

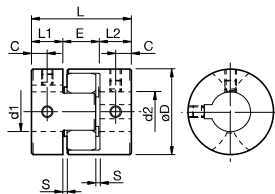
■ Specification

Model	Torque		Max. permissible misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Radial displacement [N/mm]	Moment of inertia [kg·m ²]	Mass [kg]	Standard bore processed item price	Pilot bore item price
	Normal [N·m]	Max. [N·m]	Parallel offset [mm]	Angular misalignment [°]	Axial displacement [mm]							
ALS-014-R	2	4	0.10	1	0 to + 0.6	34100	21	380	1.91 x 10 ⁻⁷	0.007	-	-
ALS-020-R	5	10	0.10	1	0 to + 0.8	23800	43	400	1.08 x 10 ⁻⁶	0.018	-	-
ALS-030-R	12.5	25	0.10	1	0 to + 1.0	15900	136	650	6.25 x 10 ⁻⁶	0.047	-	-
ALS-040-R	17	34	0.10	1	0 to + 1.2	11900	1550	1700	3.87 x 10 ⁻⁵	0.15	-	-
ALS-055-R	60	120	0.10	1	0 to + 1.4	8700	2000	1350	1.66 x 10 ⁻⁴	0.35	-	-
ALS-065-R	160	320	0.10	1	0 to + 1.5	7400	3100	1400	3.57 x 10 ⁻⁴	0.51	-	-
ALS-080-R	325	650	0.10	1	0 to + 1.8	6000	6000	1710	1.06 x 10 ⁻³	1.01	-	-
ALS-095-R	450	900	0.10	1	-0.5 to + 2.0	5000	10000	4200	2.24 x 10 ⁻³	1.50	-	-
ALS-105-R	525	1050	0.15	1	-0.9 to + 2.0	4500	12000	5000	3.72 x 10 ⁻³	2.05	-	-

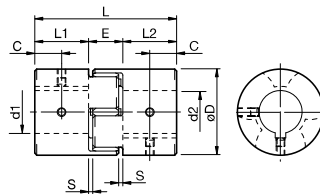
- * The spring constant values are measured at 20°C.
- * The indicated values in the moment of inertia and mass are measured with the maximum bore diameter.
- * Dynamic balance is not considered for the maximum rotation speed.
- * Negative axial displacements of ALS-014 to 080-R are not allowed.

■ Dimensions

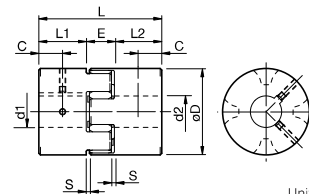
■ALS-014 to 030



■ALS-040



■ALS-055 to 105



Unit [mm]

Model	d1-d2			D	L	L1-L2	E	S	C	CAD file No.
	Pilot bore	Min.	Max.							
ALS-014-R	3	3	6.5	14	22	7	8	1	3.5	ALS-HH1
ALS-020-R	4	4	9.6	20	30	10	10	1	5	ALS-HH2
ALS-030-R	5	6	14	30	35	11	13	1.5	5.5	ALS-HH3
ALS-040-R	5	8	22	40	66	25	16	2	12.5	ALS-HH4
ALS-055-R	5	10	28	55	78	30	18	2	15	ALS-HH5
ALS-065-R	5	14	38	65	90	35	20	2.5	17.5	ALS-HH6
ALS-080-R	10	19	45	80	114	45	24	3	22.5	ALS-HH7
ALS-095-R	8	19	55	95	126	50	26	3	25	-
ALS-105-R	10	19	60	105	140	56	28	3.5	28	-

* Pilot bore indicates center processing.

■ Standard bore diameter

Model	Standard bore diameter d1-d2 [mm]																													
	3	4	5	6	6.35	8	9	9.525	10	11	12	14	15	16	18	19	20	24	25	28	30	32	35	38	40	42	45	50	55	60
ALS-014-R	*	*	*	*	*																									
ALS-020-R			*	*	*	*	*	*																						
ALS-030-R						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALS-040-R									*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALS-055-R												*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALS-065-R																		*	*	*	*	*	*	*	*	*	*	*	*	*
ALS-080-R																					*	*	*	*	*	*	*	*	*	*
ALS-095-R																					*	*	*	*	*	*	*	*	*	*
ALS-105-R																					*	*	*	*	*	*	*	*	*	*

- * The bore diameters with * are supported as standard bore diameters.
- * Processing with the no keyway is available for ø11 or smaller, and processing for the former JIS, new JIS, and new standard motor is available for ø12 or larger.
- * New JIS and processing compatible to new standard motor are set as the only standards for the bore diameters of ALS-095 and 105.

Ordering Information

ALS - 055 - R - 24N - 28H

Size: 055
 Element type: R: Hardness 97 JIS A tight fit
 Bore dia.: d1-d2
 Blank: Pilot bore item
 Bore specification: Blank: Previous edition
 JIS (Class 2) compliance
 H: New JIS compliance
 N: New standard motor compliance

Coupling ALS-Y Model



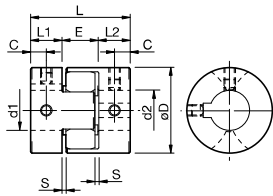
Specification

Model	Torque		Max. permissible misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Radial displacement [N/mm]	Moment of inertia [kg·m ²]	Mass [kg]	Standard bore processed item price	Pilot bore item price
	Normal [N·m]	Max. [N·m]	Parallel offset [mm]	Angular misalignment [°]	Axial displacement [mm]							
ALS-014-Y	1.2	2.4	0.10	1	0 to + 0.6	34100	12	200	1.91 x 10 ⁻⁷	0.007	-	-
ALS-020-Y	3	6	0.15	1	0 to + 0.8	23800	24	210	1.08 x 10 ⁻⁶	0.018	-	-
ALS-030-Y	7.5	15	0.15	1	0 to + 1.0	15900	73	330	6.25 x 10 ⁻⁶	0.047	-	-
ALS-040-Y	10	20	0.10	1	0 to + 1.2	11900	760	940	3.87 x 10 ⁻⁵	0.15	-	-
ALS-055-Y	35	70	0.15	1	0 to + 1.4	8700	1400	1160	1.66 x 10 ⁻⁴	0.35	-	-
ALS-065-Y	95	190	0.15	1	0 to + 1.5	7400	2100	1200	3.57 x 10 ⁻⁴	0.51	-	-
ALS-080-Y	190	380	0.15	1	0 to + 1.8	6000	4000	1430	1.06 x 10 ⁻³	1.01	-	-
ALS-095-Y	265	530	0.15	1	-0.5 to + 2.0	5000	6000	2400	2.24 x 10 ⁻³	1.50	-	-
ALS-105-Y	310	620	0.20	1	-0.9 to + 2.0	4500	7000	4000	3.72 x 10 ⁻³	2.05	-	-

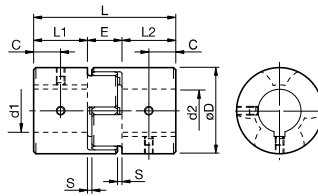
* The spring constant values are measured at 20°C.
 * The indicated values in the moment of inertia and mass are measured with the maximum bore diameter.
 * Dynamic balance is not considered for the maximum rotation speed.
 * Negative axial displacements of ALS-014 to 080-Y are not allowed.

Dimensions

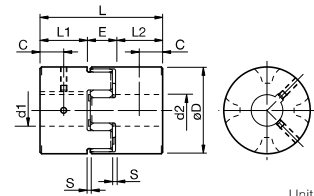
■ ALS-014 to 030



■ ALS-040



■ ALS-055 to 105



Unit [mm]

Model	d1-d2			D	L	L1-L2	E	S	C	CAD file No.
	Pilot bore	Min.	Max.							
ALS-014-Y	3	3	6.5	14	22	7	8	1	3.5	ALS-HH1
ALS-020-Y	4	4	9.6	20	30	10	10	1	5	ALS-HH2
ALS-030-Y	5	6	14	30	35	11	13	1.5	5.5	ALS-HH3
ALS-040-Y	5	8	22	40	66	25	16	2	12.5	ALS-HH4
ALS-055-Y	5	10	28	55	78	30	18	2	15	ALS-HH5
ALS-065-Y	5	14	38	65	90	35	20	2.5	17.5	ALS-HH6
ALS-080-Y	10	19	45	80	114	45	24	3	22.5	ALS-HH7
ALS-095-Y	8	19	55	95	126	50	26	3	25	-
ALS-105-Y	10	19	60	105	140	56	28	3.5	28	-

* Pilot bore indicates center processing.

Standard bore diameter

Model	Standard bore diameter d1-d2 [mm]																													
	3	4	5	6	6.35	8	9	9.525	10	11	12	14	15	16	18	19	20	24	25	28	30	32	35	38	40	42	45	50	55	60
ALS-014-Y	+	+	+	+	+																									
ALS-020-Y			+	+	+																									
ALS-030-Y						+	+	+			+	+	+																	
ALS-040-Y											+	+	+	+	+															
ALS-055-Y																		+	+	+	+									
ALS-065-Y																		+	+	+	+	+								
ALS-080-Y																					+	+	+	+	+	+	+	+		
ALS-095-Y																						+	+	+	+	+	+	+	+	+
ALS-105-Y																								+	+	+	+	+	+	+

* The bore diameters with + are supported as standard bore diameters.
 * Processing with no keyway is available for ø11 or smaller, and processing for the former JIS, new JIS, and new standard motor is available for ø12 or larger.
 * New JIS and processing compatible to new standard motor are set as the only standards for the bore diameters of ALS-095 and 105.

Ordering Information

ALS - 055 - Y - 24N - 28H

Size: 055
 Element type: Y: Hardness 97 JIS A tight fit
 Bore dia.: d1-d2
 Blank: Pilot bore item
 Bore specification: Blank: Previous edition, JIS (Class 2) compliance, H: New JIS compliance, N: New standard motor compliance

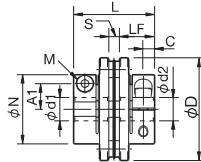
■ Specification

Model	Permissible torque [N·m]	Max. permissible misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Radial displacement [N/mm]	Shape TYPE	Moment of inertia [kg·m ²]	Mass [kg]	Price
		Parallel offset [mm]	Angular misalignment [°]	Axial displacement [mm]							
SFC-005SA2	0.6	0.02	0.5	±0.05	10000	500	140	C	0.25×10 ⁻⁶	0.007	-
SFC-010SA2	1.0	0.02	1	±0.1	10000	1400	140	C	0.58×10 ⁻⁶	0.011	-
SFC-020SA2	2.0	0.02	1	±0.15	10000	3700	64	C	2.36×10 ⁻⁶	0.025	-
SFC-030SA2	5.0	0.02	1	±0.2	10000	8000	64	A	4.00×10 ⁻⁶	0.033	-
								B	6.06×10 ⁻⁶	0.041	-
								C	8.12×10 ⁻⁶	0.049	-
SFC-035SA2	8.0	0.02	1	±0.25	10000	18000	112	C	18.43×10 ⁻⁶	0.084	-
SFC-040SA2	10	0.02	1	±0.3	10000	20000	80	A	16.42×10 ⁻⁶	0.076	-
								B	22.98×10 ⁻⁶	0.090	-
								C	29.53×10 ⁻⁶	0.105	-
SFC-050SA2	25	0.02	1	±0.4	10000	32000	48	A	54.88×10 ⁻⁶	0.156	-
								B	77.10×10 ⁻⁶	0.185	-
								C	99.33×10 ⁻⁶	0.214	-
SFC-060SA2	60	0.02	1	±0.45	10000	70000	76.4	A	143.7×10 ⁻⁶	0.279	-
								B	206.1×10 ⁻⁶	0.337	-
								C	268.5×10 ⁻⁶	0.396	-
SFC-080SA2	100	0.02	1	±0.55	10000	140000	128	C	709.3×10 ⁻⁶	0.727	-
SFC-090SA2	180	0.02	1	±0.65	10000	100000	108	C	1227×10 ⁻⁶	0.959	-
SFC-100SA2	250	0.02	1	±0.74	10000	120000	111	C	1858×10 ⁻⁶	1.181	-

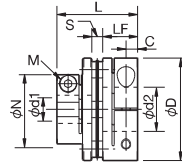
* The indicated values in the moment of inertia and mass are measured with the maximum bore diameter.
 * The torsional stiffness indicates the actual measurement value of element.

■ Dimensions

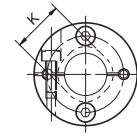
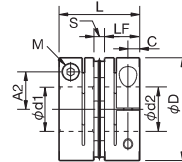
■ TYPE A



■ TYPE B



■ TYPE C



Unit [mm]

Model	d1*1		d2*1		D	N	L	LF	S	A1	A2	C	K	M	Tightening torque [N·m]	Shape TYPE	CAD file No.		
	Min.	Max.	Min.	Max.															
SFC-005SA2	4	6	4	6	16	-	16.7	7.85	1.0	-	4.8	2.5	6.5	2-M2	0.4 to 0.5	C	C005S2B1		
SFC-010SA2	4	8	4	8	19	-	19.35	9.15	1.05	-	5.8*2	3.15	8.5	2-M2.5*3	1.0 to 1.1*3	C	C010S2B1		
SFC-020SA2	5	10	5	10	26	-	23.15	10.75	1.65	-	9.5	3.3	10.6	2-M2.5	1.0 to 1.1	C	C020S2B1		
	5	10	5	10	34	21.6	27.3	12.4	2.5	8	-	3.75	14.5	2-M3	1.5 to 1.9	A	C030S2B1		
SFC-030SA2	5	10	Over10	14		-				8	12.5							B	C030S2B2
	Over 10	14	Over10	14		-				12.5	C								
SFC-035SA2	8	16	8	16	39	-	34.0	15.5	3.0	-		14.0	4.5	17	2-M4	3.4 to 4.1	C	C035S2B1	
SFC-040SA2	8	15	8	15	44	29.6	34.0	15.5	3.0	11	-	4.5	19.5	2-M4	3.4 to 4.1	A	C040S2B1		
	8	15	Over 15	19		11				17.0	B							C040S2B2	
	Over 15	19	Over 15	19		-				17.0									C
SFC-050SA2	10	19	10	19	56	38	43.4	20.5	2.4	14.5	-	6	26	2-M5	7.0 to 8.5	A	C050S2B1		
	10	19	Over 19	25		14.5				22.0	B							C050S2B2	
	Over 19	25	Over 19	25		-				22.0									C
SFC-060SA2	12	24	12	24	68	46	53.6	25.2	3.2	17.5	-	7.75	31	2-M6	14 to 15	A	C060S2B1		
	12	24	Over 24	30		17.5				26.5	B							C060S2B2	
	Over 24	30	Over 24	30		-				26.5									C
SFC-080SA2	20	35	20	35	82	-	68	30	8	-	28	9	38	2-M8	27 to 30	C	C080S2B1		
SFC-090SA2	25	40	25	40	94	-	68.3	30	8.3	-	34	9	42	2-M8	27 to 30	C	C090S2B1		
SFC-100SA2	35	45	35	45	104	-	69.8	30	9.8	-	39	9	48	2-M8	27 to 30	C	C100S2B1		

*1 The torque permitted could be limited depending on the bore diameter. Refer to the "Standard bore diameter" on page15.
 *2 indicates the value when d1 or d2 is φ4 to φ7. It will be 0.6 if d1 or d2 is φ8.
 *3 indicates the value when d1 or d2 is φ4 to φ7. It will be M2 if d1 or d2 is φ8. The tightening torque of M2 is 0.4 to 0.5N·m.
 * The dimensional tolerance of the target shaft is h7. However, for a shaft diameter of φ35, the tolerance is $\frac{-0.012}{-0.025}$. Contact us for tolerances other than h7.

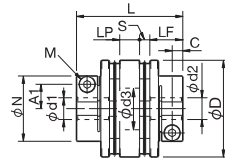
■ Specification

Model	Permissible torque [N·m]	Max. permissible misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Radial displacement [N/mm]	Shape TYPE	Moment of inertia [kg·m ²]	Mass [kg]	Price
		Parallel offset [mm]	Angular misalignment [°]	Axial displacement [mm]							
SFC-005DA2	0.6	0.05	0.5 (one side)	±0.1	10000	250	70	C	0.36×10 ⁻⁶	0.010	-
SFC-010DA2	1.0	0.11	1 (one side)	±0.2	10000	700	70	C	0.79×10 ⁻⁶	0.015	-
SFC-020DA2	2.0	0.15	1 (one side)	±0.33	10000	1850	32	C	3.40×10 ⁻⁶	0.035	-
SFC-030DA2	5.0	0.18	1 (one side)	±0.4	10000	4000	32	A	7.33×10 ⁻⁶	0.053	-
								B	9.39×10 ⁻⁶	0.061	-
								C	11.45×10 ⁻⁶	0.069	-
SFC-035DA2	8.0	0.24	1 (one side)	±0.5	10000	9000	56	C	26.78×10 ⁻⁶	0.123	-
SFC-040DA2	10	0.24	1 (one side)	±0.6	10000	10000	40	A	29.49×10 ⁻⁶	0.122	-
								B	36.05×10 ⁻⁶	0.136	-
								C	42.61×10 ⁻⁶	0.151	-
SFC-050DA2	25	0.28	1 (one side)	±0.8	10000	16000	24	A	96.94×10 ⁻⁶	0.246	-
								B	119.2×10 ⁻⁶	0.275	-
								C	141.4×10 ⁻⁶	0.304	-
SFC-060DA2	60	0.34	1 (one side)	±0.9	10000	35000	38.2	A	252.4×10 ⁻⁶	0.440	-
								B	314.8×10 ⁻⁶	0.498	-
								C	377.3×10 ⁻⁶	0.556	-
SFC-080DA2	100	0.52	1 (one side)	±1.10	10000	70000	64	C	1034×10 ⁻⁶	1.051	-
SFC-090DA2	180	0.52	1 (one side)	±1.30	10000	50000	54	C	1776×10 ⁻⁶	1.373	-
SFC-100DA2	250	0.52	1 (one side)	±1.48	10000	60000	55.5	C	2704×10 ⁻⁶	1.707	-

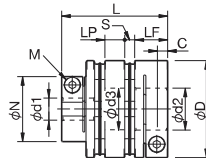
* The indicated values in the moment of inertia and mass are measured with the maximum bore diameter.
* The torsional stiffness indicates the actual measurement value of element.

■ Dimensions

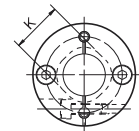
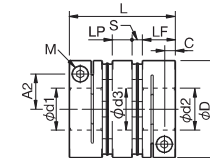
■ TYPE A



■ TYPE B



■ TYPE C



Unit [mm]

Model	d1 ^{*1}		d2 ^{*1}		D	N	L	LF	LP	S	A1	A2	C	d3	K	M	Tightening torque [N·m]	Shape TYPE	CAD file No.		
	Min.	Max.	Min.	Max.																	
SFC-005DA2	4	6	4	6	16	-	23.2	7.85	5.5	1.0	-	4.8	2.5	6.5	6.5	2-M2	0.4 to 0.5	C	C005D2B1		
SFC-010DA2	4	8	4	8	19	-	25.9	9.15	5.5	1.05	-	5.8 ^{*2}	3.15	8.5	8.5	2-M2.5 ^{*3}	1.0 to 1.1 ^{*3}	C	C010D2B1		
SFC-020DA2	5	10	5	10	26	-	32.3	10.75	7.5	1.65	-	9.5	3.3	10.6	10.6	2-M2.5	1.0 to 1.1	C	C020D2B1		
	5	10	5	10	34	21.6	37.8	12.4	8	2.5	8	12.5	3.75	15	14.5	2-M3	1.5 to 1.9	A	C030D2B1		
SFC-030DA2	5	10	Over 10	14	34	-	37.8	12.4	8	2.5	8	12.5	3.75	15	14.5	2-M3	1.5 to 1.9	B	C030D2B2		
	Over 10	14	Over 10	14														-	12.5	C	C030D2B3
	Over 10	14	Over 10	14														-	12.5	B	C030D2B3
SFC-035DA2	8	16	8	16	39	-	48	15.5	11	3	-	14.0	4.5	17	17	2-M4	3.4 to 4.1	C	C035D2B1		
SFC-040DA2	8	15	8	15	44	29.6	48	15.5	11	3	11	17.0	4.5	20	19.5	2-M4	3.4 to 4.1	A	C040D2B1		
	8	15	Over 15	19														-	17.0	B	C040D2B2
	Over 15	19	Over 15	19														-	17.0	C	C040D2B3
SFC-050DA2	10	19	10	19	56	38	59.8	20.5	14	2.4	14.5	22.0	6	26	26	2-M5	7.0 to 8.5	A	C050D2B1		
	10	19	Over 19	25														-	22.0	B	C050D2B2
	Over 19	25	Over 19	25														-	22.0	C	C050D2B3
SFC-060DA2	12	24	12	24	68	46	73.3	25.2	16.5	3.2	17.5	26.5	7.75	31	31	2-M6	14 to 15	A	C060D2B1		
	12	24	Over 24	30														-	26.5	B	C060D2B2
	Over 24	30	Over 24	30														-	26.5	C	C060D2B3
SFC-080DA2	20	35	20	35	82	-	98	30	22	8	-	28	9	40	38	2-M8	27 to 30	C	C080D2B1		
SFC-090DA2	25	40	25	40	94	-	98.6	30	22	8.3	-	34	9	47	42	2-M8	27 to 30	C	C090D2B1		
SFC-100DA2	35	45	35	45	104	-	101.6	30	22	9.8	-	39	9	50	48	2-M8	27 to 30	C	C100D2B1		

*1 Permissible torque could be limited depending on the bore diameter. Refer to the "Standard bore diameter" on page 17.

*2 indicates the value when d1 or d2 is ø4 to ø7. It will be 6.0 if d1 or d2 is ø8.

*3 indicates the value when d1 or d2 is ø4 to ø7. It will be M2 if d1 or d2 is ø8. The tightening torque of M2 is 0.4 to 0.5N·m.

* The dimensional tolerance of the target shaft is h7. However, for a shaft diameter of ø35, the tolerance is ^{h7}±0.005. Contact us for tolerances other than h7.