

# R-Flex<sup>TM</sup> Multipurpose Coupling System



- Compensates for sensor shaft misalignments
- Compatible with all our RVDTs & RVITs
- Mates to multiple shaft sizes
- Machined from high-strength aluminum alloy
- Light weight

### **DESCRIPTION**

The R-Flex<sup>™</sup> coupling system is a versatile, easily installed coupling device that corrects for most types of angular sensor shaft misalignments. R-Flex<sup>™</sup> provides excellent hysteresis-free repeatability. The unique six-beam R-Flex<sup>™</sup> coupling adapter design provides superior performance under the most severe misalignment conditions. R-Flex<sup>™</sup> is the perfect coupling for all our angular sensors as it does not degrade the repeatability or resolution. The coupling adapter is machined from high strength, yet flexible, aluminum alloy (black anodized). Its six-beam construction prevents windup under most operating conditions and virtually eliminates coupling induced phase lag in high speed closed loop control applications. Four (4) provided insert bushings allow mating the sensors with five (5) different shaft diameters.

Measurement Specialties, Inc. (NASDAQ MEAS) offers a full range of position sensors, signal conditioners, as

MEAS acquired Schaevitz Sensors and the **Schaevitz**<sup>™</sup> trademark in 2000.

### **FEATURES**

- Mates to five (5) shaft sizes
- Integral clamps
- Six-beam construction
- Eliminates windup
- Hysteresis free
- Machined from aluminum alloy
- Anodized (Black) for corrosion protection
- Light weight

### **APPLICATIONS**

- Use with all our RVDTs and RVITs
- For correction of:
  - Angular misalignment
  - Parallel misalignment
  - Skewed misalignment
  - Axial motion
  - Rotary oscillation
- Ideal for high speed closed loop controls



# **R-Flex**<sup>™</sup> Multipurpose Coupling System

### **PERFORMANCE SPECS**

Dimensions		Misalignment Correction	
Outside Diameter	0.75" [19.05 mm]	Angular Offset	2 degrees
Length	0.75" [19.05 mm]	Parallel Offset	.005" [0.13mm]
Clamping Length	.2" [5 mm]	Axial Motion	.005" [0.13mm]
Sensor Shaft Diameter (B1)	3/16" (0.1875") [4.76]		
Mating Shaft Diameters:		Construction	
With 0.187 Insert Bushing	3/16" (0.1875") [4.76]	Coupling Adapter Material	2024-T3.51 or 7075-T6
With 5mm Insert Bushing	0.197" [5mm]	Coupling Adapter Finish	Black anodized
With 6mm Insert Bushing	0.236" [6mm]	Insert Bushing Material	G10 Phenolic (natural color)
With 0.250 Insert Bushing	0.250" [6.35mm]		
Without Insert Bushing	0.394 [10mm]		

## **DIMENSIONS**

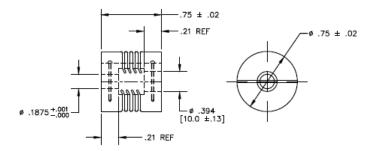
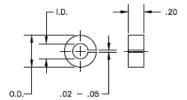


Figure 1: Coupling Adapter (Dimensions in inch [mm])



INSERT NUMBER	I.D. (inch)	I.D. (mm)
0.187	0.1895	4.813
5mm	0.1988	5.050
6mm	0.2382	6.050
0.250	0.2520	6.401

Figure 2: Insert Bushing (Dimensions in inch [mm])



## **R-Flex™** Multipurpose Coupling System

### ORDERING INFORMATION

The R-Flex™ system includes the coupling adapter, four (4) insert bushings and two (2) clamping screws.

Part Number: 66530072-000

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