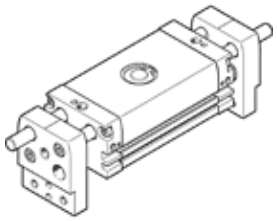
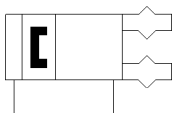
parallel gripper
DHPL-20-100-P-A

Part number: 8112219

FESTO





Data sheet

Feature	Value
Size	20
Total stroke	100 mm
Stroke per gripper jaw	50 mm
Max. replacement accuracy	<= 0.2 mm
Max. angular gripper jaw backlash ax,ay	<= 0.14 deg
Max. gripper jaw backlash Sz	<= 0.068 mm
Rotationally symmetrical	<= 0.2 mm
Repetition accuracy, gripper	<= 0.03 mm
Number of gripper fingers	2
Assembly position	Any
Mode of operation	double-acting
Cushioning	P: Flexible cushioning rings/plates at both ends
Gripper function	Parallel
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	316 N
Total gripping force at 0.6 MPa (6 bar, 87 psi), closing	238 N
Operating pressure MPa	0.15 ... 0.8 MPa
Operating pressure	1.5 ... 8 bar 21.75 ... 116 psi
Max. operating frequency of gripper	<= 1.5 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	189 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	274 ms
Max. mass per external gripper finger	170 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	158 N
Gripping force per gripper jaw at 0.6 MPa (6 bar, 87 psi) closing	119 N
Mass moment of inertia	49.3 ... 104.5 kgcm2
Max. force on gripper jaw Fz static	280 N
Max. torque at gripper Mx static	5 Nm
Max. torque at gripper My static	5 Nm
Max. torque at gripper Mz static	5 Nm
Maintenance interval	Life-time lubrication
Product weight	1,407 g
Mounting type	Direct mounting via threads with through hole Optional
Pneumatic connection	M5
Materials note	Conforms to RoHS

Feature	Value
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	Galvanised steel
Gear rack material	High alloy steel, non-corrosive
Gear material	Sintered bronze