## Parallel gripper DHPC-L-20-A-S-2 Part number: 8116837







## **Data sheet**

Stroke per gripper jaw  Max. interchangeability  0.2 mm  0.2 mm  Max. gripper jaw angular play ax, ay  0 deg  Max. gripper jaw backlash Sz  0 mm  Strational symmetry  Pneumatic gripper repetition accuracy  Number of gripper paws  2  Actuator system  Mounting position  Mode of operation  Sripper function  Parallel  Sripping force backup  Structural design  Connection direction at side  Flat mounting type for gripper fingers  Lever  Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  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.  Deparating pressure  0.1 MPa0.8 MPa 1.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  110 ms  Min. closing time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Operation resistance class (CRC)  0 - No corrosion stress	Feature	Value
Max. gripper jaw angular play ax, ay  O deg  Max. gripper jaw backlash 5z  O mm  Octational symmetry  O.2 mm  Preumatic gripper repetition accuracy  O.02 mm  Number of gripper jaws  Actuator system  Pneumatic  Mounting position  Mode of operation  Gripper function  Farallel  Gripper function  Farallel  Flat mounting type for gripper fingers  Lever  Positively driven motion sequence  Ball guide  Position sensing  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 colls.  Deparating pressure  O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi16 psi  Max. operating frequency of pneumatic gripper  Jay	Size	20
Max. gripper jaw angular play ax, ay  Max. gripper jaw backlash Sz  O mm  O.2 mm  Peneumatic gripper repetition accuracy  O.02 mm  Number of gripper jaws  2  Actuator system  Mounting position  Any  Mode of operation  Double-acting  Parallel  Sripper function  Flat mounting type for gripper fingers  Lever  Positively driven motion sequence  Suide  Position sensing  For proximity sensor  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  Max. operating frequency of pneumatic gripper  Min. opening time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Operation resistance class (CRC)  O · No corrosion resistance class (CRC)	Stroke per gripper jaw	9 mm
Avax. gripper jaw backlash Sz Rotational symmetry  0.2 mm  0.2 mm  Number of gripper repetition accuracy  0.02 mm  Number of gripper jaws  2  Actuator system  Mounting position  Any  Mode of operation  Double-acting  Gripper function  Parallel  Structural design  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  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.  Deparating pressure  0.1 MPa0.8 MPa 1 bar8 bar 14.5 psl116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  110 ms  Min. closing time at 6 bar  Operation medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Or No corrosion stress	Max. interchangeability	0.2 mm
Rotational symmetry  Peneumatic gripper repetition accuracy  Number of gripper jaws  2  Actuator system  Peneumatic  Mounting position  Any  Mode of operation  Parallel  Stripping force backup  Structural design  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  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  O1. MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  Win. opening time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Orrosion resistance class (CRC)  O - No corrosion stress	Max. gripper jaw angular play ax, ay	0 deg
Pneumatic gripper repetition accuracy  Number of gripper jaws  2 Natuator system  Pneumatic  Mounting position  Any  Mode of operation  Sripper function  Structural design  Structural design  Structural design  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  Arriants  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.  Deparating pressure  O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  Min. closing time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Orrosion resistance class (CRC)  O · No corrosion stress	Max. gripper jaw backlash Sz	0 mm
Autuator system Pneumatic Mounting position Any Mode of operation Double-acting Sripper function Parallel Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence Ball guide Position sensing Actiants Actiants Actiants Actiants Any 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.  Deparating pressure  O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper Alion. opening time at 6 bar Alion. opening time at 6 bar Actionator Compressed air as per ISO 8573-1:2010 [7:4:4] Corrosion resistance class (CRC) O - No corrosion stress	Rotational symmetry	0.2 mm
Actuator system  Mounting position  Mode of operation  Double-acting  Parallel  Gripper function  Parallel  Gripping force backup  Without  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  Actuators sensing  Actuators sensing  Actuators sensing  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.  Deparating pressure  O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Win. opening time at 6 bar  Un ms  Win. closing time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Operation on operating and pilot media  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  O - No corrosion stress	Pneumatic gripper repetition accuracy	0.02 mm
Mounting position  Mode of operation  Double-acting  Parallel  Gripper function  Parallel  Gripping force backup  Without  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  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.  Deparating pressure  O.1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Win. opening time at 6 bar  110 ms  Win. closing time at 6 bar  75 ms  Deparating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Or No corrosion stress	Number of gripper jaws	2
Double-acting  Fripper function  Parallel  Gripping force backup  Without  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  Ariants  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.  Deparating pressure  O.1 MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Win. opening time at 6 bar  Diperating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Or No corrosion resistance class (CRC)	Actuator system	Pneumatic
Parallel Stripping force backup Without Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence Suide Ball guide Position sensing For proximity sensor Arriants 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  O1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi Max. operating frequency of pneumatic gripper 3 Hz Min. opening time at 6 bar Min. closing time at 6 bar To ms  Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operation with oil lubrication possible (required for further use) Corrosion resistance class (CRC) O - No corrosion stress	Mounting position	Any
Structural design  Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  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  On 1 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  Min. closing time at 6 bar  110 ms  Min. closing time at 6 bar  75 ms  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation stress  Operation stress  Operation resistance class (CRC)  O - No corrosion stress	Mode of operation	Double-acting
Connection direction at side Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide Position sensing For proximity sensor  Adriants 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 pneumatic gripper  3 Hz  Min. opening time at 6 bar  110 ms  Min. closing time at 6 bar  75 ms  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  O - No corrosion stress	Gripper function	Parallel
Flat mounting type for gripper fingers Lever Positively driven motion sequence  Ball guide Position sensing For proximity sensor  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  On MPaO.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  In ms  Min. closing time at 6 bar  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  O - No corrosion stress	Gripping force backup	Without
Position sensing  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 MPa0.8 MPa 1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  110 ms  Vin. closing time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  O - No corrosion stress	Structural design	Flat mounting type for gripper fingers Lever
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 pneumatic gripper  3 Hz  Min. opening time at 6 bar  110 ms  Win. closing time at 6 bar  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Operation with oil lubrication possible (required for further use)  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 pneumatic gripper  3 Hz  Min. opening time at 6 bar  110 ms  Win. closing time at 6 bar  75 ms  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Operation on operating and pilot media  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  O - No corrosion stress	Position sensing	For proximity sensor
1 bar8 bar 14.5 psi116 psi  Max. operating frequency of pneumatic gripper 3 Hz  Win. opening time at 6 bar 110 ms  Win. closing time at 6 bar 75 ms  Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media Operation with oil lubrication possible (required for further use)  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 6 bar  Min. closing time at 6 bar  75 ms  Deparating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Corrosion resistance class (CRC)  O - No corrosion stress	Operating pressure	1 bar8 bar
Min. closing time at 6 bar  75 ms  Deprating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Corrosion resistance class (CRC)  O - No corrosion stress	Max. operating frequency of pneumatic gripper	3 Hz
Operating medium Compressed air as per ISO 8573-1:2010 [7:4:4]  nformation on operating and pilot media Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  0 - No corrosion stress	Min. opening time at 6 bar	110 ms
nformation on operating and pilot media  Operation with oil lubrication possible (required for further use)  O - No corrosion stress	Min. closing time at 6 bar	75 ms
Corrosion resistance class (CRC) 0 - No corrosion stress	Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
ABS (PWIS) conformity VDMA24364-B2-L	Corrosion resistance class (CRC)	0 - No corrosion stress
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Feature	Value
Suitability for the production of Li-ion batteries	Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils
Ambient temperature	-10 °C60 °C
Gripping force per gripper jaw at 6 bar, opening	192.6 N 96.3 N
Gripping force per gripper jaw at 6 bar, closing	159.5 N 79.8 N
Mass moment of inertia	0.515 kgcm²
Maximum force on gripper jaw Fz, static	101.3 N
Maximum torque on gripper jaw, Mx static	1.43 Nm
Maximum torque on gripper jaw, My static	1.3 Nm
Maximum torque on gripper jaw, Mz static	1.3 Nm
Product weight	261 g
Type of mounting	Direct mounting via through-hole Direct fastening via thread On mounting frame With through-hole and dowel pin With internal thread and dowel pin Optionally:
Pneumatic connection	M5
Note on materials	RoHS-compliant
Housing material	Aluminum, anodized
Gripper jaw material	High-alloy stainless steel