

# planar surface gantry EXCM-10-300-110-GF-ST-B-E1

FESTO

Part number: 1801917  
Product to be discontinued

With plain-bearing guide.

Type to be discontinued. Available until 2018. See Support Portal for alternative products.



## Data sheet

| Feature                                | Value  |
|--|--|
| Size                                   | 10   |
| Stroke in X direction                  | 300 mm   |
| Stroke in Y direction                  | 110 mm   |
| Controller operating mode              | PWM-MOSFET power output stage<br>Cascade controller with<br>P position controller<br>PI speed controller<br>Proportional and integral controller for electricity     |
| Operating mode                         | Micro step, 2000 step/U  |
| Adjustable current reduction           | Using software   |
| Assembly position                      | Horizontal   |
| Position sensor                        | Encoder  |
| Mains filter                           | Integrated   |
| Protective function                    | I <sup>2</sup> t monitoring<br>Temperature monitoring<br>Current monitoring<br>Voltage failure detection<br>Drag error monitoring<br>Software end-position detection |
| Design structure                       | Planar surface gantry  |
| Type of interpolation                  | Linear interpolation   |
| Motor type                             | Stepper motor  |
| Position mode                          | Set selection mode<br>Position directly transferred  |
| Display                                | 7-segment  |
| Nominal current adjustment             | Using software   |
| Max. acceleration                      | 3 m/s <sup>2</sup>   |
| Max. speed                             | 0.3 m/s  |
| Repetition accuracy                    | ±0,1 mm  |
| Braking resistance                     | 15 Ohm   |
| Digital logic output characteristics   | Not electrically isolated  |
| Duty cycle                             | 100%   |
| Max. current, digital logic outputs    | 100 mA   |
| Max. intermediate circuit voltage, DC  | 28 V   |
| Nominal DC voltage, logic power supply | 24 V   |
| Nominal voltage, load supply DC        | 24 V   |
| Nominal current, load supply           | 6 A  |
| Nominal current, logic supply          | 0.3 A  |
| Effective nominal current per phase    | 1.4 A  |
| Parameters configuring interface       | Ethernet   |
| Position control                       | Yes  |
| Ethernet, supported protocols          | TCP/IP   |

| Feature                                  | Value  |
|--|--|
| Peak current, load supply                | 8 A  |
| Permissible range, logic voltage         | ± 15 %                                       |
| CE mark (see declaration of conformity)  | to EU directive for EMC                      |
| Storage temperature                      | -10 ... 60 °C                                |
| Relative air humidity                    | 0 - 90 %<br>non-condensing                   |
| Sound pressure level                     | 38 dB(A)                                     |
| Protection class                         | IP20   |
| Ambient temperature                      | 10 ... 45 °C                                 |
| Speed at max. torque                     | 0.2 m/s                                      |
| Motor holding torque                     | 0.127 Nm                                     |
| Max. force Fz                            | 150 N  |
| Max. torque Mx                           | 2 Nm   |
| Max. torque My                           | 0.5 Nm                                       |
| Max. torque Mz                           | 2 Nm   |
| Nominal torque                           | 0.127 Nm                                     |
| Rated load with maximum dynamic response | 0.5 kg                                       |
| Product weight                           | 4,000 g                                      |
| Number of 24 V DC digital logic outputs  | 5  |
| Number of digital logic inputs           | 9  |
| Communications profile                   | FHPP   |
| Process interface                        | I/O coupling<br>for 64 position sets         |
| Specification, logic input               | Based on IEC 61131-2                         |
| Logic input working range                | 24 V   |
| Logic input characteristics              | galvanically connected to logic potential    |
| Switching logic, outputs                 | NPN (negative switching)                     |
| Input circuit logic                      | NPN (negative switching)                     |
| Communication interface, logic           | CAN DS 301<br>E/A 64pos<br>Ethernet - TCP/IP |
| Mounting type                            | With through-hole and screw                  |
| Materials note                           | Conforms to RoHS                             |