



## SMALL DIAMETER SLIP RING ASSEMBLIES DESIGNED FOR OPERATION IN DRY OR OIL ENVIRONMENTS

**MODIFICATIONS TO RUGGEDIZE SLIP RINGS FOR HIGH VIBRATION APPLICATIONS ARE AVAILABLE FOR ALL OUR SLIP RING ASSEMBLIES.**

THESE SLIP RING ASSEMBLIES WERE DESIGNED TO FIT A CUSTOMER'S APPLICATION. WE CAN MODIFY ANY OF OUR DESIGNS TO MEET YOUR REQUIREMENTS.

6 CHANNEL SLIP RING  
0.890" DIA



10 CHANNEL SLIP RING  
0.645" DIA



### SLIP RING ATTACHMENT TO END OF TRANSMISSION INPUT SHAFT



SEALED TERMINIALS AT END OF TRANSMISSION INPUT SHAFT - CONNECTED TO STRAIN GAGE TORQUE BRIDGE



TRANSMISSION INPUT SHAFT - STRAIN GAGED AND CALIBRATED TO MEASURE TORQUE



# Model B7-T-1.2W

- Ideal for automotive half shaft
- Mounts on shafts up to 1.2” in diameter\*
- Optional 60 pulse encoder
- Optional strain gage amplifier\*\*
- Rugged stainless steel construction
- Permanently lubricated bearings
- Instrumentation quality rings and brushes

\*bores available to 1.418”

\*\*see BA-T-1.2W literature sheet for specification



## Description

Michigan Scientific's *B7-T-1.2W Weatherproof Slip Ring Assembly* is ideal for applications that require a slip ring to be mounted directly on a rotating shaft. The *B7-T-1.2W* was designed to make long-term, all-weather (not submersible), torque measurements on automotive half shafts, but can be used in other applications with a shaft up to 1.2” in diameter (larger bores are available, consult factory). The slip ring sealing system protects against water spray, grit, dust, mud, slush, and snow.

Connections to strain gages, thermocouples, and other sensors are made via color-coded solder terminals located on the slip ring rotor. Each slip ring assembly includes a 15 ft stator cable with a protective rubber boot for the connector at the slip ring.

## Encoder option

The encoder included in the *B7-T-1.2W/E60 Tubular Slip Ring* produces a 60 pulse/revolution 5-volt square wave. The TTL compatible signal is produced by a hall-effect sensor, which allows speed to be determined down to 0 m.p.h. The voltage required to drive the encoder can range from 5.5 to 45 DC volts.

## Specifications

	B7-T-1.2W	B7-T-1.2W-AL*
Circuits	7	
Current Capacity	1A	
Temperature Range, slip ring	-40°F to 300°F (-40°C to 149°C)	
Encoder operating temperature range	-40°F to 300°F (-40°C to 149°C)	
Maximum Peak Noise**	0.1Ω	
RPM Rating	3500 RPM	
Width	2.375 in (60.3 mm)	
Diameter	3.285 in (83.5 mm)	
Weight	2.3 lbs (1.0 kg)	1.6 lbs (0.7 kg)
* A light-weight aluminum model is available.		
** Resistance variation across slip ring contact.		

# B7-T-1.2W Configuration

