Parallel gripper DHPC-20-A-B-1 Part number: 8116821





Data sheet

Stroke per gripper jaws Max. replacement accuracy Max. angular gripper jaw backlash ax, ay O deg Max. gripper jaw backlash 5z O mm Rotationally symmetrical O.2 mm Repetition accuracy, gripper Number of gripper jaws Pheumatic Optional Mounting position 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 Ball guide 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 connector and cols Operating pressure O.1 MPaOs MPa 1 bar8 bar 14.5 psi116 psi 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 Compressed air to ISO 8573-1:2010 [7:4:4]	Feature	Value
Max. replacement accuracy Max. angular gripper jaw backlash ax, ay O deg Max. gripper jaw backlash Sz O mm Repetition accuracy, gripper O.2 mm Repetition accuracy, gripper O.2 mm Number of gripper jaws 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 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 connector and coils. Operating pressure O.1 MPaO.8 MPa 1 bar8 bar 1 4.5 psi116 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	Size	20
Max. angular gripper jaw backlash ax, ay Max. gripper jaw backlash Sz O mm Repetition accuracy, gripper O.20 mm Number of gripper jaws 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 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 connector and coils. Operating pressure O.1 MPao. 8 MPa 1 bar 8 bar 14.5 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) Mote on operating and pilot medium Odegration will Lubricated operation possible (in which case lubricated operation will Lubricated operation possible (in which case lubricated operation will	Stroke per gripper jaws	5 mm
Max. gripper jaw backlash 5z Rotationally symmetrical Repetition accuracy, gripper O.02 mm O.02 mm O.02 mm Number of gripper jaws Pneumatic Mounting position Mode of operation 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 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 connector and coils. Operating pressure O.1 MPa0,8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) Min. closing time at 0.6 MPa (6 bar, 87 psi) Operating medium Note on operating and pilot medium Outperating and pilot medium Outperating and pilot medium Outperating pressure Incident operation possible (in which case lubricated operation will	Max. replacement accuracy	0.2 mm
Rotationally symmetrical Repetition accuracy, gripper Number of gripper jaws 2 Drive system Pneumatic Mounting position Mode of operation Gripper function Gripper force back-up Design 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 connector and coils. Operating pressure O.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) 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	Max. angular gripper jaw backlash ax, ay	0 deg
Repetition accuracy, gripper Number of gripper jaws Drive system Pneumatic Optional Mode of operation Gripper function Double-acting Gripper force back-up Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence 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 connector and coils. Operating pressure O.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of gripper Min. opening time at 0.6 MPa (6 bar, 87 psi) 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	Max. gripper jaw backlash Sz	0 mm
Number of gripper jaws Drive system Pneumatic Optional 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 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 connector 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) 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	Rotationally symmetrical	0.2 mm
Drive system 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 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 connector 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] Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will	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 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 connector 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) 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	Number of gripper jaws	2
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 Position detection Variants 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 connector and coils. Operating pressure O.1 MPaO.8 MPa 1 bar8 bar 1 4.5 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] Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will	Drive system	Pneumatic
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 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 connector and coils. Operating pressure Operating frequency of gripper Ana. 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	Mounting position	optional
Design Connection direction downwards Lever Side mounting method for gripper fingers Force pilot operated motion sequence Ball guide Position detection Variants 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 connector 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) 62 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	Mode of operation	Double-acting
Design 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 connector and coils. Operating pressure O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi 3 Hz Min. opening time at 0.6 MPa (6 bar, 87 psi) 62 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	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 connector 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) 62 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	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 connector 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] Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will	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 connector 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) 62 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	Guide	Ball guide
excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connector 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) 62 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 40 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	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) 62 ms Min. closing time at 0.6 MPa (6 bar, 87 psi) 40 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	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) 40 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	Operating pressure	1 bar8 bar
Min. closing time at 0.6 MPa (6 bar, 87 psi) 40 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	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	Min. opening time at 0.6 MPa (6 bar, 87 psi)	62 ms
Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will	Min. closing time at 0.6 MPa (6 bar, 87 psi)	40 ms
	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
	Note on operating and pilot medium	
Corrosion resistance class CRC 0 - No corrosion stress	Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity VDMA24364-B2-L	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	224 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