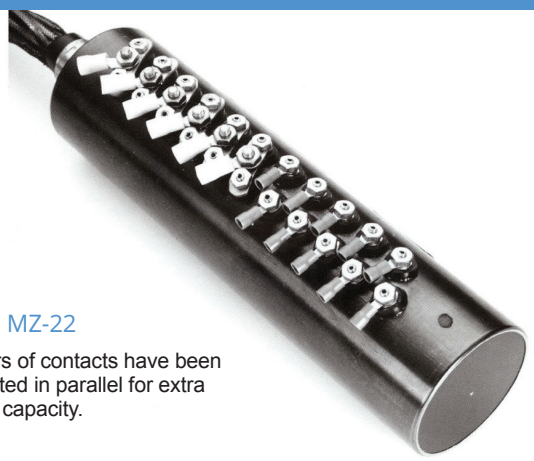
MERIDIAN LABORATORY

Solving Problems in Electro-Mechanical Rotation

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

Model MZ • High Capacity



Model MZ-22

Six pairs of contacts have been connected in parallel for extra current capacity.

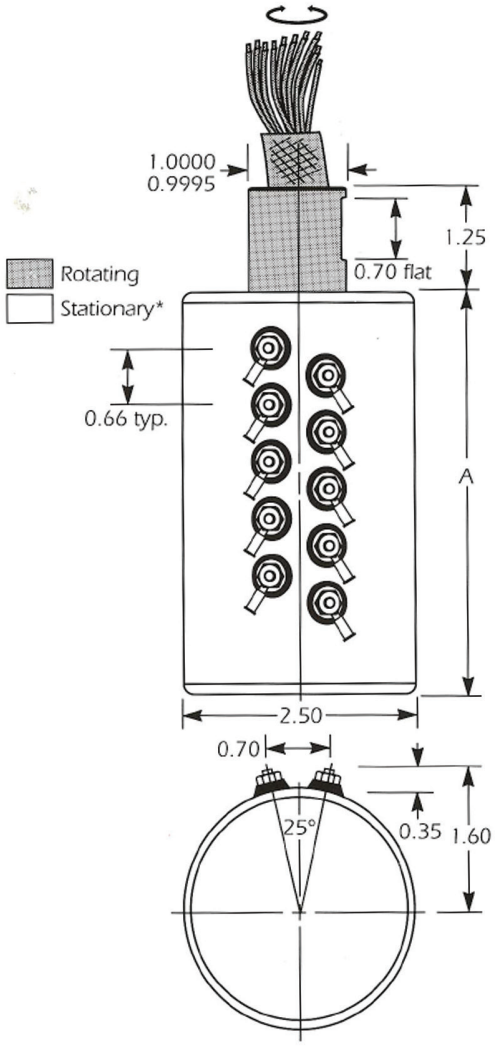
The large sized Model MZ can handle more individual signals than any other end-of-shaft ROTOCON. The one inch shaft diameter dramatically increases the total number of lead wires and the range of allowable gauges. Currents from nano amperes to 50 amperes can be carried with zero induced noise and negligible resistance. 600+ volts can be transmitted without arcing or distortion. Vibration, dirty environments, and mounting arrangement have no affect on the durable, sealed housing or the electrical performance. Standard or customized MZ's may be the solution in situations where the problems have been too big to handle.

Specifications

Mechanical	
RPM	0-1,000 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 stainless steel.
Connections	Flying leads with ring terminals on body are standard, connector/cabling options available.
General	Permanently lubricated bearings at both ends.
Electrical	
Voltage	Microvolts to 600 volts. (Higher voltage units available using MZV option)
Current	Nano-amperes to 50A per channel.
Max. Wire Gauge	#10 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 MZW – 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. (lb.)
MY-2	2	3.16	1.75
MY-4	4	3.82	2.5
MY-6	6	4.48	3.3
MY-8	8	5.14	4.0
MY-10	10	5.80	4.8
MY-12	12	6.46	5.5

Model MZ 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 0.33 inches to length "A" and 6 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 #10. Wires can be connected in parallel for increased current capacity.

Applications

- Transducer Signals:
  Strain Gages
  All Types Of Thermocouples
  RTD's
  LVDT's
  Ultrasonic Gages
  Eddy Current Probes
- DC/AC Power to 50A Per Contact
- Servo & Stepper Motor Control Signals
- Power Input & Temperature Control of Heated Rollers
- Instrumentation Signals
- Video Signals
- Communications
- Digital Data Transmissions

Features

- Zero Maintenance
- No Electrical Noise
- Environmentally Sealed
- Rugged Design
- High Reliability
- Unaffected By Vibration
- Mount In Any Orientation
- Combine Power & Control
- 95% Energy Efficient
- 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.