

Parallel gripper HPPL-40-80-A-F1A

Part number: 8202622

FESTO



Data sheet

| Feature | Value |
|--|--|
| Size | 40 |
| Total stroke | 80 mm |
| Stroke per gripper jaws | 40 mm |
| Max. angular gripper jaw backlash ax, ay | 0.2 deg |
| Max. gripper jaw backlash Sz | 0.05 mm |
| Repetition accuracy, gripper | 0.03 mm |
| Number of gripper jaws | 2 |
| Drive system | Pneumatic |
| Mounting position | optional |
| Mode of operation | Double-acting |
| Cushioning | Elastic cushioning rings/pads at both ends without metal fixed stop |
| Gripper function | Parallel |
| Gripper force back-up | None |
| Design | Twin piston Guidance Piston gate valve T-shape Rack and pinion |
| Guide | Heavy-duty guide |
| Position detection | Via proximity switch |
| Variants | Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. |
| Operating pressure | 0.2 MPa...0.8 MPa 2 bar...8 bar 29 psi...116 psi |
| Min. opening time at 0.6 MPa (6 bar, 87 psi) | 252 ms |
| Min. closing time at 0.6 MPa (6 bar, 87 psi) | 200 ms |
| Max. mass per external gripper finger | 420 g |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Lubricated operation possible (in which case lubricated operation will always be required) |
| Shock resistance | Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27 |

| Feature | Value |
|--|--|
| Corrosion resistance class CRC | 1 - Low corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Suitability for the production of Li-ion batteries | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Vibration resistance | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 |
| Degree of protection | IP40 |
| Ambient temperature | -10 °C...80 °C |
| Total gripping force, opening, 0.6MPa (6bar, 87 psi) | 1112 N |
| Total gripping force, closing, 0.6MPa (6bar, 87 psi) | 1248 N |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 556 N |
| Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) | 624 N |
| Theoretical total gripping force at 0 mm, 0.6 MPa (6 bar, 87 psi) open | 1240 N |
| Theoretical total gripping force at 0 mm, 0.6 MPa (6 bar, 87 psi), closing | 1376 N |
| Theoretical gripping force per gripper jaw at 0 mm, 0.6 MPa (6 bar, 87 psi), closing | 620 N 688 N |
| Mass moment of inertia | 63.66 kgcm ² |
| Max. force Fz | 3000 N |
| Max. torque at gripper Mx static | 125 Nm |
| Max. torque at gripper My static | 80 Nm |
| Max. torque at gripper Mz static | 100 Nm |
| Product weight | 2861 g |
| Type of mounting | Via female thread and centring sleeve Via through-hole and centring sleeve |
| Pneumatic connection | M5 |
| Note on materials | RoHS-compliant Free of copper |
| Material cover cap | Wrought aluminium alloy, anodised |
| Material end plate | Anodised wrought aluminium alloy |
| Material housing | Anodised wrought aluminium alloy |
| Material gripper jaws | High-alloy stainless steel |
| Material piston | Wrought aluminium alloy, anodised |
| Material piston seal | TPE-U(PU) |
| Material piston rod | High-alloy stainless steel |
| Material o-ring | NBR |
| Material screws | Steel, chemically nickel-plated |
| Gear wheel material | High-alloy steel |
| Gripper finger material | Wrought aluminium alloy, anodised |