

## TECHNICAL SPECIFICATION

|                      |   |      |
|----------------------|---|------|
| Table Size           | 60x60                                       | mm   |
| Table Stroke         | 15  | mm   |
| Pitch                | 1<br>(preloaded nut)                        | mm   |
| Repeatability        | 2   | µm   |
| Maximum Speed        | 20  | mm/s |
| Minimum Step         | 2   | µm   |
| Straightness         | 5   | µm   |
| Parallelism          | 10  | µm   |
| Material             | Aluminium<br>(3D printed version available) |      |
| Motor                | Nanotec® 2 phase stepper motor              |      |
| Connector            | Harting ix Industrial®                      |      |
| Limit Switch         | Photoelectric                               |      |
| Power Voltage        | 24<br>(5V DC optional)                      | V DC |
| Compatibility        | Any 2 phase stepper motor controller        |      |
| Suggested Controller | Ezi-STEP® / Ezi-STEP® mini                  |      |

## NOTES



# SIMPLIFIED PRECISION LINEAR STAGE



# SIMPLICITY AND HIGH PRECISION

» The Simplified Precision Linear Stage combines simplicity and high precision at a low price.

It's design with preloaded ball cage guides, each with 90 precision balls, and a Nanotec hybrid stepper motor guarantees smooth and even running of the drive spindle for precise and reliable positioning. Unlike conventional linear stages, these special ball cage guides require little precision when manufacturing the housing. This enables significantly simplified manufacturing and assembly. Additional components such as couplings, adjustment devices for preloading and tolerance compensation can be dispensed with. A preloaded shaft nut made of a high-strength and very low-friction plastic replaces the usual brass or recirculating ball nuts and offers a lubrication-free, low-outgassing application with minimal hysteresis. This simplification of the design even makes it possible to create the housing in 3D printing and thus adapt it individually to your prototype. Almost without loss of precision. A novelty for rapid prototyping. **Precise - Customizable - Simple.**

## MULTI AXIS POSITIONING STAGE

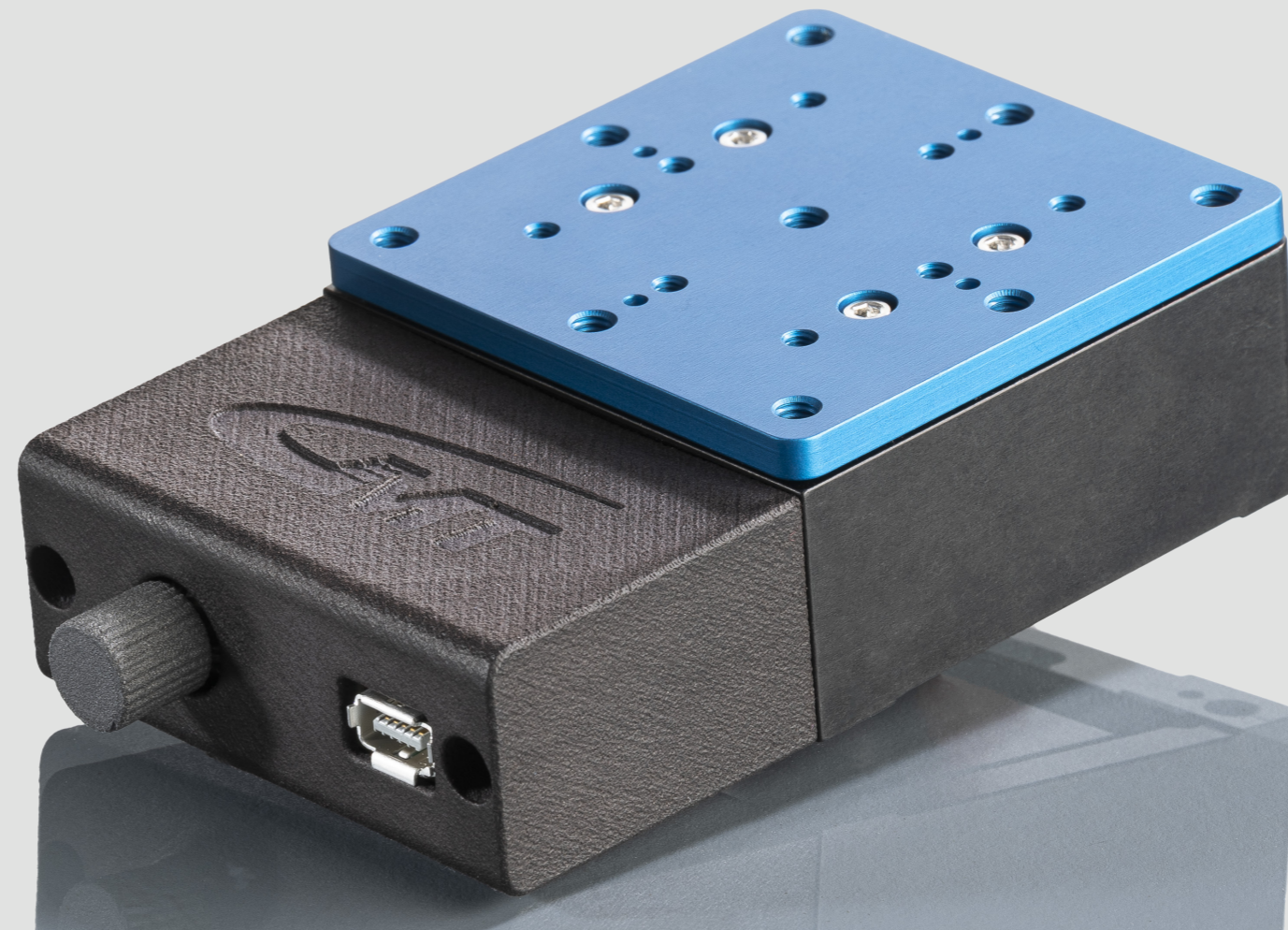
The design allows it to be combined easily as XY, XZ and XYZ linear stage without the need of additional accessories as adapter or angle plates.

## HIGH VERTICAL RANGE OF MANUFACTURE

GMT is characterized by a high vertical range of manufacture. All mechanical components are manufactured in-house. The guideways are ground and hardened in our modern factory. This enables us to maintain a stable supply situation with direct influence on all quality critical components and manufacturing processes. Of course, GMT is ISO certified and follows all necessary specifications such as REACH, RoHs as well as CE machinery guidelines.

## ASSEMBLY AND QUALITY CONTROL IN GERMANY

GMT has a state-of-the-art measuring center and detailed quality control. Furthermore, all products are also subjected to a final quality control in Germany. This stage is designed and produced in Germany.



  
**MADE IN GERMANY  
DESIGNED IN GERMANY**

## OPTIONS

### DIRECT XYZ MOUNTING

- Easily combinable as XY, XZ, and XYZ linear stage
- No additional accessories necessary (e.g. adapter or angle plate)
- Standardized hole patterns
- Compact design



### OPEN LOOP NANOTEC® STEPPER MOTOR

- Integratable to any 2 phase stepper motor controller
- High quality, long life time
- High holding torque
- High precision accuracy
- No hunting



### EXTERNAL PLUG AND PLAY CLOSED LOOP CONTROLLER OPTION

- RS485/USB Ethernet or EtherCAT interface
- Comes with Windows software
- Programmable by LabView, C++, MatLab, C# etc.
- High torque, with very continuous motion
- Positioning table



### PROFESSIONAL INDUSTRIAL CONNECTOR

- Harting ix industrial connector®
- Robust and miniaturized connector
- Stable and reliable
- Easy plug and play
- Shielded cable
- Adapters available

