

MXL-2D-FT | Configuration review

REQUEST WORKSHEET - NOT A RELEASED DATASHEET

Use this sheet to define a quotation and drawing review. Targets and reference names do not establish an approved MXL geometry, measured performance or replacement fit.

Requested MXL measurement envelope

Architecture	Biaxial force / thrust-torque configuration
Measured components	2-Axis Thrust & Torque [Fz, Mz]
Force target	Fz: 20 N-50 kN requested
Moment target	Mz: 0.1-500 N m requested
MXL mounting / dimensions	Drawing review required
Calibration and limits	Actual crosstalk, combined loads, safe/ultimate overload, temperature and environment require model-specific evidence.

Configuration-specific review points

- Measure axial force and reaction torque, not two orthogonal force components.
- For propeller testing, include thrust, torque, rotor dynamics, fixture stiffness and guarding in the test-system design.
- For drilling, define axial preload, cutting torque, duty cycle and permissible bending load.

Third-party reference - separate from MXL approval

FUTEK MBA500, cited aluminum variant | FI1451-A; current linked PDF has 3 pages including terms | reviewed 2026-10-31
diameter 50.3 x 63.5 mm cited body; allow separate cable exit clearance
350 ohm nominal; nominal 2 mV/V for 50-100 lb variants or 3 mV/V for 200 lb; maximum excitation 18 V
The cited document covers particular load/torque combinations and material. Other part-specific MBA500 drawings can differ.
[Open primary manufacturer reference](#)

Application and documentation checklist

Complete the values below, then use the website or email template. A request does not establish document availability, quotation terms or a delivery date.

Force capacities, with units and sign convention

Moment capacities, with units (if measured)

Largest simultaneous load / tool offset / stop event

Mounting footprint, bore and cable clearance

Original manufacturer, model and drawing revision

Excitation, bridge resistance, sensitivity and pinout

DAQ / PLC / PC protocol and useful bandwidth

Temperature, ingress, cable motion and environment

Quantity, delivery country and purchasing organization

Request the applicable engineering records

- ☐ Approved drawing / STEP CAD and model-specific datasheet
- ☐ Serial calibration record, uncertainty and traceability scope
- ☐ Coordinate definition and applicable decoupling matrix
- ☐ Connector pinout, cable specification and mating parts
- ☐ Supported SDK / driver / sample code versions and release files
- ☐ EtherCAT ESI / PDO mapping if supported by the supplied module
- ☐ Configuration-specific quotation, supply and delivery terms

[Open this model and document request on the website](#)

[Open a model-specific email request template](#)