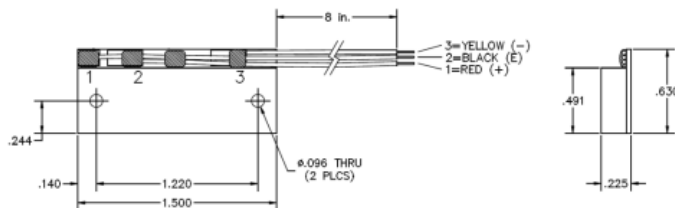
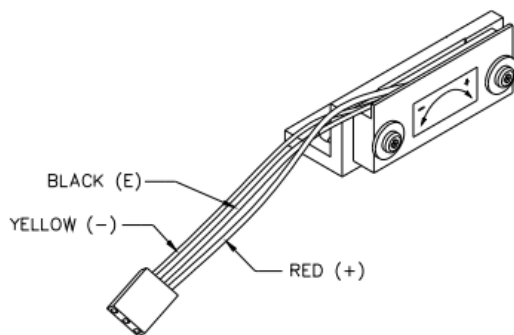
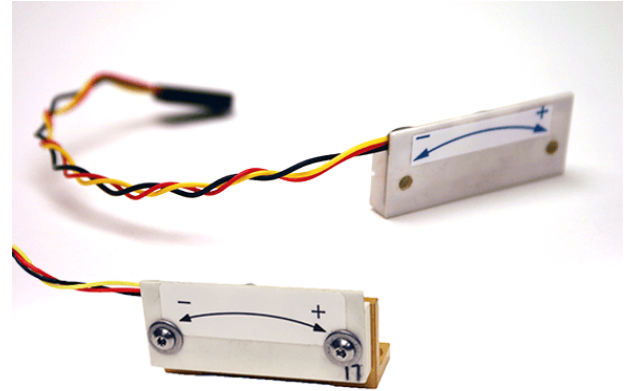
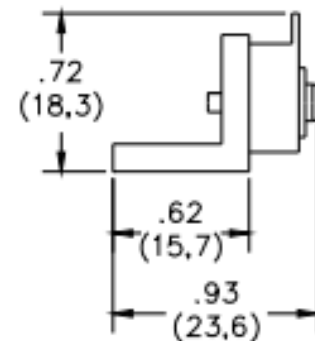
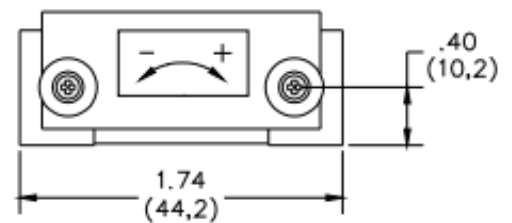
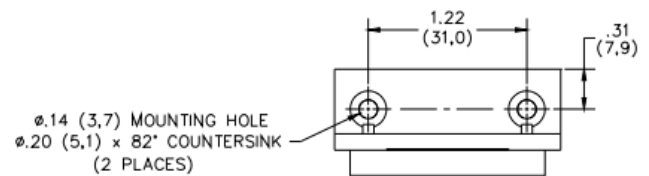


## Model 84053/59577 Mid-range Ceramic Tilt Sensor

The Model 84053 Mid-range Ceramic Tilt Sensor is a compact and robust electrolytic tilt sensor with up to 1.75 μradian resolution. Units come complete with Aluminum mounting bracket for easy installation. Order without mounting bracket as the model 59577 (performance is the same). Total range is  $\pm 6^\circ$ , linear range is  $\pm 3^\circ$ . All 84053 and 59577 Ceramic Tilt Sensors include calibration over  $\pm 3^\circ$  when ordered with Jewell electronics (or specify special/custom calibrated ranges on order). Use the 84053 and 59577 sensor for precision OEM applications where small size and peak performance are key.



Dimensions: in [mm]



# PERFORMANCE SPECIFICATIONS

## PERFORMANCE

<b>VERSION</b>	Model 84053 and 59577 Mid-range Ceramic Sensors
<b>TOTAL RANGE (°)<sup>1</sup></b>	±6°
<b>LINEAR RANGE (°)</b>	±3°
<b>NONLINEARITY (%FRO)<sup>2</sup> max</b>	2% half span (8% full span)
<b>NONREPEATABILITY</b>	0.0002° (3.5 μradian static)
<b>RESOLUTION</b>	<0.0001° (<1.75 μradian)
<b>TIME CONSTANT</b>	0.15 sec
<b>Kz TEMP COEFFICIENT (°/C)</b>	±3.5 μradians/°C (typical)
<b>Ks TEMP COEFFICIENT (%/°C)</b>	0.04%/°C (typical)

## ELECTRICAL & ENVIRONMENTAL

<b>OPERATING TEMPERATURE RANGE</b>	-50°C to +125°C
<b>STORAGE TEMPERATURE RANGE</b>	-75°C to +150°C
<b>WEIGHT</b>	84053 = 24g ; 59577 = 9.5g
<b>MATERIALS</b>	Ceramic sensor, gold anodized Al, Teflon lead wire
<b>SENSOR EXCITATION</b>	Use with any Jewell Instruments signal conditioner

### NOTES:

1. Custom ranges available on request
2. Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

Specifications are subject to change without notice due to continued product development

## ORDERING CODE

MODEL NO.	DESCRIPTION
<b>84053</b>	Mid-Range Ceramic Tilt Sensor Assembly, ±6° total range (±3° linear), with Mounting Bracket
<b>59577</b>	Mid-Range Ceramic Tilt Sensor (bare), ±6° total range (±3° linear), no Mounting Bracket