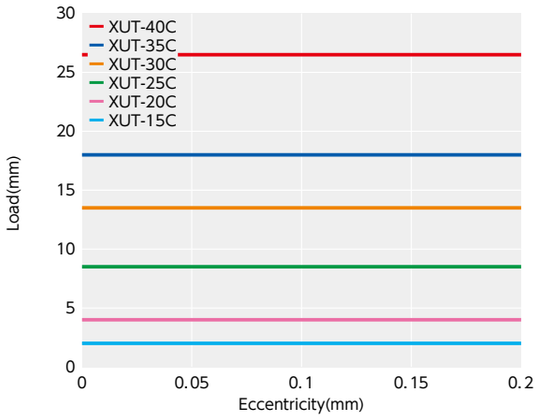
Couplicon®

XUT Flexible Coupling - Cross joint - type

Selection Tool | CAD Download | High Rigidity | Vibration absorption

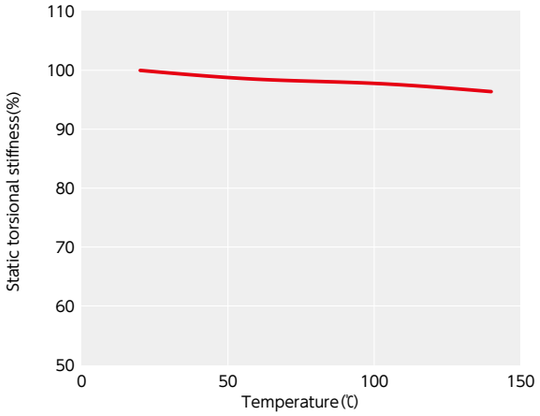
Technical Information

● Eccentric Reaction Force



XUT has small eccentric reaction force and an extremely small shaft load generated by misalignment. This reduces the load to such components as shaft bearings.

● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
XUT 's change in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. However, if the unit is used under higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

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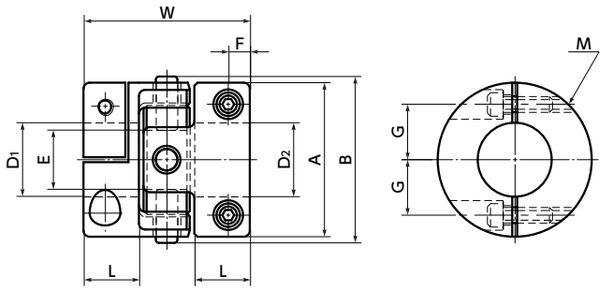
Couplicon®

XUT-C Flexible coupling - Cross joint - type - Clamping type

WEB Selection Tool　WEB CAD Download　High Rigidity　Vibration absorption

XUT-C



Dimensions

Unit : mm

Part Number 1	A	B	L	W	E	F	G	M	Screw Tightening Torque (N・m)
XUT-15C	15	16	6	18	4	2.5	5.2	M2	0.5
XUT-20C	20	22	7	20	7	2.7	6.5	M2	0.5
XUT-25C	25	27	9	27	10	3.5	9	M2.5	1
XUT-30C	30	32	9.5	30	10	4	10.5	M3	1.5
XUT-35C	35	37	11.5	35	13	5	12.5	M4	2.5
XUT-40C	40	42	12.5	40	15	5.5	15	M4	2.5

Part Number	Standard Bore Diameter D1・D2 2													
	3	4	5	6	8	10	11	12	14	15	16	18	19	20
XUT-15C	●	●	●	●										
XUT-20C		●	●	●	●									
XUT-25C			●	●	●	●	●	●						
XUT-30C				●	●	●	●	●	●					
XUT-35C					●	●	●	●	●	●	●			
XUT-40C					●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Please feel free to contact us	Available / Add'l charge

Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (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*2 (g)
XUT-15C	6	0.3	42000	2.3×10^{-7}	200	0.2	1	8
XUT-20C	8	0.6	31000	8.1×10^{-7}	400	0.2	1	16
XUT-25C	12	1.2	25000	2.7×10^{-6}	900	0.2	1	33
XUT-30C	14	2.4	21000	6.2×10^{-6}	1300	0.2	1	53
XUT-35C	16	4	18000	1.3×10^{-5}	2200	0.2	1	81
XUT-40C	20	6	15000	2.6×10^{-5}	2300	0.2	1	120

*1 : Correction of rated torque due to load fluctuation is not required.
*2 : These are values with max. bore diameter.

- Part number specification

XUT-30C - 10-12
1　2

Couplicon®

MOR Flexible coupling - Oldham - type

Selection Tool | CAD Download | High torque | Electrical Insulation | High Allowable Misalignment | Small Eccentric Reaction Force

Structure

● Set Screw type
MOR ➡ P.165

● Clamping type
MOR-C ➡ P.167

● Set Screw + Key type
MOR-K ➡ P.169

● Clamping + Key type
MOR-CK ➡ P.171

● Applicable motors

	MOR
Servomotor	–
Stepping Motor	○
General-purpose motor	◎

◎: Excellent ○: Very good

● Property

	MOR
High torque	◎
Allowable Misalignment	◎
Small eccentric reaction force	◎
Electrical insulation	◎
Allowable operating temperature	−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 eccentric reaction force generated by misalignment is small and the burden on the shaft is reduced.
- The simple structure allows the unit to be easily assembled.

● Application

Sputtering device / Parts feeder / Industrial sewing machine / Amusement device

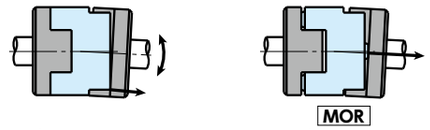
● Material/Finish

RoHS2 Compliant

	MOR / MOR-C / MOR-K / MOR-CK
Hub	A2017 Alumite Treatment
Spacer	Polyacetal
Hex Socket Set Screw	SCM435 Ferrosoferric oxide film
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Spacer's projection structure

Spacer's projection structure allows large angular to be effortlessly accepted. It reduces burden on the shaft.



(Without projection) (With projection)

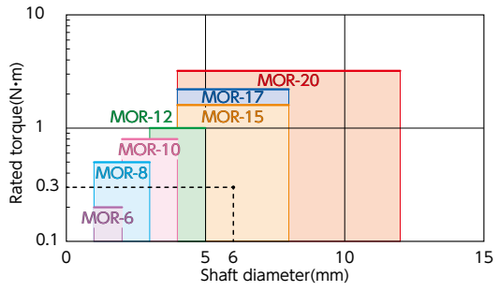
In the oldham-type coupling whose spacer has no projection, the spacer and hubs interfere with each other near outside diameter, so that the max. angular misalignment is small (1° - 1.5°) and that the bending moment arises on the shaft.
NBK's oldham type coupling allows the angular misalignment to be easily accepted since the projection serves as support. Bending moment does not arise. Therefore, the max. angular misalignment is large (3°) and the burden on the shaft is reduced.

Selection

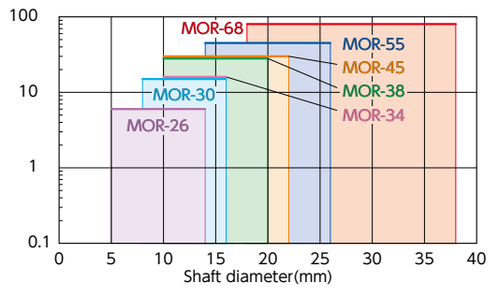
● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.

MOR Outside diameter ϕ 20 or less



MOR Outside diameter ϕ 26 or more



● Selection example

In case of selected parameters of shaft diameter of ϕ 6 and load torque of 0.3 N•m, the selected size is **MOR-15**.

● Related Products

Oldham-type couplings **MOM** with metal spacers are available.
➡ P.173

● Part number specification

MOR - 20CK - 6-10

Product Code | Size | Bore Diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

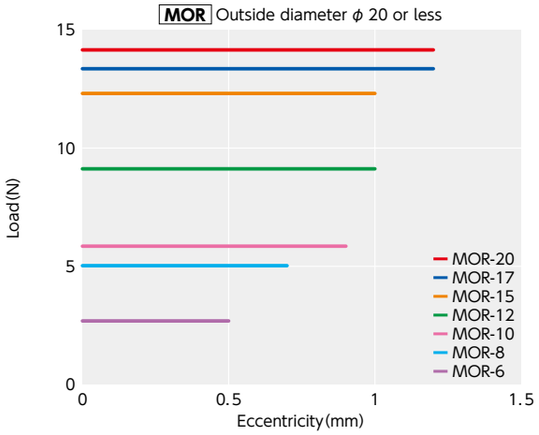
Couplicon®

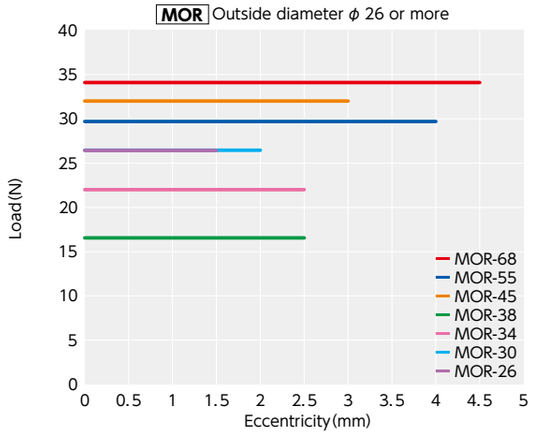
MOR Flexible coupling - Oldham - type

Selection Tool | CAD Download | High torque | Electrical Insulation | High Allowable Misalignment | Small Eccentric Reaction Force

Technical Information

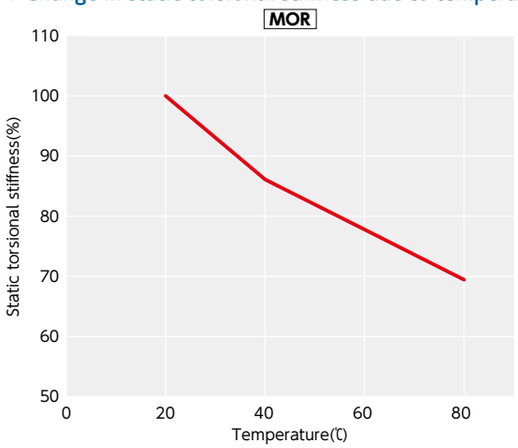
● Eccentric reaction force





These are initial slippage load values of hubs and a spacer.
After running-in operation, the slippage load becomes small, the load on the shaft due to misalignment becomes lowered, and the burden on the shaft bearing is reduced.

● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
The change of torsional stiffness within the range of allowable operating temperature is as shown in the graph.
Before using the unit, be aware of the deterioration of responsiveness.

● Spacer's physical property (Polyacetal)

	Test method	unit	Polyacetal
Density	ISO 1183	g/cm³	1.36
Water Absorption (23℃, dipped for 24 hr)	ISO 62	%	0.7
Tensile strength	ISO 527 - 1、2	N/mm²	52
Bending Strength	ISO 178	N/mm²	72
Charpy impact strength (with notch)	ISO 179/1eA	kJ/m²	5.9
Deflection temperature under load(1.8 MPa)	ISO 75 - 1、2	℃	85
Insulation breakdown strength (3 mmt)	IEC 60243 - 1	kV/mm	20
Volume Resistivity	IEC 60093	Ω・cm	1×10^{14}
Combustibility	UL94	–	HB

● Spacer's chemical resistance (Polyacetal)

	Effect
Weather Resistance	Slight change in color
Weak Acid Resistance	Minor effect
Strong Acid Resistance	Effect
Weak Alkali Resistance	Minor effect
Strong Alkali Resistance	Minor effect
Organic Solvent Resistance	Includes resistance

● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the max. torque of **MOR-C**.

Unit : N・m

Part Number	Bore diameter																		
	3	4	5	6	6.35	8	9.525	10	12	14	15	16	18	20	22	25	28	30	35
MOR-12C	0.8	1.9	2.4																
MOR-15C		2.3	3.5	4.8															
MOR-17C			2.7	3.6	4														
MOR-20C			3.7	4.2	4.3	5.7	6.1												
MOR-26C				4	6.4	9.3	11.8												
MOR-30C						7.5	13.6	13.9	17.2	20.4									
MOR-34C								16.5	18.6	23.3	30.9								
MOR-38C								19.4	20.2	24	30	34.1	37.8	38.8					
MOR-45C									34.5	41.8	42.6	44.5	48.4						
MOR-55C												73.2	75.9	88.1					
MOR-68C														101.5	104.3	104.9	105.4	110.5	115.4

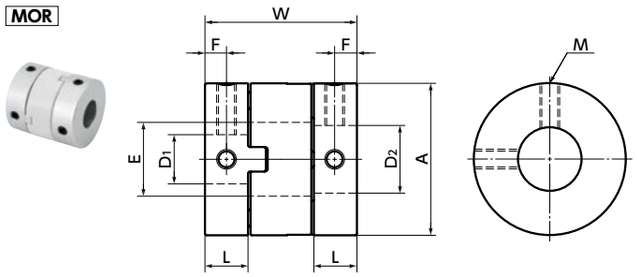
● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **MOR-C** Dimension table.

Couplicon®

MOR Flexible coupling - Oldham - type - Set screw type

WEB Selection Tool | WEB CAD Download | High torque | Electrical Insulation | High Allowable Misalignment | Small Eccentric Reaction Force

MOR



Dimensions

Unit : mm

Part Number 1	A	L	W	E	F	M	Screw Tightening Torque (N・m)
MOR-6	6	2.5	8.4	2.1	1.3	M2	0.3
MOR-8	8	2.5	9.6	3.1	1.3	M2	0.3
MOR-10	10	2.9	10.2	4.1	1.4	M2	0.3
MOR-12	12	3.9	14.2	5.2	2	M3	0.7
MOR-15	15	4.4	16	8.2	2.2	M3	0.7
MOR-17	17	4.9	19.8	8.2	2.5	M3	0.7
MOR-20	20	5.8	21.4	12.2	2.9	M4	1.7
MOR-26	26	7.3	25.6	14.2	3.7	M4	1.7
MOR-30	30	10	32.5	16.2	5	M4	1.7
MOR-34	34	11.1	34	16.2	5.6	M5	4
MOR-38	38	12.1	40	20.3	6.1	M5	4
MOR-45	45	13.8	46	22.3	6.9	M6	7
MOR-55	55	18.7	57	26.5	9.4	M8	15
MOR-68	68	24	77	38.5	12	M10	30

Part Number	Standard Bore Diameter D1・D2 (dimensional allowance H8) 2																					
	1	1.5	2	3	4	5	6	6.35	8	9.525	10	12	14	15	16	18	20	22	25	28	30	35	38
MOR-6	●	●	●																				
MOR-8	●		●	●																			
MOR-10			●	●	●																		
MOR-12				●	●	●																	
MOR-15					●	●	●	●	●														
MOR-17					●	●	●	●	●														
MOR-20					●	●	●	●	●	●	●	●											
MOR-26						●	●	●	●	●	●	●	●										
MOR-30									●	●	●	●	●	●	●								
MOR-34											●	●	●	●	●								
MOR-38											●	●	●	●	●	●	●						
MOR-45											●	●	●	●	●	●	●	●					
MOR-55													●	●	●	●	●	●	●				
MOR-68																●	●	●	●	●	●	●	●

- All products are provided with hex socket set screw.
- In a case where the bore diameter is ϕ 4 or less, the set screw is used in only one place.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with set screw type for one side and clamping type or other type for the other side is available upon request.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

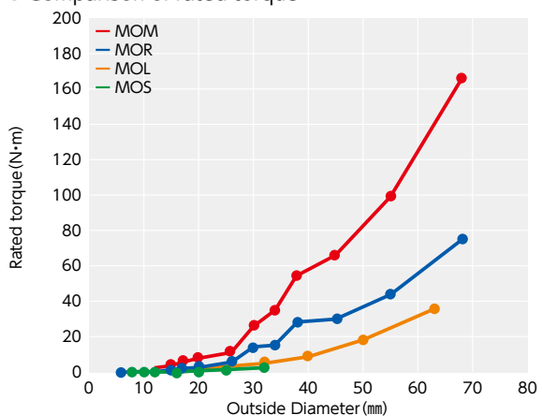
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (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*2 (g)
MOR-6	2	0.2	0.4	100000	2.2×10^{-9}	5	0.5	3	0.4
MOR-8	3	0.5	1	78000	7.4×10^{-9}	12	0.7	3	0.8
MOR-10	4	0.8	1.6	63000	1.9×10^{-8}	23	0.9	3	1
MOR-12	5	1	2	52000	5.3×10^{-8}	60	1	3	3
MOR-15	8	1.6	3.2	42000	1.4×10^{-7}	80	1	3	4
MOR-17	8	2.2	4.4	37000	2.8×10^{-7}	120	1.2	3	7
MOR-20	12	3.2	6.4	31000	5.7×10^{-7}	120	1.2	3	9
MOR-26	14	6	12	24000	2.1×10^{-6}	300	1.5	3	20
MOR-30	16	15	30	21000	5.4×10^{-6}	530	2	3	38
MOR-34	16	16	32	18000	9.1×10^{-6}	1000	2.5	3	52
MOR-38	20	28	56	16000	1.6×10^{-5}	1500	2.5	3	69
MOR-45	22	30	60	14000	3.3×10^{-5}	2400	3	3	110
MOR-55	26	45	90	11000	1.0×10^{-4}	4100	4	3	230
MOR-68	38	80	160	9000	3.7×10^{-4}	6400	4.5	3	430

*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 MOR 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

MOR-20 - 6-12 1 set
(1) (2)

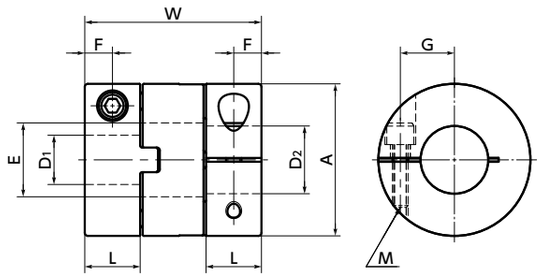
MOR - 20 - SPCR Single Spacer
Product Code | Outside Diameter (A Dimension) | Single Spacer

Couplicon®

MOR-C Flexible coupling - Oldham - type - Clamping type

Selection Tool | CAD Download | High torque | Electrical Insulation | High Allowable Misalignment | Small Eccentric Reaction Force

MOR-C



Dimensions

Unit : mm

Part Number ❶	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
MOR-12C	12	5	16.5	5.2	2.5	4	M2	0.5
MOR-15C	15	5.8	18.8	8.2	2.9	5	M2.5	1
MOR-17C	17	7.3	24.5	8.2	3.7	6	M2.5	1
MOR-20C	20	8.8	27.4	12.2	4.4	7.5	M3	1.5
MOR-26C	26	9.7	30.4	14.2	4.9	9.5	M3	1.5
MOR-30C	30	10	32.5	16.2	5	11.1	M4	2.5
MOR-34C	34	11.1	34	16.2	5.6	12.6	M4	2.5
MOR-38C	38	12.1	40	20.3	6	14.2	M5	4
MOR-45C	45	13.8	46	22.3	6.9	16	M5	4
MOR-55C	55	18.7	57	26.5	9.4	20	M6	8
MOR-68C	68	24	77	38.5	12	26	M8	16

Part Number	Standard Bore Diameter D1・D2 ❷																		
	3	4	5	6	6.35	8	9.525	10	12	14	15	16	18	20	22	25	28	30	35
MOR-12C	●	●	●																
MOR-15C		●	●	●															
MOR-17C			●	●	●														
MOR-20C			●	●	●	●	●	●											
MOR-26C				●	●	●	●	●	●	●									
MOR-30C						●	●	●	●	●									
MOR-34C								●	●	●	●	●							
MOR-38C								●	●	●	●	●	●	●					
MOR-45C									●	●	●	●	●	●					
MOR-55C												●	●	●	●	●			
MOR-68C														●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping type for one side and set screw type or other type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

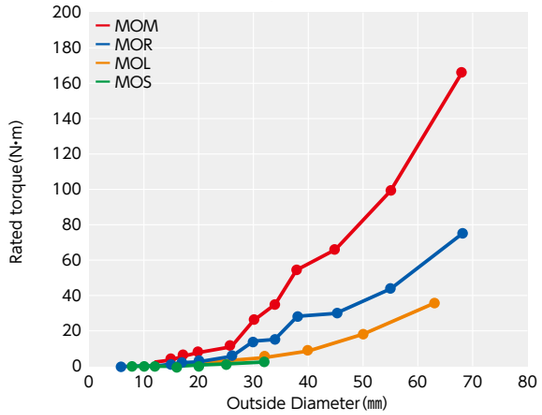
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (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*2 (g)
MOR-12C	5	1	2	52000	6.6×10^{-8}	60	1	3	3
MOR-15C	6	1.6	3.2	42000	1.7×10^{-7}	80	1	3	5
MOR-17C	6.35	2.2	4.4	37000	3.8×10^{-7}	120	1.2	3	9
MOR-20C	10	3.2	6.4	31000	8.0×10^{-7}	120	1.2	3	13
MOR-26C	14	6	12	24000	2.5×10^{-6}	300	1.5	3	24
MOR-30C	14	15	30	21000	5.3×10^{-6}	530	2	3	39
MOR-34C	16	16	32	18000	8.6×10^{-6}	1000	2.5	3	50
MOR-38C	20	28	56	16000	1.5×10^{-5}	1500	2.5	3	67
MOR-45C	20	30	60	14000	3.2×10^{-5}	2400	3	3	110
MOR-55C	25	45	90	11000	1.0×10^{-4}	4100	4	3	230
MOR-68C	35	80	160	9000	3.3×10^{-4}	6400	4.5	3	440

*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°C, be sure to correct the rated torque and max. torque with temperature correction factor shown in the following table. The allowable operating temperature of MOR-C is −20°C to 80°C.

*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

MOR-55C - 18-20 (1 set)
❶ ❷

MOR - 20 - SPCR (Single Spacer)

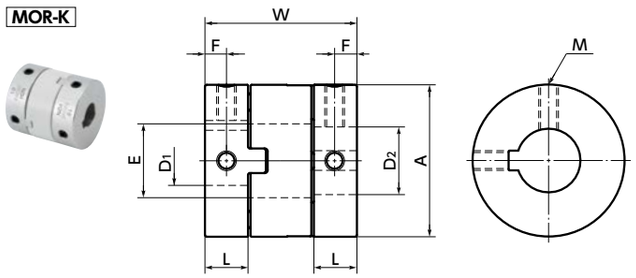
Product Code	Outside Diameter (A Dimension)	Single Spacer
MOR	20	SPCR

Couplicon®

MOR-K Flexible coupling - Oldham - type - Set screw + Key type

WEB Selection Tool　WEB CAD Download　High torque　Electrical Insulation　High Allowable Misalignment　Small Eccentric Reaction Force

MOR-K



Dimensions

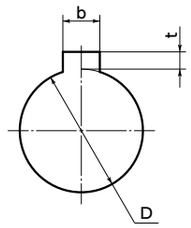
Unit : mm

Part Number 1	A	L	W	E	F	M	Screw Tightening Torque (N・m)
MOR-15K	15	4.4	16	8.2	2.2	M3	0.7
MOR-17K	17	4.9	19.8	8.2	2.5	M3	0.7
MOR-20K	20	5.8	21.4	12.2	2.9	M4	1.7
MOR-26K	26	7.3	25.6	14.2	3.7	M4	1.7
MOR-30K	30	10	32.5	16.2	5	M4	1.7
MOR-34K	34	11.1	34	16.2	5.6	M5	4
MOR-38K	38	12.1	40	20.3	6.1	M5	4
MOR-45K	45	13.8	46	22.3	6.9	M6	7
MOR-55K	55	18.7	57	26.5	9.4	M8	15
MOR-68K	68	24	77	38.5	12	M10	30

Part Number	Standard Bore Diameter (dimensional allowance H8) D1・D2 2														
	6	8	10	12	14	15	16	18	20	22	25	28	30	35	38
MOR-15K	●	●													
MOR-17K	●	●													
MOR-20K	●	●	●	●											
MOR-26K	●	●	●	●	●										
MOR-30K		●	●	●	●	●	●								
MOR-34K			●	●	●	●	●								
MOR-38K			●	●	●	●	●	●	●						
MOR-45K			●	●	●	●	●	●	●	●					
MOR-55K					●	●	●	●	●	●	●				
MOR-68K								●	●	●	●	●	●	●	●

- All products are provided with hex socket set screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with key type for one side and clamping type or other type for the other side is available upon request.

● Details of Shaft Hole



Unit : mm

Standard bore diameter D	Keyway				Key
	b		t		Nominal dimension b×h
	Standard Dimension	Allowance (JS9)	Standard Dimension	Allowance	
6	2	±0.0125	1.0	$^{+0.1}_{0}$	2×2
8	3	±0.0125	1.4	$^{+0.1}_{0}$	3×3
10・12	4	±0.0150	1.8	$^{+0.1}_{0}$	4×4
14・15・16	5	±0.0150	2.3	$^{+0.1}_{0}$	5×5
18・20・22	6	±0.0150	2.8	$^{+0.1}_{0}$	6×6
25・28	8	±0.0180	3.3	$^{+0.2}_{0}$	8×7
30・35・38	10	±0.0180	3.3	$^{+0.2}_{0}$	10×8

- Excerpt from JIS B 1301

Additional Keyway at Shaft Hole ➡ P.803
Please feel free to contact us

Cleanroom Wash & Packaging ➡ P.807
Available / Add'l charge

Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge

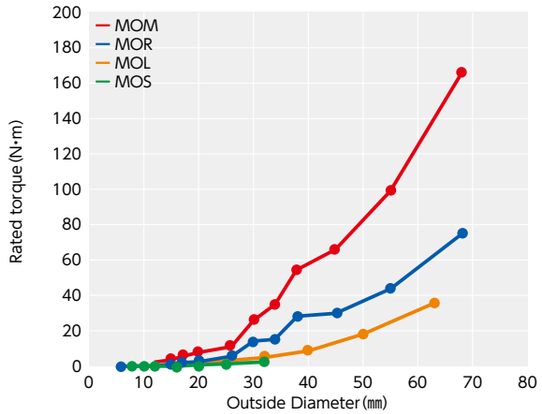
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (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*2 (g)
MOR-15K	8	1.6	3.2	42000	1.4×10^{-7}	80	1	3	4
MOR-17K	8	2.2	4.4	37000	2.8×10^{-7}	120	1.2	3	7
MOR-20K	12	3.2	6.4	31000	5.6×10^{-7}	120	1.2	3	8
MOR-26K	14	6	12	24000	2.0×10^{-6}	300	1.5	3	19
MOR-30K	16	15	30	21000	5.4×10^{-6}	530	2	3	37
MOR-34K	16	16	32	18000	9.0×10^{-6}	1000	2.5	3	51
MOR-38K	20	28	56	16000	1.5×10^{-5}	1500	2.5	3	68
MOR-45K	22	30	60	14000	3.2×10^{-5}	2400	3	3	110
MOR-55K	26	45	90	11000	1.0×10^{-4}	4100	4	3	230
MOR-68K	38	80	160	9000	3.3×10^{-4}	6400	4.5	3	430

*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°C, be sure to correct the rated torque and max. torque with temperature correction factor shown in the following table. The allowable operating temperature of MOR-K is −20°C to 80°C.

*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

MOR-26K - 8-10 1 set
(1) (2)

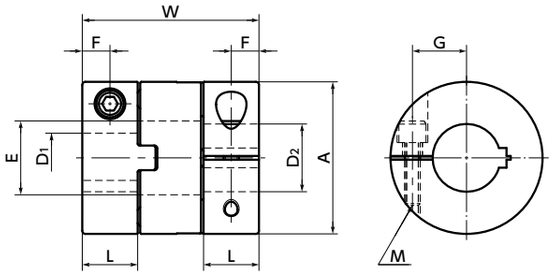
MOR - 20 - SPCR Single Spacer
Product Code / Outside Diameter (A Dimension) / Single Spacer

Couplicon®

MOR-CK Flexible coupling - Oldham - type - Clamping + Key type

WEB Selection Tool　WEB CAD Download　High torque　Electrical Insulation　High Allowable Misalignment　Small Eccentric Reaction Force

MOR-CK



Dimensions

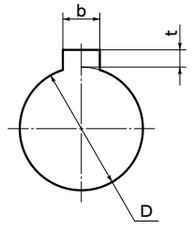
Unit : mm

Part Number 1	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
MOR-15CK	15	5.8	18.8	8.2	2.9	5	M2.5	1
MOR-17CK	17	7.3	24.5	8.2	3.7	6	M2.5	1
MOR-20CK	20	8.8	27.4	12.2	4.4	7.5	M3	1.5
MOR-26CK	26	9.7	30.4	14.2	4.9	9.5	M3	1.5
MOR-30CK	30	10	32.5	16.2	5	11.1	M4	2.5
MOR-34CK	34	11.1	34	16.2	5.6	12.6	M4	2.5
MOR-38CK	38	12.1	40	20.3	6	14.2	M5	4
MOR-45CK	45	13.8	46	22.3	6.9	16	M5	4
MOR-55CK	55	18.7	57	26.5	9.4	20	M6	8
MOR-68CK	68	24	77	38.5	12	26	M8	16

Part Number	Standard Bore Diameter D1・D2 2													
	6	8	10	12	14	15	16	18	20	22	25	28	30	35
MOR-15CK	●													
MOR-17CK	●													
MOR-20CK	●	●	●											
MOR-26CK	●	●	●	●	●									
MOR-30CK		●	●	●	●									
MOR-34CK			●	●	●	●	●							
MOR-38CK			●	●	●	●	●	●	●					
MOR-45CK				●	●	●	●	●	●					
MOR-55CK							●	●	●	●	●			
MOR-68CK									●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping + key type for one side and clamping type or other types for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

● Details of Shaft Hole



Unit : mm

Standard bore diameter D	Keyway				Key
	b		t		Nominal dimension b×h
	Standard Dimension	Allowance (JS9)	Standard Dimension	Allowance	
6	2	±0.0125	1.0	$^{+0.1}_{0}$	2×2
8	3	±0.0125	1.4	$^{+0.1}_{0}$	3×3
10・12	4	±0.0150	1.8	$^{+0.1}_{0}$	4×4
14・15・16	5	±0.0150	2.3	$^{+0.1}_{0}$	5×5
18・20・22	6	±0.0150	2.8	$^{+0.1}_{0}$	6×6
25・28	8	±0.0180	3.3	$^{+0.2}_{0}$	8×7
30・35	10	±0.0180	3.3	$^{+0.2}_{0}$	10×8

- Excerpt from JIS B 1301

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

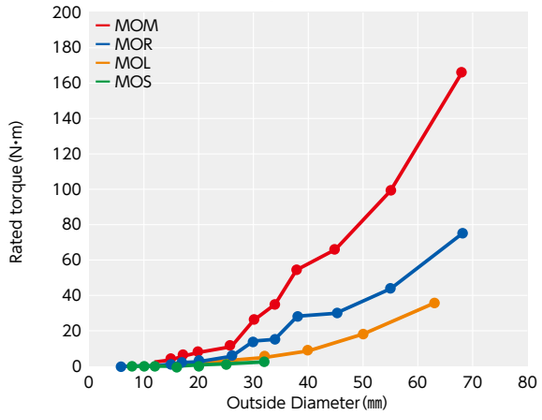
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (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*2 (g)
MOR-15CK	6	1.6	3.2	42000	1.8×10^{-7}	80	1	3	5
MOR-17CK	6.35	2.2	4.4	37000	3.8×10^{-7}	120	1.2	3	9
MOR-20CK	10	3.2	6.4	31000	8.0×10^{-7}	120	1.2	3	13
MOR-26CK	14	6	12	24000	2.5×10^{-6}	300	1.5	3	23
MOR-30CK	14	15	30	21000	5.2×10^{-6}	530	2	3	38
MOR-34CK	16	16	32	18000	8.6×10^{-6}	1000	2.5	3	49
MOR-38CK	20	28	56	16000	1.5×10^{-5}	1500	2.5	3	64
MOR-45CK	20	30	60	14000	3.2×10^{-5}	2400	3	3	110
MOR-55CK	25	45	90	11000	1.0×10^{-4}	4100	4	3	230
MOR-68CK	35	80	160	9000	3.3×10^{-4}	6400	4.5	3	440

*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°C, be sure to correct the rated torque and max. torque with temperature correction factor shown in the following table. The allowable operating temperature of **MOR** is −20°C to 80°C.

*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

MOR-38CK - 14-15 1 set
1　2

MOR - 20 - SPCR Single Spacer
Product Code　Outside Diameter (A Dimension)　Single Spacer

Couplicon®

MOM Flexible coupling - Oldham - type

WEB Selection Tool　WEB CAD Download　High torque　High Rigidity

Structure

● Set Screw type
MOM ➡ P.179

● Clamping type
MOM-C ➡ P.181

● Set Screw + Key type
MOM-K ➡ P.183

● Clamping + Key type
MOM-CK ➡ P.185

● Material/Finish

RoHS2 Compliant

	MOM / MOM-C / MOM-K / MOM-CK
Hub	S45C Ferrosoferric Oxide Film (Black)
Spacer	FCD400 Ferrosoferric oxide film
Pin	Polyacetal
Hex Socket Set Screw	SCM435 Ferrosoferric oxide film
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

● Applicable motors

	MOM
Servomotor	–
Stepping Motor	–
General-purpose motor	◎

◎: Excellent ○: Very good

● Property

	MOM
High torque	◎
High Torsional Stiffness	◎
Allowable Misalignment	○

◎: Excellent ○: Very good

- This is an oldham-type flexible coupling.
- FCD400 is adopted in the spacer. Suitable for low-speed and high-torque specification.
- High performance grease is applied in the gap between hubs and the spacer in order to prevent sticking.
- Slippage of hubs and a spacer allows large eccentricity and angular misalignment to be accepted.
- A projection placed in the spacer (resin pin) allows angular misalignment to be effortlessly accepted.
- Long-term maintenance free. The grease accumulated in a grease hole will gradually seep out during operation, thereby maintaining the lubrication property over a long period.

● Application

Mixer / Pump / Small power press / Grinder

⚠ Precautions for Use
Please apply grease periodically in order to prevent sticking of hubs and a spacer.

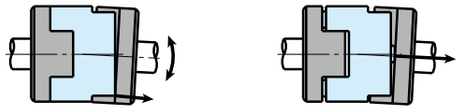
● Part number specification

MOM - 30K - 12-14
Product Code　Size　Bore Diameter

Please refer to dimensional table for part number specification.

Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

● Spacer's projection structure
Spacer's projection structure allows large angular to be effortlessly accepted. It reduces burden on the shaft.



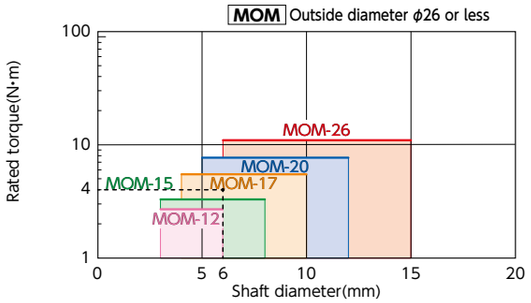
(Without projection)　MOM (With projection)

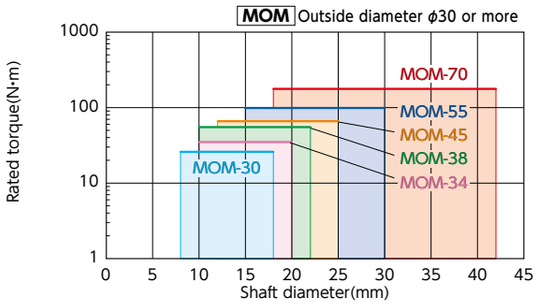
In the oldham-type coupling whose spacer has no projection, the spacer and hubs interfere with each other near outside diameter, so that the max. angular misalignment is small (1° - 1.5°) and that the bending moment arises on the shaft.
NBK's oldham type coupling allows the angular misalignment to be easily accepted since the projection serves as support. Bending moment does not arise. Therefore, the max. angular misalignment is large (2°) and the burden on the shaft is reduced. MOM is provided with a projection by inserting a resin pin into the spacer.

Selection

● Selection based on shaft diameter and rated torque

The area bounded by the shaft diameter and rated torque indicates is the selection size.





● Selection example
In case of selected parameters of shaft diameter of ϕ 6 and load torque of 4N•m, the selected size is MOM-17.

MOM Flexible coupling - Oldham - type

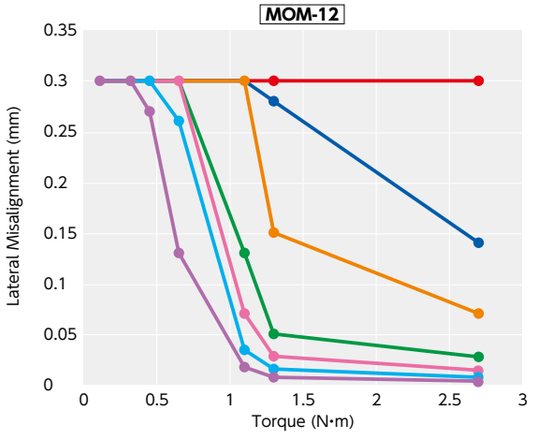
Selection Tool | CAD Download | High torque | High Rigidity

Technical Information

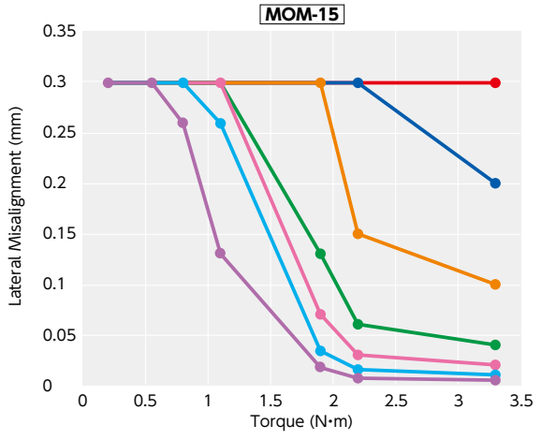
● Max. Lateral Misalignment

MOM's max. lateral misalignment varies depending on the load torque and revolution.

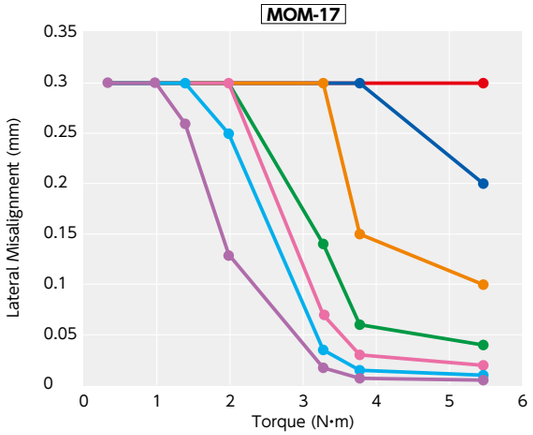
MOM-12



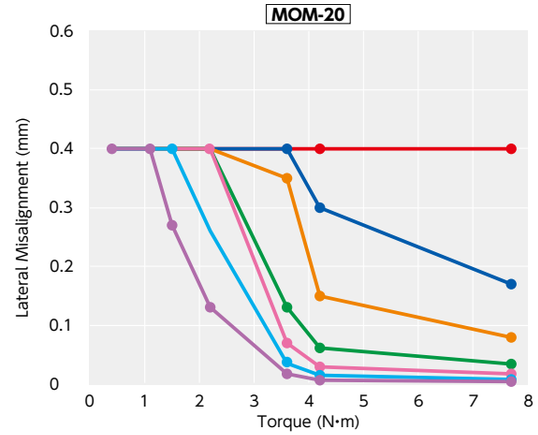
MOM-15



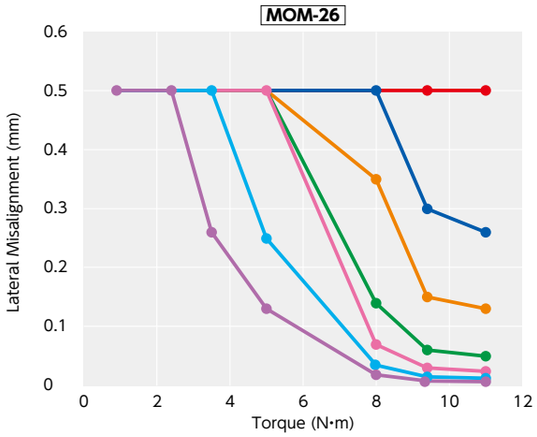
MOM-17



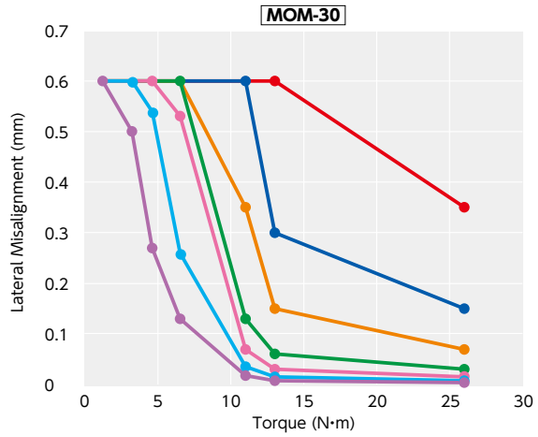
MOM-20



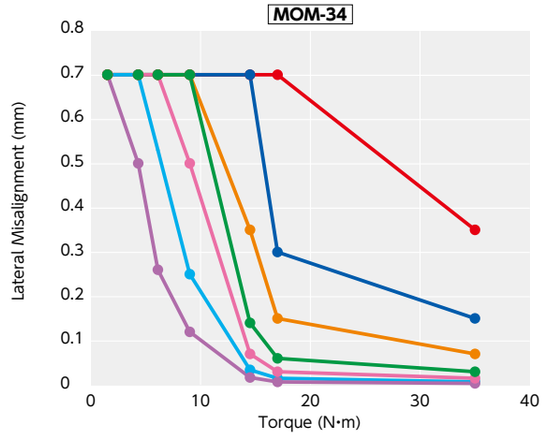
MOM-26



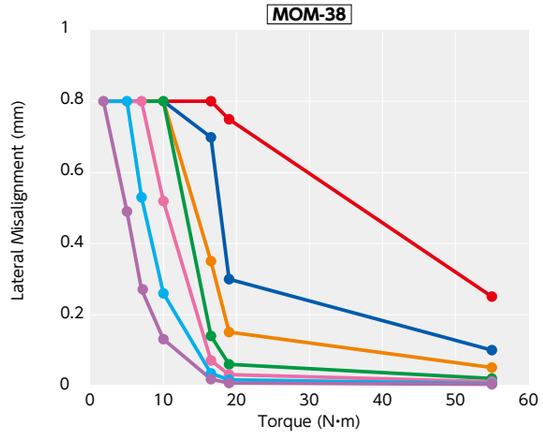
MOM-30



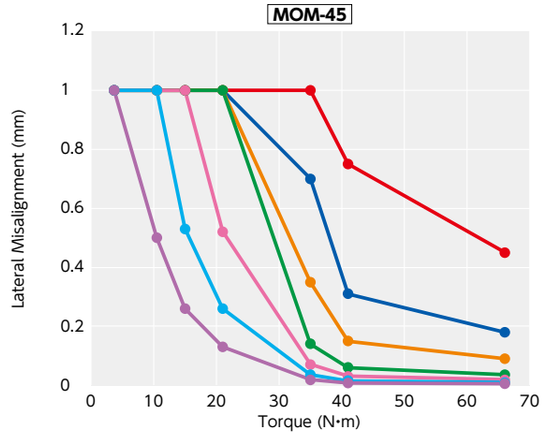
MOM-34



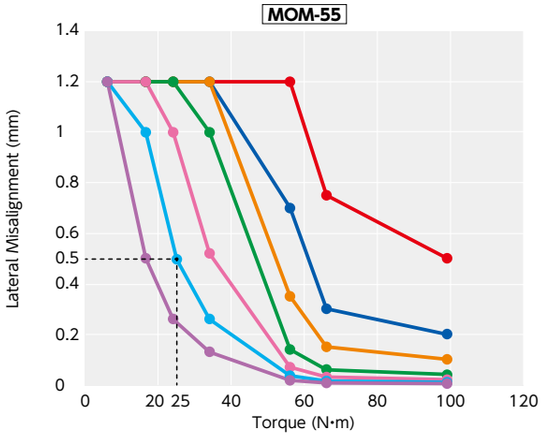
MOM-38



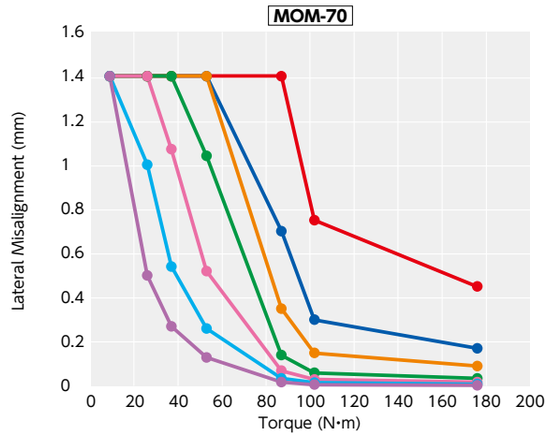
MOM-45



MOM-55



MOM-70



● Example
When load torque is 25 N•m and revolution is 1000 min−1, the max. lateral misalignment of **MOM-55** is 0.5 mm.

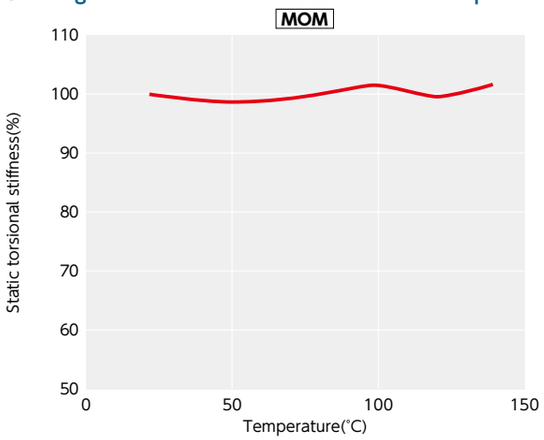
20min⁻¹
50min⁻¹
100min⁻¹
250min⁻¹
500min⁻¹
1000min⁻¹
2000min⁻¹

Couplicon®

MOM Flexible coupling - Oldham - type

Selection Tool | CAD Download | High torque | High Rigidity

● Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
MOM's change in torsional stiffness due to temperature is small and the change in responsiveness is extremely small.
However, if the unit is used under higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

● Slip Torque

Concerning the sizes shown in the following table, please note that the shaft's slip torque is smaller than the max. torque of **MOM-C**.

Unit : N・m

Part Number	Bore Diameter																			
	3	4	5	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35
MOM-15C	0.3	0.5	0.8	1															
MOM-17C		2.1	3.5	3.7															
MOM-20C			3.8	6	6	6.8	7.5												
MOM-26C				5.4	5.4	5.8	6.6	8.7											
MOM-30C						7.4	12.6	14.4	15.1										
MOM-34C							13	13.2	15.8	16.1	16.8								
MOM-38C							16.4	18.4	20.9	23.1	25.1	28.3	31.6						
MOM-45C								47.9	48.9	56.1	56.8	57.5	62.8						
MOM-55C										42.9	54.1	55.3	56.2	89.3	93.4	97.5			
MOM-70C												62.6	92.9	95.5	97.6	103.9	119	122.1	130

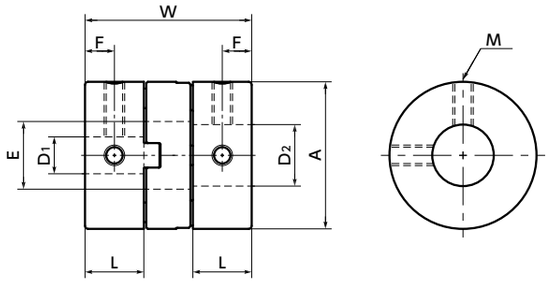
● These are test values based on the condition of shaft's dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **MOM-C** Dimension table.

Couplicon®

MOM Flexible coupling - Oldham - type - Set screw type

WEB Selection Tool　WEB CAD Download　High torque　High Rigidity

MOM



Dimensions

Unit : mm

Part Number ◀1	A	L	W	E	F	M	Screw Tightening Torque (N・m)
MOM-12	12	5.2	15	5.9	2.6	M2.5	0.5
MOM-15	15	5.4	16.6	6.9	2.7	M3	0.7
MOM-17	17	6.7	20.4	7.3	3.35	M3	0.7
MOM-20	20	7	22	11.1	3.5	M3	0.7
MOM-26	26	9	26.6	13.3	4.5	M4	1.7
MOM-30	30	12	34	15.5	6	M4	1.7
MOM-34	34	13	35	17.5	6.5	M5	4
MOM-38	38	15	40.5	21.5	7.5	M5	4
MOM-45	45	15	45.2	24.3	7.5	M5	4
MOM-55	55	17	51	27.7	8.5	M6	7
MOM-70	70	20	58.6	38.5	10	M8	15

Part Number	D1・D2 ◀2 Standard Bore Diameter (dimensional allowance H8)																					
	3	4	5	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35	38	40	42
MOM-12	●	●	●	●																		
MOM-15	●	●	●	●		●																
MOM-17		●	●	●		●	●															
MOM-20			●	●	●	●	●	●														
MOM-26				●	●	●	●	●	●	●												
MOM-30						●	●	●	●	●	●	●										
MOM-34							●	●	●	●	●	●	●									
MOM-38							●	●	●	●	●	●	●	●								
MOM-45								●	●	●	●	●	●	●	●	●						
MOM-55										●	●	●	●	●	●	●	●	●				
MOM-70												●	●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket set screw.
- In a case where the bore diameter is ϕ 4 or less, the set screw is used in only one place.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with set screw type for one side and clamping type for the other side is available upon request.

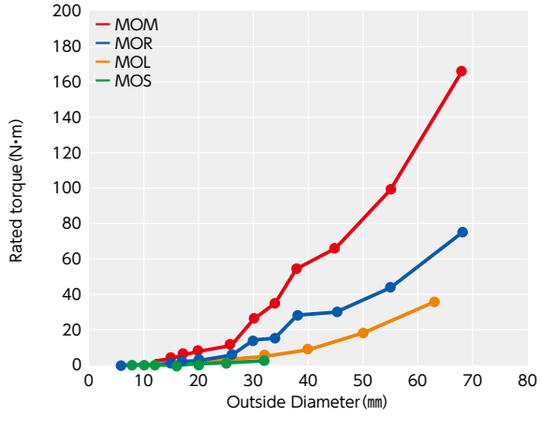
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

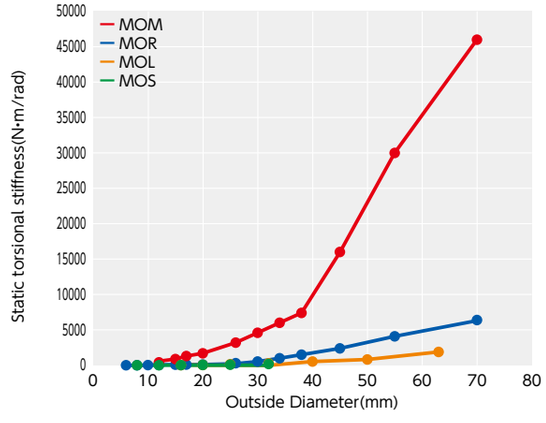
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. lateral*3 misalignment (mm) ➡ P.175	Max. Angular Misalignment (°)	Mass*2 (g)
MOM-12	6	2.7	5.4	2000	2.0×10^{-7}	420	0.3	2	9
MOM-15	8	3.3	6.6	2000	5.5×10^{-7}	870	0.3	2	15
MOM-17	10	5.5	11	2000	1.1×10^{-6}	1300	0.3	2	24
MOM-20	12	7.7	15.4	2000	2.3×10^{-6}	1700	0.4	2	34
MOM-26	15	11	22	2000	8.1×10^{-6}	3200	0.5	2	72
MOM-30	18	26	52	2000	1.8×10^{-5}	4600	0.6	2	119
MOM-34	20	35	70	2000	3.1×10^{-5}	6000	0.7	2	159
MOM-38	22	55	110	2000	5.5×10^{-5}	7400	0.8	2	230
MOM-45	25	66	132	2000	1.2×10^{-4}	16000	1	2	364
MOM-55	30	99	198	2000	3.0×10^{-4}	30000	1.2	2	636
MOM-70	42	176	352	2000	8.9×10^{-4}	46000	1.4	2	1090

*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.
*2: These are values with max. bore diameter.
*3: The max. lateral misalignment varies depending on the load torque and revolution. ➡ P.175

● Comparison of rated torque





● Part number specification

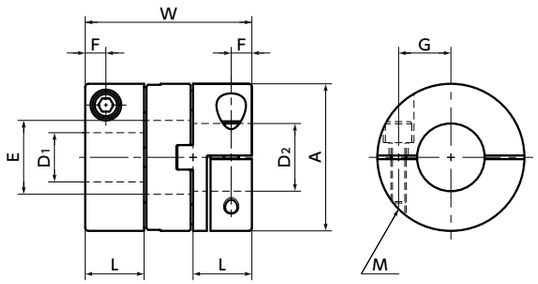
MOM-26-6.35-10
◀1 ◀2

Couplicon®

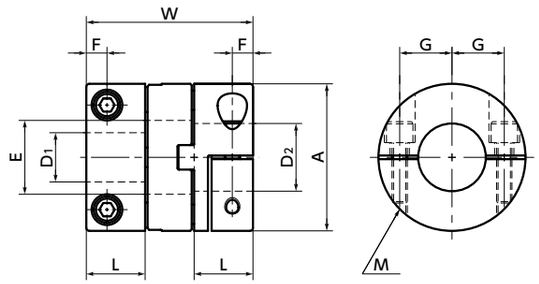
MOM-C Flexible coupling - Oldham - type - Clamping type

WEB Selection Tool　WEB CAD Download　High torque　High Rigidity

MOM-C



Outside Diameter: ϕ15 - ϕ38



Outside Diameter: ϕ45 - ϕ70

Dimensions

Unit : mm

Part Number 1	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
MOM-15C	15	6.6	19	6.9	2.15	5.2	M1.6	0.25
MOM-17C	17	9	25	7.3	2.65	5.5	M2	0.5
MOM-20C	20	10	28	11.1	3.25	7.25	M2.5	1
MOM-26C	26	11.5	31.6	13.3	4	9	M3	1.5
MOM-30C	30	12	34	15.5	4	11	M3	1.5
MOM-34C	34	13	35	17.5	4.5	12	M4	3.5
MOM-38C	38	15	40.5	21.5	4.75	14	M4	3.5
MOM-45C	45	16.2	47.6	24.3	6.2	16	M5	8
MOM-55C	55	20.8	58.6	27.7	7.9	20	M6	13
MOM-70C	70	25	68.6	38.5	8.9	26	M6	13

Part Number	Standard Bore Diameter D1・D2 2																		
	3	4	5	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35
MOM-15C	●	●	●	●															
MOM-17C		●	●	●															
MOM-20C			●	●	●	●	●												
MOM-26C				●	●	●	●	●											
MOM-30C						●	●	●	●										
MOM-34C							●	●	●	●	●								
MOM-38C							●	●	●	●	●	●	●						
MOM-45C								●	●	●	●	●	●	●					
MOM-55C										●	●	●	●	●	●	●			
MOM-70C												●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping type for one side and set screw type or other type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

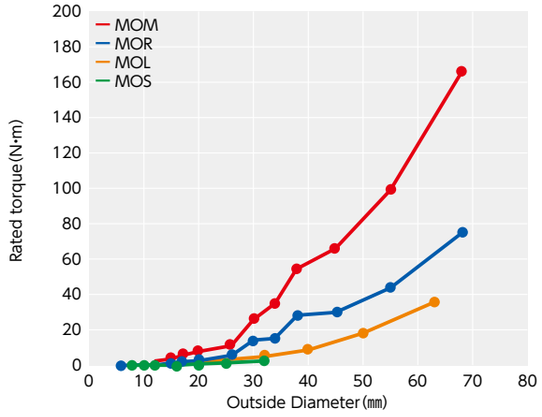
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge

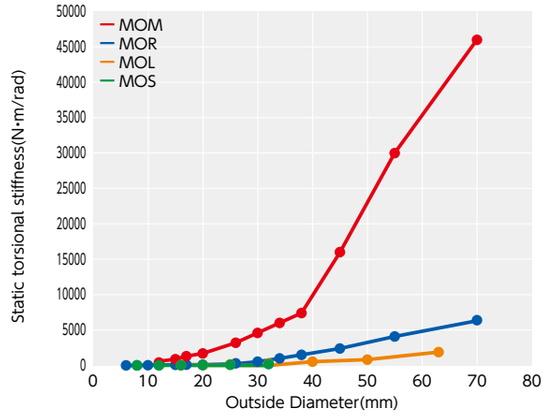
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. Lateral*3 Misalignment (mm) ➡ P.175	Max. Angular Misalignment (°)	Mass*2 (g)
MOM-15C	6	3.3	6.6	2000	6.2×10^{-7}	870	0.3	2	19
MOM-17C	6.35	5.5	11	2000	1.4×10^{-6}	1300	0.3	2	34
MOM-20C	10	7.7	15.4	2000	3.0×10^{-6}	1700	0.4	2	47
MOM-26C	12	11	22	2000	9.6×10^{-6}	3200	0.5	2	92
MOM-30C	14	26	52	2000	1.8×10^{-5}	4600	0.6	2	131
MOM-34C	16	35	70	2000	3.1×10^{-5}	6000	0.7	2	173
MOM-38C	20	55	110	2000	5.5×10^{-5}	7400	0.8	2	235
MOM-45C	22	66	132	2000	1.2×10^{-4}	16000	1	2	387
MOM-55C	25	99	198	2000	3.4×10^{-4}	30000	1.2	2	752
MOM-70C	35	176	352	2000	1.0×10^{-3}	46000	1.4	2	1370

*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.
*2: These are values with max. bore diameter.
*3: The max. lateral misalignment varies depending on the load torque and revolution. ➡ P.175

- Comparison of rated torque





- Part number specification

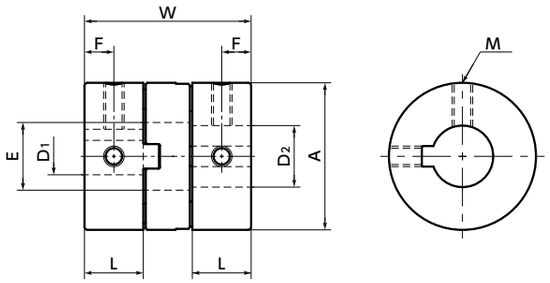
MOM-55C - 15-16
1　2

Couplicon®

MOM-K Flexible coupling - Oldham - type - Set screw + Key type

WEB Selection Tool　WEB CAD Download　High torque　High Rigidity

MOM-K



Dimensions

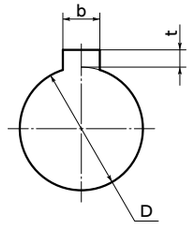
Unit : mm

Part Number 1	A	L	W	E	F	M	Screw Tightening Torque (N・m)
MOM-15K	15	5.4	16.6	6.9	2.7	M3	0.7
MOM-17K	17	6.7	20.4	7.3	3.35	M3	0.7
MOM-20K	20	7	22	11.1	3.5	M3	0.7
MOM-26K	26	9	26.6	13.3	4.5	M4	1.7
MOM-30K	30	12	34	15.5	6	M4	1.7
MOM-34K	34	13	35	17.5	6.5	M5	4
MOM-38K	38	15	40.5	21.5	7.5	M5	4
MOM-45K	45	15	45.2	24.3	7.5	M5	4
MOM-55K	55	17	51	27.7	8.5	M6	7
MOM-70K	70	20	58.6	38.5	10	M8	15

Part Number	Standard Bore Diameter (dimensional allowance H8) D1・D2 2															
	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35
MOM-15K	●															
MOM-17K	●		●													
MOM-20K	●	●	●	●												
MOM-26K	●	●	●	●	●											
MOM-30K			●	●	●	●	●									
MOM-34K				●	●	●	●	●								
MOM-38K				●	●	●	●	●	●	●						
MOM-45K					●	●	●	●	●	●	●					
MOM-55K							●	●	●	●	●	●	●	●		
MOM-70K									●	●	●	●	●	●	●	●

- All products are provided with hex socket set screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with key type for one side and clamping type or other type for the other side is available upon request.

● Details of Shaft Hole



Unit : mm

Standard bore diameter D	Keyway b		Keyway t		Key Nominal dimension b×h
	Standard Dimension	Allowance (JS9)	Standard Dimension	Allowance	
6・6.35	2	±0.0125	1.0	$^{+0.1}_{0}$	2×2
8	3	±0.0125	1.4	$^{+0.1}_{0}$	3×3
10・12	4	±0.0150	1.8	$^{+0.1}_{0}$	4×4
14・15・16	5	±0.0150	2.3	$^{+0.1}_{0}$	5×5
18・20・22	6	±0.0150	2.8	$^{+0.1}_{0}$	6×6
24・25・28・30	8	±0.0180	3.3	$^{+0.2}_{0}$	8×7
35	10	±0.0180	3.3	$^{+0.2}_{0}$	10×8

- Excerpt from JIS B 1301

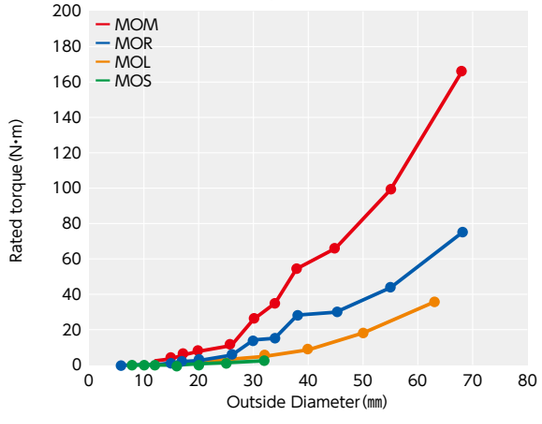
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

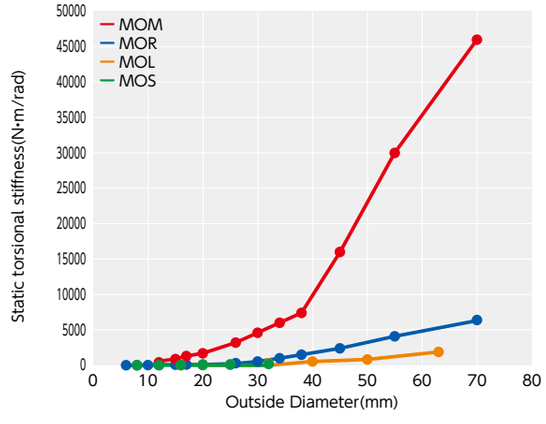
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. lateral*3 misalignment (mm) ➡ P.175	Max. Angular Misalignment (°)	Mass*2 (g)
MOM-15K	7	3.3	6.6	2000	5.7×10^{-7}	870	0.3	2	17
MOM-17K	8	5.5	11	2000	1.1×10^{-6}	1300	0.3	2	26
MOM-20K	10	7.7	15.4	2000	2.4×10^{-6}	1700	0.4	2	37
MOM-26K	12	11	22	2000	8.4×10^{-6}	3200	0.5	2	78
MOM-30K	15	26	52	2000	1.8×10^{-5}	4600	0.6	2	130
MOM-34K	16	35	70	2000	3.2×10^{-5}	6000	0.7	2	178
MOM-38K	20	55	110	2000	5.7×10^{-5}	7400	0.8	2	241
MOM-45K	22	66	132	2000	1.2×10^{-4}	16000	1	2	384
MOM-55K	28	99	198	2000	3.1×10^{-4}	30000	1.2	2	650
MOM-70K	35	176	352	2000	9.3×10^{-4}	46000	1.4	2	1200

*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.
*2: These are values with max. bore diameter.
*3: The max. lateral misalignment varies depending on the load torque and revolution. ➡ P.175

● Comparison of rated torque





● Part number specification

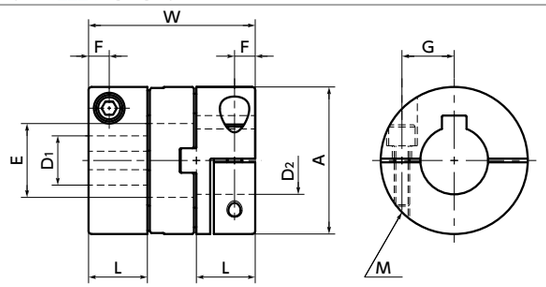
MOM-15K - 6-6
1　2

Couplicon®

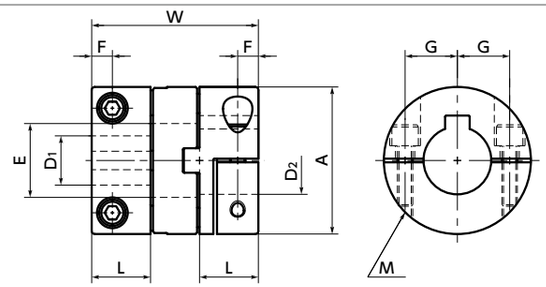
MOM-CK Flexible coupling - Oldham - type - Clamping + Key type

WEB Selection Tool　WEB CAD Download　High torque　High Rigidity

MOM-CK



Outside Diameter: ϕ15 - ϕ38



Outside Diameter: ϕ45 - ϕ70

Dimensions

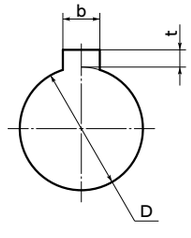
Unit : mm

Part Number [1]	A	L	W	E	F	G	M	Screw Tightening Torque (N・m)
MOM-15CK	15	6.6	19	6.9	2.15	5.2	M1.6	0.25
MOM-17CK	17	9	25	7.3	2.65	5.5	M2	0.5
MOM-20CK	20	10	28	11.1	3.25	7.25	M2.5	1
MOM-26CK	26	11.5	31.6	13.3	4	9	M3	1.5
MOM-30CK	30	12	34	15.5	4	11	M3	1.5
MOM-34CK	34	13	35	17.5	4.5	12	M4	3.5
MOM-38CK	38	15	40.5	21.5	4.75	14	M4	3.5
MOM-45CK	45	16.2	47.6	24.3	6.2	16	M5	8
MOM-55CK	55	20.8	58.6	27.7	7.9	20	M6	13
MOM-70CK	70	25	68.6	38.5	8.9	26	M6	13

Part Number	Standard Bore Diameter D1・D2 [2]															
	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35
MOM-15CK	●															
MOM-17CK	●															
MOM-20CK	●	●	●	●												
MOM-26CK	●	●	●	●	●											
MOM-30CK			●	●	●	●										
MOM-34CK				●	●	●	●	●								
MOM-38CK				●	●	●	●	●	●	●						
MOM-45CK					●	●	●	●	●	●	●					
MOM-55CK							●	●	●	●	●	●	●			
MOM-70CK										●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- A set of hubs with clamping + key type for one side and clamping type or other type for the other side is available upon request.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. ➡ P.258

● Details of Shaft Hole



Unit : mm

Standard bore diameter D	Keyway				Key
	b		t		Nominal dimension b×h
	Standard Dimension	Allowance (JS9)	Standard Dimension	Allowance	
6・6.35	2	±0.0125	1.0	$^{+0.1}_{0}$	2×2
8	3	±0.0125	1.4	$^{+0.1}_{0}$	3×3
10・12	4	±0.0150	1.8	$^{+0.1}_{0}$	4×4
14・15・16	5	±0.0150	2.3	$^{+0.1}_{0}$	5×5
18・20・22	6	±0.0150	2.8	$^{+0.1}_{0}$	6×6
24・25・28・30	8	±0.0180	3.3	$^{+0.2}_{0}$	8×7
35	10	±0.0180	3.3	$^{+0.2}_{0}$	10×8

- Excerpt from JIS B 1301

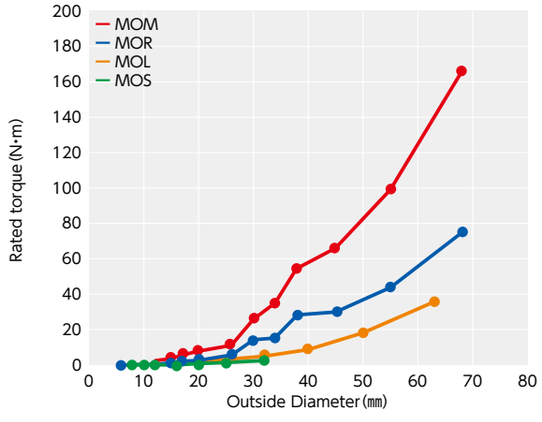
Additional Keyway at Shaft Hole ➡ P.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Please feel free to contact us	Available / Add'l charge	Available / Add'l charge

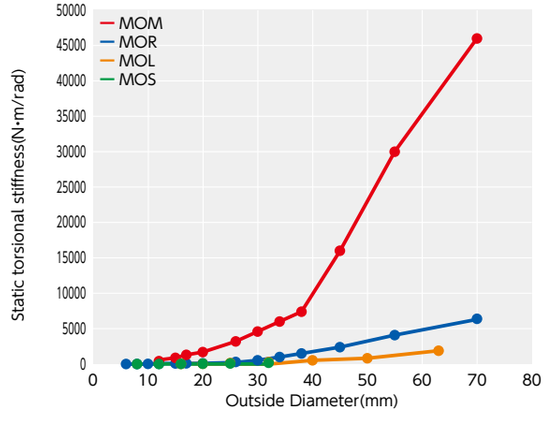
Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N・m)	Max.*1 torque (N・m)	Max. Rotational Frequency (min^{-1})	Moment*2 of Inertia ($kg・m^2$)	Static Torsional Stiffness (N・m/rad)	Max. lateral*3 misalignment (mm) ➡ P.175	Max. Angular Misalignment (°)	Mass*2 (g)
MOM-15CK	6	3.3	6.6	2000	6.1×10^{-7}	870	0.3	2	18
MOM-17CK	6.35	5.5	11	2000	1.4×10^{-6}	1300	0.3	2	33
MOM-20CK	10	7.7	15.4	2000	2.9×10^{-6}	1700	0.4	2	45
MOM-26CK	12	11	22	2000	9.5×10^{-6}	3200	0.5	2	90
MOM-30CK	14	26	52	2000	1.8×10^{-5}	4600	0.6	2	128
MOM-34CK	16	35	70	2000	3.0×10^{-5}	6000	0.7	2	170
MOM-38CK	20	55	110	2000	5.4×10^{-5}	7400	0.8	2	231
MOM-45CK	22	66	132	2000	1.2×10^{-4}	16000	1	2	383
MOM-55CK	25	99	198	2000	3.4×10^{-4}	30000	1.2	2	743
MOM-70CK	35	176	352	2000	1.0×10^{-3}	46000	1.4	2	1350

*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.
*2: These are values with max. bore diameter.
*3: The max. lateral misalignment varies depending on the load torque and revolution. ➡ P.175

● Comparison of rated torque





● Part number specification

MOM-38CK - 16-18
[1] [2]

Couplicon®

MOL/MOS Flexible coupling - Oldham - type

WEB Selection Tool WEB CAD Download High Allowable Misalignment Small Eccentric Reaction Force

Structure

● Set Screw type

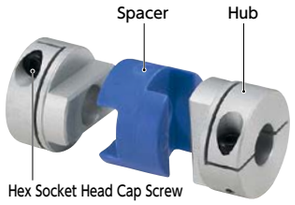
MOL Outside diameter ϕ16 - ϕ32 ➡ P.189

MOL Outside diameter ϕ40 - ϕ63

MOS ➡ P.191

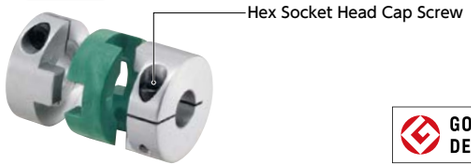
● Clamping type

MOL-C Outside diameter ϕ16 - ϕ32 ➡ P.189



MOL-C Outside diameter ϕ40 - ϕ63

MOS-C ➡ P.191



GOOD DESIGN

● Applicable motors

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

◎: Excellent ○: Very good

● 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

RoHS2 Compliant

	MOL / MOL-C / MOS / MOS-C
Hub	A2017 Alumite Treatment
Spacer	Polyacetal
Hex Socket Set Screw	SCM435 Ferrosoferric oxide film
Hex Socket Head Cap Screw	SCM435 Ferrosoferric oxide film

Related Products

Oldham-type coupling with high torque specification **MOR** is available.
➡ P.161

Oldham-type couplings **MOM** with metal spacers are available.
➡ P.173

● 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.803	Cleanroom Wash & Packaging ➡ P.807	Change to Stainless Steel Screw ➡ P.805
Available / Add'l charge	Available / Add'l charge	Available / Add'l charge