



## Couplings

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F A C E Ø40R 10\*10  
F A C H - S Ø32 6\*8 - LK

F	A	C	E		Ø40R	10*10	Custom Made
F	A	C	H	S	Ø32	6*8	LK
Type	Material	Axis Fixing	Coupling Model	Length	O.D. / (Jaw Type Option)	Ød1*Ød2	Key way
F: Flexible R: Rigid	A: Aluminum S: Stainless Steel C: Carbon steel	M: Set screw fixing C: Clamping fixing B: 2 Pieces S: Zero backlash type	S: Spiral beam type(for servo motor) M: Spiral beam type (for stepping motor) C: Metal disk with high rigid design H: Metal disk in straight type T: Metal disk in steps type B: Bellows design G: Oldham type - phosphor bronze spacer P: Oldham type - carbon resin spacer J: Oldham type - Black POM spacer N: Oldham type - POM spacer E: Jaw type U: Aluminum spacer	L: Long design S: Short design	◆Refer to dimension table to decide the O.D. ◆Jaw Spider options: B: Blue (80 ShoreA) W: White (92 ShoreA) R: Red (98 ShoreA)	◆Bore diameter of two sides of the coupling ◆LK: left side Ød1 ◆RK: right side Ød2 ◆WK: Both sides (Ød1 & Ød2)	

Note : ◆ Material AL, surface in anodized finished.

- ◆ Accessories are clamping screws and set screws.
- ◆ Shaft dia. Ød1, Ød2 accepted by custom sizes.(Within specified Max. bore dimensions)
- ◆ GMT coupling series are all processed in cryogenic treatment.( Refer to P.0453)

- ◆ Coupling is a mechanism device, connecting transmission between two shafts and transmitting safety torque.
- ◆ Coupling divided into "Flexible type" and "Rigidity type".
- ◆ To apply flexible couplings timing in case of power transmission, two shafts are not easy to set in alignment, or to simplify two shafts installation. It contains shock buffer to absorb parallelism, deflection, axial displacement, deviation improvement, and improvement of traditional transmission power, so few deviation would not cause any unusual situation on bearing. It's widely applied to current markets.
- ◆ Rigidity coupling is an unit causing non-eccentric, non-deflection, and make two connected shafts fixed in one unit. Users must do the best to have motor running and axis of load in alignment due to high requirement of concentricity, also means of axis has to be calibrated strictly; otherwise, the rotating shaft would be broken caused by mechanism fatigue, also the bearing would be thermal abrasion due to eccentric load, those were brought by continuous vibration of the axis during long term running of the motor. The advantage of rigidity coupling is to transmit transmission torque precisely.





- ( 1 ) There are five ways to fix coupling onto shaft as below. Please select coupling as your demand.
- ( 2 ) Set screw or clamping screw (hexagonal countersink screw) shall be secured by screw driver or torque wrench. Securing torque refer to product specifications.



#### Set Screw Fixing

This fixing in low cost is the most traditional. Front of screw contacting with shaft directly may cause damage or difficult disassembly.



#### Clamping Fixing

Use sink screw securing to narrow the slit for clamping shaft tightly. Clamped fix and easy disassembly won't cause damage of shaft.



#### Separation Fixing

Use separated bushings to fix and disassemble without moving your equipment.



#### Key Way Fixing

This type is also traditional, like set screw fixing, suits for transmission in higher torque. Prevent from parallel movement, it's usually used with set screw fixing and clamp fixing together.

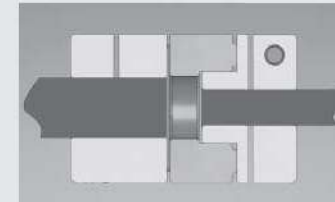


#### Zero Backlash Type

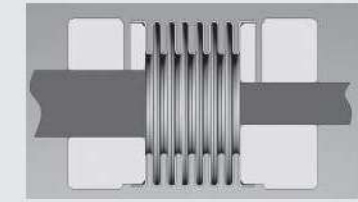
Zero backlash type coupling is designed to be equipped high precision clamping nut as one unit, performs high friction moment and reliable movement which is suitable for spindle transmission of the machine.

To maintain installation completeness of all kinds of couplings, it's recommended to install as follow charts to avoid direct contact of two shafts and to have a regular run.

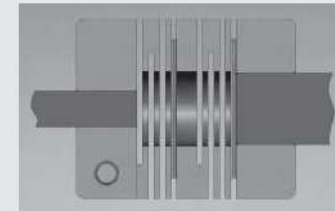
#### Oldham Type



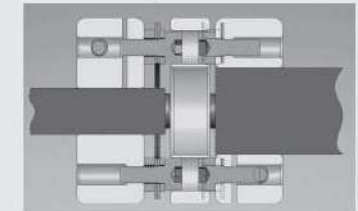
#### Bellows Type



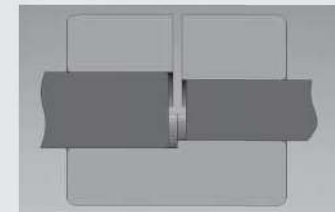
#### Spiral Beam Type



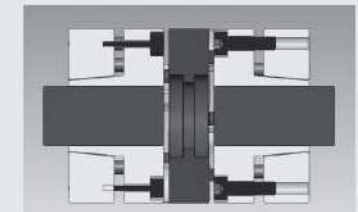
#### Metal Disk Type



#### Rigidity Coupling



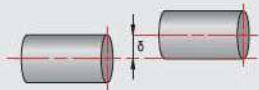
#### Zero Backlash Type



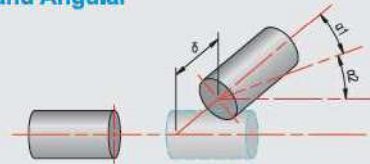
### Coupling - Deviation Adjustment

- ( 1 ) Flexible coupling transmits torque and rotation angle, and absorb deviation from shaft installation. It may cause vibration or shortening life hours of coupling, while deviation is over allowed range. Thus, make sure and take perfect adjustment for deviation.
- ( 2 ) There are three deviation for shaft, as parallel deviation, angular deviation and axial deviation. Please adjust deviation lower than allowed range listed in the product spec offered by our catalog.
- ( 3 ) The max. allowable deviation listed in our catalog is in case of only one deviation existing. While two or more deviation existing at same time, allowable range shall be lower than 1/2 x max. deviation listed in the spec of catalog.
- ( 4 ) Deviation happened not only on equipment installation, but caused by vibration in running progress, heated expansion, bearing abrasion. Thus, it's recommended to adjust axial deviation lower than 1/3 x Max. range.

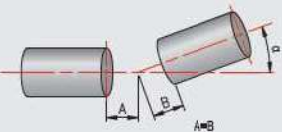
#### Parallel Deviation



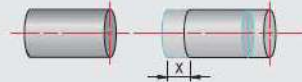
#### Complex Deviation in Parallel and Angular



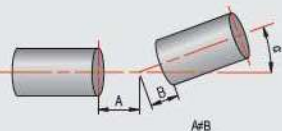
#### Symmetry Angular Deviation



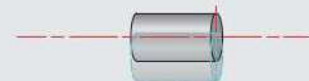
#### Axial Deviation



#### Asymmetry Angular Deviation



#### Run Out



### Torque

In physics, torque is defined as "force in vertical" x "distance to rotating center", metric unit (N·m), divided by acceleration of gravity 9.8m/ sec<sup>2</sup>, unit could be converted to familiar (kg·m). Imperial unit lb-ft, in case of conversion to metric unit, just take lb-ft divided by 7.22. Torque we called is not force unit, but a kind of the moment of force, which means capacity of energy transforming. We could see the connection from normal unit used in calculating torque (Kgm), and generally judging from words: Kgm stands for the capacity of rising an object weighed 1 kg in 1 meter movement. This is a kind of the moment of force, so inappropriate to call it force. Motor producing force per time unit is decided by RPM and torque of motor, and REC out shown in motor, (W) shown in Japan, (HP) power output shown in USA and Europe.  
(1HP=746w=0.746kw )

### Coupling - Allowed Torque

Transmitted torque occurs in allowed speed range rotating continuously.

### Max. Torque in Driven Side

Max. torque in driven side being hit in the moment, ex: torque produced while breaking.

### Allowable Angular (Deflection)

The deflection between two shafts while connecting two shafts.

### Allowable Axial Deviation Displacement

Displacement caused in axial while connecting two shafts.

### Inertial Torque

It's not easy to change running status of object with big mass (whether from static to running or running to static); equally, rotating inertial or inertial torque is to show keeping object in running status, bigger inertia torque makes tough rotation.

### Static Torsional Stiffness

Required (N·m) to rotate 1 radian.

## Motor

### Induction Motor

- (1) More than triple torque occurs in case of running momentarily.
- (2) Shaft axis center of the motor has  $\pm 1.5\text{mm}$  movement back and forth while running, and it's not recommended to use spiral beam type.
- (3) DC motor could be used in working environment with dust.

### Stepping Motor

- (1) Without triple torque in case of running momentarily, but max. rated torque of motor occurs.
- (2) Larger torque in low speed than servo motor in same level.
- (3) Higher RPM, smaller torque in motor.
- (4) Motor have temperature rise in case of running continuously. (to improve by using disk type coupling)  
※ Force output in stepping motor is smaller than servo motor.

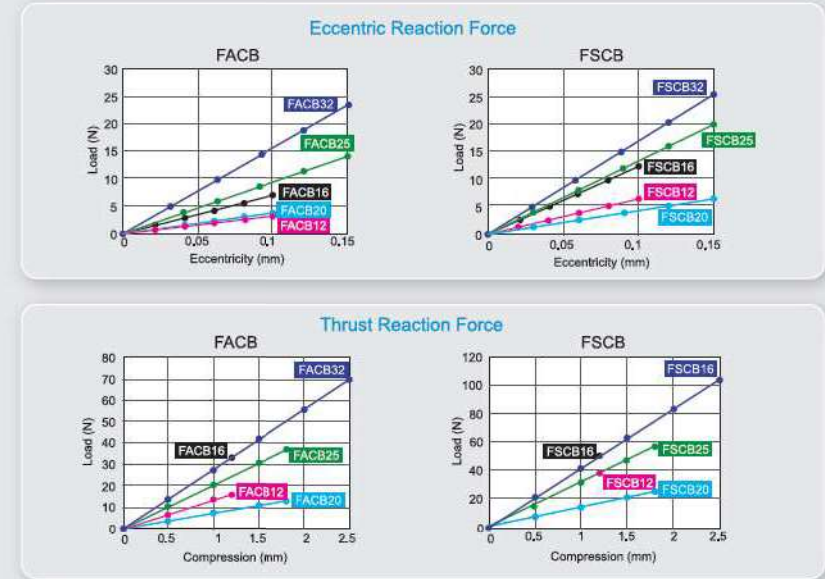
### Servo Motor

- (1) More than triple torque occurs in case of running momentarily.
- (2) Under rated RPM range, cause rated torque.
- (3) Same torque produce in low speed and high speed
- (4) Temperature rise is small in case of running continuously.

### Encoder

- (1) Built-in in servo motor, has tiny driven torque.
- (2) Or connected to stepping motor. (optional)

## Bellows type - Rigidity Standard



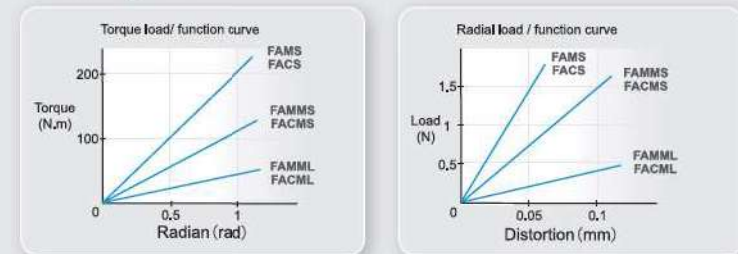
## Spiral Beam Type - Rigidity Standard

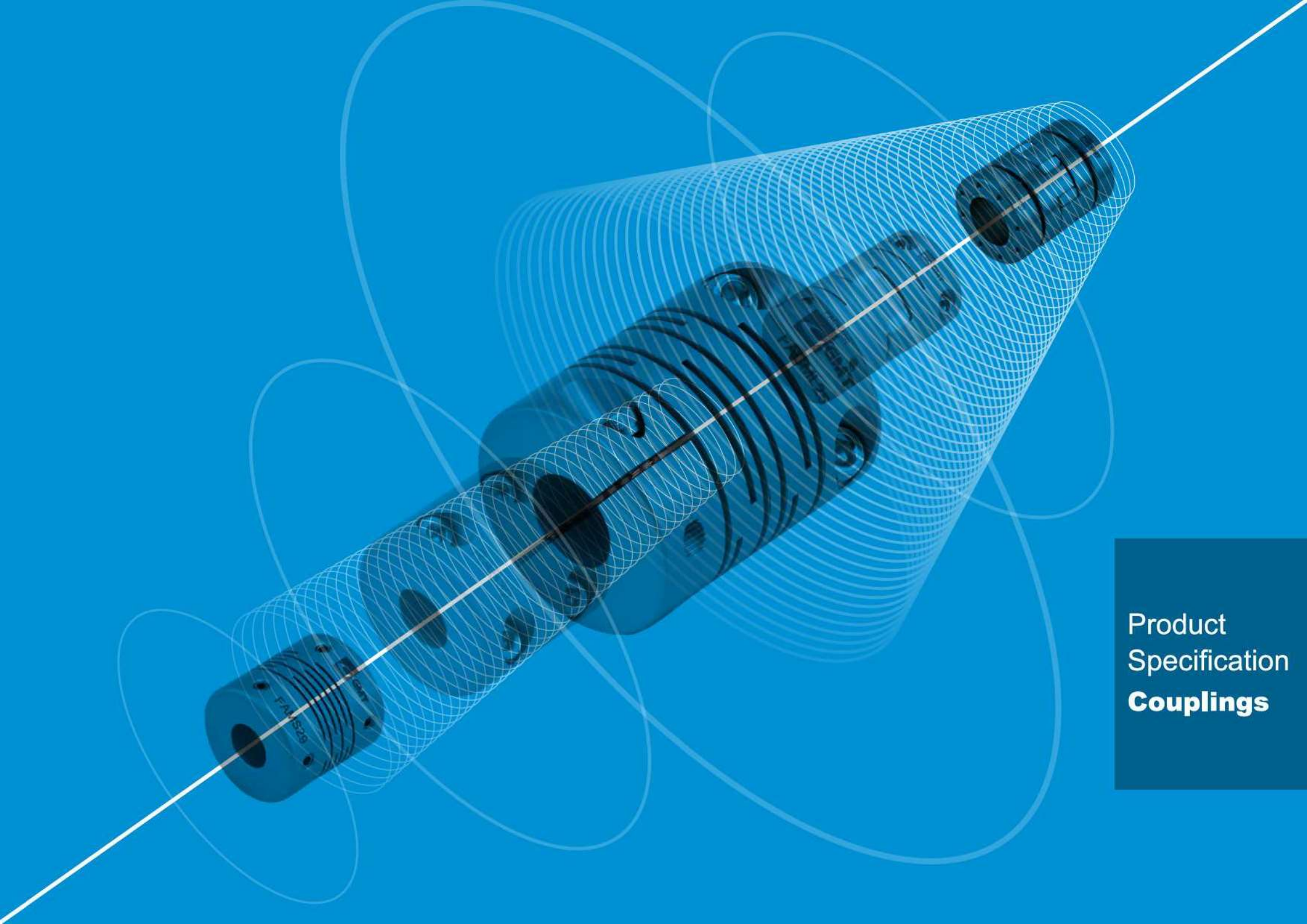


Torque rigidity and flexibility - Balance acquired among incompatible functions. These flexible couplings apply to stepping motor.

High torque rigidity, light and complete miniature. These flexible couplings apply to servo motor.

### Character Comparison



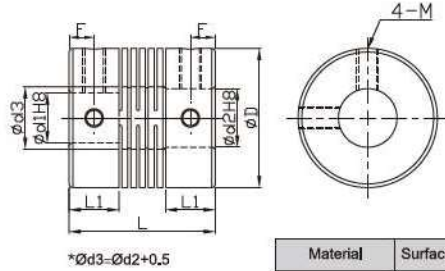


Product  
Specification  
**Couplings**

FAMS



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating angular, parallel, and axial misalignment.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Set screw

Dimensions		$\phi d_2$														L	L1	F	M	
Model No.	$\phi D$	$\phi d_1$																		
		5	6	6.35	7	8	9.525	10	11	12	14	15	16							
FAMS	16	5	•	•											17.4	6	3	3		
		6		•																
	19	5	•	•		•	•								20	6.8	3.4	3		
		6		•		•	•													
		6.35			•	•	•													
		8				•	•	•												
	24	6		•		•	•	•							25	8.5	4.25	4		
		6.35			•	•	•	•												
		7				•	•	•	•											
		8				•	•	•	•	•										
		9.525					•	•	•	•	•									
		10						•	•	•	•	•								
	29	8					•	•	•	•	•				30	10.2	5.1	4		
		10						•	•	•	•	•								
		11							•	•	•	•	•							
		12								•	•	•	•	•						
34	10										•	•		35	12	6	5			
	11											•	•							
	12												•					•		
	14																	•	•	
	15																		•	•
	16																			•

\*Moment of inertial torque and weight calculated by maximum diameter.

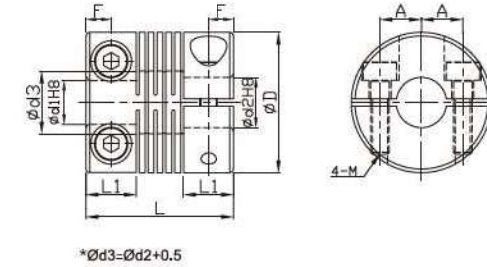
Specification		Allowable Wrench Torque (N-m)	Allowable Misalignment			Static Torsional Stiffness (N-m/rad)	Max. RPM ( $r/min^{-1}$ )	* Moment of Inertia ( $kg-m^2$ )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	$\phi D$		Angular ( $^{\circ}$ )	Parallel (mm)	Axial (mm)					
FAMS	16	0.5	0.5	0.05	$\pm 0.1$	200	24000	$2.8 \cdot 10^{-7}$	0.7	7
	19	1				270	20000	$6.2 \cdot 10^{-7}$		10
	24	1.5				790	16000	$2.0 \cdot 10^{-6}$	1.7	22
	29	2				1400	13000	$5.2 \cdot 10^{-6}$		40
	34	3				2200	11000	$1.1 \cdot 10^{-6}$		64

Ordering Example: FAMS24 - 8 - 12 - 100 PCS  
Model no.  $\phi d_1$   $\phi d_2$  Q'ty

FACS



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating angular, parallel, and axial misalignment.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset, deflection, shaft deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Clamping screw

Dimensions		$\phi d_2$														L	L1	F	M	A	
Model No.	$\phi D$	$\phi d_1$																			
		5	6	6.35	7	8	9.525	10	11	12	14	15	16								
FACS	16	5	•	•											17.4	6	3	2	4.74		
		6		•																	
	19	5	•	•		•	•								20	6.8	3.4	2.5	5.6		
		6		•		•	•														
		6.35			•	•	•														
		8				•	•	•													
	24	6		•		•	•	•							25	8.5	4.25	3	8		
		6.35			•	•	•	•													
		7				•	•	•	•												
		8				•	•	•	•	•											
		9.525					•	•	•	•	•										
		10						•	•	•	•	•									
	29	8					•	•	•	•	•				30	10.2	5.1	3	9		
		10						•	•	•	•	•									
		11							•	•	•	•	•								
		12								•	•	•	•	•							
34	10										•	•		35	12	6	3	11			
	11											•	•								
	12												•						•		
	14																		•	•	
	15																			•	•
	16																				•

\*Moment of inertial torque and weight calculated by maximum diameter.

Specification		Allowable Wrench Torque (N-m)	Allowable Misalignment			Static Torsional Stiffness (N-m/rad)	Max. RPM ( $r/min^{-1}$ )	* Moment of Inertia ( $kg-m^2$ )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	$\phi D$		Angular ( $^{\circ}$ )	Parallel (mm)	Axial (mm)					
FACS	16	0.5	0.5	0.05	$\pm 0.1$	200	9500	$2.5 \cdot 10^{-7}$	0.5	7
	19	1				270	8000	$5.8 \cdot 10^{-7}$		12
	24	1.5				790	6300	$1.8 \cdot 10^{-6}$	1	23
	29	2				1400	5200	$4.7 \cdot 10^{-6}$		41
	34	3				2200	4400	$1.1 \cdot 10^{-6}$		62

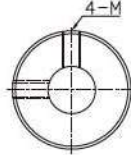
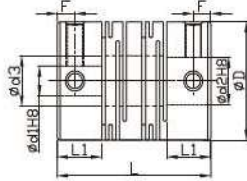
Ordering Example: FACS24 - 8 - 12 - 100 PCS  
Model no.  $\phi d_1$   $\phi d_2$  Q'ty



FAMML



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating parallel, angular, and axial misalignment.
- High wrench torque rigidity and sensitivity.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*Ød3=Ød2+0.5

\*When Ød1 < 4 and Ød2 > 5, there would be 3 set screws.  
When Ød1 and Ød2 both smaller than 4, there would be 2 set screws.

Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Set screw

Dimensions		Ød2														L	L1	M	F							
Model No.	ØD	Ød1		2	3	4	5	6	6.35	7	8	9.525	10	11	12	14	15	16	18			Rough thread				
FAMML	8	2	3	•	•															14	3.5	2	1.7			
				12	4	•	•															18.5	5	2.5	2.5	
					5	•	•	•															23	6.5	3	3
	16	4	•	•	•														26	7.5	3	3				
		5	•	•	•	•																				
	FAMML	20	6.35		•	•	•	•													26	7.5	3	3		
			8		•	•	•	•																		
			9.525		•	•	•	•	•																	
		25	5				•	•													31	8.5	4	4		
			6				•	•																		
			6.35				•	•																		
	8					•	•																			
32	9.525						•	•											41	12	4	6				
	10						•	•																		
	12						•	•	•																	
	14								•	•																
	16									•	•															
40	8										•								56	17	5	8.5				
	9.525										•															
	10										•															
	12										•															
	14											•														
	15												•													

\*Moment of inertial torque and weight calculated by maximum diameter.

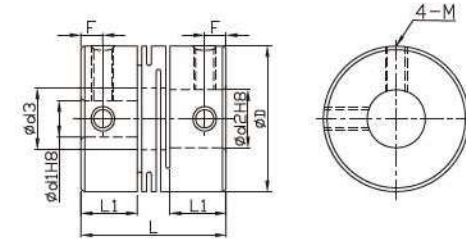
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)	
Model No.	ØD	Angular (°)	Parallel (mm)	Axial (mm)					
FAMML	8	0.1	0.10	±0.2	25	48000	1.2*10 <sup>-6</sup>	0.3	1.4
	12	0.4		±0.3	45	32000	8.3*10 <sup>-6</sup>	0.5	3.7
	16	0.5		±0.4	80	24000	3.3*10 <sup>-7</sup>	0.7	8.1
	20	1	0.15	±0.4	170	19000	9.0*10 <sup>-7</sup>	1.7	14
	25	2		±0.5	380	15000	2.6*10 <sup>-6</sup>		27
	32	4		±0.5	500	12000	9.6*10 <sup>-6</sup>		60
	40	8		±0.5	600	9600	3.2*10 <sup>-6</sup>		130

Ordering Example: FAMML25 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FAMMS



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating angular, and axial misalignment.
- No accommodating to parallel misalignment.
- High wrench torque rigidity and sensitivity.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- FAMMS can't allow axial deviation caused by offset
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*Ød3=Ød2+0.5

\*When Ød1 < 4 and Ød2 > 5, there would be 3 set screws.  
When Ød1 and Ød2 both smaller than 4, there would be 2 set screws.

Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Set screw

Dimensions		Ød2											L	L1	M	F				
Model No.	ØD	Ød1		2	3	4	5	6	7	8	10	12	14			Rough thread				
FAMMS	8	2	3	•										10	3.4	2	1.7			
				12	4	•										14	5.2	2.5	2.5	
					5		•										18	6.8	3	3
	16	5			•								20	7.65	3	3				
		6				•														
	20	5					•								20	7.65	3	3		
		6					•													
		8					•													
		8					•													
	25	5						•							25	9.6	4	4		
		6.35							•											
		8								•										
32	8													32	12.6	4	6			
	9.525																			
	10																			
	12																			

\*Moment of inertial torque and weight calculated by maximum diameter.

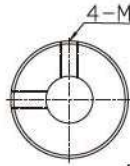
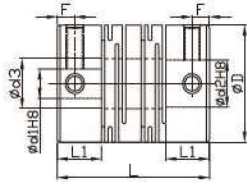
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	ØD	Angular (°)	Axial (mm)					
FAMMS	8	0.1	±0.1	24	48000	1.0*10 <sup>-6</sup>	0.3	1
	12	0.4		80	32000	7.0*10 <sup>-6</sup>	0.5	3.1
	16	0.5		180	24000	2.8*10 <sup>-7</sup>	0.7	7.4
	20	1	200	19000	7.5*10 <sup>-7</sup>	12		
	25	2	±0.2	780	15000	2.3*10 <sup>-6</sup>	1.7	24
	32	4		1100	12000	8.0*10 <sup>-6</sup>		50

Ordering Example: FAMMS25 - 8 - 10 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FSMML



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating parallel, angular, and axial misalignment.
- High wrench torque rigidity and sensitivity.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*Ød3=Ød2+0.5

\*When Ød1 < 4 and Ød2 > 5, there would be 3 set screws.  
When Ød1 and Ød2 both smaller than 4, there would be 2 set screws.

Material	Accessories
SUS303	Set screw

Dimensions		Ød2														L	L1	M	F					
Model No.	ØD	Ød1		2	3	4	5	6	6.35	7	8	9.525	10	11	12	14	15	16	18			Rough thread		
FSMML	8	2		•																14	3.5	2	1.7	
		3		•																				
	12	4		•	•																18.5	5	2.5	2.5
		5		•	•	•																		
	16	4		•	•	•															23	6.5	3	3
		5		•	•	•	•																	
	20	6.35																						
		6																						
		6.35																						
		8																						
	25	9.525																						
		10																						
		6																						
		6.35																						
	32	8																						
		6.35																						
		8																						
		9.525																						
	40	10																						
		12																						
14																								
15																								
16																								
18																								

\*Moment of inertial torque and weight calculated by maximum diameter.

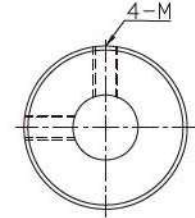
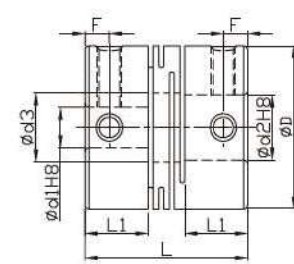
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)	
Model No.	ØD	Angular (°)	Parallel (mm)	Axial (mm)					
FSMML	8	0.2	0.10	±0.2	50	48000	3.1*10 <sup>-6</sup>	0.3	3
	12	0.3		±0.3	64	32000	2.1*10 <sup>-7</sup>	0.5	9.3
	16	0.5		±0.3	85	24000	8.4*10 <sup>-7</sup>	0.7	21
	20	1	0.15	±0.4	250	19000	2.4*10 <sup>-6</sup>	1.7	38
	25	2		±0.5	330	15000	6.8*10 <sup>-6</sup>		71
	32	3.5		±0.5	850	12000	2.6*10 <sup>-5</sup>		160
40	8	0.20		1000	9600	9.7*10 <sup>-5</sup>	4	350	

Ordering Example: FSMML25 - 8 - 10 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FSMMS



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating angular and axial misalignment.
- No accommodating to parallel misalignment.
- High wrench torque rigidity and sensitivity.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- FSMMS can't allow axial deviation caused by offset
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*Ød3=Ød2+0.5

\*When Ød1 < 4 and Ød2 > 5, there would be 3 set screws.  
When Ød1 and Ød2 both smaller than 4, there would be 2 set screws.

Material	Accessories
SUS303	Set screw

Dimensions		Ød2											L	L1	M	F							
Model No.	ØD	Ød1		2	3	4	5	6	7	8	10	12	14			Rough thread							
FSMMS	8	2		•														10	3.4	2	1.7		
		3		•																			
	12	4		•	•																		
		5		•	•	•																	
	16	5																					
		6																					
	20	5																					
		6																					
		8																					
		6																					
	25	6.35																					
		8																					
10																							
32	8																						
	10																						
	12																						

\*Moment of inertial torque and weight calculated by maximum diameter.

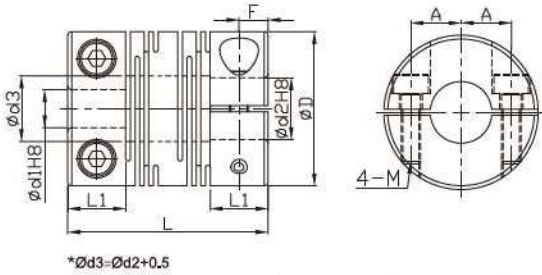
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	ØD	Angular (°)	Axial (mm)					
FSMMS	8	0.2	±0.1	49	48000	2.4*10 <sup>-6</sup>	0.3	2.7
	12	0.3		140	32000	1.8*10 <sup>-7</sup>	0.5	7.8
	16	0.5		240	24000	7.2*10 <sup>-7</sup>	0.7	18
	20	1	±0.2	330	19000	2.0*10 <sup>-6</sup>	1.7	32
	25	2		720	15000	6.1*10 <sup>-6</sup>		63
	32	3.5		1300	12000	2.1*10 <sup>-5</sup>		130

Ordering Example: FSMMS25 - 8 - 10 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACML



- The flexure allowed by the beam portion of the coupling is capable of accommodating angular, parallel, and axial misalignment.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Clamping screw

Dimensions		Ød2														L	L1	M Rough thread	A	F		
Model No.	ØD	Ød1	4	5	6	6.35	7	8	9.525	10	11	12	14	15	16							
FACML	12	4	•	•													18.5	5	2	4	2.5	
		5			•	•												23	6.5	2.5	5	3.25
	16	5			•	•												26	7.5			
		6			•	•	•	•														
	20	6.35	8			•												31	8.5	3	9	4.25
			5			•	•															
		25	6.35			•	•											41	12	4	11	6
			8			•	•	•	•													
		32	9.525	10			•											56	17	5	14	8.5
				8			•	•	•	•												
	40		10			•																
			12			•																

\*Moment of inertial torque and weight calculated by maximum diameter.

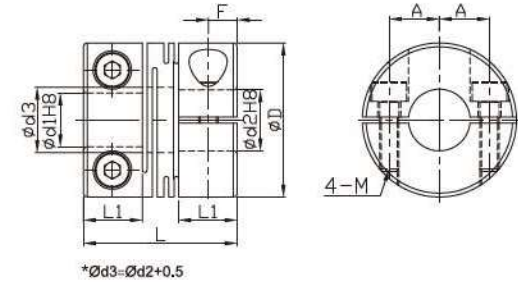
Specification	Model No.	ØD	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	★ Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	★ Weight (g)
				Angular (°)	Parallel (mm)					
FACML	12	0.4	2	0.10	±0.3	45	12000	7.8*10 <sup>-6</sup>	0.5	3.6
	16	0.5				80	9500	3.4*10 <sup>-7</sup>	1	9.2
	20	1				170	7600	9.1*10 <sup>-7</sup>		16
	25	2	0.15	±0.5	380	6100	2.6*10 <sup>-6</sup>	1.5	28	
	32	4			500	4800	9.7*10 <sup>-6</sup>	2.5	64	
	40	8			600	3800	3.3*10 <sup>-5</sup>	4	140	

Ordering Example: FACML32 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACMS



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating angular and axial misalignment.
- No accommodating to parallel misalignment.
- High wrench torque rigidity and sensitivity.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- FACMS can't allow axial deviation caused by offset
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Clamping screw

Dimensions		Ød2										L	L1	M Rough thread	A	F				
Model No.	ØD	Ød1	4	5	6	7	8	10	12	14										
FACMS	12	4	•	•												14	5.2	2	4	2.6
		5			•	•											18	6.8	2.5	5
	16	5			•	•										20				
		6			•	•	•	•												
	20	8	8			•										25	9.6	3	9	4.8
			5			•														
		25	6			•	•									32	12.6	4	11	6.3
			8			•	•	•	•											
	32	10	10			•														
			12			•	•	•	•											

\*Moment of inertial torque and weight calculated by maximum diameter.

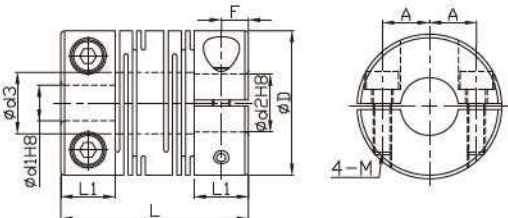
Specification	Model No.	ØD	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	★ Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	★ Weight (g)
				Angular (°)	Axial (mm)					
FACMS	12	0.4	1	±0.1	80	12000	6.4*10 <sup>-6</sup>	0.5	3	
	16	0.5				9500	2.9*10 <sup>-7</sup>	1	8	
	20	1				200	7600		7.5*10 <sup>-7</sup>	13
	25	2	±0.2	780	6100	2.3*10 <sup>-6</sup>	1.5	25		
	32	4			1100	4800	8.1*10 <sup>-6</sup>	2.5	53	

Ordering Example: FAMS25 - 8 - 10 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FSCML



- The flexure allowed by the beam portion of the coupling is capable of accommodating angular, parallel, and axial misalignment.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*Ød3=Ød2+0.5  
\*1pc clamping screw in ØD12-DØ32 of stainless steel type.

Material	Accessories
SUS303	Clamping screw

Dimensions		Ød2														L	L1	M Rough thread	A	F		
Model No.	ØD	Ød1	4	5	6	6.35	7	8	9.525	10	11	12	14	15	16							
FSCML	12	4	•	•													18.5	5	2	4	2.5	
		5																				
	16	5			•													23	6.5	2.5	5	3.25
		6			•	•																
		5			•	•	•	•	•									26	7.5	6.5	3.75	
	20	6			•	•	•	•	•													
		6.35			•	•	•	•	•													
		8			•	•	•	•	•													
		5			•	•	•	•	•													
	25	6			•	•	•	•	•													
		6.35			•	•	•	•	•													
		8			•	•	•	•	•													
9.525				•	•	•	•	•														
32	10			•	•	•	•	•														
	8			•	•	•	•	•														
	9.525			•	•	•	•	•														
	10			•	•	•	•	•														
40	12			•	•	•	•	•														
	10			•	•	•	•	•														
	12			•	•	•	•	•														
	14			•	•	•	•	•														

\*Moment of inertial torque and weight calculated by maximum diameter.

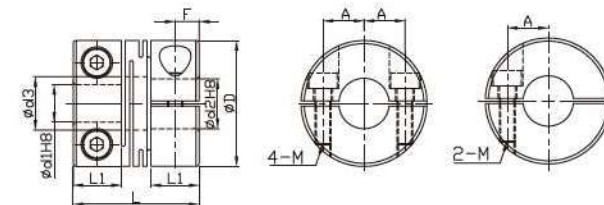
Specification	Model No.	ØD	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
				Angular (°)	Axial (mm)					
FSCML	12	0.3	2	0.10	±0.2	64	12000	2.2*10 <sup>-7</sup>	0.5	10
	16	0.5			±0.3	85	9500	9.0*10 <sup>-7</sup>	1	25
	20	1			±0.3	250	7600	2.5*10 <sup>-6</sup>		43
	25	2		0.15	±0.4	330	6100	7.1*10 <sup>-6</sup>	1.5	78
	32	3.5			±0.5	850	4800	2.7*10 <sup>-5</sup>	2.5	170
	40	8			±0.5	1000	3800	9.0*10 <sup>-5</sup>	4	370

Ordering Example: FSCML32 - 12 - 14 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FSCMS



- Zero backlash.
- The flexure allowed by the beam portion of the coupling is capable of accommodating angular, and axial misalignment.
- No accommodating to parallel misalignment.
- High wrench torque rigidity and sensitivity.
- Rotation character of clockwise or anti-clockwise are exactly the same.
- Free maintenance, oil-resist and anti-corrosiveness.
- FSCMS can't allow axial deviation caused by offset
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*Ød3=Ød2+0.5  
\*1pc clamping screw in ØD12-DØ32 of stainless steel type.

Material	Accessories
SUS303	Clamping screw

Dimensions		Ød2											L	L1	M Rough thread	A	F		
Model No.	ØD	Ød1	4	5	6	7	8	10	12	14									
FSCMS	12	4	•	•										14	5.2	2	4	2.6	
		5																	
	16	5			•									18	6.8	2.5	5	3.4	
		6			•	•											6.5	3.8	
	20	5			•	•	•												
		6			•	•	•	•											
		8			•	•	•	•											
	25	5			•	•	•	•											
		6			•	•	•	•											
		8			•	•	•	•											
		10			•	•	•	•											
	32	8			•	•	•	•											
10				•	•	•	•												
12				•	•	•	•												
12				•	•	•	•												

\*Moment of inertial torque and weight calculated by maximum diameter.

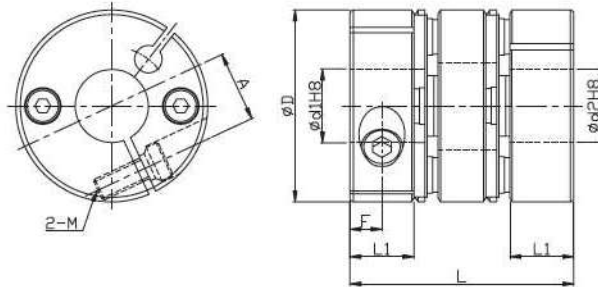
Specification	Model No.	ØD	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
				Angular (°)	Axial (mm)					
FSCMS	12	0.3	1	±0.1	±0.1	140	12000	1.8*10 <sup>-7</sup>	0.5	8.5
	16	0.5			±0.1	240	9500	7.8*10 <sup>-7</sup>	1	21
	20	1			±0.1	330	7600	2.1*10 <sup>-6</sup>		36
	25	2		±0.2	±0.2	720	6100	6.3*10 <sup>-6</sup>	1.5	69
	32	3.5			±0.2	1300	4800	2.2*10 <sup>-5</sup>	2.5	150

Ordering Example: FSCMS25 - 6 - 8 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACCL



- High wrench torque load, high wrench torque rigidity capacity and excellent sensibility.
- Zero backlash.
- The flexure allowed by the stainless steel disk portion of the coupling is capable of accommodating angular, parallel, and axial misalignment.
- Clockwise character is exactly the same as anti-clockwise one.
- Free maintenance, oil-resist and anti-corrosiveness.
- Teethless screw to lock disks.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Disk	SUS303	—	

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2														L	L1	A	F	Clamping screw			
Model No.	ØD	4	5	6	8	9	10	11	12	14	15	17	19	20	22	24	25					M	Lock torque (N-m)
FACCL	21	•	•	•	•	•												24.5	7	7	3.5	M2.5	1.2
	28		•	•	•	•	•											32	9	9.5	4	M3	1.5
	34			•	•	•	•	•	•	•								35	9.8	12	5	M3	1.5
	46				•	•	•	•	•	•	•	•	•	•				44	12.6	16.5	6	M4	3.5
	55								•	•	•	•	•	•	•	•	•	55	16	20.5	7	M5	6

\*Moment of inertial torque and weight calculated by maximum diameter.

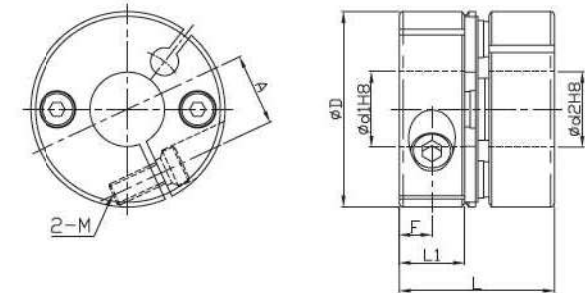
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment			Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)
Model No.	ØD	Angular (°)	Parallel (mm)	Axial (mm)				
FACCL	21	1.2	1.0	0.10	1000	10000	1.11*10 <sup>-6</sup>	17
	28	1.6	1.2	0.15			1300	4.68*10 <sup>-6</sup>
	34	4	1.5	0.20	2800		1.10*10 <sup>-5</sup>	65
	46	10		6200	4.70*10 <sup>-6</sup>		151	
	55	25		12000	1.19*10 <sup>-4</sup>		260	

Ordering Example: FACCL46 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACCS



- High wrench torque load, high wrench torque rigidity capacity and excellent sensibility.
- Zero backlash.
- The flexure allowed by the stainless steel disk portion of the coupling is capable of accommodating angular, and axial misalignment.
- No accommodating to parallel misalignment.
- Clockwise character is exactly the same as anti-clockwise one.
- Free maintenance, oil-resist and anti-corrosiveness.
- Teethless screw to lock disks.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Disk	SUS303	—	

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2														L	L1	A	F	Clamping screw			
Model No.	ØD	4	5	6	8	9	10	11	12	14	15	17	19	20	22	24	25					M	Lock torque (N-m)
FACCS	21	•	•	•	•	•												16.7	7	7	3.5	M2.5	1.2
	28		•	•	•	•	•											21	9	9.5	4	M3	1.5
	34			•	•	•	•	•	•	•								23.3	9.8	12	5	M3	1.5
	46				•	•	•	•	•	•	•	•	•	•				29.8	12.6	16.5	6	M4	3.5
	55								•	•	•	•	•	•	•	•	•	37.2	16	20.5	7	M5	6

\*Moment of inertial torque and weight calculated by maximum diameter.

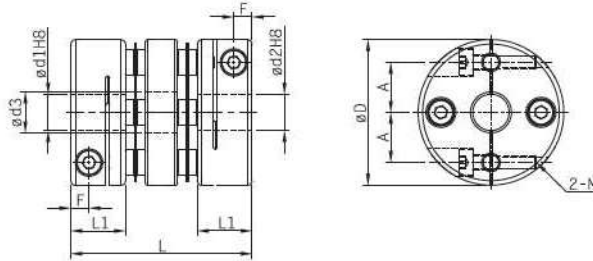
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)
Model No.	ØD	Angular (°)	Axial (mm)				
FACCS	21	1.2	1.0	1500	10000	7.90*10 <sup>-7</sup>	12
	28	1.6	1.2			1800	3.24*10 <sup>-6</sup>
	34	4	1.5	3600		7.60*10 <sup>-6</sup>	45
	46	10		10000		3.23*10 <sup>-6</sup>	105
	55	25		20000		8.19*10 <sup>-6</sup>	180

Ordering Example: FACCS34 - 10 - 14 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

### FACHL



- High wrench torque load, high wrench torque rigidity capacity and excellent sensibility.
- Zero backlash.
- The flexure allowed by the stainless steel disks portion of the coupling is capable of accommodating angular, parallel, and axial misalignment.
- Clockwise character is exactly the same as anti-clockwise one.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Disk	SUS301	—	

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2																				L	L1	d3	A	F	Clamping screw						
Model No.	ØD	4	4.5	5	6	6.35	7	8	8.525	10	11	12	14	15	16	17	18	19	20	22	24	25						M	Lock torque (N·m)				
FACHL	19	•	•	•	•	•	•	•	•																	27	8	8.5	6.5	2.5	2	0.5	
	25				•	•	•	•	•	•	•																31	10	12.5	9	3.5	2.5	1
	32							•	•	•	•	•	•														40	12	16	11	4	3	1.5
	40								•	•	•	•	•	•	•	•	•	•	•								44	14	21	15	5	4	2.5
	50																										57	18	26	18	6	5	7

\*Moment of inertial torque and weight calculated by maximum diameter.

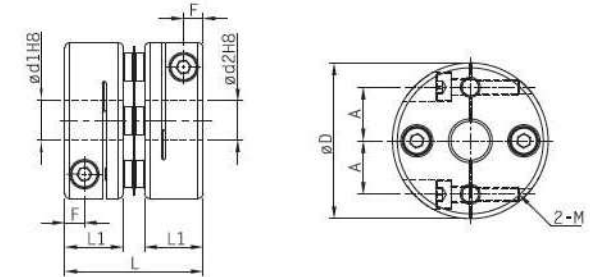
Specification	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)	
		Angular (°)	Parallel (mm)	Axial (mm)					
FACHL	19	0.7	1.5	0.12	±0.5	200	10000	8.7*10 <sup>-7</sup>	18
	25	1				450	8000	2.7*10 <sup>-6</sup>	25
	32	2.5	1100	6000		9.6*10 <sup>-6</sup>	60		
	40	3.5	1400	5000		1.9*10 <sup>-5</sup>	100		
	50	9	2200	4000		8.1*10 <sup>-5</sup>	210		

Ordering Example: FACHL40 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

### FACHS



- Hard torque load - high torque rigidity and excellent sensibility.
- Zero backlash.
- Miniature coupling has short length.
- Dual stainless steel disk to correct angular and axial deviation.
- No correction for radial deviation.
- Clockwise character is exactly the same as anti-clockwise one.
- Free maintenance, oil-resist and anti-corrosiveness.
- FACH-S can't allow axial deviation caused by offset.
- Offset, deflection, shaft deviation are individual allowed value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Disk	SUS301	—	

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2																				L	L1	F	A	Clamping screw						
Model No.	ØD	4	4.5	5	6	6.35	7	8	8.525	10	11	12	14	15	16	17	18	19	20	22	24	25						M	Lock torque (N·m)			
FACHS	19	•	•	•	•	•	•	•	•																		20	8	2.5	6.5	2	0.5
	25				•	•	•	•	•	•	•																24	10	3.5	9	2.5	1
	32							•	•	•	•	•	•														29	12	4	11	3	1.5
	40								•	•	•	•	•	•	•	•	•	•	•								33	14	5	15	4	2.5
	50																										42	18	6	18	5	7

\*Moment of inertial torque and weight calculated by maximum diameter.

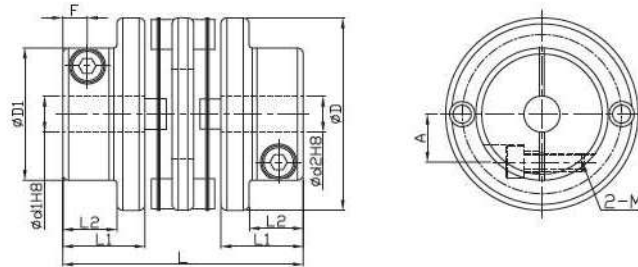
Specification	Allowable Wrench Torque (N·m)	Allowable Misalignment		Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)	
		Angular (°)	Axial (mm)					
FACHS	19	0.7	0.7	±0.2	280	10000	6.3*10 <sup>-7</sup>	9
	25	1			630	8000	2.1*10 <sup>-6</sup>	19
	32	2.5	1600	6000	7.2*10 <sup>-6</sup>	41		
	40	3.5	2600	5000	1.3*10 <sup>-5</sup>	68		
	50	9	3100	4000	6.1*10 <sup>-5</sup>	140		

Ordering Example: FACHS40 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACTL



- High wrench torque load, high wrench torque rigidity capacity and excellent sensibility.
- Zero backlash.
- Dual stainless steel rings to correct radial, angular and axial deviation.
- Clockwise character is exactly the same as anti-clockwise one.
- Free maintenance, oil-resist and anti-corrosiveness.
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Disk	SUS301	—	

Model No.	ØD	Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2												L	L1	L2	A	F	Clamping screw		
		ØD1	6	7	8	10	11	12	14	15	16	18	19	20	25						M	Lock torque (N·m)	
FACTL	32	22	•	•	•	•											40	13,7	9	8	4	3	1,5
	40	28		•	•	•	•	•									46	16,5	12	10,5	6	4	2,5
	50	39					•	•	•	•	•	•	•				52	19,4	15	14,8	7	5	7
	63	45							•	•	•	•	•	•			58	22,3	18	17	8	6	12

\*Moment of inertial torque and weight calculated by maximum diameter.

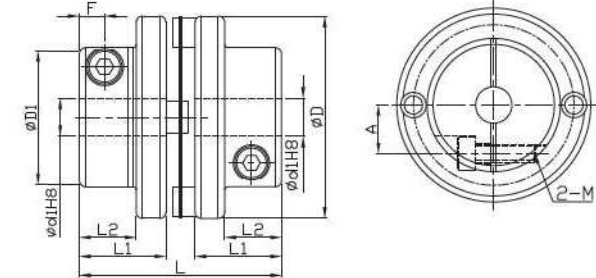
Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
			Angular (°)	Parallel (mm)	Axial (mm)				
FACTL	32	2	2	0,15	±0,4	1000	4800	6,2*10 <sup>-5</sup>	48
	40	4		0,2	±0,5	1500	3800	1,6*10 <sup>-5</sup>	81
	50	7,5		±0,6	2000	3100	4,6*10 <sup>-5</sup>	150	
	63	10		0,3	±0,8	2500	2400	1,1*10 <sup>-4</sup>	230

Ordering Example: FACTL40 - 12 - 14 - 100 PCS  
Model no. Ød1 Ød2 Qty

FACTS



- Hard torque load - high torque rigidity and excellent sensibility.
- Zero backlash.
- Miniature coupling has short length.
- Dual stainless steel disk to correct angular and axial deviation.
- No correction for radial deviation.
- Clockwise character is exactly the same as anti-clockwise one.
- Free maintenance, oil-resist and anti-corrosiveness.
- FACTS can't allow axial deviation caused by offset.
- Offset, deflection, shaft deviation are individual allowed value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Disk	SUS301	—	

Model No.	ØD	Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2												L	L1	L2	A	F	Clamping screw		
		ØD1	6	7	8	10	11	12	14	15	16	18	19	20	25						M	Lock torque (N·m)	
FACTS	32	22	•	•	•	•											32	13,7	9	8	4	3	1,5
	40	28		•	•	•	•	•									38	16,5	12	10,5	6	4	2,5
	50	39					•	•	•	•	•	•	•				44	19,4	15	14,8	7	5	7
	63	45							•	•	•	•	•	•			50	22,3	18	17	8	6	12

\*Moment of inertial torque and weight calculated by maximum diameter.

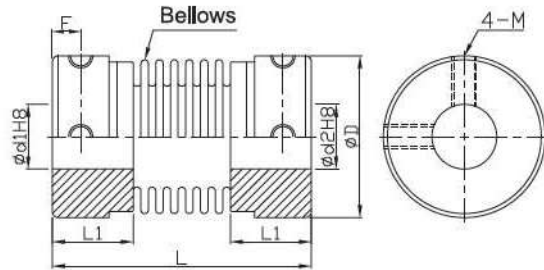
Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment		Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
			Angular (°)	Axial (mm)				
FACTS	32	2	1	±0,2	1300	4800	4,5*10 <sup>-5</sup>	38
	40	4			2800	3800	1,2*10 <sup>-5</sup>	66
	50	7,5			3700	3100	3,7*10 <sup>-5</sup>	120
	63	10			5000	2400	8,4*10 <sup>-5</sup>	190

Ordering Example: FACTS32 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Qty

FAMB



• Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*When  $\text{Ød1} < 4$  and  $\text{Ød2} > 5$ , there would be 3 set screws.  
\*When  $\text{Ød1}$  and  $\text{Ød2}$  both smaller than 4, there would be 2 set screws.

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Set screw
Bellows	C5191	—	

Dimensions	Ød1&Ød2 selection *Ød1 ≤ Ød2											L	L1	F	Set screw		
	Model No.	ØD	3	4	5	6	6.35	8	9.525	10	12				14	M	Lock torque (N·m)
FAMB	12	12	•	•	•	•	•						23.5	7.5	2.5	2.5	0.5
	16	16		•	•	•	•						26.5	9	3	3	0.7
	20	20			•	•	•	•	•				32	10	3.5		
	25	25				•	•	•	•	•			36.5	12	4.5		
	32	32				•	•	•	•	•	•		42	13.5	5.5	4	1.7

\*Moment of inertial torque and weight calculated by maximum diameter.

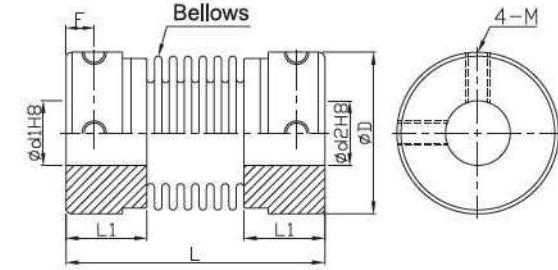
Specification	Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	Moment of Inertia (kg·m <sup>2</sup> )	Weight (g)
				Angular (°)	Parallel (mm)	Axial (mm)				
FAMB	12	12	0.3	1.5	0.10	+0.4	82	32000	9.0*10 <sup>-8</sup>	4
	16	16	0.5			-1.2	110	24000	3.5*10 <sup>-7</sup>	9
	20	20	0.8	2	0.15	+0.6	180	19000	9.9*10 <sup>-7</sup>	16
	25	25	1.3			-1.8	240	15000	3.1*10 <sup>-6</sup>	32
	32	32	2			+0.8 -2.5	330	12000	9.2*10 <sup>-6</sup>	57

Ordering Example: FAMB20 - 6 - 8 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FSMB



• Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



\*When  $\text{Ød1} < 4$  and  $\text{Ød2} > 5$ , there would be 3 set screws.  
\*When  $\text{Ød1}$  and  $\text{Ød2}$  both smaller than 4, there would be 2 set screws.

Component	Material	Accessories
Main frame	SUS303	Set screw
Bellows	SUS316	

Dimensions	Ød1&Ød2 selection *Ød1 ≤ Ød2											L	L1	F	Set screw		
	Model No.	ØD	3	4	5	6	6.35	8	9.525	10	12				14	M	Lock torque (N·m)
FSMB	12	12	•	•	•	•	•						23.5	7.5	2.5	2.5	0.5
	16	16		•	•	•	•						26.5	9	3	3	0.7
	20	20			•	•	•	•	•				32	10	3.5		
	25	25				•	•	•	•	•			36.5	12	4.5		
	32	32				•	•	•	•	•	•		42	13.5	5.5	4	1.7

\*Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	Moment of Inertia (kg·m <sup>2</sup> )	Weight (g)
				Angular (°)	Parallel (mm)	Axial (mm)				
FSMB	12	12	0.5	1.5	0.10	+0.4	100	32000	2.1*10 <sup>-7</sup>	9
	16	16	1			-1.2	150	24000	8.0*10 <sup>-7</sup>	20
	20	20	1.5	2	0.15	+0.6	220	19000	2.3*10 <sup>-6</sup>	37
	25	25	2			-1.8	330	15000	7.0*10 <sup>-6</sup>	73
	32	32	3			+0.8 -2.5	490	12000	2.1*10 <sup>-5</sup>	130

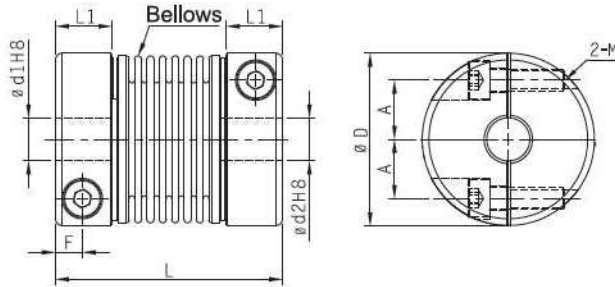
Ordering Example: FAMB25 - 8 - 10 - 100 PCS  
Model no. Ød1 Ød2 Q'ty



FACB



• Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Bellows	C5191	—	

Dimensions	Ød1&Ød2 selection *Ød1 ≤ Ød2										L	L1	F	A	Clamping screw		
	Model No.	ØD	4	5	6	6.35	8	9.525	10	12					14	M	Lock torque (N·m)
FACB	12	12	•	•								23.5	7.5	2.3	4	2	0.5
	16	16	•	•	•	•						26.5	9	3	5	2.5	1
	20	20		•	•	•	•					32	10	3.5	6.5		
	25	25			•	•	•	•	•			36.5	12	4.5	9	3	1.5
	32	32				•	•	•	•	•	•	42	13.5	5	11	4	2.5

\*Moment of inertial torque and weight calculated by maximum diameter.

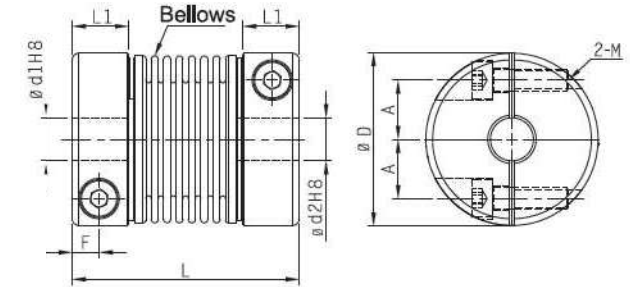
Specification	Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
				Angular (°)	Parallel (mm)	Axial (mm)				
FACB	12	12	0.3	1.5	0.10	+0.4	82	13000	9.7*10 <sup>-6</sup>	4
	16	16	0.5				110	9500	3.7*10 <sup>-7</sup>	10
	20	20	0.8	2	0.15	+0.6	180	7700	1.0*10 <sup>-6</sup>	16
	25	25	1.3				240	6100	3.1*10 <sup>-6</sup>	32
	32	32	2				0.20	+0.8	-2.5	330

Ordering Example: FACB25 - 6 - 8 - 100 PCS  
 (Model no. - Ød1 - Ød2 - Q'ty)

FSCB



• Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Accessories
Main frame	SUS303	Clamping screw
Bellows	SUS316	

Dimensions	Ød1&Ød2 selection *Ød1 ≤ Ød2										L	L1	F	A	Clamping screw		
	Model No.	ØD	4	5	6	6.35	8	9.525	10	12					14	M	Lock torque (N·m)
FSCB	12	12	•	•								23.5	7.5	2.3	4	2	0.5
	16	16	•	•	•	•						26.5	9	3	5	2.5	1
	20	20		•	•	•	•					32	10	3.5	6.5		
	25	25			•	•	•	•	•			36.5	12	4.5	9	3	1.5
	32	32				•	•	•	•	•	•	42	13.5	5	11	4	2.5

\*Moment of inertial torque and weight calculated by maximum diameter.

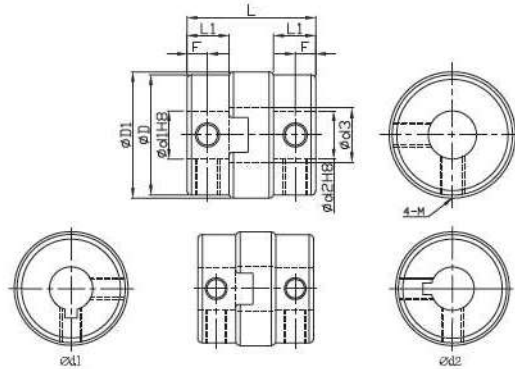
Specification	Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
				Angular (°)	Parallel (mm)	Axial (mm)				
FSCB	12	12	0.5	1.5	0.10	+0.4	100	13000	2.1*10 <sup>-7</sup>	9
	16	16	1				150	9500	8.1*10 <sup>-7</sup>	22
	20	20	1.5	2	0.15	+0.6	220	7700	2.3*10 <sup>-6</sup>	38
	25	25	2				330	6100	6.9*10 <sup>-6</sup>	74
	32	32	3				0.20	+0.8	-2.5	490

Ordering Example: FSCB20 - 6 - 8 - 100 PCS  
 (Model no. - Ød1 - Ød2 - Q'ty)

FSMG



- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Suit for high wrench torque, high rotation.
- In case of parallel deviation over 0.1, abrasion of the Insert is direct ratio to load torque, offset, and rotation numbers.
- Available options for key way per inner diameter is bigger than 6mm. (Refer to page 38)



FSMGLK (key way Ød1 side)  
FSMGRK (key way Ød2 side)  
FSMGWK (key way Ød1 and Ød2 side)

Component	Material	Accessories
Main frame	SUS304 Alloy	Set screw
Spacer	Aluminum bronze (filled with Solid lubricant)	

Model No.	ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2																		ØD	ØD1	Ød3	L	L1	F	Set screw	
		4	5	6	8,35	7	8	8,525	10	11	12	14	15	16	18	20	M	Lock torque (N·m)									
FSMG	15	•	•	•	•	•	•	•											14,5	15	7,2	16	5,4	2,6	4	1,7	
	17		•	•	•	•	•												16,8	17,5	8,2	19,8	6,7	3,2			
	20			•	•	•	•	•	•	•									20	21	9	21,6	7	3,4			
	26			•	•	•	•	•	•	•	•	•							26	27	12	25,6	9	4	5	4,0	
	30				•	•	•	•	•	•	•	•						30	31	14	33	12	6				
	34					•	•	•	•	•	•	•	•	•					34	35	14	34	13	5,5			
	38						•	•	•	•	•	•	•	•	•	•			38	41	17	39,5	15	7			

\*Moment of inertial torque and weight calculated by maximum diameter.

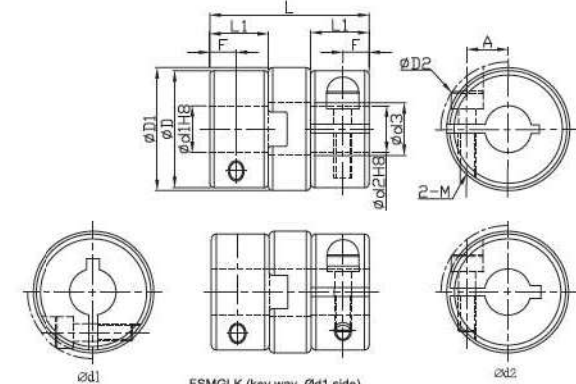
Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
			Angular (°)	Parallel (mm)	Axial (mm)				
FSMG	15	3	1.5	0.5	±0.1	800	8000	4*10 <sup>-6</sup>	15
	17	5		0.5	±0.1	1000	7000	1*10 <sup>-7</sup>	25
	20	7		0.5	±0.1	2200	6000	2*10 <sup>-6</sup>	37
	26	10		0.8	±0.2	4000	5000	6*10 <sup>-6</sup>	79
	30	30		1	±0.3	5500	5000	2,5*10 <sup>-6</sup>	120
	34	32		1	±0.2	8000	4000	4*10 <sup>-6</sup>	180
	38	50		1	±0.3	11000	4000	1*10 <sup>-4</sup>	256

Ordering Example: FSMG26 - 8 - 12 - 100 PCS  
Model no. - Ød1 - Ød2 - Qty

FSCG



- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Suit for high wrench torque, high rotation.
- In case of parallel deviation over 0.1, abrasion of the insert is direct ratio to load torque, offset, and rotation numbers.
- Available options for key way per inner diameter is bigger than 6mm. (Refer to page 38)



FSMGLK (key way Ød1 side)  
FSMGRK (key way Ød2 side)  
FSMGWK (key way Ød1 and Ød2 side)

Component	Material	Accessories
Main frame	SUS304 Alloy	Clamping screw
Spacer	Aluminum bronze (filled with Solid lubricant)	

Model No.	ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2																		ØD	ØD1	ØD2	Ød3	L	L1	A	F	Clamping screw	
		4	5	6	6,35	7	8	8,525	10	11	12	14	15	16	18	20	M	Lock torque (N·m)											
FSCG	15	•	•	•	•															14,5	15	16	7,2	18,4	6,6	4,5	3,2	3	1,8
	17		•	•	•															16,8	17,5	19	8,2	24,4	9	5	4		
	20			•	•	•	•	•	•											20	21	23	9	27,2	10	7	4,5		
	26			•	•	•	•	•	•	•	•									26	27	29	12	30,4	11,5	8,4	5	6	4,5
	30				•	•	•	•	•	•	•	•							30	31	32	14	33	12	9				
	34					•	•	•	•	•	•	•	•	•					34	35	37	17	34	13	11				
	38						•	•	•	•	•	•	•	•	•	•			38	41	41	17	39,5	15	13,7	7			

\*Moment of inertial torque and weight calculated by maximum diameter.

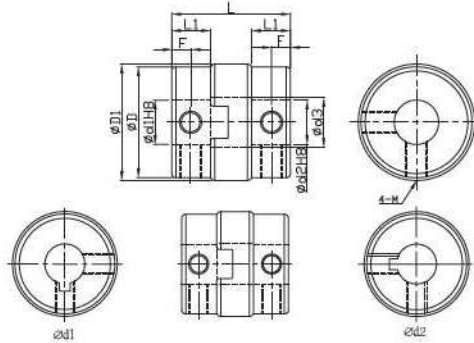
Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment			Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
			Angular (°)	Parallel (mm)	Axial (mm)				
FSCG	15	3	1.5	0.5	±0.1	800	8000	6*10 <sup>-7</sup>	17
	17	5		0.5	±0.1	1000	7000	1,2*10 <sup>-6</sup>	30
	20	7		0.5	±0.1	2200	6000	3*10 <sup>-6</sup>	48
	26	10		0.8	±0.2	4000	5000	1*10 <sup>-5</sup>	90
	30	30		1	±0.3	5500	5000	2,5*10 <sup>-6</sup>	120
	34	32		1	±0.2	8000	4000	4*10 <sup>-6</sup>	172
	38	50		1	±0.3	11000	4000	1*10 <sup>-4</sup>	246

Ordering Example: FSCG26 - 10 - 12 - 100 PCS  
Model no. - Ød1 - Ød2 - Qty

FSMP



- Operating temperature : -40°C~90°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Available options for key way per inner diameter is bigger than 6mm. (Refer to page 38)



\*When Ød1<4 and Ød2>5, there would be 3 set screws.  
\*When Ød1 and Ød2 both smaller than 4, there would be 2 set screws.

FSMGLK (key way Ød1 side)  
FSMGRK (key way Ød2 side)  
FSMGWK (key way Ød1 and Ød2 side)

Component	Material	Accessories
Main frame	SUS304 Alloy	Set screw
Spacer	Carbon resin	

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2																		ØD	ØD1	ØD3	L	L1	F	Set screw						
Model No.	ØD	1	1.5	2	3	4	5	6	6.35	7	8	8.25	10	11	12	14	15	16	18	20							M	Lock torque (N-m)				
FSMP	6	•	•	•																	6	6.2	2.4	8.4	3	1.5	1.5	0.15				
	8	•	•	•	•																8	8.2	3.4	9.6	3.5	1.7						
	10			•	•	•																10	10.2	4.4	10.2	3.7	1.8	2	0.3			
	12			•	•	•	•															12	12.5	4.0	14.2	5.2	2.5					
	15				•	•	•	•	•	•													14.5	15	5.0	16	5.4	2.6	3	0.7		
	17				•	•	•	•	•	•	•												16.8	17.5	7.2	19.8	6.7	3.2				
	20					•	•	•	•	•	•	•	•											20	21	8.2	21.4	7	3.4	4	1.7	
	26						•	•	•	•	•	•	•	•										26	27	12.0	25.6	9	4			
30							•	•	•	•	•	•	•	•										30	31	13.0	33	12	6			
34								•	•	•	•	•	•	•	•										34	35	13.0	34.2	13	5.5	5	4.0
38									•	•	•	•	•	•	•	•									38	41	17.0	40	15	7		

\*Moment of inertial torque and weight calculated by maximum diameter.

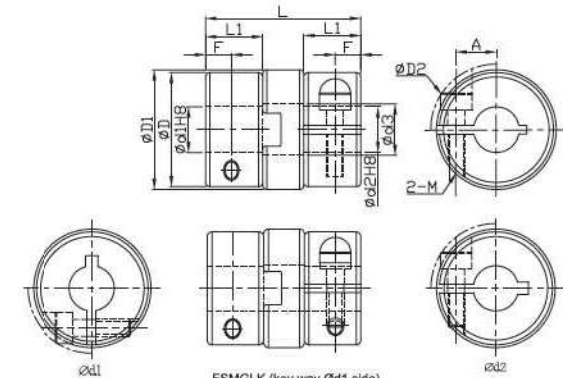
Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment			Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)
		Angular (°)	Parallel (mm)	Axial (mm)				
FSMP	6	0.3	0.3	±0.25	9	12000	1.5*10 <sup>-6</sup>	1.5
	8	0.5						
	10	0.8						
	12	1	0.5	±0.35	44	10000	1.6*10 <sup>-7</sup>	8
	15	1.6						
	17	2.2	1	±0.55	250	8000	1.7*10 <sup>-6</sup>	29
	20	3.2						
	26	6	2	±0.6	340	6500	6.2*10 <sup>-6</sup>	65
	30	15						
	34	16	2.5		1200	6200	2*10 <sup>-6</sup>	100
38	28							
				2400	6000	2.5*10 <sup>-6</sup>	155	
				3500	5800	8*10 <sup>-6</sup>	240	

Ordering Example: FSMP26 - 8 - 10 - 100 PCS  
Model no. Ød1 Ød2 Qty

FSCP



- Operating temperature : -40°C~90°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- FSCP lock torque of clamping screw is 5.4 (N · m) based on shaft dia (Ød1, Ød2) over Ø16.
- Available options for key way per inner diameter is bigger than 6mm. (Refer to page 38)



FSMGLK (key way Ød1 side)  
FSMGRK (key way Ød2 side)  
FSMGWK (key way Ød1 and Ød2 side)

Component	Material	Accessories
Main frame	SUS304 Alloy	Clamping screw
Spacer	Carbon resin	

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2																		ØD	ØD1	ØD2	ØD3	L	L1	A	F	Clamping screw											
Model No.	ØD	4	5	6	6.35	7	8	8.25	10	11	12	14	15	16	18	20											M	Lock torque (N-m)											
FSCP	15	•	•	•																									14.5	15	16	5.0	18.4	6.6	4.5	3.2	2.5	1.0	
	17		•	•	•																									16.8	17.5	19	7.2	24.4	9	5	4		
	20			•	•	•	•	•	•																					20	21	23	8.2	27.2	10	7	4.5		
	26				•	•	•	•	•	•	•																			26	27	29	12	30.4	11.5	8.4	5	4	3.0
	30					•	•	•	•	•	•	•																		30	31	32	13	33	12	9			
	34						•	•	•	•	•	•	•	•																34	35	37	13	34	13	11			
38									•	•	•	•	•	•	•	•													38	41	41	17	40	15	13.7	7			

\*Moment of inertial torque and weight calculated by maximum diameter.

Specification	Allowable Wrench Torque (N-m)	Allowable Misalignment			Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)
		Angular (°)	Parallel (mm)	Axial (mm)				
FSCP	15	1.6	0.8	±0.45	90	10000	5.0*10 <sup>-7</sup>	15
	17	2.2						
	20	3.2						
	26	6	1.5	±0.55	250	8000	2.4*10 <sup>-6</sup>	40
	30	15						
	34	16	2	±0.6	340	6500	8.0*10 <sup>-6</sup>	85
	38	18						
					1200	6200	2.0*10 <sup>-6</sup>	100
				2400	6000	2.5*10 <sup>-6</sup>	155	
				3500	5800	8.0*10 <sup>-6</sup>	240	

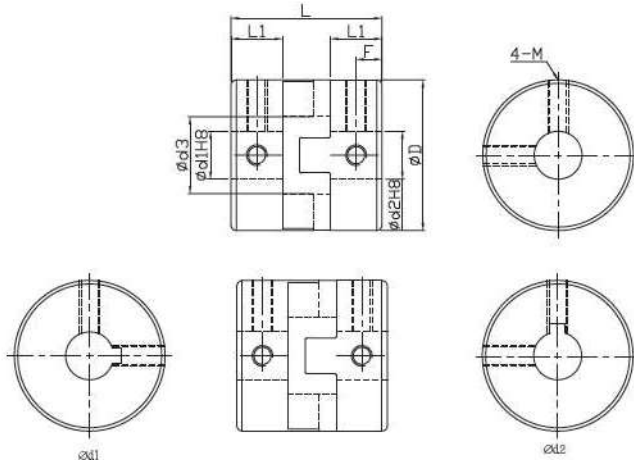
©FSMP&FSCP spacer selection, please refer to P.42

Ordering Example: FSCP26 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Qty

FAMJ



- Operating temperature : -20°C~80°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Available options for key way per inner diameter is bigger than 6mm. (Refer to page 39)



FAMJLK (key way Ød1 side)  
FAMJRK (key way Ød2 side)  
FAMJWK (key way Ød1 and Ød2 side)

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Set screw
Spacer	Black (POM)	—	

Model No.	ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2												Ød3	L	L1	F	Set screw	
		14	15	16	18	20	22	25	26	28	30	35	38					M	Lock torque (N·m)
FAMJ	44	•	•	•	•	•	•							22.5	46	15	7.5	6	7.0
	55				•	•	•	•						28	57	19	9.5	8	15.0
	70						•	•		•	•			39	77	25	12.5	10	30.0

\*Moment of inertial torque and weight calculated by maximum diameter.

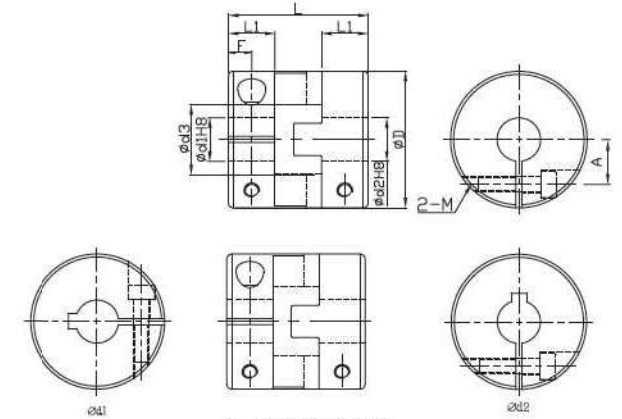
Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment		Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
			Angular (°)	Parallel (mm)				
FAMJ	44	30	2	1	1500	12000	4*10 <sup>-6</sup>	140
	55	45		1.5	2800	10000	11*10 <sup>-6</sup>	260
	70	80		2	4800	8000	40*10 <sup>-6</sup>	450

Ordering Example: FAMJ44 - 16 - 22 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACJ



- Operating temperature : -20°C~80°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Select bigger lock torque of clamping screw than listed values in catalogs when shaft diameter is too small.
- List torque tightness values are only for general standard.
- Available options for key way per inner diameter is bigger than 6mm. (Refer to page 39)



FACJLK (key way Ød1 side)  
FACJRK (key way Ød2 side)  
FACJWK (key way Ød1 and Ød2 side)

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Spacer	Black (POM)	—	

Model No.	ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2												Ød3	L	L1	F	A	Clamping screw	
		14	15	16	18	20	22	25	28	30	35	M	Lock torque (N·m)							
FACJ	44	•	•	•	•	•								22.5	46	15	7.5	14.5	5	*8.4
	55				•	•	•	•						28	57	19	9.5	17	6	*14.4
	70						•	•	•	•				39	77	25	12.5	24	8	*30.0

\*Moment of inertial torque and weight calculated by maximum diameter.

Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment		Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	* Weight (g)
			Angular (°)	Parallel (mm)				
FACJ	44	26	2	1	1500	12000	4*10 <sup>-6</sup>	140
	55	40		1.5	2800	10000	11*10 <sup>-6</sup>	260
	70	72		2	4800	8000	40*10 <sup>-6</sup>	450

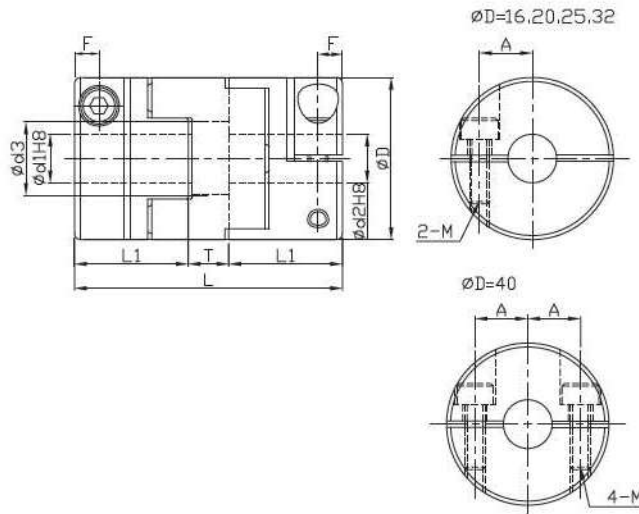
©FAMJ&FACJ spacer selection, please refer to P.43

Ordering Example: FACJ44 - 16 - 18 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FACPL



- Operating temperature : -20°C~80°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Spacer	(POM)	—	

Model No.	ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2														Ød3	L	L1	T	F	A	Clamping screw		
		4	5	6	6.35	7	8	9.525	10	11	12	14	15	16	M							Lock torque (N·m)		
FACPL	16	•	•	•													7	29	13	3	3	5	2.5	1
	20		•	•	•	•											9	33	14	5	3	6.5		
	25			•	•	•	•	•									11	39	17	5	3.8	9	3	1.5
	32				•	•	•	•	•	•	•						14.5	45	19	7	4.5	11	4	2.5
	40						•	•	•	•	•	•	•				17	50	23	4	7	13	5	4

\*Moment of inertial torque and weight calculated by maximum diameter.

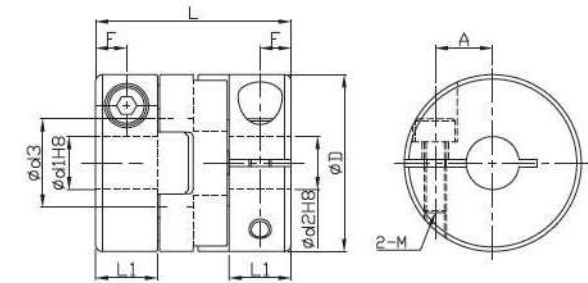
Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment		Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>1/2</sup> )	★ Moment of Inertia (kg·m <sup>2</sup> )	★ Weight (g)
			Angular (°)	Parallel (mm)				
FACPL	16	0.7	3	1.0	31	9500	5.8*10 <sup>-7</sup>	12
	20	1.2		1.5	60	7600	1.5*10 <sup>-6</sup>	19
	25	2		2.0	140	6100	4.4*10 <sup>-5</sup>	36
	32	4.5		2.5	280	4800	1.4*10 <sup>-5</sup>	69
	40	9		3.0	540	3800	4.1*10 <sup>-5</sup>	130

Ordering Example: FACPL16 - 8 - 10 - 100 PCS  
(Model no., Ød1, Ød2, Qty)

FACPS



- Operating temperature : -20°C~80°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	AL 7075	Anodized	Clamping screw
Spacer	(POM)	—	

Model No.	ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2												Ød3	L	L1	F	A	Clamping screw			
		3	4	5	6	6.35	7	8	9.525	10	11	12	14						M	Lock torque (N·m)		
FACPS	12	•	•	•												6	14.9	5	2.5	4	2	0.5
	16	•	•	•	•											8	21	7	3.5	5	2.5	1
	20		•	•	•	•	•									10	22		6.5	6.5		
	25				•	•	•	•	•							14	27.2	8	4	9	3	1.5
	32					•	•	•	•	•	•	•	•			18	33.3	10	5	11	4	2.5

\*Moment of inertial torque and weight calculated by maximum diameter.

Model No.	ØD	Allowable Wrench Torque (N·m)	Allowable Misalignment		Static Torsional Stiffness (N·m/rad)	Max. RPM (r/min <sup>1/2</sup> )	★ Moment of Inertia (kg·m <sup>2</sup> )	★ Weight (g)
			Angular (°)	Parallel (mm)				
FACPS	12	0.2	2	0.6	9	13000	7.1*10 <sup>-8</sup>	3
	16	0.4		1.0	30	9500	3*10 <sup>-7</sup>	8
	20	0.7		1.3	47	7600	7.4*10 <sup>-7</sup>	13
	25	1.2		1.5	85	6100	2.2*10 <sup>-6</sup>	24
	32	2.8		2.0	190	4800	7.3*10 <sup>-6</sup>	48

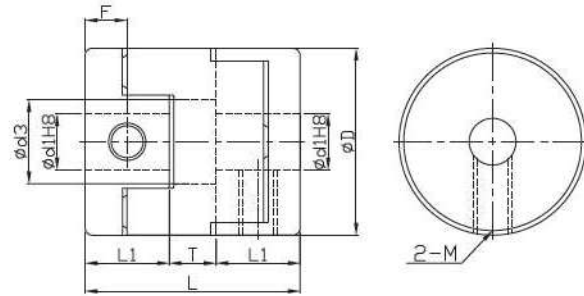
© FACPL&FACPS spacer selection, please refer to P.44

Ordering Example: FACPS25 - 8 - 10 - 100 PCS  
(Model no., Ød1, Ød2, Qty)

FAMN



- Operating temperature : -20°C~80°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Set screw
Spacer	(POM)	—	

Dimensions	Ød1&Ød2 selection *Ød1 ≤ Ød2													Set screw									
	Model No.	ØD	3	4	5	6	8,35	7	8	9,525	10	11	12	14	15	16	Ød3	L	L1	T	F	M	Lock torque (N-m)
FAMN	16	16	•	•	•	•	•										7	18	7	4	3.5	3	0.7
	20	20		•	•	•	•	•									9	23	9	5	4.5	4	1.7
	25	25			•	•	•	•	•								11	28	11	6	5.5	5	4
	32	32						•	•	•	•	•	•				14.5	33	13	7	6.5	6	7
	40	40							•	•	•	•	•	•	•	•	17	32	14	4	7		

\*Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque (N-m)	Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>2</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)
				Angular (°)	Parallel (mm)				
FAMN	16	16	0.7	3	1.0	31	9500	3.2*10 <sup>-7</sup>	7
	20	20	1.2		1.5	60	7600	1.0*10 <sup>-6</sup>	14
	25	25	2		2.0	140	6100	3.0*10 <sup>-6</sup>	27
	32	32	4.5		2.5	280	4800	9.5*10 <sup>-6</sup>	50
	40	40	9		3.0	540	3800	2.3*10 <sup>-5</sup>	80

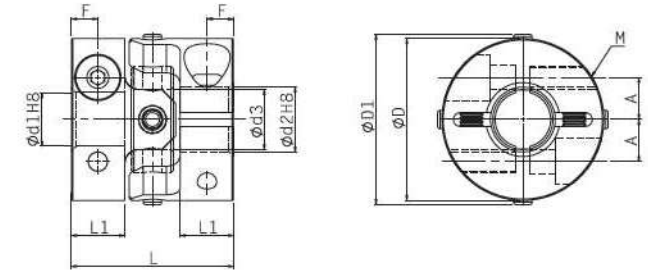
\*FAMN spacer selection, please refer to P.44

Ordering Example: FAMN25 - 6 - 8 - 100 PCS  
Model no. - Ød1 - Ød2 - Q'ty

FACU



- Offset of angular, parallel, or axial deviation are individual value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Suitable applied for high torque rigidity and low vibration needs.



Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Spacer	Aluminum Alloy	Anodized	
Pin	SUJ-2	—	
Bearing	Aluminum + Teflon	—	

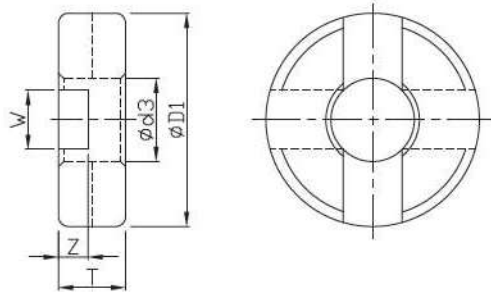
Dimensions	Ød1&Ød2 selection *Ød1 ≤ Ød2																	Clamping screw							
	Model No.	ØD	3	4	5	6	8	10	11	12	14	15	16	18	19	20	ØD	ØD1	Ød3	L	L1	A	F	M	Lock torque (N-m)
FACU	15	15	•	•	•	•											15	16	4	18	6	5.2	2.5	M2	0.5
	20	20		•	•	•	•										20	22	7	20	7	6.5	2.7	M2	0.5
	25	25			•	•	•	•	•								25	27	10	27	9	9	3.5	M2.5	1
	30	30				•	•	•	•	•							30	32	10	30	9.5	10.5	4	M3	1.5
	35	35					•	•	•	•	•	•					35	37	13	35	11.5	12.5	5	M4	2.5
	40	40						•	•	•	•	•	•	•	•	•	40	42	15	40	12.5	15	5.5	M4	2.5

\*Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque		Allowable Misalignment		Static Torsional Stiffness (N-m/rad)	Max. RPM (r/min <sup>2</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)
			Rated torque (N-m)	Max. torque (N-m)	Angular (°)	Parallel (mm)				
FACU	15	15	0.3	0.6	1	0.2	200	42000	2.3*10 <sup>-7</sup>	8
	20	20	0.6	1.2			400	31000	8.1*10 <sup>-6</sup>	16
	25	25	1.2	2.4			900	25000	2.7*10 <sup>-5</sup>	33
	30	30	2.4	4.8			1300	21000	6.2*10 <sup>-5</sup>	53
	35	35	4	8			2200	18000	1.3*10 <sup>-4</sup>	81
	40	40	6	12			2300	4000	2.6*10 <sup>-4</sup>	120

Ordering Example: FACU25 - 10 - 12 - 100 PCS  
Model no. - Ød1 - Ød2 - Q'ty

FS-PC



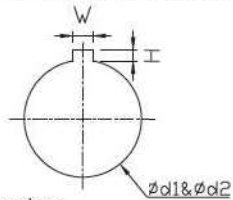
◆ Spacer

Material : carbon resin

Model No.	Dimensions		T	Ød3	W	Z	Coupling
	ØD	ØD1					
FS-PC	6	6.2	2.2	2.4	1.3	1.3	FSMP6
	8	8.2	2.4	3.4	1.6	1.5	FSMP8
	10	10.2	2.6	4.4	1.6	1.6	FSMP10
	12	12.5	3.8	4.0	3	1.8	FSMP12
	15	15	4.8	5.0	3.4	2.3	FSMP15 FSCP15
	17	17.5	6	7.2	4.6	2.9	FSMP17 FSCP17
	20	21	6.6	8.2	5.8	3.2	FSMP20 FSCP20
	26	27	7	12.0	7	4	FSMP26 FSCP26
	30	31	8.5	13.0	7	4	FSMP30 FSCP30
34	35	7	13.0	7	4	FSMP34 FSCP34	
38	41	9.5	16.0	7	4	FSMP38 FSCP38	

◆ W dimension is made in strict standard, and inter-inlaid adjustment,

Ordering Example: FS-PC 26  
Model no. ØD

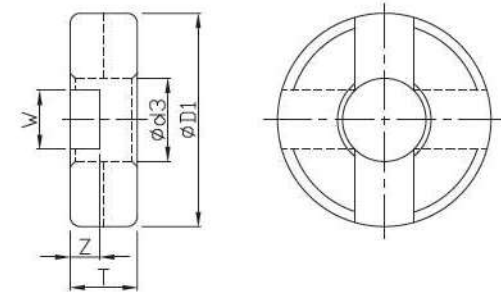


◆ Key way dimensions

(Reference for FSMG, FSCG, FSMP, FSCP)

Shaft dia. Ød1 □ Ød2	w		H		Key dimensions W*H
	Datum dimension	Allowable Tolerance	Datum dimension	Allowable tolerance	
6~7.9	2	±0.0125	1.0	+0.1 0	2*2
8~10	3		1.4		3*3
10.1~12	4		1.8		4*4
12.1~17	5	±0.0150	2.3		5*5
17.1~20	6		2.8		6*6

FS-PP

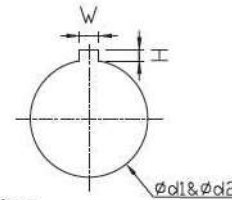


◆ Spacer

Material : Polyacetal (POM)

Model No.	Dimensions		T	Ød3	W	Z	Coupling
	ØD	ØD1					
FS-PP	44	44.3	14	22.5	10.4	9	FAMJ44 FACJ44
	55	55	17	28	13	11	FAMJ55 FACJ55
	70	69	25	39	15	16.5	FAMJ70 FACJ70

Ordering Example: FS-PP 44  
Model no. ØD

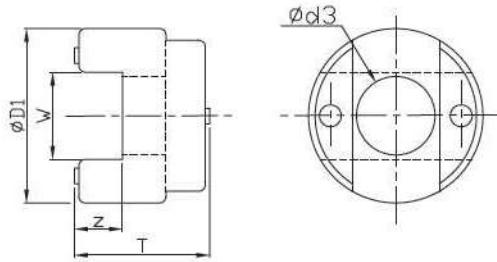


◆ Key way dimensions

(Reference for FAMJ, FACJ)

Shaft dia. Ød1 □ Ød2	w		H		Key dimensions W*H
	Datum dimension	Allowable tolerance	Datum dimension	Allowable tolerance	
14~17	5	±0.0150	2.3	+0.1	5*5
17.1~22	6		2.8	0	6*6
22.1~30	8		±0.0180	3.3	+0.2
30.1~38	10	0			10*8

FA-PB



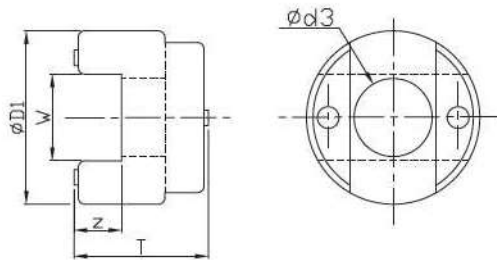
◆ Spacer

Material : Polyacetal (POM)

Dimensions		ØD1	T	Ød3	W	Z	Coupling
Model No.	ØD						
FA-PB	16	16	12	7	8	4.5	FAMN16 FACPL16
	20	20	15	9	10	5.5	FAMN20 FACPL20
	25	25	18	11	12	6.5	FAMN25 FACPL25
	32	32	21	14.5	15	7.5	FAMN32 FACPL32
	40	40	18	17	19	7.5	FAMN40 FACPL40

Ordering Example: FA-PB 32  
Model no. ØD

FA-PG



◆ Spacer

Material : Polyacetal (POM)

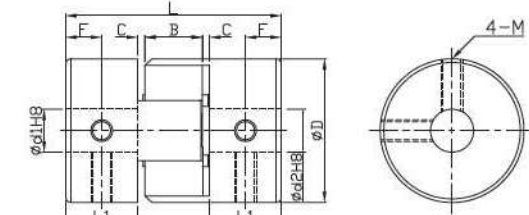
Dimensions		ØD1	T	Ød3	W	Z	Coupling
Model No.	ØD						
FA-PG	12	12	4.9	6	4	2.5	FACPS12
	16	16	7	8	5	3.5	FACPS16
	20	20	8	10	7	4	FACPS20
	25	25	11.2	14	9	5.5	FACPS25
	32	32	13.3	18	10	6.5	FACPS32

Ordering Example: FA-PG 32  
Model no. ØD

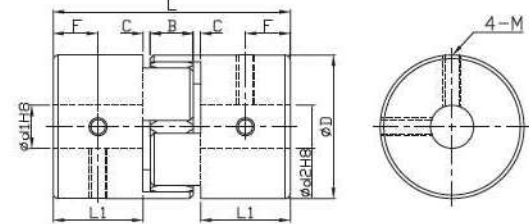
FAME



- Operating temperature : -20°C~60°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



FAME ØD=14.20.30



FAME ØD=40

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Set screw
Spider	Urethane(PU)	—	

\* Dimension "C", must be previously reserved while assembly by users, otherwise it would affect allowed deflection, accelerating shaft and coupling damage.

Dimensions	Spider (color selection)	Ød1&Ød2 selection *Ød1 ≤ Ød2														L		L1		B		C		F		Set screw	
		3	4	5	6	6.35	7	8	9.525	10	11	12	14	15	16	M	Lock torque (N-m)										
FAME	14 B (Blue)	•	•	•	•											22	7	6		3.5	3	0.7					
	20 W (White)			•	•	•	•									30	10	8	1	5	4	1.7					
	30					•	•	•	•	•	•	•	•	•		35	11	10	1.5	5.5	4	1.7					
	40 R (Red)								•	•	•	•	•	•	•	66	25	12	2	12.5	5	4					

\* Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque (N-m)				Allowable Misalignment						Static Torsional Stiffness (N-m/rad)			Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	* Weight (g)					
			Angular (°)				Parallel (mm)			Axial (mm)	B			W	R								
			B	W	R		B	W	R		B	W	R										
FAME	14	0.7	1.2	2	1.0	0.10	0.5	0.10	+0.6 0	8	14	22	27000	2.1*10 <sup>-7</sup>	7.3								
	20	1.8	3	5			0.20	0.15		+0.8 0	18	29				55	19000	1.0*10 <sup>-6</sup>	18				
	30	4	7.5	12.5			0.20	0.15			+1.0 0	46				73				130	13000	5.9*10 <sup>-6</sup>	46
	40	4.9	10	17			0.5	0.10				+1.2 0				380				570			

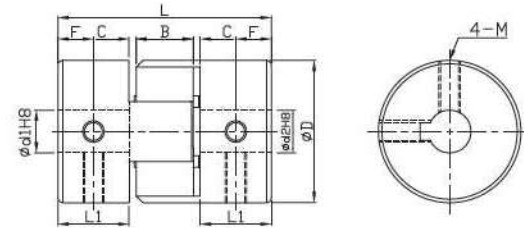
Ordering Example: FAME30 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Qty



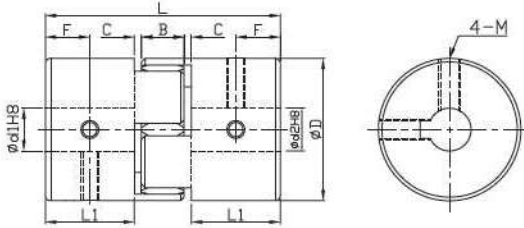
FAMK



- Operating temperature : -20°C~60°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



FAMK ØD=30



FAMK ØD=40

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Set screw
Spider	Urethane(PU)	—	

★ Dimension "C", must be previously reserved while assembly by users, otherwise it would affect allowed deflection, accelerating shaft and coupling damage.

Dimensions		Spider (color selection)	Ød1&Ød2 selection *Ød1 ≤ Ød2					L	L1	B	C	F	Set screw	
Model No.	ØD		10	11	12	14	15						16	M
FAMK	30	B (Blue)	•	•	•	•		35	11	10	1.5	5.5	4	1.7
		W (White)												
	40	R (Red)	•	•	•	•	•	66	25	12	2	12.5	5	4

★Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque (N-m)			Allowable Misalignment			Static Torsional Stiffness (N-m/rad)			Max. RPM (r/min <sup>-1</sup> )	★ Moment of Inertia (kg-m <sup>2</sup> )	★ Weight (g)	
			B	W	R	Angular (°)	Parallel (mm)		Axial (mm)	B	W				R
FAMK	30	4	7.5	12.5	1.0	0.20	0.15	0.10	+1,00 0	46	73	130	5100	5.8*10 <sup>-4</sup>	45
FAMK	40	4.9	10	17	1.0	0.15	0.10	0.10	+1,20 0	380	570	1200	3800	3.8*10 <sup>-5</sup>	150

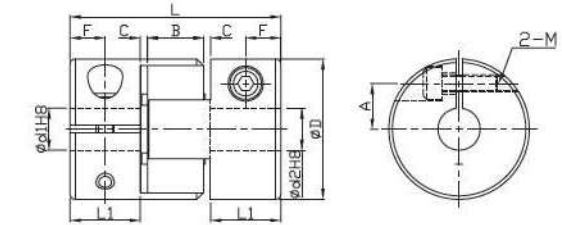
©FAME&FAMK spider selection and installation remark please refer to P.51

Ordering Example: FAMK30 - 12 - 14 - 100 PCS  
Model no. Ød1 Ød2 Qty

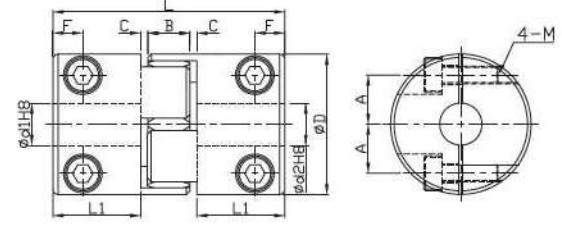
FACE



- Operating temperature : -20°C~60°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.



FACE ØD=14.20.30



FACE ØD=40

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Spider	Urethane(PU)	—	

★ Dimension "C", must be previously reserved while assembly by users, otherwise it would affect allowed deflection, accelerating shaft and coupling damage.

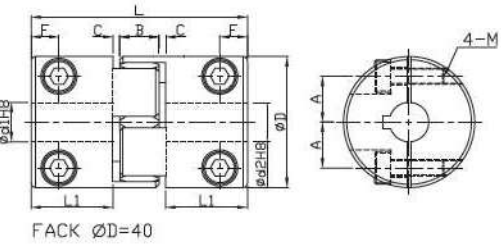
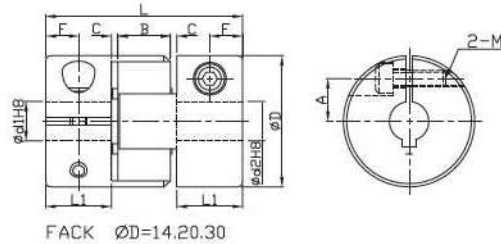
Dimensions		Spider (color selection)	Ød1&Ød2 selection *Ød1 ≤ Ød2													L	L1	B	C	F	A	Clamping screw			
Model No.	ØD		3	4	5	6	6.35	7	8	9.525	10	11	12	14	15							16	M	Lock torque (Nm)	
FACE	14	B (Blue)	•	•	•												22	7	6	1	3.5	4	2	0.5	
	20	W (White)				•	•	•	•	•								30	10	8		5	6.5	2.5	1
	30								•	•	•	•	•	•				35	11	10	1.5	5.5	10	4	2.5
	40	R (Red)																66	25	12	2	8.5	14	5	4

★Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque (N-m)			Allowable Misalignment			Static Torsional Stiffness (N-m/rad)			Max. RPM (r/min <sup>-1</sup> )	★ Moment of Inertia (kg-m <sup>2</sup> )	★ Weight (g)																				
			B	W	R	Angular (°)	Parallel (mm)		Axial (mm)	B	W				R																			
FACE	14	0.7	1.2	2	1.0	0.15	0.10	0.10	+0.6 0	8	14	22	11000	1.6*10 <sup>-7</sup>	6																			
																1.0	0.20	0.15	+0.8 0	16	29	55	7600	1.1*10 <sup>-6</sup>	19									
																										0.20	0.15	+1.0 0	46	73	130	5100	6.2*10 <sup>-5</sup>	50

Ordering Example: FACE14 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Qty

**FA CK**



- Operating temperature : -20°C~60°C
- Offset, deflection, shaft deviation are individual allowed values, so axial offsets in all reasons appearing at same time would reduce values.

Component	Material	Surface Finish	Accessories
Main frame	Aluminum Alloy	Anodized	Clamping screw
Spider	Urethane(PU)	—	

★ Dimension "C", must be previously reserved while assembly by users, otherwise it would affect allowed deflection, accelerating shaft and coupling damage.

Dimensions		Spider (color selection)	Ød1&Ød2 selection *Ød1 ≤ Ød2					L	L1	B	C	F	A	Clamping screw	
Model No.	ØD		10	11	12	14	15							16	M
FA CK	30	B (Blue)	•	•	•			35	11	10	1.5	5.5	10	4	2.5
	40	W (White) R (Red)	•	•	•	•	•	66	25	12	2	8.5	14	5	4

★ Moment of inertial torque and weight calculated by maximum diameter.

Specification	Model No.	ØD	Allowable Wrench Torque (N·m)			Allowable Misalignment			Static Torsional Stiffness (N·m/rad)			Max. RPM (r/min <sup>-1</sup> )	★ Moment of Inertia (kg·m <sup>2</sup> )	★ Weight (g)		
			B	W	R	Angular (°)	Parallel (mm)		Axial (mm)	B	W				R	
			4	7.5	12.5		B	W								R
FA CK	30	40	4	7.5	12.5	1.0	0.20	0.15	0.10	+1.0 0	46	73	130	5100	4.2*10 <sup>-6</sup>	50
			4.9	10	17		0.15	0.10			+1.2 0	380	570			

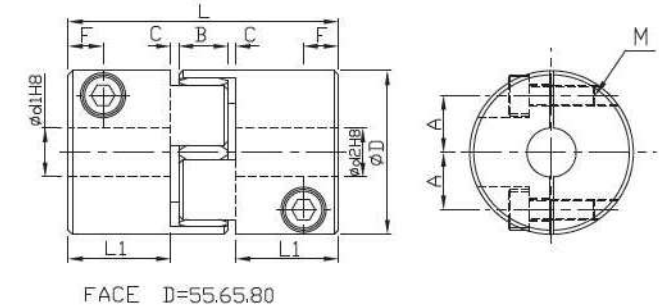
©FACE&FA CK spider selection and installation remark please refer to P.51

Ordering Example: FACK30 - 10 - 12 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

**FACE**



- Operating temperature : -20°C~90°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the UK allowable value.
- Key way available on request per indicated as LK(Ød1 bore), RK(Ød2 bore), WK(Ød1,Ød2 bore)



Component	Material	Surface Finish	Accessories
Main frame	AL6061T651	Anodized	Clamping
Spider	Urethane(PU)	—	

Key way Ød1 . Ød2	W		H		Key way dimension W□
	Dimension	Allowable tolerance	Dimension	Allowable tolerance	
6~7	2	±0.015	1.0	±0,1	2*2
8~10	3		1.4		3*3
11~12	4		1.8		4*4
13~16	5	±0.02	2,3		5*5
18~22	6		2,8		6*6
24~30	8	±0.025	3,3		8*8
32~42	10		3,3	10*10	

Size	Spider Elastic strength (Color)	Ød1&Ød2 options * Ød1 ≤ Ød2						L	L1	B	C	F	A	Clamping screw		
		16	20	24	32	35	40							42	M	Lock Torque (N·m)
FACE	55	•	•	•				78	30	14	2	10.5	20	M6	10.5	
	65	92sh A(W) 98sh A(R)	•	•	•	•	•		90	35	15	2.5	11.5	25	M8	25
	80	•	•	•	•	•	•		114	45	18	3	15.5	25	M8	30

★ Moment of inertial torque and weight calculated by maximum diameter.

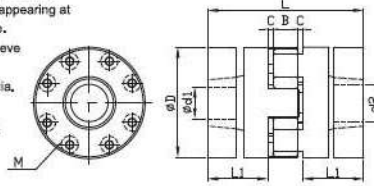
Specifications		Allowable Torque (N·m)		Allowable Angle Misalignment	Allowable Parallel Misalignment (mm)		Allowable Axial Misalignment (mm)	Static torsional stiffness (N·m/rad)		Max. RPM (r/min <sup>-1</sup> )	Moment of inertia (kg·m)	Weight (g)
Model	ØD	R	W		R	W		R	W			
FACE	55	60	35	0.9°	0.1	0.1	1.2	2600	1600	8650	1.6*10 <sup>4</sup>	330
	65	160	95				1.2	4900	3000	7350	3.8*10 <sup>4</sup>	560
	80	325	190				1.2	6500	5300	5950	1.0*10 <sup>3</sup>	560

Ordering Example: FACE65 - 24 - 55 - 100 PCS  
Model no. Ød1 Ød2 Q'ty

FASE



- Operating temperature : -20°C-90°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Zero backlash and high precision expansion sleeve design.
- Aluminum sleeve, light and low rotatory inertia.
- Tightened axle to have high friction torque.
- Stable rotation in maximum speed to 40m/s.



Component	Material	Surface finished	Accessories
Main frame	Aluminum	Anodized	Clamping
Spider	Urethane(PU)	-	

Size	Spider Elastic strength (Color)	ØDd1&Ød2 Options *Ød1 ≤ Ød2								L	L1	B	C	Cinch Bolt	
		16	20	24	26	28	29	32	36					38	M
FASE FCSE	55	●	●	●						78	30	14	2	M5	6
	65				●	●	●	●	●	90	35	15	2.5	M5	7
	80				●	●	●	●	●	114	45	18	3	M6	12
	95				●	●	●	●	●	126	50	20	3	M8	30

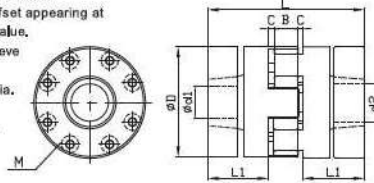
\* Moment of inertial torque and weight calculated by maximum diameter.

Specifications	Allowable Torque (N·m)		Allowable Angle Misalignment	Allowable Parallel Misalignment (mm)		Allowable Axial Misalignment (mm)	Static Torsional Stiffness (N·m/rad)		Max. RPM (r/min)	Moment of Inertia (kg·m)	Weight (g)	
	R	W		R	W		R	W				
FASE	55	60	35	0.9°	0.1	0.1	1.2	2600	1600	8650	0.78*10 <sup>-4</sup>	162
	65	160	95				1.2	2600	1600	7350	1.70*10 <sup>-4</sup>	240
	80	325	190				1.2	4900	3000	5950	5.17*10 <sup>-4</sup>	490
	95	450	265				1.2	2600	1600	5000	11.7*10 <sup>-4</sup>	772

FCSE



- Operating temperature : -20°C-90°C
- Offset of angular, parallel, or axial deviation are individual allowed value, so couple reasons of axial offset appearing at same time would reduce the unit allowable value.
- Zero backlash and high precision expansion sleeve design.
- Aluminum sleeve, light and low rotatory inertia.
- Tightened axle to have high friction torque.
- Stable rotation in maximum speed to 40m/s.

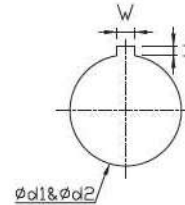


Component	Material	Surface finished	Accessories
Main frame	Mid-carbon steel	Black dyed	Clamping screw
Spider	Urethane(PU)	-	

Specifications	Allowable Torque (N·m)		Allowable Angle Misalignment	Allowable Parallel Misalignment (mm)		Allowable Axial Misalignment (mm)	Static Torsional Stiffness (N·m/rad)		Max. RPM (r/min)	Moment of Inertia (kg·m)	Weight (g)	
	R	W		R	W		R	W				
FCSE	55	60	35	0.9°	0.1	0.1	1.2	2600	1600	6950	1.91*10 <sup>-4</sup>	399
	65	160	95				1.2	2600	1600	5850	4.18*10 <sup>-4</sup>	592
	80	325	190				1.2	4900	3000	4758	12.9*10 <sup>-4</sup>	1225
	95	450	265				1.2	2600	1600	4000	31.7*10 <sup>-4</sup>	2300

Ordering Example: FCSE80 - 28 36 - 100 PCS  
Model no. Ød1 Ød2 Qty

Key way dimensions



Shaft dia. Ød1 □ Ød2	W		H		Key dimensions W*H
	Datum dimension	Allowable tolerance	Datum dimension	Allowable tolerance	
10 · 11 · 12	4	±0,0150	1,8	+0,1	4*4
14 · 15 · 16	5		2.3	0	5*5

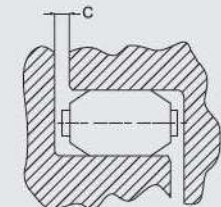
Jaw Spider

Model No.	ØD	Coupling	Shape diagram	Colour	Hardness JIS A (Shore A standard)
FS-B FS-W FS-R	14	FAME14 FACE14		B=Blue W=White R=Red	B=80 W=92 R=98
	20	FAME20 FACE20			
	30	FAME30 FACE30 FAMK30 FACK30			
	40	FAME40 FACE40 FAMK40 FACK40			

Model No.	ØD	Coupling	Shape diagram	Colour	Hardness JIS A (Shore A standard)	Remark
FS-W FS-R	55	FACE		W=White R=Red	92 shA 98 shA	Spider colour might be green base on same hardness
	65					
	80					
	55	FASE				
	65					
	80					
	55	FCSE				
	65					
	80					
95						

Ordering Example: FS-W 30 Model no. ØD

- Spiders are available used for set screw type and clamping type.
- Larger hardness has better sensibility in angular transmission. Smaller hardness has better vibration absorbability.
- Additional remark of installation of Flexible couplings integrated with Jaw Spiders : Flexible couplings (integrated with Jaw Spiders), model number FAME, FAMK, FACE, FACK series need to reserve "C" dimension while assembling. This would ensure coupling the function and usage life of Jaw Spiders, as well as keeping isolation feature of the coupling.



### Polyacetal plastic(POM)

Polyacetal(Abbr. POM), also called Plastic steel.

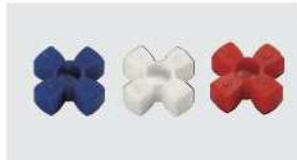
**POM character** : Polyoxymethylene is a kind of thermal plasticity polymer, having good physical, mechanical and chemical functions. It has high hardness, rigidity in very wide range of temperature. Secondly, resisted strength, fatigue resistance, creep resistance are excellent as well, especially outstanding dimension stability and durability; besides, polyoxymethylene has advantages of small friction factor, good durability, dispensable lubricant, good organic solvent-resistance, low absorbent ability etc... Long-term using in the range of -40~104°C. In addition, polyoxymethylene has better corrosion resistance.



### Urethane(PU)

PU glue is also called polyurethane

Polyurethane application is kind of flexible polymer, used as elastic resilience and damping in shock absorber. Generally, polyurethane suits for terrains with collision from small to medium level most, and adjustable polyurethane makes perfect effect. Urethane glue is water-resistant, abrasion-resist, high mechanism strength, and product hardness adjusted by purposes, high elasticity, good shock absorbability, no hurting machine tools, a excellent anti-collision material.



### Highly wear-resisting copper alloy

Highly wear-resisting copper alloy(aluminum bronze(C6161))

High tensile-resist strength, wear-resistance, and offer various extruded materials, forged materials, centrifugal rolls, and applied to gear, bearing, bushing, slide panel, plastic mould, electrode heads....etc.



### Character chart for plastic material

Material	Specific gravity	Thermal distortion temperature	Flammability	Feature		Purpose
				Advantage	Defect	
POM	1.14 ~ 1.43	Homopolymer	Flammable	1. Tough & flexible	1. Low anti-ultraviolet	1. Parts in industry load
				2. CLIP character - excellent fatigue resistance	2. Heat dissolution and formaldehyde gas produced	2. Automobile - electric parts
				3. Self-lubricity, low abrasion-resistance	3. Low anti-acid	3. Toy parts
				4. Drug tolerance		4. Substitute for metal
				5. Good heat-resistance		
PU	1.11 ~ 1.24	Softening point	Flammable	1. Good abrasion-resistance	1. Softness in low level - easily stuck while demolding and shock.	1. Shoes and sports utilities
				2. Climate-resistant and low temperature-resistant (-50°C-60°C)	2. Long dried time for materials	2. Shock absorb, noise elimination, bushing
				3. anti-oxygen, ozone aging characters		3. Grip and grasp with soft-touch feeling
				4. Good tensile rate of bending strength		
				5. Adjustable toughness		

### Remark of plastic spacer corresponding to environment temperature.

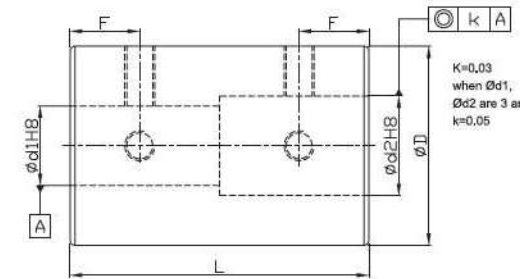
Plastic spacer series include rubber or plastic parts. These model no. must be used in operating temperature range indicated on our catalogs. If temperature over 30°C, max. torque and allowable torque shall be corrected by factors as listed below.

Environment temperature	Corrective factor
-20°C ~ 30°C	1.00
30°C ~ 40°C	0.80
40°C ~ 60°C	0.70
60°C ~ 100°C	0.55

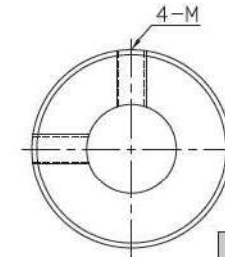
### RAM



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.



\*When Ød1 < 4 and Ød2 > 5, there would be 3 set screws.  
\*When Ød1 and Ød2 both smaller than 4, there would be 2 set screws.



Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Set screw

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2												L	F	M Rough thread		
Model No.	ØD	3	4	5	6	8	10	11	12	14	15	16	18				20	
RAM	16	•	•	•	•											24	6	3
	20			•	•	•	•									30	7	
	25					•	•	•	•							36	9	4
	32								•	•	•	•			41	10		
	40										•	•	•	•	44	10.5	5	

\*Moment of inertial torque and weight calculated by maximum diameter.

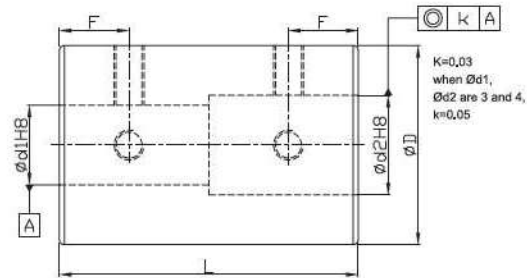
Specification		Allowable Wrench Torque (N·m)	Max. RPM (r/min)	Moment of Inertia (kg·m <sup>2</sup> )	Screw Fixing Torque (N·m)	Weight (g)
Model No.	ØD					
RAM	16	0.3	24000	4.4*10 <sup>-7</sup>	0.7	11
	20	0.5	19000	1.3*10 <sup>-6</sup>		20
	25	1	15000	3.9*10 <sup>-6</sup>	1.7	39
	32	2	12000	1.2*10 <sup>-5</sup>		71
	40	4	4000	1.5*10 <sup>-5</sup>		120

Ordering Example: RAM20 - 6 - 8 - 100 PCS  
Model no. Ød1 Ød2 Qty

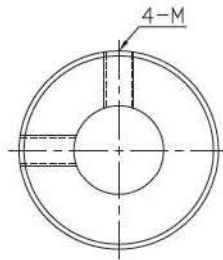
RSM



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.



\*When  $\varnothing d1 < 4$  and  $\varnothing d2 > 5$ , there would be 3 set screws.  
\*When  $\varnothing d1$  and  $\varnothing d2$  both smaller than 4, there would be 2 set screws.



Material	Accessories
SUS303	Set screw

Dimensions		$\varnothing d1$ & $\varnothing d2$ selection * $\varnothing d1 \leq \varnothing d2$										L	F	M	
Model No.	$\varnothing D$	3	4	5	6	8	10	11	12	14	15	16			Rough thread
RSM	16	•	•	•	•								24	6	3
	20			•	•	•	•						30	7	
	25				•	•	•	•	•				36	9	4
	32							•	•	•	•		41	10	

\*Moment of inertial torque and weight calculated by maximum diameter.

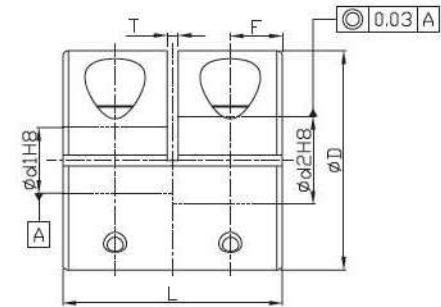
Specification		Allowable Wrench Torque (N-m)	Max. RPM (r/min)	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	$\varnothing D$					
RSM	16	0.3	24000	$1.2 \cdot 10^{-6}$	0.7	28
	20	0.5	19000	$3.5 \cdot 10^{-6}$		54
	25	1	15000	$1.0 \cdot 10^{-6}$	1.7	100
	32	2	12000	$3.1 \cdot 10^{-6}$		190

Ordering Example: RSM20 - 6 - 8 - 100 PCS  
Model no. -  $\varnothing d1$  -  $\varnothing d2$  - Qty

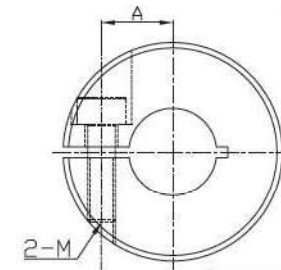
RACS



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.
- Bear type with no allowable offset almost, please show the axis entirely in operating.



\* $\varnothing d1$  &  $\varnothing d2$  tolerance are defined before machining.



Material	Surface Finish	Accessories
Aluminum alloy	Anodized	Clamping screw

Dimensions		$\varnothing d1$ & $\varnothing d2$ selection * $\varnothing d1 \leq \varnothing d2$								L	A	T	F	M	
Model No.	$\varnothing D$	5	6	8	10	12	14	15	16	18				Rough thread	
RACS	16	•	•								16	5	1	3.75	2.5
	20		•	•							20	6.5		4.75	
	25			•	•						25	9	6	3	
	32				•	•	•				32	11	7.75	4	
	40						•	•	•	•	44	13	1.5	10.5	5

\*Moment of inertial torque and weight calculated by maximum diameter.

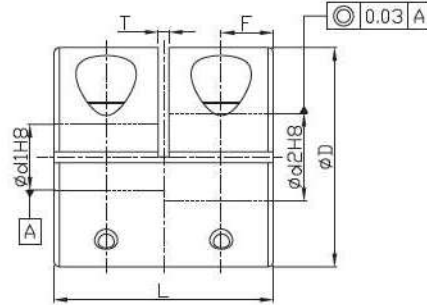
Specification		Allowable Wrench Torque (N-m)	Max. RPM (r/min)	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	$\varnothing D$					
RACS	16	0.3	9500	$3.0 \cdot 10^{-7}$	1	9
	20	0.5	7600	$8.7 \cdot 10^{-7}$		15
	25	1	6100	$2.7 \cdot 10^{-6}$	1.5	29
	32	2	4800	$7.1 \cdot 10^{-6}$	2.5	61
	40	4	4000	$1.5 \cdot 10^{-6}$	7	120

Ordering Example: RACS32 - 10 - 12 - 100 PCS  
Model no. -  $\varnothing d1$  -  $\varnothing d2$  - Qty

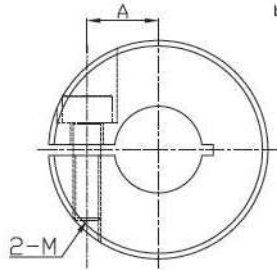
RSCS



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.
- Beam type with no allowable offset almost, please show the axis entirely in operating.



\*Ød1&Ød2 tolerance are defined before machining.



Material	Accessories
SUS303	Clamping screw

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2						L	A	T	F	M
Model No.	ØD	5	6	8	10	12	14					Rough thread
RSCS	16	•	•					16	5	1	3,75	2,5
	20		•	•				20	6,5		4,75	
	25			•	•			25	9	6	3	
	32				•	•	•	32	11	7,75	4	

\*Moment of inertial torque and weight calculated by maximum diameter.

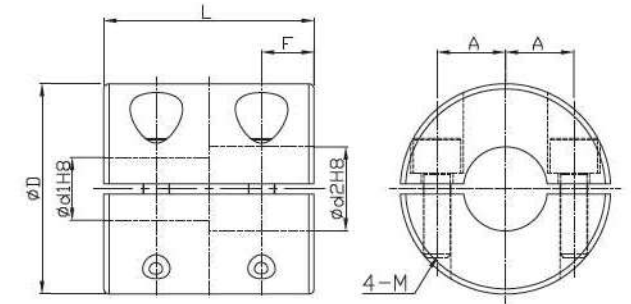
Specification		Allowable Wrench Torque (N-m)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	ØD					
RSCS	16	0.3	9500	8,0*10 <sup>-7</sup>	1	22
	20					
	25	1	6100	7,3*10 <sup>-6</sup>	1.5	80
	32	2	4800	2,5*10 <sup>-5</sup>	2.5	160

Ordering Example: RSCS20 - 6 - 8 - 100 PCS  
Model no. - Ød1 - Ød2 - Qty

RAB



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.
- Beam type with no allowable offset almost, please show the axis entirely in operating.



\*Ød1&Ød2 tolerance are defined before machining.

Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Clamping screw

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2						L	A	F	M
Model No.	ØD	5	6	8	10	12	14				
RAB	16	•	•					16	5	4	2,5
	20		•	•				20	6,5	5	
	25			•	•			25	9	6	3
	32				•	•	•	32	11	8	4

\*Moment of inertial torque and weight calculated by maximum diameter.

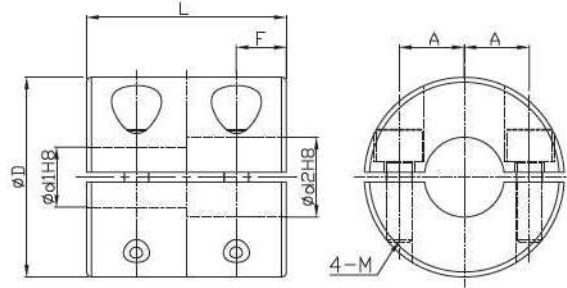
Specification		Allowable Wrench Torque (N-m)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	ØD					
RAB	16	0.3	9500	3,2*10 <sup>-7</sup>	1	8,8
	20					
	25	1	6100	2,7*10 <sup>-6</sup>	1.5	29
	32	2	4800	9,3*10 <sup>-6</sup>	2.5	61

Ordering Example: RAB25 - 8 - 10 - 100 PCS  
Model no. - Ød1 - Ød2 - Qty

RSB



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.
- Beam type with no allowable offset almost, please show the axis entirely in operating.



\*Ød1&Ød2 tolerance are defined before machining.

Material	Accessories
SUS303	Clamping screw

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2						L	A	F	M
Model No.	ØD	5	6	8	10	12	14				
RSB	16	•	•					16	5	4	2.5
	20		•	•				20	6.5	5	
	25			•	•			25	9	6	3
	32				•	•	•	32	11	8	4

\* Moment of inertial torque and weight calculated by maximum diameter.

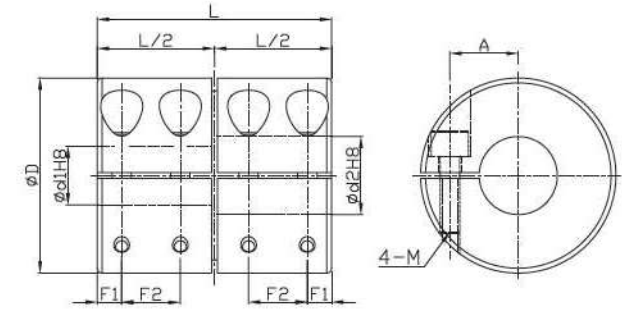
Specification		Allowable Wrench Torque (N-m)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	ØD					
RSB	16	0.3	9500	8,2*10 <sup>-7</sup>	1	22
	20	0.5	7600	2,4*10 <sup>-6</sup>		41
	25	1	6100	7,3*10 <sup>-6</sup>	1.5	80
	32	2	4800	2,5*10 <sup>-5</sup>	2.5	160

Ordering Example: RSB20 - 6 - 8 - 100 PCS  
Model no. - Ød1 - Ød2 - Qty

RACL



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.
- Beam type with no allowable offset almost, please show the axis entirely in operating.



\*Ød1&Ød2 tolerance are defined before machining.

Material	Surface Finish	Accessories
Aluminum Alloy	Anodized	Clamping screw

Dimensions		Ød1&Ød2 selection *Ød1 ≤ Ød2						L	A	F1	F2	M
Model No.	ØD	5	6	8	10	12	14					
RACL	16	•	•					22	5	2.5	5.5	2
	20		•	•				24	7		6	
	25			•	•			36	9	4.5	9	2.5
	32				•	•	•	40	11	4	10	3

\* Moment of inertial torque and weight calculated by maximum diameter.

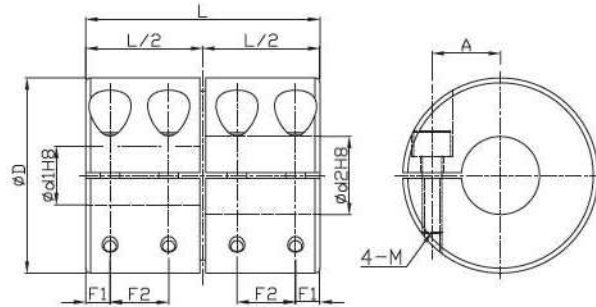
Specification		Allowable Wrench Torque (N-m)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg-m <sup>2</sup> )	Screw Fixing Torque (N-m)	* Weight (g)
Model No.	ØD					
RACL	16	0.3	9000	3,4*10 <sup>-7</sup>	0.5	10
	20	0.5	7000	9,2*10 <sup>-7</sup>		18
	25	1	6000	3,4*10 <sup>-6</sup>	1	38
	32	2	4500	1,0*10 <sup>-5</sup>	1.5	70

Ordering Example: RACL25 - 8 - 10 - 100 PCS  
Model no. - Ød1 - Ød2 - Qty

RSCL



- Light, very low inertial and high sensibility.
- Maintenance free, super anti-oil and corrosion-resistance.
- Beam type with no allowable offset almost, please show the axis entirely in operating.



\*Ød1&Ød2 tolerance are defined before machining.

Material	Accessories
SUS303	Clamping screw

Model No.	Dimensions ØD	Ød1&Ød2 selection *Ød1 ≤ Ød2						L	A	F1	F2	M
		5	6	8	10	12	14					
RSCL	16	•	•					22	5	2.5	5.5	2
	20		•	•				24	7		6	
	25			•	•			36	9	4.5	9	2.5
	32				•	•	•	40	11	4	10	3

\* Moment of inertial torque and weight calculated by maximum diameter.

Specification		Allowable Wrench Torque (N·m)	Max. RPM (r/min <sup>-1</sup> )	* Moment of Inertia (kg·m <sup>2</sup> )	Screw Fixing Torque (N·m)	* Weight (g)
Model No.	ØD					
RSCL	16	0.3	9000	8.9*10 <sup>-7</sup>	0.5	25
	20	0.5	7000	2.5*10 <sup>-6</sup>		45
	25	1	6000	9.2*10 <sup>-6</sup>	1	100
	32	2	4500	2.7*10 <sup>-6</sup>	1.5	180

Ordering Example: RSCL25 - 8 - 10 - 100 PCS  
 Model no. | Ød1 | Ød2 | Q'ty



### Installation Notice :

- ( 1 ) To avoid mistakenly operating driver, please be sure to cut off main power and start installation after security confirmation.
- ( 2 ) Please clear out miscellaneous, dust and oil...etc attached on the shafts and inner of coupling. Especially for the grease with molybdenum disulfide and extreme pressure additive which affect friction factor substantially, please proceed defatting treatment entirely.
- ( 3 ) In order to perform coupling functions completely, please proceed installing as range of max. allowable offset in the spec list. Installation error in the list is top value occurring individually, so please take below half of allowed values in multiple cases into account.
- ( 4 ) Please take the ruler against to outer body while centering, with around 90° to proceed checking two departed points. Centering accuracy has huge affection to life hours of unit.
- ( 5 ) Please set safety cover after installing this product. Otherwise, it might get hurt by touching products in operating.
- ( 6 ) To lock screw, please be sure to use corrected torque wrench and refer to the torque value of clamping lock screw in the spec list to secure.
- ( 7 ) Installing by using wrong connecting ways would cause too much vibration, abnormal running or inaccurate center, overloaded defelction to damage motor, coupling...etc mechanism units. It's recommended to notice accuracy balance correction to extend unit life while assembling mechanically.

### Operation Notice :

- ( 1 ) Considering safety, please set protective jacket on the turning parts of device surrounding couplings.
- ( 2 ) If allowable offset is set over limited range or too much torque, it might cause distortion of coupling possible to shorten life.
- ( 3 ) If any noise (metal sound) in running, please stop operating, and check any interference to centering and shafts, and screw loosened or not.
- ( 4 ) If load variation of device is too much, please put adhesives or adjust one level higher of coupling model to avoid screw loose.

### Safety Notice :

**In order to work safely, please read description as below, and keep the instruction to recheck the points if necessary.**

#### **Danger**

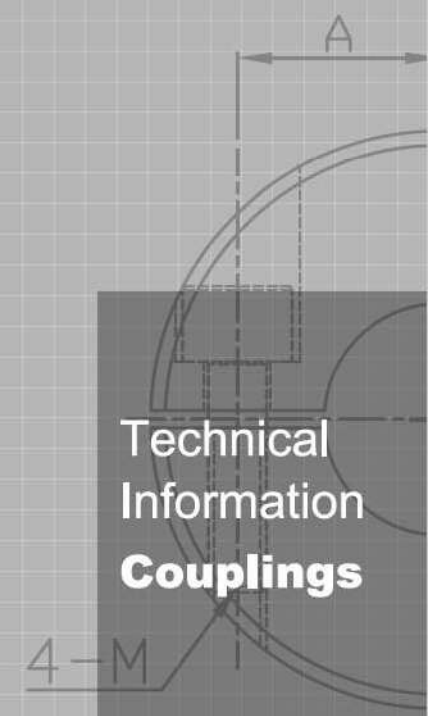
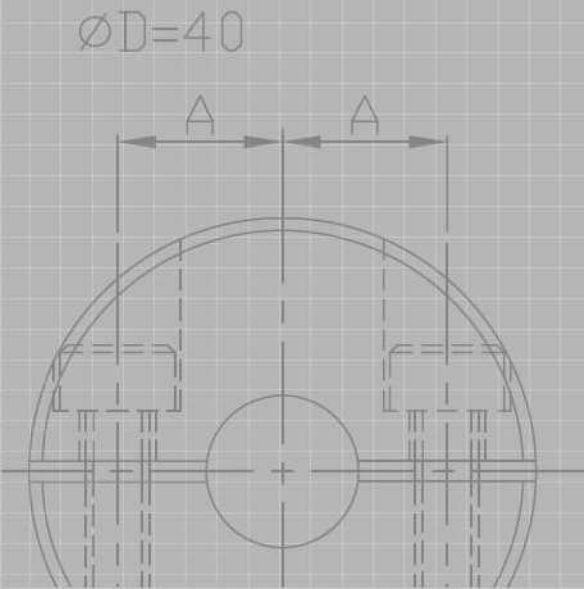
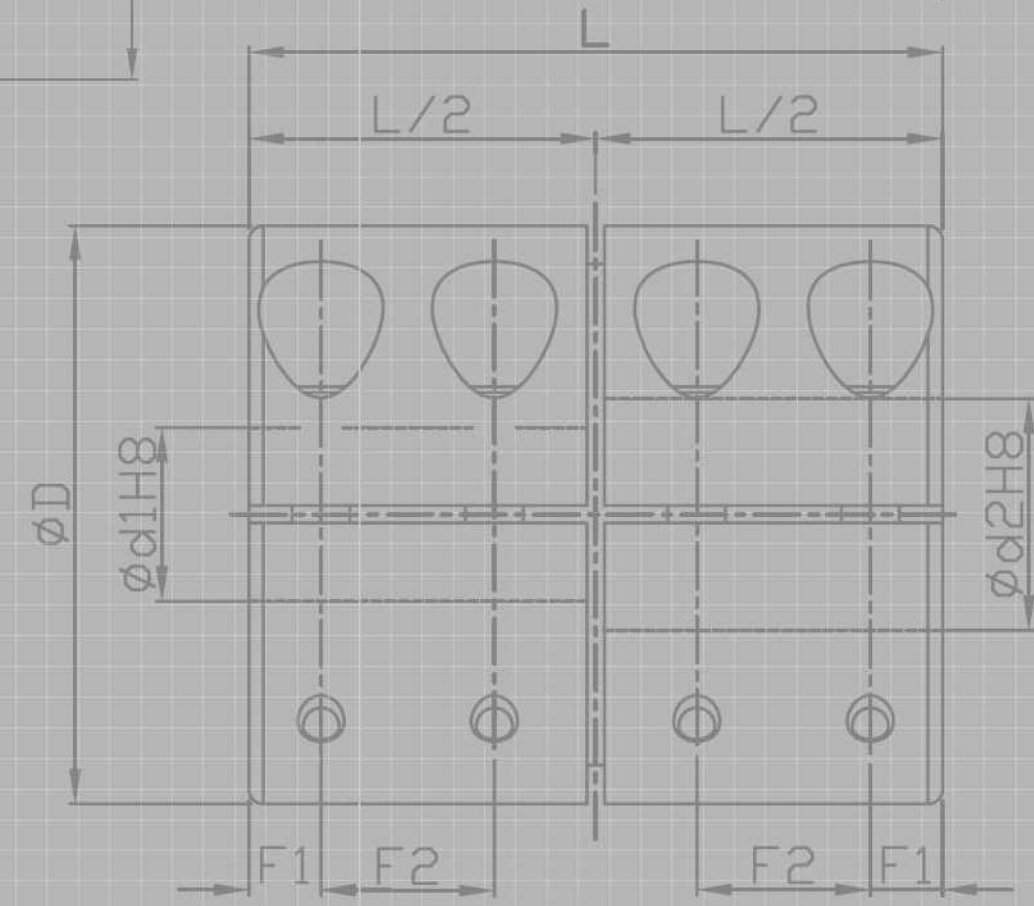
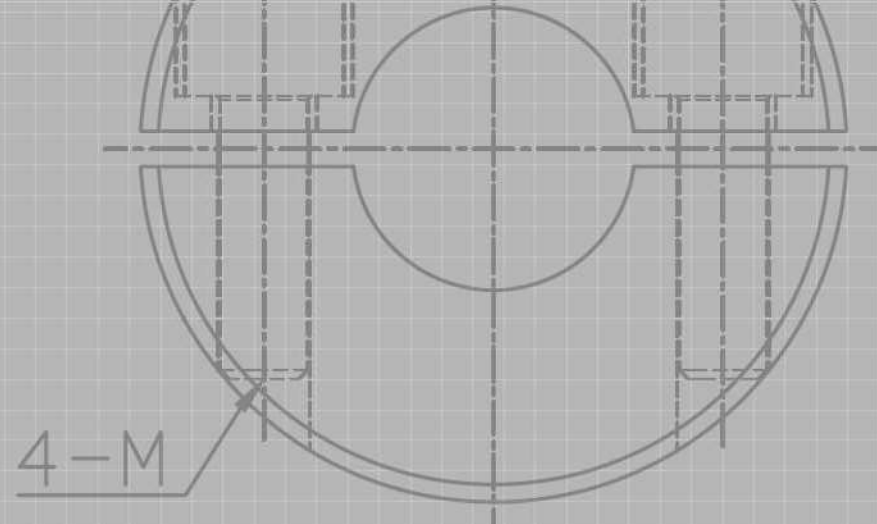
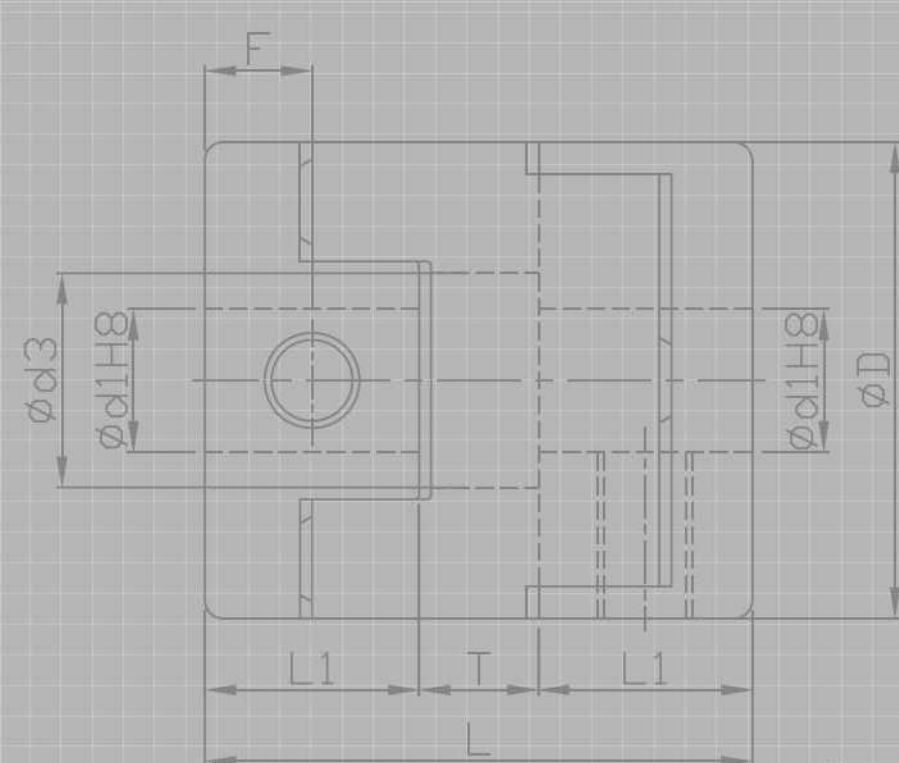
Following acts might cause danger or harmful damage if using mistakenly.

- ◆ For safety work, coupling and related rotating parts must be protected by covers. You might be hurt if touching these parts in operating.
- ◆ To avoid danger, protection device must be installed.
- ◆ Power off is necessary while assembling and disassembling.
- ◆ Lock screw and counter bore screw must be secured by using screwdriver, wrench or torque wrench fitly.
- ◆ Operating speed of product never over top speed.
- ◆ No disassembling or recombining products.

#### **Warning**

Following acts might cause body hurt or wealth loss if using mistakenly.

- ◆ Please operate in allowable deviation range. It might cause damage of coupling if deviation is out of allowed range and probably affect coupling system badly.
- ◆ Torque produced by continuously operating can't exceed rated torque. Otherwise, coupling might be damaged, or affect coupling system badly.
- ◆ While securing, please use screws (lock screw and counter bore screw) appointed by GMT, not any ones else.
- ◆ No operating in the environment affecting products badly.
- ◆ Please stop operation of rotating machine if hearing abnormal noise. Check deviation of machine, any interference between shafts, screws loosened or not...etc.
- ◆ If the rotating machine you use operates in bigger load variation, please use anti-loosen glue on screws to avoid coming off, or use one-size larger coupling.
- ◆ Please ask experts to deal with these products to avoid damage to environment while product abandon.
- ◆ Never touch coupling after completing operation. You might be burned by high temperature caused by coupling system.



Technical Information  
Couplings

### Coupling Testing Facility

◆ Exclusive use for coupling test

- (1) For use durability test.
- (2) For mass production inspection in development process.

Coupling Test Report Test Item : <b>General Test</b>			Tester	Q013
Model Number : FACE	Type of space ring : R	Test Day	2012/02/13	16:43:47
Outer diameter : 40	Inner diameter d1 : 10	Inner diameter d2 : 10		
<b>Test Parameter</b>				
Deflection : <b>-1.08°</b>	Eccentricity : <b>-0.10 mm</b>			
Planned testing time : <b>480 min 0 sec</b>				
Forward rotation : <b>0 min 10 sec</b>				
Pause : <b>2 sec</b>				
Inverse rotation : <b>0 min 10 sec</b>				
Present torque : <b>16.50 (N.m)</b>	Remark:			
Zeroed torque : <b>0.00 (N.m)</b>				
Machine operating time : <b>480 min 0 sec</b>	Serial NO.	20120213-FACE40R-8		
Revolution Test : <b>200 rpm / min</b>	Back to main page	Back to last page	Print	<del>PAUSE</del> STOP

