## Parallel gripper DHPC-16-A-B Part number: 8116788







## **Data sheet**

General operating condition

Stroke per gripper jaw  Max. interchangeability  0.2 mm  Max. gripper jaw angular play ax, ay  0 deg  Nax. gripper jaw backlash Sz  0 mm  Rotational symmetry  Pneumatic gripper repetition accuracy  Number of gripper jaws  2  Actuator system  Pneumatic  Mounting position  Any  Mode of operation  Double-acting  Gripper function  Parallel  Gripper function  Structural design  Connection direction downwards  Lever  Standard mounting type for gripper fingers  Positively driven motion sequence  Suide  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 connecto and coils.  Operating pressure  Operating pressure  1 bar 8 bar  Operating frequency of pneumatic gripper  Max. operating frequency of pneumatic gripper  Min. closing time at 6 bar  31 ms  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Normation on operating and pilot media  Operation with dil lubrication possible (required for further use)  Operation resistance class (CRC)  O - No corrosion stress	Feature	Value
Max. Interchangeability  O. 2 mm  Max. gripper jaw angular play ax, ay  O deg  O mm  Rotational symmetry  Pneumatic gripper repetition accuracy  Number of gripper jaws  2 Actuator system  Mouting position  Mouting position  Moude of operation  Gripper function  Parallel  Structural design  Connection direction downwards  Lever  Standard mounting type for gripper fingers  Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Operating pressure  O.1 MPa 0.8 MPa  Operating pressure  Deparating pressure  1 4.5 psi 116 psi  Min. coloning time at 6 bar  Min. copening time at 6 bar  Operation gredulum  Information on operating and pilot media  Operation gression sensine (conversed and possible (required for further use)  Operation greation on perating and pilot media  Operation with oil lubrication possible (required for further use)  Operation resistance class (CRC)  O - No corrosion stress	Size	16
Max. gripper jaw angular play ax, ay  Max. gripper jaw backlash Sz  O mm  Rotational symmetry  \$0.2 mm  Pneumatic gripper repetition accuracy  Number of gripper jaws  2  Actuator system  Pneumatic  Mounting position  Any  Mode of operation  Double-acting  Gripper function  Parallel  Gripping force backup  Structural design  Connection direction downwards  Lever  Standard mounting type for gripper fingers  Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Symbol  Oo991894  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  Operating pressure  1 bar 8 bar  Operating pressure  1 1 bar 8 bar  Operating frequency of pneumatic gripper  3 Hz  Min. 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)  Corrosion resistance class (CRC)  O - No corrosion stress	Stroke per gripper jaw	3 mm
Max. gripper jaw backlash S2 Rotational symmetry  \$0.2 mm  \$0.2 mm  Number of gripper jaws  2  Actuator system  Mounting position  Any  Mode of operation  Gripper function  Firipping force backup  Structural design  Connection direction downwards  Lever  Standard mounting type for gripper fingers  Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Symbol  O0991894  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  O1. MPa 0.8 MPa  Operating pressure  14.5 psi 116 psi  Max. operating frequency of pneumatic gripper  14.5 psi 116 psi  Min. opening time at 6 bar  Min. 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 resistance class (CRC)  O No corrosion stress	Max. interchangeability	0.2 mm
Rotational symmetry so.2 mm  Pneumatic gripper repetition accuracy so.0.2 mm  Number of gripper jaws 2  Actuator system Pneumatic  Mounting position Any Mode of operation Double-acting  Gripper function Parallel  Structural design Connection direction downwards  Lever Standard mounting type for gripper fingers  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 connector and coils.  Operating pressure 0.1 MPa 0.8 MPa  Operating pressure 14.5 psi 116 psi  Max. operating frequency of pneumatic gripper 31 ms  Win. closing time at 6 bar 29 ms  Win. closing time at 6 bar 31 ms  Operation 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  Sripper function  Sripper function  Sripping force backup  Structural design  Connection direction downwards Lever Standard 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 connecto 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  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 resistance class (CRC)  O - No corrosion stress	Max. gripper jaw backlash Sz	0 mm
Actuator system Pneumatic Mounting position Any Mode of operation Double-acting Gripper function Parallel Gripping force backup Structural design Connection direction downwards Lever Standard mounting type for gripper fingers Positively driven motion sequence 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 connecto and coils.  Deparating pressure Diperating pressure Diperating pressure Diperating frequency of pneumatic gripper Diperating frequency of pneumatic gripper Diperating time at 6 bar Diperating 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) Corrosion resistance class (CRC) O - No corrosion stress	Rotational symmetry	≤0.2 mm
Actuator system Mounting position Any Mode of operation Double-acting Gripper function Parallel Structural design Connection direction downwards Lever Standard 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 connecto 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 29 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	Pneumatic gripper repetition accuracy	≤0.02 mm
Mounting position  Mode of operation  Double-acting  Gripper function  Gripper function  Parallel  Connection direction downwards Lever Standard mounting type for gripper fingers Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Ough 1894  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  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  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	Number of gripper jaws	2
Mode of operation  Gripper function  Gripper function  Gripping force backup  Structural design  Connection direction downwards Lever Standard mounting type for gripper fingers Positively driven motion sequence  Ball guide  Position sensing  For proximity sensor  Symbol  Ou991894  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 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 psi  Max. operating frequency of pneumatic gripper  14.5 psi 116 psi  Max. operating frequency of pneumatic gripper  3 Hz  Min. opening time at 6 bar  29 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 Structural design Connection direction downwards Lever Standard 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 connecto and coils.  Operating pressure O1.1 MPa 0.8 MPa Operating pressure 1 bar 8 bar Operating pressure 1 14.5 psi 116 psi Max. operating frequency of pneumatic gripper 3 Hz Min. opening time at 6 bar 29 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	Mounting position	Any
Structural design  Connection direction downwards Lever Standard 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 connector 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  29 ms  Min. closing time at 6 bar  31 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)	Mode of operation	Double-acting
Connection direction downwards Lever Standard 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 connector and coils.  Operating pressure O1 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 29 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	Gripper function	Parallel
Lever Standard 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 nickellated surfaces, printed circuit boards, cables, electrical plug connector and coils.  Operating pressure  O.1 MPa 0.8 MPa  Operating pressure  1 bar 8 bar  Operating pressure  14.5 psi 116 psi  3 Hz  Min. opening time at 6 bar  29 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)	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 connector and coils.  Operating pressure  On 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  29 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	Structural design	Lever Standard 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 connector 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  29 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	Guide	Ball guide
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  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  29 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	Position sensing	For proximity sensor
excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connector and coils.  Operating pressure  On MPa 0.8 MPa  Departing 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  29 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	Symbol	00991894
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 29 ms Min. closing time at 6 bar 31 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 29 ms  Min. closing time at 6 bar 31 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  29 ms  Min. closing time at 6 bar  31 ms  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Corrosion resistance class (CRC)  0 - No corrosion stress	Operating pressure	1 bar 8 bar
Min. opening time at 6 bar  29 ms  Min. closing time at 6 bar  31 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  31 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	29 ms
Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  O - No corrosion stress	Min. closing time at 6 bar	31 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	125.4 N
Gripping force per gripper jaw at 6 bar, closing	107.8 N
Gripping force per gripper jaw at 6 bar, opening	62.7 N
Gripping force per gripper jaw at 6 bar, closing	53.9 N
Mass moment of inertia	0.148 kgcm²
Maximum force on gripper jaw Fz, static	49 N
Maximum torque on gripper jaw, Mx static	0.34 Nm
Maximum torque on gripper jaw, My static	0.68 Nm
Maximum torque on gripper jaw, Mz static	0.34 Nm
Product weight	111 g
Type of mounting	Optionally: Direct mounting via through-hole Direct fastening via thread With through-hole and dowel pin With internal thread and dowel pin
Pneumatic connection	M3
Note on materials	RoHS-compliant
Housing material	Aluminum, anodized
Gripper jaw material	High-alloy stainless steel