Parallel gripper DHPC-20-A-B-2 Part number: 8116822





Data sheet

Stroke per gripper jaws Stroke per gripper jaws Max. replacement accuracy 0.2 mm Max. angular gripper jaw backlash ax, ay 0 deg Max. gripper jaw backlash Sz 0 mm Rotationally symmetrical 0.2 mm Repetition accuracy, gripper 0.02 mm Number of gripper jaws 2 Drive system Pneumatic Mounting position Mode of operation Gripper function Parallel Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever Force pilot operated motion sequence Guide Ball guide 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 connecto and coils. Operating pressure 0.1 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) More 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 Rotationally symmetrical Repetition accuracy, gripper Number of gripper jaws Pneumatic Mounting position Mode of operation Gripper function Gripper function Parallel Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever Force pilot operated motion sequence 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 connecto and coils. Operating pressure O1. 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) Monm Compressed air to ISO 8573-1:2010 [7:4:4]	Size	20
Max. angular gripper jaw backlash sz Max. gripper jaw backlash Sz O mm Rotationally symmetrical Repetition accuracy, gripper Number of gripper jaws Drive system Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever 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 connecto 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) Min. closing time at 0.6 MPa (6 bar, 87 psi) Mome Compressed air to ISO 8573-1:2010 [7:4:4]	Stroke per gripper jaws	5 mm
Max. gripper jaw backlash Sz Rotationally symmetrical Repetition accuracy, gripper O.02 mm Number of gripper jaws Drive system Pneumatic Mounting position Mode of operation Gripper function Parallel Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever 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 connecto 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) More pressure Compressed air to ISO 8573-1:2010 [7:4:4]	Max. replacement accuracy	0.2 mm
Rotationally symmetrical Repetition accuracy, gripper O.02 mm Number of gripper jaws Drive system Pneumatic Mounting position Mode of operation Gripper function Parallel Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever 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 connecto 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]	Max. angular gripper jaw backlash ax, ay	0 deg
Repetition accuracy, gripper Number of gripper jaws 2 Drive system Pneumatic Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever Force pilot operated motion sequence 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 connecto 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 One music pressed air to ISO 8573-1:2010 [7:4:4]	Max. gripper jaw backlash Sz	0 mm
Number of gripper jaws Drive system Pneumatic Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever 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 connecto 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]	Rotationally symmetrical	0.2 mm
Drive system Pneumatic Optional Mode of operation Double-acting Gripper function Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever 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 connecto 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]	Repetition accuracy, gripper	0.02 mm
Mounting position Mode of operation Gripper function Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever Force pilot operated motion sequence 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 connecto 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]	Number of gripper jaws	2
Mode of operation Gripper function Parallel Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever 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 connecto 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]	Drive system	Pneumatic
Gripper function Gripper force back-up Design Connection direction downwards Flat mounting method for gripper fingers Lever Force pilot operated motion sequence Guide Ball guide 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 connecto and coils. Operating pressure O.1 MPa08 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]	Mounting position	optional
None	Mode of operation	Double-acting
Design Connection direction downwards Flat mounting method for gripper fingers Lever Force pilot operated motion sequence Ball guide 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 connecto 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]	Gripper function	Parallel
Flat mounting method for gripper fingers Lever 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 connecto 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]	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 connecto 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]	Design	Flat mounting method for gripper fingers Lever
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 connecto 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]	Guide	Ball guide
excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connecto 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]	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]	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]	Operating pressure	1 bar8 bar
Min. closing time at 0.6 MPa (6 bar, 87 psi) 40 ms Compressed air to ISO 8573-1:2010 [7:4:4]	Max. operating frequency of gripper	3 Hz
Operating medium Compressed air to ISO 8573-1:2010 [7:4:4]	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 always be required)	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	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