



Reaction Torque Sensors



Model 12328



Model 15228

TELEDYNE LECROY Test Services (TLTS) offers a complete line of Reaction Torque Sensors from 10 in-lb to 100,000+ in-lb capacities. All of our sensors utilize precision strain gage technology and have no moving parts.

Reaction sensors offer a lower cost approach to torque measurement by eliminating the need for rotating parts and costly electronics. Contact one of our application engineers for more details.

| SPECIFICATIONS for Models 12328 and 15228 | |
|--|-----------------------------|
| Output at Rated Torque | 1.5 - 3 mV/V Nominal |
| Calibration Accuracy | 0.25% Full Scale |
| Overload Rating | 150% |
| Excitation Maximum DC | 10V |
| Bridge Resistance..... | 350 Ohms |
| Zero Balance | ±0.1% Full Scale |
| Temperature Effect on Zero | 0.0025% Full Scale/°F |
| Compensated Temperature Range | 72°F - 150°F ±0.3°F |
| Duty Cycle..... | Standard |
| Connector..... | MS 3110P-8-4P or equivalent |

(over) 08/17



Dimensions (inches/mm)

| Part # | Model # | Torque (in-lbs) | Drawing # | A | B | C | D | E | F | G | *H |
|--------|------------|-----------------|--------------|-------------|-----------|-------------|--------------|-------------|---|--------------|-------------|
| 160296 | 12328-100K | 100000 | 12328-ASSY-3 | 6.5 165 | 5 127 | 1 25.4 | 0.52 13.2 | 4.88 124 | 8 | 2 51 | 0.25 6.4 |
| 160294 | 12328-50K | 50000 | 12328-ASSY-2 | 5 127 | 3.5 89 | 0.75 19 | 0.39 9.9 | 4.25 108 | 8 | 1.63 41.4 | thru hole |
| 160291 | 12328-20K | 20000 | 12328-ASSY-2 | 5 127 | 3.5 89 | 0.75 19 | 0.39 9.9 | 4.25 108 | 8 | 2 51 | 0.25 6.4 |
| 160289 | 12328-10K | 10000 | 12328-ASSY-2 | 5 127 | 3.5 89 | 0.75 19 | 0.39 9.9 | 4.25 108 | 8 | 2 51 | 0.25 6.4 |
| 160286 | 12328-5K | 5000 | 12328-ASSY-1 | 4.25 108 | 4 101 | 0.5 12.7 | 0.33 8.4 | 3.5 89 | 8 | 0.5 13 | 0.12 3.1 |
| 160280 | 12328-2K | 2000 | 12328-ASSY-1 | 4.25 108 | 4 101 | 0.5 12.7 | 0.33 8.4 | 3.5 89 | 8 | 0.5 13 | 0.12 3.1 |
| 160277 | 12328-1K | 1000 | 12328-ASSY-1 | 4.25 108 | 4 101 | 0.5 12.7 | 0.33 8.4 | 3.5 89 | 8 | 0.5 13 | 0.12 3.1 |

| Part # | Model # | Torque (in-lbs) | Drawing # | A | B | C | D | E | F | G | H |
|--------|------------|-----------------|------------|---------|---------------|---------------|-------|---------------|---|--------------|-----------|
| 160314 | 15228-1000 | 1000 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |
| 160313 | 15228-500 | 500 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |
| 160312 | 15228-200 | 200 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |
| 160311 | 15228-100 | 100 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |
| 160307 | 15228-50 | 50 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |
| 160304 | 15228-20 | 20 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |
| 160302 | 15228-10 | 10 | 15228-ASSY | 3 76 | 1.75 44.45 | 2.12 53.85 | 10-32 | 1.25 31.75 | 4 | 0.87 22.2 | thru hole |

*Thru hole available upon request.

Please visit <http://teledyne-ts.com/products/reactiontq.html> for detailed drawings and downloadable CAD models.

For custom or heavy-duty torque measurement applications, contact Applications Engineering at Sales_TestServices@Teledyne.com