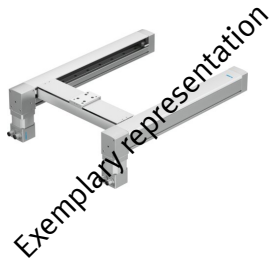


# Planar surface gantry EXCM-30-

Part number: 2226101

FESTO



General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature                                    | Value                                                                                                                                                                      |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                       | 30                                                                                                                                                                         |
| Controller operating mode                  | PWM MOSFET power output stage<br>Cascade controller with<br>P position controller<br>PI speed controller<br>PI current regulator                                           |
| Mode of operation                          | Micro step, 2000 steps/rev.                                                                                                                                                |
| Mounting position                          | Any                                                                                                                                                                        |
| Position sensor                            | Encoder                                                                                                                                                                    |
| Line filter                                | Integrated                                                                                                                                                                 |
| Protective function                        | I <sup>2</sup> t monitoring<br>Temperature monitoring<br>Current monitoring<br>Voltage failure detection<br>Contouring error monitoring<br>Software end position detection |
| Structural design                          | Planar surface gantry                                                                                                                                                      |
| Type of interpolation                      | Linear interpolation                                                                                                                                                       |
| Motor type                                 | Stepper motor                                                                                                                                                              |
| Position mode                              | Block selection mode<br>Transfer position directly                                                                                                                         |
| Safety function                            | Safe torque off (STO)                                                                                                                                                      |
| Display                                    | 7-segment<br>LED                                                                                                                                                           |
| Max. acceleration                          | 10 m/s <sup>2</sup> ... 20 m/s <sup>2</sup>                                                                                                                                |
| Max. speed                                 | 0.5 m/s ... 1 m/s                                                                                                                                                          |
| Repetition accuracy                        | ±0.05 mm                                                                                                                                                                   |
| Braking resistor                           | 15 Ohm                                                                                                                                                                     |
| Characteristics of digital logic outputs   | Not galvanically isolated                                                                                                                                                  |
| Duty cycle                                 | 100%                                                                                                                                                                       |
| Max. current of digital logic outputs      | 100 mA                                                                                                                                                                     |
| Nominal voltage, logic supply DC           | 24 V                                                                                                                                                                       |
| Nominal voltage, load supply DC            | 24 V ... 48 V                                                                                                                                                              |
| Parameterization interface                 | Ethernet                                                                                                                                                                   |
| Position control                           | yes                                                                                                                                                                        |
| Ethernet, supported protocols              | TCP/IP                                                                                                                                                                     |
| Permissible range of logic voltage         | ± 15 %                                                                                                                                                                     |
| CE marking (see declaration of conformity) | As per EU EMC directive                                                                                                                                                    |

| Feature                                      | Value                                                |
|----------------------------------------------|------------------------------------------------------|
| 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 %<br>Non-condensing                           |
| Noise level                                  | 52 dB(A)                                             |
| Degree of protection                         | IP20                                                 |
| Ambient temperature                          | 10 °C ... 45 °C                                      |
| Motor holding torque                         | 0.5 Nm                                               |
| Max. driving torque                          | 0.2 Nm                                               |
| Max. force Fz                                | 1345 N                                               |
| Max. torque Mx                               | 5.5 Nm                                               |
| Max. torque My                               | 10.9 Nm                                              |
| Max. torque Mz                               | 5.5 Nm                                               |
| Max. process force in Z direction            | 100 N                                                |
| Nominal torque                               | 0.04 Nm                                              |
| Guide value rated load, horizontal           | 3 kg                                                 |
| Guide value rated load, vertical             | 2 kg                                                 |
| Feed constant                                | 38 mm/U                                              |
| Number of digital logic outputs 24 V DC      | 5                                                    |
| Number of digital logic inputs               | 8                                                    |
| Communication profile                        | FHPP                                                 |
| Process interfacing                          | I/O coupling<br>For 31 blocks                        |
| Logic input specification                    | Based on IEC 61131-2                                 |
| Work range of logic input                    | 24 V                                                 |
| Characteristics of logic input               | Galvanically connected to logic potential            |
| Input switching logic                        | NPN (negative switching)<br>PNP (positive switching) |
| Switching logic at outputs                   | NPN (negative switching)<br>PNP (positive switching) |
| Logic communication interface                | CAN DS 301<br>I/O 31pos<br>Ethernet - TCP/IP         |
| Type of mounting                             | Profile mounting                                     |
| Note on materials                            | RoHS-compliant                                       |