

# Parallel gripper DHPL-10-20-P-A

Part number: 8112216

FESTO



[PDF](#) General operating condition

## Data sheet

Feature	Value
Size	10
Complete stroke	20 mm
Stroke per gripper jaw	10 mm
Max. interchangeability	≤0.2 mm
Max. gripper jaw angular play ax, ay	≤0.22 deg
Max. gripper jaw backlash Sz	≤0.064 mm
Rotational symmetry	≤0.2 mm
Pneumatic gripper repetition accuracy	≤0.03 mm
Number of gripper jaws	2
Actuator system	Pneumatic
Mounting position	Any
Mode of operation	Double-acting
Cushioning	Elastic cushioning rings/pads at both ends
Gripper function	Parallel
Gripping force backup	None
Structural design	Gear rack/pinion
Guide	Plain-bearing guide
Position sensing	Via proximity switch
Symbol	00991894
Operating pressure	0.25 MPa ... 0.8 MPa
Operating pressure	2.5 bar ... 8 bar
Operating pressure	36.25 psi ... 116 psi
Max. operating frequency of pneumatic gripper	≤2 Hz
Min. opening time at 6 bar	41 ms
Min. closing time at 6 bar	70 ms
Max. mass per external gripper finger	54 g
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)	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Degree of protection	IP54
Ambient temperature	-10 °C ... 60 °C
Gripping force per gripper jaw at 6 bar, opening	60 N
Gripping force per gripper jaw at 6 bar, closing	38 N
Gripping force per gripper jaw at 6 bar, opening	30 N

Feature	Value
Gripping force per gripper jaw at 6 bar, closing	19 N
Mass moment of inertia	1.6 kgcm <sup>2</sup> ... 2.2 kgcm <sup>2</sup>
Maximum force on gripper jaw Fz, static	40 N
Maximum torque on gripper jaw, Mx static	0.5 Nm
Maximum torque on gripper jaw, My static	0.5 Nm
Maximum torque on gripper jaw, Mz static	0.5 Nm
Maintenance interval	Lifetime lubrication
Product weight	251 g
Type of mounting	Alternatively: With through-hole
Pneumatic connection	M5
Note on materials	RoHS compliant
Cover cap material	Wrought aluminum alloy, anodized
Cover material	Wrought aluminum alloy, anodized
End plate material	Wrought aluminum alloy, anodized
Housing material	Wrought aluminum alloy, anodized
Gripper jaw material	Wrought aluminum alloy, anodized
Piston seal material	TPE-U(PU)
Piston rod material	high-alloy stainless steel
O-ring material	NBR
Material of screws	Galvanized steel
Gear rack material	high-alloy stainless steel
Gear wheel material	Sintered bronze