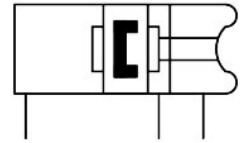
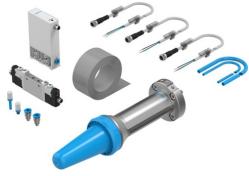



Adaptive shape gripper kit for robots DHEF-20-A-RA50

FESTO

Part number: 8210811



 [General operating condition](#)

Data sheet

Feature	Value
Size	20
Inverting cap version	Standard
Stroke	66 mm
Min. \varnothing to be gripped	12 mm
Max. \varnothing to be gripped	38 mm
Mounting position	Any
Mode of operation	Double-acting
Gripper function	Adaptive
Design	Force pilot operated motion sequence
Guide	Basic Guide
Position detection	Via proximity switch
Symbol	00997278
Pick-up tolerance	± 4 mm
Placement tolerance	± 2 mm
Operating pressure of ball valve drive unit	0.1 MPa ... 0.8 MPa
Operating pressure of ball valve drive unit	1 bar ... 8 bar
Operating pressure of ball valve drive unit	14.5 psi ... 116 psi
Operating pressure of cap	0.007 MPa ... 0.01 MPa
Operating pressure of cap	0.07 bar ... 0.1 bar
Operating pressure of cap	1.015 psi ... 1.45 psi
Burst pressure of cap	0.03 MPa
Burst pressure of cap	0.3 bar
Burst pressure of cap	4.35 psi
Recommended flow rate for pressure regulator	10 l/min
Max. operating frequency of gripper	1 Hz
Return-stroke time	290 ms
Advance time	270 ms
Max. speed without gripped object	290 mm/s
Max. speed during gripping	120 mm/s
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	158 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	189 N
Dynamic lateral force with max. projection	2.3 N
Contact force on the gripping object	20 N
Static holding force parallel to the gripper axis	26 N
Static holding force perpendicular to the gripper axis	45 N

Feature	Value
Impact energy in end positions	0.1 J
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation not possible
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Ambient temperature	0 °C ... 60 °C
Mass moment of inertia	1.29 kgcm ²
Guide value for effective load	1 kg
Product weight	475 g
Moving mass	60 g
Note on the moving mass	Without inverting cap
Type of mounting	To ISO 9409
Pneumatic connection	M5
Note on materials	RoHS compliant
Material cap	VMQ (silicone)
Material housing	Anodised aluminium
Locking cover material	Process automation
Scope of delivery	1x Velcro® roll 1x solenoid valve 1x proportional-pressure regulator 2x proximity switch 3x connecting cable
Drive system	Pneumatic