

Unique flexible coupling design resolves hunting while operating a servo system at high gain settings. Integrally molded vibration-resistant rubber damps vibration while maintaining torsional rigidity.



- REDUCE STABILIZATION TIME
- INCREASE PRODUCTIVITY
- MAINTAIN PEAK SERVO SYSTEM PERFORMANCE

Vibration (*hunting*) occurs when increased gain settings are present

In high precision and high speed applications servomotors provide the high frequency response required. Servomotor improvements have kept pace with demands for greater speed and precision, but result in increased vibration, especially when a static torsional stiffness coupling is used, such as a disc or bellows type.

Coupling technology has evolved providing a solution, a flexible coupling that maintains proper torsional rigidity while absorbing vibration.

For position accuracy and vibration reduction in a servo system **specify Antivibration Flexible Couplings**. These couplings solve misalignment challenges in response-mandatory servo systems designed for the semiconductor manufacturing equipment industry, scanning equipment and many automation applications. Standard sizes available in bores 3 mm thru 16 mm. Call for custom requirements.

- Zero Backlash
- High Torque
- High Response
- Absorbs Vibration
- Quiet Operation
- Space Saving – specify smaller component as a result of high-torque capability



For component options and design solutions – SDP/SI established 1950

ENGINEERING | PRECISION MANUFACTURING | ASSEMBLY

ZERO BACKLASH
 HIGH TORQUE
 HIGH RESPONSE
 EXCELLENT ELECTRICAL INSULATION
 ABSORBS VIBRATION

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



> MATERIAL:

- Hubs - Aluminum
- Center - Molded Rubber (FKM)
- Cap Screws - Steel, Black Oxide

> MISALIGNMENT COMPENSATION:

- Max. Angular Offset: 1.5°
- Max. Lateral Offset: 0.15
- Max. Axial Motion: ± 0.2

> OPERATING TEMPERATURE:

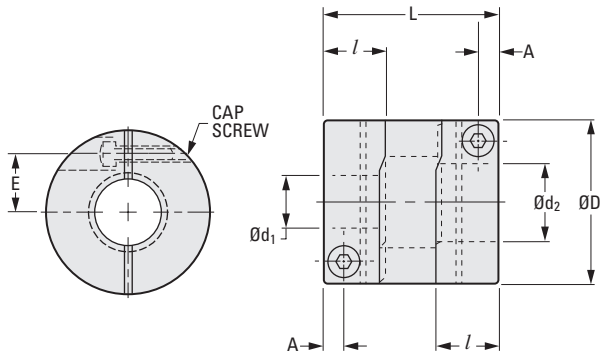
-10°C to +120°C

> APPLICATIONS:

Outstanding performance when used with servomotors or stepping motors for the following reasons:
 Eliminates Resonance
 Absorbs Vibration
 High Speed & Precise Positioning
 Increases Gain

> SPECIFICATION:

- Shaft Tolerance (h7):
- 3 to 6 mm 0/-0.012
- 6.35 to 10 mm 0/-0.015
- 11 mm 0/-0.018



The projections shown are per ISO convention.

METRIC COMPONENT

Catalog Number	D Dia.	d ₁ Bore	d ₂ Bore	L	l	A	E	Cap Screw	Max. Bore
S50GS2MA15H0305	15	3	5	18	6.5	2.15	5	M1.6	6
S50GS2MA15H0404		4	4						
S50GS2MA15H0406		4	6						
S50GS2MA19H0606	19	6	6	20	7.7	2.65	6.5	M2	8
S50GS2MA19H06E6		6	6.35						
S50GS2MA19H0608		6	8						
S50GS2MA19H08E6		6.35	8						
S50GS2MA25H08E6	25	6.35	8	27	9.5	3.25	9	M2.5	12
S50GS2MA25H0808		8	8						
S50GS2MA25H0810		8	10						
S50GS2MA25H0811		8	11						

Coupling Series (Ref. Only)	Rated Torque ^A N • m	Max. rpm	Moment of Inertia* kg • m ²	Static Torsional Stiffness N • m/rad	Weight* grams
S50GS2MA15H...	0.5	42000	2.1 x 10 ⁻⁷	64	7
S50GS2MA19H...	0.8	33000	5.9 x 10 ⁻⁷	170	12
S50GS2MA25H...	2.3	25000	2.4 x 10 ⁻⁶	290	24

*Based on max. bore dimension.

Continued on the next page

^AIf ambient temperature exceeds 30° C use the temperature correction factor to adjust the rated torque.

Ambient Temp.	Temp. Correction Factor
-10°C to 30°C	1.00
30°C to 40°C	.80

Ambient Temp.	Temp. Correction Factor
40°C to 60°C	.70
60°C to 120°C	.55

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- Cap Screws - Steel, Black Oxide

► **MISALIGNMENT COMPENSATION:**

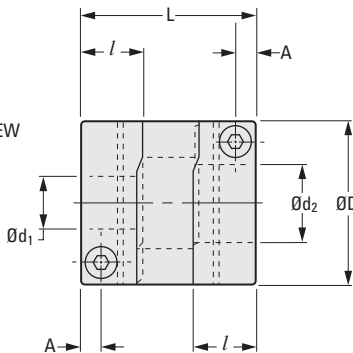
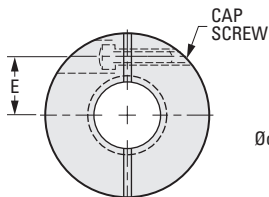
- Max. Angular Offset: 1.5°
- Max. Lateral Offset: 0.2
(For S50GS2MA27H...: 0.15)
- Max. Axial Motion: ± 0.3
(For S50GS2MA27H...: ± 0.2)

► **OPERATING TEMPERATURE:**

-10°C to +120°C

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► **SPECIFICATION:**

- Shaft Tolerance (h7):
6 mm 0/-0.012
- 8 & 10 mm 0/-0.015
- 11 to 16 mm 0/-0.018

METRIC COMPONENT

Catalog Number	D Dia.	d ₁ Bore	d ₂ Bore	L	l	A	E	Cap Screw	Max. Bore
S50GS2MA27H0606	27	6	6	27	9.5	3.25	10	M2.5	14
S50GS2MA27H0808		8	8						
S50GS2MA27H0810		8	10						
S50GS2MA30H0812	30	8	12	30	11	4	11	M3	15
S50GS2MA30H1010		10	10						
S50GS2MA30H1212		12	12						
S50GS2MA34H1012	34	10	12	35	12	4	12.25	M3	16
S50GS2MA34H1111		11	11						
S50GS2MA39H1212		12	12						
S50GS2MA39H1216	39	12	16	40	15.5	4.5	14.5	M4	20

Coupling Series (Ref. Only)	Rated ^A Torque N • m	Max. rpm	Moment of Inertia* kg • m ²	Static Torsional Stiffness N • m/rad	Weight* grams
S50GS2MA27H...	2.3	23000	3.2 x 10 ⁻⁶	290	28
S50GS2MA30H...	3.3	21000	5.2 x 10 ⁻⁶	430	38
S50GS2MA34H...	5.5	18000	1.1 x 10 ⁻⁵	800	61
S50GS2MA39H...	7	16000	2.1 x 10 ⁻⁵	930	90

*Based on max. bore dimension.

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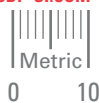
^AIf ambient temperature exceeds 30° C use the temperature correction factor to adjust the rated torque.

Ambient Temp.	Temp. Correction Factor	Ambient Temp.	Temp. Correction Factor
-10°C to 30°C	1.00	40°C to 60°C	.70
30°C to 40°C	.80	60°C to 120°C	.55

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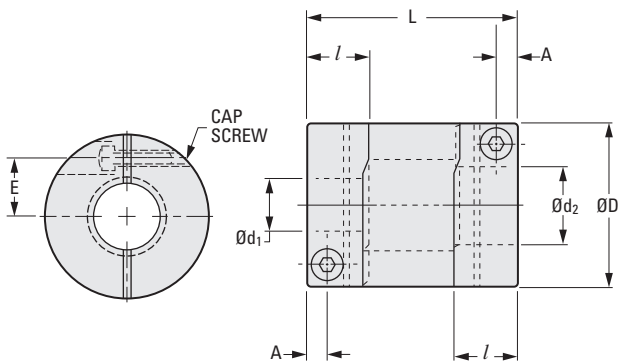
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- 3 to 6 mm 0/-0.012
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- 11 mm 0/-0.018

METRIC COMPONENT

Catalog Number	D Dia.	d ₁ Bore	d ₂ Bore	L	l	A	E	Cap Screw	Max. Bore
S50GT2MA15H0305	15	3	5	23	6.5	2.15	5	M1.6	6
S50GT2MA15H0404		4	4						
S50GT2MA15H0406		4	6						
S50GT2MA19H0606	19	6	6	26	7.7	2.65	6.5	M2	8
S50GT2MA19H06E6		6	6.35						
S50GT2MA19H0608		6	8						
S50GT2MA19H08E6		6.35	8						
S50GT2MA25H08E6	25	6.35	8	32	9.5	3.25	9	M2.5	12
S50GT2MA25H0808		8	8						
S50GT2MA25H0810		8	10						
S50GT2MA25H0811		8	11						

Coupling Series (Ref. Only)	Rated Torque ^A N • m	Max. rpm	Moment of Inertia* kg • m ²	Static Torsional Stiffness N • m/rad	Weight* grams
S50GT2MA15H...	1.1	42000	2.6 x 10 ⁻⁷	110	9
S50GT2MA19H...	2.1	33000	7.6 x 10 ⁻⁷	240	15
S50GT2MA25H...	4	25000	2.7 x 10 ⁻⁶	390	29

*Based on max. bore dimension.

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^AIf ambient temperature exceeds 30° C use the temperature correction factor to adjust the rated torque.

Ambient Temp.	Temp. Correction Factor
-10°C to 30°C	1.00
30°C to 40°C	.80

Ambient Temp.	Temp. Correction Factor
40°C to 60°C	.70
60°C to 120°C	.55

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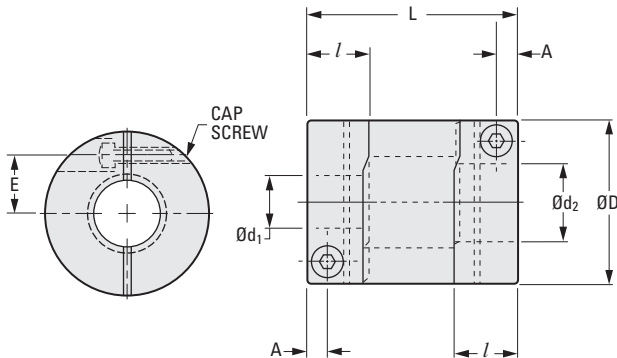
- Max. Angular Offset: 1.5°
- Max. Lateral Offset: 0.2
(For S50GT2MA27H...: 0.15)
- Max. Axial Motion: ± 0.3
(For S50GT2MA27H...: ± 0.2)

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► **SPECIFICATION:**

- Shaft Tolerance (h7):
8 & 10 mm 0/-0.015
11 & 16 mm 0/-0.018

METRIC COMPONENT

Catalog Number	D Dia.	d ₁ Bore	d ₂ Bore	L	l	A	E	Cap Screw	Max. Bore
S50GT2MA27H0808	27	8	8	32	9.5	3.25	10	M2.5	14
S50GT2MA27H0810		8	10						
S50GT2MA27H0812		8	12						
S50GT2MA27H0814		12	14						
S50GT2MA30H0812	30	8	12	36	11	4	11	M3	15
S50GT2MA30H1010		10	10						
S50GT2MA30H1212		12	12						
S50GT2MA34H1012	34	10	12	38	12	4	12.25	M3	16
S50GT2MA34H1111		11	11						
S50GT2MA39H1212		12	12						
S50GT2MA39H1216	39	12	16	48	15.5	4.5	14.5	M4	20

Coupling Series (Ref. Only)	Rated ^Δ Torque N • m	Max. rpm	Moment of Inertia* kg • m ²	Static Torsional Stiffness N • m/rad	Weight* grams
S50GT2MA27H...	4	23000	3.7 x 10 ⁻⁶	400	33
S50GT2MA30H...	6.3	21000	6.3 x 10 ⁻⁶	590	45
S50GT2MA34H...	8	18000	1.2 x 10 ⁻⁵	890	66
S50GT2MA39H...	13.5	16000	2.5 x 10 ⁻⁵	1100	105

*Based on max. bore dimension.

Continued from the previous page

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Ambient Temp.	Temp. Correction Factor
-10°C to 30°C	1.00
30°C to 40°C	.80

Ambient Temp.	Temp. Correction Factor
40°C to 60°C	.70
60°C to 120°C	.55

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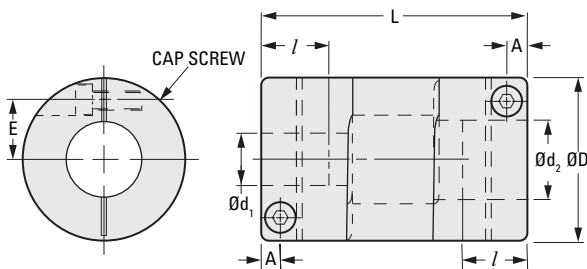
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11 mm 0/-0.018

METRIC COMPONENT

Catalog Number	D Dia.	d ₁ Bore	d ₂ Bore	L	l	A	E	Cap Screw	Max. Bore
S50GL2MA15H0305	15	3	5	30	6.5	2.15	5	M1.6	6
S50GL2MA15H0505		5	5						
S50GL2MA15H0506		5	6						
S50GL2MA19H0606		6	6						
S50GL2MA19H06E6	19	6	6.35	34	7.7	2.65	6.5	M2	8
S50GL2MA19H0608		6	8						
S50GL2MA19H08E6		6.35	8						
S50GL2MA25H08E6		6.35	8						
S50GL2MA25H0808	25	8	8	42	9.5	3.25	9	M2.5	12
S50GL2MA25H0810		8	10						
S50GL2MA25H0811		8	11						

Coupling Series (Ref. Only)	Rated ^A Torque N • m	Max. rpm	Moment of Inertia* kg • m ²	Static Torsional Stiffness N • m/rad	Weight* grams
S50GL2MA15H...	1.1	42000	3.6 x 10 ⁻⁷	82	11
S50GL2MA19H...	2.1	33000	1.0 x 10 ⁻⁶	210	20
S50GL2MA25H...	4	25000	3.8 x 10 ⁻⁶	300	40

*Based on max. bore dimension.

Continued on the next page

^AIf ambient temperature exceeds 30° C use the temperature correction factor to adjust the rated torque.

Ambient Temp.	Temp. Correction Factor
-10°C to 30°C	1.00
30°C to 40°C	.80

Ambient Temp.	Temp. Correction Factor
40°C to 60°C	.70
60°C to 120°C	.55

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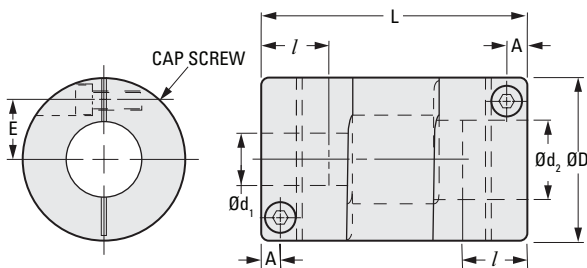
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Shaft Tolerance (h7):
8 & 10 mm 0/-0.015
11 & 14 mm 0/-0.018

METRIC COMPONENT

Catalog Number	D Dia.	d ₁ Bore	d ₂ Bore	L	l	A	E	Cap Screw	Max. Bore
S50GL2MA30H0812	30	8	12	42	11	4	11	M3	15
S50GL2MA30H1010		10	10						
S50GL2MA30H1214		12	14						
S50GL2MA34H0812	34	8	12	44	12	4	12.25	M3	16
S50GL2MA34H1014		10	14						
S50GL2MA39H1012		10	12						
S50GL2MA39H1214	39	12	14	55	15.5	4.5	14.5	M4	20

Coupling Series (Ref. Only)	Rated ^Δ Torque N • m	Max. rpm	Moment of Inertia* kg • m ²	Static Torsional Stiffness N • m/rad	Weight* grams
S50GL2MA30H...	6.3	21000	7.6 x 10 ⁻⁶	540	56
S50GL2MA34H...	8	18000	1.4 x 10 ⁻⁵	640	78
S50GL2MA39H...	13.5	16000	2.9 x 10 ⁻⁵	950	122

*Based on max. bore dimension.

Continued from the previous page

^ΔIf ambient temperature exceeds 30°C use the temperature correction factor to adjust the rated torque.

Ambient Temp.	Temp. Correction Factor	Ambient Temp.	Temp. Correction Factor
-10°C to 30°C	1.00	40°C to 60°C	.70
30°C to 40°C	.80	60°C to 120°C	.55