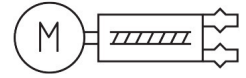


# Parallel gripper EHPS-25-A-LK

Part number: 8103811

FESTO



 [General operating condition](#)

## Data sheet

| Feature                                           | Value                                                                             |
|---------------------------------------------------|-----------------------------------------------------------------------------------|
| Size                                              | 25                                                                                |
| Stroke per gripper jaws                           | 16 mm                                                                             |
| Max. replacement accuracy                         | ≤0.2 mm                                                                           |
| Max. angular gripper jaw backlash ax, ay          | 0.3 deg                                                                           |
| Max. gripper jaw backlash Sz                      | 0.04 mm                                                                           |
| Rotationally symmetrical                          | ≤0.2 mm                                                                           |
| Repetition accuracy, gripper                      | ≤0.01 mm                                                                          |
| Number of gripper jaws                            | 2                                                                                 |
| Drive system                                      | Electrical                                                                        |
| Mounting position                                 | optional                                                                          |
| Gripper function                                  | Parallel                                                                          |
| Design                                            | Worm gear unit<br>T-shape<br>Rack and pinion<br>Electric gripper                  |
| Conforms to standard                              | IEC 61010-1                                                                       |
| Guide                                             | Plain-bearing guide                                                               |
| Position detection                                | With Hall sensor<br>With integrated displacement encoder<br>Via IO-Link interface |
| Symbol                                            | 00992258                                                                          |
| Type of motor                                     | DC servo motor                                                                    |
| Ready status indication                           | LED                                                                               |
| Max. cycle frequency                              | 0.8 Hz                                                                            |
| Max. mass per external gripper finger             | 230 g                                                                             |
| Max. current consumption                          | 2000 mA                                                                           |
| Nominal operating voltage DC                      | 24 V                                                                              |
| Permissible voltage fluctuations                  | +/- 10 %                                                                          |
| Approval                                          | RCM trademark                                                                     |
| KC mark                                           | KC-EMV                                                                            |
| CE mark (see declaration of conformity)           | To EU EMC Directive<br>In accordance with EU RoHS Directive                       |
| UKCA marking (see declaration of conformity)      | To UK instructions for EMC<br>To UK RoHS instructions                             |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)                                                        |
| Explosion protection                              | Zone 1 (UKEX)<br>Zone 21 (UKEX)                                                   |

| Feature                                            | Value                                                                                                                                                  |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Corrosion resistance class CRC                     | 1 - Low corrosion stress                                                                                                                               |
| LABS (PWIS) conformity                             | VDMA24364-B2-L                                                                                                                                         |
| Suitability for the production of Li-ion batteries | Metals with more than 5% by mass of copper are excluded from use. Exceptions are printed circuit boards, cables, electrical plug connectors and coils  |
| Sound pressure level                               | ≤70 dB(A)                                                                                                                                              |
| Degree of protection                               | IP40                                                                                                                                                   |
| Ambient temperature                                | 5 °C ... 60 °C                                                                                                                                         |
| Total gripping force                               | 312 N                                                                                                                                                  |
| Mass moment of inertia                             | 5.24 kgcm <sup>2</sup>                                                                                                                                 |
| Max. force on gripper jaw Fz static                | 450 N                                                                                                                                                  |
| Max. torque at gripper Mx static                   | 28 Nm                                                                                                                                                  |
| Max. torque at gripper My static                   | 16 Nm                                                                                                                                                  |
| Max. torque at gripper Mz static                   | 28 Nm                                                                                                                                                  |
| Lubrication interval for guide components          | 2 MioCyc                                                                                                                                               |
| Product weight                                     | 904 g                                                                                                                                                  |
| Protocol                                           | IO-Link®                                                                                                                                               |
| IO-Link, Protocol version                          | Device V 1.1                                                                                                                                           |
| IO-Link, communication mode                        | COM3 (230.4 kBaud)                                                                                                                                     |
| IO-Link, SIO-Mode support                          | No                                                                                                                                                     |
| IO-Link, Port class                                | Device B                                                                                                                                               |
| IO-Link, Number of ports                           | Device 1                                                                                                                                               |
| IO-Link, Process data length OUT                   | 8 bytes                                                                                                                                                |
| IO-Link, Process data content OUT                  | 16 bit (ControlWord)<br>16 bit (GrippingPosition)<br>8-bit (GrippingForce)<br>8 bit (GrippingMode)<br>8 bit (GrippingTolerance)<br>8 bit (WorkpieceNo) |
| IO-Link, Process data length IN                    | 6 bytes                                                                                                                                                |
| IO-Link, Process data content IN                   | 16-bit (ActualPosition)<br>16 bit (ErrorNumber)<br>16 bit (StatusWord)                                                                                 |
| IO-Link, Min. cycle time                           | 5 ms                                                                                                                                                   |
| IO-Link, Data storage required                     | <500 Byte                                                                                                                                              |
| IO-Link, Device ID                                 | 0x000033                                                                                                                                               |
| Electrical connection                              | 5-pin<br>Cable with plug<br>M12x1                                                                                                                      |
| Type of mounting                                   | Either:<br>Via female thread and centring sleeve<br>Via through-hole and centring sleeve                                                               |
| Note on materials                                  | RoHS-compliant                                                                                                                                         |
| Material housing                                   | Anodised wrought aluminium alloy                                                                                                                       |
| Material gripper jaws                              | High-alloy stainless steel                                                                                                                             |