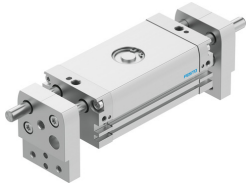



Parallel gripper DHPL-20-100-P-A

Part number: 8112219

FESTO



 [General operating condition](#)

Data sheet

Feature	Value
Size	20
Complete stroke	100 mm
Stroke per gripper jaw	50 mm
Max. interchangeability	≤0.2 mm
Max. gripper jaw angular play ax, ay	≤0.14 deg
Max. gripper jaw backlash Sz	≤0.068 mm
Rotational symmetry	≤0.2 mm
Pneumatic gripper repetition accuracy	≤0.03 mm
Number of gripper jaws	2
Mounting position	Any
Mode of operation	Double-acting
Cushioning	Elastic cushioning rings/pads at both ends
Gripper function	Parallel
Structural design	Gear rack/pinion
Guide	Sliding guide
Position sensing	For proximity sensor
Symbol	00991894
Operating pressure	0.15 MPa ... 0.8 MPa
Operating pressure	1.5 bar ... 8 bar
Operating pressure	21.75 psi ... 116 psi
Max. operating frequency of pneumatic gripper	≤1.5 Hz
Min. opening time at 6 bar	189 ms
Min. closing time at 6 bar	274 ms
Max. mass per external gripper finger	170 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	316 N
Gripping force per gripper jaw at 6 bar, closing	238 N
Gripping force per gripper jaw at 6 bar, opening	158 N
Gripping force per gripper jaw at 6 bar, closing	119 N
Mass moment of inertia	49.3 kgcm ² ... 104.5 kgcm ²

Feature	Value
Maximum force on gripper jaw Fz, static	280 N
Maximum torque on gripper jaw, Mx static	5 Nm
Maximum torque on gripper jaw, My static	5 Nm
Maximum torque on gripper jaw, Mz static	5 Nm
Maintenance interval	Life-time lubrication
Product weight	1407 g
Type of mounting	Optionally: Direct fastening via thread 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	Anodized wrought aluminum alloy
Piston seal material	TPE-U(PU)
Piston rod material	High-alloy stainless steel
O-ring material	NBR
Material of screws	Steel, galvanized
Gear rack material	High-alloy stainless steel
Gear wheel material	Sintered bronze