Flexible coupling

## **Coupling Catalogue**

Diaphragm type												
Single diaphragm c (high-strength alur	lamping type minum alloy)	Double diaphragm (high-strength alu	clamping type	Single diaphragm (high-strength alu	top wire type minum alloy)	Double diaphragn (high-strength alu	top wire type					
		(1)										
DMP-C	P17	SMP-C	P18	HDMP-G	P23	HSMP-G	P24					
Single diaphragm c (high-strength alur	lamping type minum alloy)	Double diaphragm (high-strength alu	clamping type minum alloy)	Single diaphragm e (carbon steel) (sta	xpansion type ainless steel)	Double diaphragm (carbon steel) (st	expansion type ainless steel)					
•		(0.)	)}									
HDMP-C	P29	HSMP-C	P30	HDMPS-T	P35	HSMPS-T	P36					
Single diaphragm t (high-strength alur		Double diaphragm (high-strength alu		Single diaphragm (carbon steel) (sta		Double diaphragn (carbon steel) (st						
	)				•							
DMPA-G	P41	SMPA-G	P42	DMPS-G	P47	SMPS-G	P48					
Single diaphragm c (high-strength alur		Double diaphragm (high-strength alu		Single diaphragm (carbon steel) (sta		Double diaphragm (carbon steel) (st						
DMPA-C	P53	SMPA-C	P54	DMPS-C	P59	SMPS-C	P60					
Single diaphragm ex (high-strength alur		Double diaphragm e (high-strength alu		Single diaphragm e (carbon steel) (sta		Double diaphragm (carbon steel) (st						
DMP-T	P67	SMP-T	P69	DMPS-T	P73	SMPS-T	P75					
Single diaphragm t (carbon steel) (sta		Double diaphragm (carbon steel) (sta		Single diaphragm e (carbon steel) (sta	xpansion type ainless steel)	Double diaphragm (carbon steel) (st	expansion type ainless steel)					
HDJM-G	P77	HSJM-G	P78	HDJM-T	P81	HSJM-T	P82					
Single diaphragm to Clamping mechanis	op wire type+ m(aluminum)	Double diaphragm Clamping mechanis		Single diaphragm t Clamping mecha		Double diaphragm Clamping mecha						
DMPA-GC	P85	SMPA-GC	P86	DMPS-GC	P91	SMPS-GC	<b>P</b> 92					



Flexible coupling



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## Coupling Selection Guide

#### 1. Mechanical characteristics of power machine:

The mechanical characteristics of the power machine have a certain impact on the entire transmission system. Different typesof power machines should choose the corresponding power machine coefficient K due to their different mechanicacharacteristics, Choosing the best type of coupling power machine suitable for the system is the fundamental factor inchoosing the type of coupling The fundamental factor, the power ofthe power machine is an important basis for determining thesize ofthe coupling, which is proportional to the torque of the coupling.

#### 2.Load category:

Due to different structures and materials, the bearing capacity of couplings used in the transmission system of variousmechanical products is very different. The load category is mainly for the impact, vibration, forward and reverse rotationbraking, frequent start and other reasons of the working load of the working machine. In order to facilitate calculation, the load of the transmission system is divided into four types, see the following table:

Load category	Load condition	Working condition factor K
I	Evenlyload, stable work	1~1.5
П	Medium shock load	1.5 ~ 2.5
Ш	Heavy impact load, frequent forward and reverse	2·5 ~ 2·75
IV	Extremely heavy impact load, frequent forward and reverse	>2·75

#### 3. Rotation speed of coupling.

The allowable speed range of the coupling is determined by calculation according to the allowable linear speed and maximumouter circle size of different materials of the coupling. The allowable speed range of the coupling of different materials and specifications is different. Change the material of the coupling can increase the allowable speed range of the coupling.

#### 4. The relative displacement of the two shafts connected by the coupling:

The two shats connected by the coupling have relative displacement occur are caused by manufacturing errors, assemblyerrors, installation errors, deformation of the shaft due to load, deformation of the base, bearing wear, temperature changes(thermal expansion and contraction), relative movement between components, etc.

#### 5. Transmission accuracy of the coupling

Small torque and shating transmission based on transmission motion require the coupling to have a high transmissiontip. Flexible couplings with metal elastic elements better be used. Flexible couplings with metal elastic elements can be used. Avoid using flexible couplings with gaps between the flexible couplings of non-metallic components and the movable components at high speeds. Diaphraam couplinas with high transmission tip better be selected.

#### 6. Coupling size, installation and maintenance.

The outer dimensions of the coupling, that is, the maximum radial and axial dimensions, must be within the installation spaceallowed by the machine and equipment. it should be selected for easy disassembly and assembly, no maintenance or easymaintenance, and replacement of wearing parts does not need to move the two shafts, and the alignment is relatively easyCoupling

#### 7. Working environment:

The coupling is used with a variety of different host products, The surroundind working environment is more comolicatedConditions such as temperature, limit, water vapor, dust, sand, radiation, etc. are one of the important factors that must beconsidered when choosing a coupling.

#### 8.Economy:

Due to the different types and specifications of the coupling structure, material, size and accuracy, the cost and manufacturingcost vary greatly, The cost of couplinas with general tipping reouirements is ower than that with hioh-precision reauirements The cost of couplings with simple structure and good manufacturability is lower than that of couplings with complex structureand poor manufacturability. The cost of couplings using general materials as raw materials is lower than that of couplingsusing specialmaterials.

When choosing a coupling, various factors should be considered comprehensively according to the actualsituation and requirements of the individual chooser, choose the most suitable coupling variety, type and specification from the existing standard couplings which most suits the needs of diameter. Under normacircumstances, the existing coupling can basically meet the needs of different working conditions.

## Torque calculation

#### 1. Mechanical characteristics of power machine:

When know the motor power (kW) and rotary speed (n) during use, but not know the motor toeque, then can use the following formula to canculate motor torque:

Motor torque T (N.M) =  $9550 \times \frac{P (KW)}{n (min^{-1})}$ 

in this, power (KW) is is the needed real or transmission power (if it is unknown, then useparameters on the motorlabel.)

#### Often-used motor power and torque conversion List

Motor power	Motor rated rotary speed N=3000rpm Rated torque T(N.M)	Motor rated rotary speed N=2000rpm Rated torque T(N.M)	Motor rated rotary speed N=1000rpm Rated torque T(N.M)	Motor rated rotary speed N=750rpm Rated torque T(N.M)
0.05	0.16	0.24	0.48	0.64
0.10	0.32	0.48	0.96	1.27
0.20	0.64	0.96	1.91	2.55
0.40	1.27	1.91	3.82	5.09
0.75	2.39	3.58	7.16	9.55
1.00	3.18	4.78	9.55	12.73
1.50	4.78	7.16	14.33	19.10
2.00	6.37	9.55	19.10	25.47
3.00	9.55	14.33	28.65	38.20
3.50	11.14	16.71	33.43	44.57
5.00	15.92	23.88	47.75	63.67
7.00	22.28	33.43	66.85	89.13

#### 2. Application parameter list:

After canculate the motor transmission torque T, then combine with he following suggested each application parameter listto ensure the parameterk.

Load parameter K1								
Constant load	K1=1·0							
Small change load	K1=1·2							
Often changed load	K1=1·7							
Big change load	K1=2·1							

Rotate time parameter K2										
	≤2	hour	K2=0.70							
Each	≤4	hour	K2=0.85							
day operate	≤8	hour	K2=1.00							
time	≤16	hour	K2=1.18							
	≤24	hour	K2=1.28							

Start. st	top frequency	parameter K3
O44	≤10 times	K3=1.0
Start	≤30 times	K3=1.1
stop times of	≤60 times	K3=1.2
each	≤120 times	K3=1.5
Hour	≤340 times	K3=2.0

#### 3. Determination of coupling torque.

After canculate the motor torque and ensure the application parameter, then choosen coupling torque can canculate as per the following formula:

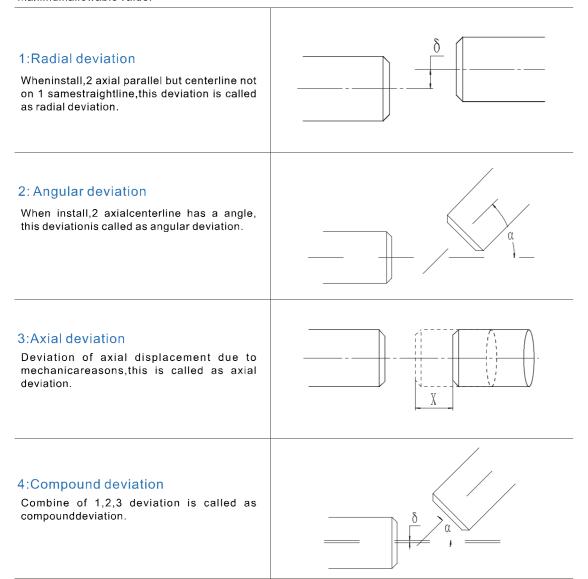
#### T≥T1×K1×K2×K3

(T: Couplingtorque T1: Motortorque K1: Load parameter K2: Operate time parameter K3: Start. stop frequency parameter

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## **Deviation description**

- 1. The flexible coupling can tolerate misalianment and transmit the rotation angle and torque, but if the misalignment value exceeds the allowable value, it may cause vibration or result in a rapid shortening of life, therefore, make sure toadiust the alianment.
- 2. There are three kinds of shaft deviation, namely radial deviation, angular deviation and axial deviation. Please confirmthat the shaft deviation is within the allowable value described in the specification table of this catalog
- 3. The tolerance range of deviation listed in this product catalog refers to the situation where there is only a singledeviation in radial, angular, and axial deviations. When two or more deviations exist, the allowable value should be 1/2of the specification table of the deviation.
- 4.In order to extend the life, it is recommended that the deviation value should be adjusted within 1/3 of the maximum allowable value.



## Term explanation

## >>> Rated torque:

Continuous passed torque value of coupling, when choose coupling please ensure the using load toeque is below therated toeque.

#### Maximum torque:

Torque value which coupling can instant pass.

#### Axis deviation:

Axis deviation of 2 axial which connect by coupling. There are three kinds of deviation, namely radial deviation, angulaldeviation and axial deviation, please adjust to the axis to ensure axis deviation of 2 axial is under the allowed deviation. When at the same time have 2 or above 2 deviations, each correspondingly allowed value half correspondingly.

#### Radial deviation:

Parallel deviation of 2 connected axis

#### > Angle deviation:

Angle deviation of 2 connected axis

#### > Axial deviation:

The axial displacement of each axis. Occurs when temperature rises to cause expansion and when the motor accelerates or decelerates.

## >> Static torsional rigidity:

The rigidity of the coupling against torsion. Indicates the phase diference between the rotation direction of the input shaftand the output shaft when torque is applied to the coupling. The value in the product catalog represents the torsional rigidity of the entire coupling. The larger the value, the higher the responsiveness, and high-precision rotation controcan be achieved.

### Moment of inertia:

Indicates the value of the rotational inertia of the coupling. The greater the value, the greater the rotational inertia.

#### **Backlash:**

The loose clearance relative to the direction of rotation of the coupling. When need high-precision positioning, forwardrotation and reverse rotation, please consider choosing a coupling with zero backlash.

### Maximum speed:

The maximum speed that the coupling can use. Since dynamic balance is not considered, balancing measures may betaken when using at high speeds.

#### >> Tightening torque:

The bolt tightening torque when connecting the coupling to the shaft. Use a torque wrench to tighten with the specified torque.

## > Electricalinsulation:

The electrical insulation between the two shaft sleeves of the coupling. A coupling made of rubber or resin is used between the two sleeves.

# DMP-C series coupling single diaphragm-clamping type (high-strength aluminum alloy)

#### Structure



#### Material

Shaft sleeve	high-strength aluminum alloy					
Shall sleeve	anodizing treatment					
Diaphragm	stainless steel					
Gasket	Carbon steel nickel plated					
Fixed diaphragm bolt	SCM435 (12.9 class)					
Tixed diapinagin box	Ferric oxide protective film (black)					
Hexagonsocket	SCM435(12.9 class)					
bolt	Ferric oxide protective film (black)					

## Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position controlsystem
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoderXY axis sliding table, indexing table
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acidic and Alkaline, warm and humid environment

## Product model description

DMP-39C - 10 ×16

Product model specification

haft bore

💥 Remarks: Non-standard aperture and keyway can be processed additionally

# SMP-C Series Coupling Double Diaphragm-Clamping Type (High Strength Aluminum Alloy)

#### Structure



#### Material

01.6.1	high-strength aluminum alloy					
Shaft sleeve	alloyanodizing treatment					
Intermediate	high-strength aluminum					
ouide	alloyanodizing treatment					
Diaphragm	stainless steel					
Gasket	Carbon steel nickel plated					
Fixed diaphragm bolt	SCM435 (12.9 class)					
rixed diapili agili bolt	Ferric oxide protective film (black)					
Hayagan gaakat halt	SCM435 (12.9 class)					
Hexagon socket bolt	Ferric oxide protective film (black)					

#### Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position controlsystem
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoderXY axis sliding table, indexing table
- XY axis sliding table, indexing table
- Dust-free,vacuum environment transmission system
- Acidic and Alkaline, warm and humid environment

#### Product model description

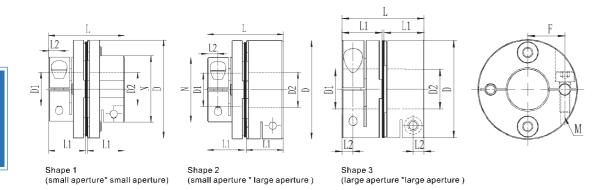
SMP-39C - 10 ×16

Product model specification

💥 Remarks: Non-standard aperture and keyway can be processed additionally

## DMP-C

## single diaphragm-clamping coupling (high-strength aluminum alloy)



#### **Specifications**

Model	D1/D2 Aper	D	L	N	L1	L2	F	М	Screw tightening torque	
	Small aperture	Big aperture	D	_	IN	- 11	LZ	r	IVI	( N•M )
DMP-16C	-	3-5	16	17.8	-	8.7	2.55	5.2	M2	0.5
DMP-19C	-	4-8	19.6	2 0.8	-	10.2	2.9	7	M2.5	1
DMP-25C	-	5-12	25	24.4	-	12	3.3	9.25	M3	1.5
DMP-26C	-	5-12 14	26.5	25	-	12.3	3.6	8.9 9.5	M3 M2.5	1.5 1
DMP-27C	-	6-14	27	25	-	12.3	3.5	10.25	М3	1.5
DMP-34C	6-11	12-16	34	2 6.2	22.5	12.8	3.8	12	M3	1.5
DMP-39C	8-12	14-19	39	34	27	16.6	4.68	14.5	M4	3.5
DMP-44C	8-15	16-22	44	34	29.6	16.6	4.68	17	M4	3.5
DMP-56C	10-19	20-28	56	4 3.2	38	21	6	20.5	M5	8

## D1/D2 Standard aperture

D 17 D 2 O ( )	5 1752 Starrage aportars																	
Model	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28
DMP-16C	•	•	•															
DMP-19C		•	•	•	•													
DMP-25C			•	•	•	•	•	•										
DMP-26C			•	•	•	•	•	•	•									
DMP-27C				•	•	•	•	•	•									
DMP-34C				•	•	•	•	•	•	•	•							
DMP-39C					•	•	•	•	•	•	•	•	•					
DMP-44C					•	•	•	•	•	•	•	•	•	•	•			
DMP-56C						•	•	•	•	•	•	•	•	•	•	•	•	•

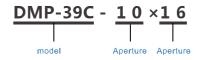
## Series of photos:



## Performance parameter

	Max	Ratedtorque	Max	Maximum	Static	Moment	Allo	quality			
Model	aperture (mm)	(N.M)	torque (N.M)	speed (min- <sup>1</sup> )	torquerigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)	
DMP-16C	Ф5	0.6	1.2	15000	310	9.7×10 <sup>-8</sup>	0.02	0.5	±0.1	8	
DMP-19C	Ф8	1	2	13000	620	5.3×10 <sup>-7</sup>	0.02	1	±0.1	14	
DMP-25C	Ф12	1.8	3.6	11000	1400	2.2×10 <sup>-6</sup>	0.02	1	±0.2	24	
DMP-26C	Ф14	2	4	10000	1500	2.9×10 <sup>-6</sup>	0.02	1	±0.2	27	
DMP-27C	Ф14	2	4	10000	1500	2.4×10 <sup>-6</sup>	0.02	1	±0.2	28	
DMP-34C	Ф16	4	8	10000	2600	6.0×10 <sup>-6</sup>	0.02	1	±0.3	48	
DMP-39C	Ф19	7	14	10000	4500	9.7×10 <sup>-6</sup>	0.02	1	±0.3	7	
DMP-44C	Ф22	9	18	10000	6200	2.4×10 <sup>-5</sup>	0.02	1	±0.3	99	
DMP-56C	Ф28	24	48	8000	14500	7.6×10 <sup>-5</sup>	0.02	1	±0.4	216	

#### When ordering:



#### Keyway machining

When machining keyway on one side shaft hole: DMP-39C-10Kx16 When machining keyway on two sides shaft hole: DMP-39C-10Kx16K

Please refer to forkeyway processing parameters

#### X Shape change service:

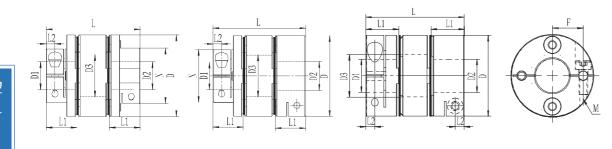
If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

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## SMP-C

## Double diaphragm-clamping type-coupling (high-strength aluminum alloy)



Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Aperture range		D	L	N	D3	L1	L2	F	М	Screw tightening torque	
Model	Small aperture	Big aperture	U	L	IN	טט	LT	LZ	r	IVI	( N•M )	
SMP-16C	-	3-5	16	25.7	-	6	8.7	2.55	5.2	M2	0.5	
SMP-19C	-	4-8	19.6	28.7	-	8.5	10.2	2.9	7	M2.5	1	
SMP-25C	-	5-12	25	34.5	-	12.5	12	3.3	9.25	М3	1.5	
SMP-26C	-	5-12 14	26.5	35.1	-	14.5	12.3	3.6	8.9 9.5	M3 M2.5	1.5 1	
SMP-27C	-	6-14	27	35.1	-	14.5	12.3	3.5	10.25	М3	1.5	
SMP-34C	6-11	12-16	34	38.4	22.5	16.5	12.8	3.8	12	М3	1.5	
SMP-39C	8-12	14-19	39	48.8	27	20.5	16.6	4.68	14.5	M4	3.5	
SMP-44C	8-15	16-22	44	48.8	29.6	23	16.6	4.68	17	M4	3.5	
SMP-56C	10-19	20-28	56	64.4	38	29	21	6	20.5	M5	8	

## D1/D2 Standard aperture

Model	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28
SMP-16C	•	•	•															
SMP-19C		•	•	•	•													
SMP-25C			•	•	•	•	•	•										
SMP-26C			•	•	•	•	•	•	•									
SMP-27C				•	•	•	•	•	•									
SMP-34C				•	•	•	•	•	•	•	•							
SMP-39C					•	•	•	•	•	•	•	•	•					
SMP-44C					•	•	•	•	•	•	•	•	•	•	•			
SMP-56C						•	•	•	•	•	•	•	•	•	•	•	•	•

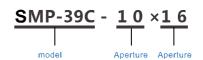
## Series of photos:



## Performance parameter

	Max	Rated	Max	Maximum	Static	Moment	Allo	wable devia	ation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min- <sup>1</sup> )	torquerigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMP-16C	Ф5	0.6	1.2	15000	210	3.2×10 <sup>-7</sup>	0.05	1	±0.2	12
SMP-19C	Φ8	1	2	13000	470	7.51×10 <sup>-7</sup>	0.15	2	±0.2	20
SMP-25C	Ф12	1.8	3.6	11000	880	2.5×10 <sup>-6</sup>	0.2	2	±0.4	35
SMP-26C	Ф14	2	4	10000	1080	4.09×10 <sup>-6</sup>	0.2	2	±0.4	37
SMP-27C	Ф14	2	4	10000	1080	3.0×10 <sup>-6</sup>	0.2	2	±0.4	39
SMP-34C	Ф16	4	8	10000	1700	9.1×10 <sup>-6</sup>	0.25	2	±0.6	2
SMP-39C	Ф19	7	14	10000	3250	2.2×10 <sup>-5</sup>	0.3	2	±0.6	115
SMP-44C	Ф22	9	18	8000	3800	3.4×10 <sup>-5</sup>	0.3	2	±0.6	147
SMP-56C	Ф28	24	48	8000	9300	1.18×10 <sup>-4</sup>	0.3	2	±0.8	334

#### When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMP-39C-10Kx16 When machining keyway on two sides shaft hole: DMP-39C-10Kx16K

For keyway processing parameters, please refer to the keyway dimension table

#### X Shape change service:

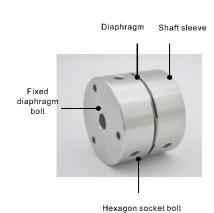
If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

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## **HDMP-G Series**

coupling single diaphragm-top wire type (high-strength aluminum alloy)

#### Structure



#### Material

Shaft sleeve	high-strength aluminum alloy
Shall sleeve	anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
T IXOU GIUPINUGIII DOIL	Ferric oxide protective film (black)
Hexagonsocket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position controlsystem
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- · Corrosion resistance
- Top wire fixing method

#### The main purpose

- · High-speed, high-precision position control

- Dust-free, vacuum environment transmission system
- · Acidic and Alkaline, warm and humid environment

- Servo motors, stepping motors, precision motors, etc.
- · Precision encoderXY axis sliding table, indexing table
- XY axis sliding table, indexing table

#### Product model description

HSMP-79G - 20 ×30

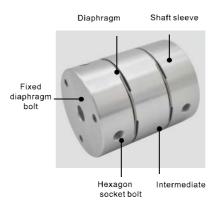
Product model specification

※ Remarks: keyway can be processed additionally

## **HSMP-G Series**

Coupling Double Diaphragm-Top wire Type (High Strength Aluminum Alloy)

#### Structure



#### Material

01.6.1	high-strength aluminum alloy
Shaft sleeve	anodizing treatment
Intermediate	high-strength aluminum alloy
momodiate	anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
Fixed diaphragin boit	Ferric oxide protective film (black)
Hovegon socket helt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm elastic coupling
- · Zero backlash, high-precision position controlsystem
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- · Top wire fixing method

## The main purpose

- Servo motors, stepping motors, precision motors, etc.
- · High-speed,high-precision position control
- Precision encoderXY axis sliding table, indexing table
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- · Acidic and Alkaline, warm and humid environment

Product model description

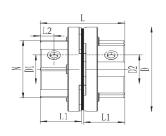
HDMP-79G - 20 ×30

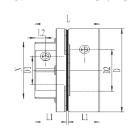
Product model specification

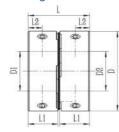
X Remarks: keyway can be processed additionally

## **HDMP-G Series**

## Single diaphragm-Top wire type- coupling (high-strength aluminum alloy)









Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

	D1/D2 Aper	ture range	D		N	L1	L2	М	Screw tightening torque
Model	Small aperture	Big aperture		_	IN		LZ	141	( N•M )
HSMP-65G	10-22	24-35	65	54.5	44	26.5	12	M8	20
HSMP-79G	14-25	28-42	79	63.5	53	31	15	M10	40
HSMP-98G	25-35	38-50	98	69	68	33	15	M10	40

## D1/D2 Standard aperture

Model	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50
HSMP-65G	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
HSMP-79G				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
HSMP-98G													•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Rated	Max	Maximum	Static	Moment	Allo	owable devia	ation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min- <sup>1</sup> )	torquerigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
HSMP-65G	Ф35	50	100	9800	16000	2.2×10 <sup>-4</sup>	0.02	1	±0.45	376
HSMP-79G	Ф42	100	200	7900	23000	6.7×10 <sup>-4</sup>	0.02	1	±0.55	680
HSMP-98G	Ф50	280	560	6400	52000	1.7×10⁻³	0.02	1	±0.65	1193

## When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole:HDMP-79G-20Kx30 When machining keyway on two sides shaft hole:HDMP-79G-20Kx30K

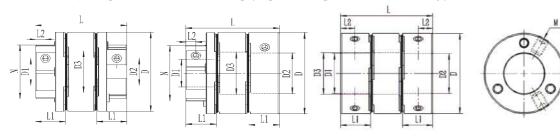
For keyway processing parameters, please refer to the keyway dimension table

#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **HSMP-G Series**

## Double diaphragm-Top wire-coupling (high-strength aluminum alloy)



Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Aper	ture range	D		N	D3	L1	L2	М	Screw tightening torque
Wiodei	Small aperture	Big aperture	D	_	IN	D3	- 11	LZ	IVI	( N•M )
HSMP-65G	10-22	24-35	65	76	44	36	26.5	12	M8	20
HSMP-79G	14-25	28-42	79	98.6	53	43	31	15	M10	40
HSMP-98G	25-35	38-50	98	105.5	68	51	33	15	M10	40

## D1/D2 Standard aperture

Model	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50
HSMP-65G	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
HSMP-79G				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
HSMP-98G													•	•	•	•	•	•	•	•	•	•

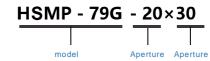
## Series of photos:



## Performance parameter

	Max	Datadaaaa	Max	Maximum	um Static Momen		Allo	owable de via	ation	quality
Model	aperture (mm)	Ratedtorque (N.M)	torque (N.M)	speed (min- <sup>1</sup> )	torquerigidity (N.M/rad)	of inertia (KG⋅M2)	radial deviation	angular deviation	axial deviation	quality (g)
HSMP-65G	Ф35	50	100	9800	15000	3.3×10 <sup>-4</sup>	0.35	2	±0.9	533
HSMP-79G	Φ42	100	200	7900	22000	1.0×10 <sup>-3</sup>	0.5	2	±1.1	1048
HSMP-98G	Ф50	280	560	6400	47000	2.6×10 <sup>-3</sup>	0.5	2	±1.3	1860

## When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: HSMP-79G-20Kx30 When machining keyway on two sides shaft hole: HSMP-79G-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table  $\,$ 

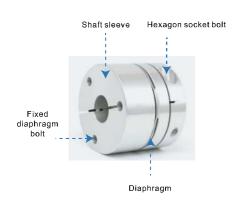
#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **HDMP-C Series**

Coupling single diaphragm-clamping type (high-strength aluminum alloy)

#### Structure



#### Material

Shaft sleeve	high-strength aluminum alloy
Stigit Sieeve	anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
T INCO GIUPINAGIII SON	Ferric oxide protective film (black)
Hexagonsocket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position controlsystem
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- · Corrosion resistance
- Clamping fixing method

### The main purpose

- · High-speed, high-precision position control

- Dust-free, vacuum environment transmission system
- · Acidic and Alkaline, warm and humid environment

- Servo motors, stepping motors, precision motors, etc.
- · Precision encoderXY axis sliding table, indexing table
- XY axis sliding table, indexing table

#### Product model description

HDMP-79C - 20 ×30

Product model specification

💥 Remarks: Non-standard aperture and keyway can be processed additionally

## **HSMP-G Series**

Coupling Double Diaphragm-Top wire Type (High Strength Aluminum Alloy)

#### Structure



#### Material

Objett also	high-strength aluminum alloy
Shaft sleeve	anodizing treatment
Intermediate	high-strength aluminum alloy
ou.aco	anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
Fixed diaphragin boit	Ferric oxide protective film (black)
Hovegon socket helt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm elastic coupling
- · Zero backlash, high-precision position controlsystem
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- · Clamping fixing method

### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- · High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- · Acidic and Alkaline, warm and humid environment

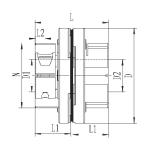
Product model description

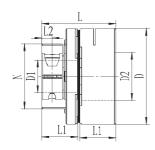
HSMP-79C - 20 ×30

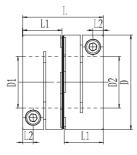
Product model specification

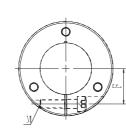
💥 Remarks: Non-standard aperture and keyway can be processed additionally

# HDMP-C Single diaphragm-clamping-coupling (high-strength aluminum alloy) HDMPS-C Single diaphragm-clamping-coupling (Carbon Steel)









Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Apert	ure range			N.			_		Screw tightening torque
Model	Small aperture	Big aperture	D	L	N	L1	L2	F	М	( N•M )
HDMP-65C	10-22	24-35	65	54.5	44	26.5	7	24	M6	13
HDMP-79C	14-25	28-42	79	63.5	53	31	8.75	29	M8	28
HDMP-98C	25-35	38-50	98	69	68	33	8.75	38	M8	28
HDMPS-126C	30-45	48-60	126	91	88	40	11.5	46.5	M10	55
HDMPS-144C	40-55	60-80	144	104	98	45	14	55	M12	90

#### D1/D2 Standard aperture

Model	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55	60	65	70	75	80
HDMP-65C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
HDMP-79C				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
HDMP-98C													•	•	•	•	•	•	•	•	•	•						
HDMPS-126C															•	•	•	•	•	•	•	•	•	•				
HDMPS-144C																			•	•	•	•	•	•	•	•	•	•

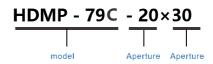
## Series of photos:



## Performance parameter

	Max	Datadtanna	Max	Maximum	Static	Moment	Allo	wable devia	ation	quality
Model	aperture (mm)	Ratedtorque (N.M)	torque (N.M)	speed (min- <sup>1</sup> )	torquerigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
HDMP-65C	Ф35	50	100	9800	16000	2.2×10 <sup>-4</sup>	0.02	1	±0.45	361
HDMP-79C	Ф42	100	200	7900	23000	6.7×10 <sup>-4</sup>	0.02	1	±0.55	652
HDMP-98C	Ф50	280	560	6400	52000	1.7×10 <sup>-3</sup>	0.02	1	±0.65	1148
HDMPS-126C	Ф60	450	900	5000	430000	1.4×10 <sup>-2</sup>	0.02	1	±0.8	5862
HDMPS-144C	Ф80	800	1600	4350	780000	2.6×10 <sup>-2</sup>	0.02	1	±0.9	7761

#### When ordering:



#### X Keyway machining

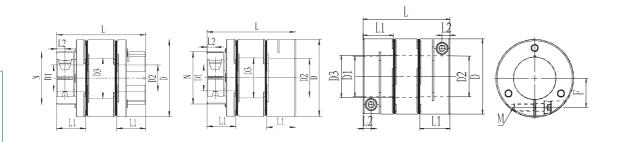
When machining keyway on one side shaft hole: HDMP-79C-20Kx30 When machining keyway on two sides shaft hole: HDMP-79C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

#### ※ Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

# HSMP-C Double diaphragm-clamping-coupling (high-strength aluminum alloy) HSMP-C Double diaphragm-clamping-coupling (carbon steel)



Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Apert	ure range	D		N	D3	L1	L2	F	М	Screw tightening torque
	Small aperture	Big aperture		_	''			LZ		141	( N•M )
HSMP-65C	10-22	24-35	65	76	44	36	26.5	7	24	M6	13
HSMP-79C	14-25	28-42	79	98.6	53	43	31	8.75	29	M8	28
HSMP-98C	25-35	38-50	98	<b>05.5</b>	68	51	33	8.75	38	M8	28
HSMPS-126C	30-45	48-60	126	126	88	65	40	11.5	46.5	M10	55
HSMPS-144C	40-55	60-80	144	144	98	80.5	45	14	55	M12	90

#### D1/D2 Aperture range

Model	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55	60	65	70	75	80
HSMP-65C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
HSMP-79C				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
HSMP-98C													•	•	•	•	•	•	•	•	•	•						
HSMPS-126C															•	•	•	•	•	•	•	•	•	•				
HSMPS-144C																			•	•	•	•	•	•	•	•	•	•

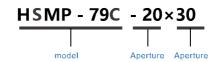
## Series of photos:



## Performance parameter

	Max	Ratedtorque	Max	Maximum	Static	Moment	Allo	wable devia	ation	quality
Model	aperture (mm)	(N.M)	torque (N.M)	speed (min- <sup>1</sup> )	torquerigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
HSMP-65C	Ф35	50	100	9800	15000	3.3×10 <sup>-4</sup>	0.35	2	±0.9	518
HSMP-79C	Ф42	100	200	7900	22000	1.0×10 <sup>-3</sup>	0.5	2	±1.1	1032
HSMP-98C	Ф50	280	560	6400	47000	2.6×10 <sup>-3</sup>	0.5	2	±1.3	1813
HSMPS-126C	Ф60	450	900	5000	215000	1.9×10 <sup>-2</sup>	0.5	2	±1.6	7830
HSMPS-144C	Ф80	800	1600	4350	390000	3.5×10 <sup>-2</sup>	0.5	2	±1.8	10485

#### When ordering:



#### Keyway machining

When machining keyway on one side shaft hole:HSMP-79C-20Kx30 When machining keyway on two sides shaft hole:HSMP-79C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **HDMPS-T Series**

Coupling single diaphragm-expansion sleeve type (carbon steel)

#### Structure



#### Material

Shaft sleeve	Carbon steel/blackening
Sildit Sieeve	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
T ixed diapinagin selt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Low inertia, high sensitivity, high torque rigidity
- Zero backlash
- Clockwise and counterclockwise rotation
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Expansion sleeve fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- · High-speed, high-precision position control
- · Machine tool's feed axis, spindle
- XY axis sliding table, indexing table

#### Product model description

## HDMPS-65T-20x22

Product model specification

X Note: Add S to indicate that the material is carbon steel

## **HSMPS-T Series**

Coupling Double diaphragm-expansion sleeve type (carbon steel)

## Structure



#### Material

Oh aft all ann	Carbon steel/blackening
Shaft sleeve	Stainless steel/electrolysis
Intermediate	Carbon steel/blackening
ouiute	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
Fixed diapili agiii boit	Ferric oxide protective film (black)
Hoveren socket helt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)
	-

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- High torque rigidity
- High sensitivity
- Zero backlash
- Clockwise and counterclockwise rotation characteristics are identicalStainless steel diaphragm compensates for angular and axial deviation
- Expansion sleeve fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- · High-speed,high-precision position control
- · Machine tool's feed axis, spindle
- XY axis sliding table, indexing table

Product model description

**HSMPS-65T-20x22** 

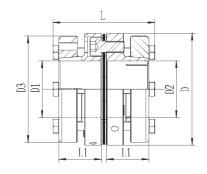
Product model specification Shaft bore

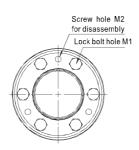
X Note: Add S to indicate that the material is carbon steel

## **HDMPS-T Series**

## Single diaphragm-expansion sleeve type-coupling (carbon steel)







## Specifications

Model	D	D3	L.	LI	M1	M2	Screw tightening torque ( N•M )
		47					
HDMPS-65T	65	53	63.5	26	M6	M6	10
		63					
		58					
HDMPS-79T	79	68	74.3	30	M6	M6	10
		75					
		73					
HDMPS-98T	98	78	75.8	30	M6	M6	10
		83					
		78					
HDMPS-126T	126	98	90.3	34	M8	M8	24
		108					
		88					
HDMPS-144T	144	108	98.6	37	M8	M8	24
11DMI 3-1741	177	118	30.0	31	IVIO	IVIO	24
		128					

## D1/D2 Standard aperture

Model	Standard aperture													
HDMPS-65T	16	18	19	20	22	24	25	28	30	32	35			
HDMPS-79T	19	20	22	24	25	28	30	32	35	38	40			
HDMPS-98T	32	35	38	40	42	45	48	50						
HDMPS-126T	35	38	40	42	45	48	50	55	60	65	70			
HDMPS-144T	35	38	40	42	45	48	50	55	60	65	70	75	80	

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	wable devia	ition	
Model	aperture (mm)	torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	quality (g)
HDMPS-65T	Ф35	100	500	52000	4.27×10 <sup>-4</sup>	0.02	1.0	±0.5	818
HDMPS-79T	Ф40	200	500	138000	1.48×10 <sup>-3</sup>	0.02	1.0	±0.5	1390
HDMPS-98T	Ф50	450	5000	250000	3.68×10 <sup>-3</sup>	0.02	1.0	±0.65	1761
HDMPS-126T	Ф70	600	4000	430000	9.7×10 <sup>-3</sup>	0.02	1.0	±0.8	3979
HDMPS-144T	Ф80	800	3700	780000	1.7×10 <sup>-3</sup>	0.02	1.0	±0.9	5418

## When ordering:

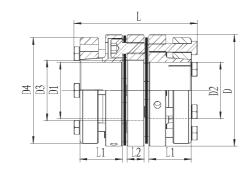
HDMPS-65T-20x22

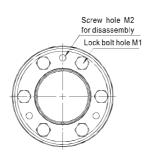
Product model specification Aperture

## HSMPS-T

## Double diaphragm-expansion sleeve type-coupling (carbon steel)







## Specifications

Model	D	D4	D3	L	L1	L2	M1	M2	Screw tightening torque ( N•M )
		47							
HSMPS-65T	65	53	36	80.7	26	13.7	М6	M6	10
		63							
		58							
HSMPS-79T	79	68	41	100.3	30	19.7	M6	M6	10
		75							
		73							
HSMPS-98T	98	78	51	102.9	30	19.3	M6	M6	10
		83							
		78							
HSMPS-126T	126	98	72	114	34	12	M8	M8	24
		108							
		88							
HSMPS-144T	144	108	80	128.6	37	16	M8	M8	24
13 NIF 3-144 I	144	118	30	120.0	51	10	1410	1410	24
		128							

## D1/D2 Standard aperture

Model						Star	ndard a <sub>l</sub>	perture					
HSMPS-65T	16	18	19	20	22	24	25	28	30	32	35		
HSMPS-79T	19	20	22	24	25	28	30	32	35	38	40		
HSMPS-98T	32	35	38	40	42	45	48	50					
HSMPS-126T	35	38	40	42	45	48	50	55	60	65	70		
HSMPS-144T	35	38	40	42	45	48	50	55	60	65	70	75	80

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	quality		
Model	aperture (mm)	torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
HSMPS-65T	Ф35	100	8500	25800	6.45×10 <sup>-4</sup>	0.25	1.0	±1.0	938
HSMPS-79T	Ф40	200	6500	72000	2.44×10 <sup>-3</sup>	0.30	1.0	±1.0	1728
HSMPS-98T	Ф50	450	5000	145000	5.28×10 <sup>-3</sup>	0.35	1.0	±1.3	2234
HSMPS-126T	Ф70	600	4000	215000	1.2×10 <sup>-2</sup>	0.4	1.0	±1.6	5000
HSMPS-144T	Ф80	800	3700	390000	2.3×10 <sup>-2</sup>	0.5	1.0	±1.8	7244

## When ordering:

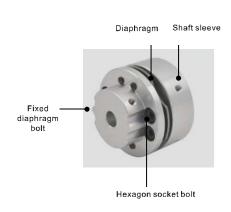
**HSMPS- 65 T - 20×22** 

Product model specification Aperture

## **DMPA-G Series**

Coupling single diaphragm-top wire type (high-strength aluminum alloy)

#### Structure



#### Material

Shaft sleeve	High-strength aluminum alloy
Strait Steeve	Anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
T INCU GIUPINAGIII SON	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- · Corrosion resistance
- Top wire fixing method

#### Product model description

DMPA-68G-20x30

Product model specification

Shaft bore

X Remarks: keyway can be processe

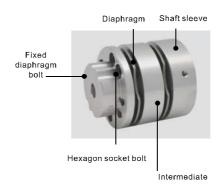
#### The main purpose

- · Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuumen vironment transmission system
- Acid-base, warmand humid environment

## **SMPA-G Series**

Couplings Double Diaphragm-Top wire Type (High Strength Aluminum Alloy)

#### Structure



#### Material

01.6.1	High-strength aluminum alloy
Shaft sleeve	Anodizing treatment
Intermediate	High-strength aluminum alloy
	Anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
r ixed diapili agiii boit	Ferric oxide protective film (black)
Hexagon socket bolt	SCM435 (12.9 class)
riexagori socket boit	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- · Zero backlash, high-precision position control system
- · Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- · Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Top wire fixing method

### The main purpose

- · Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuumenvironment transmission system
- Acid-base, warmand humid environment

Product model description

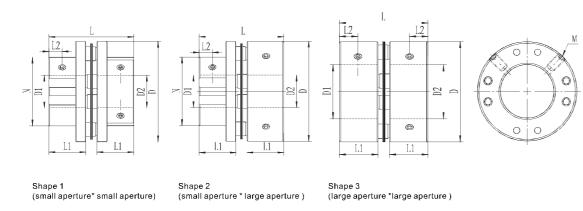
SMPA-68G-20x30

Product model specification Shaft bore

※ Remarks: keyway can be processe

## **DMPA-G Series**

## Single diaphragm-top wire-coupling (high-strength aluminum alloy)



## **Specifications**

Model	D1/D2 Apert	D1/D2 Aperture range			N	L1	L2	М	Screw tightening torque
	Small aperture	Big aperture	D		IN	LI	LZ	IVI	( N•M )
DMPA-39G	8-12	14-19	39	35.25	24	15	7	M4	2.5
DMPA-46G	8-16	17-24	46	35.25	30	15	7	M4	2.5
DMPA-56G	10-20	22-30	56	47.5	38	20	10	M5	5
DMPA-68G	10-22	24-35	68	58.1	46.5	25	12	M6	8
DMPA-82G	14-28	30-42	82	68.7	54	30	14	M8	20
DMPA-92G	19-35	38-45	92	69	60	30	14	M8	20
DMPA-102G	20-40	42-55	102	69	68	30	15	M10	40

## D1/D2 Standard aperture

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50 55
DMPA-39G	•	•	•	•	•	•	•	•	•	•													
DMPA-46G	•	•	•	•	•	•	•	•	•	•	•	•	•										
DMPA-56G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							
DMPA-68G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
DMPA-82G					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-92G										•	•	•	•	•	•	•	•	•	•	•	•	•	
DMPA-102G											•	•	•	•	•	•	•	•	•	•	•	•	• •

## Series of photos:



## Performance parameter

	Max		Maximum	Static	Moment	Allo	wable devia	ation	· quality
Model	aperture (mm)	Allowable torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPA-39G	Ф19	14	10000	3920	2.2×10 <sup>-5</sup>	0.02	0.5	±0.3	95
DMPA-46G	Ф24	18	10000	4480	2.8×10 <sup>-5</sup>	0.02	0.5	±0.3	123
DMPA-56G	Ф30	32	7700	20000	4.0×10 <sup>-5</sup>	0.02	0.5	±0.3	239
DMPA-68G	Ф35	60	6500	28000	1.0×10 <sup>-4</sup>	0.02	0.5	±0.3	422
DMPA-82G	Ф42	100	5500	70000	4.0×10 <sup>-4</sup>	0.02	0.5	±0.3	780
DMPA-92G	Φ45	150	5500	80000	1.0×10 <sup>-3</sup>	0.02	0.5	±0.3	984
DMPA-102G	Ф55	250	4000	140000	1.85×10 <sup>-3</sup>	0.02	0.5	±0.5	1158

## When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMPA-68G-20x30 When machining keyway on two sides shaft hole: DMPA-68G-20x30K

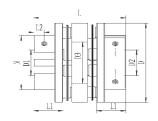
For keyway processing parameters, please refer to the keyway dimension table

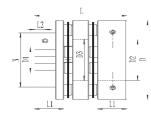
#### X Shape change service:

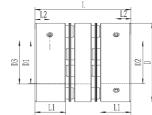
If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

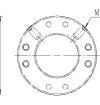
## **SMPA-G Series**

## Double diaphragm-top wire-coupling (high-strength aluminum alloy)









Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## Specifications

Model	D1/D2 Aper	ture range	_	,	N	Da	L1	L2		Screw tightening torque
Model	Small aperture	Big aperture	D	L	N	D3	LI	L2	М	(N•M)
SMPA-39G	8-12	14-19	39	52.5	24	19.2	15	7	M4	2.5
SMPA-46G	8-16	17-24	46	52.5	30	24.5	15	7	M4	2.5
SMPA-56G	10-20	22-30	56	69	38	30.5	20	10	M5	5
SMPA-68G	10-22	24-35	68	80.2	46.5	35.5	25	12	M6	8
SMPA-82G	14-28	30-42	82	97.4	54	42.5	30	14	M8	20
SMPA-92G	19-35	38-45	92	98	60	47	30	15	M8	20
SMPA-102G	20-40	42-55	102	98	68	51	30	15	M10	40

## D1/D2 Standard aperture

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
SMPA-39G	•	•	•	•	•	•	•	•	•	•														
SMPA-46G	•	•	•	•	•	•	•	•	•	•	•	•	•											
SMPA-56G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPA-68G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPA-82G					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPA-92G										•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPA-102G											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max		Maximum	Static	Moment	Allo	ation	quality	
Model	aperture (mm)	Allowable torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPA-39G	Ф19	14	10000	1960	3.0×10 <sup>-5</sup>	0.1	1.0	±0.45	147
SMPA-46G	Ф24	18	10000	2240	3.8×10 <sup>-5</sup>	0.1	1.0	±0.55	188
SMPA-56G	Ф30	32	7700	10000	5.8×10 <sup>-5</sup>	0.2	1.0	±0.60	355
SMPA-68G	Ф35	60	6500	14000	1.4×10 <sup>-4</sup>	0.2	1.0	±0.60	582
SMPA-82G	Ф42	100	5500	35000	5.2×10 <sup>-4</sup>	0.2	1.0	±0.60	1144
SMPA-92G	Ф45	150	5500	40000	1.8×10 <sup>-3</sup>	0.2	1.0	±0.60	1424
SMPA-102G	Ф55	250	4000	70000	3.7×10 <sup>-3</sup>	0.25	1.0	±0.90	1703

## When ordering:



#### Keyway machining

When machining keyway on one side shaft hole: SMPA-68G-20x30 When machining keyway on two sides shaft hole: SMPA-68G-20x30K

For keyway processing parameters, please refer to the keyway dimension table

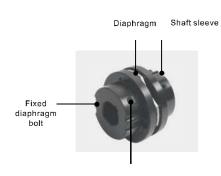
#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **DMPS-G Series**

Coupling single diaphragm-top wire type (carbon steel)

#### Structure



#### Material

Shaft sleeve	Carbon steel/blackening
Shall sieeve	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
Tixed diapinagin boil	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

## Features

Diaphragm-type elastic coupling connected by expansion sleeve

Hexagon socket bolt

- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Top wire fixing method

#### Product model description

DMPS-68G-20x30

Product model specification

Shaft bore

 $\ensuremath{\mathbb{X}}$  Remarks: keyway can be processe

The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free,vacuumenvironment transmission system
- Acid-base,warmand humid environment

## **SMPS-G Series**

Coupling double diaphragm-top wire type (carbon steel)

#### Structure



#### Material

	Carbon steel/blackening
Shaft sleeve	Stainless steel/electrolysis
Intermediate	Carbon steel/blackening
ouide	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
Fixed diaphragin boit	Ferric oxide protective film (black)
Hayanan aaaltat halt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- · Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Top wire fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuumen vironment transmission system
- Acid-base, warmand humid environment

Product model description

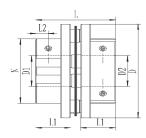
SMPS-68G-20x30

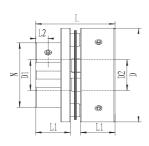
Product model specification Shaft bore

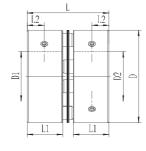
X Remarks: keyway can be processe

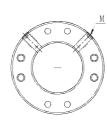
## **DMPS-G Series**

## Single diaphragm-top wire type-coupling (carbon steel)









Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Apert	ure range	D		N	L1	L2	М	Screw tightening torque
Wiodol	Small aperture	Big aperture	U	L	IN	LI	LZ	IVI	( N•M )
DMPS-39G	8-12	14-19	39	35.25	24	15	7	M4	2.5
DMPS-46G	8-16	17-24	46	35.25	30	15	7	M4	2.5
DMPS-56G	10-20	22-30	56	47.5	38	20	10	M5	5
DMPS-68G	10-22	24-35	68	58.1	46.5	25	12	M6	8
DMPS-82G	14-28	30-42	82	68.7	54	30	14	M8	20
DMPS-92G	19-35	38-45	92	69	60	30	14	M8	20
DMPS-102G	20-40	4 2-55	102	69	68	30	15	M10	40

## D1/D2 Aperture range

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45 !	50 5	55
DMPS-39G	•	•	•	•	•	•	•	•	•	•														
DMPS-46G	•	•	•	•	•	•	•	•	•	•	•	•	•											
DMPS-56G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMPS-68G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPS-82G					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMPS-92G										•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPS-102G											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	owable devia	ation	· quality
Model	aperture (mm)	torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPS-39G	Ф19	16.8	5000	4000	4.9×10 <sup>-5</sup>	0.02	0.5	±0.3	207
DMPS-46G	Ф24	21.6	5000	4600	9.4×10 <sup>-5</sup>	0.02	0.5	±0.3	280
DMPS-56G	Ф30	38.4	5000	22400	2.7×10 <sup>-5</sup>	0.02	0.5	±0.3	542
DMPS-68G	Ф35	80	5000	33600	7.4×10 <sup>-4</sup>	0.02	0.5	±0.3	1026
DMPS-82G	Ф42	130	4000	78000	1.8×10 <sup>-4</sup>	0.02	0.5	±0.3	1779
DMPS-92G	Ф45	195	4000	89000	3.0×10 <sup>-3</sup>	0.02	0.5	±0.3	2319
DMPS-102G	Ф55	325	4000	156000	4.6×10 <sup>-3</sup>	0.02	0.5	±0.5	2714

## When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMPS-68G-20x30 When machining keyway on two sides shaft hole: DMPS-68G-20x30K

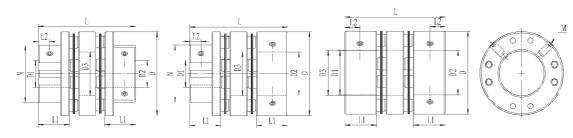
For keyway processing parameters, please refer to the keyway dimension table

#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **SMPS-G Series**

## Coupling double diaphragm-clamping type (high-strength aluminum alloy)



Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Apert	ure range	D		N	D3	L1	L2	М	Screw tightening torque
	Small aperture	Big aperture	D	_	IN	υs	LI	LZ	IVI	( N•M )
SMPS-39G	8-12	14-19	39	52.5	24	19.2	15	7	M4	2.5
SMPS-46G	8-16	17-24	46	52.5	30	24.5	15	7	M4	2.5
SMPS-56G	10-20	22-30	56	69	38	30.5	20	10	M5	5
SMPS-68G	10-22	24-35	68	80.2	46.5	35.5	25	12	M6	8
SMPS-82G	14-28	30-42	82	97.4	54	42.5	30	14	M8	20
SMPS-92G	19-35	38-45	92	98	60	47	30	15	M8	20
SMPS-102G	20-40	42-55	102	98	68	51	30	15	M10	40

## D1/D2 Aperture range

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50 5	55
SMPS-39G	•	•	•	•	•	•	•	•	•	•														
SMPS-46G	•	•	•	•	•	•	•	•	•	•	•	•	•											
SMPS-56G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPS-68G		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPS-82G					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPS-92G										•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPS-102G											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	owable devia	ation	· quality
Model	aperture (mm)	torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPS-39G	Ф19	16.8	5000	2000	7.0×10 <sup>-5</sup>	0.1	1.0	±0.45	300
SMPS-46G	Ф24	21.6	5000	2300	1.3×10 <sup>-5</sup>	0.1	1.0	±0.55	402
SMPS-56G	Ф30	38.4	5000	11200	3.7×10 <sup>-5</sup>	0.2	1.0	±0.60	754
SMPS-68G	Ф35	80	5000	16800	9.8×10 <sup>-4</sup>	0.2	1.0	±0.60	1345
SMPS-82G	Ф42	130	4000	39000	2.5×10 <sup>-4</sup>	0.2	1.0	±0.60	2454
SMPS-92G	Φ45	195	4000	44500	4.1×10 <sup>-3</sup>	0.2	1.0	±0.60	3174
SMPS-102G	Ф55	325	4000	78000	6.3×10 <sup>-3</sup>	0.25	1.0	±0.90	3795

## When ordering:



#### Keyway machining

When machining keyway on one side shaft hole: SMPS-68G-20Kx30 When machining keyway on two sides shaft hole: SMPS-68G-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

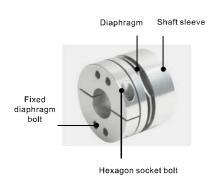
#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **DMPA-C Series**

Coupling single diaphragm-clamping type (high-strength aluminum alloy)

#### Structure



#### Material

Shaft sleeve	High-strength aluminum alloy
Shall sleeve	Anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
Tixed diaphilagiii boit	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping wire fixing method

#### Product model description

DMPA-68C-20x30

Product model specification

Shaft bore

※ Remarks: keyway can be processe

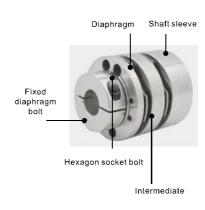
#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free,vacuumenvironment transmission system
- Acid-base,warmand humid environment

## **SMPA-C Series**

Coupling double diaphragm-clamping type (high-strength aluminum alloy)

#### Structure



## Material

01.6.1	Carbon steel/blackening
Shaft sleeve	Stainless steel/electrolysis
Intermediate	Carbon steel/blackening
	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
rixed diaphragin boit	Ferric oxide protective film (black)
Hayagan gaakat halt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)
.,,	

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- · Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping wire fixing method

### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuumen vironment transmission system
- Acid-base, warmand humid environment

Product model description

SMPA-68C-20x30

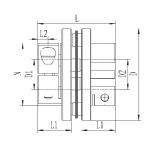
Product model specification Shaft bore

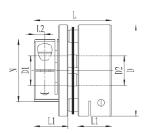
※ Remarks: keyway can be processe

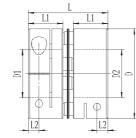
53 |

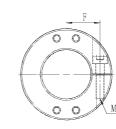
## **DMPA-C Series**

## Single diaphragm-clamping type-coupling (high-strength aluminum alloy)









Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture)

## **Specifications**

Model	D1/D2 Apert	ure range	D		N	L1	L2	F	М	Screw tightening torque
	Small aperture	Big aperture	U	L	IN	LI	LZ		IVI	( N•M )
DMPA-39C	8-12	14-19	39	36.45	26	15.6	4.55	14.5	M4	2.5
DMPA-46C	8-16	17-24	46	36.45	30	15.6	4.5	17	M4	2.5
DMPA-56C	10-20	22-30	56	47.5	38	20	6.5	20.5	M5	5
DMPA-68C	10-22	24-35	68	58.1	46.5	25	7.75	24	М6	8
DMPA-82C	14-28	30-42	82	68.7	54	30	9	29	M8	28
DMPA-92C	19-35	38-45	92	69	60	30	9	34	M8	28
DMPA-102C	20-40	42-55	102	69	68	30	9	38	M8	28

## D1/D2 Standard aperture

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMPA-39C	•	•	•	•	•	•	•	•	•	•														
DMPA-46C	•	•	•	•	•	•	•	•	•	•	•	•	•											
DMPA-56C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMPA-68C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPA-82C					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMPA-92C										•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-102C											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	wable devia	ition	avalit.
Model	aperture (mm)	torque (N.M)	speed (min- <sup>1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	quality (g)
DMPA-39C	Ф19	14	10000	3920	2.2×10 <sup>-5</sup>	0.02	0.5	±0.3	93
DMPA-46C	Ф24	18	10000	4480	2.8×10 <sup>-5</sup>	0.02	0.5	±0.3	120
DMPA-56C	Ф30	32	7700	20000	4.0×10 <sup>-5</sup>	0.02	0.5	±0.3	236
DMPA-68C	Ф35	60	6500	28000	1.0×10 <sup>-4</sup>	0.02	0.5	±0.3	410
DMPA-82C	Ф42	100	5500	70000	4.0×10 <sup>-4</sup>	0.02	0.5	±0.3	763
DMPA-92C	Ф45	150	5500	80000	1.2×10 <sup>-3</sup>	0.02	0.5	±0.3	970
DMPA-102C	Ф55	250	4000	140000	1.85×10 <sup>-3</sup>	0.02	0.5	±0.5	1127

## When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMPA-68C-20Kx30 When machining keyway on two sides shaft hole: DMPA-68C-20Kx30K

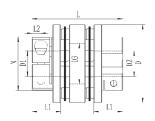
For keyway processing parameters, please refer to the keyway dimension table

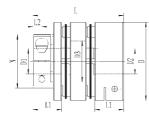
#### X Shape change service:

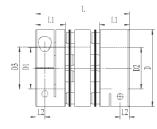
If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

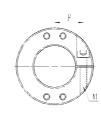
## SMPA-C Series

## Double diaphragm-clamping-coupling (high-strength aluminum alloy)









Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

#### **Specifications**

Model	D1/D2 Apert	ure range	D		N	D3	L1	L2	Ę	М	Screw tightening torque
	Small aperture	Big aperture	U	L	IN	νs	LI	LZ	ſ	IVI	(N•M)
SMPA-39C	8-12	14-19	39	53.7	26	19.2	15. 6	4.55	14.5	M4	2.5
SMPA-46C	8-16	17-24	46	53.7	30	24.5	15. 6	4.5	17	M4	2.5
SMPA-56C	10-20	22-30	56	69	38	30.5	20	6.5	20.5	M5	5
SMPA-68C	10-22	24-35	68	80.2	46.5	35.5	25	7.75	24	M6	8
SMPA-82C	14-28	30-42	82	97.4	54	42.5	30	9	29	M8	28
SMPA-92C	19-35	38-45	92	98	60	51	30	9	38	M8	28
SMPA-102C	20-40	42-55	102	98	68	51	30	9	38	M8	28

## D1/D2 Standard aperture

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
SMPA-39C	•	•	•	•	•	•	•	•	•	•														
SMPA-46C	•	•	•	•	•	•	•	•	•	•	•	•	•											
SMPA-56C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPA-68C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPA-82C					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPA-92C										•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPA-102C											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	owable devia	ation	quality
Model	aperture (mm)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPA-39C	Ф19	14	10000	1960	3.0×10 <sup>-5</sup>	0.1	1.0	±0.45	145
SMPA-46C	Ф24	18	10000	2240	3.8×10 <sup>-5</sup>	0.1	1.0	±0.55	185
SMPA-56C	Ф30	32	7700	10000	5.8×10 <sup>-5</sup>	0.2	1.0	±0.60	352
SMPA-68C	Ф35	60	6500	14000	1.4×10 <sup>-4</sup>	0.2	1.0	±0.60	571
SMPA-82C	Ф42	100	5500	35000	5.2×10 <sup>-4</sup>	0.2	1.0	±0.60	1128
SMPA-92C	Ф45	150	5500	40000	1.8×10 <sup>-3</sup>	0.2	1.0	±0.60	1410
SMPA-102C	Ф55	250	4000	70000	3.7×10 <sup>-3</sup>	0.25	1.0	±0.90	1671

## When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: SMPA-68C-20Kx30 When machining keyway on two sides shaft hole: SMPA-68C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

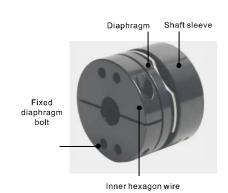
#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **DMPS-C Series**

Coupling single diaphragm-clamping type (carbon steel)

#### Structure



#### Material

Shaft sleeve	Carbon steel/blackening
Silait Sieeve	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
T IXOU GIUPINUGIII DOIL	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping wire fixing method

#### Product model description

## DMPA-68C-20x30

Product model specification Shaft bore

※ Remarks: keyway can be processed

59

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free,vacuumenvironment transmission system
- Acid-base,warmand humid environment

## **SMPS-C Series**

Coupling Double Diaphragm-Clamping Type (Carbon Steel)

#### Structure



#### Material

01.5	Carbon steel/blackening
Shaft sleeve	Stainless steel/electrolysis
Intermediate	Carbon steel/blackening
canace	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed diaphragm bolt	SCM435 (12.9 class)
Fixed diaphragin boil	Ferric oxide protective film (black)
Hovegon socket helt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- · Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping wire fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuumen vironment transmission system
- Acid-base, warmand humid environment

Product model description

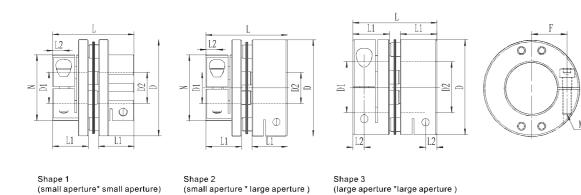
SMPA-68C-20x30

Product model specification Shaft bore

※ Remarks: keyway can be processed

## **DMPS-C Series**

## Single diaphragm-clamping type-coupling (carbon steel)



#### **Specifications**

Model	D1/D2 Apert	ure range	D		N	L1	L2	F	D.4	Screw tightening torque
Model	Small aperture	Big aperture	D		N	LI	L2		М	( N•M )
DMPS-39C	8-12	14-19	39	36.45	26	15.6	4.55	14.5	M4	2.5
DMPS-46C	8-16	17-24	46	36.45	30	15.6	4.5	17	M4	2.5
DMPS-56C	10-20	2 2-30	56	47.5	38	20	6.5	20.5	M5	5
DMPS-68C	10-22	2 4-35	68	58.1	46.5	25	7.75	24	M6	8
DMPS-82C	14-28	3 0-42	82	68.7	54	30	9	29	M8	28
DMPS-92C	19-35	3 8-45	92	69	60	30	9	34	M8	28
DMPS-102C	20-40	4 2-55	102	69	68	30	9	38	M8	28

#### D1/D2 Standard aperture

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMPS-39C	•	•	•	•	•	•	•	•	•	•														
DMPS-46C	•	•	•	•	•	•	•	•	•	•	•	•	•											
DMPS-56C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMPS-68C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPS-82C					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMPS-92C										•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPS-102C											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	owable devia	ation	· quality
Model	aperture (mm)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG-M2)	radial deviation	angular deviation	axial deviation	(g)
DMPS-39C	Ф19	16.8	5000	4000	4.8×10 <sup>-5</sup>	0.02	0.5	±0.3	200
DMPS-46C	Ф24	21.6	5000	4600	9.0×10 <sup>-5</sup>	0.02	0.5	±0.3	269
DMPS-56C	Ф30	38.4	5000	22400	2.6×10 <sup>-4</sup>	0.02	0.5	±0.3	528
DMPS-68C	Ф35	80	5000	33600	7.2×10 <sup>-4</sup>	0.02	0.5	±0.3	985
DMPS-82C	Ф42	130	4000	78000	1.8×10 <sup>-3</sup>	0.02	0.5	±0.3	1718
DMPS-92C	Ф45	195	4000	89000	2.9×10 <sup>-3</sup>	0.02	0.5	±0.3	2256
DMPS-102C	Ф55	325	4000	156000	4.5×10 <sup>-3</sup>	0.02	0.5	±0.5	2622

#### When ordering:



#### Keyway machining

When machining keyway on one side shaft hole: DMPA-68C-20Kx30 When machining keyway on two sides shaft hole: DMPA-68C-20Kx30K

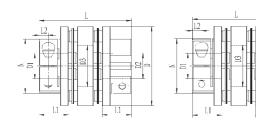
For keyway processing parameters, please refer to the keyway dimension table

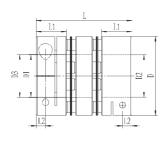
#### X Shape change service:

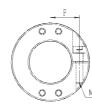
If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **SMPS-C Series**

## Double diaphragm-clamping-coupling (carbon steel)







Shape 1 (small aperture\* small aperture)

Shape 2 (small aperture \* large aperture )

Shape 3 (large aperture \*large aperture )

## **Specifications**

Model	D1/D2 Apert	ture range	D		N	D3	L1	L2	F	М	Screw tightening torque
	Small aperture	Big aperture	D	_	IN	υs		LZ	, i	IVI	( N•M )
SMPS-39C	8-12	14-19	39	53.7	26	19.2	15.6	4.55	14.5	M4	2.5
SMPS-46C	8-16	17-24	46	53.7	30	24.5	15.6	4.5	17	M4	2.5
SMPS-56C	10-20	22-30	56	69	38	30.5	20	6.5	20.5	M5	5
SMPS-68C	10-22	24-35	68	80.2	46.5	35.5	25	7.75	24	M6	8
SMPS-82C	14-28	30-42	82	97.4	54	42.5	30	9	29	M8	28
SMPS-92C	19-35	38-45	92	98	60	47	30	9	34	M8	28
SMPS-102C	20-40	42-55	102	98	68	51	30	9	38	M8	28

## D1/D2 Standard aperture

Model	8	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
SMPS-39C	•	•	•	•	•	•	•	•	•	•														
SMPS-46C	•	•	•	•	•	•	•	•	•	•	•	•	•											
SMPS-56C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPS-68C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPS-82C					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPS-92C										•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPS-102C											•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Series of photos:



## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	wable devia	tion	quality
Model	aperture (mm)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG-M2)	radial deviation	angular deviation	axial deviation	(g)
SMPS-39C	Ф19	16.8	5000	2000	6.8×10 <sup>-5</sup>	0.1	1.0	±0.45	292
SMPS-46C	Ф24	21.6	5000	2300	1.3×10 <sup>-4</sup>	0.1	1.0	±0.55	391
SMPS-56C	Ф30	38.4	5000	11200	3.7×10 <sup>-4</sup>	0.2	1.0	±0.60	740
SMPS-68C	Ф35	80	5000	16800	9.4×10 <sup>-4</sup>	0.2	1.0	±0.60	1304
SMPS-82C	Ф42	130	4000	39000	2.5×10 <sup>-3</sup>	0.2	1.0	±0.60	2393
SMPS-92C	Ф45	195	4000	44500	4.0×10 <sup>-3</sup>	0.2	1.0	±0.60	3111
SMPS-102C	Ф55	325	4000	78000	6.2×10 <sup>-3</sup>	0.25	1.0	±0.90	3703

#### When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMPA-68C-20Kx30 When machining keyway on two sides shaft hole: DMPA-68C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

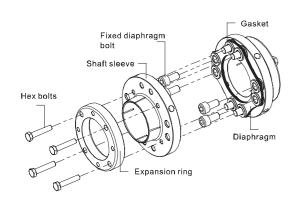
#### ※ Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

## **DMP-T Series**

Coupling Single diaphragm-expansion sleeve type (high-strength aluminum alloy)

#### Structure



#### Material

High-strength aluminum alloy
Anodizing treatment
High-strength aluminum alloy
Anodizing treatment
stainless steel
Carbon steel blackened
SCM435 (12.9 class)
Ferric oxide protective film (black)
SCM435(12.9 class)
Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Clamping wire fixing method

#### Product model description

DMP-68T - 20x22

Product model specification Shaft bore

#### The main purpose

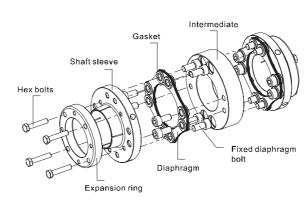
- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Machine tool's feed axis, spindle
- XY axis sliding table, indexing table



## SMP-T Series

coupling Double Diaphragm-Expansion Sleeve Type (High Strength Aluminum Alloy)

#### Structure



#### Material

	High-strength aluminum alloy								
Shaft sleeve	Anodizing treatment								
Intermediate	High-strength aluminum alloy								
intermediate	Anodizing treatment								
	High-strength aluminum alloy								
Expansion ring	Anodizing treatment								
Diaphragm	stainless steel								
Gasket	Carbon steel nickel plated								
Fixed disphrage half	SCM435 (12.9 class)								
Fixed diaphragm bolt	Ferric oxide protective film (black)								
Hexagon socket	SCM435(12.9 class)								
bolt	Ferric oxide protective film (black)								

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- High torque rigidity
- High sensitivity
- Zero backlash
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular and axial deviation
- Expansion sleeve fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Machine tool's feed axis, spindle
- XY axis sliding table, indexing table

#### Product model description

SMP-68T - 20x22

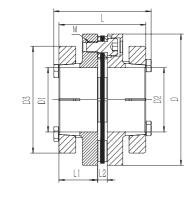
Product model specification Shaft bore

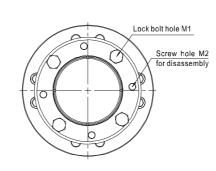


## **DMP-T Series**

## Single diaphragm-expansion sleeve type-coupling (high-strength aluminum alloy)







## Specifications

Model	D	D3	L	L1	L2	L3	M	M1	M2	Screw tightening torque ( N•M )
DMP-56T	56	40 48	47.5	20	7.5	54.5	M5	M5	M5	6
DMP-68T	68	44 53 63	60.1	26	8.1	67.1	M5	M5	M5	6
DMP-82T	82	58 68 75	68.7	30	8.7	76.7	M8	M6	M6	13.7
DMP-92T	92	58 68 78	69	30	9	77	M8	M6	M6	13.7
DMP-102T	102	73 78 83	69	30	9	77	M8	M6	М6	13.7

## D1/D2 Standard aperture

Model	Standard aperture												
DMP-56T	10	11	12	14	15	16	17	18	19	20	22	24	25
DMP-68T	16	18	19	20	22	24	25	28	30	32	35		
DMP-82T	19	20	22	24	25	28	30	32	35	38	40		
DMP-92T	20	22	24	25	28	30	32	35	38	40	42	45	
DMP-102T	32	35	38	40	42	45	48	50					

## Series of photos:



## Performance parameter

			Moment							
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMP-56T	Ф25	58	116	9000	21000	3.6×10 <sup>-5</sup>	0.02	1.0	±0.2	230
DMP-68T	Ф35	60	120	8500	70000	2.6×10 <sup>-4</sup>	0.02	1.0	±0.3	385
DMP-82T	Ф40	100	200	6500	120000	7.1×10 <sup>-4</sup>	0.02	1.0	±0.55	702
DMP-92T	Ф45	150	300	5800	130000	9.4×10 <sup>-4</sup>	0.02	1.0	±0.60	798
DMP-102T	Ф50	250	500	5200	140000	1.89×10 <sup>-3</sup>	0.02	1.0	±0.74	927

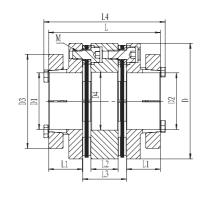
## When ordering:

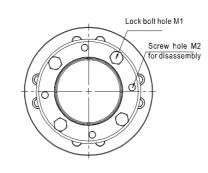


## **SMP-T Series**

## Double diaphragm-expansion sleeve type-coupling (high-strength aluminum alloy)







## Specifications

Model	D	D3	D4	L	L1	L2	L3	L4	М	M1	M2	Screw tightening torque ( N•M )
SMP-56T	56	40 48	29	69	20	14	29	76	M5	M5	M5	6
SMP-68T	68	44 53 63	36	82.2	26	14	30.2	89.2	M5	M5	M5	6
SMP-82T	82	58 68 75	41	97.4	30	20	37.4	105.4	M8	M6	M6	13.7
SMP-92T	92	58 68 78	47	98	30	20	38	106	M8	M6	М6	13.7
SMP-102T	102	73 78 83	51	102	30	24	42	110	M8	M6	M6	13.7

## D1/D2 Standard aperture

Model	Standard aperture												
SMP-56T	10	11	12	14	15	16	17	18	19	20	22	24	25
SMP-68T	16	18	19	20	22	24	25	28	30	32	35		
SMP-82T	19	20	22	24	25	28	30	32	35	38	40		
SMP-92T	20	22	24	25	28	30	32	35	38	40	42	45	
SMP-102T	32	35	38	40	42	45	48	50					

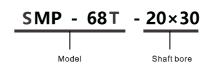
## Series of photos:



## Performance parameter

	Max	Rated	Max	Maximum	Static	Moment	Allo	ation	quality	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g) *
SMP-56T	Ф25	58	116	9000	10000	5.4×10 -5	0.25	1.0	±0.8	349
SMP-68T	Ф35	60	120	8500	35000	3.7×10 <sup>-4</sup>	0.25	1.0	±0.9	563
SMP-82T	Ф40	100	200	6500	60000	1.03×10 <sup>-3</sup>	0.25	1.0	±1.1	1072
SMP-92T	Φ45	150	300	5800	65000	1.5×10 <sup>-3</sup>	0.25	1.0	±1.2	1223
SMP-102T	Ф50	250	500	5200	70000	2.75×10 <sup>-3</sup>	0.25	1.0	±1.4	1545

## When ordering:

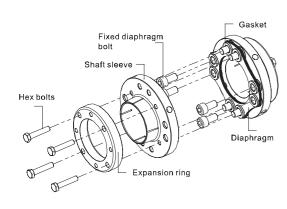


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## **DMPS-T Series**

Coupling Single diaphragm-expansion sleeve type (carbon steel)

#### Structure



#### Material

	Carbon steel/blackening
Shaft sleeve	Stainless steel/electrolysis
Expansion ring	Carbon steel/blackening
Expansion ring	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel nickel plated
Fixed disphrage helt	SCM435 (12.9 class)
Fixed diaphragm bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolt	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Low inertia, high sensitivity, high torque rigidity
- Zero backlash
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Expansion sleeve fixing method

### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Machine tool's feed axis, spindle
- XY axis sliding table, indexing table

#### Product model description

DMPS-68T - 20x22

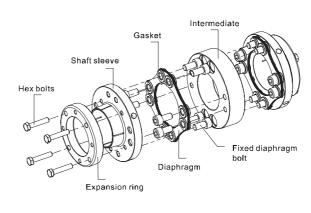
Product model specification Shaft bore



## SMP-T Series

coupling Double Diaphragm-Expansion Sleeve Type (High Strength Aluminum Alloy)

#### Structure



#### Material

	Carbon steel/blackening						
Shaft sleeve	Stainless steel/electrolysis						
Intermediate	Carbon steel/blackening						
intermediate	Stainless steel/electrolysis						
	Carbon steel/blackening						
Expansion ring	Stainless steel/electrolysis						
Diaphragm	stainless steel						
Gasket	Carbon steel nickel plated						
Fixed disphrage half	SCM435 (12.9 class)						
Fixed diaphragm bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435(12.9 class)						
bolt	Ferric oxide protective film (black)						
	· · · · · · · · · · · · · · · · · · ·						

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- High torque rigidity
- High sensitivity
- Zero backlash
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular and axial deviation
- Expansion sleeve fixing method

Product model description

SMPS-68T - 20x22

Product model specification Shaft bore

#### The main purpose

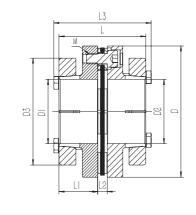
- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Machine tool's feed axis, spindle
- XY axis sliding table, indexing table

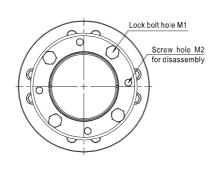


## **DMPS-T Series**

## Diaphragm-expansion sleeve type-coupling (carbon steel)







## Specifications

Model	D	D3	L	L1	L2	L3	М	M1	M2	Screw tightening torque (N•M)
DMPS-56T	56	40 48	47.5	20	7.5	54.5	M5	M5	M5	6
DMPS-68T	68	44 53 63	60.1	26	8.1	67.1	M5	M5	M5	6
DMPS-82T	82	58 68 75	68.7	30	8.7	76.7	M8	M6	M6	13.7
DMPS-92T	92	58 68 78	69	30	9	77	M8	М6	M6	13.7
DMPS-102T	102	73 78 83	69	30	9	77	M8	М6	M6	13.7

## D1/D2 Standard aperture

Model	Standard aperture												
DMPS-56T	10	11	12	14	15	16	17	18	19	20	22	24	25
DMPS-68T	16	18	19	20	22	24	25	28	30	32	35		
DMPS-82T	19	20	22	24	25	28	30	32	35	38	40		
DMPS-92T	20	22	24	25	28	30	32	35	38	40	42	45	
DMPS-102T	32	35	38	40	42	45	48	50					

## Series of photos:



## Performance parameter

	Max		Max	Maximum	Static	Moment	Allo	wable devia	ation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPS-56T	Ф25	75	150	9000	50000	4.2×10 <sup>-5</sup>	0.02	1.0	±0.2	464
DMPS-68T	Ф35	80	160	8500	52000	4.27×10 <sup>-4</sup>	0.02	1.0	±0.3	862
DMPS-82T	Ф40	130	260	6500	138000	1.48×10 <sup>-3</sup>	0.02	1.0	±0.55	1482
DMPS-92T	Ф45	195	390	5800	194000	2.0 × 10 <sup>-3</sup>	0.02	1.0	±0.60	1703
DMPS-102T	Ф50	325	650	5000	250000	3.68×10 <sup>-3</sup>	0.02	1.0	±0.74	1993

## When ordering:

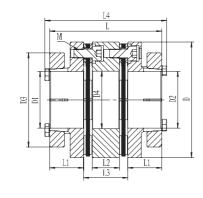


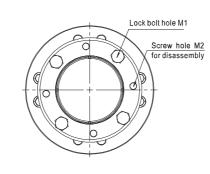
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## **SMPS-T Series**

## Double diaphragm-expansion sleeve type-coupling (carbon steel)







## Specifications

Model	D	D3	D4	L	L1	L2	L3	L4	М	M1	M2	Screw tightening torque ( N•M )
SMPS-56T	56	40 48	29	69	20	14	29	76	M5	M5	M5	6
SMPS-68T	68	44 53 63	36	82.2	26	14	30.2	89.2	M5	M5	M5	6
SMPS-82T	82	58 68 75	41	97.4	30	20	37.4	105.4	М8	М6	М6	13.7
SMPS-92T	92	58 68 78	47	98	30	20	38	106	M8	M6	M6	13.7
SMPS-102T	102	73 78 83	51	102	30	24	42	110	M8	M6	M6	13.7

## D1/D2 Standard aperture

Model		Standard aperture											
SMPS-56T	10	11	12	14	15	16	17	18	19	20	22	24	25
SMPS-68T	16	18	19	20	22	24	25	28	30	32	35		
SMPS-82T	19	20	22	24	25	28	30	32	35	38	40		
SMPS-92T	20	22	24	25	28	30	32	35	38	40	42	45	
SMPS-102T	32	35	38	40	42	45	48	50					

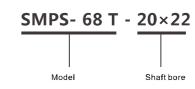
## Series of photos:



## Performance parameter

	Max	Rated	Max	Maximum	Static	Moment	Allo	quality		
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPS-56T	Ф25	75	150	9000	24000	6.1×10 -5	0.25	1.0	±0.6	686
SMPS-68T	Ф35	80	160	8500	25800	6.45×10 <sup>-4</sup>	0.25	1.0	±0.9	1222
SMPS-82T	Ф40	130	260	6500	72000	2.44×10 <sup>-3</sup>	0.25	1.0	±1.1	2172
SMPS- 92T	Ф45	195	390	5800	97000	3.1×10 <sup>-3</sup>	0.25	1.0	±1.2	2543
SMPS-102T	Ф50	325	650	5000	145000	5.28×10 <sup>-3</sup>	0.25	1.0	±1.4	3255

When ordering:



## **HDJM-G Series**

Coupling Single Diaphragm-Top wire type (Carbon Steel)

#### Structure



#### Material

Shaft sleeve	Carbon steel/blackening				
Shart sieeve	Stainless steel/electrolysis				
Diaphragm	stainless steel				
Gasket	Carbon steel nickel plated				
Fixed diaphragm bolt	SCM435 (12.9 class)				
T ixed diapinagin boil	Ferric oxide protective film (black)				
Hexagon socket	SCM435(12.9 class)				
bolt	Ferric oxide protective film (black)				

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Top wire fixing method

## Product model description

HDJM-126G-30x35

Product model specification

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Shaft bore

※ Remarks: keyway can be processed

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free,vacuum environmenttransmission system
- Acid-base, warm and humid environment

## Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular and axial deviation
- Corrosion resistance
- Top wire fixing method

#### Product model description

HDJM-126G-30x35

Shaft bore

Product model specification

※ Remarks: keyway can be processed

## **HSJM-G Series**

Diaphragm

Inner hexagon stop wire

Structure

Fixed diaphragm

Coupling Double Diaphragm-Top wire type (Carbon Steel)

Shaft sleeve

Intermediate

#### Material

01.6.1	Carbon steel/blackening
Shaft sleeve	Stainless steel/electrolysis
Intermediate	Carbon steel/blackening
mormodiate	Stainless steel/electrolysis
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
Fixed diapili agiii boit	Ferric oxide protective film (black)
Hayanan aaakat halt	SCM435 (12.9 class)
Hexagon socket bolt	Ferric oxide protective film (black)

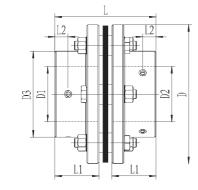
#### The main purpose

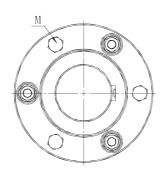
- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

## HDJM-G

## Single diaphragm-screw type-coupling (carbon steel)







## **Specifications**

Model	D1	.D2	D		D3	L1	L2	М
Model	Minimum	Maximum			D3	- "	LZ	IVI
HDJM-104G	16	40	104	80	61	35	12	M8
HDJM-126G	19	50	126	91	78	40	12	M10
HDJM-144G	22	60	144	102.5	88	44	15	M10
HDJM-152G	22	70	152	102	104	45	15	M10
HDJM-178G	28	80	178	124	118	55	20	M12
HDJM-192G	32	85	192	144.8	126	65	25	M12
HDJM-225G	48	100	225	197	140	90	35	M16

## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allowable	auglitu	
Model	aperture (mm)	torque (N.M)	speed ( min-1)	torquerigidity (N.M/rad)	of inertia (KG·M²)	angular deviation	axial deviation	quality (g)
HDJM-104G	Ф40	250	12000	250000	2.6×10 <sup>-3</sup>	1	±1.4	2152
HDJM-126G	Ф50	450	11000	430000	6.5×10 <sup>-3</sup>	1	±1.6	3486
HDJM-144G	Ф60	800	9400	780000	9.9×10 <sup>-3</sup>	1	±1.8	5127
HDJM-152G	Φ70	1000	5900	1500000	12.6×10 <sup>-3</sup>	1	±0.4	4710
HDJM-178G	Ф80	1300	5100	2840000	26.88×10 <sup>-3</sup>	1	±0.5	7520
HDJM-192G	Ф85	2000	4700	3400000	43.82×10 <sup>-3</sup>	1	±0.5	12046
HDJM-225G	Ф100	5000	4000	5940000	102.53×10 <sup>-3</sup>	1	±0.6	18250

## When ordering:



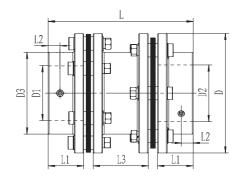
#### ※ Keyway machining

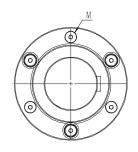
When machining keyway on one side shafthole :HDJM-126G-30Kx35 When machining keyway on both sides shaft hole:HDJM-126G-30Kx35K

For keyway processing parameters, please refer to the keyway dimension table

#### Series of photos:







#### **Specifications**

	D1•D2		D		D3	L1	L2	L3	М
Model	Minimum	Maximum					LZ	LS	101
HSJM-104G	16	40	104	128	61	35	12	38	M8
HSJM-126G	19	50	126	143.6	78	40	12	41.6	M10
HSJM-144G	22	60	144	165	88	44	15	48	M10
HSJM-152G	22	70	152	184	104	45	15	70	M10
HSJM-178G	28	80	178	218	118	55	20	80	M12
HSJM-192G	32	85	192	260	126	65	25	100.4	M12
HSJM-225G	48	100	225	330	140	90	35	116	M16

## Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	quality		
Model	aperture (mm)	torque (N.M)	speed ( min <sup>-1</sup> )	nin <sup>-1</sup> ) (N.M/rad) (KG·	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
HSJM-104G	Ф40	250	10000	125000	4.6×10⁻³	0.6	2	±2.8	3300
HSJM-126G	Ф50	450	8000	215000	11.8×10 <sup>-3</sup>	8.0	2	±3.2	5800
HSJM-144G	Ф60	800	7000	390000	21.2×10 <sup>-3</sup>	0.9	2	±3.6	8600
HSJM-152G	Φ70	1000	5900	750000	21.87×10 <sup>-3</sup>	1.4	2	±0.8	8720
HSJM-178G	Ф80	1300	5100	1420000	51.07×10 <sup>-3</sup>	1.6	2	±1.0	13940
HSJM-192G	Ф85	2000	4700	170000	81.58×10 <sup>-3</sup>	2.0	2	±1.0	19510
HSJM-225G	Ф100	5000	4000	2970000	176.91×10 <sup>-3</sup>	2.3	2	±1.2	30270

## When ordering:



※ Keyway machining

When machining keyway on one side shafthole :HDJM-126G-30Kx35 When machining keyway on both sides shaft hole:HDJM-126G-30Kx35K

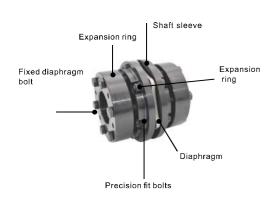
For keyway processing parameters, please refer to the keyway dimension table

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#### **HDJM-T Series**

Coupling Single Diaphragm-expansion type (Carbon Steel)

#### Structure



#### Material

	Carbon steel							
Shaft sleeve	blackening							
Expansion ring	Carbon steel							
Expansion ring	blackening							
Diaphragm	stainless steel							
Gasket	Carbon steel blackened							
Precision fit bolts	SCM435 (12.9 class)							
1 Todiololi III Bolto	Ferric oxide protective film (black)							
Hexagonal nut	SCM435(12.9 class)							
Trexagonarnat	Ferric oxide protective film (black)							
Hexagonal bolts	SCM435(12.9 class)							
Tioxagonal bolts	Ferric oxide protective film (black)							

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial angularand axial deviations
- Corrosion resistance
- Expansion fixing method

#### Product model description

HDJM-178T-60x70

Shaft bore

Product model specification

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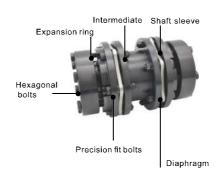
#### The main purpose

- · Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- XY axis sliding table, indexing table
- Dust-free, vacuum environmenttransmission system
- Acid-base, warm and humid environment

#### **HSJM-T Series**

Coupling Double Diaphragm-expansion Type (Carbon Steel)

#### Structure



#### Material

	Carbon steel						
Shaft sleeve	blackening						
	Carbon steel						
Intermediate	blackening						
Fynansian sinn	Carbon steel						
Expansion ring	blackening						
Diaphragm	stainless steel						
Gasket	Carbon steel blackened						
Precision fit bolts	SCM435 (12.9 class)						
Frecision in boits	Ferric oxide protective film (black)						
Hexagonal nut	SCM435(12.9 class)						
нехадопагни	Ferric oxide protective film (black)						
Hexagonal bolts	SCM435(12.9 class)						
Tienagoriai boits	Ferric oxide protective film (black)						

#### Features

- Diaphragm elastic coupling
- · Zero backlash, high-precision position control system
- . Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular
- Corrosion resistance
- Expansion fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

Product model description

HSJM-178T-60x70

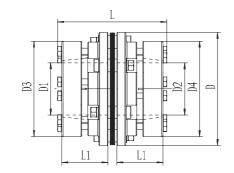
Shaft bore

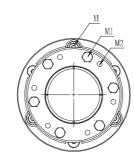
Product model specification

#### **HDJM-T Series**

Single diaphragm-Expansion type-coupling (carbon steel)





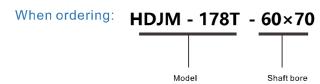


#### **Specifications**

Model	D1•D2	D	L	D3•D4	L1	М	M1	M2
HDJM-104T	32-42	104	98	68/73	40	M8	M6	M6
HDJM-126T	35-50	126	122.3	68/73/78/83	50	M10	M8	M8
HDJM-144T	35-60	144	143.1	83/88/98/108	59	M10	M8	M8
HDJM-152T	38-70	152	146.6	108/128	62	M10	M8	M8
HDJM-178T	38-80	178	154.6	108/128/148	65	M12	M8	M8
HDJM-192T	38-85	192	161.6	108/128/148	67	M12	M10	M10
HDJM-225T	38-100	225	195.8	108/128/148/168	83	M16	M10	M10

#### Performance parameter

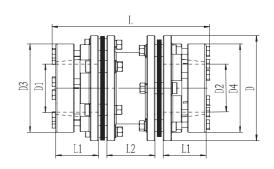
	Max	Allowable	Maximum	Static	Moment	Allowable		
Model	aperture (mm)	torque (N.M)	speed ( min-1)	torquerigidity (N.M/rad)	of inertia (KG·M²)	angular deviation	axial deviation	quality (g)
HDJM-104T	Φ42	250	5000	250000	3.2×10 <sup>-3</sup>	1	±1.4	2535
HDJM-126T	Ф50	450	5000	430000	8.9×10 <sup>-3</sup>	1	±1.6	4848
HDJM-144T	Ф60	800	5000	780000	1.7×10 <sup>-2</sup>	1	±1.8	6915
HDJM-152T	Φ70	1000	5900	1500000	2.6×10 <sup>-2</sup>	1	±0.4	8980
HDJM-178T	Ф80	1300	5100	2840000	5.1×10 <sup>-2</sup>	1	±0.5	13031
HDJM-192T	Ф85	2000	4700	3400000	6.1×10 <sup>-2</sup>	1	±0.5	14080
HDJM-225T	Ф100	5000	4000	5940000	1.2×10 <sup>-1</sup>	1	±0.6	20240

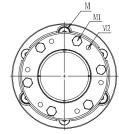


#### **HSJM-T Series**

Double Diaphragm-Expansion Type-Coupling (Carbon Steel)







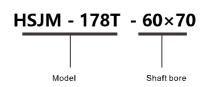
#### **Specifications**

Model	D1•D2	D	L	D3•D4	L1	L2	М	M1	M2
HSJM-104T	32-42	104	146	68/73	40	38	M8	M6	М6
HSJM-126T	35-50	126	175.6	68/73/78/83	50	41.6	M10	M8	M8
HSJM-144T	35-60	144	205.6	83/88/98/108	59	48	M10	M8	M8
HSJM-152T	38-70	152	228.6	108/128	62	70	M10	M8	M8
HSJM-178T	38-80	178	248.6	108/128/148	65	80	M12	M8	M8
HSJM-192T	38-85	192	276.8	108/128/148	67	100.4	M12	M10	M10
HSJM-225T	38-100	225	328.8	108/128/148/168	83	116	M16	M10	M10

#### Performance parameter

	Max	Allowable	Maximum	Static	Moment	Allo	tion	quality	
Model	aperture (mm)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g) ·
HSJM-104T	Ф42	250	5000	125000	5.3×10 <sup>-3</sup>	0.6	2	±2.8	4084
HSJM-126T	Ф50	450	5000	215000	1.4×10 <sup>-2</sup>	0.8	2	±3.2	7447
HSJM-144T	Ф60	800	5000	390000	2.7×10 <sup>-2</sup>	0.9	2	±3.6	10630
HSJM-152T	Φ70	1000	5900	750000	4.1×10 <sup>-2</sup>	1.4	2	±0.8	13908
HSJM-178T	Ф80	1300	5100	1420000	8.0×10 <sup>-2</sup>	1.6	2	±1.0	20330
HSJM-192T	Ф85	2000	4700	1700000	1.0×10 <sup>-1</sup>	2.0	2	±1.0	23845
HSJM-225T	Ф100	5000	4000	2970000	1.9×10 <sup>-1</sup>	2.3	2	±1.2	32751

When ordering:



#### **DMPA-GC Series**

Coupling single diaphragm-(Top wire type + clamping type) (high-strength aluminum alloy)

#### Structure

Diaphragm type



#### Material

(Top wire type)	High-strength aluminum alloy						
Shaft sleeve	Anodizing treatment						
(clamping type)	High-strength aluminum alloy						
Shaft sleeve	Anodizing treatment						
Diaphragm	stainless steel						
Gasket	Carbon steel blackened						
	SCM435 (12.9 class)						
Fixed diaphragm bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435 (12.9 class)						
set bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435 (12.9 class)						
bolt	Ferric oxide protective film (black)						

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial angularand axial deviations
- Corrosion resistance
- Top wire fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environmenttransmission system
- Acid-base, warm and humid environment

#### Product model description

DMPA-68GC-20 x22

Product model specification

Shaft bore

※ Remarks: keyway can be processed

# **SMPA-GC Series**

Coupling double diaphragm-(Top wire type + clamping type) (high-strength aluminum alloy)

#### Structure



#### Material

(Top wire type)	High-strength aluminum alloy						
Shaft sleeve	Anodizing treatment						
(clamping type)	High-strength aluminum alloy						
Shaft sleeve	Anodizing treatment						
Intermediate	High-strength aluminum alloy						
milermediate	Anodizing treatment						
Diaphragm	stainless steel						
Gasket	Carbon steel blackened						
Fire deliandes on balk	SCM435 (12.9 class)						
Fixed diaphragm bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435 (12.9 class)						
set bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435 (12.9 class)						
bolt	Ferric oxide protective film (black)						

#### Features

- · Diaphragm elastic coupling
- · Zero backlash, high-precision position control system
- . Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular
- Corrosion resistance
- Top wire fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

#### Product model description

SMPA-68GC-20x22

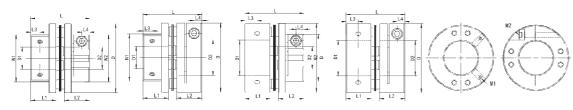
Shaft bore

Product model specification

※ Remarks: keyway can be processed

#### **DMPA-GC Series**

#### Single Diaphragm - Top wire type + Clamping type - Coupling (High Strength Aluminum Alloy)



Shape 1 Shape 2 Shape 3 Shape 3 Shape 4 (small aperture\* small aperture\*) (small aperture\*) (large aperture\*) (large aperture\*) (large aperture\*) (large aperture\*)

#### **Specifications**

Model	D1/D2 Aperture range		D		N1 / N2	L1/L2	L3	L4	М1	М2	Screw tightening torque	
Model	Small aperture	Big aperture	D	L	INT / INZ	LI/LZ	LS	L <del>4</del>	IVII	IVIZ	M1	M2
DMPA-56GC	10-20	22-30	56	47.5	38	20	10	6.5	M5	M5	5 So	5 rew
DMPA-68GC	10-22	24-35	68	58.1	46.5	25	12	7.75	М6	M6	8	8
DMPA-82GC	14-28	30-42	82	68.7	54	30	14	9	M8	M8	20	28
DMPA-92GC	19-35	38-45	92	69	60	30	14	9	M8	M8	20	28
DMPA-102GC	20-40	42-55	102	69	68	30	15	9	M10	M8	40	28

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMPA-56GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DIMPA-30GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMPA-68GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DIVIPA-00GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPA-82GC	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DIVIPA-62GC	D2				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMPA-92GC	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-92GC	D2									•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-102GC	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
DIVIPA-102GC	D2										•	•	•	•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Max ape	Max aperture (mm)		Maximum	Static	Moment	Allo	quality		
Model	D1	D2	Allowable torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPA-56GC	Ф30	Ф30	32	7700	22400	1.17×10 <sup>-4</sup>	0.02	0.5	±0.3	235
DMPA-68GC	Ф35	Ф35	60	6500	33600	3.03×10 <sup>-4</sup>	0.02	0.5	±0.3	421
DMPA-82GC	Φ42	Ф42	100	5500	78000	8.13×10 <sup>-4</sup>	0.02	0.5	±0.3	783
DMPA-92GC	Φ45	Ф45	150	5500	89000	1.27×10 <sup>-3</sup>	0.02	0.5	±0.3	986
DMPA-102GC	Ф55	Ф55	250	4000	156000	1.86×10 <sup>-3</sup>	0.02	0.5	±0.5	1119

#### When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMPA-68C-20Kx30 When machining keyway on two sides shaft hole: DMPA-68C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

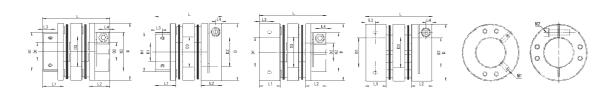
#### ※ Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

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#### **SMPA-GC Series**

Double Diaphragm - Top wire type + Clamping type - Coupling (High Strength Aluminum Alloy)



Shape 1 Shape 2 Shape 3 Shape 3 Shape 4 (small aperture\* small aperture) (large aperture\* large aperture) (large aperture) (large aperture) (large aperture)

#### **Specifications**

Model	D1/D2 Aperture range				NI1 / NI 2	11/12					Screw tightening torque		
Model	Small aperture	Big aperture	D	L	N1 / N2	L1/ L2	L3	L4	М1	M2	М1	M2	
SMPA-56GC	10-20	22-30	56	69	38	20	10	6.5	M5	M5	5	5	
SMPA-68GC	10-22	24-35	68	80.2	46.5	25	12	7.75	M6	M6	8	8	
SMPA-82GC	14-28	30-42	82	97.4	54	30	14	9	M8	M8	20	28	
SMPA-92GC	19-35	38-45	92	98	60	30	15	9	М8	M8	20	28	
SMPA-102GC	20-40	42-55	102	98	68	30	15	9	M10	M8	40	28	

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
SMPA-56GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SIMPA-SOGC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPA-68GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SWPA-66GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPA-82GC	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SWPA-62GC	D2				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPA-92GC	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
SWIPA-92GC	D2									•	•	•	•	•	•	•	•	•	•	•	•	•		
SMDA 1026C	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
SMPA-102GC	D2										•	•	•	•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Мах ареі	rture (mm)	Allowable	Maximum	Static	Moment	Allo	wable devia	tion	au alibu
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	quality (g)
SMPA-56GC	Ф30	Ф30	32	7700	1000	1.74×10 <sup>-4</sup>	0.2	1.0	±0.6	348
SMPA-68GC	Ф35	Ф35	60	6500	14000	4.19×10 <sup>-4</sup>	0.2	1.0	±0.6	583
SMPA-82GC	Ф42	Ф42	100	5500	35000	1.2×10 <sup>-3</sup>	0.2	1.0	±0.6	1162
SMPA-92GC	Φ45	Ф45	150	5500	40000	1.83×10 <sup>-3</sup>	0.2	1.0	±0.6	1418
SMPA-102GC	Ф55	Ф55	250	4000	70000	2.69×10 <sup>-3</sup>	0.25	1.0	±0.9	1614

#### When ordering:



#### Keyway machining

When machining keyway on one side shaft hole: DMPA-68C-20Kx30 When machining keyway on two sides shaft hole: DMPA-68C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

#### X Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

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#### **DMPS-G Series**

Coupling Single Diaphragm - (Top wire type + Clamping type) - (Carbon Steel)

#### Structure



#### Material

(Tan wire tune)	Carbon steel/blackening								
(Top wire type) Shaft sleeve	stainless steel								
(clamping type)	Carbon steel/blackening								
Shaft sleeve	stainless steel								
Diaphragm	stainless steel								
Gasket	Carbon steel blackened								
Fixed diaphragm bolt	SCM435 (12.9 class)								
r ixed diapin agin boit	Ferric oxide protective film (black)								
Hexagonal nut	SCM435(12.9 class)								
Troxagonarnat	Ferric oxide protective film (black)								
Hexagonal bolts	SCM435(12.9 class)								
. Toxagonar botto	Ferric oxide protective film (black)								

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Top wire type+clamping type fixing method

#### Product model description

DMPS - 68GC - 20 ×22

Product model specification

Shaft bore

※ Remarks: keyway can be processed

# The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environmenttransmission system
- Acid-base, warm and humid environment

#### **SMPS-GC Series**

Coupling Double Diaphragm - (Top wire type + Clamping type) - (Carbon Steel)

#### Structure



#### Material

(Top wire type)	Carbon steel/blackening									
Shaft sleeve	stainless steel									
(clamping type)	Carbon steel/blackening									
Shaft sleeve	stainless steel									
Intermediate	Carbon steel/blackening									
milermediate	stainless steel									
Diaphragm	stainless steel									
Gasket	Carbon steel blackened									
Fixed diaphragm bolt	SCM435 (12.9 class)									
r ixed diapili agili bolt	Ferric oxide protective film (black)									
Hexagon socket	SCM435(12.9 class)									
set bolt	Ferric oxide protective film (black)									
Hexagon socket	SCM435(12.9 class)									
bolts	Ferric oxide protective film (black)									

#### Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular and axial deviation
- Corrosion resistance
- Top wire type+clamping type fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

#### Product model description

SMPS - 68GC - 20 ×22

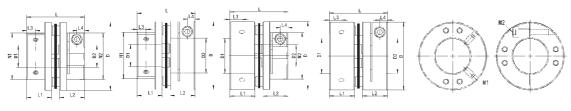
Shaft bore

Product model specification

※ Remarks: keyway can be processed

#### **DMPS-GC Series**

#### Single Diaphragm - (Top wire type + Clamping type)-Coupling - (Carbon Steel)



Shape 1 Shape 2 Shape 3 Shape 3 Shape 4 (small aperture\* small aperture) (large aperture\* large aperture) (large aperture) (large aperture) (large aperture)

#### **Specifications**

Model	D1/D2 Ape	erture range			NI /NI 2	11/12			141			crew ng torque
Model	Small aperture	Big aperture	D	L	N1/N2	L1/L2	L3	L4	M1	M2	М1	M2
DMPS-56GC	10-20	22-30	56	47.5	38	20	10	6.5	M5	M5	5	5
DMPS-68GC	10-22	24-35	68	58.1	46.5	25	12	7.75	М6	M6	8	8
DMPS-82GC	14-28	30-42	82	68.7	54	30	14	9	M8	M8	20	28
DMPS-92GC	19-35	38-45	92	69	60	30	14	9	M8	M8	20	28
DMPS-102GC	20-40	42-55	102	69	68	30	15	9	M10	M8	40	28

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMPS-56GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DIMPS-30GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMPS-68GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DIMPS-60GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPS-82GC	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DIVIPS-02GC	D2				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMPS-92GC	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
DIVIPS-92GC	D2									•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPS-102GC	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
DIVIP3-102GC	D2										•	•	•	•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Max ape	rture (mm)	Allowable	Maximum	Static	Moment	Allo	wable devia	ation	
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	quality (g)
DMPS-56GC	Ф30	Ф30	38.4	5000	22400	2.7×10 <sup>-4</sup>	0.02	0.5	±0.3	535
DMPS-68GC	Ф35	Ф35	80	5000	33600	7.38×10 <sup>-4</sup>	0.02	0.5	±0.3	1015
DMPS-82GC	Φ42	Ф42	130	4000	78000	1.87×10 <sup>-3</sup>	0.02	0.5	±0.3	1772
DMPS-92GC	Φ45	Ф45	195	4000	89000	3.02×10 <sup>-3</sup>	0.02	0.5	±0.3	2314
DMPS-102GC	Ф55	Ф55	325	4000	156000	4.43×10 <sup>-3</sup>	0.02	0.5	±0.5	2655

#### When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole: DMPA-68C-20Kx30 When machining keyway on two sides shaft hole: DMPA-68C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

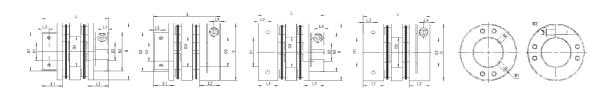
#### ※ Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

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#### **SMPS-GC Series**

#### Double Diaphragm - (Top wire type + Clamping type)-Coupling - (Carbon Steel)



Shape 1 Shape 2 Shape 3 Shape 3 Shape 4 (small aperture\* small aperture) (large aperture\* large aperture) (large aperture) (large aperture) (large aperture)

#### **Specifications**

Model	D1/D2 Ape	rture range	D	L	N1 / N2	D3	L1/L2	L3	L4	М1	M2		crew ng torque
Model	Small aperture	Big aperture	D	_	INI / INZ	DS	L1/L2	L3	L4	IVII	IVIZ	М1	M2
SMPS-56GC	10-20	22-30	56	69	38	31	20	10	6.5	M5	M5	5	5
SMPS-68GC	10-22	24-35	68	80.2	46.5	36	25	12	7.75	M6	M6	8	8
SMPS-82GC	14-28	30-42	82	97.4	54	42.5	30	14	9	M8	M8	20	28
SMPS-92GC	19-35	38-45	92	98	60	47	30	15	9	M8	M8	20	28
SMPS-102GC	20-40	42-55	102	98	68	56	30	15	9	M10	M8	40	28

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
CMPC FCCC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPS-56GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPS-68GC	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SIVIPS-00GC	D2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPS-82GC	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
31V1P3-02GC	D2				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPS-92GC	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
31V1P3-92GC	D2									•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPS-102GC	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
31VIF3-102GC	D2										•	•	•	•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Max aper	ture (mm)	Allowable	Maximum	Static	Moment	Allo	wable devia	ion	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPS-56GC	Ф30	Ф30	38.4	5000	11200	3.75×10 <sup>-4</sup>	0.2	1.0	±0.6	744
SMPS-68GC	Ф35	Ф35	80	5000	16800	9.72×10 <sup>-4</sup>	0.2	1.0	±0.6	1335
SMPS-82GC	Ф42	Ф42	130	4000	39000	2.6×10 <sup>-3</sup>	0.2	1.0	±0.6	2462
SMPS-92GC	Φ45	Φ45	195	4000	44500	4.13×10 <sup>-3</sup>	0.2	1.0	±0.6	3161
SMPS-102GC	Ф55	Ф55	325	4000	78000	6.1×10 <sup>-3</sup>	0.25	1.0	±0.9	3645

#### When ordering:



#### ※ Keyway machining

When machining keyway on one side shaft hole:DMPA-68C-20Kx30 When machining keyway on two sides shaft hole:DMPA-68C-20Kx30K

For keyway processing parameters, please refer to the keyway dimension table

#### ※ Shape change service:

If you wish to change the standard coupling shape 1 and shape 2 (stepped sleeve) to shape 3 (straight sleeve), please contact our customer service for consultation.

#### **DMPA-GT Series**

Coupling single diaphragm - (top wire type + expansion type) (high strength aluminum alloy)

#### Structure



#### Material

	I									
(Top wire type)	High strength aluminum alloy									
Shaft sleeve	anodizing treatment									
(clamping type)	High strength aluminum alloy									
Shaft sleeve	anodizing treatment									
Evpansion ring	High strength aluminum alloy									
Expansion ring	anodizing treatment									
Diaphragm	stainless steel									
Gasket	Carbon steel blackened									
Fixed diaphragm bolt	SCM435 (12.9 class)									
Tixed diaplinagiii bolt	Ferric oxide protective film (black)									
Hexagon socket	SCM435(12.9 class)									
set bolt	Ferric oxide protective film (black)									
Hexagon socket	SCM435(12.9 class)									
bolts	Ferric oxide protective film (black)									

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- Top wire type+clamping type fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free,vacuum environmenttransmission system
- Acid-base, warm and humid environment

## Product model description

**DMPA-68GT - 20x22** 

Product model specification

Shaft bore

X Remarks: keyway can be processed

# SMPA-GT Series

series coupling Double diaphragm - (top wire type + expansion type) (high strength aluminum alloy)

#### Structure



#### Material

(Top wire type)	High strength aluminum alloy						
Shaft sleeve	anodizing treatment						
(clamping type)	High strength aluminum alloy						
Shaft sleeve	anodizing treatment						
Expansion ring	High strength aluminum alloy						
Expansion ring	anodizing treatment						
Intermediate	High strength aluminum alloy						
intermediate	anodizing treatment						
Diaphragm	stainless steel						
Gasket	Carbon steel blackened						
Fixed diaphragm bolt	SCM435(12.9 level )						
Tixed diapiliagili bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435(12.9 level)						
set bolt	Ferric oxide protective film (black)						
Hexagon socket	SCM435(12.9 level)						
bolts	Ferric oxide protective film (black)						

#### Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular and axial deviation
- Corrosion resistance
- Top wire type+clamping type fixing method

#### The main purpose

- $\bullet \quad \text{Servo motors, stepping motors, precision motors, etc.}$
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

#### Product model description

**SMPA-68GT - 20x22** 

Product model specification

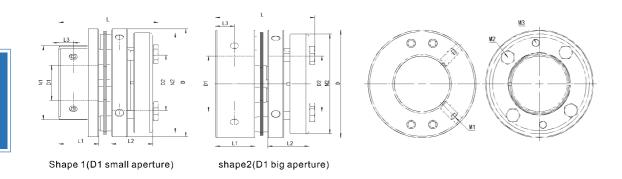
Shaft bore

※ Remarks: keyway can be processed

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#### **DMPA-GT Series**

Coupling single diaphragm - (top wire type + expansion type) (high strength aluminum alloy)



#### Specifications

	D1 Apertu	ure range	D2									140/140	Sci tightenin	rew ng torque
Model	Small aperture	Big aperture	Aperture range	D	L	N1	N2	L1	L2	L3	М1	M2/M3	М1	M2
DMPA-56GT	10-20	22-30	10-25	56	51	38	40 48	20	20	10	M5	M5	5	6
DMPA-68GT	10-22	24-35	16-35	68	62.6	46.5	44 53 63	25	26	12	M6	M5	8	6
DMPA-82GT	14-28	30-42	19-40	82	72.7	54	58 68 75	30	30	14	M8	M6	20	13.7
DMPA-92GT	19-35	38-45	20-45	92	73	60	58 68 78	30	30	15	M8	M6	20	13.7
DMPA-102GT	20-40	42-55	32-50	102	73	68	73 78 83	30	30	15	M10	M6	40	13.7

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMDA ECCT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMPA-56GT	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
DAADA COCT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPA-68GT	D2						•	•	•	•	•	•	•	•	•	•	•	•						
DMDA 02CT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMPA-82GT	D2									•	•	•	•	•	•	•	•	•	•	•				
DMDA 02CT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-92GT	D2										•	•	•	•	•	•	•	•	•	•	•	•		
DARA 102CT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
DMPA-102GT	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max aper	ture (mm)	Allowable	Maximum	Static	Moment	Allov	vable		quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPA-56GT	Ф30	Ф30	32	7700	20000	1.07×10 <sup>-4</sup>	0.02	0.5	±0.3	232
DMPA-68GT	Ф35	Ф25	60	6500	28000	2.85×10 <sup>-4</sup>	0.02	0.5	±0.3	407
DMPA-82GT	Ф42	Ф40	100	5500	70000	7.53×10 <sup>-4</sup>	0.02	0.5	±0.3	752
DMPA-92GT	Ф45	Ф45	150	5500	80000	1.1×10 <sup>-3</sup>	0.02	0.5	±0.3	895
DMPA-102GT	Ф55	Ф50	250	4000	1 40000	1.59×10 <sup>-3</sup>	0.02	0.5	±0.5	1015

#### When ordering:



※ Keyway machining

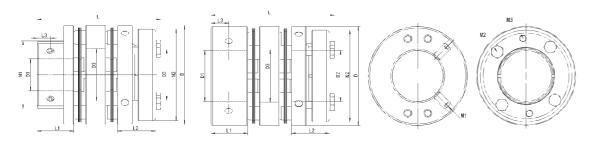
When processing the keyway on the D1 side shaft hole:DMPA-68GT-20Kx22

※ Shape change service:

If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

#### **SMPA-GT Series**

Double diaphragm-top wire type + expansion type-coupling (high strength aluminum alloy)



Shape 1(D1 small aperture)

shape2(D1 big aperture)

#### Specifications

Model	D1 Apert	ure range	D2 Aperture	D		N1	N2	D3	L1	L2	12	N/1	M2/M3	Scr tightenin	rew ig torque
Model	Small aperture	Big aperture	range			INT	INZ	D3	-1	LZ	LJ	IVII	1012/1013	М1	M2
SMPA-56GT	10-20	22-30	10-25	56	72.5	38	40 48	31	20	20	10	M5	M5	5	6
SMPA-68GT	10-22	24-35	16-35	68	84.7	46.5	44 53 63	36	25	26	12	М6	M5	8	6
SMPA-82GT	14-28	30-42	19-40	82	101.4	54	58 68 75	42.5	30	30	14	M8	М6	20	13.7
SMPA-92GT	19-35	38-45	20-45	92	102	60	58 68 78	47	30	30	15	M8	M6	20	13.7
SMPA-102GT	20-40	42-55	32-50	102	106	68	73 78 83	56	30	30	15	M10	M6	40	13.7

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
CNADA ECCT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPA-56GT	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
CMDA COCT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPA-68GT	D2						•	•	•	•	•	•	•	•	•	•	•	•						
CMDA 02CT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPA-82GT	D2									•	•	•	•	•	•	•	•	•	•	•				
CMDA 02CT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPA-92GT	D2										•	•	•	•	•	•	•	•	•	•	•	•		
CNADA 102CT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
SMPA-102GT	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max aper	ture (mm)	Allowable	Maximum	Static	Moment		Allowable	:	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPA-56GT	Ф30	Ф25	32	7700	20000	1.64×10 <sup>-4</sup>	0.2	1.0	±0.6	345
SMPA-68GT	Ф35	Ф35	60	6500	28000	4.0×10 <sup>-4</sup>	0.2	1.0	±0.6	568
SMPA-82GT	Ф42	Ф40	100	5500	70000	1.14×10 <sup>-3</sup>	0.2	1.0	±0.6	1131
SMPA-92GT	Ф45	Ф45	150	5500	80000	1.66×10 <sup>-3</sup>	0.2	1.0	±0.6	1327
SMPA-102GT	Ф55	Ф50	250	4000	140000	2.54×10 <sup>-3</sup>	0.25	1.0	±0.9	1584

#### When ordering:



※ Keyway machining

When processing the keyway on the D1 side shaft hole:SMPA-68GT-20Kx22

X Shape change service:

If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

For keyway processing parameters, please refer to the keyway dimension table

#### **DMPS-GT Series**

Coupling single diaphragm - (top wire type + expansion type) (carbon steel)

#### Structure



#### Material

(Top wire type)	Carbon steel/blackening
Shaft sleeve	stainless steel
(clamping type)	Carbon steel/blackening
Shaft sleeve	stainless steel
Expansion ring	Carbon steel/blackening
Expansion ring	stainless steel
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
Tixed diaplinagiii boit	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
set bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolts	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial angularand axial deviations
- Corrosion resistance
- Top wire type+clamping type fixing method

#### The main purpose

- High-speed, high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environmenttransmission system
- Acid-base, warm and humid environment

- · Servo motors, stepping motors, precision motors, etc.

#### Product model description

#### **DMPS-68GT-20x22**

Product model specification Shaft bore

※ Remarks: keyway can be processed

#### **SMPS-GC Series**

Coupling Double Diaphragm - (Top wire type + Clamping type) - (Carbon Steel)

#### Structure



#### Material

(Top wire type)	Carbon steel/blackening
Shaft sleeve	stainless steel
(clamping type)	Carbon steel/blackening
Shaft sleeve	stainless steel
Evpansion ring	Carbon steel/blackening
Expansion ring	stainless steel
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
r ixed diapili agili bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
set bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolts	Ferric oxide protective film (black)

#### Features

- · Diaphragm elastic coupling
- · Zero backlash, high-precision position control system
- . Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular
- Corrosion resistance
- Top wire type+clamping type fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

#### Product model description

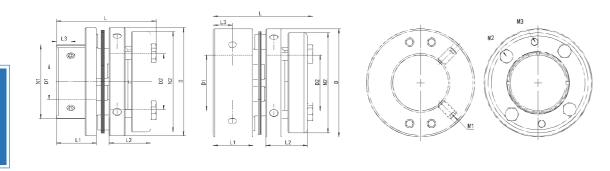
#### **SMPS-68GT - 20x22**

Product model specification Shaft bore

※ Remarks: keyway can be processed

#### **DMPS-GT Series**

Single diaphragm - top screw + expansion type - coupling (carbon steel)



shape2(D1 big aperture)

#### Specifications

Shape 1(D1 small aperture)

Model	D1 Aperti	ure range	D2 Aperture											rew ng torque
Wodei	Small aperture	Big aperture	range	D	L	N1	N2	L1	L2	L3	М1	M2/M3	M1	M2
DMPS-56GT	10-20	22-30	10-25	56	51	38	40 48	20	20	10	M5	M5	5	6
DMPS-68GT	10-22	24-35	16-35	68	62.6	46.5	44 53 63	25	26	12	М6	M5	8	6
DMPS-82GT	14-28	30-42	19-40	82	72.7	54	58 68 75	30	30	14	M8	M6	20	13.7
DMPS-92GT	19-35	38-45	20-45	92	73	60	58 68 78	30	30	15	M8	M6	20	13.7
DMPS-102GT	20-40	42-55	32-50	102	73	68	73 78 83	30	30	15	M10	M6	40	13.7

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMPS-56GT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DIVIPS-50GT	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
DMPS-68GT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DIVIPS-00G1	D2						•	•	•	•	•	•	•	•	•	•	•	•						
DMPS-82GT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DIVIP3-0201	D2									•	•	•	•	•	•	•	•	•	•	•				
DMPS-92GT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
DIVIPS-9201	D2										•	•	•	•	•	•	•	•	•	•	•	•		
DMPS-102GT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
DIVIP3-102G1	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max apert	ure (mm)	Allowable	Maximum	Static	Moment		Allowable	;	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPS-56GT	Ф30	Ф25	38.4	5000	22400	2.33×10 <sup>-4</sup>	0.02	0.5	±0.3	502
DMPS-68GT	Ф35	Ф35	80	5000	33600	6.7×10 <sup>-4</sup>	0.02	0.5	±0.3	951
DMPS-82GT	Ф42	Ф40	130	4000	78000	1.68×10 <sup>-3</sup>	0.02	0.5	±0.3	1655
DMPS-92GT	Ф45	Φ45	195	4000	89000	2.54×10 <sup>-3</sup>	0.02	0.5	±0.3	2032
DMPS-102GT	Ф55	Ф50	325	4000	156000	3.67×10 <sup>-3</sup>	0.02	0.5	±0.5	2341

#### When ordering:



※ Keyway machining

When processing the keyway on the D1 side shaft hole:DMPS-68GT-20Kx22

If you wish to change the standard coupling profile 1

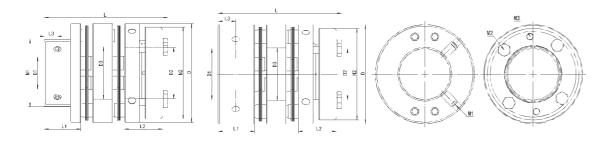
(stepped sleeve) to profile 2 (straight sleeve)

※ Shape change service:

For keyway processing parameters, please refer to the keyway dimension table

#### **SMPS-GT Series**

Double Diaphragm - Top wire type + Expansion Type - Coupling (Carbon Steel)



Shape 1(D1 small aperture)

shape2(D1 big aperture)

#### Specifications

Model	D1 Aper	ture range	D2 Aperture	D		N1	N2	D3	L1	L2	L3	M1	M2/M3	Sci tightenir	rew ng torque
Wodel	Small aperture	Big aperture	range		_	INT	INZ	DS	LI	LZ	L3	IVII	1012/1013	M1	M2
SMPS-56GT	10-20	22-30	10-25	56	72.5	38	40 48	31	20	20	10	M5	M5	5	6
SMPS-68GT	10-22	24-35	16-35	68	84.7	46.5	44 53 63	36	25	26	12	M6	M5	8	6
SMPS-82GT	14-28	30-42	19-40	82	101.4	54	58 68 75	42.5	30	30	14	M8	M6	20	13.7
SMPS-92GT	19-35	38-45	20-45	92	102	60	58 68 78	47	30	30	15	M8	М6	20	13.7
SMPS-102GT	20-40	42-55	32-50	102	106	68	73 78 83	56	30	30	15	M10	M6	40	13.7

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
SMPS-56GT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
3N1P3-30G1	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
SMPS-68GT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
314173-0001	D2						•	•	•	•	•	•	•	•	•	•	•	•						
SMPS-82GT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
314173-0201	D2									•	•	•	•	•	•	•	•	•	•	•				
SMPS-92GT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
314173-9201	D2										•	•	•	•	•	•	•	•	•	•	•	•		
SMDS 102GT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
31VIF3-10201	SMPS-102GT D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max apert	ure (mm)	Allowable	Maximum	Static	Moment		Allowable	:	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPS-56GT	Ф30	Ф25	38.4	5000	11200	3.4×10 <sup>-4</sup>	0.2	1.0	±0.6	711
SMPS-68GT	Ф35	Ф35	80	5000	16800	9.04×10 <sup>-4</sup>	0.2	1.0	±0.6	1271
SMPS-82GT	Ф42	Ф40	130	4000	39000	2.4×10 <sup>-3</sup>	0.2	1.0	±0.6	2344
SMPS-92GT	Φ45	Ф45	195	4000	44500	3.65×10 <sup>-3</sup>	0.2	1.0	±0.6	2879
SMPS-102GT	Ф55	Ф50	325	4000	78000	5.6×10 <sup>-3</sup>	0.25	1.0	±0.9	3512

#### When ordering:



※ Keyway machining

When processing the keyway on the D1 side shaft hole:SMPS-68GT-20Kx22

Shape change service:

If you wish to shape the steedard as

If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

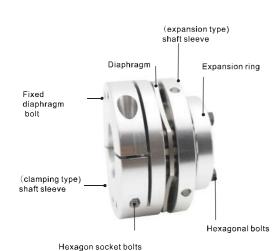
For keyway processing parameters, please refer to the keyway dimension table

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#### **DMPA-CT Series**

Coupling single diaphragm - (clamping type + expansion type) (high-strength aluminum alloy)

#### Structure



Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial, angularand axial deviations
- Corrosion resistance
- clamping type+expansion type fixing method

#### Product model description

#### **DMPA-68CT - 20x22**

Product model specification

Shaft bore

#### Material

(Top wire type)	High strength aluminum alloy
Shaft sleeve	anodizing treatment
(clamping type)	High strength aluminum alloy
Shaft sleeve	anodizing treatment
Funancias das	High strength aluminum alloy
Expansion ring	anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435 (12.9 class)
r ixed diapinagin bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
set bolt	Ferric oxide protective film (black)
Hexagon socket bolts	SCM435(12.9 class)
	Ferric oxide protective film (black)

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed,high-precision position control
- Precision encoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environmenttransmission system
- Acid-base, warm and humid environment

#### **SMPA-CT Series**

Coupling double diaphragm - (clamping type + expansion type) (high-strength aluminum alloy)

#### Structure



#### Material

(Top wire type)	High strength aluminum alloy
Shaft sleeve	anodizing treatment
(clamping type)	High strength aluminum alloy
Shaft sleeve	anodizing treatment
Expansion ring	High strength aluminum alloy
Expansion mig	anodizing treatment
Intermediate	High strength aluminum alloy
Intermediate	anodizing treatment
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fixed diaphragm bolt	SCM435(12.9 level)
Fixed diaprilagili bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 level)
set bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 level)
bolts	Ferric oxide protective film (black)

#### Features

High strength aluminum alloy

- Diaphragm elastic coupling
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular and axial deviation
- Corrosion resistance
- clamping type+expansion type fixing method

## Product model description

#### **SMPA-68CT - 20x22**

Shaft bore

Product model specification

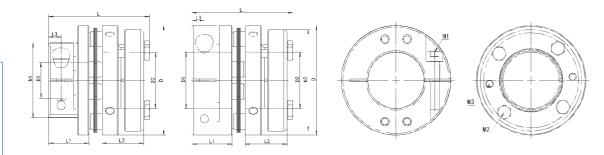
※ Remarks: keyway can be processed

#### The main purpose

- $\bullet \quad \text{Servo motors, stepping motors, precision motors, etc.}$
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

#### **DMPA-CT Series**

Single diaphragm - clamping type+ expansion type - coupling (high strength aluminum alloy



Shape 1(D1 small aperture)

shape2(D1 big aperture)

#### Specifications

Model	D1 Aper	ture range	D2 Aperture	D	L	N1	N2	L1	L2	L3	M1	M2/M3		ew ig torque
Model	Small aperture	Big aperture	range		_	INT	INZ	LI	LZ	LJ	IVII	1012/1013	M1	M2
DMPA-56CT	10-20	22-30	10-25	56	51	38	40 48	20	20	6.5	M5	M5	5	6
DMPA -68CT	10-22	24-35	16-35	68	62.6	46.5	44 53 63	25	26	7.75	M6	M5	8	6
DMPA-82CT	14-28	30-42	19-40	82	72.7	54	58 68 75	30	30	9	M8	M6	28	13.7
DMPA -92CT	19-35	38-45	20-45	92	73	60	58 68 78	30	30	9	M8	M6	28	13.7
DMPA-102CT	20-40	42-55	32-50	102	73	68	73 78 83	30	30	9	M8	M6	28	13.7

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMD4 FCCT	D1	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•								
DMPA-56CT	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
DMDA 69CT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMPA-68CT D2						•	•	•	•	•	•	•	•	•	•	•	•							
DMPA-82CT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMFA-62C1	D2									•	•	•	•	•	•	•	•	•	•	•				
DMDA 02CT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-92CT	D2										•	•	•	•	•	•	•	•	•	•	•	•		
DMPA-102CT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max aper	ture (mm)	Allowable	Maximum	Static	Moment		Allowable	•	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPA-56CT	Ф30	Ф25	32	7700	2000	1.06×10 <sup>-4</sup>	0.02	0.5	±0.3	230
DMPA-68CT	Ф35	Ф35	60	6500	28000	2.82×10 <sup>-4</sup>	0.02	0.5	±0.3	402
DMPA-82CT	Ф42	Ф40	100	5500	70000	7.44×10 <sup>-4</sup>	0.02	0.5	±0.3	744
DMPA-92CT	Ф45	Ф45	150	5500	8000	1.9×10 <sup>-3</sup>	0.02	0.5	±0.3	883
DMPA-102CT	Ф55	Ф50	250	4000	140000	1.58×10 <sup>-3</sup>	0.02	0.5	±0.5	1004

#### When ordering:



※ Keyway machining

When processing the keyway on the D1 side shaft hole:DMPA-68CT-20Kx22

X Shape change service:

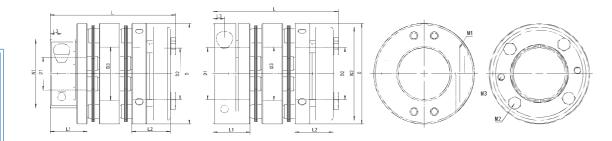
If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

For keyway processing parameters, please refer to the keyway dimension table

DZ Keyway dimension table

#### **SMPA-CT Series**

Double diaphragm - clamping type + expansion type- coupling (high strength aluminum alloy)



Shape 1(D1 small aperture)

shape2(D1 big aperture)

#### Specifications

Model	D1 Apertu		D2 Aperture	D		N1	N2	D3	L1	L2	L3	M1	M2/M3	Scr tightenin	
moder	Small aperture	Big aperture	range		_	INT	INZ	D3		LZ	LJ	IVII	1012/1013	M1	M2
SMPA-56CT	10-20	22-30	10-25	56	72.5	38	40 48	31	20	20	6.5	M5	M5	5	6
SMPA-68CT	10-22	24-35	16-35	68	84.7	46.5	44 53 63	36	25	26	7.75	M6	M5	8	6
SMPA-82CT	14-28	30-42	19-40	82	101.4	54	58 68 75	42.5	30	30	9	M8	M6	28	13.7
SMPA-92CT	19-35	38-45	20-45	92	102	60	58 68 78	47	30	30	9	M8	M6	28	13.7
SMPA-102CT	20-40	42-55	32-50	1 02	106	68	73 78 83	56	30	30	9	M8	M6	28	13.7

#### D1/D2 Standard aperture

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
CMDA FCCT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SMPA-56CT	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
CMDA COCT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
SMPA-08CI	SMPA-68CT D2						•	•	•	•	•	•	•	•	•	•	•	•						
CMDA 02CT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
SMPA-82CT	D2									•	•	•	•	•	•	•	•	•	•	•				
CMDA 02CT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
SMPA-92CT	D2										•	•	•	•	•	•	•	•	•	•	•	•		
SMPA-102CT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max aper	ture (mm)	Allowable	Maximum	Static	Moment		Allowable	)	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPA-56CT	Ф30	Ф25	32	7700	10000	1.63×10 <sup>-4</sup>	0.2	1.0	±0.6	342
SMPA-68CT	Ф35	Ф35	60	6500	14000	3.97×10 <sup>-4</sup>	0.2	1.0	±0.6	565
SMPA-82CT	Ф42	Ф40	100	5500	35000	1.13×10 <sup>-3</sup>	0.2	1.0	±0.6	1120
SMPA-92CT	Ф45	Ф45	150	5500	40000	1.66×10 <sup>-3</sup>	0.2	1.0	±0.6	1320
SMPA-102CT	Ф55	Ф50	250	4000	70000	2.5×10 <sup>-3</sup>	0.2	1.0	±0.9	1561

#### When ordering:



Keyway machining

When processing the keyway on the D1 side shaft hole:SMPA-68CT-20Kx22

X Shape change service:

If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

For keyway processing parameters, please refer to the keyway dimension table

#### **DMPS-CT Series**

Coupling Single Diaphragm - (Clamping type + Expansion type) (Carbon Steel)

#### Structure



#### Material

(Ton wire tune)	Carbon steel/blackening
(Top wire type) Shaft sleeve	stainless steel
	Stalliless steel
(clamping type)	Carbon steel/blackening
Shaft sleeve	stainless steel
Fynansian sinn	Carbon steel/blackening
Expansion ring	stainless steel
Diaphragm	stainless steel
Gasket	Carbon steel blackened
Fived diaphroam helt	SCM435 (12.9 class)
Fixed diaphragm bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
set bolt	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 class)
bolts	Ferric oxide protective film (black)

#### Features

- Diaphragm-type elastic coupling connected by expansion sleeve
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation
- Stainless steel diaphragmcompensates radial angularand axial deviations
- Corrosion resistance
- Clamping type+expansion type fixing method

#### The main purpose

- High-speed, high-precision position control
- Precision encoder
- Dust-free, vacuum environmenttransmission system
- Acid-base, warm and humid environment

- · Servo motors, stepping motors, precision motors, etc.

- XY axis sliding table, indexing table

#### Product model description

**DMPS-68CT - 20x22** 

Product model specification

Shaft bore

※ Remarks: keyway can be processed

#### **SMPS-CT Series**

Coupling Double Diaphragm - (Clamping type + Expansion type) (Carbon Steel)

#### Structure



#### Material

Carbon steel/blackening
stainless steel
Carbon steel/blackening
stainless steel
Carbon steel/blackening
stainless steel
Carbon steel/blackening
stainless steel
stainless steel
Carbon steel blackened
SCM435(12.9 level)
Ferric oxide protective film (black)
SCM435(12.9 level)
Ferric oxide protective film (black)
SCM435(12.9 level)
Ferric oxide protective film (black)

#### Features

- · Diaphragm elastic coupling
- · Zero backlash, high-precision position control system
- . Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular
- Corrosion resistance
- clamping type+expansion type fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Precisionencoder
- XY axis sliding table, indexing table
- Dust-free, vacuum environment transmission system
- Acid-base, warm and humid environment

#### Product model description

**SMPS-68CT - 20x22** 

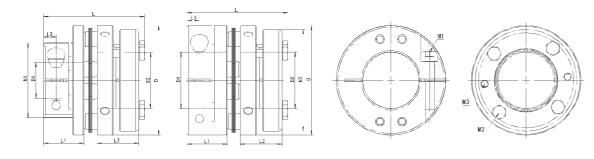
Shaft bore

Product model specification

※ Remarks: keyway can be processed

#### **DMPS-CT Series**

#### Single Diaphragm - Clamping type + Expansion Type - Coupling (Carbon Steel)



Shape 1(D1 small aperture)

shape2(D1 big aperture)

#### Specifications

Model	D1 Apert	ure range	D2 Aperture	D		N1	N2	L1	L2	L3	M1	M2/M3	Sci tightenir	rew ng torque
Model	Small aperture	Big aperture	range		_	INT	INZ		LZ	LS	IVII	1012/1013	M1	M2
DMPS-56CT	10-20	22-30	10-25	56	51	38	40 48	20	20	6.5	M5	M5	5	6
DMPS-68CT	10-22	24-35	16-35	68	62.6	46.5	44 53 63	25	26	7.75	M6	M5	8	6
DMPS-82CT	14-28	30-42	19-40	82	72.7	54	58 68 75	30	30	9	M8	M6	28	13.7
DMPS-92CT	19-35	38-45	20-45	92	73	60	58 68 78	30	30	9	M8	M6	28	13.7
DMPS-102CT	20-40	42-55	32-50	102	73	68	73 78 83	30	30	9	M8	M6	28	13.7

#### D1/D2 Standard aperture

117

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
DMPS-56CT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
DMP3-30C1	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
DMPS-68CT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
DMP2-08C1	D2						•	•	•	•	•	•	•	•	•	•	•	•						
DMPS-82CT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
DMP3-02C1	D2									•	•	•	•	•	•	•	•	•	•	•				
DMPS-92CT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
DMP3-92C1	D2										•	•	•	•	•	•	•	•	•	•	•	•		
DMDC 103CT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
DMPS-102CT	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max apert	ure (mm)	Allowable	Maximum	Static	Moment		Allowable		quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
DMPS-56CT	Ф30	Ф25	38.4	5000	22400	2.3×10 <sup>-4</sup>	0.02	0.5	±0.3	<b>49</b> 2
DMPS-68CT	Ф35	Ф35	80	5000	33600	6.5×10 <sup>-4</sup>	0.02	0.5	±0.3	929
DMPS-82CT	Ф42	Ф40	130	4000	78000	1.63×10 <sup>-3</sup>	0.02	0.5	±0.3	1612
DMPS-92CT	Ф45	Ф45	195	4000	89000	2.5×10 <sup>-3</sup>	0.02	0.5	±0.3	1978
DMPS-102CT	Ф55	Ф50	325	4000	156000	3.6×10 <sup>-3</sup>	0.02	0.5	±0.5	2289

#### When ordering:



※ Keyway machining

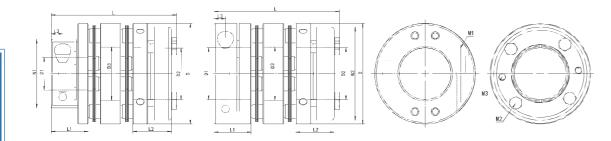
When processing the keyway on the D1 side shaft hole: DMPS-68CT-20Kx22  $\,$ 

※ Shape change service:

If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

#### **SMPS-CT Series**

Double Diaphragm - Clamping type + Expansion type - Coupling (Carbon Steel)



Shape 1(D1 small aperture)

shape2(D1 big aperture)

#### Specifications

Model	D1 Apert	ure range	D2 Aperture	D		N1	N2	D3	L1	L2	L3	М1	M2/M3		rew ng torque
	Small aperture	Big aperture	range		-	INT	INZ	55	LI	LZ	13	IVIT	1012/1013	М1	M2
SMPS-56CT	10-20	22-30	10-25	56	51	38	40 48	31	20	20	6.5	M5	M5	5	6
SMPS-68CT	10-22	24-35	16-35	68	626	46.5	44 53 63	36	25	26	7.75	M6	M5	8	6
SMPS-82CT	14-28	30-42	19-40	82	727	54	58 68 75	42.5	30	30	9	M8	M6	28	13.7
SMPS-92CT	19-35	38-45	20-45	92	73	60	58 68 78	47	30	30	9	M8	M6	28	13.7
SMPS-102CT	20-40	42-55	32-50	102	73	68	73 78 83	56	30	30	9	M8	M6	28	13.7

#### D1/D2 Standard aperture

119

Model		10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	50	55
SMPS-56CT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
3MP3-30C1	D2	•	•	•	•	•	•	•	•	•	•	•	•	•										
SMPS-68CT	D1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
3MP3-00C1	D2						•	•	•	•	•	•	•	•	•	•	•	•						
SMPS-82CT	D1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
3MP3-02C1	D2									•	•	•	•	•	•	•	•	•	•	•				
SMPS-92CT	D1									•	•	•	•	•	•	•	•	•	•	•	•	•		
3MP3-92C1	D2										•	•	•	•	•	•	•	•	•	•	•	•		
SMDS 103CT	D1										•	•	•	•	•	•	•	•	•	•	•	•	•	•
SMPS-102CT	D2																•	•	•	•	•	•	•	

#### Series of photos:



#### Performance parameter

	Max aper	ture (mm)	Allowable	Maximum	Static	Moment		Allowable	;	quality
Model	D1	D2	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial deviation	(g)
SMPS-56CT	Ф30	Ф25	38.4	5000	11200	3.34×10 <sup>-4</sup>	0.2	1.0	±0.6	701
SMPS-68CT	Ф35	Ф35	80	5000	16800	8.9×10 <sup>-4</sup>	0.2	1.0	±0.6	1250
SMPS-82CT	Ф42	Ф40	130	4000	39000	2.4×10 <sup>-3</sup>	0.2	1.0	±0.6	2298
SMPS-92CT	Ф45	Ф45	195	4000	44500	3.6×10 <sup>-3</sup>	0.2	1.0	±0.6	2831
SMPS-102CT	Ф55	Ф50	325	4000	78000	5.5×10 <sup>-3</sup>	0.25	1.0	±0.9	3449

#### When ordering:



※ Keyway machining

When processing the keyway on the D1 side shaft hole: SMPS-68CT-20Kx22  $\,$ 

X Shape change service:

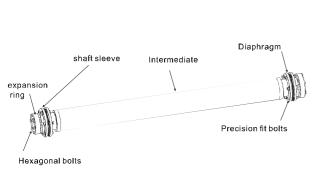
If you wish to change the standard coupling profile 1 (stepped sleeve) to profile 2 (straight sleeve)

For keyway processing parameters, please refer to the keyway dimension table

#### **HSCM-T Series**

Couplings Long Shaft Type - Expansion Type (Steel Tube)

#### Structure



#### Material

Shaft sleeve	steel						
Silait sieeve	blackening						
Expansion ring	steel						
Expansion ring	blackening						
Intermediate	steel						
mtermediate	blackening						
Diaphragm	stainless steel						
Gasket	Carbon steel/blackening						
Precision fit bolts	SCM435(12.9 class)						
r recicion in Bone	Ferric oxide protective film (black)						
Hexagonal bolts	SCM435(12.9 class)						
Tiexagenar boile	Ferric oxide protective film (black)						

#### Features

- Diaphragm elastic coupling
- Zero backlash, high-precision position control system
- Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragmcompensates radial angularand axial deviations
- Corrosion resistance
- expansion type fixing method

#### The main purpose

- High-speed, high-precision position control
- Spindle power transmission
- Acid-base, warm and humid environment

- · Servo motors, stepping motors, precision motors, etc.

#### Product model description

#### HSCM-6260T-48X60-J1500

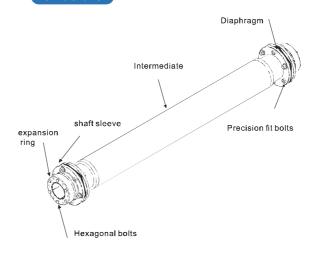
model Shaft bore Axle spacing

Remarks: keyway can be processed additionally

#### **CFRP-T Series**

Couplings Long Shaft Type - Expansion Type (Carbon Fiber Composite Tube)

#### Structure



#### Material

Shaft sleeve	steel							
Shart sleeve	blackening							
Expansion ring	steel							
	blackening							
Intermediate	Carbon Fiber Composite Tube							
Diaphragm	stainless steel							
Gasket	Carbon steel/blackening							
	SCM435(12.9 class)							
Precision fit bolts	Ferric oxide protective film (black)							
Hexagonal bolts	SCM435(12.9 class)							
	Ferric oxide protective film (black)							

#### Features

- Diaphragm elastic coupling
- · Zero backlash, high-precision position control system
- . Low inertia, high sensitivity, high torque rigidity
- Clockwise and counterclockwise rotation characteristics are identical
- Stainless steel diaphragm compensates for angular
- Corrosion resistance
- expansion type fixing method

#### The main purpose

- Servo motors, stepping motors, precision motors, etc.
- High-speed, high-precision position control
- Spindle power transmission
- Acid-base, warm and humid environment

#### Product model description

#### CFRP-6260T-48X60-J1500

model

Shaft bore

Axle spacing

Remarks: keyway can be processed additionally

Nietz Precision Coupling

Nietz Precision Coupling

## **HSCM-T Series**

Long Shaft Type - Expansion Type - Coupling (Steel Pipe)



#### Specifications

Model	D1 - D2 Aperture range	D	и	<b>J</b> Axle spacing(mm)	M1
HSCM-630T	14-26	77	35		6×M5
HSCM-645T	20-36	89	40		6×M5
HSCM-665T	25-45	104	45		6×M6
HSCM-6110T	30-45	126	50		6×M6
HSCM-6160T	35-55	143	55		6×M8
HSCM-6260T	40-65	168	60		6×M8
HSCM-8320T	42-75	168	65		8×M8
HSCM-8400T	50-85	188	75		8×M8
HSCM-8500T	60-100	198	95		8×M10

#### Maximum speed table (different axis spacing J)

			Maxim	ium speed	d table (r/r	min)				
Axle spacing model J	800mm	1000mm	1125mm	1250mm	1375mm	1500mm	1625mm	1750mm	1800mm	2000mm
HSCM-630T	5500	4300	3500	3000	2500	2000	1600	1500	1350	1200
HSCM-645T	6000	5500	4300	3500	2900	2400	2100	1700	1600	1300
HSCM-665T	6000	5700	5300	4200	3400	3000	2500	2200	2000	1600
HSCM-6110T	6000	6000	5700	4800	4200	3300	2800	2500	2200	1800
HSCM-6160T	6000	6000	6000	5400	4700	3700	3200	2800	2500	2200
HSCM-6260T	6000	6000	6000	5700	5100	4200	3500	3100	2600	2300
HSCM-8320T	6000	6000	6000	6000	5300	4500	3800	3200	3000	2500
HSCM-8400T	6000	6000	6000	6000	5300	4500	3800	3200	3000	2500
HSCM-8500T	5000	5000	5000	5000	5000	5000	4500	3800	3600	3000



#### Performance parameter

Model	Max	Rated	Maximum	Maximum		Allowable	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	radial deviation	angular deviation	axial deviation
HSCM-630T	Ф <b>26</b>	300	450			0.3	±0.8
HSCM-645T	Ф <b>3</b> 6	420	630			0.3	±0.9
HSCM-665T	Ф45	650	975			0.3	±1.1
HSCM-6110T	Ф45	1100	1650			0.3	±1.3
HSCM-6160T	Ф55	1600	2400	See the		0.3	±1.5
HSCM-6260T	Ф65	2600	3900	tachometer		0.3	±1.7
HSCM-8320T	Φ75	3200	4800			0.3	±1.5
HSCM-8500T	Ф100	5000	7500			0.3	±2.0

#### When ordering:

### HSCM-6260T-48X60-J1500

model Aperture Axle spacing

## **CFRP-T Series**

Long Shaft Type - Expansion Type - Coupling (Carbon Fiber Composite Tube)





#### Specifications

Model	D1 - D2 Aperture range	D	L1	<b>J</b> Axle spacing(mm)	М
CFRP-630T	14-26	77	35		6×M5
CFRP-645T	20-36	89	40		6×M5
CFRP-665T	25-45	104	45	According to	6×M6
CFRP-6110T	30-45	126	50	customer	6×M6
CFRP-6160T	35-55	143	55	requirements	6×M8
CFRP-6260T	40-65	168	60	(up to 4000mm)	6×M8
CFRP-8320T	42-75	168	65		8×M8
CFRP-8400T	50-85	188	75		8×M8
CFRP-8500T	60-100	198	95		8×M10



#### Performance parameter

Model	Max	Rated	Maximum	Maximum		Allowable	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	radial deviation	angular deviation	axial deviation
CFRP-630T	Ф <b>26</b>	300	450	10000		0.3	±0.8
CFRP-645T	Ф <b>36</b>	420	630	10000		0.3	± 0.9
CFRP-665T	Ф45	650	975	10000		0.3	±1.1
CFRP-6110T	Φ45	1100	1650	8000	Determined	0.3	±1.3
CFRP-6160T	Ф55	1600	2400	7000	by the	0.3	±1.5
CFRP-6260T	Φ65	2600	3900	6500	length of J	0.3	±1.7
CFRP-8320T	Φ75	3200	4800	5500		0.3	±1.5
CFRP-8400T	Φ85	4000	6000	5000		0.3	±1.7
CFRP-8500T	Ф100	5000	7500	4500		0.3	±2.0

#### When ordering:

### CFRP-6260T-48X60-J1500

mode

Aperture

Axle spacing

ZS-C Series integrated-high-precision-clamping (standard) coupling (high-strength aluminum alloy)
ZSD-C Series Integrated-high-precision-clamping (short and smal) coupling (high-strength aluminum alloy)

#### Structure

# Shockproof rubber

Shaft sleeve

#### Material

Shaft sleeve	High strength aluminum alloy
Spacer	Shockproof rubber
Hexagon	SCM435(12.9 level )
socket bolts	Ferric oxide protective film (black)

#### Features

Zero-turn backlash (accuracy)

Hexagon socket bolts

- High gain
- Shock absorption/cutting
- High torsional rigidity
- Absorption deviation
- Electrical insulation
- Oil resistance
- Clamping screw fixing method

#### Product model description

ZS - 40C	_	10 × 16
7SD-65C	_	20×24

Product model specification

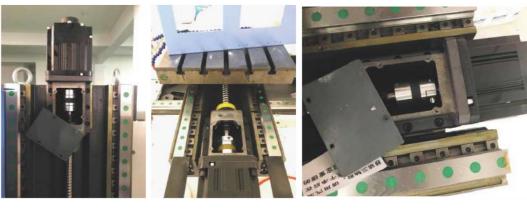
Shaft bore

#### $\ensuremath{\, \times \,}$ Remarks:non-standard aperture can be processed additionally

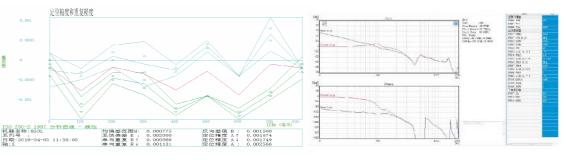
#### The main purpose

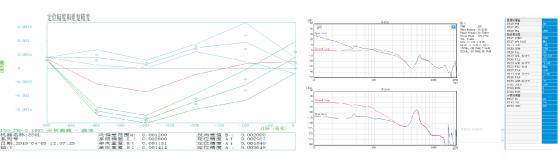
- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, machining center XYZ axis drive
- Semiconductor production equipment
- robot
- Precision position positioning contro!
- Automation equipment

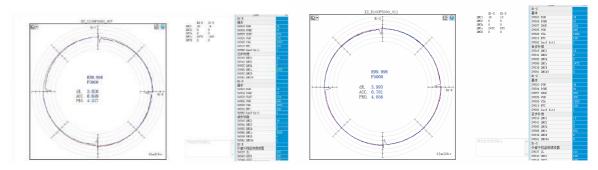
# Integrated-high-precision coupling Machine tool application case Assembly:



#### Test:



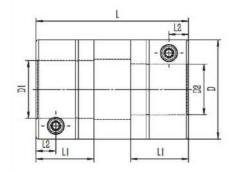


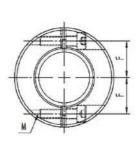


ZS-C Series integrated-high-precision-clamping(standard) coupling (high-strength aluminum alloy)
ZSD-C Series integrated-high-precision-clamping (short and small) coupling (high-strength aluminum alloy)

# Outer diameter $\phi$ 30- $\phi$ 105







#### **Specifications**

Model	Shaft bore	D	L	L1	L2	F	М	Screw tightening torque
ZS-30C	6-12	Ф30	42	15	4.5	10	M4	3.5
23-300	14-16	Ψ30	43	15	4.0	11	M3	1.5
ZS-40C	8-20	Φ40	66	25	8.5	15	M5	8
23-400	22-25	Ψ40	00	25	0.0	16	M4	3.5
ZS-55C	10-28	Ф55	78	30	10.5	20	M6	13
23-330	30-32	Ψοσ	78	30	10.5	22.5	M5	8
ZSD-65C	14-32	Ф65	75	31	11.5	24	M8	28
230 030	35-38	Ψ03	73	31	11.5	25	M6	13
ZS-65C	14-32	Ф65	90	35	11.5	24	M8	28
23-030	35-38	Ψ03	30	33	11.5	25	M6	13
ZS-80C	20-42	Ф80	114	45	15	30	М8	28
23-000	<b>4</b> 5	Ψ00	114	40	10	31	IVIO	20
ZS-95C	25-48	Ф95	126	50	18	34	M10	55
23 930	50-55	433	120	50	10	36	IVITO	55
ZS-105C	30-60	Ф105	140	56.5	19	41	M10	55

#### D1 D2 Standard aperture

Model	6	6.35	7	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
ZS-30C	•	•	•	•	•	•	•	•	•	•	•													Т					
ZS-40C				•	•	•	•	•	•	•	•	•	•	•	•	•	•												
ZS-55C						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•									
ZSD-65C									•	•	•	•	•	•	•	•	•	•	•	•	•	•							
ZS-65C									•	•	•	•	•	•	•	•	•	•	•	•	•	•							
ZS-80C														•	•	•	•	•	•	•	•	•	•	•	•				
ZS-95C																	•	•	•	•	•	•	•	•	•	•	•	•	
ZS-105C																			•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static	Moment	Allowable	edeviation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	(g)
ZS-30C	ф 16	12	24	15000	135	5.8 × 10 <sup>-6</sup>	0.05	0.5	57
ZS-40C	Ф25	16	32	13000	1260	3.5 × 10 <sup>-5</sup>	0.05	0.5	135
ZS-55C	Ф32	58	116	10500	2500	1.5 × 10 <sup>-4</sup>	0.05	0.5	322
ZSD-65C	Ф38	165	300	8500	4700	3.18×10 <sup>-4</sup>	0.05	0.5	440
ZS-65C	Ф38	165	330	8500	4700	3.3 × 10 <sup>-4</sup>	0.05	0.5	530
ZS-80C	Ф45	330	660	7000	6600	1.0 × 10 <sup>-3</sup>	0.05	0.5	1130
ZS-95C	Ф55	440	880	5800	8800	2.2 × 10 <sup>-3</sup>	0.05	0.5	1702
ZS-105C	Ф60	500	1000	3400	11000	3.5 × 10 <sup>-3</sup>	0.05	0.5	2402

#### When ordering:

$$\frac{ZS - 40C - 10 \times 16}{ZSD - 65C - 20 \times 24}$$

$$\frac{ZSD - 65C - 20 \times 24}{Aperture}$$
Aperture Aperture

Integrated High Precision Clamping Coupling (High Strength Aluminum Alloy)

#### Structure



#### Material

Shaft sleeve	High strength aluminum alloy
Spacer	Shockproof rubber
Hexagon	SCM435(12.9 level )
socket bolts	Ferric oxide protective film (black)

#### Features

- Zero-turn backlash (accuracy)
- High gain
- Shock absorption/cutting
- High torsional rigidity
- Absorption deviation
- Electrical insulation
- Oil resistance
- Clamping screw fixing method

#### Product model description

ZSMP-C-44C-10x16

Product model specification

Shaft bore

X Remarks:non-standard aperture can be processed additionally

The main purpose

- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, machining center XYZ axis drive
- Semiconductor production equipment
- robot
- Precision position positioning contro!
- Automation equipment

Features

**ZS-T Series** 

Structure

expansion ring

Hexagonal bolts

- Zero-turn backlash (accuracy)
- High gain
- Shock absorption/cutting
- High torsional rigidity
- Absorption deviation
- Electrical insulation
- Oil resistance
- Use the expansion sleeve to connect

#### Product model description

ZS-40T - 10 x16

Product model specification

#### Material

Integrated-high-precision-expansion type coupling (high-strength aluminum alloy)

Shockproof rubber

Shaft sleeve

Shaft sleeve	High strength aluminum alloy
Expansion ring	High strength aluminum alloy
Spacer	Shockproof rubber
Hexagon	SCM435(12.9 level )
socket bolts	Ferric oxide protective film (black)

#### The main purpose

- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, machining center XYZ axis drive
- Semiconductor production equipment
- Precision position positioning contro!
- Automation equipment

Shaft bore

\* Remarks:non-standard aperture can be processed additionally

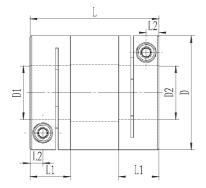
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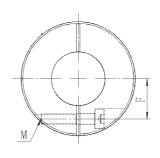
#### **ZSMP-C Series**

#### Integrated-high-precision-clamping-coupling (high-strength aluminum alloy)

Outer diameter Φ**16-**Φ**56** 







#### **Specifications**

Model	D	L	L1	L2	F	М	Screw tightening torque ( N•M )
ZSMP-16C	16	25.7	9.7	2.35	5.2	M2	0.5
ZSMP-19C	19.6	28.7	10.2	2.9	7	M2.5	1
ZSMP-25C	25	34.5	12	3.3	9.25	M3	1.5
ZSMP-27C	27	35.1	12.3	3.5	10.25	M3	1.5
ZSMP-34C	34	38.4	12.8	3.8	12	M3	1.5
ZSMP-39C	39	47.6	16	4.38	14.5	M4	3.5
ZSMP-44C	44	47.6	16	4.38	17	M4	3.5
ZSMP-56C	56	64.4	21	6	20.5	M5	8

#### D1 D2 Standard aperture

Model	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28
ZSMP-16C	•	•	•															
ZSMP-19C		•	•	•	•													
ZSMP-25C			•	•	•	•	•	•										
ZSMP-27C				•	•	•	•	•	•									
ZSMP-34C				•	•	•	•	•	•	•	•							
ZSMP-39C					•	•	•	•	•	•	•	•	•	•				
ZSMP-44C					•	•	•	•	•	•	•	•	•	•	•			
ZSMP-56C						•	•	•	•	•	•	•	•	•	•	•	•	•

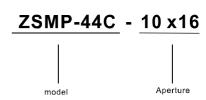
#### Series of photos:



#### Performance parameter

	Maximum	Rated	Maximum torque	Maximum	Static	Moment	Allowable	e deviation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	(g)
ZSMP-16C	Ф5	1.5	3	10000	110	2.6×10 <sup>-7</sup>	0.05	0.5	12
ZSMP-19C	Φ8	2.5	5	10000	240	7.6×10 <sup>-7</sup>	0.05	0.5	19
ZSMP-25C	Ф12	4.5	9	10000	390	2.7×10 <sup>-6</sup>	0.05	0.5	34
ZSMP-27C	Ф14	4.5	9	10000	400	3.7×10 <sup>-6</sup>	0.05	0.5	40
ZSMP-34C	Ф16	8.5	17	10000	890	1.2×10 <sup>-5</sup>	0.05	0.5	72
ZSMP-39C	Ф20	14	28	10000	1100	2.5×10 -5	0.05	0.5	115
ZSMP-44C	Ф22	19	38	10000	1300	4.1×10 -5	0.05	0.5	143
ZSMP-56C	Ф28	36	72	10000	2500	1.4×10 <sup>-4</sup>	0.05	0.5	321

#### When ordering:

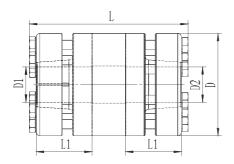


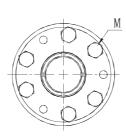
## **ZS-T Series**

#### Integrated-high-precision type-expansion type-coupling (high-strength aluminum alloy)

Outer diameter Φ**30–**Φ**105** 







#### Specifications

Model	Shaft bore	D	L	L1	М	Screw tightening torque ( N•M )
ZS-30T	8-14	30	54	18.5	M3	1.5
ZS-40T	8-20	40	71.6	25	M4	3.4
ZS-55T	10-28	55	85	30	M5	7
ZS-65T	14-38	65	97	35	M5	7
ZS-80T	20-45	80	122	45	M6	14
ZS-95T	25-50	95	137	50	M8	30
ZS-105T	30-55	105	154	56.5	M10	68

#### D1 D2 Standard aperture

Model	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
Model	Ŭ		· ·		•	13	10	10	,,			- '			30	32	33	30			13		50	
ZS-30T	•	•	•	•	•																			
ZS-40T	•	•	•	•	•	•	•	•	•	•														
ZS-55T		•	•	•	•	•	•	•	•	•	•	•	•	•										
ZS-65T					•	•	•	•	•	•	•	•	•	•	•	•	•	•						
ZS-80T										•	•	•	•	•	•	•	•	•	•	•	•			
ZS-95T													•	•	•	•	•	•	•	•	•	•	•	
ZS-105T															•	•	•	•	•	•	•	•	•	•

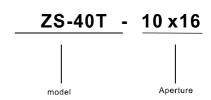
#### Series of photos:



#### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static	Moment	Allowable	e deviation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	(g)
ZS-30T	Ф14	12	24	20000	120	0.05×10 <sup>-4</sup>	0.05	0.5	73
ZS-40T	Ф20	16	32	15000	1200	0.21×10 <sup>-4</sup>	0.05	0.5	176
ZS-55T	Ф28	58	116	12000	2400	0.76×10 <sup>-4</sup>	0.05	0.5	353
ZS-65T	Ф38	165	330	10000	4800	1.65×10 <sup>-4</sup>	0.05	0.5	570
ZS-80T	Ф45	330	660	7000	6500	5.17×10 <sup>-4</sup>	0.05	0.5	1176
ZS-95T	Ф50	440	880	6000	8800	11.17×10 <sup>-4</sup>	0.05	0.5	1973
ZS-105T	Ф55	500	1000	5800	10100	18.8×10 <sup>-4</sup>	0.05	0.5	2803

#### When ordering:



#### Plum elastomer

Plum blossom elastomers are divided into three types according to their hardness, with materials ranging from soft tohard. The appropriate elastomer can be selected according to the necessary torque, shock absorption performance, etc

			Plum blosso	om elastomer ov	erview
Color	Hardness	Material	Allowable tem	perature range	
Coloi	Haluness	Waterial	Continuous temperature	Instantaneous temperature	Instantaneous temperature
0.0					Suitable for shaft sleeves of all materials
4	000114	D = 1 41	2006 . 0006	2006 10006	Good dynamics
7	92SHA	Polyurethane	-20°C ~ +80°C	-30℃ ~ +100℃	Good damping, electrical insulation
					Applied to various general mechanical transmission and
YL					hydraulic equipment transmission
					Suitable for matching with shaft sleeves made of
					steel,cast iron and ductile iron
200	98SHA	Polyurethane	-20°C ~ +80°C	-30℃ ~ +100℃	Transmit higher torque
					Medium damping performance
RD					Good electrical insulation
					Suitable for matching with shaft sleeves made of steeland
					ductile iron
200	64SHD	Hytrel	-30℃~+110℃	-40°C ~ +120°C	Good electricalinsulation, small torsion angle
					Very good temperature resistance
GR					Suitable for critical speed transmission







Outer diameter  $\Phi 14 \sim \Phi 30$ 

Outer diameter  $\Phi40$ 

Outer diameter  $\Phi 55 \sim \Phi 95$ 

				om elastomer tech			
Specification	Elastomer model		e(Nm)	Static torque rigidity (Nm/rad)	Dynamic torque rigidity (Nm/rad)	Radial rigidity(Nm/rad)	Weight (kg)
		T	T max	,	, , ,	• • • •	
14	92Sh-A	1.2	2.4	14.3	43	219	0.5×10 <sup>-3</sup>
	98Sh-A	2	4	22.9	69	421	
20	92Sh-A	3	6	31.5	95	262	1.7×10 <sup>-3</sup>
20	98Sh-A	5	10	51.6	155	518	1.7×10
30	92Sh-A	7.5	15	114.6	344	336	
30	98Sh-A	12.5	25	171.9	513	654	4.7×10 <sup>-3</sup>
	92Sh-A	10	20	1090	1815	1120	
40	98Sh-A	17	34	1512	2540	2010	7×10 <sup>-3</sup>
	64Sh-D	21	42	2560	3810	2930	
	92Sh-A	35	70	2280	4010	1480	
55	98Sh-A	60	120	3640	5980	2560	18×10 <sup>-3</sup>
	64Sh-D	75	150	5030	10896	3696	
	92Sh-A	95	190	4080	6745	1780	
65	98Sh-A	160	320	6410	9920	3200	29×10 <sup>-3</sup>
	64Sh-D	200	400	10260	20177	4348	
	92Sh-A	190	380	6525	11050	2350	
80	98Sh-A	325	650	11800	17160	4400	49×10 <sup>-3</sup>
	64Sh-D	405	810	26300	40335	6474	
	92Sh-A	265	530	10870	15680	2430	
95	98Sh-A	450	900	21594	37692	5570	74.5×10 <sup>-3</sup>
ļ	64Sh-D	560	1120	36860	69825	7270	

#### MH-G Series

#### Coupling Plum Blossom Type-Top wire Type

#### Structure



#### Material

	MH-14G	High strength aluminum alloy
Shaft	to MH-105G	Anodizing treatment
sleeve	MHS-14G	Carbon steel
	MHS-105G	Blackening
Elastic	spacer	Polyurethane
Hexago	n socket	SCM435(12.9 level)
set s	crew	Ferric oxide protective film (black)

#### Features

- Plum elastomer connection
- There are three different hardness elastomers
- Clockwise and counterclockwise rotationcharacteristics are identical
- Absorb vibration, compensate radial, angular and axial deviation
- · High torsional rigidity
- · Oil resistance, electricalinsulation
- Easy to load and unload
- Top wire fixing method

#### Product model description

MH-30G - RD - 10x16

Product model specification

colour

 Remarks: Non-standard aperture and keyway can be processed additionally

#### The main purpose

- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, drill attack, machining centerXYZ
- Robots, medical devices
- Reducer
- Precision position positioning control
- Indexing table,injection molding machine, printingmachine, etc.

#### Zero backlash

Plum blossom series selection is divided into generaluse and use underno backlash

If it is considered to be used in a backlash-free stateit needs to be used at a torque sufficiently lower thanthe common coupling torque.

In terms of the coupling structure, the component canbe used without backlash during pre-compression, but backlash may occur during use.If consideringlong-term use without backlash, it is recommended to increase the use factor.

If you need to achieve higher precision controlpositioning for along time, it is recommended to useour company's diaphragm type series coupling

#### **MH-C Series**

#### Coupling Plum Blossom Type-Clamping Type



#### Features

- Plum elastomer connection
- There are three different hardness elastomers
- Clockwise and counterclockwise rotationcharacteristics

  are identical
- Absorb vibration, compensate radial, angular and axial deviation
- High torsional rigidity
- Oil resistance, electricalinsulation
- Easy to load and unload
- Clamping screw fixing method

#### Product model description

MH-30C - RD - 10x16

Product model specification

colour

Shaft bore

Remarks: Non-standard aperture andkeyway can be processed additionally

#### Material

	MH-14G	High strength aluminum alloy							
Shaft	to MH-105G	Anodizing treatment							
sleeve	MHS-14G	Carbon steel							
	MHS-105G	Blackening							
Elastic	spacer	Polyurethane							
Hexago	n socket	SCM435(12.9 level )							
set s	crew	Ferric oxide protective film (black)							

#### The main purpose

- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, drill attack, machining centerXYZ
  axis drive
- Robots, medical devices
- Reducer
- Precision position positioning contro!
- Indexing table, injection molding machine, printingmachine, etc.

#### Zero backlash

Plum blossom series selection is divided into generaluse and use underno backlash

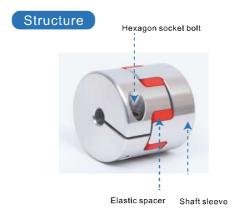
If it is considered to be used in a backlash-free stateit needs to be used at a torque sufficiently lower thanthe common coupling torque.

In terms of the coupling structure, the component canbe used without backlash during pre-compression, but backlash may occur during use. If considering long-term use without backlash, it is recommended to increase the use factor.

If you need to achieve higher precision controlpositioning for along time, it is recommended to useour company's diaphragm type series coupling

#### MHD-C Series

Coupling Plum Blossom Type-Clamping Type (Short and Small)



#### Material

Shaft sleeve	High strength aluminum alloy
Shart sleeve	Anodizing treatment
Elastic spacer	Polyurethane
Hexagon	SCM435(12.9 level)
socket bolts	Ferric oxide protective film (black)

#### Features

- Plum elastomer connection
- There are three different hardness elastomers
- Clockwise and counterclockwise rotationcharacteristics are identical
- Absorb vibration, compensate radial, angular and axial deviation
- · High torsional rigidity
- Oil resistance, electricalinsulation
- Easy to load and unload
- Clamping screw fixing method

#### Product model description

MHD-40C - RD - 10x16

Product model specification colour Shaft bore

Remarks: Non-standard aperture andkeyway can be processed additionally

#### The main purpose

- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, drill attack, machining centerXYZ axis drive
- Robots, medical devices
- Precision position positioning control
- Reducer
- Indexing table,injection molding machine, printingmachine, etc.

#### Zero backlash

Plum blossom series selection is divided into generaluse and use underno backlash

If it is considered to be used in a backlash-free stateit needs to be used at a torque sufficiently lower thanthe common coupling torque.

In terms of the coupling structure, the component canbe used without backlash during pre-compression, but backlash may occur during use. If consideringlong-term use without backlash, it is recommended to increase the use factor.

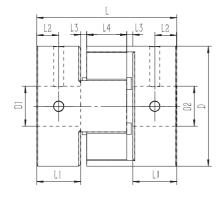
If you need to achieve higher precision control positioning for along time, it is recommended to useour company's diaphragm type series coupling

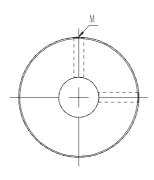
## MH-G Plum Blossom Type

Top wire Type-Coupling (High Strength Aluminum Alloy)

Outer diameter Φ14-Φ30







#### **Specifications**

Model	D	L	L1	L2	L3*	L4	M	Screw tightening torque ( N•M )
MH-14G	14	22	7	3.5	1	6	M3	0.7
MH-20G	20	30	10	5	1	8	М3	0.7
MH-30G	30	35	11	5.5	1.5	10	M4	1.7

<sup>\*</sup> Please be sure to leave L3 size when using

#### D1 D2 Standard aperture

Model	3	4	4.5	5	6	6.35	7	8	9.525	10	11	12	14	15	16
MH-14G	•	•	•	•	•	•	•								
MH-20G		•	•	•	•	•	•	•	•	•	•				
MH-30G					•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum	Maximum	Static	Moment	Allo	wable dev	iation	quality
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial daviation	(g)
MH-14G	YL	Φ7	1.2	2.4	19000	15	1.6×10 <sup>-7</sup>	0.10	1.0	+0.6	6
MH-20G	YL	Ф11	3	6	17000	28	1.0×10 <sup>-6</sup>	0.15	1.0	+0.8	16
MH-30G	YL	Ф16	7.5	15	15000	74	5.2×10 <sup>-6</sup>	0.15	1.0	+1.0	43
MH-14G	RD	Φ7	2	4	19000	24	1.6×10 <sup>-7</sup>	0.10	1.0	+0.6	6
MH-20G	RD	Ф11	5	10	17000	57	1.0×10 <sup>-6</sup>	0.10	1.0	+0.8	16
MH-30G	RD	Ф16	12.5	25	15000	133	5.22×10 <sup>-6</sup>	0.10	1.0	+1.0	43

#### When ordering:



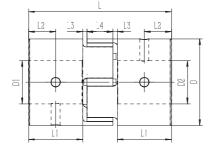
※ Keyway machining

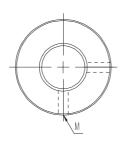
When machiningkeywayon one side shaft hole :MH-30G-RD-10Kx16 When machining keyway on two sides shaft hole:MH-30G-RD-10Kx16K

# MH-G Plum Blossom Type-Top wire Type-Coupling (High Strength Aluminum Alloy) MHS-G Plum BlossomType-Top wire Type-Coupling (Carbon Steel)

Outer diameter Ф40

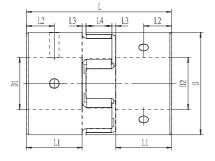


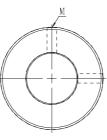












#### Specifications

ı	Model	D	L	L1	L2	L3*	L4	М	Screw tightening torque ( N•M )
М	H-40G	40	66	25	12.5	2	12	M5	4
М	H-55G	55	78	30	15	2	14	M6	7
М	H-65G	65	90	35	17.5	2.5	15	M8	15
М	H-80G	80	114	45	22.5	3	18	M8	15
М	H-95G	95	126	50	25	3	20	M8	15
М	IH-105G	105	140	56.5	25	3	21	M10	25
М	IHS-120G	120	160	65	25	3.5	22	M12	55
М	IHS-135G	135	185	75	30	3.5	26	M12	55

<sup>\*</sup> Please be sure to leave L3 size when using

#### D1 D2 Standard aperture

Model	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70
MH-40G	•	•	•	•	•	•	•	•	•	•	•	•	•	•														
MH-55G			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
MH-65G						•	•	•	•	•	•	•	•	•	•	•	•	•	•									
MH-80G											•	•	•	•	•	•	•	•	•	•	•	•						
MH-95G														•	•	•	•	•	•	•	•	•	•	•	•			
MH-105G	i															•	•	•	•	•	•	•	•	•	•	•		
MHS-1200	;																•	•	•	•	•	•	•	•	•	•	•	
MHS-1350	ì																	•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum	Maximum	Static	Moment	Allo	wable dev	iation	quality
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min-')	torque rigidity (N.M/rad)	of inertia ( KG⋅M2 )	radial deviation	angular deviation	axial daviation	(g)
MH-40G	YL	Ф25	10	20	13000	580	3.6×10 <sup>-5</sup>	0.10	1.0	+1.2	134
MH-55G	YL	Ф32	35	70	10500	1680	1.55×10 <sup>-4</sup>	0.15	1.0	+1.4 0	318
MH-65G	YL	Ф38	95	190	8500	3100	3.56×10 <sup>-4</sup>	0.15	1.0	+1.5 0	515
MH-80G	YL	Φ45	190	380	7100	5400	1.2×10 <sup>-3</sup>	0.15	1.0	+1.8	1020
MH-95G	YL	Ф55	265	530	5800	6000	2.35×10 <sup>-3</sup>	0.15	1.0	+2.0	1549
MH-105G	YL	Ф60	310	620	3400	7000	3.72×10 <sup>-3</sup>	0.15	1.0	+2.0 0	2146
MH-40G	RD	Ф25	17	34	13000	1260	3.6×10 <sup>-5</sup>	0.10	1.0	+1.2	134
MH-55G	RD	Ф32	60	120	10500	2500	1.55×10 <sup>-4</sup>	0.10	1.0	+1.4 0	318
MH-65G	RD	Ф38	160	320	8500	4700	3.56×10 <sup>-4</sup>	0.10	1.0	+1.5 0	515
MH-80G	RD	Φ45	325	650	7100	6600	1.3×10 <sup>-3</sup>	0.10	1.0	+1.8	1020
MH-95G	RD	Ф55	450	900	5800	8800	2.35×10 <sup>-3</sup>	0.10	1.0	+2.0	1549
MH-105G	RD	Ф60	525	1050	3400	11000	3.72×10 <sup>-3</sup>	0.10	1.0	+2.0	2146
MHS-120G	RD	Ф65	685	1370	3150	38000	2.09×10 <sup>-2</sup>	0.10	1.0	+2.2	8992
MHS-135G	RD	Ф70	940	1880	2800	43000	3.94×10 <sup>-2</sup>	0.10	1.0	+ 2.6	13638
MH-40G	GR	Ф25	21	42	13000	3100	3.6×10 <sup>-5</sup>	0.08	1.0	+1.2	134
MH-55G	GR	Ф32	75	150	10500	9200	1.55×10 <sup>-4</sup>	0.08	1.0	+1.4 0	318
MH-65G	GR	Ф38	200	400	8500	13800	3.56×10 <sup>-4</sup>	0.08	1.0	+1.5	515
MH-80G	GR	Φ45	405	810	7100	14500	1.2×10 <sup>-3</sup>	0.08	1.0	+1.8	1020
MH-95G	GR	Ф55	560	1120	5800	15600	2.35×10 <sup>-3</sup>	0.08	1.0	+2.0	1549
MH-105G	GR	Ф60	655	1310	4500	50000	3.72×10 <sup>-3</sup>	0.08	1.0	+2.0 0	2146
MHS-120G	GR GR	Ф65	825	1650	3150	95000	2.09×10 <sup>-2</sup>	0.08	1.0	+2.2 0	8992
MHS-135G	GR	Φ70	1175	2350	2800	105000	3.94×10 <sup>-2</sup>	0.08	1.0	+ 2.6 0	13638



※ Keyway machining

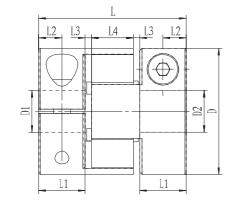
When machiningkeywayon one side shaft hole :MH-40G-RD-10Kx16 When machining keyway on two sides shaft hole:MH-40G-RD-10Kx16K

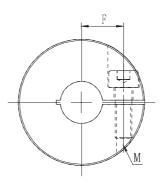
## MH-C Plum Blossom Type

Clamping Type-Coupling (High Strength Aluminum Alloy)

Outer diameter Φ14-Φ30







#### **Specifications**

Model	Shaft bore	D	L	L1	L2	L3*	L4	F	M	Screw tightening torque ( N•M )
MH-14C	3 - 5 6 - 7	Ф14	22	7	3.5	1	6	4 5	M2 M1.6	0.5 0.25
MH-20C	4 - 8 9.525 - 11	Ф20	30	10	5	1	8	6.5 7.5	M2.5 M2	1 0.5
MH-30C	6 - 12 14 - 16	Ф30	35	11	5.5	1.5	10	10 11	M4 M3	3.5 1.5

<sup>\*</sup> Please be sure to leave L3 size when using

#### D1 D2 Standard aperture

Model	3	4	4.5	5	6	6.35	7	8	9.525	10	11	12	14	15	16
MH-14C	•	•	•	•	•	•	•								
MH-20C		•	•	•	•	•	•	•	•	•	•				
MH-30C					•	•	•	•	•	•	•	•	•	•	•

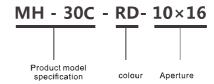
#### Series of photos:



#### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum	Maximum	Static	Moment	Allo	wable dev	iation	quality
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	(g)
MH-14C	YL	Φ7	1.2	2.4	19000	15	1.8×10 <sup>-7</sup>	0.10	1.0	+0.6	6
MH-20C	YL	Ф11	3	6	17000	28	1.0×10 <sup>-6</sup>	0.15	1.0	+0.8	18
MH-30C	YL	Ф16	7.5	15	15000	74	5.8×10 <sup>-6</sup>	0.15	1.0	+1.0	48
MH-14C	RD	Φ7	2	4	19000	24	1.8×10 <sup>-7</sup>	0.10	1.0	+0.6 0	6
MH-20C	RD	Ф11	5	10	17000	57	1.0×10 <sup>-6</sup>	0.10	1.0	+0.8	18
MH-30C	RD	Ф16	12.5	25	15000	133	5.8×10 <sup>-6</sup>	0.10	1.0	+1.0	48

#### When ordering:



※ Keyway machining

When machiningkeywayon one side shaft hole :MH-30C-RD-10Kx16 When machining keyway on two sides shaft hole:MH-30C-RD-10Kx16K

# MH-C Plum Blossom Type-Clamping Type-Coupling (High Strength Aluminum Alloy) MHS-C Plum BlossomType-Clamping Type-Coupling (Carbon Steel)

Outer diameter Ф40

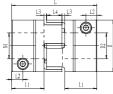






Outer diameter Φ 105-Φ135

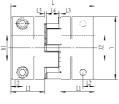














#### **Specifications**

Model	Shaft bore	D	L	L1	L2	L3*	L4	F	М	Screw tightening torque (N•M)
MH-40C	8-20 22-25	40	66	25	8.5	2	12	14 15.75	M5 M4	8 3.5
MH-55C	10-28 30-32	55	78	30	10.5	2	14	20 21	M6 M5	13 8
MH-65C	14-32 35-38	65	90	35	13	2.5	15	24 25	M8 M6	28 13
MH-80C	20-42 45	80	114	45	15	3	18	30 31	M8	28
MH-95C	25-48 50-55	95	126	50	18	3	20	34 36	M10	55
MH-105C	30-60	105	140	56.5	19	3	21	41	M10	55
MHS-120C	32-65	120	160	65	26	3.5	22	46	M12	90
MHS-135C	35-70	135	185	75	33	3.5	26	51	M12	90

#### D1 D2 Standard aperture

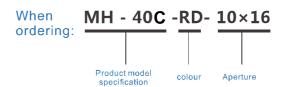
				٠, ٢		_																						
Model	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70
MH-40C	•	•	•	•	•	•	•	•	•	•	•	•	•	•														
MH-55C			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
MH-65C						•	•	•	•	•	•	•	•	•	•	•	•	•	•									
MH-80C											•	•	•	•	•	•	•	•	•	•	•	•						
MH-95C														•	•	•	•	•	•	•	•	•	•	•	•			
MH-105C																•	•	•	•	•	•	•	•	•	•	•		
MHS-120C																	•	•	•	•	•	•	•	•	•	•	•	
MHS-135C																		•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum	Maximum	Static	Moment	Allo	wable dev	iation	quality
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min-')	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	quality (g)
MH-40C	YL	Ф25	10	20	13000	580	3.5×10⁻⁵	0.10	1.0	+1.2	131
MH-55C	YL	Ф32	35	70	10500	1680	1.55×10 <sup>-4</sup>	0.15	1.0	+1.4	310
MH-65C	YL	Ф38	95	190	8500	3100	3.4×10 <sup>-4</sup>	0.15	1.0	+1.5	502
MH-80C	YL	Φ45	190	380	7000	5500	1.1×10 <sup>-3</sup>	0.15	1.0	+1.8	997
MH-95C	YL	Ф55	265	530	5800	6000	2.25×10 <sup>-3</sup>	0.15	1.0	+2.0	1515
MH-105C	YL	Ф60	310	620	3400	7000	3.5×10 <sup>-3</sup>	0.15	1.0	+2.0	2100
MH-40C	RD	Ф25	17	34	13000	1260	3.5×10 <sup>-5</sup>	0.10	1.0	+1.2	131
MH-55C	RD	Ф32	60	120	10500	2500	1.5×10 <sup>-4</sup>	0.10	1.0	+1.4	310
MH-65C	RD	Ф38	160	320	8500	4700	3.3×10 <sup>-4</sup>	0.10	1.0	+1.5	502
MH-80C	RD	Ф45	325	650	7000	6600	$1.0 \times 10^{-3}$	0.10	1.0	+1.8	997
MH-95C	RD	Ф55	450	900	5800	8800	2.2×10 <sup>-3</sup>	0.10	1.0	+2.0	1515
MH-105C	RD	Ф60	525	1050	3400	11000	3.5×10 <sup>-3</sup>	0.10	1.0	+2.0 0	2100
MHS-120C	RD	Ф65	685	1370	3150	38000	2.4×10 <sup>-2</sup>	0.10	1.0	+2.2	8475
MHS-135C	RD	Ф70	940	1880	2800	43000	4.0×10 <sup>-2</sup>	0.10	1.0	+ 2.6 0	12990
MH-40C	GR	Ф25	21	42	13000	3100	3.4×10 <sup>-5</sup>	0.08	1.0	+1.2	131
MH-55C	GR	Ф32	75	150	10500	9200	1.5×10 <sup>-4</sup>	0.08	1.0	+1.4	310
MH-65C	GR	Ф38	200	400	8500	13800	3.35×10 <sup>-4</sup>	0.08	1.0	+1.5	502
MH-80C	GR	Ф45	405	810	7000	14500	1.0×10 <sup>-3</sup>	0.08	1.0	+1.8	997
MH-95C	GR	Ф55	560	1120	5800	15600	2.25×10 <sup>-3</sup>	0.08	1.0	+2.0	1515
MH-105C	GR	Ф60	655	1310	4500	50000	3.5×10 <sup>-3</sup>	0.08	1.0	+2.0	2100
MHS-120C	GR	Ф65	825	1650	3150	95000	2.4×10 <sup>-2</sup>	0.08	1.0	+2.2	8475
MHS-135C	GR	Ф70	1175	2350	2800	105000	4.0×10 <sup>-2</sup>	0.08	1.0	+ 2.6	12990



X Keyway machining

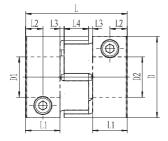
When machining keyway on one side shaft hole:MH-40C-RD-10Kx16 When machining keyway on two sides shaft hole:MH-40C-RD-10Kx16K

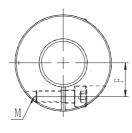
## MHD-C Plum Blossom Type

#### Clamping type (short and small) coupling (high-strength aluminum alloy)

Outer diameter Ф40

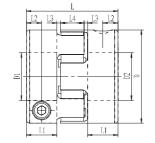


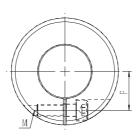




Outer diameter Ф55-Ф105







#### **Specifications**

Model	Shaft bore	D	L	L1	L2	L3*	L4	F	М	Screw tightening torque ( N•M )
MHD-40C	8-20	40	50	17	8.5	2	12	14	M5	8
	22-25							15.75	M4	3.5
MHD-55C	10-28	55	54	18	9	2	14	20	M6	13
WII 10-33C	30-32	33	31	10	,	2	1-	21	M5	8
	14-32	<b>6 -</b>	62	21	10.5	2.5	15	24	M8	28
MHD-65C	35-38	65	62	21	10.5	2.5	15	25	М6	13
	20-42					_	4.0	30		
MHD-80C	45	80	88	32	16	3	18	31	M8	28
	25-48	25	0.4		47	_	24	34		
MHD-95C	50 55	95	94	34	17	3	21	36	M10	55
MHD-105C	30-60	105	99	36	18	3	22	41	M10	55

<sup>\*</sup> Please be sure to leave L3 size when using

#### D1 D2 Standard aperture

Model	8	9.525	10	11	12	14	15	<b>1</b> 6	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
MHD-40C	•	•	•	•	•	•	•	•	•	•	•	•	•	•												
MHD-55C			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•									
MHD-65C						•	•	•	•	•	•	•	•	•	•	•	•	•	•							
MHD-80C											•	•	•	•	•	•	•	•	•	•	•	•				
MHD-95C														•	•	•	•	•	•	•	•	•	•	•	•	
MHD-105C																•	•	•	•	•	•	•	•	•	•	•

#### Series of photos:



#### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum	Maximum	Static	Moment	Allo	wable dev	iation	qualit
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad )	of inertia (KG·M2)	radial deviation	angular deviation	axial daviation	(g)
MHD-40C	YL	Ф25	10	20	13000	580	2.6×10 <sup>-5</sup>	0.10	1.0	+1.2	110
MHD-55C	YL	Ф32	35	70	10500	1680	1.05×10 <sup>-4</sup>	0.15	1.0	+1.4	225
MHD-65C	YL	Ф38	95	190	8500	3100	2.35×10 <sup>-4</sup>	0.15	1.0	+1.5 0	348
MHD-80C	YL	Φ45	190	380	7000	5500	8.0×10 <sup>-4</sup>	0.15	1.0	+1.8 0	777
MHD-95C	YL	Ф55	265	530	5800	6000	1.7×10 <sup>-3</sup>	0.15	1.0	+2.0	1172
MHD-105C	YL	Ф60	310	620	3400	7000	2.66×10 <sup>-3</sup>	0.15	1.0	+2.0 0	1466
MHD-40C	RD	Ф25	17	34	13000	1260	2.6×10 <sup>-5</sup>	0.10	1.0	+1.2	110
MHD-55C	RD	Ф32	60	120	10500	2500	$1.05 \times 10^{-4}$	0.10	1.0	+1.4	225
MHD-65C	RD	Ф38	160	320	8500	4700	2.35×10 <sup>-4</sup>	0.10	1.0	+1.5 0	348
MHD-80C	RD	Ф45	325	650	7000	6600	8.0×10 <sup>-4</sup>	0.10	1.0	+1.8 0	777
MHD-95C	RD	Φ55	450	900	5800	8800	1.7×10 <sup>-3</sup>	0.10	1.0	+2.0	1172
MHD-105C	RD	Ф60	525	1050	3400	11000	2.66×10 <sup>-3</sup>	0.10	1.0	+2.0	1466
MHD-40C	GR	Ф25	21	42	13000	3100	2.6×10 <sup>-5</sup>	0.08	1.0	+1.2	110
MHD-55C	GR	Ф32	75	150	10500	9200	1.05×10 <sup>-4</sup>	0.08	1.0	+1.4	225
MHD-65C	GR	Ф38	200	400	8500	13800	2.35×10 <sup>-4</sup>	0.08	1.0	+1.5	348
MHD-80C	GR	Φ45	405	810	7000	14500	8.0×10 <sup>-4</sup>	0.08	1.0	+1.8 0	777
MHD-95C	GR	Ф55	560	1120	5800	15600	1.7×10 <sup>-3</sup>	0.08	1.0	U	1172
MHD-105C	GR	Ф60	655	1310	3400	50000	2.66×10 <sup>-3</sup>	0.08	1.0	+2.0	1466

#### When ordering:



#### \* Keyway machining

When machiningkeywayon one side shaft hole:MHD-40C-RD-10Kx16 When machining keyway on two sides shaft hole:MHD-40C-RD-10Kx16K

#### **MH-C Series**

#### Coupling-Plum Blossom Type-Clamping Type + Internal Expansion Type

#### Structure



#### Material

Sleeve (clamping end)	High-strength aluminum alloy/anodized
Shaft sleeve (expansion end)	Carbon steel/Nickel
Cone block	Carbon steel
Cone Blook	Nickel
Elastic spacer	Polyurethane
Hexagon socket bolt	SCM435(12.9 level )
TIEXAGOTI SOCKET BOIL	Ferric oxide protective film (black)

#### Features

- Can be connected with synchronous wheels.gears, sprockets, hollow shafts
- Absorb vibration, compensate radial, angular and axial deviation
- High torsional rigidity
- Oilresistance, electrical insulation
- Easy to load and unload
- Can be combined with top screw type, clamping type and other sleeves

#### The main purpose

- Servo motor, stepper motor, general purpose motor
- Precision position positioning contro!

#### Product model description

MH-30CT - RD - 10x16

Product model specification

colour

shaft bore

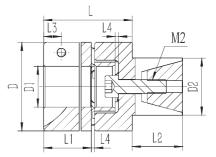
\*\* Remarks: Non-standard aperture and keyway can be processed additionally(Top Screw type or clamping type, one end can be keyed)

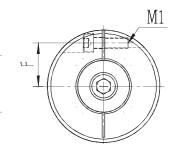
#### **MH-CT Series**

Outer

#### Plum Blossom Type-Clamping Type + Internal Expansion Type-Coupling







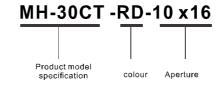
Model	D1	D2	D	L	L1	L2	L3	L4*	F	M1	M1 Screw tightening torquey (N.M/rad)	M2	M2 Screw tightening torquey (N.M/rad)
MH-30CT	6-12	12-16	30	29	11	15.5	5.5	1.5	10	M4	3.5	M5	8
MIH-30C1	14-16	12-10	30	29	''	15.5	5.5	1.3	11	M3	1.5	IVIO	0
MIL 40CT	8-20	14-25	40	49	25	21	0 <b>F</b>	2	14	M5	8	M6	10
MH-40CT	22-25	14-25	40	49	25	21	8.5	۷	15.75	M4	3.5	IVIO	10
MH-55CT	10-28	23-32	FF	56	30	31	10.5	2	20	M6	13	M8	20
MIH-33C1	30-32	23 <b>-</b> 32	22	30	30	31	10.5	۷	21	M5	8	IVIO	20
MH GECT	14-32	26.20	6 E	G E	25	27	12	2 5	24	M8	28	N/10	40
MH-65CT	35-38	26-38	05	65	35	37	13	2.5	25	М6	13	M10	40

 $<sup>\</sup>star$  Please be sure to leave L4 size when using

#### Performance parameter

Model	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min-')	Static torque rigidity (N.M/rad)	Moment of inertia ( KG·M2 )	Allowable deviation			quality
						radial deviation	angular deviation	axial daviation	(g)
MH-30CT	12.5	25	10000	133	1.2×10 <sup>-5</sup>	0.08	1.0	+1.0	115
MH-40CT	17	34	8500	1260	5.3×10 <sup>-5</sup>	0.06	1.0	+1.2	278
MH-55CT	60	120	6500	2500	2.1×10 <sup>-4</sup>	0.09	1.0	+1.4	607
MH-65CT	160	320	5500	4700	4.7×10 <sup>-4</sup>	0.1	1.0	+1.5	1013

#### When ordering:



※ Keyway machining

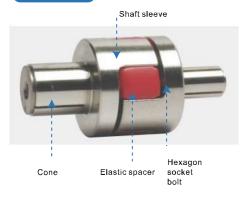
MH-30CT-RD-10K×16

Top Screw type or clamping type, one end can be keyed)

### **MH-TT Series**

### Coupling Plum Blossom-Internal Expansion+Internal Expansion

### Structure



### Material

Shaft sleeve	Carbon steel
Shart side ve	Nickel plated
Cone	Carbon steel
Solic	Nickel plated
Elastic spacer	Polyurethane
Hexagon socket bolt	SCM435(12.9 level )
Trexager socker built	Ferric oxide protective film (black)

### Features

- It can be connected with synchronous wheels gears, sprockets, hollow shafts
- Absorb vibration, compensate radial, angular and axial deviation
- High torsional rigidity
- Oilresistance, electrical insulation
- Easy to load and unload
- Can be combined with top screw type, clamping type and other sleeves

### The main purpose

- Servo motor, stepper motor, general purpose motor
- Precision position positioning contro!

### Product model description

MH-30TT - RD - 10x16

Product model specification

colour

shaft bore

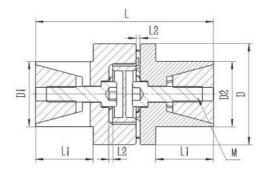
imes Note:Non-standard aperture can be processed

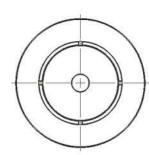
### **MH-TT Series**

### Plum Blossom Type-internal Expansion + internal Expansion-Coupling

Outer diameter Ф30-Ф65







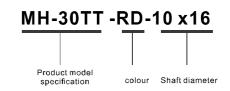
Model	D1/D2	D	L	L1	L2*	М	M Screw tightening torque (N.M/rad)
MH-30TT	12-16	30	54	15.5	1.5	M5	8
MH-40TT	14-25	40	74	21	2	M6	10
MH-55TT	23-32	55	96.8	31	2	M8	20
MH-65TT	26-38	65	114	37	2.5	M10	40

\* Please be sure to leave L2 size when using

### Performance parameter

			Maximum	Static	Moment	А	llowable dev	iation	quality
Model	torque (N.M)	torque (N.M)	speed ( min-')	torque rigidity (N.M/rad)	of inertia ( KG∙M2 )	radial deviation	angular deviation	axial daviation	(g)
MH-30TT	12.5	25	10000	133	1.8×10 <sup>-5</sup>	0.08	1.0	+1.0 0	189
MH-40TT	17	34	8500	1260	7.2×10 <sup>-5</sup>	0.06	1.0	+1.2	426
MH-55TT	60	120	6500	2500	2.6×10 <sup>-4</sup>	0.09	1.0	+1.4	913
MH-65TT	160	320	5500	4700	5.6×10⁴	0.1	1.0	+1.5	1452

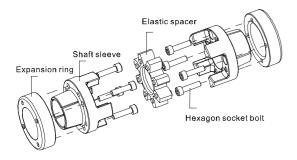
### When ordering:



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# MH-T series coupling plum blossom type-expansion sleeve type (high-strength aluminum alloy) MHS-T series coupling plum blossom type-expansion sleeve type (carbon steel)

### Structure



### Features

- Plum elastomer connection
- Excellent balance
- There are three different hardness elastomers
- Clockwise and counterclockwise rotationcharacteristics
- Absorb vibration, compensate radial, angular and axial deviation
- · High torsional rigidity
- Oil resistance, electricalinsulation
- Easy to load and unload
- · High shaft locking force
- Use the expansion sleeve to connect

### Product model description

 $\frac{\text{MH-40T}}{\text{MHS-40T}} - \frac{10 \times 16}{10 \times 16}$ 

Product model specification Shaft bore

X Note: Add S to indicate that the materialis carbon steel

### Material

Shaft sleeve	Carbon steel/ high-strength aluminum alloy
Shall sleeve	Blackening/anodic oxidation
Expansion ring	Carbon steel/ high-strength aluminum alloy
ExpansionTing	Blackening/anodic oxidation
Elastic spacer	Polyurethane
Hexagon socket	SCM435(12.9 level )
set screw	Ferric oxide protective film (black)

### The main purpose

- Servo motor, stepper motor, general purpose motor
- Machine tool equipment, drilling and tapping machine, machining contact drive.
- Machine tool spindle, high speed occasions
- · Robots, medical equipment
- Precision position positioning control
- Reduce
- Indexing table,injection molding machine, printingmachine, etc.



### Zero backlash

The plum blossom series is divided into general use and use without backlash.

If it is considered to be used without backlash, it needs to be used at asufficiently

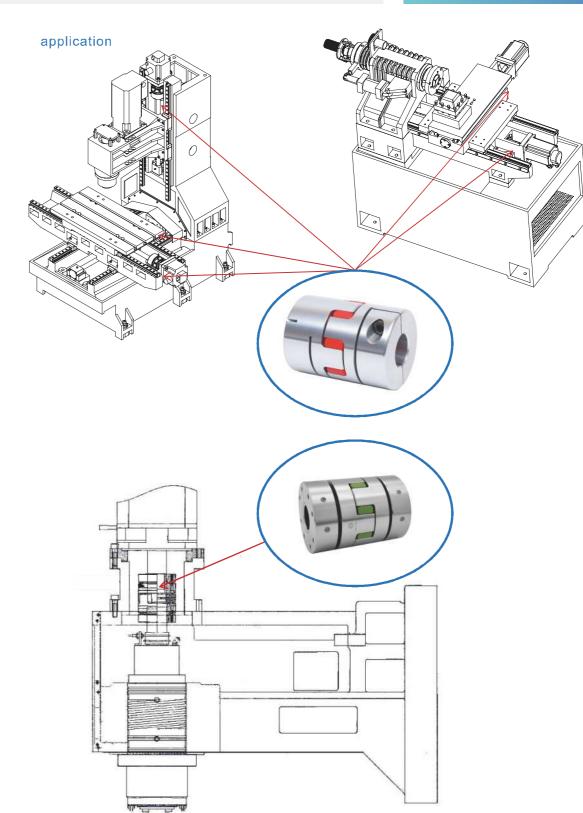
lower torque than the common coupling torque

In terms of the coupling structure, the component can be used withoutbacklash

during pre-compression, but backlash may occur during use, Ifconsidering long-term

use without backlash, it is recommended to increase theuse.

If you need to achieve higher precision control positioning for a long time, it is recommended to use ourcompany's diaphragm type series coupling.

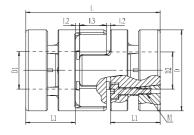


### MH-T Series

### Plum blossom type-expansion sleeve type-coupling (high-strength aluminum alloy)

Outer diameter Ф30

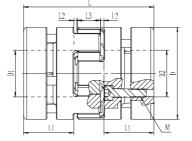


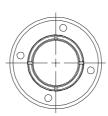




Outer diameter Ф40-Ф105







### Specifications

Model	D	L	L1	L2*	L3	М	Number of bolts	M wire Tightening torque (N. M)
MH-30T	30	50	18.5	1.5	10	M3	4	1.5
MH-40T	40	66	25	2	12	M4	6	3.4
MH-55T	55	78	30	2	14	M5	4	7
MH-65T	65	90	35	2.5	15	M5	8	7
MH-80T	80	114	45	3	18	M6	8	14
MH-95T	95	126	50	3	20	M8	8	30
MH-105T	105	140	56.5	3	21	M10	8	68

### D1 D2 Standard aperture

Model	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
MH-30T	•	•	•	•	•																			
MH-40T	•	•	•	•	•	•	•	•	•	•														
MH-55T		•	•	•	•	•	•	•	•	•	•	•	•	•										
MH-65T					•	•	•	•	•	•	•	•	•	•	•	•	•	•						
MH-80T										•	•	•	•	•	•	•	•	•	•	•	•			
MH-95T													•	•	•	•	•	•	•	•	•	•	•	
MH-105T															•	•	•	•	•	•	•	•	•	•

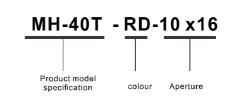
### Series of photos:



### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum	Maximum	Static	Moment	А	llowable de	viation	
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	quality (g)
MH-30T	YL	Ф14	7.5	15	20000	70	0.05×10 <sup>-4</sup>	0.10	1.0	+1.0 0	64
MH-40T	YL	Ф20	10	20	15000	560	0.21×10 <sup>-4</sup>	0.10	1.0	+1.2	1 60
MH-55T	YL	Ф28	35	70	12000	1600	0.76×10 <sup>-4</sup>	0.15	1.0	+1.4	321
MH-65T	YL	Ф38	95	190	10000	3000	1.65×10 <sup>-₄</sup>	0.15	1.0	+1.5	510
MH-80T	YL	Ф45	190	380	7000	5400	5.17×10 <sup>-4</sup>	0.15	1.0	+1.8	982
MH-95T	YL	Ф50	265	530	6000	6100	11.17×10 <sup>-4</sup>	0.15	1.0	+2.0	1 655
MH-105T	YL	Ф55	310	620	5800	7500	18.8×10 <sup>-4</sup>	0.15	1.0	+2.0	2 342
MH-30T	RD	Ф14	12.5	25	20000	120	0.05×10 <sup>-4</sup>	0.10	1.0	+1.0	64
MH-40T	RD	Ф20	17	34	15000	1200	0.21×10 <sup>-4</sup>	0.10	1.0	+1.2	1 60
MH-55T	RD	Ф28	60	120	12000	2400	0.76×10 <sup>-4</sup>	0.10	1.0	+1.4	321
MH-65T	RD	Ф38	160	320	10000	4800	1.65×10⁻⁴	0.10	1.0	+1.5 0	510
MH-80T	RD	Ф45	325	650	7000	6500	5.17×10 <sup>-4</sup>	0.10	1.0	+1.8	982
MH-95T	RD	Ф50	450	900	6000	8800	11.17×10 <sup>-4</sup>	0.10	1.0	+2.0	1 655
MH-105T	RD	Φ55	525	1050	5800	10100	18.8×10 <sup>-4</sup>	0.10	1.0	+2.0	2 342
MH-40T	GR	Ф20	21	42	15000	3000	0.21×10 <sup>-4</sup>	0.08	1.0	+1.2	1 60
MH-55T	GR	Ф28	75	150	12000	9000	0.76×10 <sup>-4</sup>	0.08	1.0	+1.4	321
MH-65T	GR	Ф38	200	400	10000	13500	1.65×10 <sup>-4</sup>	0.08	1.0	+1.5	510
MH-80T	GR	Ф45	405	810	7000	14000	5.17×10 <sup>-4</sup>	0.08	1.0	+1.8	982
MH-95T	GR	Ф50	560	1120	6000	15200	11.17×10 <sup>-4</sup>	0.08	1.0	+2.0	1 655
MH-105T	GR	Ф55	655	1310	5800	50000	4.0 × 10 <sup>-3</sup>	0.08	1.0	±2 0	2 346

When ordering:



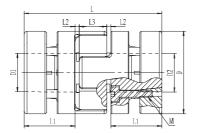
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### MHS-T Series

### Plum blossom type-expansion sleeve type-coupling (carbon steel)

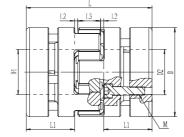
Outer diameter Ф30

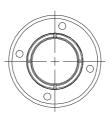












### Specifications

Model	D	L	L1	L2*	L3	М	Number of bolts	M wire Tightening torque (N. M)
MHS-30T	30	50	18.5	1.5	10	M3	4	1.3
MHS-40T	40	66	25	2	12	M4	6	4
MHS-55T	55	78	30	2	14	M5	4	8.5
MHS-65T	65	90	35	2.5	15	M5	8	8.5
MHS-80T	80	114	45	3	18	M6	8	14
MHS-95T	95	126	50	3	20	M8	8	35
MHS-105T	105	140	56.5	3	21	M10	8	68
MHS-120T	120	160	65	3.5	22	M10	8	68
MHS-135T	135	185	75	3.5	26	M12	8	118

<sup>\*</sup> Please be sure to leave L2 size when using

### D1 D2 Standard aperture

01020	, tu		u i	u u	0.	COI	•																				
Model	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70
MHS-30T	•	•	•	•	•																						
MHS-40⊤	•	•	•	•	•	•	•	•	•	•																	
MHS-55T		•	•	•	•	•	•	•	•	•	•	•	•	•													
MHS-65T					•	•	•	•	•	•	•	•	•	•	•	•	•	•									
MHS-80T										•	•	•	•	•	•	•	•	•	•	•	•						
MHS-95T													•	•	•	•	•	•	•	•	•	•	•				
MHS-1051	Ī														•	•	•	•	•	•	•	•	•	•			
MHS-1201	_																•	•	•	•	•	•	•	•	•	•	
MHS-1357																			•	•	•	•	•	•	•	•	•

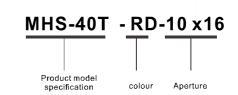
### Series of photos:



### Performance parameter

	Elastic spacer	Maximum	Rated	Maximum			Moment	А	llowable de	quality	
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	torque rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	quality (g)
MHS-30T	YL	Ф14	7.5	15	20000	70	1.0×10 <sup>-5</sup>	0.10	1.0	+1.0	154
MHS-40T	YL	Ф20	10	20	15000	560	3.7×10 <sup>-5</sup>	0.10	1.0	+1.2	370
MHS-55T	YL	Ф28	35	70	12000	1600	1.7×10 <sup>-4</sup>	0.15	1.0	+1.4 0	798
MHS-65T	YL	Ф38	95	190	10000	3000	3.9×10 <sup>-4</sup>	0.15	1.0	+1.5 0	1213
MHS-80T	YL	Ф45	190	380	10000	5400	$1.0 \times 10^{-3}$	0.15	1.0	+1.8 0	2347
MHS-95T	YL	Ф50	265	530	8000	6100	$2.3 \times 10^{-3}$	0.15	1.0	+2.0 0	3839
MHS-105T	YL	Ф55	310	620	5800	7500	5.2×10 <sup>-3</sup>	0.15	1.0	+2.0 0	5218
MHS-30T	RD	Ф14	12.5	25	20000	120	1.0×10 <sup>-5</sup>	0.10	1.0	+1.0	154
MHS-40T	RD	Ф20	17	34	15000	1200	3.7×10 <sup>-5</sup>	0.10	1.0	+1.2 0	370
MHS-55T	RD	Ф28	60	120	12000	2400	$1.7 \times 10^{-4}$	0.10	1.0	+1.4	798
MHS-65T	RD	Ф38	160	320	10000	4800	3.9×10 <sup>-4</sup>	0.10	1.0	+1.5	1213
MHS-80T	RD	Ф45	325	650	10000	6500	1.0×10 <sup>-3</sup>	0.10	1.0	+1.8	2347
MHS-95T	RD	Ф50	450	900	8000	8800	2.3×10 <sup>-3</sup>	0.10	1.0	+2.0 0	3839
MHS-105T	RD	Ф55	525	1050	5800	10100	5.2×10 <sup>-3</sup>	0.10	1.0	+2.0 0	5218
MHS-120T	RD	Ф65	685	1370	6350	38000	10.3×10 <sup>-3</sup>	0.10	1.0	+2.2	7680
MHS-135T	RD	Ф70	940	1880	5650	43000	19.1×10 <sup>-3</sup>	0.10	1.0	+2.6 0	11427
MHS-40T	GR	Ф20	21	42	15000	3000	3.7×10 <sup>-5</sup>	0.08	1.0	+1.2 0	370
MHS-55T	GR	Ф28	75	150	12000	9000	$1.7 \times 10^{-4}$	0.08	1.0	+1.4	798
MHS-65T	GR	Ф38	200	400	10000	13500	3.9×10 <sup>-4</sup>	0.08	1.0	+1.5 0	1213
MHS-80T	GR	Ф45	405	810	10000	14000	1.0×10 <sup>-3</sup>	0.08	1.0	+1.8 0	2347
MHS-95T	GR	Ф50	560	1120	8000	15200	$2.3 \times 10^{-3}$	0.08	1.0	+2.0 0	3839
MHS-105T	GR	Ф55	655	1310	9100	50000	5.2×10 -3	0.08	1.0	+2.0	5218
MHS-120T	GR	Ф65	825	1650	6350	95000	10.3×10 <sup>-3</sup>	0.08	1.0	+2.2	7680
MHS-135T	GR	Ф70	1175	2350	5650	105000	19.1×10 -3	0.08	1.0	+2.6	11427

### When ordering:



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### MHS-SP-T (Special for spindle) Series

Couplings Plum Blossom Type - Expansion Sleeve Type (Steel)

### Structure



Features

- Backlash-free, high-precision expansion sleeve coupling
- Excellent balance
- Suitable for high-speed transmission of the main shaft
- Can absorb vibration
- High torsional rigidity
- High shaft locking force using expansion sleeve connection

### Product model description

MHS-SP-95T-GR-40x40

Product model specification colour shaft bore

### Material

Shaft sleeve	steel
Intermediate	steel
Elastic spacer	Polyurethane
Hexagon socket	SCM435(12.9 level )
set screw	Ferric oxide protective film (black)

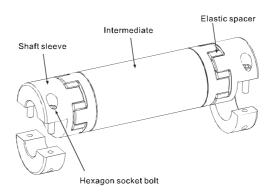
### The main purpose

- Servo motors, stepper motors, precision motors, etc.
- Machine tools, drilling machines, machining center drives
- Machine tool spindles, high-speed applications

### **MHL-FC Series**

Coupling Long Shaft Type - Clamping Band Separate Type (Aluminum Alloy Tube)

### Structure



### Material

Shaft sleeve	Aluminum alloy
Silait sieeve	Anodizing
	Aluminum alloy
Intermediate	Anodizing
Elastic spacer	Polyurethane
Hexagon socket bolt	SCM435(12.9 level )
Tickagon socket bolt	Ferric oxide protective film (black)

### Features

- Elastomers of different hardness
- Low inertia, high torsional rigidity
- The clockwise and counterclockwise rotation characteristics are exactly the same
- Can absorb vibrations and compensate for radial, angular and axial deviations
- Oil resistance, electricalinsulation
- Easy to load and unload

### The main purpose

- Servo motors, stepper motors, precision motors, etc.
- High-precision position control
- Long-distance power transmission

### Product model description

MHL-80FC-38x45-J1500

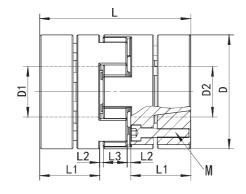
Product model specification Shaft bore Shaft diameter

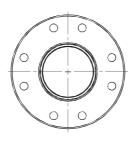
💥 Note: Non-standard hole diameters and keyways can be processed

# MHS-SP-T (Special for spindle) Series

Couplings Plum Blossom Type - Expansion Sleeve Type (Steel)







### Specifications

Model	D	L	ш	L2*	L3	М	Number of bolts	Screw tightening torque (N. M)
MHS-SP-65T	65	90	35	2.5	15	M5	8	8.5
MHS-SP-80T	80	114	45	3	18	М6	8	14
MHS-SP-95T	95	126	50	3	20	M8	8	35
MHS-SP-105T	105	140	56.5	3	21	M10	8	68
MHS-SP-120T	120	160	65	3.5	22	M10	8	68
MHS-SP-135T	135	185	75	3.5	26	M12	8	118
MHS-SP-160T	160	210	85	5	30	M12	10	118

<sup>\*</sup> Please be sure to leave L2 size when using

### D1 D2 Standard aperture

Model	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70	75	80
MHS-SP-65T	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
MHS-SP-80T							•	•	•	•	•	•	•	•	•	•	•	•	•							
MHS-SP-95T										•	•	•	•	•	•	•	•	•	•	•						
MHS-SP-105T												•	•	•	•	•	•	•	•	•	•					
MHS-SP-120T														•	•	•	•	•	•	•	•	•	•			
MHS-SP-135T																•	•	•	•	•	•	•	•	•		
MHS-SP-160T																	•	•	•	•	•	•	•	•	•	•

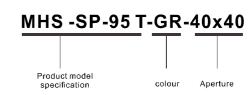
### Series of photos:



### Performance parameter

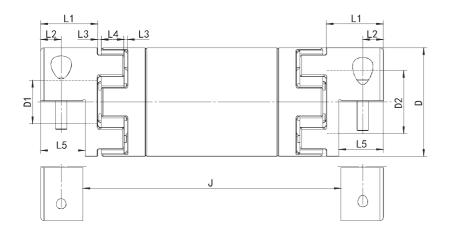
	Elastic spacer	Maximum	Rated	Maximum		Static torque	Moment	All	owable dev	iation	mumilia.
Model	Fastening type	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial daviation	quality (g)
MHS-SP-65T	GR	Ф38	200	380	15000	13500	8.9×10 <sup>-4</sup>	0.08	1.0	+1.5 0	1268
MHS-SP-80T	GR	Ф48	405	810	12000	14000	2.68×10 <sup>-3</sup>	0.08	1.0	+1.8 0	2546
MHS-SP-95T	GR	Ф50	560	1120	10000	15200	6.1×10 <sup>-3</sup>	0.08	1.0	+2.0 0	4216
MHS-SP-105T	GR	Ф55	655	1120	9100	50000	1.01×10 <sup>-2</sup>	0.08	1.0	+2.0 0	5752
MHS-SP-120T	GR	Ф65	825	1650	7900	95000	1.9×10 <sup>-2</sup>	0.08	1.0	+2.2 0	8383
MHS-SP-135T	GR	Ф70	1175	2350	7000	<b>1</b> 05000	3.6×10 <sup>-2</sup>	80.0	1.0	+2.6 0	12491
MHS-SP-160T	GR	Ф80	2400	4800	5900	182320	7.4×10 <sup>-2</sup>	80.0	1.0	+3.0 0	18662

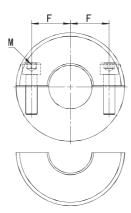
When ordering:



# MHL-FC Long Shaft Type

Clamping Band Separate Type - Coupling (Aluminum Alloy Tube)





### Specifications

Model	D1-D2 aperture range	D	L1	L2	L3*	L4	L5	J Axle spacing (mm)	F	М	Screw tightening torque (N.M)
MHL-40FC	8-20 22-25	40	25	8.5	2	12	17		14 15.75	M5 M4	8 3.5
MIII EEEC	10-28		20	10.5	2	1.4	21		20	M6	13
MHL-55FC	30-32	55	30	10.5	2	14	21		21	M5	8
MHL-65FC	14-32	65	35	13	2.5	15	26	According to	24	M8	28
MHL-03FC	35-38	03	33	13	2.5	15	20	customer	25	M6	13
MHL-80FC	20-42	80	45	15	3	18	32	requirements	30	M8	28
MHL-80FC	45	80	43	13	3	10	32		31	IVIO	20
MIII OFFC	25-48	ΩE	Ε0	18	3	20	27		34	M10	55
MHL-95FC	50-55	95	50	18	3	20	37		36	M10	33
MHL-105FC	30-60	105	56.5	19	3	21	39.5		41	M10	55

### D1 D2 Standard aperture

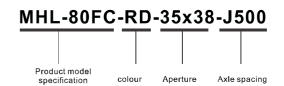
Model	8	9.525	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
MHL-40 FC	•	•	•	•	•	•	•	•	•	•	•	•	•	•												
MHL-55 FC			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•									
MHL-65 FC						•	•	•	•	•	•	•	•	•	•	•	•	•	•							
MHL-80 FC											•	•	•	•	•	•	•	•	•	•	•	•				
MHL-95 FC														•	•	•	•	•	•	•	•	•	•	•	•	•
MHL-105FC																•	•	•	•	•	•	•	•	•	•	•

### Series of photos:



Model	Maximum aperture		torque .M)		Allowable deviation	
	(mm)	RD	GR	radial deviation	angular deviation	axial daviation
MHL-40 FC	Φ25	17	21		2	+1.2
MHL-55 FC	Ф32	60	75		2	+1.4
MHL-65 FC	Ф38	160	200	Determined	2	+1.5
MHL-80 FC	Φ45	325	405	by the length of J	2	+1.8
MHL-95 FC	Ф55	450	560		2	+2.0
MHL-105FC	Ф60	525	655		2	+2.0

### When ordering:



### ※ Keyway machining

When processing the keyway on the side shaft hole :MHL-80FC-RD-35K-38-J500 When processing the keyway on both sides of the shaft hole: MHL-80FC-RD-35K-38K-J500

For keyway processing parameters, please refer to the keyway dimension table

### BWG-G series coupling bellows type - top screw type (high-strength aluminum alloy) BWG-C series coupling bellows type - clamping type, (high-strength aluminum alloy)

### Structure





### Material

	High strength aluminum alloy
Shaft sleeve	anodizing treatment
D-II	stainless steel
Bellows	SCM435(12.9 level )
Hexagon socket bolts	SCM435(12.9 level )
Hexagon socket boils	Ferric oxide protective film (black)
Hexagon socket	SCM435(12.9 level )
set screw	Ferric oxide protective film (black)

### Features

- Zero rotational clearance
- Bellows allow compensation of radial, angular and axial deviations
- Clockwise and counterclockwise rotation characteristics are identical
- · Corrosion resistance
- Top screw fixing method
- Clamping fixing method

### The main purpose

- XY axis slide
- · Semiconductor equipment
- Mechanical equipment

### Product model description

BWG-40G - 12 x16

BWG-40C - 12 x16

Product model specification Shaft bore

※ Note: Non-standard hole diameters and keyways

- Precision encoder

### Features

**BWGS-T Series** 

Structure

Hexagonal

Coupling Bellows Type - Expansion Type (Carbon Steel)

- Zero rotational clearance
- Bellows allow compensation of radial, angular and axial deviations

Bellows

Shaft sleeve

- Clockwise and counterclockwise rotation characteristics are identical
- Corrosion resistance
- · Top screw fixing method
- Expansion type fixing method

# Material

Expansion

	Carbon steel						
Shaft sleeve	Nickel						
Evenesias alaqua	Carbon steel						
Expansion sleeve	Nickel						
Bellows	stainless steel						
	SCM435(12.9 level )						
Hexagon bolts	Ferric oxide protective film (black						

### The main purpose

- Drive of machine tool equipment
- XY axis slide
- Semiconductor equipment
- High speed occasions
- Mechanical equipment

### Product model description

BWGS-80T-28 x35

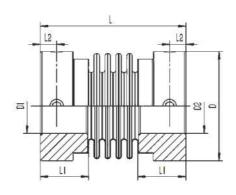
Product model specification Shaft bore

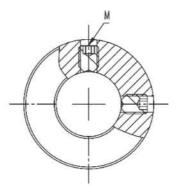
\* Note: Non-standard hole diameters can be processed

# **3ellows Typ**

# BWG-G Bellows-Top-Screw Coupling (High Strength Aluminum Alloy)







### Series of photos:



### Specifications

Model	D	L	L1	L2	M	Screw tightening torque (N.M)
BWG-16G	16	27.6	9.2	3	М3	1.3
BWG-20G	20	27.4	8.7	3	М3	1.3
BWG-26G	26	31.4	10.7	4	M4	2.5
BWG-32G	32	38.4	11.7	4	M4	2.5
BWG-40G	40	47.4	13.7	5	M5	5

### Performance parameter

	Maximum	Rated	Maximum	Static torque	Moment	Allo	owable devia	tion	100
Model	aperture (mm)	torque (N.M)	speed (min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	quality (g)
BWG-16G	Ф8	1	31000	120	3.3×10 <sup>-7</sup>	0.10	1.5	+0.3 -1.0	9
BWG-20G	Ф10	1.5	23000	180	7.7×10 <sup>-7</sup>	0.15	2	+0.5 -1.5	13
BWG-26G	Ф14	2	19000	750	2.8×10 <sup>-6</sup>	0.15	2	+0.5 -1.5	26
BWG-32G	Ф18	4	14000	1600	9.1×10 <sup>-6</sup>	0.20	2	+0.7 -2.0	53
BWG-40G	Ф25	10	11000	2700	2.3×10 <sup>-6</sup>	0.20	2	+0.7 -2.0	82

### D1 D2 Standard aperture

Model	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25
BWG-16G	•	•	•	•	•												
BWG-20G	•	•	•	•	•	•											
BWG-26G		•	•	•	•	•	•	•	•								
BWG-32G			•	•	•	•	•	•	•	•	•	•					
BWG-40G				•	•	•	•	•	•	•	•	•	•	•	•	•	•

When ordering:



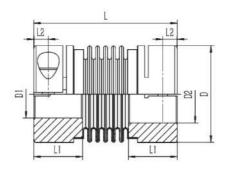
※ Keyway machining

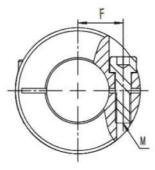
When processing keyway on both sides of the shaft hole: BWG-40G-12Kx16K

Please refer to the keyway size table for keyway processing parameters

BWG-C bellows type - clamping type - coupling (high-strength aluminum alloy)
BWGD-C bellows type - clamping type (short and small) - coupling (high-strength aluminum alloy)







### Specifications

Model	D	L.	L1	L2	F	М	Screw tightening torque (N.M)
BWG-16C	16	32	11.4	3	5.2	M2.5	1
BWG-20C	20	32.4	11.2	3	7.1	M2.5	1
BWG-26C	26	36	13	3.6	9	M3	1.5
BWG-32C	32	47.4	16.2	4.5	12	M4	2.5
BWG-40C	40	60.4	20.2	6	14.5 15.5	M5 M4	5 2.5
BWG-55C	55	70.4	23.8	7	20.5	M6	8
BWG-65C	65	83.3	30	9	25	M8	25
BWG-80C	81	108.4	36.2	11.5	29.5	M10	40
BWG-90C	90	119.3	41	12.8	33	M12	90
BWG-110C	110	130	43	13	42	M12	90
BWGD-110C	110	116	43	13	42	M12	90

### D1 D2 Standard aperture

Model	3	4	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	<b>5</b> 5	60
BWG-16C	•	•	•	•																									
BWG-20C	•	•	•	•	•																								
BWG-26C		•	•	•	•	•	•	•																					
BWG-32C			•	•	•	•	•	•	•	•	•																		
BWG-40C			•	•	•	•	•	•	•	•	•	•	•	•	•	•													
BWG-55C						•	•	•	•	•	•	•	•	•	•	•	•	•	•										
BWG-65C								•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							
BWG-80C									•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
BWG-90C														•	•	•	•	•	•	•	•	•	•	•	•				
BWG-110C																•	•	•	•	•	•	•	•	•	•	•	•	•	•
BWGD-110C																•	•	•	•	•	•	•	•	•	•	•	•	•	•

### Series of photos:



### Performance parameter

	inoo pure								
	Maximum	Rated	Maximum	Static torque	Moment	Alle	owable devia	ition	quality
Model	aperture (mm)	torque (N.M)	speed (min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	(g)
BWG-16C	Ф6	1	31000	120	4.2×10 <sup>-7</sup>	0.10	1.5	+0.3 -1.0	12
BWG-20C	Ф8	1.5	23000	180	9.8×10 <sup>-7</sup>	0.15	2	+0.5 -1.5	17
BWG-26C	Ф12	2	19000	750	3.3×10 <sup>-6</sup>	0.15	2	+0.5 -1.5	33
BWG-32C	Ф16	4.5	14000	1600	1.2×10 <sup>-5</sup>	0.20	2	+0.7 -2.0	70
BWG-40C	Ф24	10	11000	2700	3.1×10 <sup>-5</sup>	0.20	2	+0.7 -2.0	112
BWG-55C	Ф30	30	8700	27000	1.4×10 <sup>-4</sup>	0.20	2	+0.7 -2.0	291
BWG-65C	Ф38	60	7350	54000	3.4×10 <sup>-4</sup>	0.20	2	+0.7 -2.0	473
BWG-80C	Ф42	150	5750	84000	9.9×10 <sup>-4</sup>	0.25	2	+1.0 -3.0	917
BWG-90C	Ф45	200	4900	135000	1.6×10 <sup>-3</sup>	0.25	2	+1.0 -3.0	1221
BWG-110C	Ф60	300	4000	340000	3.7×10 <sup>-3</sup>	0.3	2	+1.0 -3.0	1890
BWGD-110C	Ф60	300	4000	340000	3.5×10 <sup>-3</sup>	0.25	2	+1.0 -3.0	1790

### When ordering:



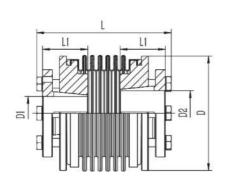
※ Keyway machining

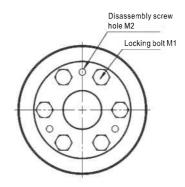
When processing keyway on one side of the shaft hole: BWG-40C-12Kx16 When processing keyway on both sides of the shaft hole: BWG-40C-12Kx16K

Please refer to the keyway size table for keyway processing parameters

# BWGSD-T bellows type - expansion type (short size) - coupling (carbon steel) BWGS-T bellows type - expansion type - coupling (carbon steel)







### Series of photos:



### Specifications

Model	D	L	L1	M1	M2	Screw tightening torque ( N•M )
BWGS-80T	81	96	31	M6	M5	12
BWGS-90T	90	101.3	33	M6	M5	14
BWGS-110T	110	123	40	M8	M6	18
BWGSD-110T	110	109	40	M8	M6	18
BWGS-124T	124	121	40	M8	M6	25

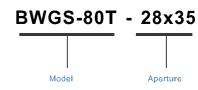
### Performance parameter

	Maximum	Rated	Maximum	Static torque	Moment	,	Allowable dev	ation	
Model	aperture (mm)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad )	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	quality (g)
BWGS-80T	Ф38	150	7500	110000	1.2×10⁻³	0.25	2	+1.0 -3.0	1377
BWGS-90T	Ф45	200	7000	140000	1.9×10 <sup>-7</sup>	0.25	2	+1.0 -3.0	1674
BWGS-110T	Ф55	300	5200	350000	5.5×10⁻³	0.3	2	+1.0 -3.0	3230
BWGSD-110T	Ф55	300	5200	350000	5.2×10 <sup>-3</sup>	0.25	2	+1.0 -3.0	3160
BWGS-124T	Ф60	500	4600	500000	8.1×10 <sup>-3</sup>	0.35	2	+1.0 -3.0	3852

### D1 D2 Standard aperture

Model	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
BWGS-80T	•	•	•	•	•	•	•	•	•	•	•	•	•							
BWGS-90T	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
BWGS-110T							•	•	•	•	•	•	•	•	•	•	•	•	•	
BWGSD-110T							•	•	•	•	•	•	•	•	•	•	•	•	•	
BWGS-124T							•	•	•	•	•	•	•	•	•	•	•	•	•	•

When ordering:



# Spring ty

### **TH-FL Series**

Coupling Spring Type - Flange Type

### Structure



### Material

Flange	steel
range	blackening
spring	Three-layer rectangular section spring
Spring	blackening

### Features

- High torque rigidity
- Compensated radial, angular and axial deviations
- Easy to load and unload
- Flange connection

### The main purpose

- General motors
- Vacuum equipment
- Medical equipment
- Printing machinery

### Product model description

TH-85FL

Product model specification

# Shaft sleeve spring

### Hexagon socket set screw

### **TH-G Series**

Structure

Coupling Spring Type - Top Screw Type

### Material

Floren	steel
Flange	blackening
spring	Three-layer rectangular section spring
spring	blackening
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### Features

- High torque rigidity
- Compensated radial, angular and axial deviations
- Easy to load and unload
- Fixing method with top screw

### The main purpose

- General motors
- Vacuum equipment
- Medical equipment
- Printing machinery

### Product model description

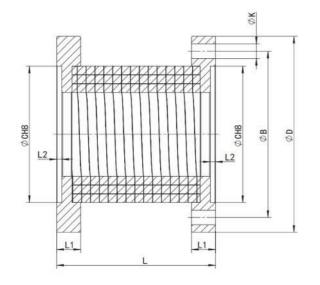
TH-G-85G - 25x25

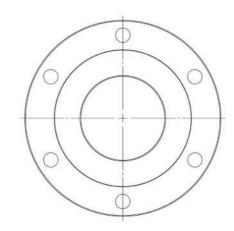
Product model specification Shaft bore

💥 Note: Non-standard hole diameters and keyways can be processed additionally

# Spring typ

# TH-FL Spring Type - Flange Type - Coupling





### Specifications

Model	D	L	L1	L2	С	В	К
TH-75FL	75	48.5	10	1.5	50	62.5	5.8
TH-85FL	85	63.8	11	2.0	60	72.5	7
TH-100FL	100	85	13	2.5	75	87.5	7
TH-115FL	115	93	14	3.0	80	97.5	8.5

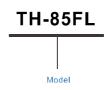
### Series of photos:



### Performance parameter

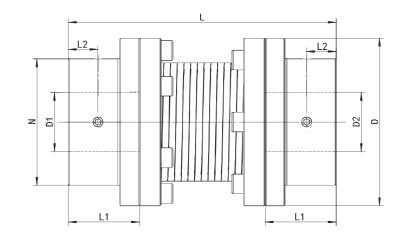
	Rated	Maximum	Maximum	Static torque	Moment		Allowabl	e deviation	
Model	torque (N.M)	aperture (mm)	speed (min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	quality (g)
TH-75FL	90	180	6000	3438	5.07×10 <sup>-4</sup>	0.8	3	+2.0	666
TH-85FL	150	300	5000	4297	1.0×10 <sup>-3</sup>	1.0	3	+2.5	1086
TH-100FL	220	440	4500	6303	2.7×10 <sup>-3</sup>	1.3	3	+3.2	2146
TH-115FL	280	560	4000	6865	4.8×10 <sup>-3</sup>	1.6	3	+3.5	3016

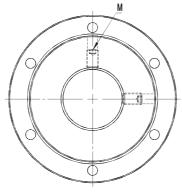
When ordering:



# Spring typ

# TH-G Spring Type - Top Screw Type - Coupling





### Specifications

Model	D	L.	N	L1	L2	М	Screw tightening torque ( N•M )
TH-75G	75	110.5	54	31	15	M6	7.0
TH-85G	85	135.8	65	36	15	M6	7.0
TH-100G	100	165	80	40	15	M8	15
TH-115G	115	185	85	46	15	M8	15

### D1 D2 Standard aperture

Model	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40
TH-75G	•	•	•	•	•	•	•	•	•	•	•	•						
TH-85G					•	•	•	•	•	•	•	•	•	•				
TH-100G									•	•	•	•	•	•	•	•		
TH-115G												•	•	•	•	•	•	•

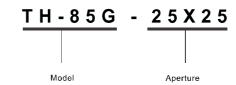
### Series of photos:



### Performance parameter

	Maximum aperture	Rated	Maximum	Maximum	Static torque	Moment of inertia	Allo	wable devia	tion	quality
Model	(mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	rigidity (N.M/rad )	(KG·M2)	radial deviation	angular deviation	axial daviation	(g)
TH-75G	Ф25	90	180	6000	3438	1.24×10 <sup>-3</sup>	0.8	3	+2.0	1884
TH-85G	Ф30	150	300	5000	4297	$2.57 \times 10^{-3}$	1.0	3	+2.5	2993
TH-100G	Ф35	220	440	4500	6303	6.4×10 <sup>-3</sup>	1.3	3	+3.2	5333
TH-115G	Ф40	280	560	4000	6865	1.1×10 <sup>-4</sup>	1.6	3	+3.5	7311

When ordering:



### ※ Keyway machining

When processing the keyway on the side shaft hole :TH-85G-25KX25 When processing the keyway on both sides of the shaft hole:TH-85G-25KX25K

Please refer to the keyway size table for keyway processing parameters

### TH-C Series Coupling Spring Type Clamp Type

### Structure



### Material

Shaft sleeve	steel
Snart sleeve	blackening
spring	Three-layer rectangular section spring
spring	blackening
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### TH-T Series Coupling Spring Type Expansion Type

### Structure



### Material

steel
blackening
steel
blackening
Three-layer rectangular section spring
blackening
SCM435 (12.9 class)
Ferric oxide protective film (black)

### Features

- · High torque rigidity
- Compensated radial, angular and axial deviations
- Easy to load and unload
- · Clamping screw fixing method

### The main purpose

- General motors
- Vacuum equipment
- Medical equipment
- Printing machinery

### Features

- High torque rigidity
- Compensated radial, angular and axial deviations
- Easy to load and unload
- · Expansion fixing method

### The main purpose

- General motors
- Vacuum equipment
- Medical equipment
- Printing machinery

### Product model description

TH-85G - 25x25

Product model specification Shaft bore

X Note: Non-standard hole diameters and keyways can be processed additionally

### Product model description

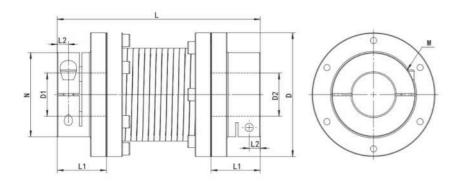
TH-85T - 25x25

Product model specification

X Note: Non-standard hole diameters and keyways can be processed additionally

# Spring type

# TH-C Spring Type Clamping Coupling



### Specifications

Model	D	ι	N	L1	L2	М	Screw tightening torque ( N•M )
TH-75C	75	110.5	54	31	9	M8	28
TH-85C	85	135.8	60	36	9	M8	28
TH-100C	100	165	68	40	9	M8	28
TH-115C	115	185	82	46	9	M8	28

### D1 D2 Standard aperture

Model	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40
TH-75C	•	•	•	•	•	•	•	•	•	•	•	•						
TH-85C					•	•	•	•	•	•	•	•	•	•				
TH-100C									•	•	•	•	•	•	•	•		
TH-115C												•	•	•	•	•	•	•

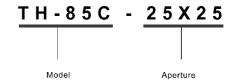
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Al	lowable dev	iation	quality	
Model	aperture (mm)	torque (N.M)	aperture (mm)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia (KG·M2)	radial deviation	angular deviation	axial daviation	(g)	
TH-75C	Ф25	90	180	6000	3438	1.2×10 <sup>-3</sup>	0.8	3	+2.0	1839	
TH-85C	Ф30	150	300	5000	4297	2.3×10 <sup>-3</sup>	1.0	3	+2.5	2786	
TH-100C	Ф35	220	440	4500	6303	5.7×10 <sup>-3</sup>	1.3	3	+3.2	4788	
TH-115C	Ф40	280	560	4000	6865	1.1×10 <sup>-2</sup>	1.6	3	+3.5	7218	

When ordering:



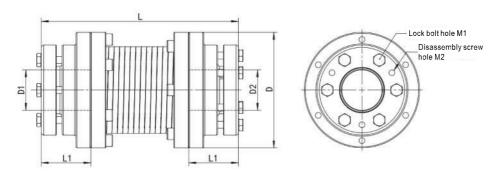
Keyway machining

When processing keyway on one side of the shaft hole: TH-85C-25KX25 When processing keyway on both sides of the shaft hole: TH-85C-25KX25K

Please refer to the keyway size table for keyway processing parameters

# Spring typ

### TH-T Spring Type Expansion Coupling



### Specifications

Model	D	L.	LI	M1	M2	Screw tightening torque ( N•M )
TH-75T	75	117.5	34.5	М6	M6	10
TH-85T	85	135.8	36	M6	M6	10
TH-100T	100	171	43	М6	M6	10
TH-115T	115	185	46	M6	M6	10

### D1 D2 Standard aperture

Model	15	16	18	19	20	22	24	25	28	30	32	35	38	40
TH-75T	•	•	•	•	•	•	•	•						
TH-85T	•	•	•	•	•	•	•	•	•	•				
TH-100T					•	•	•	•	•	•	•	•		
TH-115T								•	•	•	•	•	•	•

### Series of photos:



### Performance parameter

Model	Maximum aperture	Rated torque	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Static torque rigidity	Moment of inertia	Alle	quality		
	(mm)	(N.M)			(N.M/rad)	(KG·M2)	radial deviation	angular deviation	axial daviation	(g)
TH-75T	Ф25	90	180	6000	3438	1.2×10 <sup>-3</sup>	0.8	3	+2.0	1891
TH-85T	Ф30	150	300	5000	4297	2.4×10 <sup>-3</sup>	1.0	3	+2.5	2858
TH-100T	Ф35	220	440	4500	6303	6.3×10 <sup>-3</sup>	1.3	3	+3.2	5239
TH-115T	Ф40	280	560	4000	6865	1.1×10 <sup>-2</sup>	1.6	3	+3.5	7143

When ordering:



### XFD-G Series Coupling Slit Type - Top wire Type (Short)

### Structure



### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon socket	SCM435 (12.9 class)
setscrew	Ferric oxide protective film (black)

# Structure



XF-G Series Coupling Slit Type - Top wire Type

### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### Features

- Zero backlash
- The spring effect formed by slit cutting can absorb eccentricity, angular deviation and axial deviation
- High torque rigidity and torque
- Low inertia and fast response speed
- The clockwise and counterclockwise rotation characteristics are exactly the same
- Good oil resistance and chemical resistance
- · Top screw fixing method

### The main purpose

- · Servo motors, stepper motors, small motors
- · Precision encoders
- High-speed, precision position control
- Copiers, information communications, audio equipment
- · XY axis slides, indexing tables

### Features

- Zero backlash
- The spring effect formed by slit cutting can absorb eccentricity, angular deviation and axial deviation
- High torque rigidity and torque
- Low inertia and fast response speed
- Identical clockwise and counterclockwise rotation characteristics
- Good oil resistance and chemical resistance
- · Top screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- · Precision encoders
- High-speed, precision position control
- Copiers, information communications, audio equipment
- XY axis slides, indexing tables

### Product model description

XFD-32G - 12-14

Product model specification Shaft bore

X Note: Non-standard hole diameters and keyways can be processed additionally

### Product model description

XF-32G - 12-14

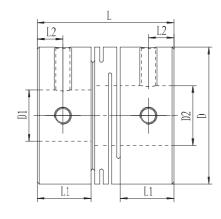
Product model specification

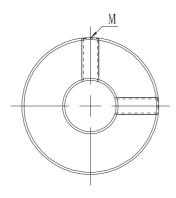
X Note: Non-standard hole diameters and keyways can be processed additionally

# Slit typ

# XFD-G Slit type - top wire type - (short and small) coupling







### Specifications

Model	D	L	L1	L2	М	Screw tightening torque ( N•M )
XFD-12G	12	14	5.2	2.5	M2.5	0.5
XFD-16G	16	18	6.8	3	M3	0.7
XFD-20G	20	20	7.65	3	M3	0.7
XFD-25G	25	25	9.6	4	M4	1.7
XFD-32G	32	32	12.6	6	M4	1.7

### D1 D2 Standard aperture

Model	3	4	5	6	7	8	10	11	12	14	15	16
XFD-12G	•	•	•	•								
XFD-16G		•	•	•	•	•						
XFD-20G			•	•	•	•	•					
XFD-25G			•	•	•	•	•	•	•			
XFD-32G				•	•	•	•	•	•	•	•	•

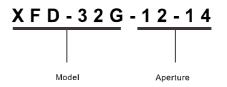
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Allowable	- quality	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	angular deviation	axial daviation	(g)
XFD-12G	Ф6	0.5	1	15000	75	6.8×10 <sup>-8</sup>	1	±0.1	3
XFD-16G	Φ8	0.6	1.2	12000	186	3.0×10 <sup>-7</sup>	1	±0.2	7
XFD-20G	Ф10	1.1	2.2	10000	210	7.2×10 <sup>-7</sup>	1	±0.2	13
XFD-25G	Ф12	1.8	3.6	8000	750	2.2×10 <sup>−6</sup>	1	±0.2	26
XFD-32G	Ф16	3.8	7.6	6000	1050	7.6×10 <sup>-6</sup>	1	±0.2	51

When ordering:



※ Keyway machining

When processing the keyway on the side shaft hole: XFD-32G-12Kx14 When processing the keyway on both sides of the shaft hole: XFD-32G-12Kx14K

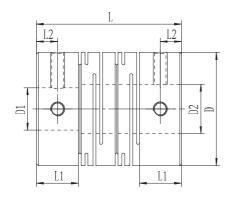
Please refer to the keyway size table for keyway processing parameters

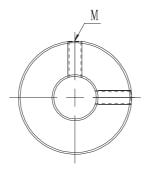
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# Slit ty

# XF-G Slit-type-top-screw-type-coupling







### Specifications

Model	D	L.	L1	L2	М	Screw tightening torque ( N•M )
XF-12G	12	18.5	5	2.5	M2.5	0.5
XF-16G	16	23	6.5	3	M3	0.7
XF-20G	20	26	7.5	3	M3	0.7
XF-25G	25	31	8.5	4	M4	1.7
XF-32G	32	41	11.9	6	M4	1.7
XF-40G	40	56	17	8.5	M5	4
XF-50G	50	71	21	10.5	M6	7
XF-63G	63	90	26	13	M8	15

### D1 D2 Standard aperture

Model	3	4	5	6	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35
XF-12G	•	•	•	•																		
XF-16G		•	•	•	•	•																
XF-20G			•	•	•	•	•															
XF-25G			•	•	•	•	•	•	•													
XF-32G				•	•	•	•	•	•	•	•	•										
XF-40G						•	•	•	•	•	•	•	•	•	•							
XF-50G									•	•	•	•	•	•	•	•	•	•				
XF-63G										•	•	•	•	•	•	•	•	•	•	•	•	•

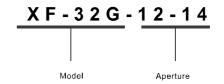
### Series of photos:



### Performance parameter

	Maximum Model aperture		Maximum	Maximum		Moment	Moment	Allowable	e deviation	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad )	of inertia ( KG·M2 )	of inertia ( KG·M2 )	angular deviation	axial daviation	quality (g)
XF-12G	Ф6	0.5	1	15000	48	8.5×10 <sup>-8</sup>	0.10	2	±0.3	4
XF-16G	Ф8	0.6	1.2	12000	88	4.0×10 <sup>-7</sup>	0.10	2	±0.4	8
XF-20G	Ф10	1.1	2.2	10000	176	8.0×10 <sup>-7</sup>	0.10	2	±0.4	15
XF-25G	Ф12	1.8	3.6	8000	370	3.2×10 <sup>-6</sup>	0.15	2	±0.5	29
XF-32G	Ф16	3.8	7.6	6000	490	8.5×10 <sup>-6</sup>	0.15	2	±0.5	62
XF-40G	Ф20	8	16	5000	700	3.3×10 <sup>-5</sup>	0.20	2	±0.5	132
XF-50G	Ф25	16	32	4000	1800	1.0×10 <sup>-4</sup>	0.20	2	±0.5	268
XF-63G	Ф35	32	64	3000	3000	3.3×10 <sup>-4</sup>	0.20	2	±0.5	501

When ordering:



### ※ Keyway machining

When processing the keyway on the side shaft hole: XF-32G-12Kx14 When processing the keyway on both sides of the shaft hole: XF-32G-12Kx14K

Please refer to the keyway size table for keyway processing parameters

### XFD-C Series Coupling Slit Type - Clamping Type (Short)

### Structure



### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon socket bolts	SCM435 (12.9 class)
J Thirties	Ferric oxide protective film (black)

# XF-C Series Couplings Slit Type - Clamping Type

### Structure



### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon socket bolts	SCM435 (12.9 class)
,	Ferric oxide protective film (black)

### Features

- Zero backlash
- The spring effect formed by slit cutting can absorb eccentricity, angular deviation and axial deviation
- High torque rigidity and torque
- Low inertia and fast response speed
- Identical clockwise and counterclockwise rotation
- Good oil resistance and chemical resistance
- · Clamping screw fixing method

### The main purpose

- · Servo motors, stepper motors, small motors
- · Precision encoders
- High-speed, precision position control
- Copiers, information communications, audio equipment
- · XY axis slides, indexing tables

### Features

- Zero backlash
- The spring effect formed by slit cutting can absorb eccentricity, angular deviation and axial deviation
- High torque rigidity and torque
- Low inertia and fast response speed
- Identical clockwise and counterclockwise rotation characteristics
- Good oil resistance and chemical resistance
- · Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- · Precision encoders
- High-speed, precision position control
- Copiers, information communications, audio equipment
- XY axis slides, indexing tables

### Product model description

XFD-32C - 12-14

Product model specification Shaft bore

X Note: Non-standard hole diameters and keyways can be processed additionally

### Product model description

XF-32C - 12-14

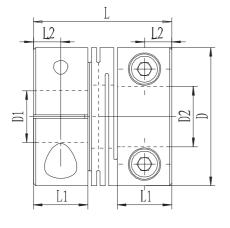
Product model specification

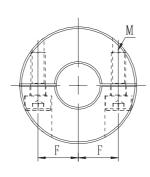
X Note: Non-standard hole diameters and keyways can be processed additionally

# Slit ty

# XFD-C Slit-type-clamping-(short and small) coupling







### **Specifications**

Model	D	L	L1	L2	F	М	Screw tightening torque ( N•M )
XFD-12C	12	14	5.2	2.6	4	M2	0.5
XFD-16C	16	18	6.8	3.4	5	M2.5	1
XFD-20C	20	20	7.65	3.8	6.5	M2.5	1
XFD-25C	25	25	9.6	4.8	9	M3	1.5
XFD-32C	32	32	12.6	6.3	11	M4	2.5

### D1 D2 Standard aperture

Model	4	5	6	7	8	10	11	12	14
XFD-12C	•	•							
XFD-16C	•	•	•						
XFD-20C		•	•	•	•				
XFD-25C		•	•	•	•	•			
XFD-32C					•	•	•	•	•

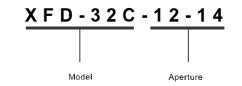
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Allowable	quality	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia (KG·M2)	angular deviation	axial daviation	quality (g)
XFD-12C	Ф5	0.5	1	15000	75	6.3×10 <sup>-8</sup>	1	±0.1	4
XFD-16C	Ф6	0.6	1.2	12000	186	3.1×10 <sup>-7</sup>	1	±0.2	8
XFD-20C	Ф8	1.1	2.2	10000	210	7.7×10 <sup>-7</sup>	1	±0.2	14
XFD-25C	Ф10	1.8	3.6	8000	750	2.1×10 <sup>-6</sup>	1	±0.2	27
XFD-32C	Ф14	3.8	7.6	6000	1050	7.9×10 <sup>-6</sup>	1	±0.2	56

### When ordering:



### Keyway machining

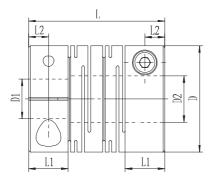
When processing the keyway on the side shaft hole: XFD-32C-12Kx14 When processing the keyway on both sides of the shaft hole: XFD-32C-12Kx14K

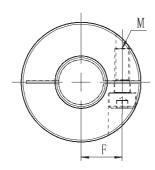
Please refer to the keyway size table for keyway processing parameters

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# XF-C Slit Type Clamping Coupling







### Specifications

Model	D	L	L1	L2	F	М	Screw tightening torque ( N•M )
XF-12C	12	18.5	5	2.5	4	M2	0.5
XF-16C	16	23	6.5	3.25	5	M2.5	1
XF-20C	20	26	7.5	3.75	6.5	M2.5	1
XF-25C	25	31	8.5	4.25	9	M3	1.5
XF-32C	32	41	11.9	6	11	M4	2.5
XF-40C	40	56	17	8.5	14	M5	4
XF-50C	50	71	21	10.5	18	M6	8
XF-63C	63	90	26	13	24	M8	16

### D1 D2 Standard aperture

Model	4	5	6	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30
XF-12C	•	•																	
XF-16C	•	•	•																
XF-20C		•	•	•	•														
XF-25C		•	•	•	•	•													
XF-32C					•	•	•	•	•										
XF-40C					•	•	•	•	•	•	•	•							
XF-50C								•	•	•	•	•	•	•	•				
XF-63C									•	•	•	•	•	•	•	•	•	•	•

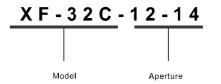
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Allo	quality		
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	radial deviation	angular deviation	axial daviation	(g)
XF-12C	Ф5	0.5	1	15000	48	7.5×10 <sup>-8</sup>	0.10	2	±0.3	4
XF-16C	Ф6	0.6	1.2	12000	88	3.1×10 <sup>-7</sup>	0.10	2	±0.4	9
XF-20C	Φ8	1.1	2.2	10000	176	8.6×10 <sup>-7</sup>	0.10	2	±0.4	17
XF-25C	Ф10	1.8	3.6	8000	370	2.4×10 <sup>-6</sup>	0.15	2	±0.5	31
XF-32C	Ф14	3.8	7.6	6000	490	9.4×10 <sup>-6</sup>	0.15	2	±0.5	65
XF-40C	Ф18	8	16	5000	700	3.4×10 <sup>-5</sup>	0.20	2	±0.5	139
XF-50 C	Ф22	16	32	4000	1800	1.1×10 <sup>-4</sup>	0.20	2	±0.5	290
XF-63 C	Ф32	32	64	3000	3000	3.4×10 <sup>-4</sup>	0.20	2	±0.5	556

When ordering:



### ※ Keyway machining

When processing keyway on one side of the shaft hole: XF-32C-12Kx14 When processing keyway on both sides of the shaft hole: XF-32C-12Kx14K

Please refer to the keyway size table for keyway processing parameters

# ross slider type

### HK-G Series Couplings Cross Slider Type - Top Screw Type

### Structure



### Material

	High strength aluminum alloy
Shaft sleeve	anodizing treatment
Spacer	Polyurethane
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

# HKD-C series coupling, cross slider type - clamping type (short size) HK-C series coupling, cross slider type - clamping type

### Structure



### Material

	High strength aluminum alloy
Shaft sleeve	anodizing treatment
Spacer	Polyurethane
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### Features

- Cross slider connection
- Allows large radial and angular deviations
- Low inertia, high torque rigidity
- Non-magnetic
- · Electrical insulation effect
- Easy to load and unload
- Top screw fixing method

### The main purpose

- Servo motors, stepper motors, AC motors, DC motors, various small motors
- Transmission equipment
- Precision encoders
- Environmental equipment, small water pumps
- Air conditioning equipment, optical systems

### Features

- Cross slider connection
- Allows large radial and angular deviations
- . Low inertia, high torque rigidity
- Non-magnetic
- · Electrical insulation effect
- Easy to load and unload
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, AC motors, DC motors, various small motors
- Transmission equipment
- Precision encoders
- Environmental equipment, small water pumps
- Air conditioning equipment, optical systems

### Product model description



 $\ensuremath{\mathbb{X}}$  Note: Non-standard hole diameters and keyways can be processed additionally

### Product model description

HKD-20C - 8 x8

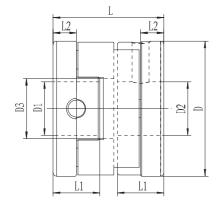
Product model specification SI

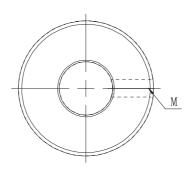
💥 Note: Non-standard hole diameters and keyways can be processed additionally

# es slider typ

# HK-G Cross Slider Type - Top Screw Type - Coupling







### Specifications

Model	D	D3	L	L1	L2	M	Screw tightening torque ( N•M )
HK-16G	16	7.9	19.3	7	3.5	M3	0.7
HK-20G	20.5	9.8	24	9	4.5	M4	1.7
HK-25G	25	10.9	28.6	11	5.5	M5	4
HK-32G	32	14.1	33.7	13	6.5	M6	7
HK-40G	40.5	18	33.2	14	7	M6	7
HK-50G	50	23	38	17	8.5	M8	15
HK-63G	63	28	47	21	10.5	M10	30

### D1 D2 Standard aperture

Model	3	4	5	6	6.35	8	9.525	10	12	14	15	16	18	20	25
HK-16G	•	•	•	•	•										
HK-20G		•	•	•	•	•									
HK-25G			•	•	•	•	•	•							
HK-32G						•		•	•	•					
HK-40G								•	•	•	•	•			
HK-50G										•	•	•	•	•	
HK-63G												•	•	•	•

### Series of photos:



### Performance parameter

	Maximum	Rated			Moment	Allowable	deviation		
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed (min <sup>-1</sup> )			axial daviation	angular deviation	quality (g)
HK-16G	Ф6.35	0.8	1.6	12000	29	3.1×10 <sup>-7</sup>	1.0	3	7
HK-20G	Φ8	1.1	2.2	11000	55	1.6×10 <sup>-6</sup>	1.5	3	15
HK-25G	Ф10	1.8	3.6	10000	130	2.8×10 <sup>-6</sup>	2.0	3	26
HK-32G	Ф14	4	8	9000	290	9.3×10 <sup>-6</sup>	2.5	3	48
HK-40G	Ф16	10	20	8000	520	2.1×10 <sup>-5</sup>	3.0	3	82
HK-50G	Ф20	18	36	7000	820	6.7×10 <sup>-5</sup>	3.5	3	148
HK-63G	Ф25	36	72	6000	1900	2.2×10 <sup>-4</sup>	4.0	3	292

When ordering:

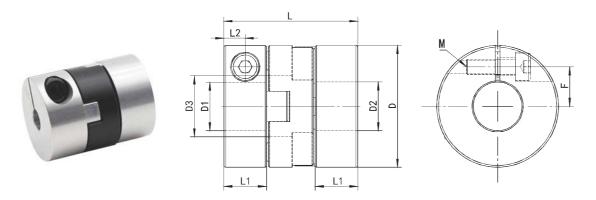


### X Keyway machining

When processing the keyway on the side shaft hole: HK-40G-12Kx16 When processing the keyway on both sides of the shaft hole: HK-40G-12Kx16K

# ss slider type

# HKD-C Series Coupling Oldham Slider Type - Clamping Type (Short Size)



### Specifications

Model	D	L	D3	L1	L2	F	М	Screw tightening torque ( N•M )
HKD-12C	12	16	6	5	2.5	4	M2	0.5
HKD-16C	16	21	8	7	3.5	5	M2.5	1
HKD-20C	20	22	10	7	3.5	6.5	M2.5	1
HKD-25C	25	28	12	8	4	9	М3	1.5
HKD-32C	32	35	16	10	5	11	M4	2.5

### D1 D2 Standard aperture

Model	3	4	5	6	6.35	8	9.525	10	12	14
HKD-12C	•	•	•							
HKD-16C	•	•	•	•						
HKD-20C			•	•	•	•				
HKD-25C				•	•	•	•			
HKD-32C				•	•	•	•	•	•	•

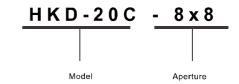
### Series of photos:



### Performance parameter

	Maximum	Rated	ated Maximum Maximum S		Static torque	Moment	Allowable	deviation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	axial daviation	angular deviation	(g)
HKD-12C	Ф5	0.3	0.6	15000	10	7.9×10 <sup>-8</sup>	0.6	2	3.6
HKD-16C	Ф6	0.5	1.0	12000	29	3.3×10 <sup>-7</sup>	1.0	2	8.9
HKD-20C	Ф8	0.8	1.6	11000	55	7.9×10 <sup>-7</sup>	1.5	2	13.6
HKD-25C	Ф10	1.5	3	10000	100	2.4×10 <sup>-6</sup>	2	2	26
HKD-32C	Ф14	3	6	9000	210	7.8×10 <sup>-6</sup>	2.5	2	52

When ordering:



X Keyway machining

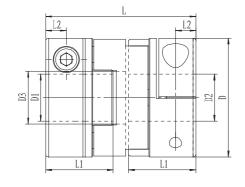
When processing the keyway on the side shaft hole: HKD-20C-8kx8 When processing the keyway on both sides of the shaft hole: HKD-20C-8kx8K

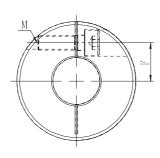
For keyway processing parameters, please refer to the keyway dimension table

Cross slider ty

# HK-C Cross Slider Type - Clamping Type - Coupling







### **Specifications**

Model	D	D3	L	L1	L2	F	М	Screw tightening torque ( N•M )
HK-16C	16	7.9	30.3	12.5	3	5	M2.5	1
HK-20C	20.5	9.8	34	14	3	6.5	M2.5	1
HK-25C	25	10.9	39.6	16.5	3.8	9	M3	1.5
HK-32C	32	14.1	45.7	19	4.5	11	M4	2.5
HK-40C	40.5	18	51.2	23	7	13	M5	4
HK-50C	50	23	58	27	8	16	M6	8
HK-63C	63	28	71	33	10	21	M8	16

### D1 D2 Standard aperture

Model	5	6	6.35	8	10	11	12	14	15	16	18	20	25
HK-16C	•	•											
HK-20C		•	•	•									
HK-25C			•	•	•								
HK-32C				•	•	•	•	•					
HK-40C							•	•	•	•			
HK-50C										•	•	•	
HK-63C											•	•	•

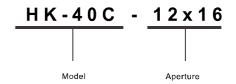
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Allowable	deviation	- quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad )	of inertia ( KG·M2 )	axial daviation	angular deviation	(g)
HK-16C	Ф6	0.8	1.6	12000	29	5.6×10 <sup>-7</sup>	1.0	3	12
HK-20C	Φ8	1.1	2.2	11000	55	1.3×10 <sup>-6</sup>	1.5	3	21
HK-25C	Ф10	1.8	3.6	10000	130	4.2×10 <sup>-6</sup>	2.0	3	37
HK-32C	Ф14	4	8	9000	290	1.7×10 <sup>-5</sup>	2.5	3	67
HK-40C	Ф16	10	20	8000	520	4.0×10 <sup>-5</sup>	3.0	3	133
HK-50C	Ф20	18	36	7000	820	1.2×10 <sup>-4</sup>	3.5	3	234
HK-63C	Ф25	36	72	6000	1900	3.7×10 <sup>4</sup>	4.0	3	461

When ordering:



### Keyway machining

When processing the keyway on the side shaft hole: HK-40C-12Kx16 When processing the keyway on both sides of the shaft hole: HK-40C-12Kx16K

For keyway processing parameters, please refer to the keyway dimension table

### HKS-G Series Coupling Cross Slider Type - Top Screw Type

### Structure

### Hexagon socket set screw



### Material

Shaft sleeve	stainless steel
Spacer	Polyurethane
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### HKS-C Series Coupling Oldham Slider Type - Clamping Type

### Structure

# Hexagon socket bolts shaft sleeve Spacer

### Material

Shaft sleeve	stainless steel
Spacer	Aluminum Bronze
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### Features

- Cross slider connection
- Allows large radial and angular deviations
- Low inertia, high torque rigidity
- Non-magnetic
- · Electrical insulation effect
- Easy to load and unload
- Top screw fixing method

### The main purpose

- · Servo motors, stepper motors, AC motors, DC motors,
- Transmission equipment
- Precision encoders
- Environmental equipment, small water pumps
- · Air conditioning equipment, optical systems

### Features

- Cross slider connection
- Allows large radial and angular deviations
- . Low inertia, high torque rigidity
- Non-magnetic
- · Electrical insulation effect
- Easy to load and unload
- · Top screw fixing method

### The main purpose

- Servo motors, stepper motors, AC motors, DC motors,
- Transmission equipment
- Precision encoders
- Environmental equipment, small water pumps
- · Air conditioning equipment, optical systems

### Product model description

HKS-34G - 12 x16

Product model specification

X Note: Keyway can be processed

### Product model description

HKS-34C - 12 x16

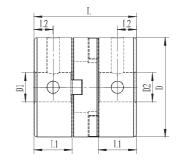
Product model specification

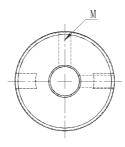
X Note: Keyway can be processed

# oss slider type

# HKS-G Cross Slider Type - Top Screw Type - Coupling







### **Specifications**

Model	D	ι	L1	L2	М	Screw tightening torque ( N•M )
HKS-15G	15	17	5.6	2.8	M3	0.7
HKS-17G	17	21	7	3.5	M3	0.7
HKS-20G	20	22	7	3.5	M3	0.7
HKS-25G	25	27	9	4.5	M4	1.7
HKS-30G	30	34	12	6	M4	1.7
HKS-34G	34	35	13	6.5	M5	4
HKS-38G	38	41	15	7.5	M5	4
HKS-45G	45	45	15	7.5	M5	4
HKS-55G	55	51	17	8.5	M6	7
HKS-70G	70	59	20	10	M8	15

### D1 D2 Standard aperture

Model	3	4	5	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35	38	40	42
HKS-15G	•	•	•	•	•	•																
HKS-17G		•	•	•	•	•	•															
HKS-20G			•	•	•	•	•	•														
HKS-25G				•	•	•	•	•	•	•												
HKS-30G						•	•	•	•	•	•	•										
HKS-34G							•	•	•	•	•	•	•									
HKS-38G							•	•	•	•	•	•	•	•								
HKS-45G								•	•	•	•	•	•	•	•	•						
HKS-55G										•	•	•	•	•	•	•	•	•				
HKS-70G												•	•	•	•	•	•	•	•	•	•	•

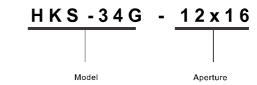
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Allowable	e deviation	
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia (KG·M2)	axial daviat <b>i</b> on	angular deviation	quality (g)
HKS-15G	Ф8	3.3	6.6	8000	950	4.9×10 <sup>-7</sup>	0.3	2	16
HKS-17G	Ф10	5.5	11	7000	1450	9.2×10 <sup>-7</sup>	0.3	2	24
HKS-20G	Ф12	7.7	15.4	6000	1880	1.8×10 <sup>-6</sup>	0.4	2	34
HKS-25G	Ф15	11	22	5000	3400	6.6×10 <sup>-6</sup>	0.5	2	64
HKS-30G	Ф18	26	52	5000	4850	1.4×10 <sup>-5</sup>	0.6	2	117
HKS-34G	Ф20	35	70	4000	6350	2.4×10 -5	0.7	2	162
HKS-38G	Ф22	55	110	4000	7660	4.5×10 <sup>-5</sup>	8.0	2	231
HKS-45G	Ф25	66	132	3000	1 7500	1.0×10 <sup>-4</sup>	1	2	368
HKS-55G	Ф30	99	198	3000	3 1000	2.6×10 <sup>-4</sup>	1.2	2	639
HKS-70G	Ф42	176	352	2000	4 7500	7.3×10 <sup>-4</sup>	1.4	2	1095

When ordering:



### X Keyway machining

When processing the keyway on the side shaft hole: HKS -34G-12Kx16 When processing the keyway on both sides of the shaft hole: HKS -34G-12Kx16K

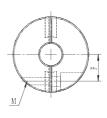
# oss slider type

# HKS-C Cross Slider Type - Clamping Type - Coupling

Outer diameter  $\Phi$ 15 $-\Phi$ 38



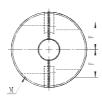




Outer diameter  $\Phi$ 45- $\Phi$ 70







### **Specifications**

Model	D	L	L1	L2	F	М	Screw tightening torque ( N•M )
HKS-15C	15	20	7.1	2.35	5.2	M2	0.5
HKS-17C	17	25	9	2.65	5.5	M2	0.5
HKS-20C	20	28	10	3.25	7.25	M2.5	1
HKS-25C	25	32	11.5	4	9	M3	1.5
HKS-30C	30	34	12	4	11	M3	1.5
HKS-34C	34	35	13	4.5	12	M4	3.5
HKS-38C	38	41	15	4.75	14	M4	3.5
HKS-45C	45	48	16.5	6.2	16	M5	8
HKS-55C	55	59	21	8	20	M6	13
HKS-70C	70	69	25	9	26	M6	13

### D1 D2 Standard aperture

Model	3	4	5	6	6.35	8	10	12	14	15	16	18	20	22	24	25	28	30	35
HKS-15C	•	•	•	•															
HKS-17C		•	•	•															
HKS-20C			•	•	•	•	•												
HKS-25C				•	•	•	•	•											
HKS-30C						•	•	•	•										
HKS-34C							•	•	•	•	•								
HKS-38C							•	•	•	•	•	•	•						
HKS-45C								•	•	•	•	•	•	•					
HKS-55C										•	•	•	•	•	•	•			
HKS-70C												•	•	•	•	•	•	•	•

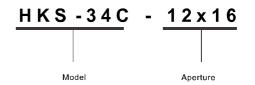
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Maximum	Static torque	Moment	Allowable	deviation	19
Model	aperture (mm)	torque (N.M)	torque (N.M)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	axial daviation	angular deviation	quality (g)
HKS-15C	Ф6	3.3	6.6	8000	950	4.9×10 <sup>-7</sup>	0.3	2	19
HKS-17C	Ф6.35	5.5	11	7000	1450	9.2×10 <sup>-7</sup>	0.3	2	35
HKS-20C	Ф10	7.7	15.4	6000	1880	1.8×10 <sup>-6</sup>	0.4	2	47
HKS-25C	Ф12	11	22	5000	3400	6.6×10 <sup>-6</sup>	0.5	2	85
HKS-30C	Ф14	26	52	5000	4850	1.4×10 <sup>-5</sup>	0.6	2	132
HKS-34C	Ф16	35	70	4000	6350	2.4×10 -5	0.7	2	180
HKS-38C	Ф20	55	110	4000	7660	4.5×10 <sup>-5</sup>	0.8	2	237
HKS-45C	Ф22	66	132	3000	17500	1.0×10 <sup>-4</sup>	1	2	402
HKS-55C	Ф25	99	198	3000	31000	2.6×10 <sup>-4</sup>	1.2	2	778
HKS-70C	Ф35	176	352	2000	47500	7.3×10 <sup>-4</sup>	1.4	2	1405

When ordering:



### ※ Keyway machining

When processing keyway on one side of the shaft hole: HKS-34C-12Kx16 When processing keyway on both sides of the shaft hole: HKS-34C-12x16K

# ross slider type

# Cross slider t

# SZ-C Series Coupling Cross Shaft Type - Clamping Type (Steel)

### Structure



### Material

Chaffalaasa	Carbon steel
Shaft sleeve	blackening
Cross Shaft	alloy steel
fixed block	High strength aluminum alloy
iixed block	anodizing treatment
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### Features

- Cross-axis connection
- Compensation for radial and angular deviations
- Low inertia, high torque rigidity
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, AC motors, DC motors
- Various small motors

### Product model description

SZ-55C - 15x15

Product model specification

Shaft bor

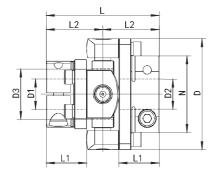
imes Note: Keyway can be processed

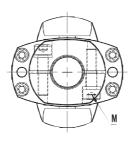
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# ross slider type

# SZ-C Cross Shaft Type - Clamping Type - Coupling (Steel)







### **Specifications**

Model	Shaft bore	D	L	N	L1	L2	D3	М	Screw tightening torque ( N•M )
SZ-45C	8-16	45	48	31	17	24	20	M4	4.0
SZ-55C	10-20 24	55	56	38	20	28	25	M5 M4	8.3 4.0
SZ-65C	12-22 24-25	65	68	44	24.5	34	30	M6 M5	13.7 8.3
SZ-80C	12-30 32-35	80	80	57	29	40	39	M8 M6	34.3 13.7
SZ-100C	20-35 38-40	100	100	70	36	50	45	M10 M8	67.6 34.3
SZ-125C	25-50	125	120	88	42.5	60	61	M12	118
SZ-155C	35-60	155	141	112	50	70.5	76	M14	186

### D1 D2 Standard aperture

Model	8	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
SZ-45C	•	•	•	•	•	•	•	•																			
SZ-55C		•	•	•	•	•	•	•	•	•	•	•	•	•													
SZ-65C				•	•	•	•	•	•	•	•	•	•	•	•												
SZ-80C				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
SZ-100C												•	•	•	•	•	•	•	•	•	•						
SZ-125C															•	•	•	•	•	•	•	•	•	•	•		
SZ-155C																			•	•	•	•	•	•	•	•	•

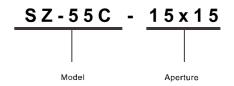
### Series of photos:



### Performance parameter

	Maximum	Rated	Maximum	Allowable	Maximum	Static torque	Moment	Allowable	deviation	quality
Model	aperture (mm)	torque (N.M)	torque (N.M)	thrust load (N)	speed ( min <sup>-1</sup> )	rigidity (N.M/rad)	of inertia ( KG·M2 )	axial daviation	angular deviation	quality (g)
SZ-45C	Ф16	10	20	500	6000	1.91×10 <sup>4</sup>	0.40×10 <sup>-4</sup>	0.2	1	190
SZ-55C	Ф24	20	40	850	6000	5.01×10 <sup>4</sup>	1.13×10 <sup>-4</sup>	0.2	1	360
SZ-65C	Ф25	40	80	1450	6000	1.08×10 <sup>5</sup>	2.54×10 <sup>-4</sup>	0.2	1	570
SZ-80C	Ф35	80	160	3250	6000	2.37×10 <sup>5</sup>	6.89×10 <sup>-4</sup>	0.2	1	970
SZ-100C	Ф40	160	320	3750	6000	4.66×10 <sup>5</sup>	2.24×10 <sup>-3</sup>	0.2	1	2090
SZ-125C	Ф50	320	640	6000	6000	8.80×10 <sup>5</sup>	7.08×10 <sup>-3</sup>	0.2	1	4380
SZ-155C	Ф60	640	1280	9750	6000	1.66×10 <sup>6</sup>	1.98×10 <sup>-2</sup>	0.2	1	7670

When ordering:



### Keyway machining

When processing the keyway on the side shaft hole: SZ-55C-15Kx15 When processing the keyway on both sides of the shaft hole: SZ-55C-15Kx15K

### GX-G Series Coupling Rigid - Top Screw Type

# Structure Hexagon socket set screw

main body

### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon socket	SCM435 (12.9 class)
set screw	Ferric oxide protective film (black)

### Features

- Zero backlash
- High torque rigidity and high permissible
- · Lightweight, extremely low moment of
- Maintenance-free, oil-resistant and chemical-resistant
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors,
- Precision machinery XY axis slides
- Machine tools

### Product model description

GX-40C -16 x 18

Product model specification

Shaft bore

\* Note: Non-standard hole diameters and keyways can be processed additionally

### GXC-C Series Coupling Rigid-Clamping Type (Extended Type)



### Features

- Zero backlash
- High torque rigidity and high permissible
- · Lightweight, extremely low moment of
- · Maintenance-free, oil-resistant and chemical-resistant
- Top wire fixing method

### The main purpose

- · Servo motors, stepper motors,
- · Precision machinery XY axis slides
- Machine tools

### Product model description

GX-40G - 16 x20

Product model specification

Shaft bore

X Note: Non-standard hole diameters and keyways can be processed additionally

### Structure

# Hexagon socket bolts main body

### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon	SCM435 (12.9 class)
socket bolts	Ferric oxide protective film (black)

# GX-C Series Couplings Rigid-Clamping Type

### Structure



### Material

	High strength aluminum alloy
main body	anodizing treatment
Hexagon	SCM435 (12.9 class)
socket bolts	Ferric oxide protective film (black)

### Features

- Zero backlash
- High torque rigidity and high permissible
- · Lightweight, extremely low moment of
- · Maintenance-free, oil-resistant and chemical-resistant
- · Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- Precision machinery XY axis slides
- Machine tools

### Product model description

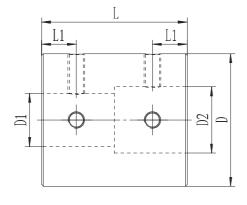
- GXC-32C 12 x14
- Product model specification

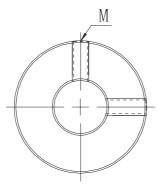
X Note: Non-standard hole diameters and keyways can be processed additionally

Shaft bore

# GX-G Rigid-top-screw-type coupling







### **Specifications**

Model	D	L	L1	M	Screw tightening torque ( N•M )
GX-16G	16	24	6	M3	0.7
GX-20G	20	30	7	M3	0.7
GX-25G	25	36	9	M4	1.7
GX-32G	32	41	10	M4	1.7
GX-40G	40	44	10.5	M5	4
GX-50G	50	53	12	M6	7
GX-65G	65	65	16	M8	15

### D1 D2 Standard aperture

Model	3	4	5	6	8	10	12	15	16	18	19	20	25	28	30	32
GX-16G	•	•	•	•												
GX-20G				•	•	•										
GX-25G					•	•	•									
GX-32G							•	•	•							
GX-40G									•	•	•	•				
GX-50G											•	•	•			
GX-65G														•	•	•

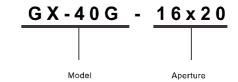
### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GX-16G	Ф8	1.1	2.2	12000	4.2×10 <sup>-7</sup>	11
GX-20G	Ф10	2.6	5.2	10000	$1.5 \times 10^{-6}$	20
GX-25G	Ф12	4.3	8.6	9000	3.7×10 <sup>-6</sup>	39
GX-32G	Ф16	10	20	8000	1.1×10 <sup>-5</sup>	71
GX-40G	Ф20	20	40	6000	3.2×10 <sup>-5</sup>	120
GX-50G	Ф25	25	50	5500	8.4×10 -5	225
GX-65G	Ф32	35	70	5000	2.9×10 <sup>-5</sup>	473

### When ordering:



※ Keyway machining

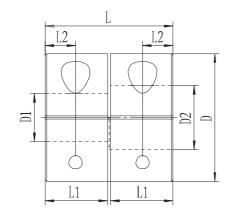
When processing the keyway on the side shaft hole: GX-40G-16Kx20 When processing the keyway on both sides of the shaft hole: GX-40G-16Kx20K

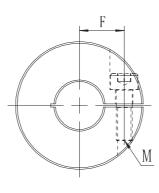
For keyway processing parameters, please refer to the keyway dimension table

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### **GX-C Rigid-Clamping-Coupling**







### **Specifications**

Model	D	L	L1	L2	F	М	Screw tightening torque ( N•M )
GX-16C	16	16	7.5	3.75	5	M2.5	1
GX-20C	20	20	9.5	4.75	6.5	M2.5	1
GX-25C	25	25	12	6	9	M3	1.5
GX-32C	32	32	15.5	7.75	11	M4	2.5
GX-40C	40	40	19.5	9.5	14	M5	4
GX-50C	50	50	24.4	12	18	M6	8
GX-65C	65	65	31.9	16	23	M8	16

### D1 D2 Standard aperture

Model	5	6	8	10	12	14	15	16	18	19	20	24	25	28	30
GX-16C	•	•													
GX-20C		•	•												
GX-25C			•	•											
GX-32C				•	•	•									
GX-40C							•	•	•						
GX-50C										•	•	•			
GX-65C													•	•	•

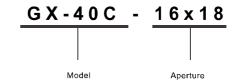
### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GX-16C	Ф6	0.8	1.6	12000	2.8×10 <sup>-7</sup>	8
GX-20C	Φ8	2.4	4.8	11000	8.5×10 <sup>-7</sup>	14
GX-25C	Ф10	4.3	8.6	10000	2.9×10 <sup>-6</sup>	28
GX-32C	Ф14	9.5	19	8000	$7.4 \times 10^{-6}$	58
GX-40C	Ф18	19	38	6000	2.6×10 <sup>-5</sup>	113
GX-50C	Ф24	25	50	5500	7.5×10 -5	211
GX-65C	Ф30	35	70	5000	2.8×10 <sup>-4</sup>	481

### When ordering:

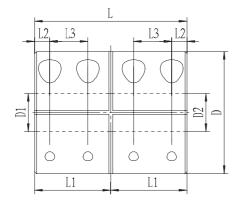


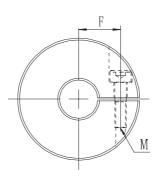
### X Keyway machining

When processing the keyway on the side shaft hole: GX-40C-16Kx18 When processing the keyway on both sides of the shaft hole: GX-40C-16Kx18K

# GXC-C Rigid-clamping-(extended) coupling







### **Specifications**

Model	D	L	L1	L2	L3	F	М	Screw tightening torque ( N•M )
GXC-16C	16	22	11	2.5	5.5	5	M2	0.5
GXC-20C	20	24	12	2.5	6	7	M2	0.5
GXC-25C	25	36	18	4.5	9	9	M2.5	1
GXC-32C	32	40	20	4	10	11	M3	1.5
GXC-39C	39	52	26	7.25	11	13.8	M5	7
GXC-49C	49	66	33	9.25	14	18.3	M6	12
GXC-54C	54	80	40	10	15	20	M6	12

### D1 D2 Standard aperture

Model	5	6	8	10	12	14	15	16	18	19	20	22	24	25	28
GXC-16C	•	•													
GXC-20C		•	•												
GXC-25C			•	•	•										
GXC-32C				•	•	•	•								
GXC-39C					•	•	•	•	•						
GXC-49C					•	•	•	•	•	•	•	•	•		
GXC-54C							•	•	•	•	•	•	•	•	•

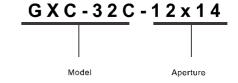
### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GXC-16C	Ф6	0.8	1.6	12000	3.4×10 <sup>-7</sup>	11
GXC-20C	Ф8	2.4	4.8	11000	9.2×10 <sup>-7</sup>	17
GXC-25C	Ф12	4.3	8.6	10000	3.4×10 <sup>-6</sup>	38
GXC-32C	Ф15	9.5	19	8000	1.0×10 <sup>-5</sup>	70
GXC-39C	Ф18	19	38	7500	2.9×10 <sup>-5</sup>	143
GXC-49C	Ф24	33	66	7000	1.1×10 <sup>-4</sup>	271
GXC-54C	Ф28	38	76	6500	2.0×10 <sup>-4</sup>	381

### When ordering:



### X Keyway machining

When processing the keyway on the side shaft hole: GXC-32C-12Kx14 When processing the keyway on both sides of the shaft hole: GXC-32C-12Kx14K

For keyway processing parameters, please refer to the keyway dimension table

# **GXB-C Series**

Coupling Rigid-Clamping Type (Standard Type) (High Strength Aluminum Alloy)

### Structure



### Material

main hadu	High strength aluminum alloy
main body	anodizing treatment
Hexagon	SCM435 (12.9 class)
socket bolts	Ferric oxide protective film (black)

### **GXBS-C Series**

Couplings Rigid-clamping type (standard type) (carbon steel)

### Structure



### Material

main body	Carbon steel/blackening
main body	Stainless steel/electrolysis
Hexagon	SCM435 (12.9 class)
socket bolts	Ferric oxide protective film (black)

### Features

- Zero backlash
- High torque rigidity and high permissible torque
- Lightweight, extremely low moment of inertia
- Maintenance-free, oil-resistant and
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- · Precision machinery XY axis slides
- Machine tools

### Features

- Zero backlash
- High torque rigidity and high permissible torque
- Maintenance-free, oil-resistant and chemical-resistant
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- Precision machinery XY axis slides
- Machine tools

### Product model description

GXB-44C - 16 x 18

Product model specification

 $\ensuremath{\mathbb{X}}$  Note: Non-standard hole diameters and keyways can be processed additionally

### Product model description

GXBS-44C -

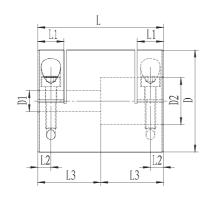
16 x 18

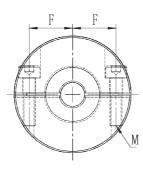
Product model specification

X Note: Non-standard hole diameters and keyways can be processed additionally

# GXB-C Rigid-Clamping Type (Standard Type) (High Strength Aluminum Alloy)







### **Specifications**

Model	D	L	L1	L2	L3	F	M	Screw tightening torque ( N•M )
GXB-24C	24	30	7	3.5	15	7.75	M3	1.5
GXB-34C	34	40	8	4	20	12	M3	1.5
GXB-39C	39	48	10	5	24	14.5	M4	3.4
GXB-44C	44	48	12.5	6.25	24	16	M5	7
GXB-56C	56	60	14.5	7.25	30	20	M6	14
GXB-68C	68	73	19	9.5	36.5	24	M8	28

### D1 D2 Standard aperture

Model	5	6	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35
GXB-24C	•	•	•	•	•														
GXB-34C			•	•	•	•	•	•	•										
GXB-39C			•	•	•	•	•	•	•	•									
GXB-44C				•	•	•	•	•	•	•	•	•	•						
GXB-56C						•	•	•	•	•	•	•	•	•	•	•	•		
GXB-68C								•	•	•	•	•	•	•	•	•	•	•	•

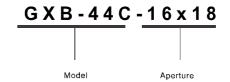
### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GXB-24C	Ф11	2.3	4.6	26000	2×10 <sup>-6</sup>	30
GXB-34C	Ф16	2.8	5.6	18000	9.5×10 <sup>-6</sup>	79
GXB-39C	Ф18	4.7	9.4	16000	2.2×10 <sup>-5</sup>	126
GXB-44C	Ф22	6.5	13	13000	3.3×10 <sup>-5</sup>	153
GXB-56C	Ф30	15	30	10000	1.1×10 <sup>-4</sup>	294
GXB-68C	Ф35	40	80	10000	2.8×10 <sup>-4</sup>	545

### When ordering:



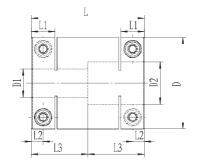
### X Keyway machining

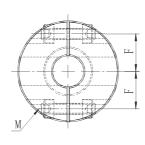
When processing the keyway on the side shaft hole: GXB-44C-16Kx18 When processing the keyway on both sides of the shaft hole: GXB-44C-16Kx18K

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# GXBS-C Rigid-Clamping-(Standard) Coupling (Carbon Steel)







### **Specifications**

Model	D	L	L1	L2	L3	F	М	Screw tightening torque ( N•M )
GXBS-24C	24	30	7	3.5	15	8	M3	1.5
GXBS-34C	34	40	8	4	20	12	M3	1.5
GXBS-39C	39	48	10	5	24	14.5	M4	2.5
GXBS-44C	44	48	12.5	6.25	24	16	M5	4
GXBS-56C	56	60	14.5	7.25	30	20	M6	8
GXBS-68C	68	73	19	9.5	36.5	24	M8	16

### D1 D2 Standard aperture

Model	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35
GXBS-24C	•	•															
GXBS-34C		•	•	•	•	•											
GXBS-39C				•	•	•	•	•									
GXBS-44C				•	•	•	•	•	•	•	•						
GXBS-56C						•	•	•	•	•	•	•	•	•			
GXBS-68C							•	•	•	•	•	•	•	•	•	•	•

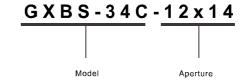
### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GXBS-24C	Ф10	2.3	4.6	26000	2.7×10 <sup>-6</sup>	82
GXBS-34C	Ф15	2.8	5.6	18000	1.4×10 -5	216
GXBS-39C	Ф18	4.7	9.4	16000	3.9×10 <sup>-5</sup>	333
GXBS-44C	Ф22	6.5	13	11000	1.7×10 <sup>-4</sup>	397
GXBS-56C	Ф28	15	30	8000	5.5×10 <sup>-4</sup>	810
GXBS-68C	Ф35	35	70	5000	1.5×10 <sup>-3</sup>	1414

### When ordering:



### ※ Keyway machining

When processing the keyway on the side shaft hole: GXBS-34C-12Kx14 When processing the keyway on both sides of the shaft hole: GXBS-34C-12Kx14K

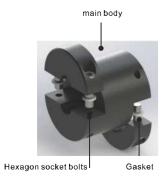
# Rigid coupling

# Rigid coupling

### GXFS-C Series Coupling Rigid-Split Clamping Type (Carbon Steel)

### GXFS-CC Series Coupling Rigid - Split Clamping Type (Carbon Steel)

### Structure



### Material

main body	Carbon steel/blackening
main body	Stainless steel/electrolysis
Hexagon	SCM435 (12.9 class)
socket bolts	Ferric oxide protective film (black)

### Structure



### Material

	Carbon steel/blackening
main body	Stainless steel/electrolysis
Gasket	PE
Hexagon	SCM435 (12.9 class)
socket bolts	Ferric oxide protective film (black)

### Features

- Zero backlash
- High torque rigidity and high permissible torque
- Maintenance-free, oil-resistant and chemical-resistant
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- Precision machinery XY axis slides
- Machine tools

### Features

- Zero backlash
- High torque rigidity and high permissible torque
- Maintenance-free, oil-resistant and chemical-resistant
- Clamping screw fixing method

### The main purpose

- Servo motors, stepper motors, small motors
- Precision machinery XY axis slides
- Machine tools

### Product model description

GXFS-34C - 12 x14

Product model specification

Shaft hore

 $\ensuremath{\mathbb{X}}$  Note: Non-standard hole diameters and keyways can be processed additionally

### Product model description

GXFS-34CC - 12 x14

Product model specification

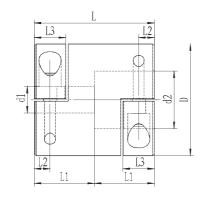
Shaft bore

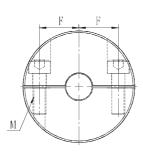
💥 Note: Non-standard hole diameters and keyways can be processed additionally

# Rigid coupling

# GXFS-C Rigid Split Clamping Coupling (Carbon Steel)







### **Specifications**

Model	D	L	L1	L2	L3	F	М	Screw tightening torque ( N•M )
GXFS-24C	24	30	15	3.5	7	8	M3	1.5
GXFS-34C	34	40	20	4	8	12	M3	1.5
GXFS-39C	39	48	24	5	10	14.5	M4	2.5
GXFS-44C	44	48	24	6.25	12.5	16	M5	4
GXFS-56C	56	60	30	7.25	14.5	20	M6	8
GXFS-68C	68	73	36.5	9.5	19	24	M8	16

### D1 D2 Standard aperture

Model	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35
GXFS-24C	•	•															
GXFS-34C		•	•	•	•	•											
GXFS-39C				•	•	•	•	•									
GXFS-44C				•	•	•	•	•	•	•	•						
GXFS-56C						•	•	•	•	•	•	•	•	•			
GXFS-68C							•	•	•	•	•	•	•	•	•	•	•

### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GXFS-24C	Ф10	2.3	4.6	26000	2.7×10 <sup>-6</sup>	83
GXFS-34C	Ф15	2.8	5.6	18000	1.4×10 <sup>-6</sup>	218
GXFS-39C	Ф18	4.7	9.4	16000	3.9×10 <sup>-5</sup>	336
GXFS-44C	Ф22	6.5	13	11000	1.7×10 <sup>-5</sup>	402
GXFS-56C	Ф30	15	30	8000	5.5×10 <sup>-4</sup>	776
GXFS-68C	Ф35	35	70	5000	1.5×10 <sup>-4</sup>	1432

When ordering:

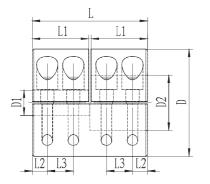


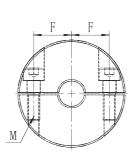
※ Keyway machining

When processing the keyway on the side shaft hole: GXFS-34C-12Kx14 When processing the keyway on both sides of the shaft hole: GXFS-34C-12Kx14K

# GXFS-CC Rigid-Split Clamping Coupling (Carbon Steel)







### Specifications

Model	D	L	L1	L2	L3	F	М	Screw tightening torque ( N•M )
GXFS-24CC	24	30	14.7	3.5	7.7	7.75	M3	1.5
GXFS-34CC	34	40	19.7	4	11	12	M3	1.5
GXFS-39CC	39	48	24	5	14	14.5	M4	2.5
GXFS-44CC	44	48	23.5	6.25	11	16	M5	4
GXFS-56CC	56	60	29.5	7.25	15	20	M6	8
GXFS-68CC	68	73	35.75	9.5	16.5	24	M8	16

### D1 D2 Standard aperture

Model	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35
GXFS-24CC	•	•															
GXFS-34CC		•	•	•	•	•											
GXFS-39CC				•	•	•	•	•									
GXFS-44CC				•	•	•	•	•	•	•	•						
GXFS-56CC						•	•	•	•	•	•	•	•	•			
GXFS-68CC							•	•	•	•	•	•	•	•	•	•	•

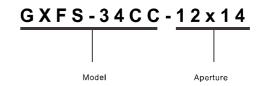
### Series of photos:



### Performance parameter

Model	Maximum aperture (mm)	Rated torque (N.M)	Maximum torque (N.M)	Maximum speed ( min <sup>-1</sup> )	Moment of inertia ( KG·M2 )	quality (g)
GXFS-24CC	Ф10	2.3	4.6	26000	2.7×10 <sup>-6</sup>	80
GXFS-34CC	Ф15	2.8	5.6	18000	1.4×10 <sup>-6</sup>	211
GXFS-39CC	Ф18	4.7	9.4	16000	3.9×10 <sup>-5</sup>	330
GXFS-44CC	Ф22	6.5	13	11000	1.7×10 <sup>-5</sup>	392
GXFS-56CC	Ф30	15	30	8000	5.5×10 <sup>-4</sup>	751
GXFS-68CC	Ф35	35	70	5000	1.5×10 <sup>-4</sup>	1395

### When ordering:



※ Keyway machining

When processing the keyway on the side shaft hole: GXFS-34CC-12x14 When processing the keyway on both sides of the shaft hole: GXFS-34CC-12x14K

