

EML-10 Servo Motor

FEATURES

- **Torque Rating of 1,352 oz.-in.**
- **Medium Inertia to Maximize Torque**
- **Peak Torque up to 300% of Rated Torque**
- **Peak Current up to 300% of Rated Current**
- **Speed of up to 1,500 RPM**
- **2,500 PPR Incremental Encoder Attached**
- **Totally Enclosed, Self-Cooled**
- **Power Rating up to 1.0 kWatts**
- **Oil Seal, and Optional Brake**
- **Long Life and Highly Reliable**
- **Neodymium-Iron-Boron Magnets (NdFeB)**
- **CE Certified**



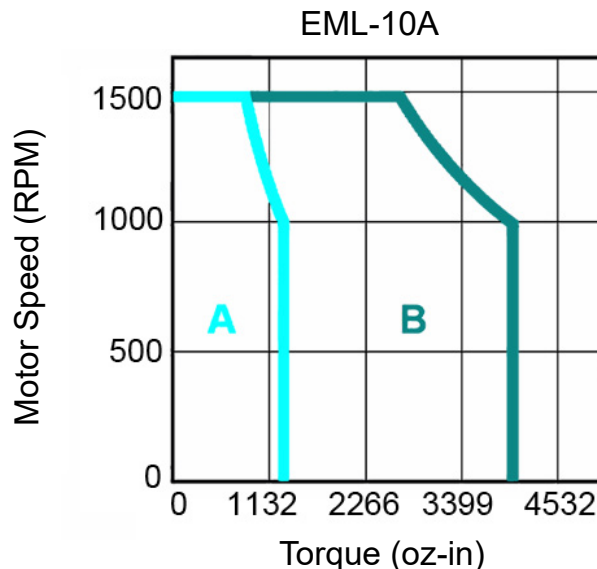
DESCRIPTION

Anaheim Automation's Digital AC Servo Motors offer a simple solution to servo applications involving speed and positioning control. The AC EML-10 Servo Motor comes standard with a 2,500 Pulses Per Revolution (PPR) Incremental Encoder, runs at a maximum speed of 1,500 RPM, provides peak values up to 300% of the rated torque and current values, and has a rated torque of 1,352 oz-in with a 1.0 kWatt power rating. These enclosed and self-cooled motors also provide longer motor life and higher reliability. The EML-10 AC Servo Motors enable industrial motion control applications with medium inertia to attain a great combination of speed and positioning functionality.

SPECS

| Model # | Rated Torque (oz-in) | Rated Power (Watts) | Rated Speed (rpm) | Rated Current (A rms) | Brake (24VDC) | Inertia (oz-in-sec ²) | Electric Time Constant T _E (ms) | Back EMF Voltage K _E (V/krpm) | Torque Constant K _T (oz-in/A) | Resistance (ohms) | Weight (lbs) |
|-------------|----------------------|---------------------|-------------------|-----------------------|---------------|-----------------------------------|--|--|--|-------------------|--------------|
| EML-10APB22 | 1352 | 1000 | 1000 | 5.5 | No | 0.3328 | 7.10 | 124 | 303.8 | 1.616 | 24.5 |
| EML-10APB24 | 1352 | 1000 | 1000 | 5.5 | Yes | 0.3484 | 7.10 | 124 | 303.8 | 1.616 | 31.44 |

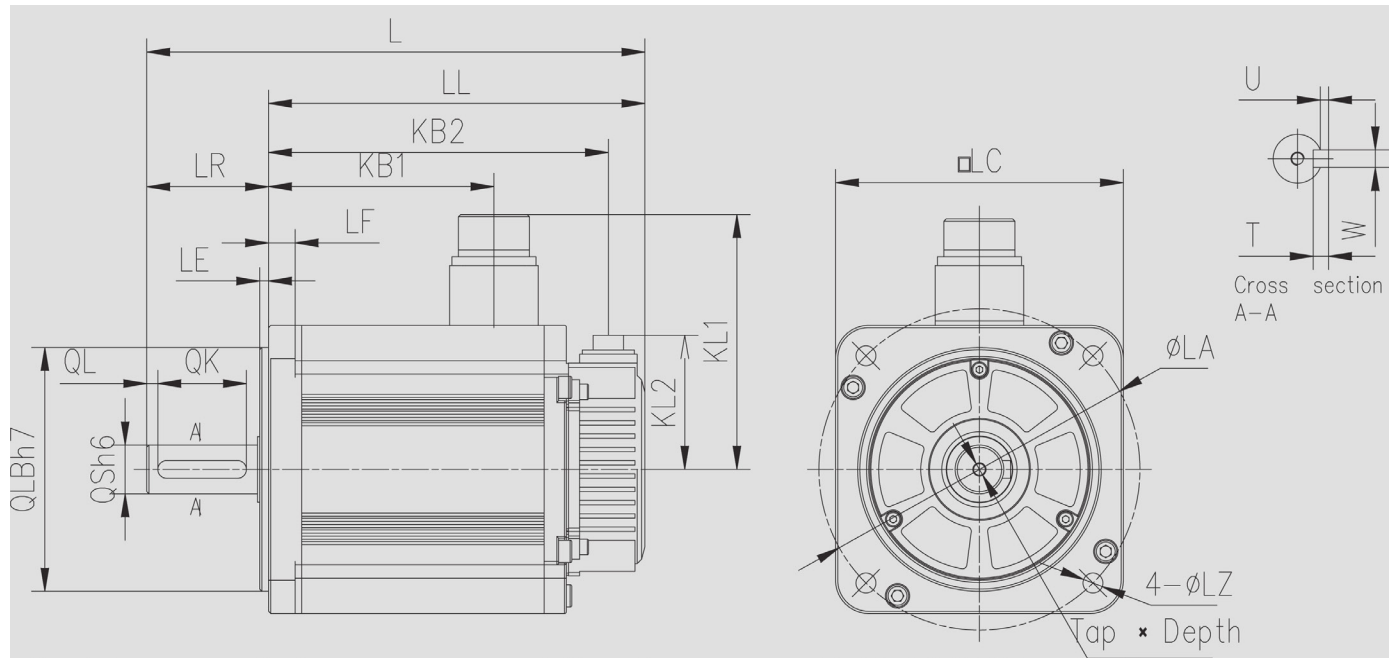
TORQUE VS SPEED



A: Continuous Working Area

B: Repeatedly Working Area

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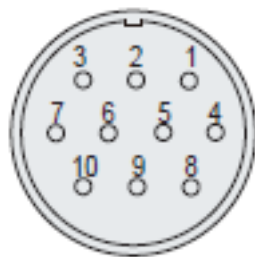


Note: All Dimensions in (mm)

| MODEL # | L | LL | KB1 | KB2 | KL1 | KL2 | FLANGE SLIDE | | | | | | | S | TapxDepth | KEY | | | | |
|-------------|-------|-------|-------|-------|-----|------|--------------|----|----|-----|-----|-----|----|----|-----------|-----|----|---|---|---|
| | | | | | | | LR | LE | LF | LC | LA | LB | LZ | | | QK | QL | W | T | U |
| EML-10APB22 | 247 | 192 | 124 | 175.5 | 117 | 60.5 | 55 | 4 | 12 | 130 | 145 | 110 | 9 | 22 | M6x20 | 40 | 5 | 8 | 7 | 4 |
| EML-10APB24 | 289.5 | 234.5 | 147.2 | 218 | 117 | 79 | 55 | 4 | 12 | 130 | 145 | 110 | 9 | 22 | M6x20 | 40 | 5 | 8 | 7 | 4 |

Encoder Connector Specification:

| Receptacle | Plug |
|------------------|------------------|
| M-CAN-CM1002-10P | M-CAN-CM1008-10S |

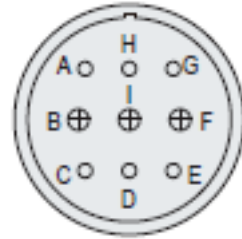


| Pin No. | Signal |
|---------|--------|
| 1 | A+ |
| 2 | A- |
| 3 | B+ |
| 4 | B- |
| 5 | C+ |
| 6 | C- |
| 7 | PG 0V |
| 8 | PG 5V |
| 10 | FG |

Motor Connector Specification:

| Receptacle | Plug | Cable Clamp |
|----------------|-----------------|-------------|
| HMS3102E20-18P | HMS3106AE20-18S | MS3057-12A |

| Pin No. | Signal |
|---------|--------|
| A | - |
| B | U |
| C | FG |
| D | FG |
| E | - |
| F | W |
| *G | B1 |
| *H | B2 |
| I | V |



***NOTE: There are no B1, B2 signals in motor without brake**

| | | |
|------------------------------------|---|---|
| Power Requirement: 220VAC | Vibration: 49 m/s ² | Running Air Pressure: 86 to 106 kPa |
| Insulation Class: F | Ambient Temperature: 20% to 80% RH | Insulation Voltage Endurance: AC 1800V, 50Hz, 1 min |
| Ambient Temperature: 0°C to 40°C | Running Humidity: Not More Than 90%, Under 25°C | Insulation Impedance: Not Less Than 50M Under Normal Conditions |
| Running Temperature: -25°C to 40°C | | |

Compatible Drivers:

| Part Number | Description |
|--------------|--------------|
| PRONET-E-10A | Servo Driver |



Compatible Cables:

| Part Number | Description |
|-----------------|-------------------|
| PDM-GA16-05-II | Power Cable |
| PMP-GA24-05-II | Encoder Cable |
| PDMB-GA14-05-II | Power/Brake Cable |

