

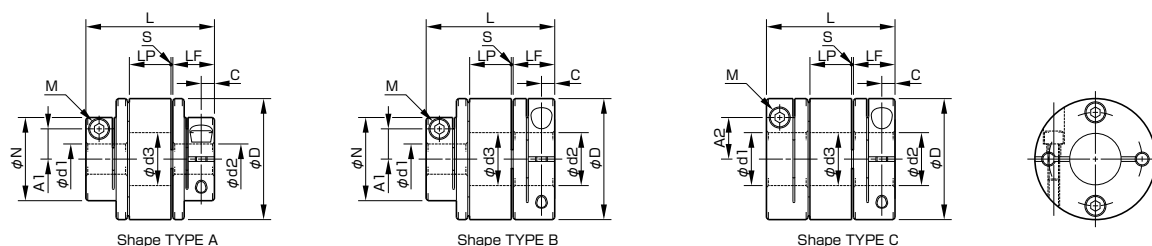
SERVOFLEX SFR – Datasheet

Specifications

Model	Shape type	Rated torque [N·m]	Misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m ²]	Mass [kg]
			Parallel [mm]	Angular [°]	Axial [mm]					
SFR-005SA1	C	0.6	0.15	1.5	±0.2	10000	30	241	0.32 × 10 ⁻⁶	0.009
SFR-010SA1	C	1	0.15	1.5	±0.2	10000	47	245	0.73 × 10 ⁻⁶	0.014
SFR-020SA1	C	2	0.15	1.5	±0.2	10000	178	642	3.11 × 10 ⁻⁶	0.032
SFR-025SA1	C	4	0.2	1.5	±0.3	10000	254	430	4.88 × 10 ⁻⁶	0.038
SFR-030SA1	A	5	0.2	1.5	±0.3	10000	396	413	6.62 × 10 ⁻⁶	0.048
	B								8.65 × 10 ⁻⁶	0.054
	C								10.76 × 10 ⁻⁶	0.063
SFR-035SA1	C	10	0.2	1.5	±0.3	10000	607	416	26.98 × 10 ⁻⁶	0.105
SFR-040SA1	A	12	0.2	1.5	±0.3	10000	1128	605	25.37 × 10 ⁻⁶	0.103
	B								31.96 × 10 ⁻⁶	0.114
	C								38.64 × 10 ⁻⁶	0.128
SFR-050SA1	A	25	0.2	1.5	±0.3	10000	2775	658	85.36 × 10 ⁻⁶	0.216
	B								105.75 × 10 ⁻⁶	0.234
	C								128.36 × 10 ⁻⁶	0.263

- Check the Standard Bore Diameters as there may be limitations on the rated torque caused by the holding power of the coupling shaft section.
- Higher rpm possible with balancing.
- Torsional stiffness values are analysis values for the element taken at a temperature of 20 °C.
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Model	Shape type	d1 [mm]		d2 [mm]		D [mm]	N [mm]	L [mm]	LF [mm]	LP [mm]	S [mm]	A1 [mm]	A2 [mm]	C [mm]	d3 [mm]	M Quantity – Nominal dia.	Tightening torque [N·m]
		Min.	Max.	Min.	Max.												
SFR-005SA1	C	3	5	3	6	16	—	22.7	7.85	6.4	0.3	—	4.8	2.5	5.5	1-M2	0.4 ~ 0.5
SFR-010SA1	C	3	7	3	18	19	—	25.4	9.15	6.6	0.25	—	5.8(6)	3.15	7.5	1-M2.5(M2)	1.0 ~ 1.1(0.4 ~ 0.5)
SFR-020SA1	C	4	10	4	11	26	—	31.8	10.75	8.9	0.7	—	9.5	3.3	10.5	1-M2.5	1.0 ~ 1.1
SFR-025SA1	C	5	13	5	14	29	—	32.3	10.75	9.4	0.7	—	11	3.3	13.5	1-M2.5	1.0 ~ 1.1
SFR-030SA1	A	5	10	5	10	—	21.6	—	12.4	11	—	8	—	—	—	1-M3	1.5 ~ 1.9
	B	5	10	Over 10	16	34	21.6	37.8	—	—	1	8	12.5	3.75	15.5		
	C	Over 10	15	Over 10	16	—	—	—	—	—	—	—	12.5	—	—		
SFR-035SA1	C	6	18	6	19	39	—	48	15.5	15	1	—	14	4.5	18.5	1-M4	1.5 ~ 1.9
SFR-040SA1	A	8	15	8	15	—	29.6	—	15.5	15	—	11	—	—	—	1-M4	3.4 ~ 4.1
	B	8	15	Over 15	24	44	29.6	48	—	—	1	11	17	4.5	23.5		
	C	Over 15	22	Over 15	24	—	—	—	—	—	—	—	17	—	—		
SFR-050SA1	A	8	19	8	19	—	38	—	20.5	17.4	—	14.5	—	—	—	1-M5	7.0. ~ 8.5
	B	8	19	Over 19	30	56	38	59.8	—	—	0.7	14.5	—	—	—		
	C	Over 19	28	Over 19	30	—	—	—	—	—	—	—	22	6	29.5		

- The d3 dimension is the inner diameter of the element. For d2 dimension exceeding this value, shaft can be inserted only up to LF dimension to the d2 side hub.
- The figures in parentheses () for the SFR-010 are the values when d2 is ø8 mm.

Standard Bore Dimensions

		Standard (option) bore diameter, d1/d2 [mm] and related rated torque [N-m]																											
Nominal bore diameter			3	4	5	6	6.35	7	8	9	9.525	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30		
Shaft tolerance	h7 (h6 - g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	j6 (Option)	J																			○		○	○		○			
	k6 (Option)	K							○	○						○		○			○		○	○					
SFR-005SA1	d1	●	●	●																									
	d2	●	●	●	●																								
SFR-010SA1	d1	●	●	●	●	●	●																						
	d2	●	●	●	●	●	●	●																					
SFR-020SA1	d1		●	●	●	●	●	●	●	●	●	●																	
	d2		●	●	●	●	●	●	●	●	●	●	●																
SFR-025SA1	d1			2.1	●	●	●	●	●	●	●	●	●	●	●	●													
	d2			2.1	●	●	●	●	●	●	●	●	●	●	●	●	●												
SFR-030SA1	d1			2.8	3.4	●	●	●	●	●	●	●	●	●	●	●	●	●											
	d2			2.8	3.4	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
SFR-035SA1	d1				5	5	6.6	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
	d2				5	5	6.6	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							
SFR-040SA1	d1							9	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
	d2							9	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
SFR-050SA1	d1							18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	d2							18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

- The shaft tolerance for standard bore diameter is h7 (h6 or g6): designation B.
- Shaft tolerances j6/k6: designations J/K are optional, and are only supported for bore diameters marked with ○.
- Bore diameters marked with ● or numbers are supported as the standard bore diameters. Please contact Miki Pulley regarding special arrangements which may be possible for other bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated torque by the holding power of the shaft connection component because the bore diameter is small. The numbers indicate the rated torque [N-m].

How to Place an Order

SFR-030SA1-10B-14K

Size

Bore diameter d1
(Small diameter)

Bore diameter d2
(Large diameter)

Supported shaft tolerance

B : h7(h6,g6)Shaft (Option J : j6Shaft , K : k6Shaft)

* For nominal bore diameter, select d1 (small diameter)-d2 (large diameter) in that order.

* If d1=d2 (same diameters), select B, J, and K in that order.

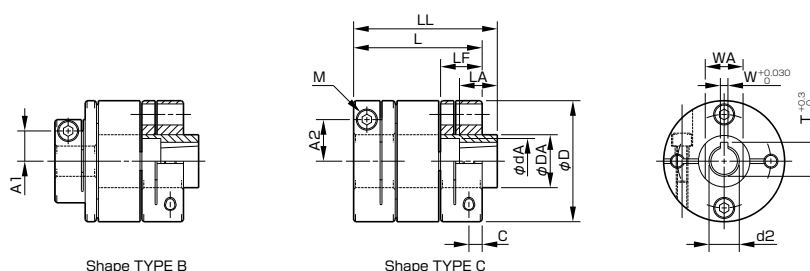
Options Tapered shaft supported

Specifications

Model	Shape type	Rated torque [N·m]	Misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m ²]	Mass [kg]
			Parallel [mm]	Angular [°]	Axial [mm]					
SFR-040SA1-□ B-11BC	B C	12	0.2	1.5	± 0.3	10000	1125	605	39.95 × 10 ⁻⁶ 42.24 × 10 ⁻⁶	0.162 0.174
SFR-050SA1-□ B-11BC	B C	25	0.2	1.5	± 0.3	10000	2775	658	111.04 × 10 ⁻⁶ 133.26 × 10 ⁻⁶	0.297 0.325
SFR-050SA1-□ B-14BC	B C	25	0.2	1.5	± 0.3	10000	2775	658	118.21 × 10 ⁻⁶ 141.08 × 10 ⁻⁶	0.328 0.369
SFR-050SA1-□ B-16BC	B C	25	0.2	1.5	± 0.3	10000	2775	658	124.92 × 10 ⁻⁶ 147.53 × 10 ⁻⁶	0.366 0.395

- Check the Standard Bore Diameters as there may be limitations on the rated torque caused by the holding power of the coupling shaft section.
- Higher rpm possible with balancing.
- Torsional stiffness values are analysis values for the element taken at a temperature of 20 °C.
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Model	d1 [mm]	W [mm]	T [mm]	WA [mm]	LA [mm]	dA [mm]	DA [mm]	LL [mm]	D [mm]	L [mm]	LF [mm]	C [mm]	A1 [mm]	A2 [mm]	M Qty – Nominal dia.
SFR-040SA1-□ B-11BC	11	4	12.2	18	16	17	22	58	44	48	15.5	4.5	11	17	1-M4
SFR-050SA1-□ B-11BC	11	4	12.2	18	16	17	22	64.8	56	59.8	20.5	6	14.5	22	1-M5
SFR-050SA1-□ B-14BC	14	4	15.1	24	19	22	28	69.8	56	59.8	20.5	6	14.5	22	1-M5
SFR-050SA1-□ B-16BC	16	5	17.3	24	29	26	30	79.8	56	59.8	20.5	6	14.5	22	1-M5

• For other dimensions, see dimensions for SFR MODEL

Standard Bore Dimensions

Standard (option) bore diameter, d1/d2 [mm] and related rated torque [N·m]																					
Nominal bore diameter			8	9	9.525	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30
Shaft-to- erance	h7 (h6 · g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	j6 (Option)	J													○		○	○		○	
	k6 (Option)	K	○	○							○		○			○		○	○		
SFR-040SA1-□ B-11BC			9	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
SFR-050SA1-□ B-11BC			18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
SFR-050SA1-□ B-14BC			18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SFR-050SA1-□ B-16BC			18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

- The shaft tolerance for standard bore diameter is h7 (h6 or g6): designation B.
- Shaft tolerances j6/k6: designations J/K are optional, and are only supported for bore diameters marked with ○.
- Bore diameters marked with ● or numbers are supported as the standard bore diameters. Please contact Miki Pulley regarding special arrangements which may be possible for other bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated torque by the holding power of the shaft connection component because the bore diameter is small. The numbers indicate the rated torque [N·m].

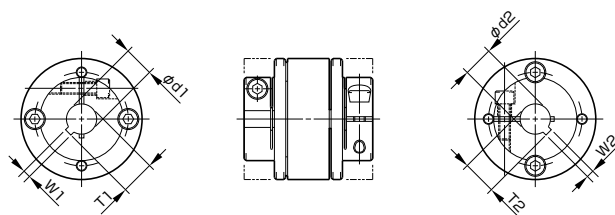
How to Place an Order

SFR-050SA1-12B-14BC

Size ————
Bore diameter d1 ————
[d2]BC
BC: Taper adapter *Select d2 for BC.
Supported shaft tolerance
B: h7 (h6,g6) , (Option K: k6 , J: j6)

Options Keyway

Keyway Standards



H9 keyway												JS9 keyway																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Nominal bore dia.				Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.				Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]	Nominal bore dia.				Bore dia. d1 · d2 [mm]	Keyway width W1 · W2 [mm]	Keyway height T1 · T2 [mm]																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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• We can also handle standards not listed above. Please contact Miki Pulley.

Standard Bore Diameter

Standard (option) bore diameter, d1/d2 [mm] and related rated torque [N·m]																					
Shaft tolerance	Nominal bore diameter		8	9	9.525	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30
	h7 (h6 - g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	j6 (Option)	J													○		○	○		○	
	k6 (Option)	K	○	○							○		○			○		○	○		
SFR-030SA1		d1	●	●	●	●	●	●	●	●	●										
		d2	●	●	●	●	●	●	●	●	●	●									
SFR-035SA1		d1	●	●	●	●	●	●	●	●	●	●	●	●							
		d2	●	●	●	●	●	●	●	●	●	●	●	●	●						
SFR-040SA1		d1	9	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
		d2	9	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
SFR-050SA1		d1	18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		d2	18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

• The shaft tolerance for standard bore diameter is h7 (h6 or g6): designation B.

• Shaft tolerances j6/k6: designations J/K are optional, and are only supported for bore diameters marked with ○.

• Bore diameters marked with ● or numbers are supported as the standard bore diameters. Please contact Miki Pulley regarding special arrangements which may be possible for other bore diameters.

• Bore diameters whose fields contain numbers are restricted in their rated torque by the holding power of the shaft connection component because the bore diameter is small. The numbers indicate the rated torque [N·m].

How to Place an Order

SFR-050SA1-12BH-14KJ

Size

Bore diameter d1
(Small diameter)

Affixing method
BH: h7(h6,g6) shaft + H9 keyway

Affixing method
KJ: k6 shaft
+ JS9 keyway

Bore diameter d2
(Large diameter)

* For nominal bore diameter, select d1 (small diameter) -d2 (large diameter) in that order.

* If d1=d2 (same diameters), select B, J, and K in that order.
B · J · K · BH · BJ · JH · JJ · KH · KJ