## Parallel gripper DHPC-L-20-A-S-1 Part number: 8116836







## **Data sheet**

General operating condition

Stroke per gripper jaw  Max. interchangeability  0.2 mm  Max. gripper jaw angular play ax, ay  0 deg  Max. gripper jaw backlash Sz  Rotational symmetry  Pneumatic gripper repetition accuracy  Number of gripper jaws  2  Actuator system  Pneumatic  Mounting position  Mouthing position  Mode of operation  Gripper function  Gripper function  Gripper for backup  Structural design  Lever  Side mounting type for gripper fingers  Positively driven motion sequence  Guide  Ball guide  Position sensing  For proximity sensor  Symbol  Varriants  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 MPa 0.8 MPa  Operating pressure  14.5 psi 116 psi  Max. operating and pilot media  Operation media opperation possible (required for further use)  Cornosion resistance class (CRC)  0 - No corrosion stress	Feature	Value
Max. gripper jaw angular play ax, ay  Odeg  Max. gripper jaw backlash 5z  Omm  Rotational symmetry  Number of gripper repetition accuracy  Number of gripper jaws  Actuator system  Pneumatic gripper repetition accuracy  Number of gripper jaws  Actuator system  Pneumatic  Any  Mode of operation  Gripper function  Parallel  Gripping force backup  Structural design  Connection direction at side  Lever Side mounting type for gripper fingers  Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Symbol  Oo991894  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  Operating pressure  Operating pressure  1 bar 8 bar  Operating frequency of pneumatic gripper  Min. opening time at 6 bar  Min. closing time at 6 bar  Min. closing time at 6 bar  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)  Corrosion resistance class (CRC)  O - No corrosion stress	Size	20
Max. gripper jaw angular play ax, ay  Max. gripper jaw backlash Sz  O mm  Rotational symmetry  so.2 mm  Pneumatic gripper jaws  Actuator system  Mode of operation  Gripper function  Gripper function  Gripper function  Gripper function  Gripping force backup  Structural design  Guide  Position sensing  For proximity sensor  Symbol  Variants  Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surface plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  Operating pressure  Operating frequency of pneumatic gripper  Min. closing 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 resistance class (CRC)  O - No corrosion stress	Stroke per gripper jaw	9 mm
Max. gripper jaw backlash Sz  Rotational symmetry  \$0.2 mm  \$0.02 mm  Number of gripper faws  2  Actuator system  Pneumatic  Mounting position  Any  Mode of operation  Gripper function  Gripper function  Gripping force backup  Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Guide  Ball guide  Position sensing  For proximity sensor  Symbol  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, MPa, 0, 8, MPa  Operating pressure  1, 45, psi, 116 psi  Max. operating frequency of pneumatic gripper 3, HZ  Min. opening time at 6 bar  10 ms  Min. closing time at 6 bar  75 ms  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  O - No corrosion stress	Max. interchangeability	0.2 mm
Rotational symmetry \$0.2 mm  Pneumatic gripper repetition accuracy \$0.02 mm  Number of gripper jaws 2  Actuator system Pneumatic  Mounting position Any Mode of operation Double-acting  Gripper function Parallel  Gripping force backup Without  Structural design Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Guide Ball guide  Position sensing For proximity sensor  Symbol O0991894  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 MPa 0.8 MPa  Operating pressure 14.5 psi 116 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)  Corrosion resistance class (CRC) 0 · No corrosion stress	Max. gripper jaw angular play ax, ay	0 deg
Pneumatic gripper repetition accuracy  Number of gripper jaws  2  Actuator system  Mounting position  Any  Mode of operation  Gripper function  Gripper function  Gripping force backup  Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Guide  Ball guide  Position sensing  For proximity sensor  Symbol  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  Operating pressure  1 bar 8 bar  Operating frequency of pneumatic gripper  Min. opening time at 6 bar  Min. closing time at 6 bar  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)  Ornosion resistance class (CRC)  O - No corrosion stress	Max. gripper jaw backlash Sz	0 mm
Number of gripper jaws 2 Actuator system Pneumatic Mounting position Any Mode of operation Gripper function Gripper function Gripping force backup Without Structural design Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence Guide Ball guide Position sensing For proximity sensor Symbol O0991894 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 Operating pressure 1 bar 8 bar Operating frequency of pneumatic gripper 14.5 psi 116 psi Max. operating frequency of pneumatic gripper Min. opening time at 6 bar To ms 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) Corrosion resistance class (CRC) O - No corrosion stress	Rotational symmetry	≤0.2 mm
Actuator system  Mounting position  Any  Double-acting  Gripper function  Gripper function  Gripping force backup  Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Symbol  Oo991894  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  Operating pressure  Operating pressure  1 bar 8 bar  Operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  To ms  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)  Corrosion resistance class (CRC)	Pneumatic gripper repetition accuracy	≤0.02 mm
Mounting position  Mode of operation  Gripper function  Gripper function  Gripping force backup  Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Symbol  O0991894  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  Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)	Number of gripper jaws	2
Mode of operation  Gripper function  Gripper function  Gripping force backup  Without  Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Ball guide  Position sensing For proximity sensor  Symbol  O0991894  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 connectors and coils.  Operating pressure  Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  O - No corrosion stress	Actuator system	Pneumatic
Gripper function Parallel Gripping force backup Without  Structural design Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Guide Ball guide Position sensing For proximity sensor  Symbol 00991894  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 MPa 0.8 MPa  Operating pressure 1 bar 8 bar  Operating pressure 14.5 psi 116 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)  Corrosion resistance class (CRC) 0 - No corrosion stress	Mounting position	Any
Gripping force backup  Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Guide  Ball guide  Position sensing For proximity sensor  Symbol  O0991894  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 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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)  Corrosion resistance class (CRC) O - No corrosion stress	Mode of operation	Double-acting
Structural design  Connection direction at side Lever Side mounting type for gripper fingers Positively driven motion sequence  Ball guide  Position sensing For proximity sensor  Symbol  O0991894  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 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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)  Corrosion resistance class (CRC)  O - No corrosion stress	Gripper function	Parallel
Lever Side mounting type for gripper fingers Positively driven motion sequence  Guide  Ball guide  Position sensing  For proximity sensor  Symbol  00991894  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 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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)  Corrosion resistance class (CRC)	Gripping force backup	Without
Position sensing  For proximity sensor  O0991894  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 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Corrosion resistance class (CRC)  0 - No corrosion stress	Structural design	Lever Side mounting type for gripper fingers
Symbol  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 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  O - No corrosion stress	Guide	Ball guide
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excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  Operating pressure  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 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	Symbol	00991894
Operating pressure 14.5 psi 116 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)  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
Operating pressure 14.5 psi 116 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)  Corrosion resistance class (CRC) 0 - No corrosion stress	Operating pressure	0.1 MPa 0.8 MPa
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)  Corrosion resistance class (CRC)  0 - No corrosion stress	Operating pressure	1 bar 8 bar
Min. opening time at 6 bar  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)  Corrosion resistance class (CRC)  0 - No corrosion stress	Operating pressure	14.5 psi 116 psi
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)  Corrosion resistance class (CRC)  0 - No corrosion stress	Max. operating frequency of pneumatic gripper	3 Hz
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	Min. opening time at 6 bar	110 ms
Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Oorrosion resistance class (CRC)  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)
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	Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Ambient temperature	-10 °C 60 °C
Gripping force per gripper jaw at 6 bar, opening	192.6 N
Gripping force per gripper jaw at 6 bar, closing	159.5 N
Gripping force per gripper jaw at 6 bar, opening	96.3 N
Gripping force per gripper jaw at 6 bar, closing	79.8 N
Mass moment of inertia	0.515 kgcm <sup>2</sup>
Maximum force on gripper jaw Fz, static	73.5 N
Maximum torque on gripper jaw, Mx static	0.66 Nm
Maximum torque on gripper jaw, My static	1.33 Nm
Maximum torque on gripper jaw, Mz static	0.66 Nm
Product weight	261 g
Type of mounting	Optionally: Direct mounting via through-hole Direct fastening via thread On mounting frame With through-hole and dowel pin With internal thread and dowel pin
Pneumatic connection	M5
Note on materials	RoHS-compliant
Housing material	Aluminum, anodized
Gripper jaw material	High-alloy stainless steel