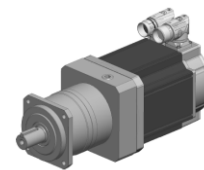


Enquiry N°: 1740

Created by: WT / Approved by: DB

SERVO MOTOR

115UDA400BAAEA100220-GSFW 5:1 SHIMPO GEARBOX



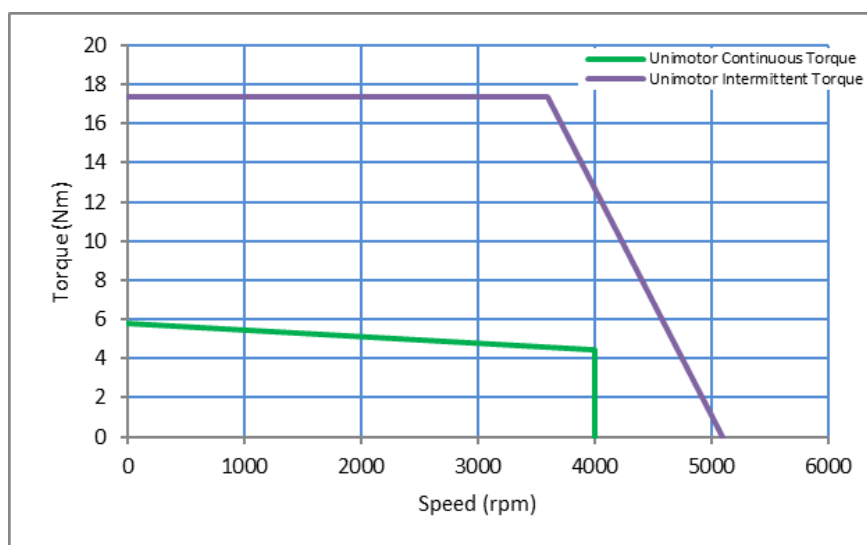
Definition

Type	Unimotor HD	
Frame Size (mm)	115	
Voltage	U	400 V
Magnet type	D	High Dynamic
Frame Length	A	
Speed (min ⁻¹)	40	4000
Brake	0	Unbraked
Connection type	B	Power and Signal 90° rotatable (Size 1)
Output shaft	A	with output key
Feedback device code	AE	Resolver (Size 52)
Inertia & thermistor	A	Standard inertia + PTC thermistor
PCD (Gearbox)	100	100
Shaft Diameter (Gearbox)	220	22j6 x 36.0
Fan Box	-	
Insulation class	F	
UL Motor / UL Stator	UL Motor / UL Stator	

Nominal characteristics

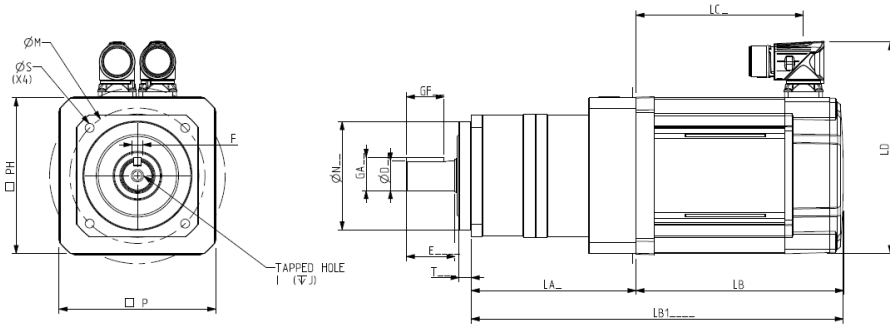
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (Nm)	5.8	Stall Current (A)	4.83
Rated Torque (Nm)	4.5	Nominal Current (A)	3.71
Motor Peak Torque (Nm)	17.4	Kt (Nm/A)	1.2
Rated Power (kW)	1.86	Ke (V/kmin ⁻¹)	73.5
Winding Thermal Time Constant (s)	160	R (ph-ph) (Ohm)	3.05
Number of Poles	10	L (ph-ph) (mH)	24.63
Maximum Cogging (Nm)	0.087		
Inertia (Motor + Gearbox) (kg.cm ²)	5.02	Weight (Motor + Gearbox) (kg)	9.1
Ingress Protection Level (IP)	IP65		

Torque / speed graph



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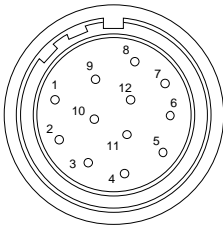
Motors (° & mm)



LB	Length (Motor)	153.8
LB1	Total length with Gearbox	275.8
LC	Connector position	124.0
LA	Flange to Flange (Gearbox)	122.0
T	Register Length (Gearbox)	9.0
N	Register Diameter (Gearbox)	80.0
LD	Connector overall height	156.5
P	Flange Square	115.0
S	Fixing Hole Diameter (Gearbox)	6.6
M	Fixing hole PCD (Gearbox)	100.0
PH	Motor Housing Width	115.0
D	Shaft Diameter (Gearbox)	22j6
E	Shaft Length (Gearbox)	36.0
GA	Key Height (Gearbox)	24.5
GF	Key Length (Gearbox)	28.0
G	Key to Shaft End (Gearbox)	0.0
F	Key Width (Gearbox)	6.0
I	Tapped Hole Thread Size (Gearbox)	M8
J	Tapped Hole Depth (Gearbox)	17.0

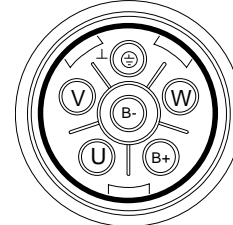
Motor electrical interface Connectors option:

Feedback device code: AE – Resolver (Size 52)



- | | |
|----------------|--------|
| 1 - Excit | 10 - - |
| 2 - Excit/ | 11 - - |
| 3 - COS | 12 - - |
| 4 - COS/ | |
| 5 - SIN | |
| 6 - SIN/ | |
| 7 - Thermistor | |
| 8 - Thermistor | |
| 9 - - | |

Connection type: B – Power and Signal 90° rotatable (Size 1)



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Gearbox

Utilisation : Environment

Ambiance Non-corrosive; Zone Non-specific

Gearbox Specification: Reducer for Servo Motor

Gear Box characteristics

Manufacturer	Shimpo	Backlash (arc/min)	≤ 3
Type	Inline Planetary	Radial Load (Fr, N) @ Fa=0, Input Speed Nom	960
Part No	VRB-090C-5-K3-28GD24	Radial Load MAX (Fr, N)	
Ratio	5	Axial Load (Fa, N) @ Fr=0, Input Speed Nom	1200
Stages	1	Output Torque Nominal (Nm)	75
Inertia (kg.cm ²)	2.6	Output Torque Max (Nm)	125
Weight (kg)	3.7	Input Speed Nom (rpm)	3000
Efficiency	95%	Input Speed Max (rpm)	6000

