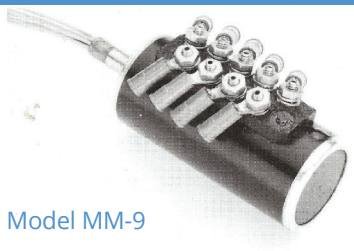
MERIDIAN LABORATORY

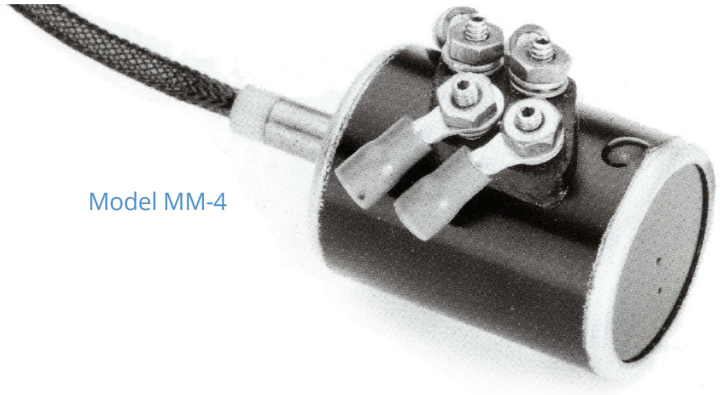
Solving Problems in Electro-Mechanical Rotation

Call us today at **1 (800) 837-6010**
to talk about how we can help you.

Model MM • Micro-Miniature



Model MM-9



Model MM-4

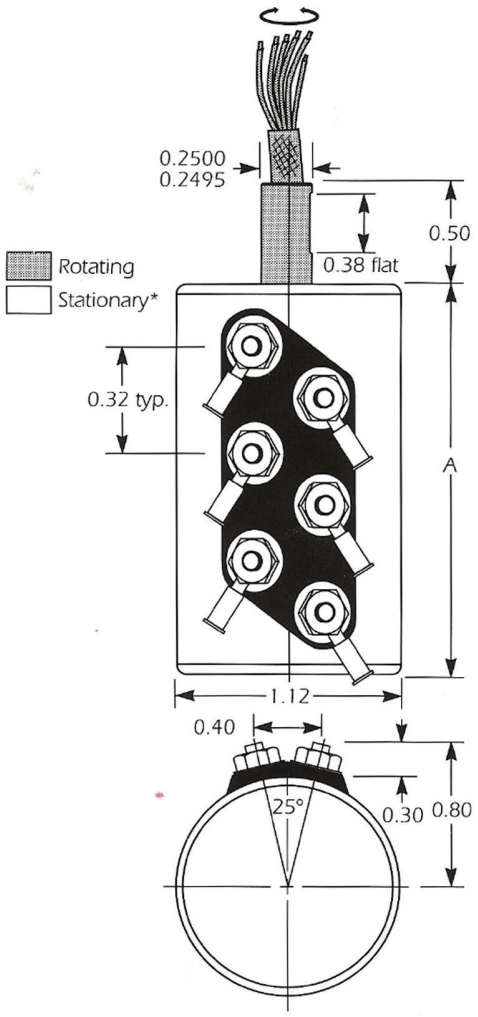
The unique Model MM micro-miniature ROTOCON is a breakthrough in packaging technology. Like all high performance ROTOCON designs, the MM has low resistance, low capacitance, no electrical noise, and is completely sealed. With a current rating of 5A, the MM is ideally suited to handle both power inputs and sensitive instrumentation signals coming from thermocouples, thermistors, strain gages, and accelerometers. The MM's small size (1 1/8 inches in diameter, 1/4 inch shaft) allows it to fit into tight mechanical layouts. Vibration and mounting orientation have no effect on electrical integrity. Torque requirements are kept to a minimum by the use of double ball- bearing construction. The ROTOCON MM is environmentally sealed and is able to withstand hostile environments with zero maintenance. Standard models can be customized to fit your existing equipment. If space is not a problem, other ROTOCON Series, such as the MX, should be considered.

Specifications

Mechanical	
RPM	0-3,000+ continuous.*
Mounting	Any end-of-shaft orientation is acceptable. Either the shaft or the housing must have a flexible coupling or link to the supporting structure. Housing rotation is prevented by an anti-rotation bolt with spring (standard) or support ring (optional).
Housing	Corrosion resistant anodized aluminum.
Connections	Flying leads with ring terminals on body.
General	Permanently lubricated bearings at both ends.
Electrical	
Voltage	Microvolts to 600 volts.
Current	Nano-amperes to 5A per channel.
Max. Wire Gauge	#20 AWG (MIL-W-16878 nickel plated, stranded copper wire with Teflon insulation). See Note 4 on back.
Frequency	DC-100Mhz (or higher using appropriately rated cable)
Stationary Contact Resistance	1m Ω (excluding lead wires)
Rotating Contact Resistance	Same as stationary resistance, no change with rotation.
Environmental	
Ambient Temperature	Not to exceed 160°F (70°C), assuming minimal heat flow through shaft and housing mounts. If machinery surfaces are hot, use insulated mounting systems or optional MMW – water cooling add-on.
Relative Humidity	No effect.

**Please contact Meridian Laboratory for unit specific ratings.*

Made In The USA



**Housing can rotate (shaft held stationary) if RPM's are low or if unit is balanced by Meridian Laboratory.*

Model No.	No. Of Contacts	A (in.)	Wt. (oz.)
MM-2	2	1.14	3
MM-4	4	1.46	4
MM-6	6	1.78	5
MM-8	8	2.10	6
MM-10	10	2.42	7
MM-12	12	2.74	8

Model MM example sizes; units containing more contacts are available.

Note 1: Dimensions subject to change without notice. If precise dimensions are required, contact Meridian Laboratory.
Note 2: Add 0.16 inches to length "A" and 0.5 ounces to the weight for each additional contact.
Note 3: Odd numbers of contact are available.
Note 4: The maximum allowable number of contacts is dependent on the size and type of wire needed to meet your requirements (teflon insulated, thermocouple leads, coaxial cable, twisted shielded pairs, or any combination of these). The maximum teflon insulated wire gauge is #20.

Applications

- Transducer Signals:
  - Strain Gages
  - All Types Of Thermocouples
  - RTD's
  - LVDT's
  - Ultrasonic Gages
  - Eddy Current Probes
- Instrumentation Signals
- Video Signals
- Communications
- Digital Data Transmissions

Features

- Miniature Package
- Zero Maintenance
- No Electrical Noise
- Environmentally Sealed
- Rugged Design
- High Reliability
- Unaffected By Vibration
- Mount In Any Orientation
- Combine Power & Control
- End of Shaft Mounting
- Fits Existing Equipment

Call us today at **1 (800) 837-6010** to request a quote or visit us online at **www.MeridianLab.com** to learn more.