TR3D Load Platform

Model LP-3030

- Measures forces and moments
- Three load ranges
- Universal mounting pattern
- Environmentally protected
- Temperature compensated



Description

The LP-3030 TR3D Load Platform is a compact load platform designed to have higher force and moment capacity than individual load cells. The load platform uses four three-axis load cells to measure the net forces and moments acting on the platform. The load cells can be connected to the JB3 Junction Box, which combines the signals and outputs the net forces in three channels.

The load cells are made of high-grade stainless steel and have waterproof coatings, making them resistant to corrosion and harsh environmental conditions. Temperature compensation of the load cells ensures stable output throughout a wide temperature range.

The top plate has an array of tapped holes to which the user can attach equipment, test pieces, or machining fixtures. Custom platform sizes or mounting patterns can be designed upon request.

Specifications

| | LP-3030-15 | LP-3030-45 | LP-3030-75 |
|--------------------------------------|---|-----------------------------|-----------------------------|
| Maximum Force Capacity (per channel) | 3,400 lbf (15 kN) | 10,000 lbf (45 kN) | 17,000 lbf (75 kN) |
| Maximum Mx/My Moment Capacity | 1,100 lbf · ft (1.5 kN · m) | 3,300 lbf · ft (4.5 kN · m) | 5,500 lbf · ft (7.5 kN · m) |
| Maximum Mz Moment Capacity | 1,800 lbf · ft (2.5 kN · m) | 5,500 lbf · ft (7.5 kN · m) | 8,900 lbf · ft (12 kN · m) |
| Sensor (4 of each) | TR3D-A-1K | TR3D-A-3K | TR3D-A-5K |
| Full Scale Output, Nominal | 3.3 mV/V | | |
| Nonlinearity* | < 0.5 % of full scale | | |
| Bridge Resistance, Nominal* | 250 Ω | | |
| Excitation Voltage, Maximum | 10 Vdc or Vac rms | | |
| Temperature Range, Compensated | 75 °F to 200 °F (24 °C to 93 °C) | | |
| Temperature Effect on Zero | < 0.2 % of full scale | | |
| Temperature Range, Usable | -40 °F to 300 °F (-40 °C to 149 °C) | | |
| Size (L x W x H) | 15.8 in x 11.8 in x 4 in (400 mm x 300 mm x 100 mm) | | |
| Weight | 46 lb (21 kg) | | |
| Standard Cable Length | 10 ft (3.05 m) shielded | | |

^{*}When used with junction box.

8500 Ance Road Charlevoix, MI 49720 Tel: 231-547-5511 Fax: 231-547-7070 03-7-22 Rev. A

SCIENTIFIC corporation

http://www.michsci.com Email: mscinfo@michsci.com

321 East Huron Street Milford, MI 48381 Tel: 248-685-3939 Fax: 248-685-5406

TR3D Load Platform

This page is intentionally blank.

Rev. A

http://www.michsci.com Email: mscinfo@michsci.com

321 East Huron Street Milford, MI 48381 Tel: 248-685-3939 Fax: 248-685-5406