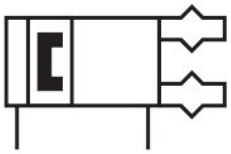
Three-point gripper
HGDD-50-A

Part number: 1163043



Data sheet

Feature	Value
Size	50
Stroke per gripper jaws	8 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	Any
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)	1113 N
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	1044 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)	93 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	128 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-B2-L
Degree of protection	IP65
Ambient temperature	5 °C...60 °C
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	371 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	348 N
Mass moment of inertia	9.65 kgcm²
Max. force on gripper jaw Fz static	1300 N

Feature	Value
Max. torque at gripper Mx static	45 Nm
Max. torque at gripper My static	30 Nm
Max. torque at gripper Mz static	30 Nm
Lubrication interval for guide components	5 MioCyc
Max. mass per external gripper finger	276 g
Product weight	1117 g
Type of mounting	Either: Via through-hole and dowel pin Via female thread and dowel pin
Pneumatic connection, blocked air	M5
Pneumatic connection	G1/8
Note on materials	RoHS compliant
Material cover cap	High-alloy stainless steel
Material housing	Smooth-anodised wrought aluminium alloy
Material gripper jaws	Hardened steel