

102-□-1□ Types Electromagnetic Micro Clutches - Flange-mounted Type

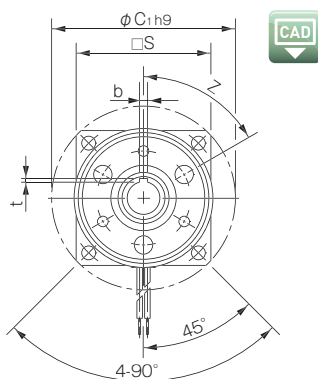
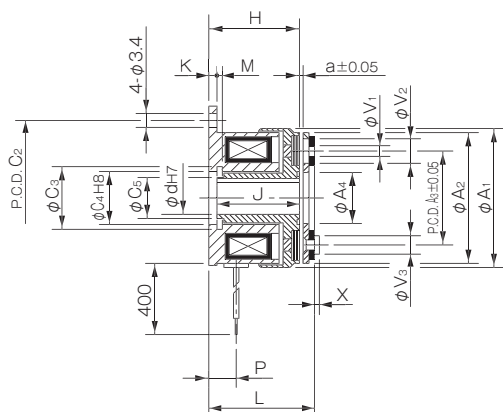
Specifications

Model	Size	Dynamic friction torque Td [N·m]	Coil (at 20°C)				Heat resistance class	Max. rotation speed [min ⁻¹]	Rotating part moment of inertia J		Allowable engaging energy E _{ea} [J]	Total work performed until readjustment of the air gap E _r [J]	Armature pull-in time t _a [s]	Torque rise time t _p [s]	Torque extinction time t _d [s]	Mass [kg]
			Voltage [V]	Wattage [W]	Current [A]	Resistance [Ω]			Armature [kg·m ²]	Rotor [kg·m ²]						
102-02-13							10000	6.75 × 10 ⁻⁷								0.075
102-02-15	02	0.4	DC24	6	0.25	96	B	500	1.00 × 10 ⁻⁶	2.45 × 10 ⁻⁶	1500	2 × 10 ⁶	0.009	0.019	0.017	0.081
102-02-11							10000	1.00 × 10 ⁻⁶								0.079
102-03-13							10000	1.30 × 10 ⁻⁶								0.096
102-03-15	03	0.6	DC24	6	0.25	96	B	500	1.95 × 10 ⁻⁶	3.25 × 10 ⁻⁶	2300	3 × 10 ⁶	0.009	0.022	0.020	0.105
102-03-11							10000	1.95 × 10 ⁻⁶								0.103
102-04-13							10000	4.38 × 10 ⁻⁶								0.178
102-04-15	04	1.2	DC24	8	0.33	72	B	500	6.15 × 10 ⁻⁶	1.41 × 10 ⁻⁵	4500	6 × 10 ⁶	0.011	0.028	0.030	0.195
102-04-11							10000	6.15 × 10 ⁻⁶								0.191
102-05-13							10000	9.08 × 10 ⁻⁶								0.310
102-05-15	05	2.4	DC24	10	0.42	58	B	500	1.38 × 10 ⁻⁵	3.15 × 10 ⁻⁵	9000	9 × 10 ⁶	0.012	0.031	0.040	0.335
102-05-11							10000	1.38 × 10 ⁻⁵								0.325

* The dynamic friction torque, T_d, is measured at a relative speed of 100 min⁻¹.
 * The moment of inertia of a rotating body and mass are measured for the maximum bore diameter.
 * Keep supply voltage fluctuation to within 10% of coil voltage.

Dimensions (102-□-13)

(For direct mounting)



Size	Shaft bore dimensions				
	d ₁ H7	Models compliant with the new JIS standards		Models compliant with the old JIS standards	
		b P9	t	b E9	t
02	5	—	—	—	—
03	6	2 ^{-0.006} _{-0.031}	0.8 ^{+0.3} ₀	—	—
04	8	2 ^{-0.006} _{-0.031}	0.8 ^{+0.3} ₀	—	—
	10	3 ^{-0.006} _{-0.031}	1.2 ^{+0.3} ₀	4 ^{+0.050} _{+0.020}	1.5 ^{+0.5} ₀
05	10	3 ^{-0.006} _{-0.031}	1.2 ^{+0.3} ₀	4 ^{+0.050} _{+0.020}	1.5 ^{+0.5} ₀
	15	5 ^{-0.012} _{-0.042}	2 ^{+0.5} ₀	5 ^{+0.050} _{+0.020}	2 ^{+0.5} ₀

Size	Radial direction dimensions													Axial direction dimensions								
	A ₁	A ₂	A ₃	A ₄	C ₁	C ₂	C ₃	C ₄	C ₅	S	V ₁	V ₂	V ₃	Z	H	J	K	L	P	M	a	X
02	31	28	19.5	10.5	39	33.5	11.4	11	8	—	2-2.1	2-5.3	2-4	4-90°	18	16.5	1.5	20.5	5	1.1	0.1	0.8
03	34	32	23	12.5	45	38	13.6	13	10	33	3-2.6	3-6	3-4.5	6-60°	22.2	20.2	2	24.5	6.7	1.3	0.15	1.2
04	43	40	30	18.5	54	47	20	19	15.5	41	3-3.1	3-6	3-5	6-60°	25.4	23.4	2	28.2	7	1.3	0.15	1.5
05	54	50	38	25.5	65	58	27.2	26	22	51	3-3.1	3-6.5	3-5.5	6-60°	28.1	26.1	2	31.3	8.2	1.5	0.2	1.5

* Size 02 is a rounded flange.
 * The rotor of size 02 has no keyway. Lock it in place by press-fitting it onto the shaft or the like.

How to Place an Order

102-03-13 24V 6DIN

Size — Rotor bore diameter (dimensional symbol d) — Keyway standards DIN: Compliant with the new JIS standards
 JIS: Compliant with the old JIS standards

* Models for which there are no keyway standards (models marked by [-]) on the Shaft Bore Dimensions table need not be marked with a keyway standards designation. Products with standards marked by diagonal lines are not set as standard products.