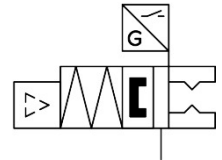


Parallel gripper HPPH-16-16-NC-P-R12

Part number: 8171874

FESTO



[PDF](#) General operating condition

Data sheet

Feature	Value
Size	16
Total stroke	16 mm
Stroke per gripper jaws	8 mm
Max. angular gripper jaw backlash ax, ay	0 deg
Max. gripper jaw backlash Sz	0 mm
Repetition accuracy, gripper	≤0.06 mm
Number of gripper jaws	2
Drive system	Pneumatic
Mounting position	optional
Mode of operation	Double-acting
Cushioning	On one side Not adjustable
Gripper function	Parallel
Gripper force back-up	During closing
Design	Force pilot operated motion sequence
Guide	Ball guide
Position detection	With integrated displacement encoder
Symbol	00997553
Switching status indication	Blue LED, switching status via signal input
Operating pressure	0.25 MPa ... 0.7 MPa
Operating pressure	2.5 bar ... 7 bar
Operating pressure	36.25 psi ... 101.5 psi
Operating pressure HRC	0.25 MPa ... 0.5 MPa
Operating pressure HRC	2.5 bar ... 5 bar
Operating pressure HRC	36.25 psi ... 72.5 psi
Max. operating frequency of gripper	1 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	180 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	90 ms
Max. mass per external gripper finger	100 g
Max. current consumption	100 mA
Nominal operating voltage DC	24 V
Switching output	PNP
Switching input	PNP
Permissible voltage fluctuations	+/- 10 %
Approval	RCM trademark

Feature	Value
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Certificate issuing authority	TÜV Süd M70132770525.01
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)
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Relative air humidity	0 - 90% Non-condensing
Sound pressure level	≤75 dB(A)
Degree of protection	IP40
Ambient temperature	-5 °C ... 50 °C
Total gripping force, closing, 0.6MPa (6bar, 87 psi)	278 N ... 302 N
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	139 N ... 151 N
Total gripping force HRC, closing	232 N ... 256 N
Gripping force per gripper jaw HRC, closing	116 N ... 128 N
Note on gripping force	Dependent on the stroke With integrated compression spring
Theoretical spring force per gripper jaw, closing	23.3 N ... 34.9 N
Mass moment of inertia	0.6 kgcm ²
Max. force on gripper jaw Fz static	176 N
Max. moment Mx	2.8 Nm
Max. moment My	1.4 Nm
Max. moment Mz	1.4 Nm
Bending radius, fixed cable	>26 mm
Bending radius, moving cable	>52 mm
Maintenance interval	Life-time lubrication
Product weight	680 g
Recommended workpiece weight for MRK	1 kg
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Cable with plug
Electrical connection 1, cable outlet	Angled
Electrical connection 1, design	Round
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	8
Electrical connection 1, used connections/cores	6
Electrical connection 1, connection pattern	00997560
Electrical connection 1, tightening torque	0.2 Nm
Type of mounting	Via mounting kit To ISO 9409
Pneumatic connection	For push-in connector O.D. 4 mm
Note on materials	RoHS-compliant
Material cover	PA-reinforced
Material spring	High-alloy stainless steel
Material housing	Anodised wrought aluminium alloy
Material gripper jaws	High-alloy steel
Material piston	Wrought aluminium alloy, anodised
Material piston seal	TPE-U(PU)

Feature	Value
Material o-ring	HNBR NBR
Material screws	Galvanised steel High-alloy steel
Gear wheel material	High-alloy steel
Gripper finger material	Wrought aluminium alloy, anodised