

Three-point gripper HGDT-50-A-F

Part number: 560186

FESTO



 [General operating condition](#)

Data sheet

Feature	Value
Size	50
Stroke per gripper jaw	4 mm
Max. interchangeability	≤0.2 mm
Max. gripper jaw angular play ax, ay	≤0.1 deg
Max. gripper jaw backlash Sz	≤0.05 mm
Rotational symmetry	≤0.2 mm
Pneumatic gripper repetition accuracy	≤0.03 mm
Number of gripper jaws	3
Mounting position	Any
Mode of operation	Double-acting
Gripper function	3-point
Structural design	Inclined plane Positively driven motion sequence
Position sensing	For proximity sensor
Symbol	00991894
Gripping force per gripper jaw at 6 bar, opening	2220 N
Gripping force per gripper jaw at 6 bar, closing	1875 N
Operating pressure	3 bar ... 8 bar
Operating pressure for sealing air	0 bar ... 0.5 bar
Max. operating frequency of pneumatic gripper	≤4 Hz
Min. opening time at 6 bar	96 ms
Min. closing time at 6 bar	83 ms
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)	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Ambient temperature	5 °C ... 60 °C
Gripping force per gripper jaw at 6 bar, opening	740 N
Gripping force per gripper jaw at 6 bar, closing	625 N
Mass moment of inertia	11.05 kgcm ²
Maximum force on gripper jaw Fz, static	1500 N
Maximum torque on gripper jaw, Mx static	50 Nm
Maximum torque on gripper jaw, My static	30 Nm
Maximum torque on gripper jaw, Mz static	40 Nm
Relubrication interval for guidance elements	5 MioCyc

Feature	Value
Max. mass per external gripper finger	160 g
Product weight	1104 g
Type of mounting	Optionally: With through-hole and dowel pin With internal thread and dowel pin
Sealing air pneumatic connection	M5
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Cover cap material	High-alloy stainless steel
Housing material	Wrought aluminum alloy COMPCOTE-coated
Gripper jaw material	Hardened steel