

# Parallel gripper HPPF-20-20-A-S

Part number: 8143425

FESTO



[PDF](#) General operating condition

## Data sheet

Feature	Value
Size	20
Complete stroke	20 mm
Stroke per gripper jaw	10 mm
Max. gripper jaw angular play ax, ay	0 deg
Max. gripper jaw backlash Sz	0 mm
Pneumatic gripper repetition accuracy	≤0.06 mm
Number of gripper jaws	2
Actuator system	Pneumatic
Mounting position	Any
Mode of operation	Double-acting
Cushioning	Elastic cushioning rings/pads at both ends
Gripper function	Parallel
Gripping force backup	Without
Structural design	Flat mounting type for gripper fingers Gear rack/pinion Positively driven motion sequence
Guide	Ball guide
Position sensing	For proximity sensor
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 pneumatic gripper	1 Hz
Min. opening time at 6 bar	90 ms
Min. closing time at 6 bar	70 ms
Max. mass per external gripper finger	625 g
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
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
Gripping force per gripper jaw at 6 bar, opening	346.6 N
Gripping force per gripper jaw at 6 bar, closing	346.6 N
Gripping force per gripper jaw at 6 bar, opening	173.3 N
Gripping force per gripper jaw at 6 bar, closing	173.3 N
Maximum force on gripper jaw Fz, static	320 N
Max. torque Mx	6 Nm
Max. torque My	3 Nm
Max. torque Mz	3 Nm
Product weight	783 g
Type of mounting	Direct mounting via through-hole Direct fastening via thread
Pneumatic connection	M5
Note on materials	RoHS-compliant
Cover cap material	Wrought aluminum alloy, anodized
Cover material	Wrought aluminum alloy, anodized
End plate material	High-alloy stainless steel
Housing material	Wrought aluminum alloy, anodized
Gripper jaw material	High-alloy steel
Piston seal material	TPE-U(PU)
O-ring material	NBR
Material of screws	Steel, coated
Gear rack material	High-alloy stainless steel