Parallel gripper DHPC-L-20-A-B-1 Part number: 8116839







Data sheet

| Stroke per gripper jaws Max. replacement accuracy 0.2 mm Max. gripper jaw backlash ax, ay 0 deg Max. argipper jaw backlash Sz 0 mm Rotationally symmetrical 0.2 mm Repetition accuracy, gripper Number of gripper jaws 2 Drive system Pneumatic Mounting position Mounting position Double-acting Gripper function Gripper function Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball 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 steet, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. Operating pressure 0.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) Mote on operating and pilot medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O · No corrosion stress | Feature | Value |
|--|--|--|
| Max. replacement accuracy Max. angular gripper jaw backlash ax, ay O deg Max. gripper jaw backlash Sz O mm Rotationally symmetrical O.2 mm Repetition accuracy, gripper Number of gripper jaws Drive system Pneumatic Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball guide Position detection Via proximity switch Warriants 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 O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) Note on operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Size | 20 |
| Max. angular gripper jaw backlash ax, ay Max. gripper jaw backlash Sz O mm Rotationally symmetrical Repetition accuracy, gripper O.02 mm Number of gripper jaws 2 Drive system Penumatic Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball guide Position detection Via proximity switch 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 O. 1 MPa08 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Stroke per gripper jaws | 9 mm |
| Max. gripper jaw backlash S2 Rotationally symmetrical Repetition accuracy, gripper Rotational Rotationa | Max. replacement accuracy | 0.2 mm |
| Rotationally symmetrical Repetition accuracy, gripper Rotationally symmetrical Repetition accuracy, gripper Rotation accuracy, gripper Rotation accuracy, gripper aws 2 Drive system Rode of operation Rotation Rode of operation Parallel Gripper function Roripper force back-up Rosign Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Rall guide Position detection Via proximity switch Variants Rotats 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 O.1 MPaO.8 MPa 1 bar8 bar 1 4.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Max. angular gripper jaw backlash ax, ay | 0 deg |
| Repetition accuracy, gripper Number of gripper jaws Drive system Pneumatic Mounting position Mode of operation Double-acting Gripper function Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball 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 O.1 MPao.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) Operating medium Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Max. gripper jaw backlash Sz | 0 mm |
| Number of gripper jaws 2 Drive system Pneumatic Mounting position optional Mode of operation Double-acting Gripper function Parallel Gripper force back-up None Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball 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 0.1 MPa0.8 MPa 1 bar8 bar 1 4.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 75 ms 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) Corrosion resistance class CRC 0 - No corrosion stress | Rotationally symmetrical | 0.2 mm |
| Drive system Mounting position Mode of operation Gripper function Gripper function Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Ball guide Position detection Variants Wats 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 Operating frequency of gripper Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) Operating medium Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Repetition accuracy, gripper | 0.02 mm |
| Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball guide Position detection 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 0.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Number of gripper jaws | 2 |
| Mode of operation Gripper function Parallel Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Guide Ball guide 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 0.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) To ms Min. closing time at 0.6 MPa (6 bar, 87 psi) Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Drive system | Pneumatic |
| Gripper function Parallel Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Ball 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 O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC O - No corrosion stress | Mounting position | optional |
| Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Ball 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 O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC O - No corrosion stress | Mode of operation | Double-acting |
| Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Ball guide Position detection Via proximity switch Wariants 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 0.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 110 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC 0 - No corrosion stress | Gripper function | Parallel |
| Lever Side mounting method for gripper fingers Force pilot operated motion sequence Ball guide Position detection Via proximity switch Wariants 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 0.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 110 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC 0 - No corrosion stress | Gripper force back-up | None |
| Position detection Via proximity switch Wetals 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 O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 110 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC O - No corrosion stress | Design | Lever Side mounting method for gripper fingers |
| Wariants 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 O.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) Operating medium Compressed air to ISO 8573-1:2010 [7:4:4] Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC O - No corrosion stress | Guide | Ball guide |
| excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils. Operating pressure O.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 110 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC O - No corrosion stress | Position detection | Via proximity switch |
| 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 110 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 75 ms 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) Corrosion resistance class CRC 0 - No corrosion stress | Variants | excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors |
| Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) 75 ms 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) Corrosion resistance class CRC 0 - No corrosion stress | Operating pressure | 1 bar8 bar |
| Min. closing time at 0.6 MPa (6 bar, 87 psi) 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) Corrosion resistance class CRC 0 - No corrosion stress | Max. operating frequency of gripper | 3 Hz |
| 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) Corrosion resistance class CRC 0 - No corrosion stress | Min. opening time at 0.6 MPa (6 bar, 87 psi) | 110 ms |
| Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) Corrosion resistance class CRC 0 - No corrosion stress | Min. closing time at 0.6 MPa (6 bar, 87 psi) | 75 ms |
| always be required) Corrosion resistance class CRC 0 - No corrosion stress | Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] |
| | Note on operating and pilot medium | |
| LABS (PWIS) conformity VDMA24364-B2-L | Corrosion resistance class CRC | 0 - No corrosion stress |
| | LABS (PWIS) conformity | VDMA24364-B2-L |

| Feature | Value |
|---|--|
| Suitability for the production of Li-ion batteries | Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Ambient temperature | -10 °C60 °C |
| Total gripping force, opening, 0.6MPa (6bar, 87 psi) | 192.6 N |
| Total gripping force, closing, 0.6MPa (6bar, 87 psi) | 159.5 N |
| Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi) | 96.3 N |
| Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) | 79.8 N |
| Mass moment of inertia | 0.515 kgcm² |
| Max. force on gripper jaw Fz static | 101.3 N |
| Max. torque at gripper Mx static | 1.43 Nm |
| Max. torque at gripper My static | 1.3 Nm |
| Max. torque at gripper Mz static | 1.3 Nm |
| Product weight | 261 g |
| Type of mounting | Direct mounting via through-hole Direct mounting via thread On mounting frame Via through-hole and dowel pin Via female thread and dowel pin Either: |
| Pneumatic connection | M5 |
| Note on materials | RoHS-compliant |
| Material housing | Anodised aluminium |
| Material gripper jaws | High-alloy stainless steel |