

546 - Datasheet

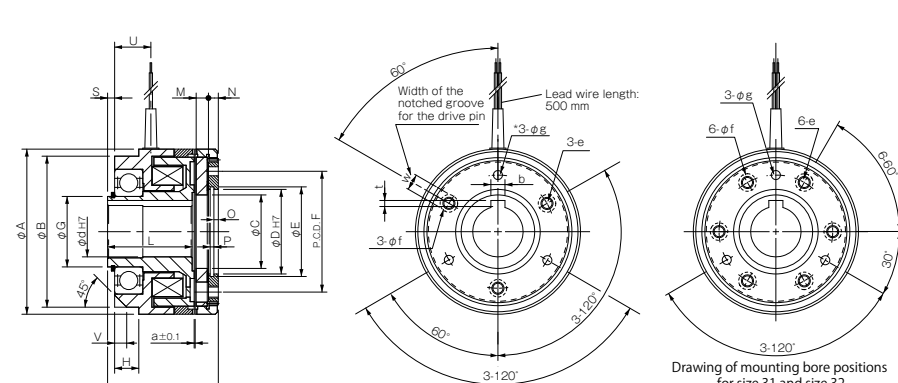
Specifications

Model	Size	Torque [N·m]	Coil [at 20 °C]				Heat resistance class	Allowable rotation speed of engagement [min ⁻¹]			Max. rotation speed [min ⁻¹]	Moment of inertia J [kg·m ²]		Number of teeth		Armature pull-in time t _a [s]	Armature release time t _{ar} [s]	Bearing number	Mass [kg]
			Exciting voltage [V]	Wattage [W]	Current [A]	Resistance [Ω]		NF	NS	Sawtooth		Rotor	Armature	Full-depth tooth, Full	Saw-tooth, Full				
546-12-34	12	17.5	DC24	13.3	0.55	43.4	F	50	30	100	1500	6.6×10^{-5}	6.0×10^{-5}	200	25	0.035	0.040	6004	0.5
546-13-34	13	25	DC24	18.7	0.78	31.0	F	50	30	100	1500	1.5×10^{-4}	1.2×10^{-4}	220	30	0.040	0.050	6005	0.9
546-15-34	15	50	DC24	21.3	0.89	27.1	F	50	30	100	1500	3.7×10^{-4}	3.7×10^{-4}	260	36	0.060	0.060	6007	1.5
546-21-34	21	100	DC24	27.0	1.13	21.0	F	50	30	100	1500	8.7×10^{-4}	5.2×10^{-4}	290	36	0.080	0.070	6009	2.4
546-23-34	23	250	DC24	36.3	1.51	15.9	F	50	30	100	1500	2.06×10^{-3}	1.85×10^{-3}	280	38	0.090	0.080	6011	3.9
546-25-34	25	500	DC24	56.6	2.36	10.2	F	50	30	100	1500	4.88×10^{-3}	4.51×10^{-3}	250	40	0.100	0.090	6014	6.8
546-31-34	31	1000	DC24	79.7	3.32	7.2	F	50	30	100	1500	1.12×10^{-2}	1.28×10^{-2}	195	40	0.110	1.110	6017	11.1
546-32-34	32	2200	DC24	114.1	4.75	5.1	F	50	30	100	1500	2.87×10^{-2}	2.92×10^{-2}	186	40	0.120	0.130	6020	15.3

• The armature pull-in and release times are reference values under no load in a static state. They are generally longer depending on the size of the load and the operating state when engaged.

• The allowable rotation speeds of engagement NF and NS indicate, respectively, full-depth tooth/full position and full-depth tooth/single position.

Dimensions



• The relationship between the positions of the keyway and mounting bore will differ from that shown in the drawing while the parts are fitted together.
• The dimension φg marked with [*] does not apply for size 12.

Size	Shaft bore dimensions				
	d H7	Models compliant with JIS standards		Models compliant with the old JIS standards	
		b P9	t +0.5 0	b E9	t +0.5 0
12	10	3 -0.006 -0.031	1.2	4 +0.05 +0.02	1.5
13	15	5 -0.012 -0.042	2	5 +0.05 +0.02	2
15	20	6 -0.012 -0.042	2.5	5 +0.05 +0.02	2
21	25	8 -0.015 -0.051	3	7 +0.061 +0.025	3
23	30	8 -0.015 -0.051	3	7 +0.061 +0.025	3
25	40	12 -0.018 -0.061	3	10 +0.061 +0.025	3.5
31	50	14 -0.018 -0.061	3.5	12 +0.075 +0.032	3.5
32	60	18 -0.018 -0.061	4	15 +0.075 +0.032	5
	70	20 -0.022 -0.074	4.5	18 +0.075 +0.032	6

Unit [mm]																						
Size	Radial direction dimensions										Axial direction dimensions											
	A	B	C	D	E	F	G	e	f	g	H	K	L	M	N	O	P	S	U	V	W	a
546-12-34	57	52	22.5	26	27.2	36	20	M4	8.5	—	10	43	34	4.3	3.1	1.3	1.3	2.0	15	4.5	5	0.2
546-13-34	67	58	31	32	33.7	46	25	M5	8.5	4.5	11	49	39	4.9	3.5	1.4	1.3	2.5	16.5	5	6	0.3
546-15-34	82	75	36.5	42	44.5	60	35	M6	10	4.5	12	55	42	6.1	4.8	2.2	1.9	3.5	18	6	8	0.3
546-21-34	95	88	46	52	55	70	45	M8	12	5.5	14	63	45	8.7	6.0	2.8	2.2	3.0	20	6	10	0.4
546-23-34	114	105	55	62	65	80	55	M8	12	7.8	18	69	50	9.0	6.5	3.3	2.2	3.0	24	6	10	0.4
546-25-34	134	127	68	72	75	95	70	M12	15	9.5	20	83	61	11.0	8.4	4.3	2.7	3.0	26	8	10	0.4
546-31-34	166	152	80	90	93.5	120	85	M12	15	9.5	22	93.5	66	13.1	11.4	5.3	3.2	3.5	31	10	12	0.5
546-32-34	195	175	95	100	103.5	150	100	M12	19	11.5	24	110	80	14.0	11.7	6.3	3.2	4.0	38.5	10	12	0.5

How to Place an Order

546-12-34-NF 24V 10DIN

Size

Keyway standards

DIN: Compliant with JIS standards P9

JIS: Compliant with the old JIS standards (class 2) E9

Rotor bore diameter (dimensional symbol d)

Tooth shape

NF: Full-depth tooth, full-position

RF: Right-handed rotating sawtooth, full-position

LF: Left-handed rotating sawtooth, full-position

NS: Full-depth tooth, single-position

RS: Right-handed rotating sawtooth, single-position

LS: Left-handed rotating sawtooth, single-position