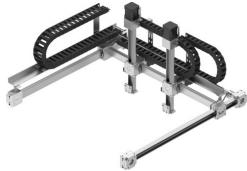


# Three-dimensional gantry

## EXCL-15-200-300-Z1-100-GF-ST-R-1-EK-M6-AN

FESTO

Part number: 8184925



## Data sheet

| Feature                                   | Value  |
|---|--|
| Size                                      | 15   |
| Stroke of the X-axis                      | 200 mm   |
| Stroke of the Y-axis                      | 300 mm   |
| Stroke of the Z-axis 1                    | 100 mm   |
| Controller operating mode                 | P position controller<br>Direct operation<br>Synchronised operating modes<br>Homing<br>Open-loop operation |
| Operating mode of drive unit              | Microstepping, >4000 steps/rev   |
| Adjustable current reduction              | Via software   |
| Mounting position                         | Horizontal   |
| Protective function                       | Voltage failure detection<br>Software end-position detection   |
| Design                                    | 3D gantry system   |
| Type of interpolation                     | Linear interpolation   |
| Type of motor                             | Stepper motor  |
| Position mode                             | Position directly transferred  |
| Display                                   | Green/yellow/red LED   |
| Nominal current setting                   | Via software   |
| Max. acceleration                         | 1 m/s <sup>2</sup>   |
| Max. speed                                | 0.5 m/s  |
| Repetition accuracy                       | ±0.1 mm  |
| Max. search speed X-axis                  | 0.03 m/s   |
| Max. creep speed X-axis                   | 0.003 m/s  |
| Max. search speed velocity Y-axis         | 0.03 m/s   |
| Max. creep speed Y-axis                   | 0.003 m/s  |
| Max. search speed Z-axis                  | 0.015 m/s  |
| Max. creep speed Z-axis                   | 0.003 m/s  |
| Duty cycle                                | 100%   |
| Nominal voltage for logic power supply DC | 5 V  |
| Nominal voltage load voltage DC           | 24 V   |
| Nominal voltage X-axis                    | 1.68 V   |

| Feature                                      | Value                            |
|--|----------------------------------|
| Nominal voltage Y-axis                       | 3.2 V                            |
| Nominal voltage Z-axis                       | 3.2 V                            |
| Nominal current X-axis                       | 4.2 A                            |
| Nominal current Y-axis                       | 2 A                              |
| Nominal current Z-axis                       | 2 A                              |
| Parameterisation interface                   | Ethernet                         |
| Position control                             | yes                              |
| Ethernet, supported protocols                | FTP<br>TCP/IP                    |
| Permissible range for logic voltage          | ± 10 %                           |
| KC mark                                      | KC-EMV                           |
| CE mark (see declaration of conformity)      | To EU EMC Directive              |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC       |
| LABS (PWIS) conformity                       | VDMA24364 zone III               |
| Storage temperature                          | -10 °C...60 °C                   |
| Relative air humidity                        | 0 - 90%                          |
| Sound pressure level                         | 65.8 dB(A)                       |
| Degree of protection                         | IP10                             |
| Ambient temperature                          | 10 °C...40 °C                    |
| Motor holding torque                         | 0.5 Nm...1.4 Nm                  |
| Max. process force in Z direction            | 15 N                             |
| Feed constant of the X-axis                  | 64 mm/U                          |
| Feed constant of the Y-axis                  | 37.7 mm/U                        |
| Feed constant of the Z-axis                  | 5 mm/U                           |
| Product weight                               | 5450 g                           |
| Process interfacing                          | Drives with positioning function |
| Communication interface, logic               | Ethernet - TCP/IP                |
| Type of mounting                             | With female thread M3            |
| Note on materials                            | RoHS-compliant                   |