

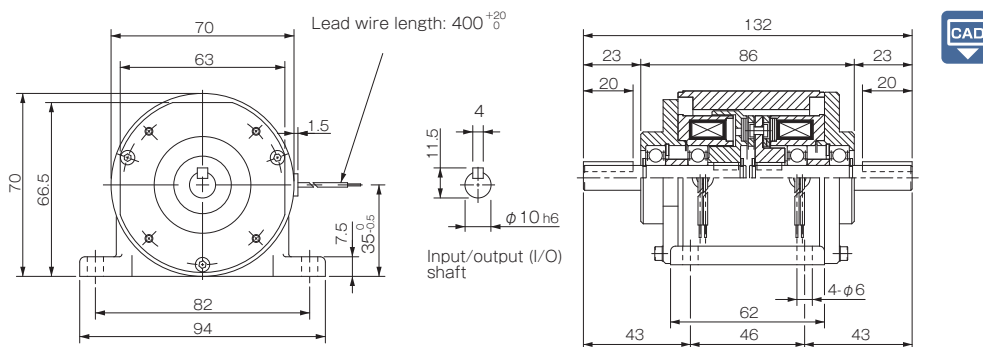
125 Models Clutch/Brake Units

Specifications (125-□-12G)

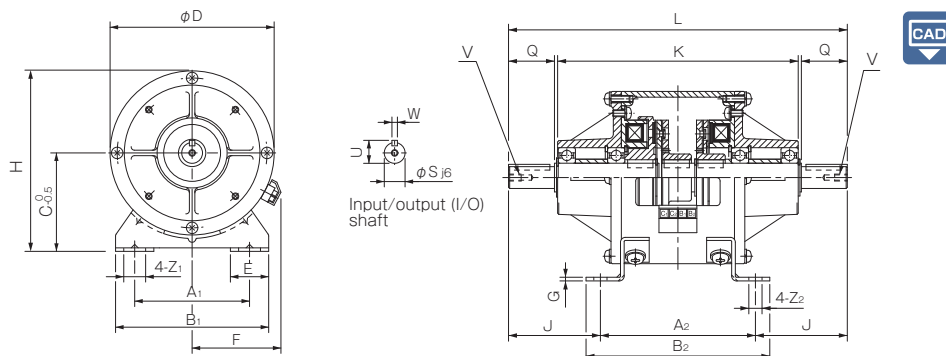
Model	Size	Dynamic friction torque T _d [N·m]	Static friction torque T _s [N·m]	Coil (at 20°C)				Heat resistance class	Max. rotation speed [min ⁻¹]	Rotating part moment of inertia J [kg·m ²]	Total work performed until readjustment of the air gap E _T [J]	Armature pull-in time t _a [s]	Torque build-up time t _p [s]	Torque decaying time t _d [s]	Mass [kg]
				Voltage [V]	Wattage [W]	Current [A]	Resistance [Ω]								
125-05-12G	05	2.4	—	DC24	10	0.42	58	B	3000	2.4 × 10 ⁻⁵	9 × 10 ⁶	C:0.012 B:0.010	C:0.031 B:0.023	C:0.040 B:0.012	1.2
125-06-12G	06	5	5.5	DC24	11	0.46	52	B	3000	1.28 × 10 ⁻⁴	36 × 10 ⁶	C:0.020 B:0.015	C:0.041 B:0.033	C:0.020 B:0.015	2.1
125-08-12G	08	10	11	DC24	15	0.63	38	B	3000	3.70 × 10 ⁻⁴	60 × 10 ⁶	C:0.023 B:0.016	C:0.051 B:0.042	C:0.030 B:0.025	4.2
125-10-12G	10	20	22	DC24	20	0.83	29	B	3000	1.40 × 10 ⁻³	130 × 10 ⁶	C:0.025 B:0.018	C:0.063 B:0.056	C:0.050 B:0.030	6.8
125-12-12G	12	40	45	DC24	25	1.04	23	B	3000	3.85 × 10 ⁻³	250 × 10 ⁶	C:0.040 B:0.027	C:0.115 B:0.090	C:0.065 B:0.050	12
125-16-12G	16	80	90	DC24	35	1.46	16	B	3000	1.35 × 10 ⁻²	470 × 10 ⁶	C:0.050 B:0.035	C:0.160 B:0.127	C:0.085 B:0.055	22

* The dynamic friction torque, T_d, is measured at a relative speed of 100 min⁻¹. Depending on the initial torque characteristics, break-in to condition the engaging surfaces may also be required.

Dimensions (125-05-12G)



Dimensions (125-□-12G)



Unit [mm]

Size	Dimensions of part															Dimensions of shaft				
	A ₁	A ₂	B ₁	B ₂	C	D	E	F	G	H	J	K	L	Z ₁	Z ₂	Q	S	U	V	W
06	65	90	90	105	65	100	27.5	61	2.6	115	48.5	132	187	13.5	6.5	25	11	12.5	M4 × 0.7, length: 8	4
08	80	110	110	130	80	125	32.5	72	3.2	142.5	63	171	236	15.5	9	30	14	16	M4 × 0.7, length: 8	5
10	105	135	140	160	90	150	35	81	3.2	165	80	210	295	20	11.5	40	19	21	M6 × 1, length: 11	5
12	135	160	175	185	112	190	42.5	97	4.5	207	108	270	376	24.5	11.5	50	24	27	M6 × 1, length: 11	7
16	155	200	200	230	132	230	45	109	6	247	145	362	490	28	14	60	28	31	M6 × 1, length: 11	7

* The input/output shaft keyways are old JIS standard class 2 while the key is old JIS standard class 1.
* When inserting pulleys or the like onto input/output shafts, use the supplied insertion set.

How to Place an Order

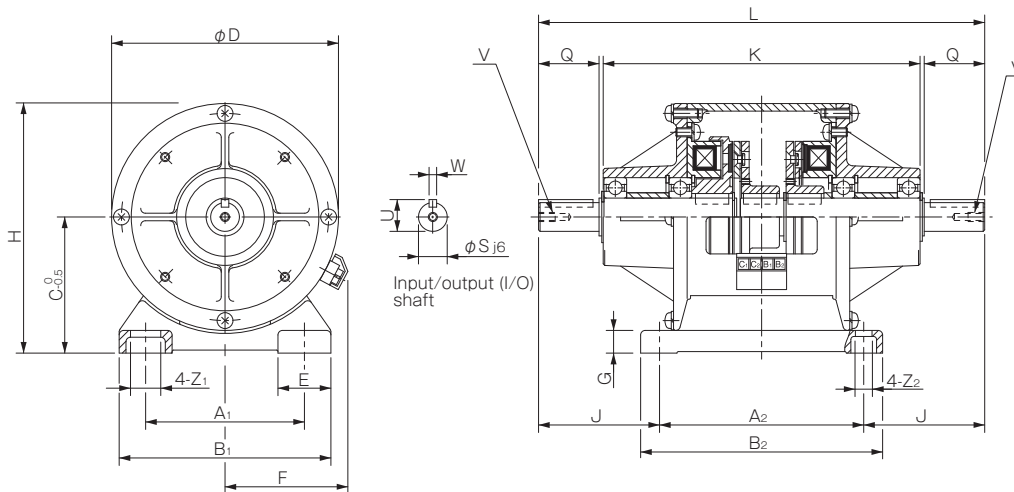
125-06-12G
Size

Specifications (125-□-12EG) Made to Order

Model	Size	Dynamic friction torque T _d [N·m]	Static friction torque T _s [N·m]	Coil (at 20°C)				Heat resistance class	Max. rotation speed [min ⁻¹]	Rotating part moment of inertia J [kg·m ²]	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 _e [s]	Mass [kg]
				Voltage [V]	Wattage [W]	Current [A]	Resistance [Ω]								
125-06-12EG	06	5	5.5	DC24	11	0.46	52	B	3000	1.28 × 10 ⁻⁴	36 × 10 ⁶	C:0.020 B:0.015	C:0.041 B:0.033	C:0.020 B:0.015	2.1
125-08-12EG	08	10	11	DC24	15	0.63	38	B	3000	3.70 × 10 ⁻⁴	60 × 10 ⁶	C:0.023 B:0.016	C:0.051 B:0.042	C:0.030 B:0.025	4.2
125-10-12EG	10	20	22	DC24	20	0.83	29	B	3000	1.40 × 10 ⁻³	130 × 10 ⁶	C:0.025 B:0.018	C:0.063 B:0.056	C:0.050 B:0.030	6.8
125-12-12EG	12	40	45	DC24	25	1.04	23	B	3000	3.85 × 10 ⁻³	250 × 10 ⁶	C:0.040 B:0.027	C:0.115 B:0.090	C:0.065 B:0.050	12
125-16-12EG	16	80	90	DC24	35	1.46	16	B	3000	1.35 × 10 ⁻²	470 × 10 ⁶	C:0.050 B:0.035	C:0.160 B:0.127	C:0.085 B:0.055	22
125-20-12EG	20	160	175	DC24	45	1.86	13	B	2500	4.08 × 10 ⁻²	10 × 10 ⁵	C:0.090 B:0.065	C:0.250 B:0.207	C:0.130 B:0.070	49

* The dynamic friction torque, T_d, is measured at a relative speed of 100 min⁻¹. Depending on the initial torque characteristics, break-in to condition the engaging surfaces may also be required.

Dimensions (125-□-12EG) Made to Order



Unit [mm]

Size	Dimensions of part															Dimensions of shaft				
	A ₁	A ₂	B ₁	B ₂	C	D	E	F	G	H	J	K	L	Z ₁	Z ₂	Q	S	U	V	W
06	65	90	90	105	65	100	27.5	61	10	115	48.5	132	187	13.5	6.5	25	11	12.5	M4 × 0.7, length: 8	4
08	80	110	110	130	80	125	32.5	72	12	142.5	63	171	236	15.5	9	30	14	16	M4 × 0.7, length: 8	5
10	105	135	140	160	90	150	35	81	15	165	80	210	295	20	11.5	40	19	21	M6 × 1, length: 11	5
12	135	160	175	185	112	190	42.5	97	15	207	108	270	376	24.5	11.5	50	24	27	M6 × 1, length: 11	7
16	155	200	200	230	132	230	45	109	18	247	145	362	490	28	14	60	28	31	M6 × 1, length: 11	7
20	195	240	240	270	160	290	47.5	124	20	305	188	448	616	28	14	80	38	41.5	M10 × 1.5, length: 17	10

* The input/output shaft keyways are old JIS standard class 2 while the key is old JIS standard class 1.

* When inserting pulleys or the like onto input/output shafts, use the supplied insertion set.

How to Place an Order

125-06-12EG

Size _____ Base casting (Made to Order): EG

125 Models

List of Stand-alone Clutches and Brakes Used

Model	Stand-alone clutch system				Stand-alone braking system				Bearing number	
									Input part	Output part
125-05-12	-				-				6000	6000
125-06-12	101-06-11G	24V	R15JIS	A15JIS	111-06-12G	24V	15JIS	6202	6202	
125-08-12	101-08-11G	24V	R20JIS	A20JIS	111-08-12G	24V	20JIS	6004	6004	
125-10-12	101-10-11G	24V	R25JIS	A25JIS	111-10-12G	24V	25JIS	6205	6205	
125-12-12	101-12-11G	24V	R30JIS	A30JIS	111-12-12G	24V	30JIS	6206	6206	
125-16-12	101-16-11G	24V	R40JIS	A40JIS	111-16-12G	24V	40JIS	6208	6208	
125-20-12	101-20-11G	24V	R50JIS	A50JIS	111-20-12G	24V	50JIS	6211	6211	

Recommended Power Supplies and Accessory Parts

Model	Recommended power supplies	Accessory parts			
		Circuit protector (Varistor), qty. 2	Tightening collar	Screw stock	Hexagonal nut
125-05-12	BEH-10G	TND07V-820KB00AAA0 or an equivalent	-	-	-
125-06-12	BEH-10G	TND07V-820KB00AAA0 or an equivalent	Qty. 1	M4 × 55 (hex-socket bolt), qty. 1	M4, qty. 1
125-08-12	BEH-10G	TND07V-820KB00AAA0 or an equivalent	Qty. 1	M4 × 55 (hex-socket bolt), qty. 1	M4, qty. 1
125-10-12	BEH-10G	TND07V-820KB00AAA0 or an equivalent	Qty. 1	M6 × 100, qty. 1	M6, qty. 2
125-12-12	BEH-10G	TND07V-820KB00AAA0 or an equivalent	Qty. 1	M6 × 100, qty. 1	M6, qty. 2
125-16-12	BEH-10G	TND07V-820KB00AAA0 or an equivalent	Qty. 1	M6 × 100, qty. 1	M6, qty. 2
125-20-12	BEH-20G	TND07V-820KB00AAA0 or an equivalent	Qty. 1	M10 × 160, qty. 1	M10, qty. 2

* The above-model varistors are manufactured by Nippon Chemi-Con Corporation.

* Varistors need not be used when a BEH model overexcitation electromagnetic power supply is used. For details, refer to the section on power supplies.

SERIES

- ELECTROMAGNETIC-ACTUATED MICRO CLUTCHES & BRAKES
- ELECTROMAGNETIC-ACTUATED CLUTCHES & BRAKES
- ELECTROMAGNETIC CLUTCH & BRAKE UNITS

- SPRING-ACTUATED BRAKE

- ELECTROMAGNETIC TOOTH CLUTCHES

- BRAKE MOTORS

- POWER SUPPLIES

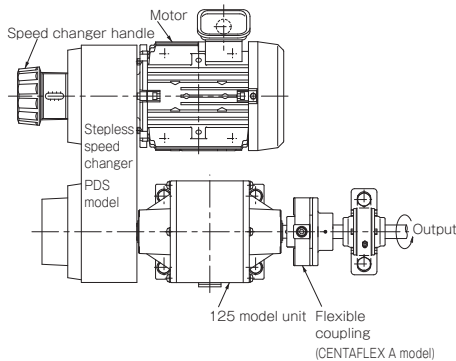
MODELS

- 125
- 121(20G)
- 126
- CBW
- CMW
- 121(10G)
- 122

Mounting Example

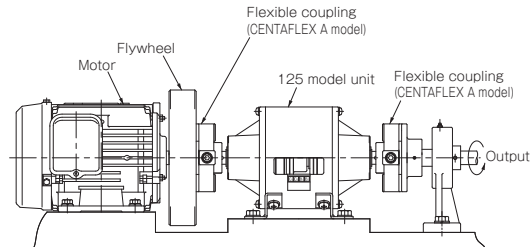
In Combination with Speed Changers

Clutches and brakes are generally used after motors and speed changers. This unit was designed so that it can be used in combination with a Miki Pulley belt-type stepless speed changer. We provide items precombined into sets. Contact Miki Pulley for details.



Examples of Direct Connection to Motors

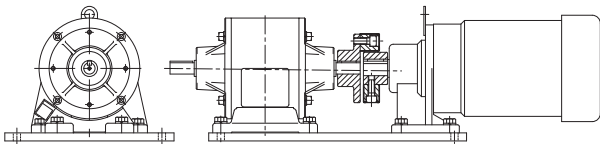
Couplings generally have small inertial moments compared to pulleys, sprockets and the like, so they are often used in combination with clutches and brakes. This unit is often combined with our flexible couplings (CENTAFLEX) in particular. It is very effective to mount it on the motor side in combination with a flywheel.



Special Types

In addition to the special application examples shown below, drivers can also be set, and units can be provided with pulleys, sprockets, and the like. Contact Miki Pulley for details.

One-piece Unit Connected to Geared Motor and Coupling



Clutch Unit (No Brake)

