SFC SA2 Types Single Element Type

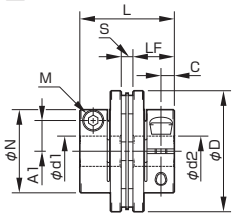
Specifications

Model	Type	Rated torque [N·m]	Misalignment			Max. rotation speed [min⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m²]	Mass [kg]
			Parallel [mm]	Angular [°]	Axial [mm]					
SFC-002SA2	C	0.25	0.01	0.5	±0.04	10000	190	34	0.06×10^{-6}	0.003
SFC-005SA2	C	0.6	0.02	0.5	±0.05	10000	500	140	0.26×10^{-6}	0.007
SFC-010SA2	C	1	0.02	1	±0.1	10000	1400	140	0.58×10^{-6}	0.011
SFC-020SA2	C	2	0.02	1	±0.15	10000	3700	64	2.39×10^{-6}	0.025
SFC-025SA2	C	4	0.02	1	±0.19	10000	5600	60	3.67×10^{-6}	0.029
SFC-030SA2	A	5	0.02	1	±0.2	10000	8000	64	4.07×10^{-6}	0.034
	B	5	0.02	1	±0.2	10000	8000	64	6.09×10^{-6}	0.041
	C	5	0.02	1	±0.2	10000	8000	64	8.20×10^{-6}	0.049
SFC-035SA2	C	10	0.02	1	±0.25	10000	18000	112	18.44×10^{-6}	0.082
SFC-040SA2	A	12	0.02	1	±0.3	10000	20000	80	16.71×10^{-6}	0.077
	B	12	0.02	1	±0.3	10000	20000	80	22.55×10^{-6}	0.085
	C	12	0.02	1	±0.3	10000	20000	80	29.25×10^{-6}	0.100
SFC-050SA2	A	25	0.02	1	±0.4	10000	32000	48	55.71×10^{-6}	0.159
	B	25	0.02	1	±0.4	10000	32000	48	76.26×10^{-6}	0.177
	C	25	0.02	1	±0.4	10000	32000	48	99.03×10^{-6}	0.206
SFC-055SA2	C	40	0.02	1	±0.42	10000	50000	43	188.0×10^{-6}	0.314
SFC-060SA2	A	60	0.02	1	±0.45	10000	70000	76.4	145.9×10^{-6}	0.283
	B	60	0.02	1	±0.45	10000	70000	76.4	205.0×10^{-6}	0.326
	C	60	0.02	1	±0.45	10000	70000	76.4	268.6×10^{-6}	0.385
SFC-080SA2	C	100	0.02	1	±0.55	10000	140000	128	710.6×10^{-6}	0.708
SFC-090SA2	C	180	0.02	1	±0.65	10000	100000	108	1236×10^{-6}	0.946
SFC-100SA2	C	250	0.02	1	±0.74	10000	120000	111	1891×10^{-6}	1.202

* Check the Standard Bore Diameter list as rated torque may be restricted by the holding power of the shaft connection component.
* Max. rotation speed does not take into account dynamic balance.
* Torsional stiffness values given are measured values for the element alone.
* The moment of inertia and mass are measured for the maximum bore diameter.

Dimensions

■TYPE A



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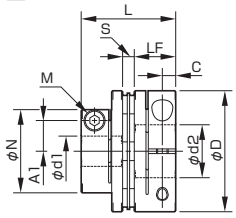

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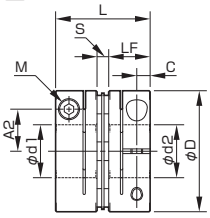
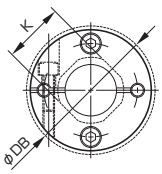




Model	Type	d1 [mm]		d2 [mm]		D [mm]	DB [mm]	N [mm]	L [mm]	LF [mm]	S [mm]	A1 [mm]	A2 [mm]	C [mm]	K [mm]	M Qty - Nominal dia.	Tightening torque [N·m]
		Min.	Max.	Min.	Max.												
SFC-002SA2	C	3	5	3	5	12	12.4	—	12.35	5.9	0.55	—	3.7	1.9	5.6	1-M1.6	0.23 ~ 0.28
SFC-005SA2	C	3	6	3	6	16	—	—	16.7	7.85	1	—	4.8	2.5	6.5	1-M2	0.4 ~ 0.5
SFC-010SA2	C	3	8	3	8	19	—	—	19.35	9.15	1.05	—	5.8(6)	3.15	8.5	1-M2.5(M2)	1.0~1.1(0.4~0.5)
SFC-020SA2	C	4	10	4	11	26	—	—	23.15	10.75	1.65	—	9.5	3.3	10.6	1-M2.5	1.0 ~ 1.1
SFC-025SA2	C	5	14	5	14	29	—	—	23.4	10.75	1.9	—	11	3.3	14.5	1-M2.5	1.0 ~ 1.1
SFC-030SA2	A	5	10	5	10	34	—	21.6	27.3	12.4	2.5	8	—	3.75	14.5	1-M3	1.5 ~ 1.9
	B	5	10	Over 10	16	34	—	21.6	27.3	12.4	2.5	8	12.5	3.75	14.5	1-M3	1.5 ~ 1.9
	C	Over 10	14	Over 10	16	34	—	—	27.3	12.4	2.5	—	12.5	3.75	14.5	1-M3	1.5 ~ 1.9
SFC-035SA2	C	6	16	6	19	39	—	—	34	15.5	3	—	14	4.5	17	1-M4	3.4 ~ 4.1
SFC-040SA2	A	8	15	8	15	44	—	29.6	34	15.5	3	11	—	4.5	19.5	1-M4	3.4 ~ 4.1
	B	8	15	Over 15	24	44	—	29.6	34	15.5	3	11	17	4.5	19.5	1-M4	3.4 ~ 4.1
	C	Over 15	19	Over 15	24	44	—	—	34	15.5	3	—	17	4.5	19.5	1-M4	3.4 ~ 4.1
SFC-050SA2	A	8	19	8	19	56	—	38	43.4	20.5	2.4	14.5	—	6	26	1-M5	7.0 ~ 8.5
	B	8	19	Over 19	30	56	—	38	43.4	20.5	2.4	14.5	22	6	26	1-M5	7.0 ~ 8.5
	C	Over 19	25	Over 19	30	56	—	—	43.4	20.5	2.4	—	22	6	26	1-M5	7.0 ~ 8.5
SFC-055SA2	C	10	30	10	30	63	—	—	50.6	24	2.6	—	23	7.75	31	1-M6	14 ~ 15
SFC-060SA2	A	11	24	11	24	68	—	46	53.6	25.2	3.2	17.5	—	7.75	31	1-M6	14 ~ 15
	B	11	24	Over 24	35	68	—	46	53.6	25.2	3.2	17.5	26.5	7.75	31	1-M6	14 ~ 15
	C	Over 24	30	Over 24	35	68	—	—	53.6	25.2	3.2	—	26.5	7.75	31	1-M6	14 ~ 15
SFC-080SA2	C	18	35	18	40	82	—	—	68	30	8	—	28	9	38	1-M8	27 ~ 30
SFC-090SA2	C	25	40	25	45	94	—	—	68.3	30	8.3	—	34	9	42	1-M8	27 ~ 30
SFC-100SA2	C	32	45	32	45	104	—	—	69.8	30	9.8	—	39	9	48	1-M8	27 ~ 30

* The øDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
* The K 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 nominal diameter for the clamping bolt M is equal to the quantity minus the nominal diameter of the screw threads, where the quantity is for a hub on one side.
* The figures in parentheses ( ) for the SFC-010 are the values when d1 or d2 is ø8 mm.

For length-specified special order parts

For keyway milling applications → P.025

Standard Bore Diameter

Standard (option) bore diameter, d1/d2 [mm] and restricted 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	32	35	38	40	42	45
Shaft tolerance	h7 (h6・g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	j6(Option)	J																			○		○	○		○						
	k6(Option)	K							○	○						○		○			○		○	○				○		○		
Supported bore diameter for each model	SFC-002SA2	d1	●	●	●																											
		d2	●	●	●																											
	SFC-005SA2	d1	●	●	●	●																										
		d2	●	●	●	●																										
	SFC-010SA2	d1	●	●	●	●	●	●	●																							
		d2	●	●	●	●	●	●	●																							
	SFC-020SA2	d1		●	●	●	●	●	●	●	●	●																				
		d2		●	●	●	●	●	●	●	●	●	●																			
	SFC-025SA2	d1			2.1	●	●	●	●	●	●	●	●	●	●	●																
		d2			2.1	●	●	●	●	●	●	●	●	●	●	●																
	SFC-030SA2	d1			2.8	3.4	●	●	●	●	●	●	●	●	●	●	●	●														
		d2			2.8	3.4	●	●	●	●	●	●	●	●	●	●	●	●														
	SFC-035SA2	d1				5	5	6.6	●	●	●	●	●	●	●	●	●	●														
		d2				5	5	6.6	●	●	●	●	●	●	●	●	●	●	●	●	●											
	SFC-040SA2	d1							9	●	●	●	●	●	●	●	●	●	●	●	●											
		d2							9	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
	SFC-050SA2	d1							18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●							
		d2							18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
	SFC-055SA2	d1										31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●					
		d2										31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●					
	SFC-060SA2	d1											50	51	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
		d2											50	51	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	SFC-080SA2	d1																		●	●	●	●	●	●	●	●	●	●			
		d2																		●	●	●	●	●	●	●	●	●	●	●		
	SFC-090SA2	d1																							●	●	●	●	●	●		
		d2																							●	●	●	●	●	●	●	●
	SFC-100SA2	d1																										226	●	●	●	●
		d2																										226	●	●	●	●

* The shaft tolerance for standard bore diameter is h7 (h6 or g6): designation B. However, for a shaft diameter of ø35, the tolerance is $^{+0.010}_{-0.025}$.
* 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. Consult 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

SFC-025SA2-10B-14K

- Size
- Type
  SA2: Single element
  Aluminum alloy hub
- Bore diameter d1 (Small diameter)
- Bore diameter d2 (Large diameter)
- Supported shaft tolerance
  B: h7(h6, g6) shaft
  J: j6 shaft (option)
  K: k6 shaft (option)

* 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.

SFC DA2 Types Double Element Type

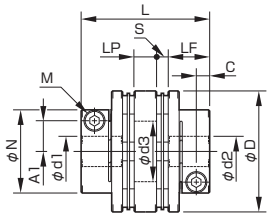
Specifications

Model	Type	Rated torque [N·m]	Misalignment			Max. rotation speed [min⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m²]	Mass [kg]
			Parallel [mm]	Angular [°]	Axial [mm]					
SFC-002DA2	C	0.25	0.03	0.5(On one side)	±0.08	10000	95	17	0.07×10^{-6}	0.004
SFC-005DA2	C	0.6	0.05	0.5(On one side)	±0.1	10000	250	70	0.37×10^{-6}	0.010
SFC-010DA2	C	1	0.11	1(On one side)	±0.2	10000	700	70	0.80×10^{-6}	0.015
SFC-020DA2	C	2	0.15	1(On one side)	±0.33	10000	1850	32	3.43×10^{-6}	0.035
SFC-025DA2	C	4	0.16	1(On one side)	±0.38	10000	2800	30	5.26×10^{-6}	0.040
SFC-030DA2	A	5	0.18	1(On one side)	±0.4	10000	4000	32	7.43×10^{-6}	0.054
	B	5	0.18	1(On one side)	±0.4	10000	4000	32	9.45×10^{-6}	0.060
	C	5	0.18	1(On one side)	±0.4	10000	4000	32	11.56×10^{-6}	0.068
SFC-035DA2	C	10	0.24	1(On one side)	±0.5	10000	9000	56	26.93×10^{-6}	0.121
SFC-040DA2	A	12	0.24	1(On one side)	±0.6	10000	10000	40	29.98×10^{-6}	0.124
	B	12	0.24	1(On one side)	±0.6	10000	10000	40	35.82×10^{-6}	0.131
	C	12	0.24	1(On one side)	±0.6	10000	10000	40	42.52×10^{-6}	0.146
SFC-050DA2	A	25	0.28	1(On one side)	±0.8	10000	16000	24	98.34×10^{-6}	0.250
	B	25	0.28	1(On one side)	±0.8	10000	16000	24	118.9×10^{-6}	0.268
	C	25	0.28	1(On one side)	±0.8	10000	16000	24	141.7×10^{-6}	0.298
SFC-055DA2	C	40	0.31	1(On one side)	±0.84	10000	25000	21.5	261.3×10^{-6}	0.459
SFC-060DA2	A	60	0.34	1(On one side)	±0.9	10000	35000	38.2	256.6×10^{-6}	0.447
	B	60	0.34	1(On one side)	±0.9	10000	35000	38.2	315.7×10^{-6}	0.489
	C	60	0.34	1(On one side)	±0.9	10000	35000	38.2	379.3×10^{-6}	0.549
SFC-080DA2	C	100	0.52	1(On one side)	±1.10	10000	70000	64	1039×10^{-6}	1.037
SFC-090DA2	C	180	0.52	1(On one side)	±1.30	10000	50000	54	1798×10^{-6}	1.369
SFC-100DA2	C	250	0.55	1(On one side)	±1.48	10000	60000	55.5	2754×10^{-6}	1.739

* Check the "Standard Bore Diameters" as rated torque may be restricted by the holding power of the shaft connection component.
* Max. rotation speed does not take into account dynamic balance.
* Torsional stiffness values given are measured values for the element alone.
* The moment of inertia and mass are measured for the maximum bore diameter.

Dimensions

■TYPE A



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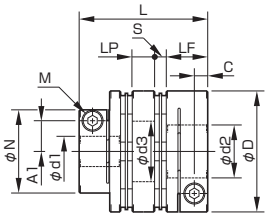

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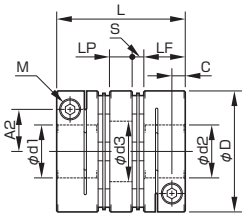
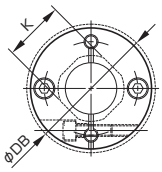


CAD



Model	Type	d1 [mm]		d2 [mm]		D [mm]	DB [mm]	N [mm]	L [mm]	LF [mm]	LP [mm]	S [mm]	A1 [mm]	A2 [mm]	C [mm]	d3 [mm]	K [mm]	M Qty - Nominal dia.	Tightening torque [N·m]
		Min.	Max.	Min.	Max.														
SFC-002DA2	C	3	5	3	5	12	12.4	—	15.7	5.9	2.8	0.55	—	3.7	1.9	5.2	5.6	1-M1.6	0.23 ~ 0.28
SFC-005DA2	C	3	6	3	6	16	—	—	23.2	7.85	5.5	1	—	4.8	2.5	6.5	6.5	1-M2	0.4 ~ 0.5
SFC-010DA2	C	3	8	3	8	19	—	—	25.9	9.15	5.5	1.05	—	5.8(6)	3.15	8.5	8.5	1-M2.5(M2)	1.0~1.1(0.4~0.5)
SFC-020DA2	C	4	10	4	11	26	—	—	32.3	10.75	7.5	1.65	—	9.5	3.3	10.6	10.6	1-M2.5	1.0 ~ 1.1
SFC-025DA2	C	5	14	5	14	29	—	—	32.8	10.75	7.5	1.9	—	11	3.3	15	14.5	1-M2.5	1.0 ~ 1.1
SFC-030DA2	A	5	10	5	10	34	—	21.6	37.8	12.4	8	2.5	8	—	3.75	15	14.5	1-M3	1.5 ~ 1.9
	B	5	10	Over 10	16	34	—	21.6	37.8	12.4	8	2.5	8	12.5	3.75	15	14.5	1-M3	1.5 ~ 1.9
	C	Over 10	14	Over 10	16	34	—	—	37.8	12.4	8	2.5	—	12.5	3.75	15	14.5	1-M3	1.5 ~ 1.9
SFC-035DA2	C	6	16	6	19	39	—	—	48	15.5	11	3	—	14	4.5	17	17	1-M4	3.4 ~ 4.1
SFC-040DA2	A	8	15	8	15	44	—	29.6	48	15.5	11	3	11	—	4.5	20	19.5	1-M4	3.4 ~ 4.1
	B	8	15	Over 15	24	44	—	29.6	48	15.5	11	3	11	17	4.5	20	19.5	1-M4	3.4 ~ 4.1
	C	Over 15	19	Over 15	24	44	—	—	48	15.5	11	3	—	17	4.5	20	19.5	1-M4	3.4 ~ 4.1
SFC-050DA2	A	8	19	8	19	56	—	38	59.8	20.5	14	2.4	14.5	—	6	26	26	1-M5	7.0 ~ 8.5
	B	8	19	Over 19	30	56	—	38	59.8	20.5	14	2.4	14.5	22	6	26	26	1-M5	7.0 ~ 8.5
	C	Over 19	25	Over 19	30	56	—	—	59.8	20.5	14	2.4	—	22	6	26	26	1-M5	7.0 ~ 8.5
SFC-055DA2	C	10	30	10	30	63	—	—	68.7	24	15.5	2.6	—	23	7.75	31	31	1-M6	14 ~ 15
SFC-060DA2	A	11	24	11	24	68	—	46	73.3	25.2	16.5	3.2	17.5	—	7.75	31	31	1-M6	14 ~ 15
	B	11	24	Over 24	35	68	—	46	73.3	25.2	16.5	3.2	17.5	26.5	7.75	31	31	1-M6	14 ~ 15
	C	Over 24	30	Over 24	35	68	—	—	73.3	25.2	16.5	3.2	—	26.5	7.75	31	31	1-M6	14 ~ 15
SFC-080DA2	C	18	35	18	40	82	—	—	98	30	22	8	—	28	9	40	38	1-M8	27 ~ 30
SFC-090DA2	C	25	40	25	45	94	—	—	98.6	30	22	8.3	—	34	9	47	42	1-M8	27 ~ 30
SFC-100DA2	C	32	45	32	45	104	—	—	101.6	30	22	9.8	—	39	9	50	48	1-M8	27 ~ 30

* The øDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
* The K 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 nominal diameter for the clamping bolt M is equal to the quantity minus the nominal diameter of the screw threads, where the quantity is for a hub on one side.
* The figures in parentheses ( ) for the SFC-010 are the values when d1 or d2 is ø8 mm.

For length-specified special order parts

【For length-specified special order parts → P.024】【For keyway milling applications → P.025】

Standard Bore Diameter

Standard (option) bore diameter, d1/d2 [mm] and restricted 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	32	35	38	40	42	45
Shaft tolerance	h7 (h6・g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	j6(Option)	J																			○		○	○		○						
	k6(Option)	K							○	○						○		○			○		○	○				○		○		
Supported bore diameter for each model	SFC-002DA2	d1	●	●	●																											
		d2	●	●	●																											
	SFC-005DA2	d1	●	●	●	●																										
		d2	●	●	●	●																										
	SFC-010DA2	d1	●	●	●	●	●	●	●																							
		d2	●	●	●	●	●	●	●																							
	SFC-020DA2	d1		●	●	●	●	●	●	●	●	●																				
		d2		●	●	●	●	●	●	●	●	●	●																			
	SFC-025DA2	d1			2.1	●	●	●	●	●	●	●	●	●	●	●																
		d2			2.1	●	●	●	●	●	●	●	●	●	●	●																
	SFC-030DA2	d1			2.8	3.4	●	●	●	●	●	●	●	●	●	●																
		d2			2.8	3.4	●	●	●	●	●	●	●	●	●	●	●	●														
	SFC-035DA2	d1				5	5	6.6	●	●	●	●	●	●	●	●	●	●														
		d2				5	5	6.6	●	●	●	●	●	●	●	●	●	●	●	●	●											
	SFC-040DA2	d1							9	●	●	●	●	●	●	●	●	●	●	●	●	●										
		d2							9	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							
	SFC-050DA2	d1							18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
		d2							18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
	SFC-055DA2	d1										31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●					
		d2										31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●					
	SFC-060DA2	d1											50	51	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
		d2											50	51	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	SFC-080DA2	d1																		●	●	●	●	●	●	●	●	●	●			
		d2																		●	●	●	●	●	●	●	●	●	●	●		
	SFC-090DA2	d1																							●	●	●	●	●	●	●	
		d2																							●	●	●	●	●	●	●	●
	SFC-100DA2	d1																										226	●	●	●	●
		d2																										226	●	●	●	●

* The shaft tolerance for standard bore diameter is h7 (h6 or g6): designation B. However, for a shaft diameter of ø35, the tolerance is $^{+0.010}_{-0.025}$.
* 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. Consult 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

SFC-025DA2-10B-14K

- Size: SFC-025
- Type: DA2: Double element, Aluminum alloy hub
- Bore diameter d1 (Small diameter): 10
- Bore diameter d2 (Large diameter): 14
- Supported shaft tolerance: B
  - B: h7(h6, g6) shaft
  - J: j6 shaft (option)
  - K: k6 shaft (option)

* 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.

To download CAD data or product catalogs: www.mikipulley.co.jp Web code A001

SFC SA2 Types Single Element Type

Option Tapered shaft supported

Allows coupling via a clamping hub when a taper adapter is mounted on the tapered shaft of a servo motor.

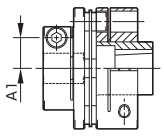
Specifications

Model	Type	Rated torque [N·m]	Misalignment			Max. rotation speed [min⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m²]	Mass [kg]
			Parallel [mm]	Angular [°]	Axial [mm]					
SFC-040SA2-□B-11BC	B	12	0.02	1	±0.3	10000	20000	80	26.58 × 10⁻⁶	0.131
	C	12	0.02	1	±0.3	10000	20000	80	33.28 × 10⁻⁶	0.146
SFC-050SA2-□B-11BC	B	25	0.02	1	±0.4	10000	32000	48	82.91 × 10⁻⁶	0.240
	C	25	0.02	1	±0.4	10000	32000	48	103.5 × 10⁻⁶	0.258
SFC-050SA2-□B-14BC	B	25	0.02	1	±0.4	10000	32000	48	88.72 × 10⁻⁶	0.271
	C	25	0.02	1	±0.4	10000	32000	48	111.5 × 10⁻⁶	0.301
SFC-050SA2-□B-16BC	B	25	0.02	1	±0.4	10000	32000	48	95.44 × 10⁻⁶	0.309
	C	25	0.02	1	±0.4	10000	32000	48	118.2 × 10⁻⁶	0.338
SFC-055SA2-□B-14BC	C	40	0.02	1	±0.42	10000	50000	43	201.1 × 10⁻⁶	0.409
SFC-055SA2-□B-16BC	C	40	0.02	1	±0.42	10000	50000	43	207.8 × 10⁻⁶	0.446
SFC-060SA2-□B-16BC	B	60	0.02	1	±0.45	10000	70000	76.4	228.7 × 10⁻⁶	0.475
	C	60	0.02	1	±0.45	10000	70000	76.4	287.8 × 10⁻⁶	0.517

* Check the "Standard Bore Diameters" as rated torque may be restricted by the holding power of the shaft connection component.
* Max. rotation speed does not take into account dynamic balance.
* Torsional stiffness values given are measured values for the element alone.
* The moment of inertia and mass are measured for the maximum bore diameter.

Dimensions

■TYPE B



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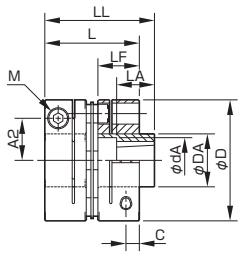
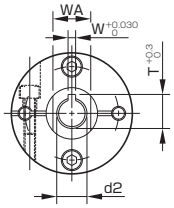




Model	d2 [mm]	W [mm]	T [mm]	WA [mm]	LA [mm]	dA [mm]	DA [mm]	LL [mm]	D [mm]	L [mm]	LF [mm]	C [mm]	A1 [mm]	A2 [mm]	M Qty - Nominal dia.
SFC-040SA2-□B-11BC	11	4	12.2	18	16	17	22	44	44	34	15.5	4.5	11	17	1-M4
SFC-050SA2-□B-11BC	11	4	12.2	18	16	17	22	48.4	56	43.4	20.5	6	14.5	22	1-M5
SFC-050SA2-□B-14BC	14	4	15.1	24	19	22	28	53.4	56	43.4	20.5	6	14.5	22	1-M5
SFC-050SA2-□B-16BC	16	5	17.3	24	29	26	30	63.4	56	43.4	20.5	6	14.5	22	1-M5
SFC-055SA2-□B-14BC	14	4	15.1	24	19	22	28	56.6	63	50.6	24	7.75	—	23	1-M6
SFC-055SA2-□B-16BC	16	5	17.3	24	29	26	30	66.6	63	50.6	24	7.75	—	23	1-M6
SFC-060SA2-□B-16BC	16	5	17.3	24	29	26	30	69.6	68	53.6	25.2	7.75	17.5	26.5	1-M6

* For other dimensions, see dimensions for single element type SFC SA2.

Standard Bore Diameter

Standard (option) bore diameter, d1 [mm] and restricted 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 tolerance	h7 (h6・g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	j6(Option)	J													○		○	○		○	
	k6(Option)	K	○	○						○		○			○		○	○			
Supported bore diameter	SFC-040SA2		9	●	●	●	●	●	●	●	●	●	●	●	●						
	SFC-050SA2		18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●		
	SFC-055SA2					31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●
	SFC-060SA2						50	51	●	●	●	●	●	●	●	●	●	●	●	●	●

* 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. Consult 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

SFC-050SA2-12B-14BC

- Size / Type: SA2: Single element, Aluminum alloy hub
- Bore diameter d1: 12
- Supported shaft tolerance: B: h7 (h6, g6), (Option K : k6, J : j6)
- [d2] BC: BC: Taper adapter *Select d2 for BC.

SFC DA2 Types Double Element Type

Option Tapered shaft supported

Allows coupling via a clamping hub when a taper adapter is mounted on the tapered shaft of a servo motor.

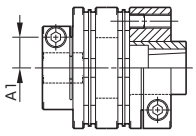
Specifications

Model	Type	Rated torque [N·m]	Misalignment			Max. rotation speed [min⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m²]	Mass [kg]
			Parallel [mm]	Angular [°]	Axial [mm]					
SFC-040DA2-□B-11BC	B	12	0.24	1(On one side)	±0.6	10000	10000	40	39.42×10^{-6}	0.180
	C	12	0.24	1(On one side)	±0.6	10000	10000	40	46.12×10^{-6}	0.195
SFC-050DA2-□B-11BC	B	25	0.28	1(On one side)	±0.8	10000	16000	24	125.5×10^{-6}	0.331
	C	25	0.28	1(On one side)	±0.8	10000	16000	24	146.1×10^{-6}	0.349
SFC-050DA2-□B-14BC	B	25	0.28	1(On one side)	±0.8	10000	16000	24	131.1×10^{-6}	0.362
	C	25	0.28	1(On one side)	±0.8	10000	16000	24	154.1×10^{-6}	0.392
SFC-050DA2-□B-16BC	B	25	0.28	1(On one side)	±0.8	10000	16000	24	138.1×10^{-6}	0.400
	C	25	0.28	1(On one side)	±0.8	10000	16000	24	160.8×10^{-6}	0.430
SFC-055DA2-□B-14BC	C	40	0.31	1(On one side)	±0.84	10000	25000	21.5	274.0×10^{-6}	0.530
SFC-055DA2-□B-16BC	C	40	0.31	1(On one side)	±0.84	10000	25000	21.5	280.5×10^{-6}	0.567
SFC-060DA2-□B-16BC	B	60	0.34	1(On one side)	±0.9	10000	35000	38.2	339.4×10^{-6}	0.638
	C	60	0.34	1(On one side)	±0.9	10000	35000	38.2	398.5×10^{-6}	0.681

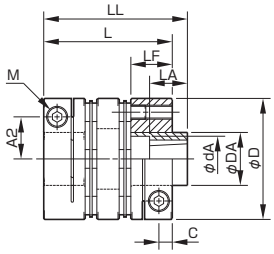
* Check the "Standard Bore Diameters" as rated torque may be restricted by the holding power of the shaft connection component.
* Max. rotation speed does not take into account dynamic balance.
* Torsional stiffness values given are measured values for the element alone.
* The moment of inertia and mass are measured for the maximum bore diameter.

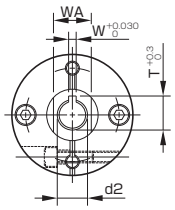
Dimensions

■TYPE B



■TYPE C





Model	d2 [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.
SFC-040DA2-□B-11BC	11	4	12.2	18	16	17	22	58	44	48	15.5	4.5	11	17	1-M4
SFC-050DA2-□B-11BC	11	4	12.2	18	16	17	22	64.8	56	59.8	20.5	6	14.5	22	1-M5
SFC-050DA2-□B-14BC	14	4	15.1	24	19	22	28	69.8	56	59.8	20.5	6	14.5	22	1-M5
SFC-050DA2-□B-16BC	16	5	17.3	24	29	26	30	79.8	56	59.8	20.5	6	14.5	22	1-M5
SFC-055DA2-□B-14BC	14	4	15.1	24	19	22	28	74.4	63	68.7	24	7.75	—	23	1-M6
SFC-055DA2-□B-16BC	16	5	17.3	24	29	26	30	84.7	63	68.7	24	7.75	—	23	1-M6
SFC-060DA2-□B-16BC	16	5	17.3	24	29	26	30	89.3	68	73.3	25.2	7.75	17.5	26.5	1-M6

* For other "Specifications" and "Dimensions", see "Specifications" and "Dimensions" for double element type SFC DA2.

Standard Bore Diameter

Standard (option) bore diameter, d1 [mm] and restricted 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 tolerance	h7 (h6・g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	j6(Option)	J													○		○	○		○	
	k6(Option)	K	○	○						○		○			○		○	○			
Supported bore diameter	SFC-040DA2		9	●	●	●	●	●	●	●	●	●	●	●	●						
	SFC-050DA2		18	20	22	22	●	●	●	●	●	●	●	●	●	●	●	●	●		
	SFC-055DA2					31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●
	SFC-060DA2						50	51	●	●	●	●	●	●	●	●	●	●	●	●	●

* 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. Consult 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

SFC-050DA2-12B-14BC

- Size / Type: DA2: Double element, Aluminum alloy hub
- Bore diameter d1
- [d2] BC: BC: Taper adapter *Select d2 for BC.
- Supported shaft tolerance: B: h7 (h6, g6), (Option K : k6, J : j6)

SFC Models

Option For length-specified special order parts

SFC DA2 type spacer length can be changed to attain the necessary distance between shafts. Specify the length in 1 mm units.

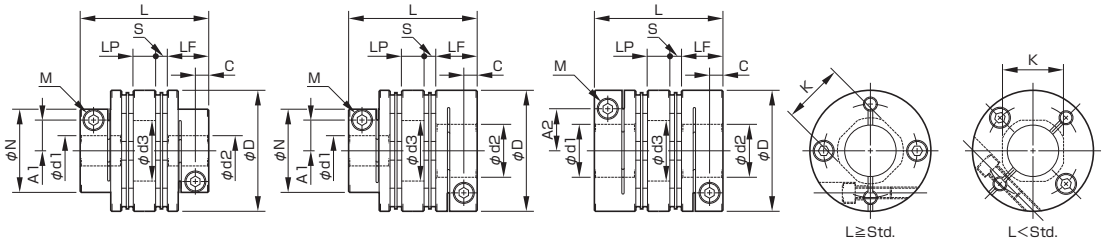
Specifications

Model	Type	Rated torque [N•m]	Misalignment				Max. rotation speed [min⁻¹]	Moment of inertia [kg•m²]		Mass [kg]	
			Parallel[mm]		Angular [°]	Axial [mm]					
			Min. L	Max. L				Min. L	Max. L	Min. L	Max. L
SFC-005DA2	C	0.6	0.03	0.20	0.5(On one side)	±0.1	10000	0.33×10^{-6}	0.62×10^{-6}	0.009	0.017
SFC-010DA2	C	1	0.08	0.44	1(On one side)	±0.2	10000	0.72×10^{-6}	1.38×10^{-6}	0.014	0.026
SFC-020DA2	C	2	0.10	0.46	1(On one side)	±0.33	10000	3.02×10^{-6}	5.30×10^{-6}	0.031	0.054
SFC-025DA2	C	4	0.09	0.46	1(On one side)	±0.38	10000	4.55×10^{-6}	7.95×10^{-6}	0.036	0.061
	A	5	0.11	0.48	1(On one side)	±0.4	10000	6.09×10^{-6}	12.80×10^{-6}	0.046	0.085
SFC-030DA2	B	5	0.11	0.48	1(On one side)	±0.4	10000	8.11×10^{-6}	14.82×10^{-6}	0.053	0.091
	C	5	0.11	0.48	1(On one side)	±0.4	10000	10.22×10^{-6}	16.93×10^{-6}	0.061	0.099
SFC-035DA2	C	10	0.15	0.54	1(On one side)	±0.5	10000	23.85×10^{-6}	35.97×10^{-6}	0.108	0.161
	A	12	0.15	0.54	1(On one side)	±0.6	10000	25.06×10^{-6}	44.76×10^{-6}	0.107	0.174
SFC-040DA2	B	12	0.15	0.54	1(On one side)	±0.6	10000	30.89×10^{-6}	50.62×10^{-6}	0.116	0.182
	C	12	0.15	0.54	1(On one side)	±0.6	10000	37.58×10^{-6}	57.31×10^{-6}	0.130	0.197
	A	25	0.16	0.63	1(On one side)	±0.8	10000	77.42×10^{-6}	144.3×10^{-6}	0.205	0.347
SFC-050DA2	B	25	0.16	0.63	1(On one side)	±0.8	10000	97.97×10^{-6}	164.8×10^{-6}	0.225	0.365
	C	25	0.16	0.63	1(On one side)	±0.8	10000	120.8×10^{-6}	187.6×10^{-6}	0.252	0.394
SFC-055DA2	C	40	0.16	0.60	1(On one side)	±0.84	10000	226.8×10^{-6}	325.0×10^{-6}	0.378	0.538
	A	60	0.19	0.63	1(On one side)	±0.9	10000	210.8×10^{-6}	340.1×10^{-6}	0.382	0.567
SFC-060DA2	B	60	0.19	0.63	1(On one side)	±0.9	10000	269.9×10^{-6}	399.2×10^{-6}	0.424	0.609
	C	60	0.19	0.63	1(On one side)	±0.9	10000	333.5×10^{-6}	462.8×10^{-6}	0.484	0.669

* Check the "Standard Bore Diameters" for SFC DA2 as there may be limitations on the rated torque caused by the holding power of the coupling shaft section.
* Max. rotation speed does not take into account dynamic balance.
* The moment of inertia and mass are measured for the maximum bore diameter.
* See "Specifications" for SFC DA2 for stiffness values.

Dimensions

■TYPE A ■TYPE B ■TYPE C



Model	Type	d1 [mm]		d2 [mm]		D [mm]	N [mm]	L [mm]			LF [mm]	S [mm]	A1 [mm]	A2 [mm]	C [mm]	d3 [mm]	K [mm]	M Qty - Nominal dia.	Tightening torque [N•m]
		Min.	Max.	Min.	Max.			Std.	Min.	Max.									
SFC-005DA2	C	3	6	3	6	16	—	23.2	21	40	7.85	1	—	4.8	2.5	6.5	6.5	1-M2	0.4 ～ 0.5
SFC-010DA2	C	3	8	3	8	19	—	25.9	24	45	9.15	1.05	—	5.8(6)	3.15	8.5	8.5	1-M2.5(M2)	1.0～1.1(0.4～0.5)
SFC-020DA2	C	4	10	4	11	26	—	32.3	29	50	10.75	1.65	—	9.5	3.3	10.6	10.6	1-M2.5	1.0 ～ 1.1
SFC-025DA2	C	5	14	5	14	29	—	32.8	29	50	10.75	1.9	—	11	3.3	15	14.5	1-M2.5	1.0 ～ 1.1
	A	5	10	5	10	34	21.6	37.8	34	55	12.4	2.5	8	—	3.75	15	14.5	1-M3	1.5 ～ 1.9
SFC-030DA2	B	5	10	Over 10	16	34	21.6	37.8	34	55	12.4	2.5	8	12.5	3.75	15	14.5	1-M3	1.5 ～ 1.9
	C	Over 10	14	Over 10	16	34	—	37.8	34	55	12.4	2.5	—	12.5	3.75	15	14.5	1-M3	1.5 ～ 1.9
SFC-035DA2	C	6	16	6	19	39	—	48	43	65	15.5	3	—	14	4.5	17	17	1-M4	3.4 ～ 4.1
	A	8	15	8	15	44	29.6	48	43	65	15.5	3	11	—	4.5	20	19.5	1-M4	3.4 ～ 4.1
SFC-040DA2	B	8	15	Over 15	24	44	29.6	48	43	65	15.5	3	11	17	4.5	20	19.5	1-M4	3.4 ～ 4.1
	C	Over 15	19	Over 15	24	44	—	48	43	65	15.5	3	—	17	4.5	20	19.5	1-M4	3.4 ～ 4.1
	A	8	19	8	19	56	38	59.8	53	80	20.5	2.4	14.5	—	6	26	26	1-M5	7.0 ～ 8.5
SFC-050DA2	B	8	19	Over 19	30	56	38	59.8	53	80	20.5	2.4	14.5	22	6	26	26	1-M5	7.0 ～ 8.5
	C	Over 19	25	Over 19	30	56	—	59.8	53	80	20.5	2.4	—	22	6	26	26	1-M5	7.0 ～ 8.5
SFC-055DA2	C	10	30	10	30	63	—	68.7	60	85	24	2.6	—	23	7.75	31	31	1-M6	14 ～ 15
	A	11	24	11	24	68	46	73.3	65	90	25.2	3.2	17.5	—	7.75	31	31	1-M6	14 ～ 15
SFC-060DA2	B	11	24	Over 24	35	68	46	73.3	65	90	25.2	3.2	17.5	26.5	7.75	31	31	1-M6	14 ～ 15
	C	Over 24	30	Over 24	35	68	—	73.3	65	90	25.2	3.2	—	26.5	7.75	31	31	1-M6	14 ～ 15

* The nominal diameter for the clamping bolt M is equal to the quantity minus the nominal diameter of the screw threads, where the quantity is for a hub on one side.
* The figures in parentheses ( ) for the SFC-010 are the values when d1 or d2 is ø8 mm.
* Compatible lengths L range from the minimum L dimension to the maximum L dimension shown in the above table. Specify in 1 mm units.
* When the L dimension is shorter than the standard, the left/right clamping bolt phases will be off by 45° .
* Check "Standard Bore Diameters" for SFC DA2 for the standard bore diameters.

How to Place an Order

SFC-040DA2-14B-15B-L60

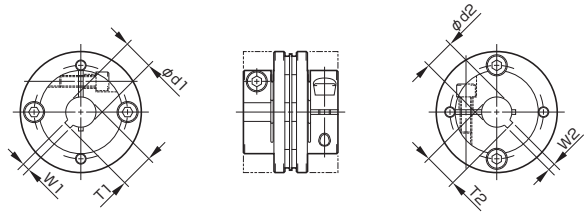
- Size / Type: DA2: Double element Aluminum alloy hub
- Bore diameter d1 (Small diameter): 14
- Bore diameter d2 (Large diameter): 15
- Supported shaft tolerance: B : h7 (h6・g6) , (Option K : k6, J : j6)
- Length designation: ※ Specify the L dimension in 1 mm increments.

Option For keyway milling applications

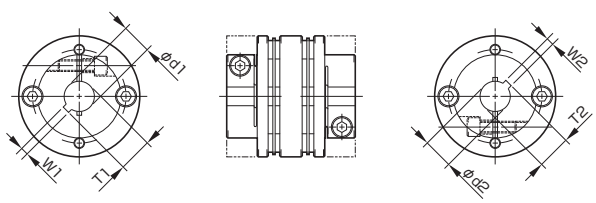
If you are using a keyed shaft, we can mill a keyway in the clamping hub to your specifications.

Keyway milling standard

■SFC SA2



■SFC DA2



H9 keyway width standards																																			
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]	Nominal bore dia.				Bore dia. d1・d2 [mm]	Keyway width W1・W2 [mm]	Keyway height T1・T2 [mm]
Shaft diameter	Shaft tolerance						Shaft diameter	Shaft tolerance						Shaft diameter	Shaft tolerance						Shaft diameter	Shaft tolerance					
	h7	j6	k6					h7	j6	k6					BJ	—	KJ					BJ	JJ	KJ			
8	BH	—	KH	8	3 $^{+0.025}_{0}$	9.4 $^{+0.3}_{0}$	20	BH	—	—	20	6 $^{+0.030}_{0}$	22.8 $^{+0.3}_{0}$	8	BJ	—	KJ	8	3 ±0.0125	9.4 $^{+0.3}_{0}$	20	BJ	—	—	20	6 ±0.0150	22.8 $^{+0.3}_{0}$
9	BH	—	KH	9	3 $^{+0.025}_{0}$	10.4 $^{+0.3}_{0}$	22	BH	JH	KH	22	6 $^{+0.030}_{0}$	24.8 $^{+0.3}_{0}$	9	BJ	—	KJ	9	3 ±0.0125	10.4 $^{+0.3}_{0}$	22	BJ	JJ	KJ	22	6 ±0.0150	24.8 $^{+0.3}_{0}$
10	BH	—	—	10	3 $^{+0.025}_{0}$	11.4 $^{+0.3}_{0}$	24	BH	JH	KH	24	8 $^{+0.036}_{0}$	27.3 $^{+0.3}_{0}$	10	BJ	—	—	10	3 ±0.0125	11.4 $^{+0.3}_{0}$	24	BJ	JJ	KJ	24	8 ±0.0180	27.3 $^{+0.3}_{0}$
11	BH	—	—	11	4 $^{+0.030}_{0}$	12.8 $^{+0.3}_{0}$	25	BH	—	—	25	8 $^{+0.036}_{0}$	28.3 $^{+0.3}_{0}$	11	BJ	—	—	11	4 ±0.0150	12.8 $^{+0.3}_{0}$	25	BJ	—	—	25	8 ±0.0180	28.3 $^{+0.3}_{0}$
12	BH	—	—	12	4 $^{+0.030}_{0}$	13.8 $^{+0.3}_{0}$	28	BH	JH	—	28	8 $^{+0.036}_{0}$	31.3 $^{+0.3}_{0}$	12	BJ	—	—	12	4 ±0.0150	13.8 $^{+0.3}_{0}$	28	BJ	JJ	—	28	8 ±0.0180	31.3 $^{+0.3}_{0}$
13	BH	—	—	13	5 $^{+0.030}_{0}$	15.3 $^{+0.3}_{0}$	30	BH	—	—	30	8 $^{+0.036}_{0}$	33.3 $^{+0.3}_{0}$	13	BJ	—	—	13	5 ±0.0150	15.3 $^{+0.3}_{0}$	30	BJ	—	—	30	8 ±0.0180	33.3 $^{+0.3}_{0}$
14	BH	—	KH	14	5 $^{+0.030}_{0}$	16.3 $^{+0.3}_{0}$	32	BH	—	KH	32	10 $^{+0.036}_{0}$	35.3 $^{+0.3}_{0}$	14	BJ	—	KJ	14	5 ±0.0150	16.3 $^{+0.3}_{0}$	32	BJ	—	KJ	32	10 ±0.0180	35.3 $^{+0.3}_{0}$
15	BH	—	—	15	5 $^{+0.030}_{0}$	17.3 $^{+0.3}_{0}$	35	BH	—	—	35	10 $^{+0.036}_{0}$	38.3 $^{+0.3}_{0}$	15	BJ	—	—	15	5 ±0.0150	17.3 $^{+0.3}_{0}$	35	BJ	—	—	35	10 ±0.0180	38.3 $^{+0.3}_{0}$
16	BH	—	KH	16	5 $^{+0.030}_{0}$	18.3 $^{+0.3}_{0}$	38	BH	—	KH	38	10 $^{+0.036}_{0}$	41.3 $^{+0.3}_{0}$	16	BJ	—	KJ	16	5 ±0.0150	18.3 $^{+0.3}_{0}$	38	BJ	—	KJ	38	10 ±0.0180	41.3 $^{+0.3}_{0}$
17	BH	—	—	17	5 $^{+0.030}_{0}$	19.3 $^{+0.3}_{0}$	40	BH	—	—	40	12 $^{+0.043}_{0}$	43.3 $^{+0.3}_{0}$	17	BJ	—	—	17	5 ±0.0150	19.3 $^{+0.3}_{0}$	40	BJ	—	—	40	12 ±0.0215	43.3 $^{+0.3}_{0}$
18	BH	—	—	18	6 $^{+0.030}_{0}$	20.8 $^{+0.3}_{0}$	42	BH	—	—	42	12 $^{+0.043}_{0}$	45.3 $^{+0.3}_{0}$	18	BJ	—	—	18	6 ±0.0150	20.8 $^{+0.3}_{0}$	42	BJ	—	—	42	12 ±0.0215	45.3 $^{+0.3}_{0}$
19	BH	JH	KH	19	6 $^{+0.030}_{0}$	21.8 $^{+0.3}_{0}$	45	BH	—	—	45	14 $^{+0.043}_{0}$	48.8 $^{+0.3}_{0}$	19	BJ	JJ	KJ	19	6 ±0.0150	21.8 $^{+0.3}_{0}$	45	BJ	—	—	45	14 ±0.0215	48.8 $^{+0.3}_{0}$

* We can also handle standards not listed above. Consult Miki Pulley.

Standard Bore Diameter

Standard (option) bore diameter, d1/d2 [mm] and restricted rated torque [N·m]																													
Nominal bore diameter			8	9	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45
Shaft tolerance	h7 (h6・g6)	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	j6(Option)	J												○		○	○		○							
	k6(Option)	K	○	○					○		○			○		○	○				○		○			
Supported bore diameter for each model	SFC-025SA2/DA2	d1	●	●	●	●	●	●	●																	
		d2	●	●	●	●	●	●	●																	
	SFC-030SA2/DA2	d1	●	●	●	●	●	●	●																	
		d2	●	●	●	●	●	●	●	●	●															
	SFC-035SA2/DA2	d1	●	●	●	●	●	●	●	●	●															
		d2	●	●	●	●	●	●	●	●	●	●	●	●												
	SFC-040SA2/DA2	d1	9	●	●	●	●	●	●	●	●	●	●	●												
		d2	9	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
	SFC-050SA2/DA2	d1	18	20	22	●	●	●	●	●	●	●	●	●	●	●	●	●								
		d2	18	20	22	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
	SFC-055SA2/DA2	d1			31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●						
		d2			31	34	36	38	●	●	●	●	●	●	●	●	●	●	●	●						
	SFC-060SA2/DA2	d1				50	51	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
		d2				50	51	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	SFC-080SA2/DA2	d1											●	●	●	●	●	●	●	●	●	●				
		d2											●	●	●	●	●	●	●	●	●	●	●	●		
	SFC-090SA2/DA2	d1																●	●	●	●	●	●	●		
		d2																●	●	●	●	●	●	●	●	●
	SFC-100SA2/DA2	d1																			226	●	●	●	●	●
		d2																			226	●	●	●	●	●

* The shaft tolerance for standard bore diameter is h7 (h6 or g6): designation B. However, for a shaft diameter of ø35, the tolerance is $^{+0.010}_{-0.025}$.
* 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. Consult 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

SFC-060SA2-12BH-14KJ

- Size / Type: SA2: Single element, DA2: Double element
- Bore diameter d1 (Small diameter)
- Bore diameter d2 (Large diameter)
- Affixing method KJ: k6 shaft + Js9 keyway
- Affixing method BH: h7 (h6, g6) shaft + H9 keyway

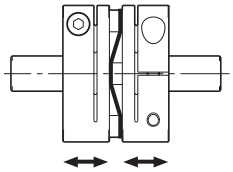
* For nominal bore diameter, select d1 (small diameter) -d2 (large diameter) in that order.
* If d1=d2 (same diameters), select B, J, and K in that order.
B・J・K・BH・BJ・JH・JJ・KH・KJ

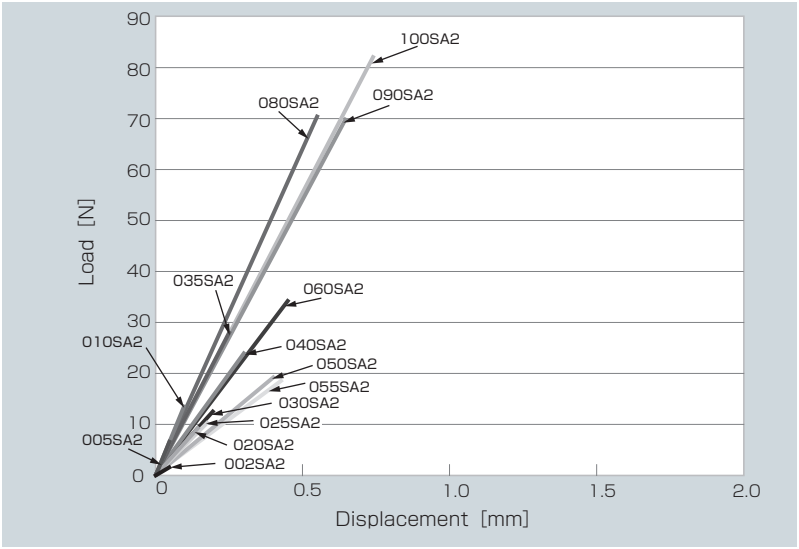
SFC Models

Items Checked for Design Purposes

Spring Characteristics SFC SA2

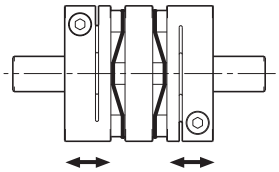
■ Axial load and amount of displacement

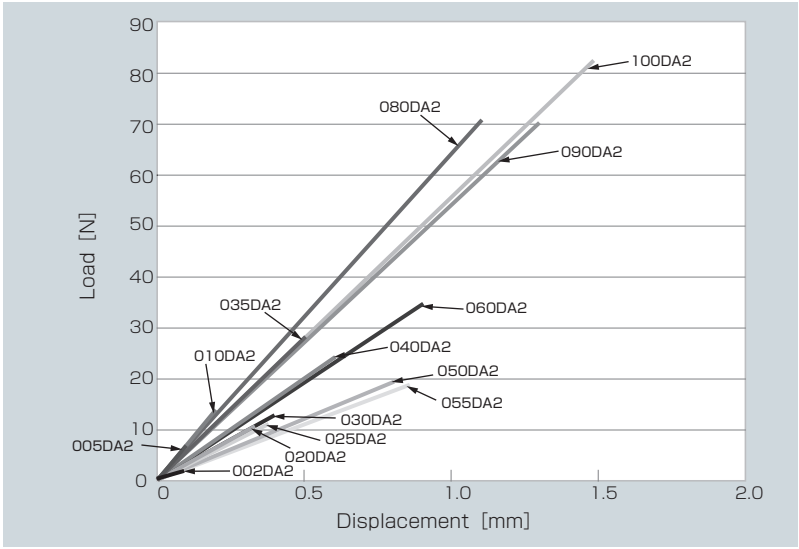




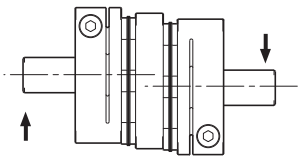
Spring Characteristics SFC DA2

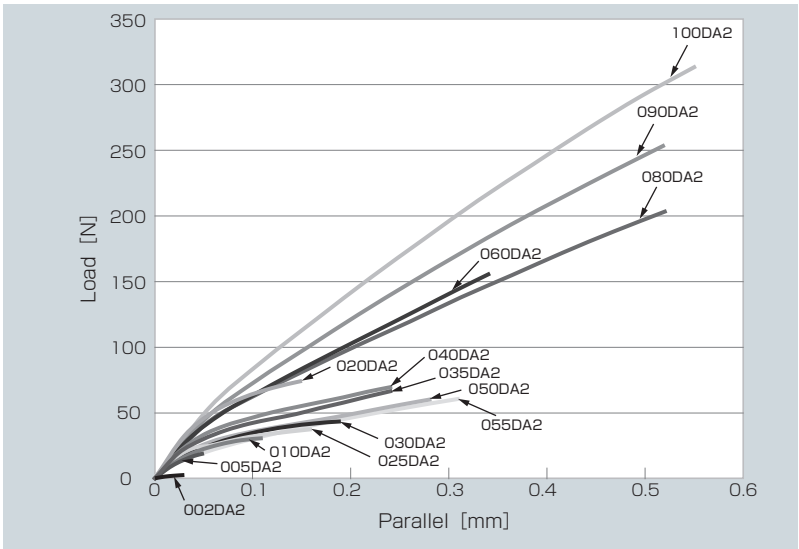
■ Axial load and amount of displacement





■ Parallel misalignment direction load and amount of displacement





Special Items to Take Note of

You should note the following to prevent any problems.

(1) Always be careful of parallel, angular, and axial misalignment.

(2) Always tighten bolts with the specified torque.

Precautions for Handling

Couplings are assembled at high accuracy using a special mounting jig to ensure accurate concentricity of left and right internal diameters. Take extra precautions when handling couplings, should strong shocks be given on couplings, it may affect mounting accuracy and cause the parts to break during use.

(1) Couplings are designed for use within an operating temperature range of -30° C to 100° C. Although the couplings are designed to be waterproof and oilproof, do not subject them to excessive amounts of water and oil as it may cause part deterioration.

(2) Handle the element with care as it is made of a thin stainless steel metal disc, also making sure to be careful so as not to injure yourself.

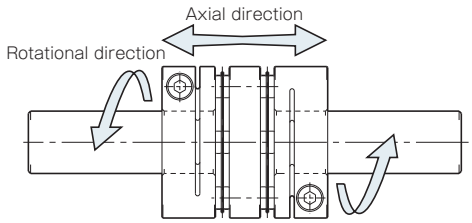
(3) Do not tighten up clamping bolts until after inserting the mounting shaft.

Mounting

(1) Check that coupling clamping bolts have been loosened and remove any rust, dust, oil residue, etc. from inner diameter surfaces of the shaft and couplings. In particular, never allow oil or grease containing antifriction or other agent (molybdenum-, silicon-, or fluorine-based), which would dramatically affect the friction coefficient, to contact the surface.

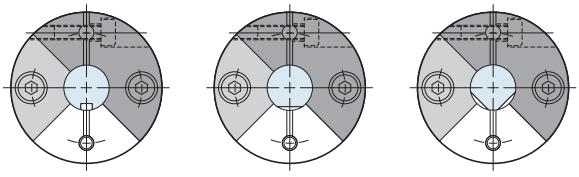
(2) Be careful when inserting the couplings into the shaft so as not to apply excessive force of compression or tensile force to the element. Be particularly careful not to apply excessive compressing force needlessly when inserting couplings into the paired shaft after attaching the couplings to the motor.

(3) With two of the clamping bolts loosened, make sure that couplings move gently along the axial and rotational directions. Readjust the centering of the two shafts if the couplings fail to move smoothly enough. This method is recommended as a way to easily check the concentricity of the left and right sides. If unable to use the same method, check the mounting accuracy using machine parts quality control procedures or an alternative method.

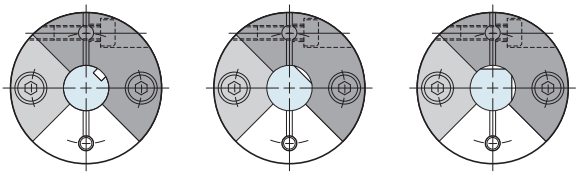


(4)As a general rule, round shafts are to be used for the paired mounting shaft. If needing to use a shaft with a different shape, be careful not to insert it into any of the locations indicated in the diagrams below. (Do not attempt to face keyways, D-shaped cuts, or other insertions to the grayed areas (□).) Placing the shaft in an undesirable location may cause the couplings to break or lead to a loss in shaft holding power. It is recommended that you use only round shafts to ensure full utilization of the entire range of coupling performance.

■ Proper Mounting Examples

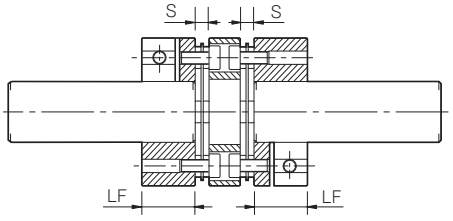


■ Poor Mounting Examples



※□ : Size 002/005, ■ : Size 010 or above

(5) Insert and mount each shaft far enough in that the paired mounting shaft touches the shaft along the entire length of the clamping hub of the coupling (LF dimension), as shown in the diagram below, and does not interfere with the elements, spacers or the other shaft.
In addition, restrict the dimensions between clamping hub faces (S dimensions in the diagram) within the allowable misalignment of the axial direction displacement with respect to a reference value. Note that the tolerance values were calculated based on the assumption that both the level of parallel misalignment and angular deflection are zero. Adjust to keep this value as low as possible.



Model	LF [mm]	S [mm]
SFC-002SA2/DA2	5.9	0.55
SFC-005SA2/DA2	7.85	1
SFC-010SA2/DA2	9.15	1.05
SFC-020SA2/DA2	10.75	1.65
SFC-025SA2/DA2	10.75	1.9
SFC-030SA2/DA2	12.4	2.5
SFC-035SA2/DA2	15.5	3
SFC-040SA2/DA2	15.5	3
SFC-050SA2/DA2	20.5	2.4
SFC-055SA2/DA2	24	2.6
SFC-060SA2/DA2	25.2	3.2
SFC-080SA2/DA2	30	8
SFC-090SA2/DA2	30	8.3
SFC-100SA2/DA2	30	9.8

(6) Check to make sure that no compression or tensile force is being applied along the axial direction before tightening up the two clamping bolts. Use a calibrated torque wrench to tighten the clamping bolts to within the tightening torque range listed below.

Model	Clamping bolts	Tightening torque [N·m]
SFC-002SA2/DA2	M1.6	0.23 ~ 0.28
SFC-005SA2/DA2	M2	0.4 ~ 0.5
SFC-010SA2/DA2	M2	0.4 ~ 0.5
SFC-010SA2/DA2	M2.5	1.0 ~ 1.1
SFC-020SA2/DA2	M2.5	1.0 ~ 1.1
SFC-025SA2/DA2	M2.5	1.0 ~ 1.1
SFC-030SA2/DA2	M3	1.5 ~ 1.9
SFC-035SA2/DA2	M4	3.4 ~ 4.1
SFC-040SA2/DA2	M4	3.4 ~ 4.1
SFC-050SA2/DA2	M5	7.0 ~ 8.5
SFC-055SA2/DA2	M6	14 ~ 15
SFC-060SA2/DA2	M6	14 ~ 15
SFC-080SA2/DA2	M8	27 ~ 30
SFC-090SA2/DA2	M8	27 ~ 30
SFC-100SA2/DA2	M8	27 ~ 30

* Use M2 bolts on SFC-010SA2/DA2 models with holes with a diameter of ø8 mm.
* The start and end numbers for the tightening torque ranges are between the minimum and maximum values. Tighten bolts to a tightening torque within the specified range for the model used.

SFC Models

Items Checked for Design Purposes

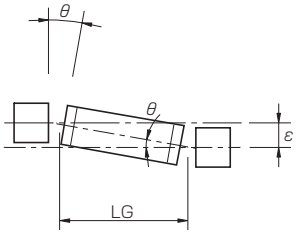
Suitable Torque Screwdriver/Torque Wrench

Nominal bolt diameter	Tightening torque [N·m]	Torque screwdriver/ wrench	Hexagon bit/ head	Coupling size
M1.6	0.23 ~ 0.28	CN30LTDK	CB 1.5mm	002
M2	0.4 ~ 0.5	CN60LTDK	SB 1.5mm	005・010
M2.5	1.0 ~ 1.1	CN120LTDK	SB 2mm	010・020・025
M3	1.5 ~ 1.9	CN200LTDK	SB 2.5mm	030
M4	3.4 ~ 4.1	CN500LTDK	SB 3mm	035・040
M5	7.0 ~ 8.5	N10LTDK	SB 4mm	050
M6	14 ~ 15	N25LCK	25HCK 5mm	055・060
M8	27 ~ 30	N50LCK	50HCK 6mm	080・090・100

* Torque screwdriver (wrench)/bit (head) models are those of Nakamura Mfg. Co., Ltd.

Length-specified Special Order Parts Option

Specify any length for the length-specified special order option for the SERVOFLEX SFC DA2. Use the following formula to calculate the amount of allowable parallel misalignment, adjust it to be no greater than that value, and then mount the coupling.



$$\varepsilon = \tan\theta \times LG$$

ε :Allowable parallel misalignment [mm]
θ :Allowable angular deflection [°]

$$LG = LP + S$$

LP : Total length of spacer [mm]
S : Gap size between clamping hub and spacer [mm]

Options for Keyway Milling

Options for keyway milling are available on request. However, because they are designed such that torque is tranferred to the friction coupling by the clamp mechanism, care should be taken not to exceed the coupling's permitted torque during use. Note also the following issues:

(1) Only ever use keys that are no wider than the keyway. Using keys that are a tight fit could results in damage during mounting or operation.

(2) The positional accuracy of keyway milling is visual. If positional accuracy relative to keyway hubs is required, contact Miki Pulley.

(3) Using Js9 class tolerances provides a tight fit, so couplings may be compressed when mounted on shafts. Take care not to further compress the couplings.

(4) Setting the fit of the key and keyway too loosely may result in play that generates dust. Also take care that the key does not come loose.

(5) Adding a set screw over the keyway is not recommended as it may lower clamp performance, and the set screw may also become loose within the torque range you use or during forward/reverse operation. It may also impair the structural strength of the clamping hub or damage the coupling.

Clamping Bolts

Use Miki Pulley-specified clamping bolts because they are processed with solid lubrication films (except for SFC-002 M1.6). Applying adhesives to prevent loosening, oil, or the like to a clamping bolt will alter torque coefficients due to those lubricating components, creating excessive axial forces and potentially damaging the clamping bolt or coupling. Consult Miki Pulley before using such products.

Surface Processing of Coupling Bore Diameter

The bore diameters of SERVOFLEX SFC models may or may not have surface processing in some components due to the circumstances of processing. This does not affect coupling performance. Consult Miki Pulley if your usage conditions require that bore diameters be surface processed or not.

Selection Order of Nominal Bore Diameters when Ordering

When specifying bore diameters, you should basically specify d1 (small diameter)-d2 (large diameter), and always specify d2 for taper adapters mounted on tapered shafts. However, where d1=d2 (same diameters), note the selection order below for each nominal bore diameter when ordering.

Nominal bore diameter symbol	Nominal bore diameter symbol description	Type	Selection diameter	Selection order
B	Shaft tolerance h7 (h6, g6)	Standard	d1・d2	1
J	Shaft tolerance j6	Option	d1・d2	2
K	Shaft tolerance k6	Option	d1・d2	3
BH	Shaft tolerance h7 (h6, g6) + keyway H9	Option	d1・d2	4
BJ	Shaft tolerance h7 (h6, g6) + keyway Js9	Option	d1・d2	5
JH	Shaft tolerance j6 + keyway H9	Option	d1・d2	6
JJ	Shaft tolerance j6 + keyway Js9	Option	d1・d2	7
KH	Shaft tolerance k6 + keyway H9	Option	d1・d2	8
KJ	Shaft tolerance k6 + keyway Js9	Option	d1・d2	9
BC	Taper adapter mounted on tapered shaft	Option	d2	10

Points to Consider Regarding the Feed Screw System

■ Servo motor oscillation

Gain adjustment on the servo motor may cause the servo motor to oscillate.
Oscillation in the servo motor during operation can cause problems particularly with the overall natural frequency and electrical control systems of the feed screw system.
In order for these issues to be resolved, the torsional stiffness for the coupling and feed screw section and the moment of inertia and other characteristics for the system overall will need to be adjusted and the torsional natural frequency for the mechanical system raised or the tuning function (filter function) for the electrical control system in the servo motor adjusted during the design stage.

■ Stepper motor resonance

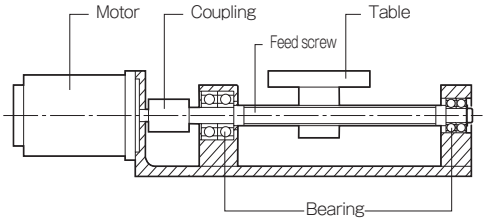
Stepper motors resonate at certain rotation speeds due to the pulsation frequency of the stepper motor and the torsional natural frequency of the system as a whole. To avoid resonance, either the resonant rotation speed must be simply skipped or the torsional natural frequency considered at the design stage.

Please contact Miki Pulley with any questions regarding stepper motor resonance or servo motor oscillation.

How to Find the Natural Frequency of a Feed Screw System

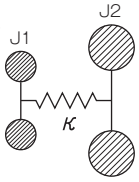
(1) Select a coupling based on the nominal and maximum torque of the servo motor or stepper motor.

(2) Find the overall natural frequency, Nf, from the torsional stiffness of the coupling and feed screw, κ , the moment of inertia of driving side, J1, and the moment of inertia of driven side, J2, for the feed screw system shown below.



$$Nf = \frac{1}{2\pi}\sqrt{\kappa\left(\frac{1}{J1}+\frac{1}{J2}\right)}$$

Nf: Overall natural frequency of a feed screw system [Hz]
κ : Torsional stiffness of the coupling and feed screw [N·m/rad]
J1: Moment of inertia of driving side [kg·m²]
J2: Moment of inertia of driven side [kg·m²]



Selection Procedures

(1) Find the torque, Ta, applied to the coupling using the output capacity, P, of the driver and the usage rotation speed, n.

$$Ta\ [N\cdot m] = 9550 \times \frac{P\ [kW]}{n\ [min^{-1}]}$$

(2) Determine the factor K from the load properties, and find the corrected torque, Td, applied to the coupling.

$$Td\ [N\cdot m] = Ta\ [N\cdot m] \times K \text{(Refer to the table below for values)}$$

Load properties	Constant	Vibrations: Small	Vibrations: Medium	Vibrations: Large
K	1.0	1.25	1.75	2.25

For servo motor drive, multiply the maximum torque, Ts, by the usage factor K = 1.2 to 1.5.

$$Td\ [N\cdot m] = Ts\ [N\cdot m] \times (1.2 \sim 1.5)$$

(3) Set the size so that the rated coupling torque, Tn, is higher than the corrected torque, Td.

$$Tn\ [N\cdot m] \geqq Td\ [N\cdot m]$$

(4) The rated torque of the coupling may be limited by the bore diameter of the coupling. See the Specifications and Standard Bore Diameters tables.

(5) Check that the mount shaft is no larger than the maximum bore diameter of the coupling.

*Contact Miki Pulley for assistance with any device experiencing extreme periodic vibrations.

Easy Selection Chart

Select a coupling size based on the rated output and the rated/maximum torque of the ordinary servo motor. The torque characteristics of servo motors vary between manufacturers, so check the specifications in the manufacturer catalog before finalizing a coupling size selection.

Servo motor specifications					Corresponding SERVOFLEX type specifications				
Rated output [W] [kW]	Rated rotation speed [min⁻¹]	Rated torque [N·m]	Max. torque [N·m]	Shaft diameter [mm]	Single element type	Double element type	Rated torque [N·m]	Max. bore diameter [mm]	Outer diameter [mm]
3W	3000 ~ 6000	0.0096	0.029	4	SFC-002SA2	SFC-002DA2	0.25	5	12
5W	3000 ~ 6000	0.016	0.048	5	SFC-002SA2	SFC-002DA2	0.25	5	12
10W	3000 ~ 6000	0.032	0.096	6	SFC-005SA2	SFC-005DA2	0.6	6	16
15W	3000 ~ 6000	0.047	0.143	4	SFC-002SA2	SFC-002DA2	0.25	5	12
20W	3000 ~ 6000	0.0638	0.191	6	SFC-005SA2	SFC-005DA2	0.6	6	16
30W	3000 ~ 6000	0.098	0.322	8	SFC-010SA2	SFC-010DA2	1	8	19
50W	3000 ~ 6000	0.16	0.64	8	SFC-010SA2	SFC-010DA2	1	8	19
100W	3000 ~ 6000	0.32	1.28	8	SFC-020SA2	SFC-020DA2	2	11	26
150W	3000 ~ 6000	0.477	1.67	8	SFC-025SA2	SFC-025DA2	4	14	29
200W	3000 ~ 6000	0.64	2.23	14	SFC-025SA2	SFC-025DA2	4	14	29
300W	3000 ~ 6000	0.95	3.72	14	SFC-030SA2	SFC-030DA2	5	16	34
400W	3000 ~ 6000	1.3	5	14	SFC-035SA2	SFC-035DA2	10	19	39
450W	1500	2.86	8.92	19	SFC-040SA2	SFC-040DA2	12	24	44
500W	2000	2.4	7.2	24	SFC-040SA2	SFC-040DA2	12	24	44
600W	3000 ~ 6000	1.91	5.73	19	SFC-035SA2	SFC-035DA2	10	19	39
750W	3000 ~ 6000	2.387	9	19	SFC-040SA2	SFC-040DA2	12	24	44
750W	2000	3.6	10.7	22	SFC-050SA2	SFC-050DA2	25	30	56
850W	1500	5.39	13.8	19	SFC-050SA2	SFC-050DA2	25	30	56
1kW	3000 ~ 6000	3.18	12.5	24	SFC-050SA2	SFC-050DA2	25	30	56
1kW	2000	5	16.6	24	SFC-050SA2	SFC-050DA2	25	30	56
1.5kW	2000	7.5	21.6	35	SFC-060SA2	SFC-060DA2	60	35	68
2kW	3000 ~ 6000	6.8	21	24	SFC-055SA2	SFC-055DA2	40	30	63
2kW	2000	9.54	31	35	SFC-060SA2	SFC-060DA2	60	35	68
2.2kW	2000	10.5	36.7	28	SFC-060SA2	SFC-060DA2	60	35	68
2.5kW	3000 ~ 6000	12	46	24	SFC-060SA2	SFC-060DA2	60	35	68
3kW	3000 ~ 6000	12	35	28	SFC-060SA2	SFC-060DA2	60	35	68
3kW	2000	14.3	42.9	35	SFC-060SA2	SFC-060DA2	60	35	68
3.5kW	3000 ~ 6000	11.1	33.4	28	SFC-060SA2	SFC-060DA2	60	35	68
3.5kW	2000	17	55	35	SFC-080SA2	SFC-080DA2	100	40	82
4kW	3000 ~ 6000	22	39.2	28	SFC-060SA2	SFC-060DA2	60	35	68
4kW	2000	19.1	66.9	35	SFC-080SA2	SFC-080DA2	100	40	82
4.5kW	1500	28.5	105	35	SFC-090SA2	SFC-090DA2	180	45	94
5kW	3000 ~ 6000	15.9	47.6	28	SFC-080SA2	SFC-080DA2	100	40	82
5kW	2000	23.9	71.6	35	SFC-080SA2	SFC-080DA2	100	40	82
6kW	2000	38	130	35	SFC-090SA2	SFC-090DA2	180	45	94
7kW	1500	44.6	134	42	SFC-090SA2	SFC-090DA2	180	45	94
7.5kW	1500	48	139	42	SFC-100SA2	SFC-100DA2	250	45	104
9kW	3000 ~ 6000	28.6	85	35	SFC-090SA2	SFC-090DA2	180	45	94
11kW	2000	52.5	158	42	SFC-100SA2	SFC-100DA2	250	45	104