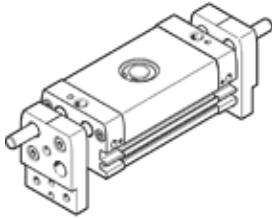


# Parallel gripper DHPL-16-80-P-A

Part number: 8112218

FESTO



## Data sheet

Feature	Value
Size	16
Total stroke	80 mm
Stroke per gripper jaw	40 mm
Max. replacement accuracy	≤ 0.2 mm
Max. angular gripper jaw backlash ax,ay	≤ 0.15 deg
Max. gripper jaw backlash Sz	≤ 0.072 mm
Rotationally symmetrical	≤ 0.2 mm
Repetition accuracy, gripper	≤ 0.03 mm
Number of gripper fingers	2
Drive system	pneumatic
Assembly position	Any
Mode of operation	double-acting
Cushioning	P: Flexible cushioning rings/plates at both ends
Gripper function	Parallel
Gripper force back-up	No
Design structure	Rack and pinion
Guide	Plain-bearing guide
Position detection	For proximity sensor
Total gripping force at 0.6 MPa (6 bar, 87 psi), opening	190 N
Total gripping force at 0.6 MPa (6 bar, 87 psi), closing	142 N
Operating pressure MPa	0.15 ... 0.8 MPa
Working pressure	1.5 ... 8 bar
Operating pressure	21.75 ... 116 psi
Max. operating frequency of gripper	≤ 1.5 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	157 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	221 ms
Max. mass per external gripper finger	93 g
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)
Corrosion resistance classification CRC	1 - Low corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
Protection class	IP54
Ambient temperature	-10 ... 60 °C
Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi) opening	95 N
Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi) closing	71 N
Mass moment of inertia	9.7 ... 12.6 kgcm <sup>2</sup>
Max. force on gripper jaw Fz static	240 N
Max. torque at gripper Mx static	3.5 Nm
Max. torque at gripper My static	3.5 Nm
Max. torque at gripper Mz static	3.5 Nm
Maintenance interval	Life-time lubrication
Product weight	802 g
Mounting type	Direct mounting via threads with through hole Optional

Feature	Value
Pneumatic connection	M5
Materials note	Conforms to RoHS
Material cover cap	Anodised wrought aluminium alloy
Material cover	Anodised wrought aluminium alloy
Material end plate	Anodised wrought aluminium alloy
Material housing	Anodised wrought aluminium alloy
Material gripper jaws	Anodised wrought aluminium alloy
Material piston seal	TPE-U(PU)
Material piston rod	High alloy steel, non-corrosive
Material o-ring	NBR
Material screws	Galvanized steel
Gear rack material	High alloy steel, non-corrosive
Gear material	Sintered bronze