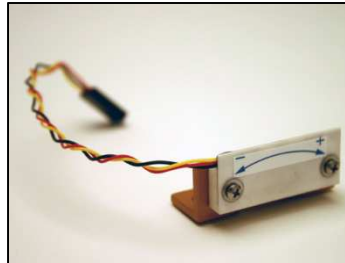


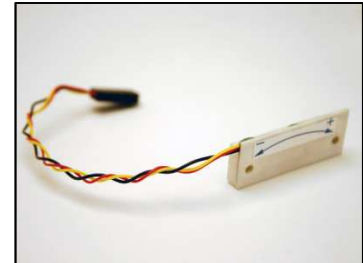
Model 84053, 59577

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 μ radian 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.



Model 84053 Mid-range
(with mounting bracket)



Model 59577 Mid-range
(without mounting bracket)

| Model 84053 and 59577 Mid-range Ceramic Sensors | |
|--|--|
| Total Range (max) ¹ | $\pm 6^\circ$ |
| Linear Range | $\pm 3^\circ$ |
| Resolution | $<0.0001^\circ$ ($<1.75 \mu$ radian) |
| Repeatability | 0.0002° (3.5 μ radian static) |
| Non-Linearity (half span, typical) ² | 2% |
| Non-Linearity (full span, typical) ² | 8% |
| Natural Frequency | 3 Hz |
| Time Constant | 0.15 sec |
| Kz Temp Coefficient (bias/ $^\circ$ C) | $\pm 3.5 \mu$ radians/ $^\circ$ C (typical) |
| Ks Temp Coefficient (%/ $^\circ$ C) ³ | 0.04%/ $^\circ$ C (typical) |
| Operating Temperature | -50° C to $+125^\circ$ C |
| Storage Temperature | -75° C to $+150^\circ$ C |
| Weight | 84053 24g ; 59577 = 9.5g |
| Materials | Ceramic sensor, gold anodized Al, Teflon lead wire |
| Sensor Excitation | Use with any Jewell Instruments signal conditioner |

Specifications subject to change without notice on account of continued product development; ¹Specify calibrated range on order; ²Max non-linearity from BFSL drawn through calibration curve, to 0.05% linearity with 5th order polynomial; ³Ks = % change in scale factor per $^\circ$ C typical

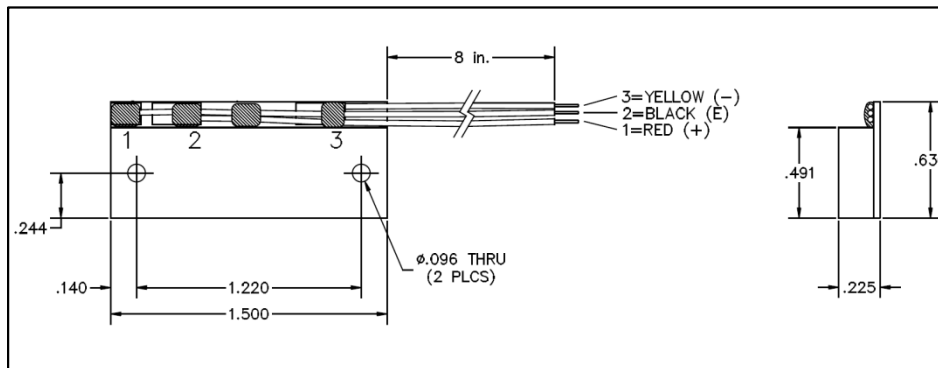
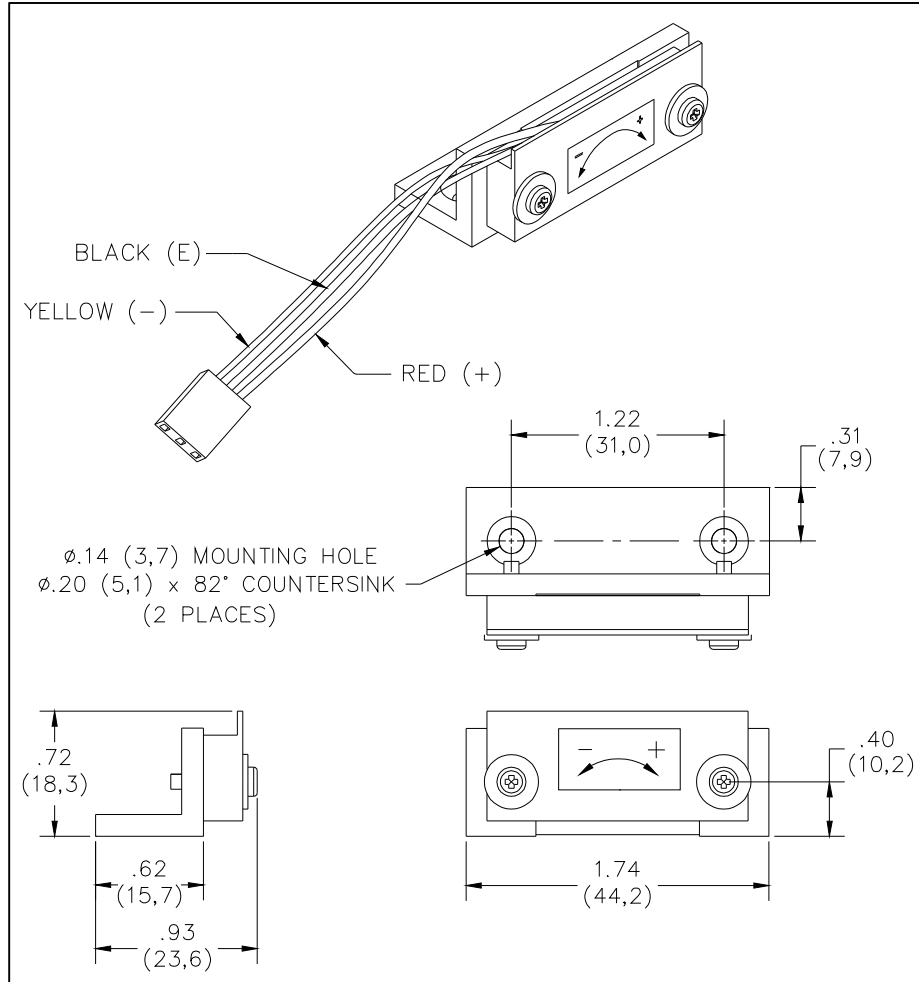
Ordering Code:

| Model No. | Description |
|-----------|--|
| 84053 | Mid-Range Ceramic Tilt Sensor Assembly, $\pm 6^\circ$ total range ($\pm 3^\circ$ linear), with Mounting Bracket |
| 59577 | Mid-Range Ceramic Tilt Sensor (bare), $\pm 6^\circ$ total range ($\pm 3^\circ$ linear), no Mounting Bracket |

Model 84053, 59577

Mid-range Ceramic Tilt Sensor

Dimensions:



Dimensions in inches (mm)