

Description

MAT-200-FXYZMZ is quad axis for force (3) and moment (3) is and is designed for measuring the force in material testing, robotics, contact mechanics & Tribology, wind tunnel research. It is used to measure the three orthogonal components of a force and moment acting in an arbitrary direction. It exhibits high sensitivity with low cross talk & excellent repeatability. This is strain gage based sensor with full temperature compensation over 10 to 50°C. This has suitable top and bottom surfaces to mount required mounting hardware.

Features

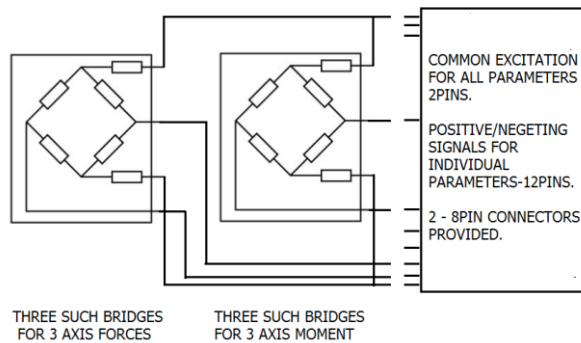
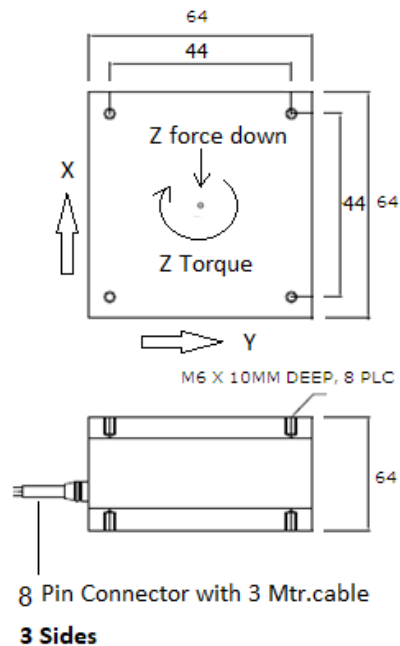
- ❖ Tri axis force from 0-50N in X, Y, Z axis.
- ❖ Tri axis moment from 0-2.5NM in X, Y, Z axis
- ❖ Other ranges offered on request

Applications

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| <ul style="list-style-type: none"> ❖ Lathe Operation ❖ Grinding & Abrasive Wheel Research ❖ Tool Wear research ❖ Tribology – Surface Mechanics ❖ Medical, Rehabilitation, Sports | <ul style="list-style-type: none"> ❖ Cutting Force Dynamometer ❖ Product & Material Testing ❖ Automotive Research ❖ Robotics ❖ Product Testing ❖ Wind Tunnel Balance Study |
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Performance Specification

Standard Capacity	0-50N, 0-2.5NM 0-100N, 0-5NM 0-200N, 0-10NM 0-400N, 0-20NM 0-1000N, 0-50NM
Excitation Voltage	10 VDC- Maximum 15 VDC
Nominal Output	0.50 to 1.0 mV/V
Non - Linearity	< ±0.5% FSO (Full Scale Output)
Hysteresis	< ±0.5% FSO
Non-Repeatability	< ±0.2% FSO
Creep (30 minutes)	< ±0.05% FSO
Zero Balance	±5.0% FSO
Bridge Resistance	350/700 ± 20 Ohms
Insulation Resistance (50 VDC)	> 2000 Mega Ohms
Cable Length (6+2 Core)	3 Meters
Safe Overload of Rated Capacity	150%
Ultimate Overload of Rated Capacity	200%
Temp. Compensated Range	10-50°C
Operating Temperature	10 – 60°C
Temperature Effect on Output	< 0.05% FSO/ °C
Temperature Effect on Zero	< 0.05% FSO/ °C
Finish & Construction	Sensing body-Aluminum Alloy/Tool Steel – electro less nickel plated
Environmental Protection Class	IP65 gage area



**Specification are subject to change.
All dimensions are in mm.**

	<p>Made in INDIA by:</p> <p>ADI ARTECH</p> <p>TRANSDUCERS PVT. LTD.</p> <p>(An ISO 9001:2015 Certified Company)</p>	<p>917/1, G.I.D.C. Estate, Makarpura, Vadodara - 390 010, Gujarat, INDIA</p> <p>Mobile : +91-9374068998, 9879444551, 9054467370</p> <p>Email : sales@adiartech.com, adiartech@adiartech.com</p> <p>Website : www.adiartech.com</p>
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