

Parallel gripper HPPF-12-48-A-S

Part number: 8141589

FESTO



 [General operating condition](#)

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	Any
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
Symbol	00991894
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
Operating pressure	1 bar ... 7 bar
Operating pressure	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
Max. mass per external gripper finger	130 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	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Ambient temperature	-10 °C ... 60 °C

Feature	Value
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