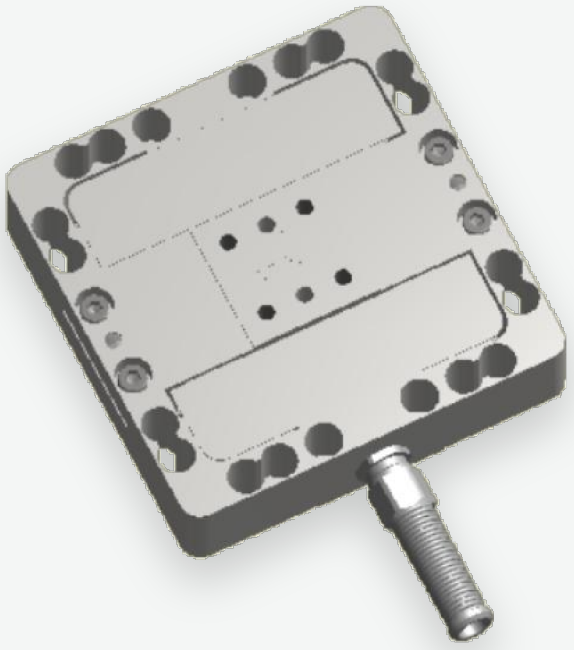
TPBB-40

3 axes. Measured at once.

3-axis force transducer with parallel bending beams

The new TPBB-40 from VELOMAT measures forces in X, Y and Z simultaneously – with its own strain gauge full bridge (350 Ω) per axis, optionally with current output via an external amplifier. Range and design tailored to your application.



Three axes in one
F_x, F_y and F_z in a single transducer – no assembly of individual sensors.

Parallel bending beams
Proven measuring principle in a compact, flat design.

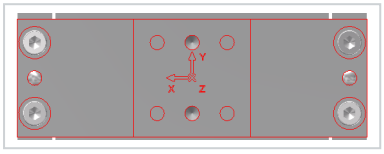
Bridge or current output
Strain gauge bridge directly or current signal via external amplifier.

Customised
Measuring range, dimensions and connection to your requirements.

Robust design
Stainless steel or aluminium, measuring elements protected by covers.

Easy mounting
Central force introduction, dowel pins for alignment.

Measuring axes



F_x	Force in X direction
F_y	Force in Y direction
F_z	Force in Z direction

Typical applications

- Test benches
- Friction tests
- Special machinery
- Joining and assembly
- Robotics and gripping
- Research & development



OUR RECOMMENDATION

VKS-0180 measuring system
Acquires F_x, F_y and F_z exactly simultaneously – at up to 1 MHz.

Technical data

Principle	Strain gauge, parallel beams
Measuring axes	X, Y, Z (F_x, F_y, F_z)
Bridges	3 × full bridge (one per axis)
Output signal	Bridge (mV/V) or current signal*
Bridge resistance	$R_i = R_a = 350\ \Omega$
Material	Stainless steel; aluminium for low forces
Force input	Central measuring plate
Connection	Lateral cable outlet
Rated force, size	customised

* Current signal via external measuring amplifier.
Further characteristics such as rated output, accuracy and crosstalk on request.

Interested in the TPBB-40? We tailor it to your measuring task – optionally as a complete solution with the VKS-0180.

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