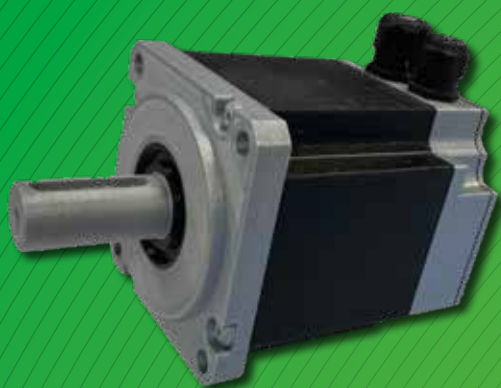


**CONTROL TECHNIQUES  
DYNAMICS**

**SERVO MOTOR SERIES**

**UNIMOTOR HD  
ULTRA LOW  
VOLTAGE  
(24V-48V)**



**060 Frame  
Motor**

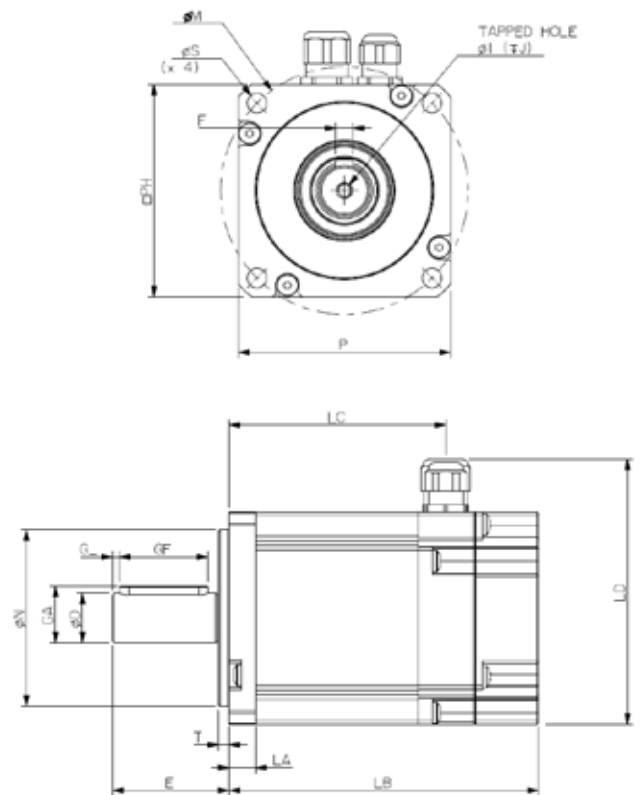
***Nidec***  
All for dreams

# SERVO MOTOR SERIES

## Frame size 060

Motor frame size (mm)		060LD			060LD		
Voltage (Vdc)		24			48		
Frame length		A	B	C	A	B	C
Continuous stall torque (Nm)		0.64	1.28	1.8	0.64	1.28	1.8
Peak torque (Nm)		1.92	3.84	5.4	1.92	3.84	5.4
Standard inertia (kg cm <sup>2</sup> )		0.16	0.36	0.49	0.16	0.36	0.49
Winding thermal time constant (sec)		42	47	52	42	47	52
Standard motor weight (kg)		1.6	2.0	2.2	1.6	2.0	2.2
Number of poles		10	10	10	10	10	10
Speed 3000 (rpm)	Kt (Nm/A) =	0.07			0.14		
	Ke (V/krpm) =	4.3			8.4		
Rated torque (Nm)		0.64	1.28	1.65	0.64	1.28	1.65
Stall current (A)		9.1	18.3	25.7	4.6	9.1	12.9
Rated power (kW)		0.20	0.40	0.52	0.2	0.4	0.52
R (ph-ph) (Ohms)		0.18	0.07	0.04	0.6	0.27	0.15
L (ph-ph) (mH)		0.43	0.21	0.13	2.29	1.22	0.83
Recommended power conn' size		Flying Leads			Flying Leads		
Speed 6000 (rpm)	Kt (Nm/A) =	0.07			0.07		
	Ke (V/krpm) =	4.3			4.3		
Rated torque (Nm)		◆	◆	◆	0.64	1.28	1.65
Stall current (A)		◆	◆	◆	9.1	18.3	25.7
Rated power (kW)		◆	◆	◆	0.40	0.80	1
R (ph-ph) (Ohms)		◆	◆	◆	0.18	0.07	0.04
L (ph-ph) (mH)		◆	◆	◆	0.43	0.21	0.13
Recommended power conn' size		◆	◆	◆	Flying Leads		

◆ not available



Δt= 100°C winding 40°C maximum ambient  
 All data subject to +/-10% tolerance  
 Stall torque, rated torque and power relate to maximum continuous operation  
 tested in a 20°C ambient at **12 kHz drive switching frequency**  
 All other figures relate to a 20°C motor temperature.  
 Maximum intermittent winding temperature is 140°C

### Motor dimension

	Feedback AR, CR, EG, FG				Flange thickness	Register length	Register diameter	Overall height	Flange square	Fixing hole diameter	Fixing hole PCD	Motor housing	Mounting bolts	
	Unbraked length		Braked length											
	LB (± 0.9)	LC (± 1.0)	LB (± 0.9)	LC (± 1.0)										
060A	88.5	61.3	118	31.5	7.5	3	50	75	60	5.5	70	60	M5	mm
060B	108.5	81.3	138	51.5										
060C	128.5	101.3	158	71.5										

### Shaft dimensions

	Shaft diameter	Shaft length	Key height	Key length	Key to shaft end	Key width	Tapped hole thread size	Tapped hole depth	
	D (j6)	E	GA	GF	G	F (h9)	I	J (± 1)	
14.0 Std	14	33	16	25	1.5	5	M5 x 0.8	10	mm