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COUPLINGS

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### Coupling overview

#### ■ Coupling

A coupling is a mechanical part that connects two shafts (driving shaft and driven shaft) in different mechanisms and makes them rotate together to transmit torque or rotation angle. The coupling compensates for the displacement between the two shafts and has the ability to absorb vibration and mitigate impact. Even if an abnormality is sent during operation and excessive torque is applied to the rotating shaft, the coupling will be damaged first, thus protecting the motor.

#### ■ Selection of Couplings

1. Although the coupling is a mechanical part that transmits torque and rotation angle, each has its own fixed strengths. Therefore, in the selection process, the necessary characteristics during use must be fully considered to select the most suitable coupling.
2. After deciding on the model, refer to the dimensions and technical parameters in this product catalog to determine its model.
3. Finally, please confirm the external dimensions, shaft diameter, and rated torque in the technical parameters of the selected model And whether the maximum speed meets the installation conditions.

#### ■ Calculation of torque

1. Calculation of torque borne by coupling

Calculate the torsional resistance of the coupling [Ta] based on the power of the driving machine (motor) [KM] and the rotational speed of the coupling [n]

$$T_a(N \cdot M) = 9950 \times \frac{kW}{n(r/min)}$$

2. Calculation of compensating torque

Calculate the compensation torque applied to the coupling based on usage and operating conditions

$$T_a[N \cdot M] = T_a \cdot K1 \cdot K2 \cdot K3 \cdot K4$$

Load nature coefficient(K1)			
Constant load	Variable load: small	Variable load: medium	Variable load: large
1.0	1.25	1.75	2.25

Motion time coefficient(K2)			
Hour/day	-8	-16	-24
K2	1.0	1.12	1.25

Environmental temperature coefficient(K3)						
Times /hour	~10	~30	~60	~120	~240	Over 240
K3	1.0	1.1	1.3	1.5	2.0	2.5≤

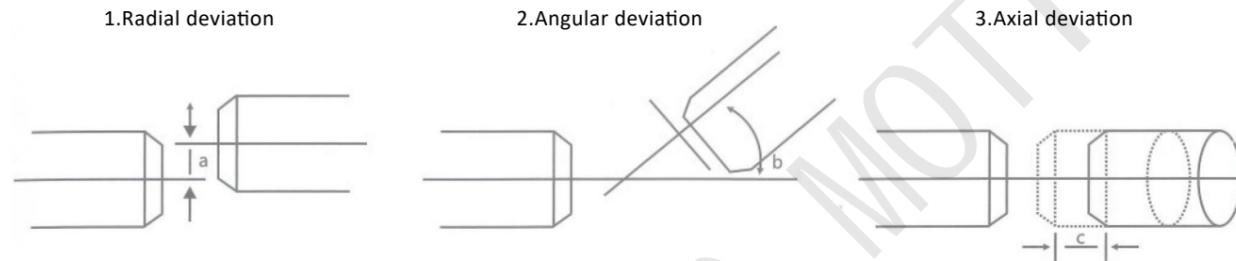
Environmental temperature coefficient(K4)				
Temperature [°C]	-30~+30	~+40	~+60	~+80
K4	1.0	1.2	1.4	1.8

3. Please select a coupling with a torque greater than the compensation torque.

#### ■ Installation of couplings

1. When installing the coupling, please make sure to perform strict calibration and adjustment. It is recommended to use the concave-convex matching method to align the two shafts, or use a square ruler to stick to the outer periphery of the body and check at two points about 90 degrees apart to ensure the highest concentricity of the coupling. Otherwise, the service life of the coupling will be greatly affected depending on the difference in the centering accuracy.
2. To avoid accidents during installation, be sure to cut off the main power supply of the drive unit and ensure safety before installation.
3. When installing this coupling, please remove dust and foreign matter attached to the mounting shaft and coupling aperture surface.
4. In order to fully utilize the optimal performance of the coupling, the allowable value for selection should be considered to be less than half when two or more deviation values occur simultaneously during installation.

## Description of deviations during coupling installation



Technical parameter list of servo motor and general motor:

Servo motor parameter table

Rated output (KW)	Rated speed (min)	Rated torque (N.M)	Maximum torque (KW)	Shaft diameter (KW)
0.05	3000	0.16	0.48	8
0.1	3000	0.32	0.95	8
0.2	3000	0.64	1.9	14
0.4	3000	1.30	3.8	14
0.5	2000	2.39	7.16	24
0.5	3000	1.59	4.77	24
0.75	2000	3.58	10.7	22
0.75	3000	2.40	7.2	19
0.85	1000	8.12	24.4	24
1	2000	4.78	14.4	24
1	3000	3.18	9.55	24
1.2	1000	11.50	34.4	35
1.5	2000	7.16	21.6	28
1.5	3000	4.78	14.3	24
2	2000	9.55	28.5	35
2	3000	6.37	15.9	24
3	1000	28.60	85.9	35
3.5	2000	16.70	50.1	35
3.5	3000	11.10	27.9	28
5	2000	23.90	71.6	35
5	3000	15.90	39.7	28
7	2000	33.40	100	35

- The above table is a simplified calculation based on the allowable torque transfer of the corresponding servo shaft and coupling when using clamping type, and is not a guaranteed value for use without clearance.

- The table above shows general servo motor specifications. The torque characteristics of servo motors vary depending on the servo motor manufacturer, so please confirm the dimensions of the coupling to be used in the manufacturer's product catalog.

General motor parameter table

Motor	50Hz:3000min <sup>-1</sup> 60Hz:3000min <sup>-1</sup>		50Hz:1500min <sup>-1</sup> 60Hz:1800min <sup>-1</sup>		50Hz:1000min <sup>-1</sup> 60Hz:1200min <sup>-1</sup>		
	Two-pole motor		Four-pole motor		Six-pole motor		
Output (KW)	Frequency (HZ)	Shaft diameter (mm)	Torque (N.M)	Shaft diameter (mm)	Torque (N.M)	Shaft diameter (mm)	Torque (N.M)
0.1	50	-	-	11	0.7	-	-
	60	-	-	11	0.5	-	-
0.2	50	11	0.7	11	1.3	-	-
	60	11	0.5	11	1.1	-	-
0.4	50	14	1.3	14	2.6	19	3.9
	60	14	1.1	14	2.2	19	3.2
0.75	50	19	2.4	19	4.9	24	7.3
	60	19	2	19	4.1	24	6.1
0.15	50	24	4.9	24	9.7	28	15
	60	24	4.1	24	8.1	28	12
2.2	50	24	7.1	28	14	28	21
	60	24	6	28	12	28	18
3.7	50	28	12	28	24	38	36
	60	28	10	28	20	38	30
5.5	50	38	18	38	36	38	54
	60	38	15	38	30	38	45
7.5	50	38	24	38	49	42	72
	60	38	20	38	41	42	60
1.1	50	42	36	42	71	42	108
	60	42	30	42	59	-	90
15	50	42	49	42	97	-	-
	60	42	42	42	81	-	-
18.5	50	42	65	-	-	-	-
	60	42	50	-	-	-	-

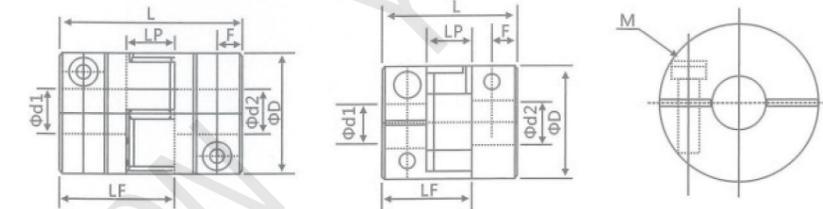
- The above table shows the suitable dimensions for key and set screw types generally used in general-purpose motor drive parts. It does not indicate the selection of clearance-free specifications.

- The motor speed and output torque are calculated values (reference values).

## GFC aluminum alloy plum blossom clamping series

### Characteristic

- > Zero rotational clearance, used for forward and reverse rotation
- > The colloid is made of polyurethane, which has good wear resistance
- > Oil resistance and electrical insulation, the middle elastomer can absorb vibration
- > Compensate for radial, angular and axial deviations
- > Detachable design, easy to install
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	F	M	Tightening screw torque (N.M)
GFC-14×22	3,4,5,6,6.35	14	22	14.3	6.6	5.0	M2.5	1.0
GFC-20×25	3,4,5,6,6.35,7,8,9,9.525,10	20	25	16.7	8.6	5.9	M3	1.5
GFC-20×30	3,4,5,6,6.35,7,8,9,9.525,10	20	30	19.25	8.6	5.9	M3	1.5
GFC-25×30	4,5,6,6.35,7,8,9,9.525,10,11,12	25	30	20.82	11.6	8.5	M4	2.5
GFC-25×34	4,5,6,6.35,7,8,9,9.525,10,11,12	25	34	22.82	11.6	8.5	M4	2.5
GFC-30×35	5,6,6.35,7,8,9,10,11,12,12.7,14,15,16	30	35	23	11.5	10	M4	2.5
GFC-30×40	5,6,6.35,7,8,9,10,11,12,12.7,14,15,16	30	40	25	11.5	10	M4	2.5
GFC-40×50	6,8,9,10,11,12,12.7,14,15,16,17,18,19,20,22,24	40	50	32.1	14.5	14	M5	7
GFC-40×55	6,8,9,10,11,12,12.7,14,15,16,17,18,19,20,22,24	40	55	34.5	14.5	14	M5	7
GFC-40×66	6,8,9,10,11,12,12.7,14,15,16,17,18,19,20,22,24	40	66	40	14.5	14	M5	7
GFC-55×49	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	49	32	16.1	13.5	M6	12
GFC-55×78	8,10,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	78	46.4	16.1	19	M6	12
GFC-65×80	14,15,16,17,18,19,20,22,24,25,28,30,32,35,38,40	65	80	48.5	17.3	14	M8	20
GFC-65×90	14,15,16,17,18,19,20,22,24,25,28,30,32,35,38,40	65	90	53.5	17.3	22.5	M8	20
GFC-80×114	19,20,22,24,25,28,30,32,35,38,40,42,45	80	114	68	22.5	16	M8	20
GFC-95×126	19,20,22,24,25,28,30,32,35,38,40,42,45,50,55	95	126	74.5	24	18	M10	30

### Technical parameters

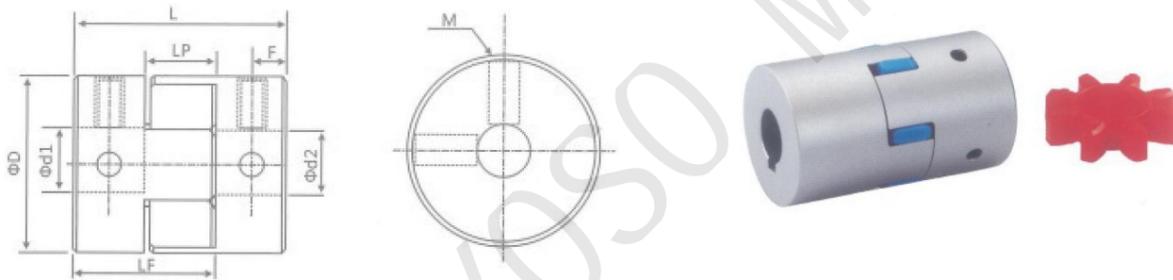
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GFC-14×22	5.0	0.1	1	±0.2	10000	50	1.0×10 <sup>-6</sup>	High strength aluminum alloy	Polyurethane imported from Germany	Anodizing treatment	10
GFC-20×25	5.0	0.1	1	±0.2	10000	50	1.0×10 <sup>-6</sup>				15
GFC-20×30	5.0	0.1	1	±0.2	10000	53	1.1×10 <sup>-6</sup>				19
GFC-25×30	10	0.1	1	±0.2	10000	90	5.2×10 <sup>-6</sup>				33
GFC-25×34	10	0.1	1	±0.2	10000	90	5.2×10 <sup>-6</sup>				42
GFC-30×35	12.5	0.1	1	±0.2	10000	123	6.2×10 <sup>-6</sup>				50
GFC-30×40	12.5	0.1	1	±0.2	10000	123	6.2×10 <sup>-6</sup>				60
GFC-40×50	17	0.1	1	±0.2	8000	1100	3.8×10 <sup>-5</sup>				115
GFC-40×55	17	0.1	1	±0.2	8000	1100	3.8×10 <sup>-5</sup>				127
GFC-40×66	17	0.1	1	±0.2	7000	1140	3.9×10 <sup>-5</sup>				154
GFC-55×49	45	0.1	1	±0.2	6500	2350	1.6×10 <sup>-3</sup>				241
GFC-55×78	45	0.1	1	±0.2	6000	2500	1.6×10 <sup>-3</sup>				341
GFC-65×80	108	0.1	1	±0.2	5500	4500	3.8×10 <sup>-3</sup>	433			
GFC-65×90	108	0.1	1	±0.2	5500	4800	3.8×10 <sup>-3</sup>	583			
GFC-80×114	145	0.1	1	±0.2	4500	5000	1.8×10 <sup>-3</sup>	1650			
GFC-95×126	250	0.1	1	±0.2	4000	5000	2.0×10 <sup>-3</sup>	1000			

Note: The coupling must be used within the allowable value range.

## GF aluminum alloy plum blossom set screw series

### Characteristic

- > Zero rotational clearance, used for forward and reverse rotation
- > The colloid is made of polyurethane, which has good wear resistance
- > Oil resistance and electrical insulation, the middle elastomer can absorb vibrator
- > Compensate for radial, angular and axial deviations
- > Detachable design, easy to install
- > Position screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	F	M	Tightening screw torque (N.M)
GF-14×22	3,4,5,6,6.35,7,8	14	22	14.3	6.6	3.8	M3	0.7
GF-20×25	3,4,5,6,6.35,7,8,9,9.525,10,11	20	25	16.7	8.6	4	M3	0.7
GF-20×30	3,4,5,6,6.35,7,8,9,9.525,10,11	20	30	19.25	8.6	5.3	M4	1.7
GF-25×30	4,5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15	25	30	20.82	11.6	5.6	M4	1.7
GF-25×34	4,5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15	25	34	22.82	11.6	5.6	M4	1.7
GF-30×35	5,6,6.35,7,8,9,10,11,12,12.7,14,15,16	30	35	23	11.5	5.75	M4	1.7
GF-30×40	5,6,6.35,7,8,9,10,11,12,12.7,14,15,16	30	40	25.60	11.5	10	M4	1.7
GF-40×50	6,8,9,10,11,12,12.7,13,14,15,16,17,18,19,20,22,24	40	50	32.1	14.5	10	M5	4
GF-40×55	6,8,9,10,11,12,12.7,13,14,15,16,17,18,19,20,22,24	40	55	34.5	14.5	10	M5	4
GF-40×66	6,8,9,10,11,12,12.7,13,14,15,16,17,18,19,20,22,24	40	66	40	14.5	12.75	M5	4
GF-55×49	12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	49	32	16.1	13.5	M6	8.4
GF-55×78	12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	78	46.4	16.1	15.5	M6	8.4
GF-65×80	14,15,16,17,18,19,20,22,24,25,30,32,35,38,40,42,45	65	80	48.5	17.3	18.1	M8	10.5
GF-65×90	14,15,16,17,18,19,20,22,24,25,30,32,35,38,40,42,45	65	90	53.5	17.3	18.1	M8	10.5

### Technical parameters

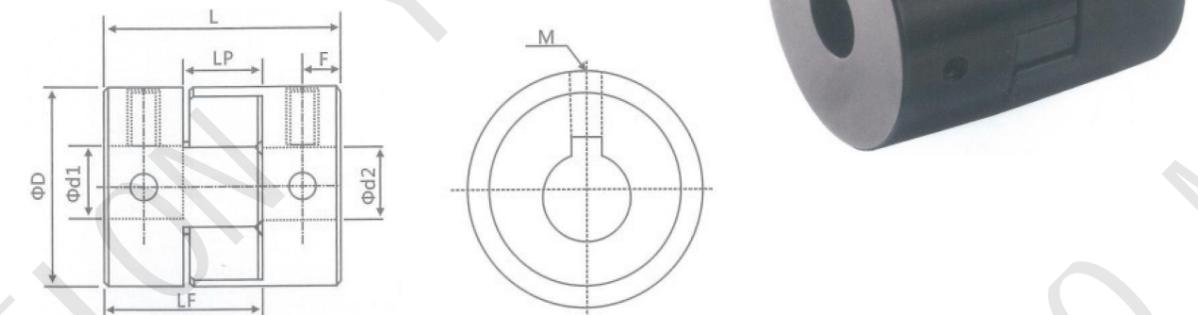
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GF-14×22	2.5	0.1	1	±0.2	10000	22	2.0×10 <sup>-7</sup>	High strength aluminum alloy	Polyurethane imported from Germany	Anodizing treatment	7
GF-20×25	5.0	0.1	1	±0.2	10000	50	1.1×10 <sup>-6</sup>				13
GF-20×30	5.0	0.1	1	±0.2	10000	53	1.0×10 <sup>-6</sup>				18
GF-25×30	10	0.1	1	±0.2	10000	90	5.0×10 <sup>-6</sup>				30
GF-25×34	10	0.1	1	±0.2	10000	90	5.0×10 <sup>-6</sup>				40
GF-30×35	12.5	0.1	1	±0.2	10000	123	5.5×10 <sup>-6</sup>				46
GF-30×40	12.5	0.1	1	±0.2	10000	123	5.5×10 <sup>-6</sup>				55
GF-40×50	17	0.1	1	±0.2	8000	1100	3.5×10 <sup>-5</sup>				100
GF-40×55	17	0.1	1	±0.2	8000	1100	3.5×10 <sup>-5</sup>				120
GF-40×66	17	0.1	1	±0.2	7000	1140	3.8×10 <sup>-5</sup>				145
GF-55×49	45	0.1	1	±0.2	6500	2200	1.5×10 <sup>-3</sup>				260
GF-55×78	45	0.1	1	±0.2	6000	2500	1.5×10 <sup>-3</sup>				320
GF-65×80	108	0.1	1	±0.2	5000	4800	3.6×10 <sup>-3</sup>				560
GF-65×90	108	0.1	1	±0.2	5500	4500	3.6×10 <sup>-3</sup>				450

Note: The coupling must be used within the allowable value range.

## GFT 45# steel high-rigidity plum blossom keyway set screw series

### Characteristic

- > The shaft sleeve is made of 45 # steel
- > The surface of the product is blackened
- > Simple structure, high rigidity, low inertia
- > Easy to install, with rubber elastomer
- > Detachable design, easy to install
- > Suitable for ordinary low-power motors, stepper motors



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	M	Tightening screw torque (N.M)
GFT035-16×22	3,4,5,6,6.35,7,8	16	22	7.25	7.5	M3	0.7
GFT050-50×27	5,6,7,8,9,10,11,12,12.7,14,15,16,17,18,19	27	44	15.5	13	M4	1.7
GFT070-35×50	8,10,11,12,12.7,14,15,16,17,18,19,20,22	35	50	18.5	13	M5	4
GFT075-45×55	8,10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	45	55	21	13	M5	4
GFT090-55×55	10,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	55	21	13	M5	4
GFT095-55×61	10,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	61	24	13	M5	4
GFT100-66×88	12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	66	88	35	18	M8	10.5
GFT110-85×110	16,17,18,19,20,22,24,25,28,30,32,38,40,42,45	85	110	44	22	M10	20

### Technical parameters

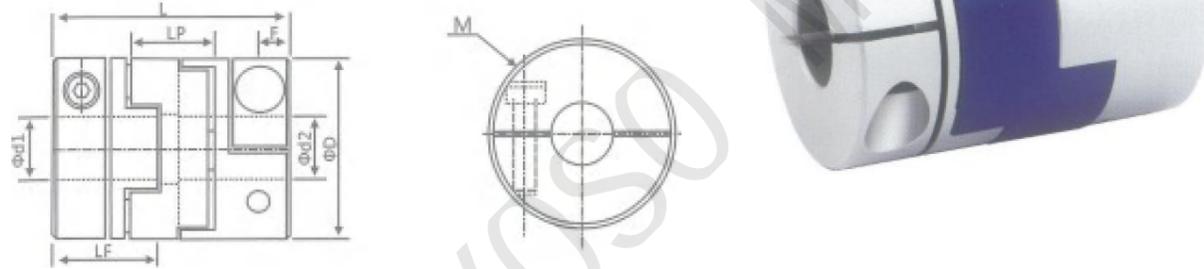
Parameters	Rated torque (N.M)*	Maximum torque (N.M)*	Maximum rotational speed rpm	Moment of Inertia (Kg.M <sup>2</sup> )	Allowable radial misalignment (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Weight (g)
GFT035-16×22	2.5	5.0	16000	0.38×10 <sup>-6</sup>	0.1	0.5	±0.3	10
GFT050-50×27	7.5	15	12000	5.1×10 <sup>-6</sup>	0.2	1.0	±0.5	60
GFT070-35×50	8	16	9000	1.78×10 <sup>-5</sup>	0.2	1.0	±0.5	120
GFT075-45×55	12.5	25	7000	5.35×10 <sup>-5</sup>	0.2	1.0	±0.5	210
GFT090-55×55	22	44	6000	1.14×10 <sup>-4</sup>	0.3	1.0	±0.5	310
GFT095-55×61	22	44	6000	1.14×10 <sup>-4</sup>	0.3	1.0	±0.5	358
GFT100-66×88	40	80	5000	4.33×10 <sup>-4</sup>	0.3	1.0	±0.7	785
GFT110-85×110	75	150	4000	1.43×10 <sup>-3</sup>	0.3	1.0	±0.7	1560

Note: The coupling must be used within the allowable value range.

## GHC cross - slide clamping series

### Characteristic

- > The colloidal material adopts imported PA66, which has good resistance to corrosion and electrical insulation
- > Sliding design more effectively compensates for radial and angular deviations
- > Detachable design, easy to install
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	F	M	Tightening screw torque (N.M)
GHC-16x21	4,5,6,6.35	16	21	8.6	11.6	2.5	M2.5	1
GHC-16x30	4,5,6,6.35	16	30	13.1	11.6	3	M2.5	1
GHC-20x22	5,6,6.35,7,8	20	22	8.6	12.7	2.5	M2.5	1
GHC-20x33	5,6,6.35,7,8	20	33	14.1	12.7	3	M2.5	1
GHC-25x28	5,6,6.35,8,9,9.525,10,11,12	25	28	11.7	16.65	3	M3	1.5
GHC-25x39	5,6,6.35,8,9,9.525,10,11,12	25	39	17.2	16.65	4.2	M3	1.5
GHC-32x33	5,6,8,9,9.525,10,11,12,12.7,14,15,16	32	33	14	19.5	3	M4	2.5
GHC-32x45	5,6,8,9,9.525,10,11,12,12.7,14,15,16	32	45	20	19.5	4.5	M4	2.5
GHC-40x50	8,9,9.525,10,11,12,14,15,16,17,18,19	40	50	23	18.4	7	M5	7
GHC-45x46	8,9,9.525,10,11,12,14,15,16,17,18,19,20,22	45	46	21	18.4	7	M5	7
GHC-50x53	10,11,12.7,14,15,16,17,18,19,20,22,24	50	53	24	15	7.5	M6	12
GHC-50x58	10,11,12.7,14,15,16,17,18,19,20,22,24	50	58	26.5	17.5	8	M6	12
GHC-55x57	10,11,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	57	26	17.5	7.8	M6	12
GHC-63x71	14,15,16,17,18,19,20,22,24,25,28,30,32	63	71	33	24	10	M8	20
GHC-70x77	14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	70	77	29.5	25	12	M8	20

### Technical parameters

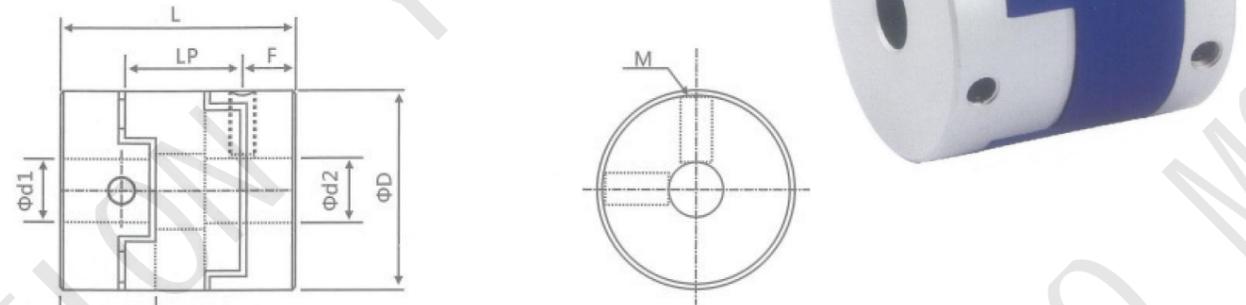
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M²)	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GHC-16x21	0.7	0.8	3	±0.2	8500	30	5.5×10 <sup>-7</sup>	High strength aluminum alloy	PA66	Anodizing treatment	8
GHC-16x30	0.7	0.8	3	±0.2	9000	30	5.9×10 <sup>-7</sup>				12
GHC-20x22	1.2	1.2	3	±0.2	6500	58	1.3×10 <sup>-6</sup>				13
GHC-20x33	1.2	1.2	3	±0.2	7000	58	1.5×10 <sup>-6</sup>				19
GHC-25x28	2	1.6	3	±0.2	5500	130	4.0×10 <sup>-6</sup>				24
GHC-25x39	22	1.6	3	±0.2	6000	130	4.5×10 <sup>-6</sup>				35
GHC-32x33	4.5	2	3	±0.2	4500	270	1.3×10 <sup>-5</sup>				48
GHC-32x45	4.5	2	3	±0.2	4800	270	1.5×10 <sup>-5</sup>				67
GHC-40x50	9	2.4	3	±0.2	3600	520	4.2×10 <sup>-5</sup>				114
GHC-45x46	12	2.5	3	±0.2	3500	800	4.5×10 <sup>-5</sup>				140
GHC-50x53	19	2.6	3	±0.2	3000	800	1.0×10 <sup>-4</sup>				190
GHC-50x58	19	3	3	±0.2	3000	800	1.1×10 <sup>-4</sup>				215
GHC-55x57	25	3.2	3	±0.2	3000	900	1.3×10 <sup>-5</sup>				260
GHC-63x71	33	3	3	±0.2	2550	1200	3.5×10 <sup>-4</sup>				455
GHC-70x77	56	3.5	3	±0.2	2500	1260	4.1×10 <sup>-5</sup>				520

Note: The coupling must be used within the allowable value range.

## GH cross - slide set screw series

### Characteristic

- > The colloidal material adopts imported PA66, which has good resistance to corrosion and electrical insulation
- > Sliding design more effectively compensates for radial and angular deviations
- > Detachable design, easy to install
- > Position screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	F	M	Tightening screw torque (N.M)
GH-16x18	4,5,6,6.35,7,8	16	18	7.1	11.6	3.55	M3	0.7
GH-20x25	4,5,6,6.35,7,8,9,9.525	20	25	9.1	12.7	4.55	M4	1.7
GH-25x28	5,6,6.35,8,9,9.525,10,11,12,14	25	28	11.7	16.65	5.58	M4	1.7
GH-32x33	5,6,8,9,9.525,10,11,12,12.7,14,15,16	32	33	14	19.5	7	M4	1.7
GH-40x35	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	40	35	15.5	18.4	7.75	M4	1.7
GH-45x46	8,9,9.525,10,11,12.7,14,15,16,17,18,19,20,22	45	46	21.5	18.4	9	M5	4
GH-50x38	10,12,12.7,14,15,16,17,18,19,20,22,24,25	50	38	16.5	15	8.25	M5	4
GH-55x57	10,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	55	57	27	17.5	10.5	M5	4
GH-63x47	14,15,16,17,18,19,20,22,24,25,28,30,32	63	47	21	17.5	10.5	M6	8.4
GH-70x77	16,17,18,19,20,22,24,25,28,30,32,38,40	70	77	36.5	25	13.5	M8	10.5

### Technical parameters

Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M²)	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GH-16x18	0.7	0.8	3	±0.2	9000	30	3.3×10 <sup>-7</sup>	High strength aluminum alloy	PA66	Anodizing treatment	6
GH-20x25	1.2	1.2	3	±0.2	7000	58	1.1×10 <sup>-6</sup>				18
GH-25x28	2	1.6	3	±0.2	6000	130	3.1×10 <sup>-6</sup>				25
GH-32x33	4.5	2	3	±0.2	4800	270	9.6×10 <sup>-6</sup>				44
GH-40x35	9	2.4	3	±0.2	3600	520	2.3×10 <sup>-5</sup>				81
GH-45x46	12	2.8	3	±0.2	3500	560	3.8×10 <sup>-5</sup>				136
GH-50x38	19	2.6	3	±0.2	3000	800	1.8×10 <sup>-4</sup>				142
GH-55x57	22	3.3	3	±0.2	2800	795	8.0×10 <sup>-4</sup>				255
GH-63x47	19	3	3	±0.2	2500	1200	8.3×10 <sup>-4</sup>				320
GH-70x77	56	3.8	3	±0.2	2500	1260	3.9×10 <sup>-4</sup>				445

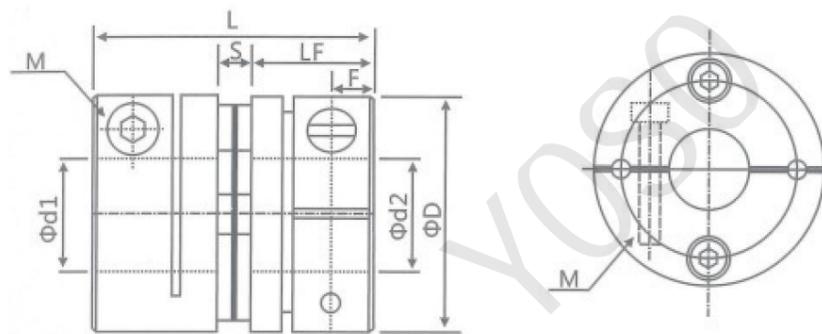
Note: The coupling must be used within the allowable value range.

# YOSO MOTION Couplings

## GS aluminum alloy single diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	S	F	M	Tightening screw torque (N.M)
GS-19×20	3,4,5,6,6.35,7,8	19	20	9.1	1.8	3.3	M2.5	1
GS-26×26	3,4,5,6,6.35,7,8,9,9.525,10,11,12,14	26	26	11.65	2.6	3.9	M3	1.5
GS-32×28	5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15	32	28	12.25	3.5	3.85	M3	1.5
GS-34×32	5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15,16	34	32	14.25	3.5	4.85	M4	2.5
GS-39×34.5	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19	39	34.5	14.9	4.5	5	M4	2.5
GS-44×34.5	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22,24	44	34.5	14.9	4.5	5	M4	2.5
GS-50×46	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	46	20.6	4.8	6	M5	7
GS-56×45	10,12,14,15,16,17,18,19,20,22,24,25,28,30,32	56	45	19.75	5.5	6.4	M5	7
GS-68×53	12,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	68	53	23.35	6.3	7.7	M6	12
GS-82×68	17,18,19,20,22,24,25,28,30,32,35,38,40,42	82	68	30	8	9.7	M8	20

### Technical parameters

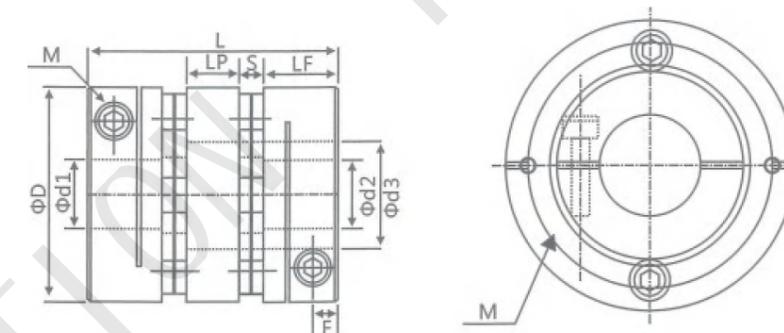
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GS-19×20	1	0.1	1	±0.09	1000	220	6.7×10 <sup>-6</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	11
GS-26×26	1.5	0.1	1	±0.14	11000	1125	2.2×10 <sup>-6</sup>				28
GS-32×28	2	0.1	1	±0.18	11000	21000	7.1×10 <sup>-6</sup>				46
GS-34×32	3	0.1	1	±0.18	11000	2250	8.0×10 <sup>-6</sup>				55
GS-39×34.5	6	0.1	1	±0.23	11000	3900	2.2×10 <sup>-5</sup>				81
GS-44×34.5	9	0.1	1	±0.27	11000	4500	2.8×10 <sup>-5</sup>				99
GS-50×46	18	0.1	1	±0.30	11000	6500	2.5×10 <sup>-5</sup>				135
GS-56×45	25	0.1	1	±0.36	11000	12900	1.2×10 <sup>-4</sup>				217
GS-68×53	60	0.1	1	±0.4	9000	25800	1.5×10 <sup>-4</sup>				348
GS-82×68	100	0.1	1	±0.5	8000	38700	1.8×10 <sup>-5</sup>				689

Note: The coupling must be used within the allowable value range.

## GL aluminum alloy double diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	d3	S	F	M	Tightening screw torque (N.M)
GL-19×27	3,4,5,6,6.35,7,8	19	27	9.1	5.2	Φ9	1.8	3.3	M2.5	1
GL-26×35	5,6,6.35,7,8,9,9.525,10,11,12,14	26	35	11.65	6.5	Φ12.5	2.6	3.9	M3	1.5
GL-32×41	5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15	32	45	12.25	9.5	Φ15	3.5	3.85	M3	1.5
GL-34×45	5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15,16	34	45	14.25	9.5	Φ16	4.5	4.85	M4	2.5
GL-39×50	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19	39	50	14.9	11.2	Φ9.3	4.5	5	M4	2.5
GL-44×50	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22	44	50	14.9	11.2	Φ2.5	4.5	5	M4	2.5
GL-50×63	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	63	20.6	12.5	Φ23	4.8	6	M5	7
GL-56×64	10,12,14,15,16,17,18,19,20,22,24,25,28,30,32	56	64	19.75	13.5	Φ2.5	5.5	6.4	M5	7
GL-68×75	12,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	68	75	23.35	15.7	Φ38.3	6.3	7.7	M6	12
GL-82×98	17,18,19,20,22,24,25,28,30,32,35,38,40,42	82	98	30	22	Φ45.5	8	9.7	M8	20

### Technical parameters

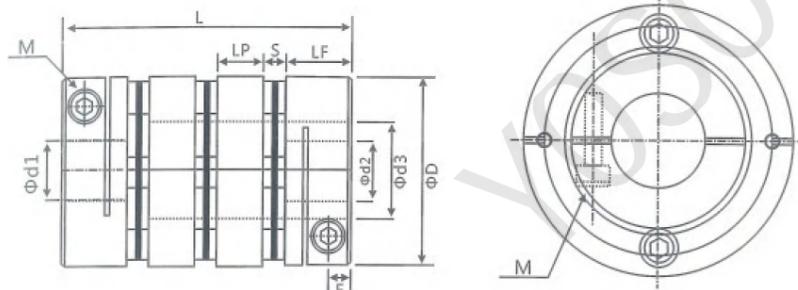
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GL-19×27	1	0.12	1.5	±0.18	10000	170	9.1×10 <sup>-7</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	14.6
GL-26×35	1.5	0.15	1.5	±0.3	10000	820	3.0×10 <sup>-6</sup>				37
GL-32×41	2	0.17	1.5	±0.36	10000	1750	1.0×10 <sup>-5</sup>				67
GL-34×45	3	0.17	1.5	±0.36	10000	1860	1.1×10 <sup>-5</sup>				77
GL-39×50	6	0.22	1.5	±0.45	10000	2860	3.0×10 <sup>-5</sup>				118
GL-44×50	9	0.22	1.5	±0.54	10000	3300	3.8×10 <sup>-5</sup>				144
GL-50×63	18	0.1	1.5	±0.54	10000	3300	3.0×10 <sup>-5</sup>				235
GL-56×64	25	0.27	1.5	±0.72	10000	9480	1.6×10 <sup>-4</sup>				318
GL-68×75	60	0.31	1.5	±0.8	9000	19000	2.0×10 <sup>-4</sup>				492
GL-82×98	100	0.55	1.5	±0.8	8000	28450	2.5×10 <sup>-4</sup>				1013

Note: The coupling must be used within the allowable value range.

## GW aluminum alloy triple diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Extended design for more effective compensation of radial, angular, and axial misalignments
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	φD	L	LF	LP	D3	S	F	M	Tightening screw torque (N.M)
Model										
GW-19×34	3,4,5,6,6.35,7,8	19	34	9.1	5.2	φ9	1.8	3.3	M2.5	1
GW-26×44.5	5,6,6.35,7,8,9,9.525,10,11,12,14	26	44.5	11.65	6.5	φ12.5	2.6	3.9	M3	1.5
GW-32×54	5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15	32	54	12.25	9.5	φ15	3.5	3.85	M3	1.5
GW-34×58	5,6,6.35,7,8,9,9.525,10,11,12,12.7,14,15,16	34	58	14.25	9.5	φ16	3.5	4.85	M4	2.5
GW-39×65.5	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19	39	65.5	14.9	11.2	φ19.3	4.5	5	M4	2.5
GW-44×65.5	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22,24	44	65.5	14.9	11.2	φ22.5	4.5	5	M4	2.5
GW-50×80	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	80	20.6	12.2	φ23	4.8	6	M5	7
GW-56×83	10,12,14,15,16,17,18,19,20,22,24,25,28,30,32	56	83	19.75	13.5	φ32.5	5.5	6.4	M5	7
GW-68×97	12,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	68	97	23.35	15.7	φ38.3	6.3	7.7	M6	12
GW-82×128	17,18,19,20,22,24,25,28,30,32,35,38,40,42	82	128	30	22	φ45.5	8	9.7	M8	20

### Technical parameters

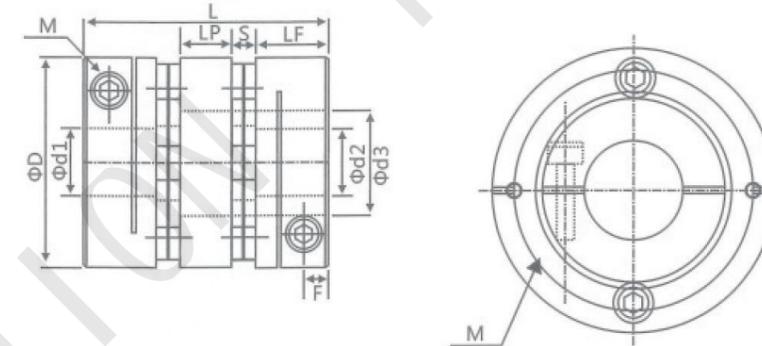
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M²)	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
Model											
GW-19×34	1	0.12	2	±0.2	10000	140	1.1×10 <sup>-6</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	18
GW-26×44.5	1.5	0.15	2	±0.33	10000	680	3.6×10 <sup>-6</sup>				45
GW-32×54	2	0.17	2	±0.3	10000	1250	1.0×10 <sup>-5</sup>				80
GW-34×58	3	0.17	2	±0.4	10000	1550	1.3×10 <sup>-5</sup>				97
GW-39×65.5	6	0.22	2	±0.5	10000	2390	3.6×10 <sup>-5</sup>				153
GW-44×65.5	9	0.22	2	±0.6	10000	2700	4.5×10 <sup>-5</sup>				189
GW-50×80	18	0.1	2	±0.65	10000	4500	4.5×10 <sup>-5</sup>				335
GW-56×83	25	0.27	2	±0.8	10000	7900	1.9×10 <sup>-4</sup>				413
GW-68×97	60	0.31	2	±0.9	9000	15800	2.4×10 <sup>-4</sup>				641
GW-82×128	100	0.55	2	±0.9	8000	23700	3.0×10 <sup>-4</sup>				1345

Note: The coupling must be used within the allowable value range.

## GLD aluminum alloy double diaphragm short clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	φD	L	LF	LP	d3	S	F	M	Tightening screw torque (N.M)
Model										
GLD-19×24.5	3,4,5,6,6.35,7,8	φ19	24.5	9.1	2.7	φ9	1.8	3.3	M2.5	1
GLD-26×30	5,6,6.35,7,8,9,9.525,10,11,12,14	φ26	30	11.65	3.6	φ12.5	2.6	3.9	M3	1.5
GLD-32×38	6,6.35,7,8,9,9.525,10,12,12.7,14,15	φ32	38	12.25	6.5	φ15	3.5	3.85	M3	1.5
GLD-34×38	6,6.35,7,8,9,9.525,10,11,12,12.7,14,15	φ34	38	12.25	6.5	φ16	3.5	3.85	M3	1.5
GLD-39×47	6,8,9,9.525,10,11,12.7,14,15,16,17,18,19	φ39	47	14.9	8.5	φ19.3	4.5	5	M4	2.5
GLD-44×47	6,8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22	φ44	47	14.9	8.1	φ22.5	4.5	5	M4	2.5
GLD-56×57	12,14,15,16,17,18,19,20,22,24,25,28,30,32	φ56	57	19.75	6.5	φ32.5	5.5	6.4	M5	7
GLD-68×68	16,17,18,19,20,22,24,25,28,30,32,35,38	φ68	68	23.35	8.7	φ38.3	6.3	7.7	M6	12
GLD-82×87	17,18,19,20,22,24,25,28,30,32,35,38,40,42	φ82	87	30	11	φ45.5	8	9.7	M8	20

### Technical parameters

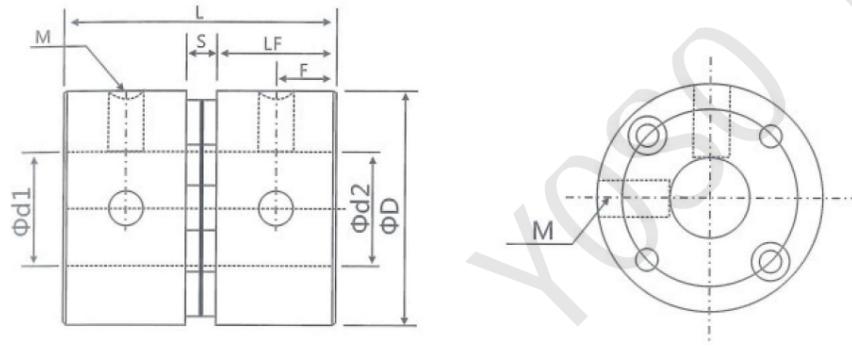
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M²)	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
Model											
GLD-19×24.5	1	0.12	1.5	±0.18	10000	170	8.19×10 <sup>-4</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	13.6
GLD-26×30	1.5	0.15	1.5	±0.3	10000	820	2.7×10 <sup>-4</sup>				32
GLD-32×38	3	0.17	1.5	±0.36	10000	1860	1.0×10 <sup>-4</sup>				58
GLD-34×38	3	0.17	1.5	±0.36	10000	1860	1.1×10 <sup>-4</sup>				71
GLD-39×47	6	0.22	1.5	±0.45	10000	2860	2.7×10 <sup>-4</sup>				110
GLD-44×47	9	0.22	1.5	±0.54	10000	3300	3.4×10 <sup>-4</sup>				134
GLD-56×57	25	0.27	1.5	±0.72	10000	9480	1.14×10 <sup>-4</sup>				298
GLD-68×68	60	0.31	1.5	±0.8	10000	19000	1.8×10 <sup>-4</sup>				472
GLD-82×87	100	0.55	1.5	±0.8	10000	28450	2.25×10 <sup>-4</sup>				983

Note: The coupling must be used within the allowable value range.

## GSJ aluminum alloy single diaphragm set screw series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Keyway design with positioning screw fixing method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	S	F	M	Tightening screw torque (N.M)
GSJ-19×20	3,4,5,6,6.35,7,8,9,9.525,10	Φ19	20	9.1	1.8	4.25	M3	0.7
GSJ-26×24	4,5,6,6.35,7,8,9,9.525,10,11,12	Φ26	24	10.7	2.6	4.5	M4	1.7
GSJ-32×29	6,6.35,7,8,9,9.525,10,11,12,12.7,14,15,16	Φ32	29	12.75	3.5	6.12	M4	1.7
GSJ-39×34.5	6,6.35,7,8,9,9.525,10,11,12,12.7,14,15,16,17,18	Φ39	34.5	15	4.5	6.62	M5	4
GSJ-44×41	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20,22	Φ44	41	18.25	4.5	8.12	M6	8.4
GSJ-56×45	8,10,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	Φ56	45	19.75	5.5	6.4	M8	8.4
GSJ-68×53	12,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	Φ68	53	23.35	6.3	7.7	M8	10.5

### Technical parameters

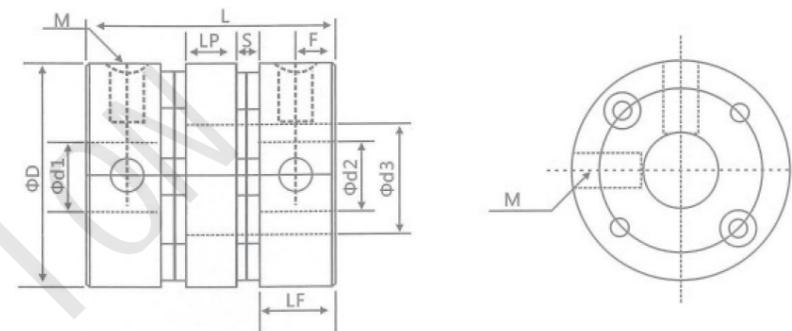
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GSJ-19×20	1	0.1	1	±0.09	10000	220	6.5×10 <sup>-1</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	10
GSJ-26×24	1.5	0.1	1	±0.14	10000	1125	1.8×10 <sup>-6</sup>				23
GSJ-32×29	2	0.1	1	±0.18	10000	2100	5.2×10 <sup>-5</sup>				50
GSJ-39×34.5	6	0.1	1	±0.23	10000	3900	2.0×10 <sup>-6</sup>				80
GSJ-44×41	9	0.1	1	±0.27	10000	4500	3.2×10 <sup>-6</sup>				155
GSJ-56×45	25	0.1	1	±0.36	10000	12900	1.2×10 <sup>-4</sup>				217
GSJ-68×53	60	0.1	1	±0.4	8000	25800	1.5×10 <sup>-4</sup>				348

Note: The coupling must be used within the allowable value range.

## GLJ aluminum alloy double diaphragm set screw series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Keyway design with positioning screw fixing method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	LP	d3	S	F	M	Tightening screw torque (N.M)
GLJ-19×27	3,4,5,6,6.35,7,8,9,9.525,10	19	27	9.1	5.2	9	1.8	4.25	M3	0.7
GLJ-26×32	4,5,6,6.35,7,8,9,9.525,10,11,12,12.7	26	32	10.7	5.4	12.5	2.6	4.5	M4	1.7
GLJ-32×41	6,6.35,7,8,9,9.525,10,11,12,12.7,13,14,15	32	41	12.75	8.5	16	3.5	6.12	M4	1.7
GLJ-39×47	6,6.35,7,8,9,9.525,10,11,12,12.7,13,14,15,16	39	47	15	8	19.3	4.5	6.62	M5	4
GLJ-44×53	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	44	53	18.25	7.5	22.5	4.5	8.12	M6	8.4
GLJ-56×64	10,11,12,12.7,13,14,15,16,17,18,19,20,22,24,25,28,30,32	56	64	19.75	13.5	32.5	5.5	6.4	M6	8.4
GLJ-68×75	12,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	68	75	23.35	15.7	45.5	6.3	7.7	M8	10.5

### Technical parameters

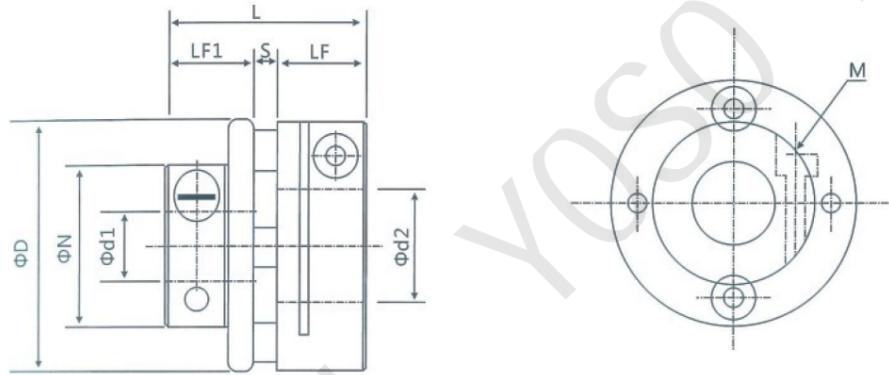
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GLJ-19×27	1	0.12	1.5	±0.18	10000	170	8.8×10 <sup>-7</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	13
GLJ-26×32	1.5	0.15	1.5	±0.3	10000	820	2.8×10 <sup>-6</sup>				29
GLJ-32×41	2	0.17	1.5	±0.36	10000	1750	1.8×10 <sup>-6</sup>				60
GLJ-39×47	6	0.22	1.5	±0.45	10000	2850	2.7×10 <sup>-5</sup>				101
GLJ-44×53	9	0.22	1.5	±0.54	10000	3300	4.2×10 <sup>-5</sup>				190
GLJ-56×64	25	0.27	1.5	±0.72	10000	9480	1.6×10 <sup>-4</sup>				318
GLJ-68×75	60	0.32	1.5	±0.8	9000	19000	2.0×10 <sup>-4</sup>				492

Note: The coupling must be used within the allowable value range.

## GSTS aluminum alloy single step single diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters Model	Common d1 shaft diameter		Common d2 shaft diameter		ΦD	ΦN	L	LF1	LF	S	M	Tightening screw torque (N.M)
	Maximum	Minimum	Maximum	Minimum								
GSTS-34×29.9	5	12	5	15	34	21.6	29.9	12.15	14.25	3.5	M3	1.5
GSTS-39×34.5	6	15	6	19	39	25	34.5	15.15	14.9	4.5	M4	2.5
GSTS-44×34.5	6	18	6	22	44	29.6	34.5	15.15	14.9	4.5	M4	2.5
GSTS-56×45.1	8	24	8	32	56	38	45.1	19.90	19.75	5.5	M5	7
GSTS-68×53.6	10	30	10	38	68	46	53.6	24	23.35	6.3	M6	12
GSTS-82×68.1	16	38	16	45	82	56	68.1	30.15	30	8	M8	20

Technical parameters

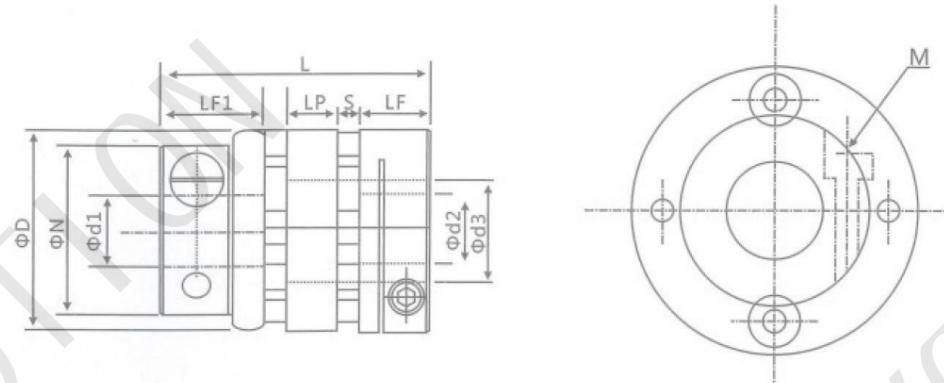
Parameters Model	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GSTS-34×29.9	3	0.02	1	±0.20	10000	2000	6.01×10 <sup>-5</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	38
GSTS-39×34.5	6	0.02	1	±0.25	10000	4500	1.49×10 <sup>-5</sup>				69
GSTS-44×34.5	9	0.02	1	±0.30	10000	5200	2.25×10 <sup>-5</sup>				84
GSTS-56×45.1	25	0.02	1	±0.40	10000	11000	7.23×10 <sup>-5</sup>				184
GSTS-68×53.6	60	0.02	1	±0.45	10000	19000	2.02×10 <sup>-4</sup>				235
GSTS-82×68.1	100	0.02	1	±0.55	10000	22000	5.95×10 <sup>-4</sup>				598

Note: The coupling must be used within the allowable value range.

## GLTS aluminum alloy single step double diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters Model	Common d1 shaft diameter		Common d2 shaft diameter		ΦD	ΦN	L	LF1	LF	S	LP	d3	M	Tightening screw torque (N.M)
	Maximum	Minimum	Maximum	Minimum										
GLTS-34×42.9	5	12	5	15	34	21.6	42.9	12.15	14.25	3.5	9.5	16	M3	1.5
GLTS-39×50.2	6	15	6	19	39	25	50.2	15.15	14.9	4.5	11.15	19	M4	2.5
GLTS-44×50.2	6	18	6	22	44	29.6	50.2	15.15	14.9	4.5	11.15	22.5	M4	2.5
GLTS-56×64.1	8	24	8	32	56	38	64.1	19.90	19.75	5.5	13.45	32.5	M5	7
GLTS-68×75.6	10	30	10	38	68	46	75.6	24	23.35	6.3	15.65	38.5	M6	12
GLTS-82×98.1	16	38	16	45	82	56	98.1	30.15	30	8	21.95	45	M8	20

Technical parameters

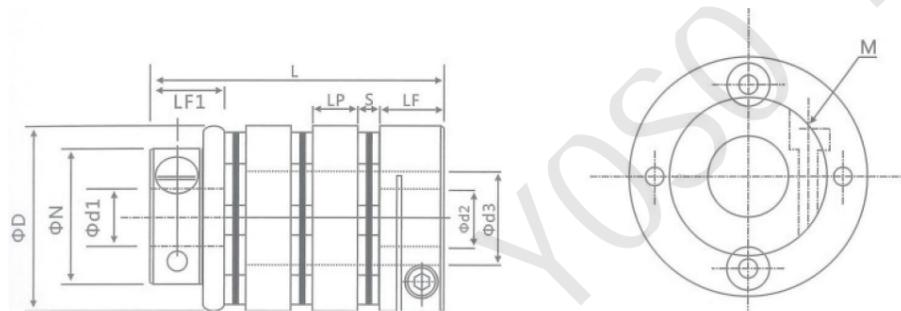
Parameters Model	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GLTS-34×42.9	3	0.02	1	±0.20	10000	2000	6.01×10 <sup>-5</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	57
GLTS-39×50.2	6	0.02	1	±0.25	10000	4500	1.49×10 <sup>-5</sup>				103
GLTS-44×50.2	9	0.02	1	±0.30	10000	5200	2.25×10 <sup>-5</sup>				124
GLTS-56×64.1	25	0.02	1	±0.40	10000	11000	7.23×10 <sup>-5</sup>				269
GLTS-68×75.6	60	0.02	1	±0.45	10000	19000	2.02×10 <sup>-4</sup>				471
GLTS-82×98.1	100	0.02	1	±0.55	10000	22000	5.95×10 <sup>-4</sup>				375

Note: The coupling must be used within the allowable value range.

## GWTS aluminum alloy single step triple diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters Model	Common d1 shaft diameter		Common d2 shaft diameter		ΦD	ΦN	L	LF1	LF	S	LP	d3	M	Tightening screw torque (N.M)
	Maximum	Minimum	Maximum	Minimum										
GWTS-34×55.9	5	12	5	15	34	21.6	55.9	12.15	14.25	3.5	9.5	16	M3	1.5
GWTS-39×65.9	6	15	6	19	39	25	65.9	15.15	14.9	4.5	11.15	19	M4	2.5
GWTS-44×65.9	6	18	6	22	44	29.6	65.9	15.15	14.9	4.5	11.15	22.5	M4	2.5
GWTS-56×83.1	8	24	8	32	56	38	83.1	19.90	19.75	5.5	13.45	32.5	M5	7
GWTS-68×97.6	10	30	10	38	68	46	97.6	24	23.35	6.3	15.65	38.3	M6	12
GWTS-82×128.1	16	38	16	45	82	56	128.1	30.15	30	8	21.95	45	M8	20

### Technical parameters

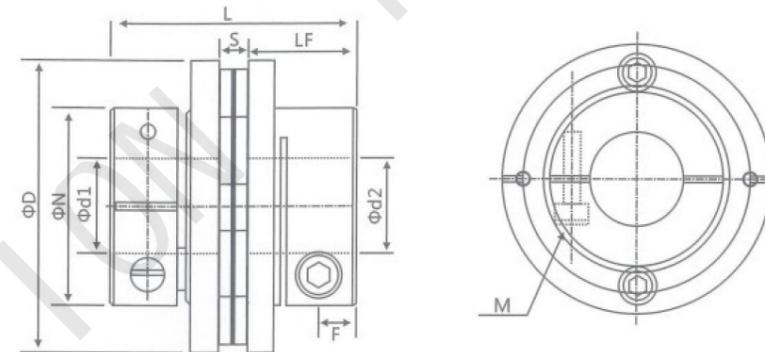
Parameters Model	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GWTS-34×55.9	3	0.02	1	±0.20	10000	2000	6.01×10 <sup>-5</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	78
GWTS-39×65.9	6	0.02	1	±0.25	10000	4500	1.49×10 <sup>-5</sup>				140
GWTS-44×65.9	9	0.02	1	±0.30	10000	5200	2.25×10 <sup>-5</sup>				184
GWTS-56×83.1	25	0.02	1	±0.40	10000	11000	7.23×10 <sup>-5</sup>				355
GWTS-68×97.6	60	0.02	1	±0.45	10000	19000	2.02×10 <sup>-4</sup>				620
GWTS-82×128.1	100	0.02	1	±0.55	10000	22000	5.95×10 <sup>-4</sup>				1200

Note: The coupling must be used within the allowable value range.

## GST aluminum alloy step-type single diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters Model	Common d1&d2 shaft diameters		ΦD	ΦN	L	LF	S	F	M	Tightening screw torque (N.M)
	GST-34×27.5	5,6,6.35,7,8,9,9.525,10,11,12								
GST-39×34.5	6,8,9,9.525,10,11,12,12.7,14,15		39	25	34.5	15.15	4.5	5	M4	2.5
GST-44×34.5	6,8,9,9.525,10,11,12,12.7,14,15,16,17,18		44	29.6	34.5	15.15	4.2	5	M4	2.5
GST-56×45	10,12,12.7,14,15,16,17,18,19,20,22,24		56	38	45	19.90	5.2	6.4	M5	7
GST-68×54	14,15,16,17,18,19,20,22,24,25,28,30		68	46	54	24	6	7.7	M6	12
GST-82×68	17,18,19,20,22,24,25,28,30,32,35,38		82	56	68	30.15	7.7	9.7	M8	20

### Technical parameters

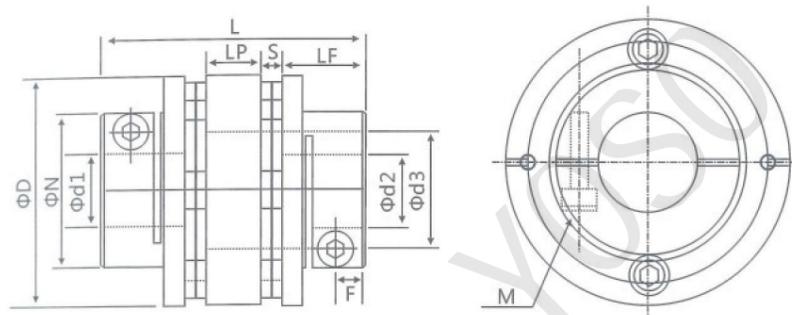
Parameters Model	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GST-34×27.5	2	0.1	1	±0.18	10000	3300	3.83×10 <sup>-6</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	30
GST-39×34.5	4.5	0.1	1	±0.23	10000	7000	1.1×10 <sup>-5</sup>				52
GST-44×34.5	6.75	0.1	1	±0.27	10000	9000	1.6×10 <sup>-5</sup>				68.5
GST-56×45	20	0.1	1	±0.36	10000	20000	5.1×10 <sup>-5</sup>				135
GST-68×54	50	0.1	1	±0.4	9000	35000	1.3×10 <sup>-4</sup>				246
GST-82×68	90	0.1	1	±0.5	8000	54000	1.9×10 <sup>-4</sup>				422

Note: The coupling must be used within the allowable value range.

## GLT aluminum alloy step-type double diaphragm clamping series

### Characteristic

- > High torque rigidity, can accurately control the rotation of the shaft, and can perform high-precision control
- > Specially designed for servo and stepper motors
- > Gapless shaft and sleeve connection, suitable for forward and reverse rotation
- > Low inertia, suitable for high-speed operation
- > The diaphragm is made of spring steel, which has excellent fatigue resistance
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	ΦN	L	LF	d3	LP	S	M	Tightening screw torque (N.M)
GLT-34×37.5	5,6,6.35,7,8,9,9.525,10,11,12	34	21.6	37.5	12.15	16	6.8	3.2	M3	1.5
GLT-39×48	6,8,9,9.525,10,11,12,12.7,14,15	39	25	48	15.15	19	9.3	4.5	M4	2.5
GLT-44×48	6,8,9,9.525,10,11,12,12.7,14,15,16,17,18	44	29.6	48	15.15	22.5	9.3	4.2	M4	2.5
GLT-56×61	10,12,12.7,14,15,16,17,18,19,20,22,24	56	38	61	19.90	32.5	10.8	5.2	M5	7
GLT-68×74	14,15,16,17,18,19,20,22,24,25,28,30	68	46	74	24	38.3	14	6	M6	12
GLT-82×98	17,18,19,20,22,24,25,28,30,32,35,38	82	56	98	30.15	45	22.3	7.7	M8	20

### Technical parameters

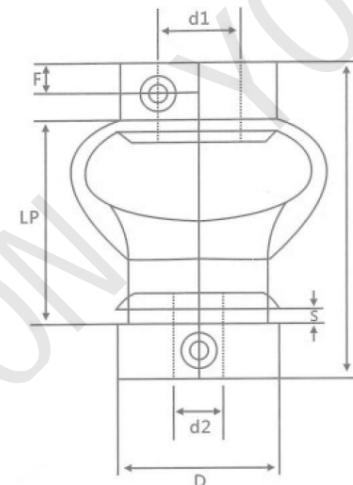
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GLT-34×37.5	2	0.12	1.5	±0.18	10000	2200	6.95×10 <sup>-5</sup>	High strength aluminum alloy	SUS304 spring steel	Anodizing treatment	49
GLT-39×48	4.5	0.15	1.5	±0.23	10000	4500	1.7×10 <sup>-5</sup>				85
GLT-44×48	6.75	0.17	1.5	±0.27	10000	5500	2.8×10 <sup>-5</sup>				107
GLT-56×61	20	0.17	1.5	±0.36	10000	11000	8.7×10 <sup>-5</sup>				196
GLT-68×74	50	0.18	1.5	±0.4	9000	23000	2.3×10 <sup>-4</sup>				375
GLT-82×98	90	0.18	1.5	±0.5	8000	38000	1.2×10 <sup>-3</sup>	645			

Note: The coupling must be used within the allowable value range.

## GB aluminum alloy figure-8 encoder-dedicated series

### Characteristic

- > Converted to encoder design
- > Good flexibility, not easy to break
- > Elastomer is made of polyurethane, oil-resistant and oxidation-resistant



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LP	S	F	M	Tightening screw torque (N.M)
GB-15×24	3,4,5,6,6.35,7,8	15	24	20	1.8	2.5	M3	0.7
GB-15×32	3,4,5,6,6.35,7,8	15	32	20	1.8	2.5	M3	1.7
GB-18×28	4,5,6,6.35,7,8,9,10	18	28	25	1.8	3.1	M4	1.7
GB-18×38	4,5,6,6.35,7,8,9,10	18	28	25	1.8	3.1	M4	1.7

### Technical parameters

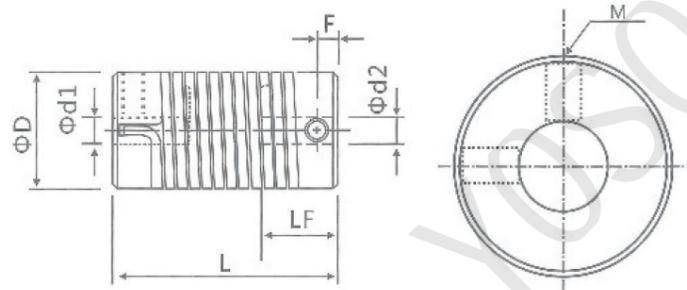
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Elastomer material	Surface treatment	Weight (g)
GB-15×24	0.5	1	2	+2-5	8000	15	4.5×10 <sup>-4</sup>	High strength aluminum alloy	PU	Anodizing treatment	8
GB-15×32	0.5	1	2	+2-5	8000	15	4.5×10 <sup>-4</sup>				8
GB-18×28	0.8	1	3	+2-5	6000	20	5.6×10 <sup>-4</sup>				13
GB-18×38	0.8	1	3	+2-5	6000	20	5.6×10 <sup>-4</sup>				13

Note: The coupling must be used within the allowable value range.

## GD encoder spring series

### Characteristic

- > The main body is made of zinc alloy
- > The intermediate elastic body is made of spring steel
- > Simple structure, good flexibility, low inertia, and large allowable angular misalignment
- > Easy installation, spring steel more effectively compensates for radial and axial deviations
- > Suitable for micro motors and encoders
- > Positioning screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	LF	F	M	Tightening screw torque (N.M)
GD-16×27	5,6,6.35,7,8,9,10	16	27	8.5	3	M3	0.7
GD-16×35	5,6,6.35,7,8,9,10	16	35	12.5	3.5	M4	1.7
GD-26×50	6,6.35,7,8,9,10,11,12,12.7,14	26	50	17	4.5	M5	4

### Technical parameters

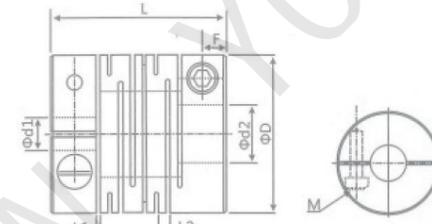
Parameters	Rated torque (N.M)*	Maximum torque (N.M)*	Maximum rotational speed rpm	Moment of Inertia (Kg.M <sup>2</sup> )	Allowable radial deviation (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Weight (g)
GD-16×27	0.5	1	3000	1.02×10 <sup>-6</sup>	1.0	8	±1.0	30
GD-16×35	0.5	1	3000	1.02×10 <sup>-6</sup>	1.0	8	±1.0	70
GD-26×50	1.5	1	3000	1.15×10 <sup>-5</sup>	1.0	8	±1.0	130

Note: The coupling must be used within the allowable value range.

## GIC aluminum alloy parallel line clamping series

### Characteristic

- > Integrated structure, using high-strength aluminum alloy material as the whole
- > Elastic compensation for radial, angular, and axial deviations
- > Seamless shaft and sleeve connection, suitable for forward and reverse rotation
- > Specially designed for encoders and micro motors
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	L1	L2	F	M	Tightening screw torque (N.M)
GIC-12×18.5	2,3,4,5,6	12	18.5	0.55	1.3	2.5	M2.5	1
GIC-16×16	3,4,5,6,6.35	16	16	0.55	1.4	3.18	M2.5	1
GIC-16×23	3,4,5,6,6.35	16	23	0.55	1.4	3.18	M2.5	1
GIC-19×23	3,4,5,6,6.35,7,8	19	23	0.55	1.4	3.18	M2.5	1
GIC-20×20	4,5,6,6.35,7,8,10	20	20	0.55	1.5	3.75	M2.5	1
GIC-20×26	4,5,6,6.35,7,8,10	20	26	0.55	1.5	3.75	M3	1.5
GIC-25×25	5,6,6.35,7,8,9,9.525,10,11,12	25	25	0.6	1.7	4.84	M3	1.5
GIC-25×31	5,6,6.35,7,8,9,9.525,10,11,12	25	31	0.6	1.8	4.46	M3	1.5
GIC-28.5×38	6,6.35,8,9,9.525,10,11,12,12.7,14	28.5	38	0.8	2.1	5.62	M4	2.5
GIC-32×32	8,9,9.525,10,11,12,12.7,14,15,16	32	32	0.8	2.3	6.07	M4	2.5
GIC-32×41	8,9,9.525,10,11,12,12.7,14,15,16	32	41	0.8	2.3	6.02	M4	2.5
GIC-38×41	8,9,9.525,10,11,12,14,15,16,17,18,19	38	41	0.8	2.7	5.32	M5	7
GIC-40×50	8,9,9.525,10,11,12,14,15,16,17,18,19,20	40	50	0.8	2.7	6.2	M5	7
GIC-40×56	8,9,10,11,12,12.7,14,15,16,17,18,19,20	40	56	0.8	2.7	8.5	M5	7
GIC-42×50	10,11,12,12.7,14,15,16,17,18,19,20,22,24	42	50	0.8	2.7	6.2	M5	7
GIC-50×50	10,12,12.7,14,15,16,17,18,19,20,22,24,25,28	50	50	0.8	2.9	7.22	M6	12
GIC-50×71	10,12,12.7,14,15,16,17,18,19,20,22,24,25,28	50	71	0.8	3.3	8.5	M6	12

### Technical parameters

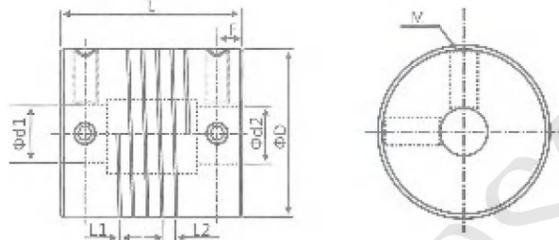
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GIC-12×18.5	0.5	0.1	2	±0.2	11000	60	7.6×10 <sup>-8</sup>	High strength aluminum alloy	Anodizing treatment	4.8
GIC-16×16	0.5	0.1	2	±0.2	10000	80	2.4×10 <sup>-7</sup>			8
GIC-16×23	0.5	0.1	2	±0.2	9500	80	3.4×10 <sup>-7</sup>			9.3
GIC-19×23	1	0.1	2	±0.2	9500	80	3.4×10 <sup>-7</sup>			13
GIC-20×20	1	0.1	2	±0.2	10000	170	8.1×10 <sup>-7</sup>			14
GIC-20×26	1	0.1	2	±0.2	7600	170	9.1×10 <sup>-6</sup>			16.5
GIC-25×25	2	0.15	2	±0.2	6100	780	2.3×10 <sup>-6</sup>			26
GIC-25×31	2	0.15	2	±0.2	6100	380	2.6×10 <sup>-6</sup>			29
GIC-28.5×38	3	0.15	2	±0.2	5500	400	4.5×10 <sup>-6</sup>			51
GIC-32×32	4	0.15	2	±0.2	5000	1100	8.1×10 <sup>-6</sup>			56
GIC-32×41	4	0.15	2	±0.2	500	500	9.7×10 <sup>-6</sup>			65
GIC-38×41	6.5	0.2	2	±0.2	650	650	3.0×10 <sup>-5</sup>			107
GIC-40×50	6.5	0.2	2	±0.2	600	650	3.0×10 <sup>-5</sup>			135
GIC-40×56	8	0.2	2	±0.2	800	800	3.3×10 <sup>-5</sup>			142
GIC-42×50	8.5	0.2	2	±0.2	800	850	3.3×10 <sup>-5</sup>			135
GIC-50×50	20	0.2	2	±0.2	1000	1000	9.0×10 <sup>-5</sup>	220		
GIC-50×71	20	0.2	2	±0.2	1000	1000	9.0×10 <sup>-5</sup>	330		

Note: The coupling must be used within the allowable value range.

## GI aluminum alloy parallel line set screw series

### Characteristic

- > Integrated structure, using high-strength aluminum alloy material as the whole
- > Elastic compensation for radial, angular, and axial deviations
- > Seamless shaft and sleeve connection, suitable for forward and reverse rotation
- > Specially designed for encoders and micro motors
- > Positioning screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	L1	L2	F	M	Tightening screw torque (N.M)
GI-12×18.5	2,3,4,5,6,6.35	12	18.5	0.55	1.2	2.5	M3	0.7
GI-16×16	3,4,5,6,6.35,7,8	16	16	0.55	1.4	3.6	M3	0.7
GI-16×23	3,4,5,6,6.35,7,8	16	23	0.55	1.4	3.6	M3	0.7
GI-17.5×23	4,5,6,6.35,7,8	17.5	23	0.55	1.4	3.6	M3	0.7
GI-20×20	4,5,6,6.35,7,8,10	20	20	0.55	1.5	3.6	M4	1.7
GI-20×26	4,5,6,6.35,7,8,10	20	26	0.55	1.5	3.6	M4	1.7
GI-25×25	4,5,6,6.35,7,8,9,9.525,10,11,12,12.5,12.7	25	25	0.6	1.7	3.6	M4	1.7
GI-25×31	5,6,6.35,8,9,9.525,10,11,12,12.5,12.7	25	31	0.6	1.8	4.3	M4	1.7
GI-28.5×38	6,6.35,8,9,9.525,10,11,12,14,15,16	28.5	38	0.8	2.1	4.5	M5	4
GI-32×32	8,9,9.525,10,11,12,12.7,14,15,16,17,18	32	32	0.8	2.3	6	M5	4
GI-32×41	8,9,9.525,10,11,12,12.7,14,15,16,17,18	32	41	0.8	2.3	6	M5	4
GI-40×50	8,10,11,12,12.7,14,15,16,17,18,19,20,22,24	40	50	0.8	2.7	7	M6	8.4
GI-40×56	8,10,11,12,12.7,14,15,16,17,18,19,20,22,24	40	56	0.8	2.7	10	M6	8.4
GI-42×56	8,10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	42	56	0.8	2.7	12	M6	8.4
GI-50×50	12,12.7,14,15,16,17,18,19,20,22,24,25,28,30	50	50	0.8	2.9	7	M8	10.5
GI-50×71	12,12.7,14,15,16,17,18,19,20,22,24,25,28,30	50	71	0.8	3.3	8.5	M8	10.5

### Technical parameters

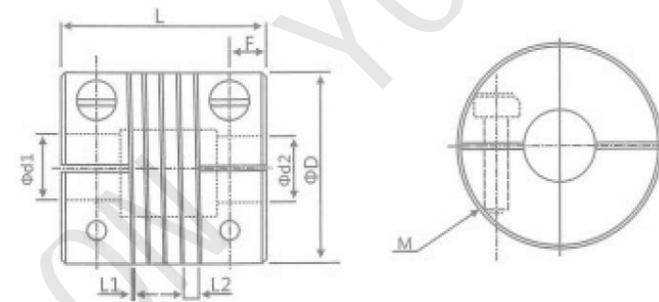
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GI-12×18.5	0.3	0.1	2	±0.2	32000	45	8.3×10 <sup>-8</sup>	High strength aluminum alloy	Anodizing treatment	3.7
GI-16×16	0.5	0.1	2	±0.2	24000	80	3.3×10 <sup>-7</sup>			6
GI-16×23	0.5	0.1	2	±0.2	24000	80	3.3×10 <sup>-7</sup>			8.1
GI-17.5×23	0.8	0.15	2	±0.2	24000	80	3.3×10 <sup>-7</sup>			10
GI-20×20	1	0.15	2	±0.2	19000	170	9.0×10 <sup>-7</sup>			12
GI-20×26	1	0.15	2	±0.2	19000	170	9.0×10 <sup>-7</sup>			15
GI-25×25	2	0.15	2	±0.2	15000	350	2.2×10 <sup>-6</sup>			23
GI-25×31	2	0.15	2	±0.2	15000	380	2.6×10 <sup>-6</sup>			27
GI-28.5×38	3	0.15	2	±0.2	13000	400	4.3×10 <sup>-6</sup>			46
GI-32×32	4	0.15	2	±0.2	12000	480	8.0×10 <sup>-6</sup>			50
GI-32×41	4	0.2	2	±0.2	12000	500	9.6×10 <sup>-6</sup>			60
GI-40×50	8	0.2	2	±0.2	9600	600	3.2×10 <sup>-5</sup>			110
GI-40×56	8	0.2	2	±0.2	9400	345	3.1×10 <sup>-5</sup>			135
GI-42×56	8.5	0.2	2	±0.2	9000	300	3.1×10 <sup>-5</sup>			165
GI-50×50	20	0.2	2	±0.2	8000	600	6.8×10 <sup>-5</sup>			220
GI-50×71	20	0.2	2	±0.2	7600	1385	8.0×10 <sup>-5</sup>			322

Note: The coupling must be used within the allowable value range.

## GC aluminum alloy wire-wound clamping series

### Characteristic

- > Integrated structure, using high-strength aluminum alloy material as the whole
- > Elastic compensation for radial, angular, and axial deviations
- > Spring-type design with buffering effect
- > Specially designed for encoders and micro motors
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	L1	L2	F	M	Tightening screw torque (N.M)
GC-12×18.5	2,3,4,5,6	12	18.5	0.4	1.8	3.0	M2.5	1
GC-16×23	3,4,5,6,6.35	16	23	0.4	2	3.6	M2.5	1
GC-19×23	4,5,6,6.35,7,8	19	23	0.4	2	4.3	M2.5	1
GC-25×25	5,6,6.35,7,8,9,9.525,10,11,12	25	25	0.4	2	4.8	M3	1.5
GC-25×32	5,6,6.35,7,8,9,9.525,10,11,12	25	32	0.4	2.75	5.3	M3	1.5
GC-28.5×38	6,6.35,7,8,9,9.525,10,11,12,12.7,14	28.5	38	0.4	2.75	6.8	M4	2.5
GC-32×32	8,9,9.525,10,11,12,12.7,14,15,16	32	32	0.4	2.75	4.8	M4	2.5
GC-32×41	8,9,9.525,10,11,12,12.7,14,15,16	32	41	0.4	2.75	5.5	M4	2.5
GC-38×41	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19	38	41	0.4	3.5	7	M5	7
GC-40×50	10,11,12,12.7,14,15,16,17,18,19,20	40	50	0.4	3.5	7	M5	7
GC-42×50	12,12.7,14,15,16,17,18,19,20,22,24,25	42	50	0.4	3.5	7	M5	7
GC-50×50	12,12.7,14,15,16,17,18,19,20,22,24,25,28	50	50	0.5	3.5	7	M6	12

### Technical parameters

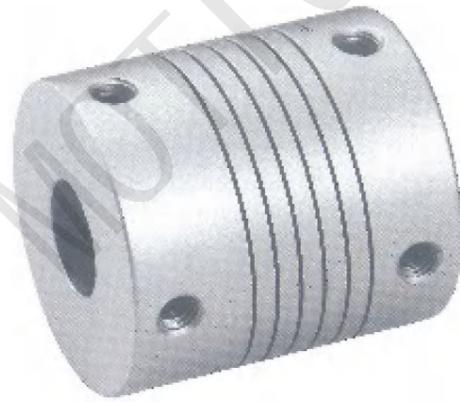
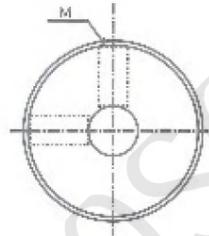
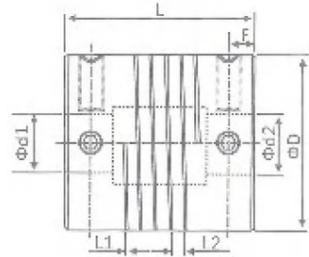
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GC-12×18.5	0.3	0.15	3	±0.2	11000	42	3.2×10 <sup>-7</sup>	High strength aluminum alloy	Anodizing treatment	4
GC-16×23	0.5	0.15	3	±0.2	9500	45	3.4×10 <sup>-7</sup>			8.1
GC-19×23	0.9	0.15	3	±0.2	7700	52	9.1×10 <sup>-7</sup>			12
GC-25×25	2	0.15	3	±0.2	6100	100	2.3×10 <sup>-6</sup>			23
GC-25×32	2	0.15	3	±0.2	6100	150	2.6×10 <sup>-6</sup>			32
GC-28.5×38	3	0.15	3	±0.2	5500	210	4.5×10 <sup>-6</sup>			47
GC-32×32	4	0.15	3	±0.2	5000	250	8.1×10 <sup>-6</sup>			55
GC-32×41	4	0.15	3	±0.2	5000	300	7.5×10 <sup>-6</sup>			86
GC-38×41	6.5	0.15	3	±0.2	4500	400	3.0×10 <sup>-5</sup>			118
GC-40×50	8	0.15	3	±0.2	3800	500	3.3×10 <sup>-5</sup>			125
GC-42×50	8	0.15	3	±0.2	3200	758	4.4×10 <sup>-5</sup>			165
GC-50×50	20	0.15	3	±0.2	3200	785	9.0×10 <sup>-5</sup>			220

Note: The coupling must be used within the allowable value range.

## GM aluminum alloy wire-wound set screw series

### ■ Characteristic

- > Integrated structure, using high-strength aluminum alloy material as the whole
- > Elastic compensation for radial, angular, and axial deviations
- > Spring-type design with buffering effect
- > Specially designed for encoders and micro motors
- > Positioning screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	L1	L2	F	M	Tightening screw torque (N.M)
GM-12×18.5	2,3,4,5,6,6.35	12	18.5	1.8	0.4	3.5	M3	0.7
GM-15.5×21	3,4,5,6,6.35,7	15.5	21	2	0.4	3.3	M3	0.7
GM-15.5×23	3,4,5,6,6.35,7	15.5	23	2	0.4	3.6	M3	0.7
GM-17.5×23	4,5,6,6.35,7,8	17.5	23	2	0.4	3.6	M4	1.7
GM-19.1×19.1	4,5,6,6.35,7,8,10	19.1	19.1	2	0.4	3	M4	1.7
GM-19.5×24.5	6,6.35,7,8,9,9.525,10	19.5	24.5	2	0.4	3.3	M4	1.7
GM-25×32	5,6,6.35,7,8,9,9.525,10,11,12,12.7	25	32	2	0.4	3.7	M4	1.7
GM-25.4×25.4	6,6.35,7,8,9,9.525,10,11,12,12.7	25.4	25.4	2	0.4	3.7	M4	1.7
GM-28.6×28.6	8,9,9.525,10,11,12,12.7,14	28.6	28.6	2.75	0.4	4.2	M4	1.7
GM-32×32	8,9,9.525,10,11,12,12.7,14,15,16,17,18	32	32	2.75	0.4	5.5	M4	1.7
GM-32×41	8,9,9.525,10,11,12,12.7,14,15,16,17,18	32	41	2.75	0.4	6.8	M4	1.7
GM-38.7×38.1	8,10,11,12,12.7,14,15,16,17,18,19,20,22	38.7	38.1	3	0.4	5.2	M5	4
GM-42×50	12,12.7,14,15,16,17,18,19,20,22,24,25,28	42	50	3.5	0.4	8.5	M6	7
GM-50×50	12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32	50	50	3.5	0.5	8.5	M6	7

### Technical parameters

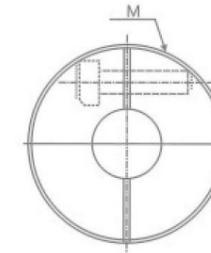
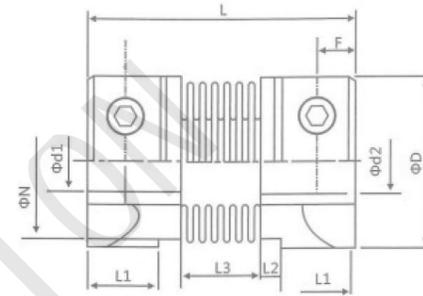
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GM-12×18.5	0.3	0.15	3	±0.2	30000	40	8.0×10 <sup>-7</sup>	High strength aluminum alloy	Anodizing treatment	4
GM-15.5×21	0.5	0.15	3	±0.2	25000	80	2.8×10 <sup>-7</sup>			7.7
GM-15.5×23	0.5	0.15	3	±0.2	25000	50	2.9×10 <sup>-7</sup>			9.3
GM-17.5×23	0.6	0.15	3	±0.2	25000	85	3.5×10 <sup>-7</sup>			12.7
GM-19.1×19.1	0.9	0.15	3	±0.2	24000	130	7.2×10 <sup>-7</sup>			11.6
GM-19.5×24.5	1	0.15	3	±0.2	19000	150	8.1×10 <sup>-7</sup>			16
GM-25×32	2	0.15	3	±0.2	15000	300	3.5×10 <sup>-7</sup>			32
GM-25.4×25.4	2	0.15	3	±0.2	14000	360	2.3×10 <sup>-6</sup>			26
GM-28.6×28.6	2	0.15	3	±0.2	14000	380	2.3×10 <sup>-6</sup>			39
GM-32×32	3	0.15	3	±0.2	13000	380	2.5×10 <sup>-6</sup>			57
GM-32×41	4	0.15	3	±0.2	12000	450	9.6×10 <sup>-6</sup>			65
GM-38.7×38.1	6.5	0.15	3	±0.2	9500	400	2.7×10 <sup>-5</sup>			97
GM-42×50	8	0.15	3	±0.2	9000	500	7.2×10 <sup>-3</sup>	185		
GM-50×50	20	0.15	3	±0.2	8000	785	8.1×10 <sup>-5</sup>	220		

Note: The coupling must be used within the allowable value range.

## GRC aluminum alloy bellows clamping series

### ■ Characteristic

- > The material is aluminum alloy, and the middle corrugated pipe is made of stainless steel, with excellent corrosion resistance
- > Laser welding is used between the corrugated tube and the shaft sleeve, with zero rotational clearance, suitable for both forward and reverse rotation
- > Bellows structure more effectively compensates for radial, angular, and axial deviations
- > Specially designed for servo motors and stepper motors
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	L1	L2	L3	N	F	M	Tightening screw torque (N.M)
GRC-16×27	4,5,6,6.35,7,8	16	27	7.5	2	8	13.5	3	M2.5	1
GRC-20×32	5,6,6.35,7,8,9,9.525,10	20	32	7.2	2.8	12	18	3.5	M3	1.5
GRC-22.5×34	5,6,6.35,7,8,9,9.525,10,11,12	22.5	34	8.05	2.8	12.3	20.2	4.5	M3	1.5
GRC-25×37	6,6.35,7,8,9,9.525,10,12	25	37	9.5	3	12	20.2	4.5	M3	1.5
GRC-32×42	8,9,9.525,10,11,12,12.7,14,15	32	42	8	4	18	27.2	5.5	M4	2.5
GRC-40×55	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	40	55	11.5	6	20	34.5	6.5	M5	7
GRC-55×72	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	55	72	16.5	6	27	51.9	10	M6	12
GRC-65×81	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	65	81	19.5	7	28	60.5	10.5	M6	12

### Technical parameters

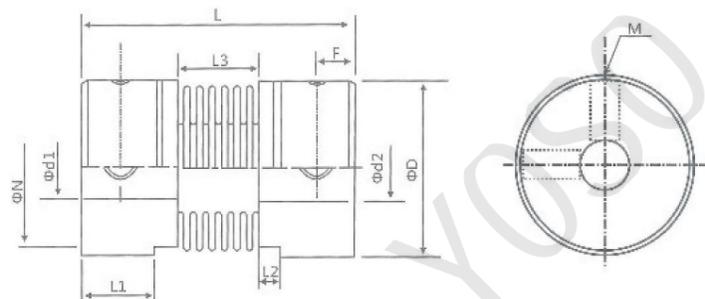
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GRC-16×27	0.8	0.1	1.5	+0.4 -1.2	9400	150	8.0×10 <sup>-7</sup>	High strength aluminum alloy	Anodizing treatment	8
GRC-20×32	1.5	0.15	2	+0.6 -1.8	7600	220	2.2×10 <sup>-5</sup>			13
GRC-22.5×34	1.8	0.15	2	+0.6 -1.8	6000	300	6.5×10 <sup>-5</sup>			22
GRC-25×37	2.0	0.15	2	+0.8 -1.8	6100	330	6.9×10 <sup>-5</sup>			30
GRC-32×42	2.5	0.2	2	+0.8 -2.5	4700	490	2.1×10 <sup>-5</sup>			53
GRC-40×55	6.4	0.2	2	+0.8 -2.5	4200	530	2.3×10 <sup>-5</sup>			97
GRC-55×72	12	0.2	2	+0.8 -2.5	3900	860	3.7×10 <sup>-5</sup>			200
GRC-65×81	18	0.2	2	+0.7 -2.5	3500	900	3.6×10 <sup>-5</sup>			380

Note: The coupling must be used within the allowable value range.

## GR aluminum alloy bellows set screw series

### ■ Characteristic

- > The material is aluminum alloy, and the middle corrugated pipe is made of stainless steel, with excellent corrosion resistance
- > Laser welding is used between the corrugated tube and the shaft sleeve, with zero rotational clearance, suitable for both forward and reverse rotation
- > Bellows structure more effectively compensates for radial, angular, and axial deviations
- > Specially designed for encoders and micro motors
- > Positioning screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	L1	L2	L3	N	F	M	Tightening screw torque (N.M)
GR-16×27	4,5,6,6.35,7,8	16	27	7.5	2	8	13.5	3	M3	0.7
GR-20×32	5,6,6.35,7,8,9,9.525,10,11,12	20	32	7.2	2.8	12	18	3.5	M3	0.7
GR-22.5×34	5,6,6.35,7,8,9,9.525,10,11,12	22.5	34	8.05	2.8	12.3	20.2	4.5	M4	1.7
GR-25×37	6,6.35,7,8,9,9.525,10,11,12	25	37	9.5	3	12	20.2	4.5	M4	1.7
GR-32×42	8,9,10,11,12,12.7,14,15	32	42	8	4	18	27.2	5.5	M5	4
GR-40×51	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	40	51	9.5	6	20	34.5	5.5	M5	4
GR-55×57	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	55	57	9	6	27	51.9	6.25	M6	7
GR-65×81	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32,35,38	65	81	19.5	7	28	60.5	8.9	M6	7

### Technical parameters

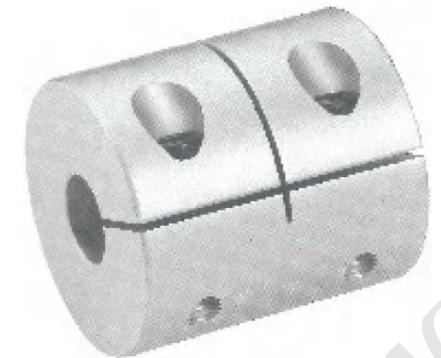
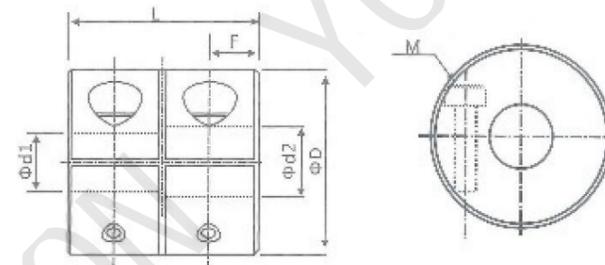
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Static torsional stiffness (N.M/rad)	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GR-16×27	0.8	0.1	2	+0.4 -1.2	20000	150	7.9×10 <sup>-7</sup>	High strength aluminum alloy	Anodizing treatment	8
GR-20×32	1.5	0.1	2	+0.6 -1.8	18000	220	2.0×10 <sup>-6</sup>			13
GR-22.5×34	1.8	0.15	2	+0.6 -1.8	16000	300	6.2×10 <sup>-6</sup>			22
GR-25×37	2.0	0.15	2	+0.6 -1.8	15000	330	6.7×10 <sup>-6</sup>			30
GR-32×42	2.5	0.2	2	+0.8 -2.5	11000	490	2.0×10 <sup>-5</sup>			53
GR-40×51	6.4	0.3	2	+0.8 -2.5	10000	530	2.1×10 <sup>-5</sup>			85
GR-55×57	12	0.3	2	+0.8 -2.5	9000	860	2.8×10 <sup>-5</sup>			170
GR-65×81	18	0.2	2	+0.7 -2.5	4500	900	2.3×10 <sup>-5</sup>			280

Note: The coupling must be used within the allowable value range.

## GNC aluminum alloy rigid clamping series

### ■ Characteristic

- > Integrated structure, using high-strength aluminum alloy material as the whole
- > High torque, high rigidity
- > Rigid type basically does not allow eccentricity, and sufficient eccentricity adjustment must be carried out during use deviations
- > Clamping screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ΦD	L	F	M	Tightening screw torque (N.M)
GNC-16×16	3,4,5,6,6.35,7,8	16	16	3.75	M2.5	1
GNC-16×24	3,4,5,6,6.35,7,8	16	24	3.75	M2.5	1
GNC-20×20	4,5,6,6.35,7,8,9,9.525,10	20	20	3.75	M2.5	1
GNC-20×30	4,5,6,6.35,7,8,9,9.525,10	20	30	3.75	M2.5	1
GNC-25×25	5,6,6.35,7,8,9,9.525,10,12	25	25	6	M3	1.5
GNC-25×36	5,6,6.35,7,8,9,9.525,10,12	25	36	6	M3	1.5
GNC-28.5×38	6,6.35,7,8,9,9.525,10,12,12.7,14	28.5	38	7.8	M4	2.5
GNC-32×32	6,6.35,7,8,9,9.525,10,12,12.7,14,15,16	32	32	7	M4	2.5
GNC-32×41	6,6.35,7,8,9,9.525,10,12,12.7,14,15,16	32	41	7.75	M4	2.5
GNC-40×44	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	40	44	10.5	M5	7
GNC-40×52	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	40	52	10.5	M5	7
GNC-50×55	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	55	13	M6	12
GNC-50×66	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	66	16	M6	12
GNC-63×71	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25,28,30,32,35	63	71	16.5	M6	12

### Technical parameters

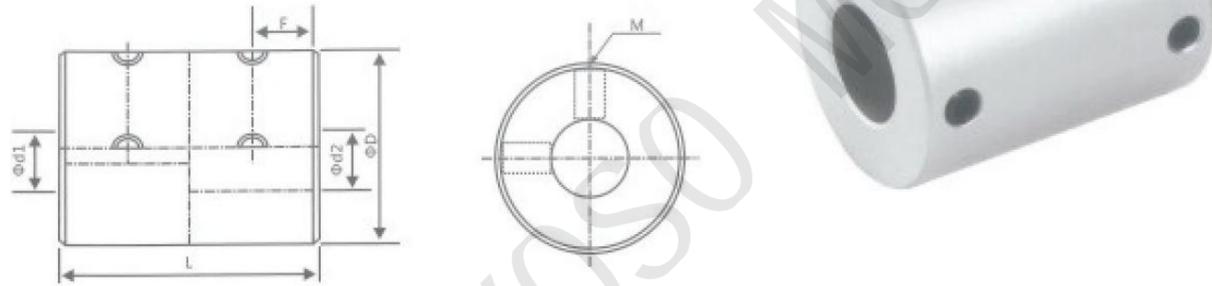
Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Moment of Inertia (Kg.M <sup>2</sup> )	Shaft sleeve material	Surface treatment	Weight (g)
GNC-16×16	5	—	—	—	1000	2.9×10 <sup>-7</sup>	High strength aluminum alloy	Anodizing treatment	7
GNC-16×24	5	—	—	—	9400	2.9×10 <sup>-7</sup>			13
GNC-20×20	10	—	—	—	7500	8.6×10 <sup>-6</sup>			15
GNC-20×30	10	—	—	—	7500	8.6×10 <sup>-6</sup>			25
GNC-25×25	12	—	—	—	6000	2.7×10 <sup>-5</sup>			29
GNC-25×36	12	—	—	—	6000	2.7×10 <sup>-5</sup>			43
GNC-28.5×38	14	—	—	—	5500	2.5×10 <sup>-5</sup>			48
GNC-32×32	15	—	—	—	4700	7.1×10 <sup>-5</sup>			55
GNC-32×41	15	—	—	—	4700	7.1×10 <sup>-5</sup>			65
GNC-40×44	19	—	—	—	4000	1.45×10 <sup>-5</sup>			123
GNC-40×52	19	—	—	—	4000	1.45×10 <sup>-5</sup>			150
GNC-50×55	45	—	—	—	4000	7.0×10 <sup>-5</sup>			240
GNC-50×66	45	—	—	—	4000	7.0×10 <sup>-5</sup>			280
GNC-63×71	100	—	—	—	3500	9.0×10 <sup>-5</sup>			320

Note: The coupling must be used within the allowable value range.

## GN aluminum alloy rigid set screw series

### ■ Characteristic

- > Integrated structure, using high-strength aluminum alloy material as the whole
- > High torque, high rigidity
- > Rigid type basically does not allow eccentricity, and sufficient eccentricity adjustment must be carried out during use deviations
- > Positioning screw fastening method



Overall dimensions (unit: mm)

Parameters	Common d1&d2 shaft diameters	ØD	L	F	M	Tightening screw torque (N.M)
GN-16×16	3,4,5,6,6.35,7,8	16	16	5	M3	0.7
GN-16×24	4,5,6,6.35,7,8	16	24	6	M3	0.7
GN-20×20	4,5,6,6.35,7,8,9,9.525,10	20	20	5	M3	0.7
GN-20×30	4,5,6,6.35,7,8,9,9.525,10	20	30	7	M4	1.7
GN-25×25	5,6,6.35,7,8,9,9.525,10,12	25	25	8	M4	1.7
GN-25×36	5,6,6.35,7,8,9,9.525,10,12	25	36	9	M4	1.7
GN-32×32	6,6.35,7,8,9,9.525,10,12,12.7,14,15,16	32	32	9	M5	4
GN-32×41	6,6.35,7,8,9,9.525,10,12,12.7,14,15,16	32	41	10	M5	4
GN-40×44	8,9,9.525,10,11,12,12.7,14,15,16,17,18,19,20	40	44	10.5	M5	4
GN-50×55	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	55	13	M6	7
GN-50×66	10,11,12,12.7,14,15,16,17,18,19,20,22,24,25	50	66	15	M6	7
GN-63×71	12,14,15,16,17,18,19,20,22,24,25,28,30,32	63	71	16	M6	7

### Technical parameters

Parameters	Rated torque (N.M)*	Allowable eccentricity (mm)*	Allowable angular misalignment (°)*	Allowable axial deviation (mm)*	Maximum rotational speed rpm	Moment of Inertia (Kg.M²)	Shaft sleeve material	Surface treatment	Weight (g)
GN-16×16	5	—	—	—	23000	4.39×10 <sup>-7</sup>	High strength aluminum alloy	Anodizing treatment	6
GN-16×24	5	—	—	—	23000	4.39×10 <sup>-7</sup>			10
GN-20×20	10	—	—	—	18000	1.25×10 <sup>-6</sup>			14
GN-20×30	10	—	—	—	18000	1.25×10 <sup>-6</sup>			19
GN-25×25	12	—	—	—	14000	3.8×10 <sup>-7</sup>			25
GN-25×36	12	—	—	—	14000	3.8×10 <sup>-7</sup>			38
GN-32×32	15	—	—	—	11000	1.15×10 <sup>-7</sup>			60
GN-32×41	15	—	—	—	11000	1.15×10 <sup>-7</sup>			70
GN-40×44	19	—	—	—	4000	1.45×10 <sup>-7</sup>			118
GN-50×55	45	—	—	—	4000	2×10 <sup>-7</sup>			235
GN-50×66	45	—	—	—	4000	2×10 <sup>-7</sup>			300
GN-63×71	115	—	—	—	3800	1.8×10 <sup>-7</sup>			400

Note: The coupling must be used within the allowable value range.

## GR plum blossom pad

### ■ Characteristic

- > This standard applies to the connection of various transmission machinery couplings with buffering effect on the transmission shaft
- > Torque: 22.4-2500NM
- > Abrasion: <0.05cm³/1.61km
- > Product hardness: yellow 92A blue 95A red 98A
- > Use temperature: -40--100 C



Specifications	Material	Outer diameter	Inner diameter	Thickness	Thickness	Number of lobes
GR-14	PU	30	10.5	12	10	4
GR-19	PU	40	18	15	12	6
GR-24	PU	55	27	17	14	8
GR-28	PU	65	30	19	15	8
GR-38	PU	80	38	22	18	8
GR-42	PU	95	46	24	20	8
GR-48	PU	105	51	26	21	8
GR-55	PU	120	60	27	22	8
GR-65	PU	135	68	32	26	8
GR-75	PU	161	81	37	30	10
GR-90	PU	199	100	42	34	10
GR-100	PU	224	111	—	38	10
GR-110	PU	254	127	—	42.5	10
GR-125	PU	293	148	—	46.5	10
GR-149	PU	320	165	—	50	10
GR-160	PU	370	190	—	57	10