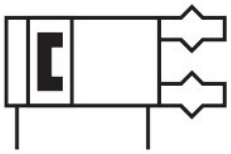
Parallel gripper
DHPL-16-30-P-A

Part number: 8112217



General operating condition

Data sheet

Feature	Value
Size	16
Total stroke	30 mm
Stroke per gripper jaws	15 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 jaws	2
Drive system	Pneumatic
Mounting position	optional
Mode of operation	Double-acting
Cushioning	Elastic cushioning rings/plates at both ends
Gripper function	Parallel
Gripper force back-up	None
Design	Rack and pinion
Guide	Plain-bearing guide
Position detection	Via proximity switch
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 gripper	≤2 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	53 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	75 ms
Max. mass per external gripper finger	93 g
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
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
Total gripping force, opening, 0.6MPa (6bar, 87 psi)	180 N
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	130 N

Feature	Value
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	90 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	65 N
Mass moment of inertia	4.3 kgcm² ... 6.6 kgcm²
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	499 g
Type of mounting	Either: Direct mounting via thread With through-hole
Pneumatic connection	M5
Note on materials	RoHS-compliant
Material cover cap	Wrought aluminium alloy, anodised
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 stainless steel
Material o-ring	NBR
Material screws	Galvanised steel
Gear rack material	High-alloy stainless steel
Gear wheel material	Sintered bronze