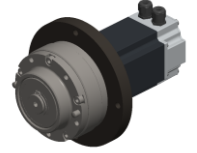


Enquiry N°:

Created by: DB / Approved by: TB

**SERVO MOTOR – 060LDB300FGCTC070110-SGV1**

**060LDB300FGCTC070110-SGV1**  
**AGV Solution Motor + Gearbox + Wheel**  
**Up to 400kg Payload**



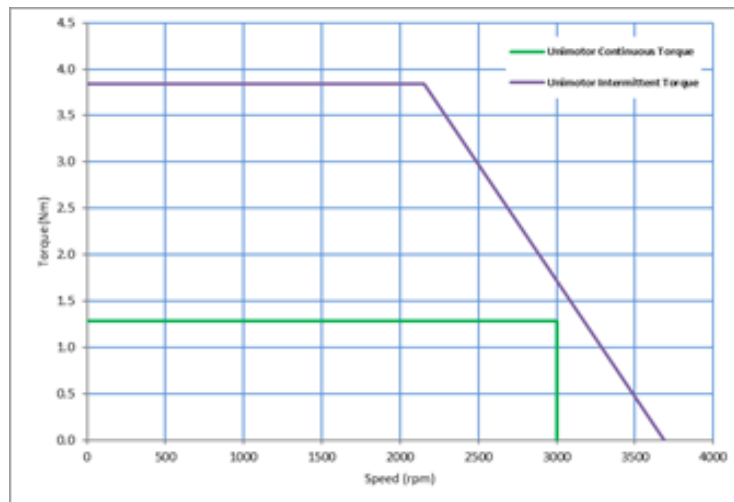
**Definition**

Type	Unimotor HD	
Frame Size (mm)	<b>060</b>	
Voltage	<b>L</b>	Ultra-Low Voltage
Magnet type	<b>D</b>	High Dynamic
Frame Length	<b>B</b>	
Speed (min <sup>-1</sup> )	<b>30</b>	3000 @48Vdc – 1500@ 24Vdc
Brake	<b>0</b>	Unbraked
Connection type	<b>F</b>	Flying lead power connection (0.5 m)
Output shaft	<b>G</b>	Integrated Gearbox Shaft
Feedback device code	<b>CT</b>	4096 ppr Incremental encoder (CTD)
Inertia & thermistor	<b>C</b>	Standard inertia + KTY84 thermistor
PCD	<b>070</b>	70 (FF 70/50)
Shaft Diameter	<b>110</b>	11j6 x 23
Fan Box	-	
Insulation class	<b>F</b>	
UL Motor / UL Stator	<b>UL Stator</b>	

**Nominal characteristics**

Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (Nm)	1.28	Stall Current (A)	9.2
Rated Torque (Nm)	1.28	Nominal Current (A)	9.2
Motor Peak Torque (Nm)	3.84	Kt (Nm/A)	0.14
Rated Power (kW)	0.40	Ke (V/kmin-1)	8.50
Winding Thermal Time Constant (s)		R (ph-ph) (Ohm)	0.2
Number of Poles	10	L (ph-ph) (mH)	1.2
Maximum Cogging (Nm)	0.02		
Inertia Motor + Gearbox (kg.cm <sup>2</sup> )		Weight Motor + Gearbox (kg)	
Ingress Protection Level (IP)	IP54		

**Torque / speed graph**

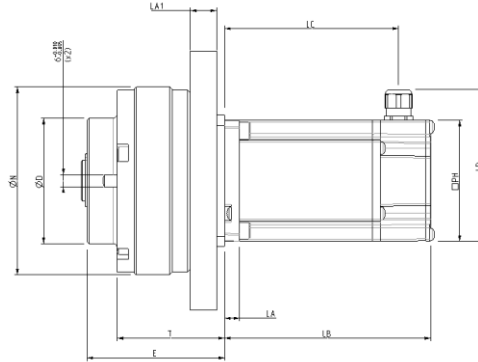
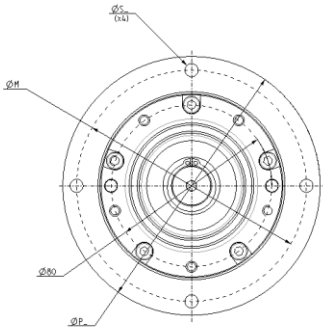


Enquiry N°:

Created by: DB / Approved by: TB

**SERVO MOTOR – 060LDB300FGCTC070110-SGV1**

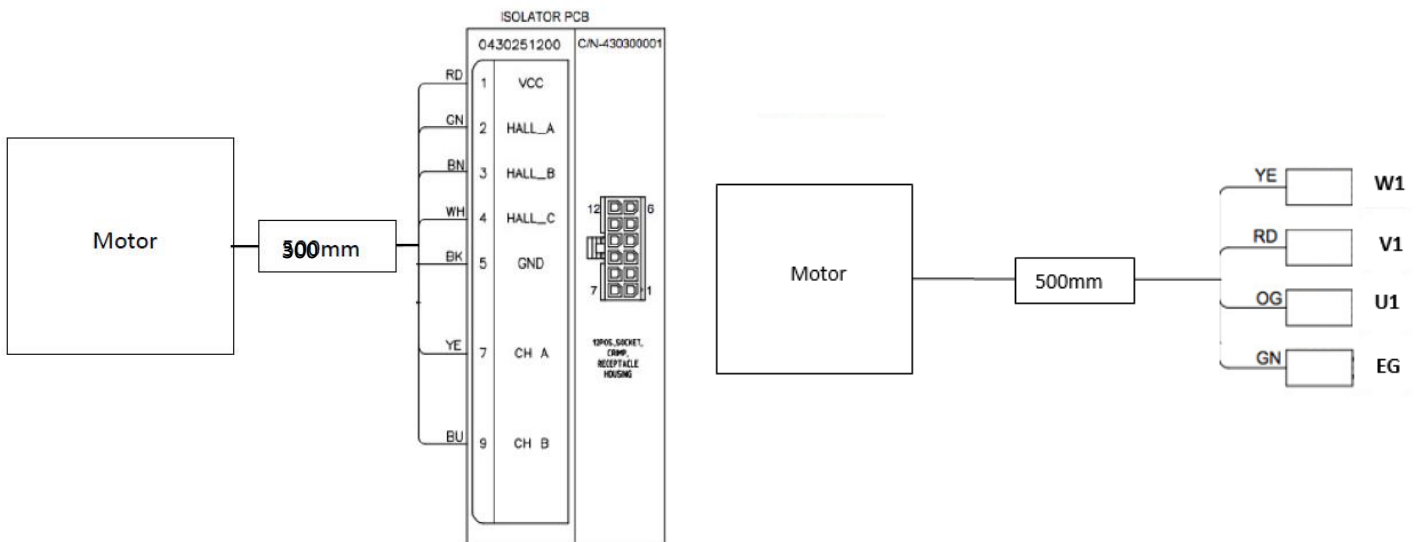
**Motors (° & mm)**



LB	Total length	102.5
LC	Power connector position	86.5
LA	Flange thickness	7.5
T	Register Length	49.5
N	Register Diameter	96h7
LD	Overall height	75.0
P	Flange Dia GBox	128
S	Fixing Hole Diameter	6.5
M	Fixing hole PCD	114.5
PH	Motor Housing Width	60.0
E	GBox Length	67.2
D	GBox Clearance Dia	62.7±0.07
	Mounting Bolt	M5

**Motor electrical interface Connectors option:**

Feedback device code: CT – 4096					Connection type:			
1	Red	Power	7	Yellow	CH A	1	U	Red (x 1)
2	Green	HALL A	8		-	2	V	Orange (x 1)
3	Brown	HALL B	9	Blue	CH B	3	W	Yellow (x 1)
4	White	HALL C	10			4	Earth	Green/Yellow (x 1)
5	Black	GND	11					
6	Red		12					
<b>SIG Cable (28 AWG): 300mm</b> (from gland to customer end) 12-Way MOLEX Connector 43025-1200					<b>PWR Cable: 500mm</b> (from gland to customer end) 4 cores of 12 AWG UL 1330 wire, with polyolefin heat shrink sleeve Shrouded Spade terminals fitted to lead wires			



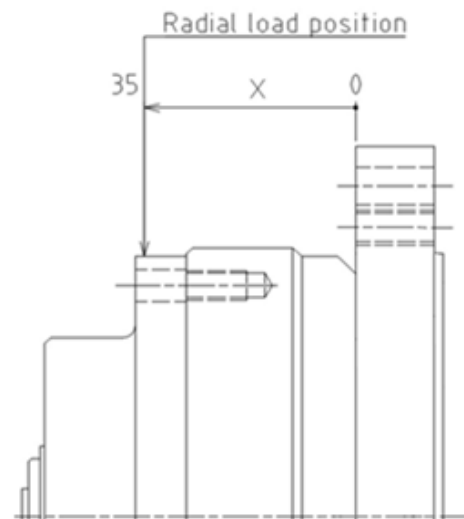
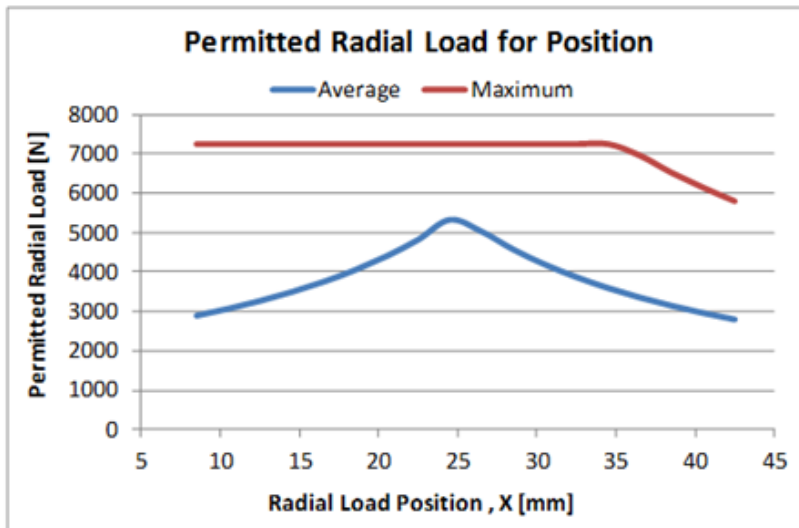
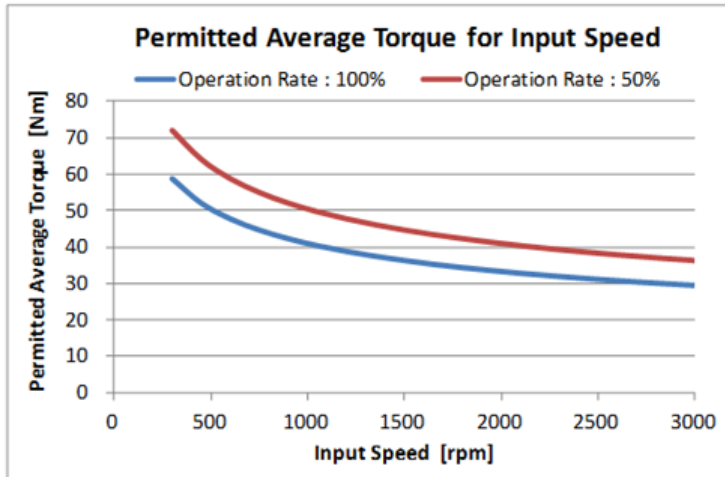
Enquiry N°:

Created by: DB / Approved by: TB

**SERVO MOTOR – 060LDB300FGCTC070110-SGV1**

**Gear Box characteristics**

Ratio	9	Backlash (arc/min)	≤7
Stages	1	Radial Load (Fr, N) @ Fa=0, Input Speed Nom	3500
Inertia (kg.cm <sup>2</sup> )	~0.2	Radial Load MAX (Fr, N)	7250
Weight (kg)	2.7	Axial Load (Fa, N) @ Fr=0, Input Speed Nom	2200
Efficiency	95%		

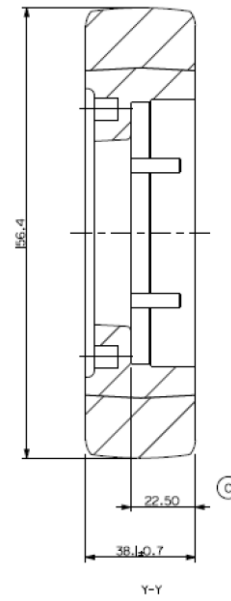
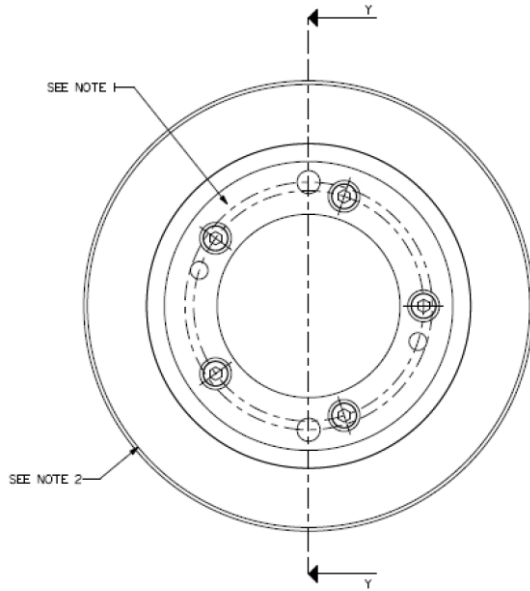


Enquiry N°:

Created by: DB / Approved by: TB

SERVO MOTOR – 060LDB300FGCTC070110-SGV1

### Wheel Specification



- NOTES:
- CORE INFORMATION
    - MATERIAL: HT200 CAST IRON.
    - FINISH: PAINT BLACK.
  - TYRE INFORMATION
    - MATERIAL: POLYESTER BASED POLYURETHANE THERMOSET CASTABLE
  - M5 x 15 CAP HEX B2P MOUNTING BOLTS (X6)