Parallel gripper
HPPR-25-12-A-NC-F1A

Part number: 8207045





Data sheet

Feature	Value
Size	25
Total stroke	12 mm
Stroke per gripper jaws	6 mm
Max. angular gripper jaw backlash ax, ay	0.2 deg
Max. gripper jaw backlash Sz	0.02 mm
Repetition accuracy, gripper	0.04 mm
Number of gripper jaws	2
Drive system	Pneumatic
Mounting position	Any
Mode of operation	Double-acting
Gripper function	Parallel
Gripper force back-up	During closing
Design	Wedge-shaped drive Force pilot operated motion sequence
Guide	Heavy-duty guide
Position detection	Via proximity switch
Operating pressure	0.4 MPa...0.8 MPa 4 bar...8 bar 58 psi...116 psi
Operating pressure of blocked air	0 MPa...0.05 MPa 0 bar...0.5 bar 0 psi...7.25 psi
Max. operating frequency of gripper	3 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	38 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	24 ms
Max. mass per external gripper finger	110 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)
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)

Feature	Value
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Degree of protection	IP40
Ambient temperature	5 °C...90 °C
Total gripping force, opening, 0.6MPa (6bar, 87 psi)	134 N...210 N
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	402 N...478 N
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	67 N...105 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	201 N...239 N
Theoretical total gripping force at 0 mm, 0.6 MPa (6 bar, 87 psi) open	144 N...220 N
Theoretical total gripping force at 0 mm, 0.6 MPa (6 bar, 87 psi), closing	412 N...486 N
Theoretical gripping force per gripper jaw at 0 mm, 0.6 MPa (6 bar, 87 psi), closing	72 N...110 N 206 N...243 N
Note on gripping force	Dependent on the stroke With integrated compression spring
Theoretical spring force per gripper jaw, closing	53 N...91 N
Mass moment of inertia	1.406 kgcm²
Max. force on gripper jaw Fz static	1200 N
Max. torque at gripper Mx static	50 Nm
Max. torque at gripper My static	45 Nm
Max. torque at gripper Mz static	35 Nm
Lubrication interval for guide components	5 MioCyc
Product weight	323 g
Type of mounting	Via female thread and centring sleeve Via through-hole and centring sleeve Via through-hole and dowel pin Via female thread and dowel pin
Pneumatic connection, blocked air	M5
Pneumatic connection	M3 M5
Note on materials	RoHS compliant
Material cover cap	High-alloy stainless steel
Material end plate	Anodised wrought aluminium alloy
Material spring	Spring steel High-alloy stainless steel
Material housing	Anodised aluminium
Material gripper jaws	High-alloy stainless steel
Material piston	Wrought aluminium alloy, anodised
Material piston seal	HNBR
Material piston rod	High-alloy steel
Material o-ring	Fluoro rubber
Material screws	Steel, chemically nickel-plated
Gripper finger material	Wrought aluminium alloy, anodised