

Three-point gripper HGDT-50-A-F

Part number: 560186

FESTO



Data sheet

Feature	Value
Size	50
Stroke per gripper jaws	4 mm
Max. replacement accuracy	0.2 mm
Max. angular gripper jaw backlash ax, ay	0.1 deg
Max. gripper jaw backlash Sz	0.05 mm
Rotationally symmetrical	0.2 mm
Repetition accuracy, gripper	0.03 mm
Number of gripper jaws	3
Mounting position	optional
Mode of operation	Double-acting
Gripper function	3-point
Design	Wedge-shaped drive Force pilot operated motion sequence
Position detection	Via proximity switch
Total gripping force, opening, 0.6MPa (6bar, 87 psi)	2220 N
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	1875 N
Operating pressure	3 bar...8 bar
Operating pressure of blocked air	0 bar...0.5 bar
Max. operating frequency of gripper	4 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	96 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	83 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	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Ambient temperature	5 °C...60 °C
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	740 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	625 N
Mass moment of inertia	11.05 kgcm ²
Max. force on gripper jaw Fz static	1500 N
Max. torque at gripper Mx static	50 Nm

Feature	Value
Max. torque at gripper My static	30 Nm
Max. torque at gripper Mz static	40 Nm
Lubrication interval for guide components	5 MioCyc
Max. mass per external gripper finger	160 g
Product weight	1104 g
Type of mounting	Via through-hole and dowel pin Via female thread and dowel pin Either:
Pneumatic connection, blocked air	M5
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Material cover cap	High-alloy stainless steel
Material housing	Wrought aluminium alloy Coated with COMPCOTE
Material gripper jaws	Hardened steel