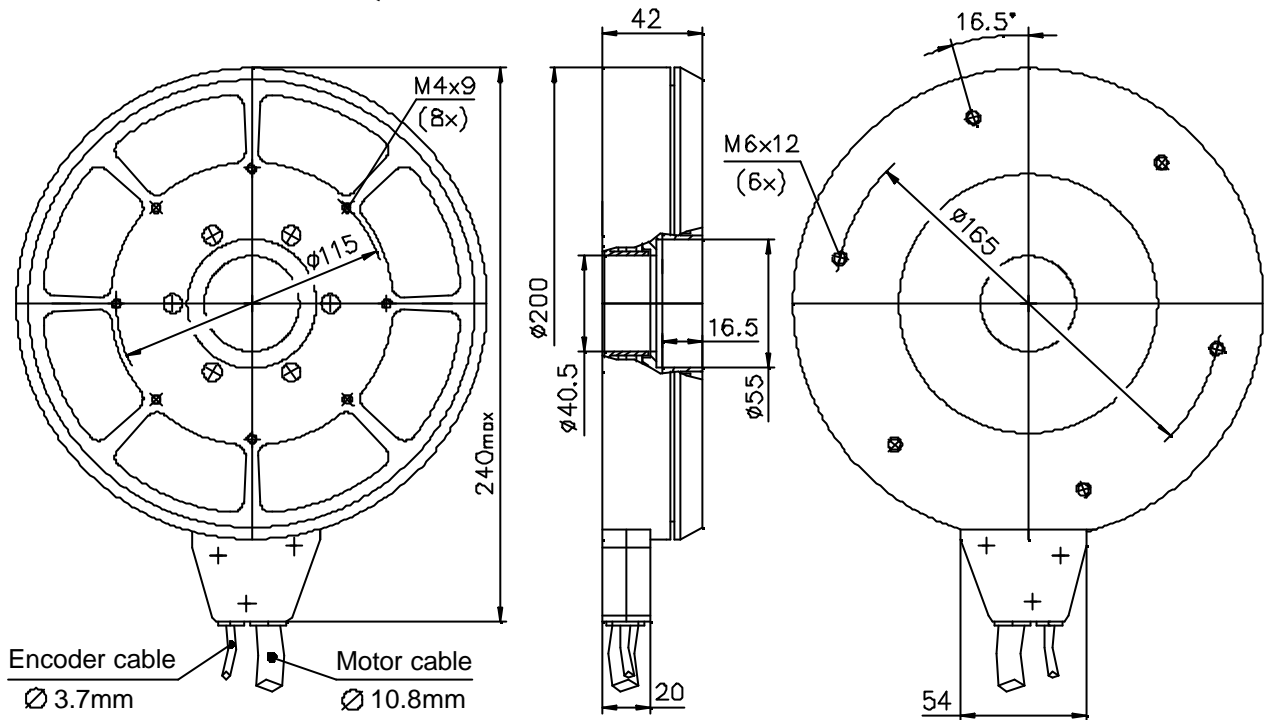


NEW

RUCH SERVOMOTOR

TORQUE MOTOR RSMR-T-24-145x25



FEATURES:

- Iron-core three-phase rotary synchronous motor with rare-earth magnets for high force density.
- Direct drive (no gear, no backlash), low profile (height 42 mm) with hollow shaft ($\varnothing 40$ mm).
- Built-in precision ball bearing, sine optical encoder, thermistors for overheating protection.
- High precision, repeatability and resolution, low cogging, smooth movement.
- High motor stiffness and large bandwidth by position regulator with encoder feedback.

APPLICATIONS:

Semiconductor manufacturing, pick and place machines, indexing tables.

CONSTRUCTION:

Motor consist of a fixed lamination stack with windings (stator) and rotated steel ring with glued permanent magnets (rotor). Windings are encapsulated in thermally conductive epoxy. The smoothness of movement is achieved by sinusoidal commutation of motor phase's currents.

| SPECIFICATION OF RSMR-T-24-145X25- | | GS | GT |
|--|-------------------|------|------|
| Number of poles pairs 2P | | | 17 |
| Peak torque Mp (coil at 20°C) | Nm | | 45 |
| Continuous torque Ma (coil at 120°C) | Nm | | 17 |
| Bearing friction torque Mb | Nm | | 0.2 |
| Peak current at Mp | Arms | 14,0 | 24,2 |
| Continuos current at Ma | Arms | 5,1 | 8,7 |
| Inductance L | mH | 15.2 | 5.1 |
| Resistance R | Ohm | 2.9 | 1.0 |
| Maximum velocity Np at 150 VDC and Mp | rpm | 214 | 412 |
| Maximum velocity Na at 150 VDC and Ma | rpm | 393 | 701 |
| Rotor moment inertia | kg•m ² | | 0.01 |
| Motor weight | kg | | 7 |
| Maximal user payload | kg | | 25 |
| Axial / radial runout | micron | | 20 |
| Encoder output signal | | | 1Vpp |
| Number of encoder lines | | | 2048 |
| Position accuracy | arc.sec. | | 35 |
| Resolution | arc.sec. | | 0,5 |
| Repeatability | arc.sec. | | 5 |