

KT500

Highly dynamic XY stage

Flat, precise and fast

The KT500 not only impresses with its very flat and compact design. Thanks to 350 mm travel, even large substrates and parts can be scanned over the entire surface. It is designed in such a way that all process parameters can be exactly repeated and a comparable performance of air bearing systems is achieved. Thanks to a cable interface that can be disconnected via a plug connection, simple installation and maintenance-free operation up to 500,000 full strokes is possible.

- High-precision repeatability up to 0.3 μm
- Time savings in start-stop operation by top speeds of up to 400 mm/s and an acceleration of 1G
- Maintenance-free operation up to 500,000 full strokes, afterwards only a simple relubrication is necessary
- Life expectancy up to two million full strokes
- Available with up to 2 electrodynamic linear motors per direction: 2+2 motors for particularly fast scan results, 2+1 motors for equal dynamics



Fields of application

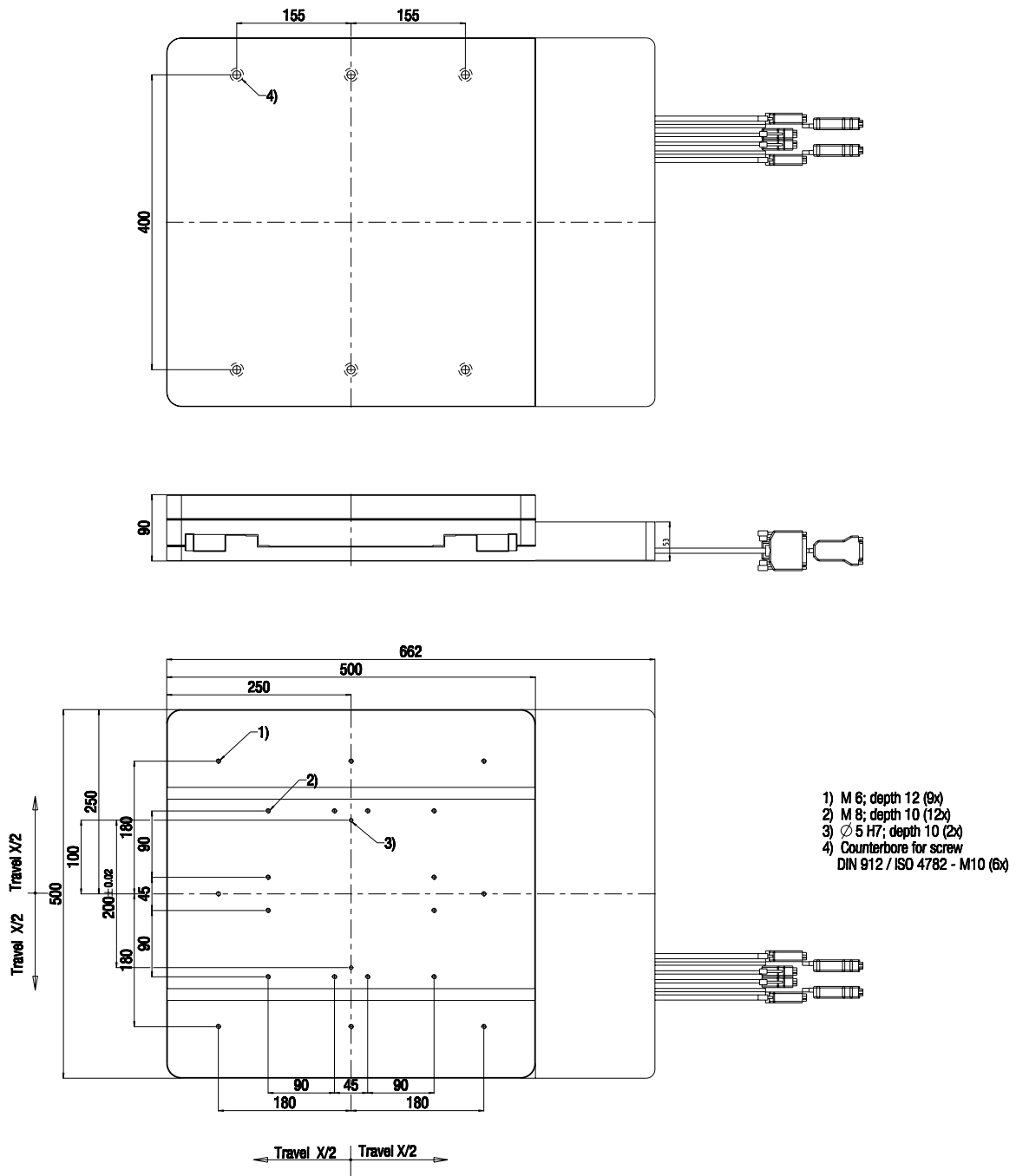
Fast scanning applications and dynamic trajectory e.g. semiconductor inspection, metrology equipment, automatic optical inspection (AOI), measuring equipment, differential measurement, replacement for air bearing stages

Specifications

KT500		-350-EDLM-L
Travel	[mm]	350
Repeatability unidirectional	[μm]	± 0.3
Repeatability bidirectional	[μm]	± 0.4
Accuracy	[μm]	± 10
Flatness	[μm]	± 10
Straightness	[μm]	± 5
Positioning speed	[mm/s]	200
Max. speed	[mm/s]	400
Max. acceleration	[m/s ²]	1000
Max. load Fx	[N]	25
Max. load Fy	[N]	25
Max. load Fz	[N]	100
Max. torque Mx	[Nm]	11
Max. torque My	[Nm]	11
Max. torque Mz	[Nm]	11
Pitch	[μrad]	± 190
Yaw	[μrad]	± 95
Length	[mm]	500
Width	[mm]	500
Height	[mm]	90
Motor	Ironless Dynamic Linear Motor	
Feedback	Linear Scale	

Specifications are subject to change. Values are for the single axis with our controller. Parameters shown here are typical values for a standard configuration. By customization and given in depth knowledge of your application significantly improved values can be achieved. Please contact us.

Dimensions / Interface



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Standardsystem-Kreuztisch-KT500-350-EDLM-L