

Parallel gripper HPPF-12-48-A-S

Part number: 8141589

FESTO



Data sheet

Feature	Value
Size	12
Total stroke	48 mm
Stroke per gripper jaws	24 mm
Max. angular gripper jaw backlash ax, ay	0 deg
Max. gripper jaw backlash Sz	0 mm
Repetition accuracy, gripper	0.02 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	Flat mounting method for gripper fingers Rack and pinion Force pilot operated motion sequence
Guide	Ball guide
Position detection	Via proximity switch
Variants	Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.
Operating pressure	0.1 MPa...0.7 MPa 1 bar...7 bar 14.5 psi...101.5 psi
Max. operating frequency of gripper	2 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	121 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	105 ms
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	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III

Feature	Value
Suitability for the production of Li-ion batteries	Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 7 according to ISO 14644-1
Ambient temperature	-10 °C...60 °C
Total gripping force, opening, 0.6MPa (6bar, 87 psi)	120.3 N
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	120.3 N
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	60.15 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	60.15 N
Max. force on gripper jaw Fz static	100 N
Max. moment Mx	2.2 Nm
Max. moment My	1.12 Nm
Max. moment Mz	1.12 Nm
Product weight	339 g
Type of mounting	Direct mounting via through-hole Direct mounting via thread
Pneumatic connection	M5
Note on materials	RoHS-compliant
Material cover cap	Wrought aluminium alloy, anodised
Material cover	Anodised wrought aluminium alloy
Material end plate	High-alloy stainless steel
Material housing	Anodised wrought aluminium alloy
Material gripper jaws	High-alloy steel
Material piston seal	TPE-U(PU)
Material o-ring	NBR
Material screws	Coated steel
Gear rack material	High-alloy stainless steel