

# Swivel/gripper unit HGDS-PP-16-P1-A-B

Part number: 1187959

FESTO



 General operating condition

## Data sheet

Feature	Value
Size	16
Rotation angle adjustment range	0 deg ... 210 deg
Stroke per gripper jaws	4.5 mm
Max. angular gripper jaw backlash ax, ay	0.1 deg
Max. gripper jaw backlash Sz	0.02 mm
Swivel angle	210 deg
Repetition accuracy, gripper	0.01 mm
Repetition accuracy of swivel angle	0.02 deg
Number of gripper jaws	2
Cushioning of swivel drive	Elastic cushioning rings/plates at both ends, end positions adjustable, with fixed stop
Cushioning	Elastic cushioning rings/pads at both ends with fixed stop
Cushioning adjustment range	2.6 mm
Mounting position	optional
Fine adjustment of swivel drive	-6 deg
Mode of operation	Double-acting
Gripper function	Parallel
Design	Semi-rotary drive With parallel gripper and gripper drive
Position detection, gripper	Via proximity switch
Position detection, swivel drive	Via proximity switch
Symbol	00991893
Operating pressure	3 bar ... 8 bar
Max. operating frequency of gripper	4 Hz
Max. swivel frequency at 0.6 MPa (6 bar, 87 psi)	2 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	40 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	60 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
Ambient temperature	5 °C ... 60 °C
Gripper force per gripper jaw, opening, 0.6 MPa (6 bar, 87 psi)	58 N
Total gripping force, opening, 0.6MPa (6bar, 87 psi)	116 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	51 N

Feature	Value
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	102 N
Max. force on gripper jaw Fz static	150 N
Max. torque at gripper Mx static	11 Nm
Max. torque at gripper My static	11 Nm
Max. torque at gripper Mz static	11 Nm
Theoretical torque at 0.6 MPa (6 bar, 87 psi)	1.25 Nm
Product weight	730 g
Max. mass per external gripper finger	50 g
Max. mass per external gripper finger, throttled	100 g
Type of mounting	Either: Via female thread and centring sleeve Via through-hole and centring sleeve Via dovetail slot
Pneumatic connection	M5
Note on materials	RoHS-compliant
Material drive shaft	Steel
Material cover	Aluminium POM
Material seals	NBR
Material housing	Wrought aluminium alloy
Material gripper jaws	High-alloy stainless steel