

SPRFLEX AL - Datasheet

Specifications

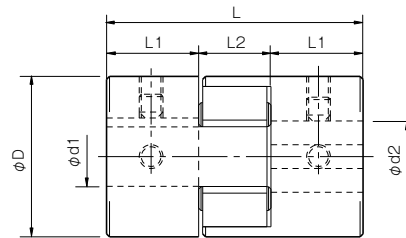
Model	Torque		Misalignment			Max. rotation speed [min ⁻¹]	Moment of inertia [kg·m ²]	Mass [kg]
	Nominal [N·m]	Max. [N·m]	Parallel [mm]	Angular [°]	Axial [mm]			
AL-035	0.5	1.5	0.1	0.5	+0.3	18000	0.38 × 10 ⁻⁶	0.01
AL-050	1.5	4.5	0.2	1.0	± 0.5	12000	5.10 × 10 ⁻⁶	0.06
AL-070	3	9	0.2	1.0	± 0.5	9000	1.79 × 10 ⁻⁵	0.12
AL-075	5	15	0.2	1.0	± 0.5	7000	5.36 × 10 ⁻⁵	0.21
AL-090	8	24	0.3	1.0	± 0.5	6000	1.15 × 10 ⁻⁴	0.31
AL-095	10	30	0.3	1.0	± 0.5	6000	1.40 × 10 ⁻⁴	0.36
AL-100	25	75	0.3	1.0	± 0.7	5000	4.34 × 10 ⁻⁴	0.78
AL-110	50	150	0.3	1.0	± 0.7	4000	1.43 × 10 ⁻³	1.56

• Higher rpm possible with balancing.
 • The moment of inertia and mass are specified for the pilot bore.

Dimensions (Couplings)

Model	Unit [mm]					
	d1 - d2		D	L	L1	L2
	Min.	Max.				
AL-035	4	8	16.1	20.5	6.5	7.5 ^{*1}
AL-050	6	16	27	43.2	15.5	12.2
AL-070	6	20	35	49.2	18.5	12.2
AL-075	7	26	45	54.4	21.0	12.4
AL-090	9	28	54	55.0	21.0	13.0
AL-095	9	28	55	61.0	24.0	13.0
AL-100	11	36	66	88.0	35.0	18.0
AL-110	11	48	85	110.0	44.0	22.0

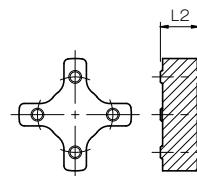
• Minimums and maximums for d1 and d2 are values at the Miki Pulley standard hole-drillings.
 • The value marked *1 leaves a 1 mm space for the thickness of the spider body.



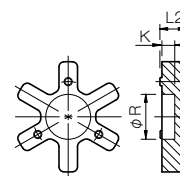
Dimensions (Spider)

Couplings model	Spider model	Unit [mm]		
		L2	R	K
AL-035	L-035	6.5	—	—
AL-050	L-050	12.2	—	—
AL-070	L-070	12.2	—	—
AL-075	L-075	12.4	20	6.0
AL-090	L-090/095	13.0	22	6.3
AL-095	L-090/095	13.0	22	6.3
AL-100	L-100	18.0	26	6.0
AL-110	L-110	22.0	30	6.0

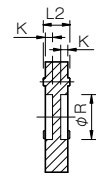
■ L-035 - 070



■ L-075 - 095

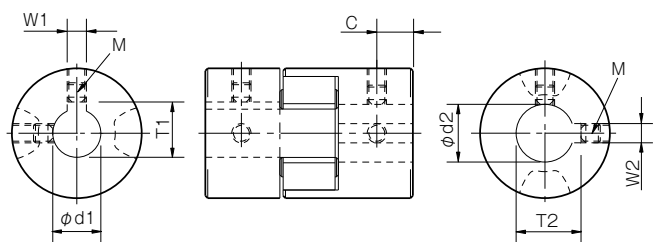


■ L-100 - 110

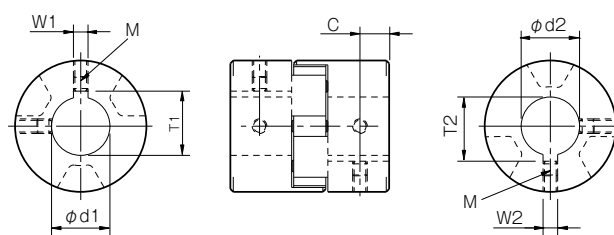


Standard Hole-Drillings

AL-035 to 070



AL-075 to 110



Unit [mm]

Models compliant with the old JIS standard (class 2) JIS B 1301 1959					Models compliant with the new JIS standard (H9) JIS B 1301 1996					Models compliant with the motor standard JIS C 4210 2001				
Nominal bore diameter	Bore diameter [d1 · d2]	Keyway width [W1 · W2]	Keyway height [T1 · T2]	Set screw hole [M]	Nominal bore diameter	Bore diameter [d1 · d2]	Keyway width [W1 · W2]	Keyway height [T1 · T2]	Set screw hole [M]	Nominal bore diameter	Bore diameter [d1 · d2]	Keyway width [W1 · W2]	Keyway height [T1 · T2]	Set screw hole [M]
	Tolerance H7, H8	Tolerance E9	—	—		Tolerance H7	Tolerance H9	—	—		Tolerance G7, F7	Tolerance H9	—	—
6	6 ^{+0.018} ₀	—	—	2-M4	6H	6 ^{+0.018} ₀	—	—	2-M4	—	—	—	—	—
7	7 ^{+0.022} ₀	—	—	2-M4	7H	7 ^{+0.022} ₀	—	—	2-M4	—	—	—	—	—
8	8 ^{+0.022} ₀	—	—	2-M4	8H	8 ^{+0.022} ₀	—	—	2-M4	—	—	—	—	—
9	9 ^{+0.022} ₀	—	—	2-M4	9H	9 ^{+0.022} ₀	—	—	2-M4	—	—	—	—	—
10	10 ^{+0.022} ₀	—	—	2-M4	10H	10 ^{+0.022} ₀	—	—	2-M4	—	—	—	—	—
11	11 ^{+0.018} ₀	—	—	2-M4	11H	11 ^{+0.018} ₀	—	—	2-M4	—	—	—	—	—
12	12 ^{+0.018} ₀	4 ^{+0.050} _{+0.020}	13.5 ^{+0.3} ₀	2-M4	12H	12 ^{+0.018} ₀	4 ^{+0.030} ₀	13.8 ^{+0.3} ₀	2-M4	—	—	—	—	—
14	14 ^{+0.018} ₀	5 ^{+0.050} _{+0.020}	16.0 ^{+0.3} ₀	2-M4	14H	14 ^{+0.018} ₀	5 ^{+0.030} ₀	16.3 ^{+0.3} ₀	2-M4	14N	14 ^{+0.024} _{+0.006}	5 ^{+0.030} ₀	16.3 ^{+0.3} ₀	2-M4
15	15 ^{+0.018} ₀	5 ^{+0.050} _{+0.020}	17.0 ^{+0.3} ₀	2-M4	15H	15 ^{+0.018} ₀	5 ^{+0.030} ₀	17.3 ^{+0.3} ₀	2-M4	—	—	—	—	—
16	16 ^{+0.018} ₀	5 ^{+0.050} _{+0.020}	18.0 ^{+0.3} ₀	2-M4	16H	16 ^{+0.018} ₀	5 ^{+0.030} ₀	18.3 ^{+0.3} ₀	2-M4	—	—	—	—	—
17	17 ^{+0.018} ₀	5 ^{+0.050} _{+0.020}	19.0 ^{+0.3} ₀	2-M4	17H	17 ^{+0.018} ₀	5 ^{+0.030} ₀	19.3 ^{+0.3} ₀	2-M4	—	—	—	—	—
18	18 ^{+0.018} ₀	5 ^{+0.050} _{+0.020}	20.0 ^{+0.3} ₀	2-M4	18H	18 ^{+0.018} ₀	6 ^{+0.030} ₀	20.8 ^{+0.3} ₀	2-M5	—	—	—	—	—
19	19 ^{+0.021} ₀	5 ^{+0.050} _{+0.020}	21.0 ^{+0.3} ₀	2-M4	19H	19 ^{+0.021} ₀	6 ^{+0.030} ₀	21.8 ^{+0.3} ₀	2-M5	19N	19 ^{+0.028} _{+0.007}	6 ^{+0.030} ₀	21.8 ^{+0.3} ₀	2-M5
20	20 ^{+0.021} ₀	5 ^{+0.050} _{+0.020}	22.0 ^{+0.3} ₀	2-M4	20H	20 ^{+0.021} ₀	6 ^{+0.030} ₀	22.8 ^{+0.3} ₀	2-M5	—	—	—	—	—
22	22 ^{+0.021} ₀	7 ^{+0.061} _{+0.025}	25.0 ^{+0.3} ₀	2-M6	22H	22 ^{+0.021} ₀	6 ^{+0.030} ₀	24.8 ^{+0.3} ₀	2-M5	—	—	—	—	—
24	24 ^{+0.021} ₀	7 ^{+0.061} _{+0.025}	27.0 ^{+0.3} ₀	2-M6	24H	24 ^{+0.021} ₀	8 ^{+0.036} ₀	27.3 ^{+0.3} ₀	2-M6	24N	24 ^{+0.028} _{+0.007}	8 ^{+0.036} ₀	27.3 ^{+0.3} ₀	2-M6
25	25 ^{+0.021} ₀	7 ^{+0.061} _{+0.025}	28.0 ^{+0.3} ₀	2-M6	25H	25 ^{+0.021} ₀	8 ^{+0.036} ₀	28.3 ^{+0.3} ₀	2-M6	—	—	—	—	—
28	28 ^{+0.021} ₀	7 ^{+0.061} _{+0.025}	31.0 ^{+0.3} ₀	2-M6	28H	28 ^{+0.021} ₀	8 ^{+0.036} ₀	31.3 ^{+0.3} ₀	2-M6	28N	28 ^{+0.028} _{+0.007}	8 ^{+0.036} ₀	31.3 ^{+0.3} ₀	2-M6
30	30 ^{+0.021} ₀	7 ^{+0.061} _{+0.025}	33.0 ^{+0.3} ₀	2-M6	30H	30 ^{+0.021} ₀	8 ^{+0.036} ₀	33.3 ^{+0.3} ₀	2-M6	—	—	—	—	—
32	32 ^{+0.025} ₀	10 ^{+0.061} _{+0.025}	35.5 ^{+0.3} ₀	2-M8	32H	32 ^{+0.025} ₀	10 ^{+0.036} ₀	35.3 ^{+0.3} ₀	2-M8	—	—	—	—	—
35	35 ^{+0.025} ₀	10 ^{+0.061} _{+0.025}	38.5 ^{+0.3} ₀	2-M8	35H	35 ^{+0.025} ₀	10 ^{+0.036} ₀	38.3 ^{+0.3} ₀	2-M8	—	—	—	—	—
38	38 ^{+0.025} ₀	10 ^{+0.061} _{+0.025}	41.5 ^{+0.3} ₀	2-M8	38H	38 ^{+0.025} ₀	10 ^{+0.036} ₀	41.3 ^{+0.3} ₀	2-M8	38N	38 ^{+0.050} _{+0.025}	10 ^{+0.036} ₀	41.3 ^{+0.3} ₀	2-M8
40	40 ^{+0.025} ₀	10 ^{+0.061} _{+0.025}	43.5 ^{+0.3} ₀	2-M8	40H	40 ^{+0.025} ₀	12 ^{+0.043} ₀	43.3 ^{+0.3} ₀	2-M8	—	—	—	—	—
42	42 ^{+0.025} ₀	12 ^{+0.075} _{+0.032}	45.5 ^{+0.3} ₀	2-M8	42H	42 ^{+0.025} ₀	12 ^{+0.043} ₀	45.3 ^{+0.3} ₀	2-M8	42N	42 ^{+0.050} _{+0.025}	12 ^{+0.043} ₀	45.3 ^{+0.3} ₀	2-M8
45	45 ^{+0.025} ₀	12 ^{+0.075} _{+0.032}	48.5 ^{+0.3} ₀	2-M8	45H	45 ^{+0.025} ₀	14 ^{+0.043} ₀	48.8 ^{+0.3} ₀	2-M10	—	—	—	—	—
48	48 ^{+0.025} ₀	12 ^{+0.075} _{+0.032}	51.5 ^{+0.3} ₀	2-M8	48H	48 ^{+0.025} ₀	14 ^{+0.043} ₀	51.8 ^{+0.3} ₀	2-M10	42N	48 ^{+0.050} _{+0.025}	14 ^{+0.043} ₀	51.8 ^{+0.3} ₀	2-M10

Position of Set Screw

Model	Position of set screw C [mm]
AL-035	3.5
AL-050	7.5
AL-070	9
AL-075	10
AL-090	12
AL-095	12
AL-100	12
AL-110	15

NOTE

- For AL-035, tolerance is ^{+0.05}₀ regardless of the bore diameter, and set screw size is M3.
- Set screws are included with the product.

How to Place an Order

Pilot Bore

AL-050

Size

Key/Set Screw Type

AL-050 12H-14N

Size

Material:
Hub - Aluminum.
Spider - Nitrile rubber (NBR)

Bore diameter: d1 (Small diameter) - d2 (Large diameter)

Bore specifications

Blank: Compliant with the old JIS standards (class 2)

H: Compliant with the new JIS standards

N: Compliant with the new motor standards

Spiders

L-075

Size