

Parallel gripper HEPP-42-56-EC-B

Part number: 8146657

FESTO



Data sheet

Feature	Value
Size	42
Complete stroke	56 mm
Stroke per gripper jaw	28 mm
Max. gripper jaw backlash Sz	0.35 mm
Pneumatic gripper repetition accuracy	0.02 mm
Number of gripper jaws	2
Actuator system	Electrical
Mounting position	Any
Controller operating mode	Interpolating mode via fieldbus
Gripper function	Parallel
Structural design	Toothed belt Electric gripper with brake with ball screw
Guide	Roller guide
Position sensing	Motor encoder
Configuration support	ESI file
Variants	Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Ready status indication	LED
Positioning speed per gripper finger	50 mm/s
Positioning acceleration per gripper finger	1 m/s ²
Gripping speed per gripper finger	3 mm/s
No. of MAC addresses	4
Max. current consumption	4000 mA
Max. load current consumption	3 A
Logic max. current consumption	1 A
Nominal operating voltage DC	24 V
Nominal voltage, logic supply DC	24 V

Feature	Value
Nominal voltage, load supply DC	24 V
Motor nominal current	5 A
Load supply permissible range	± 10 %
Permissible range of logic voltage	± 10 %
KC characters	KC EMC
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Product corresponds to Festo's internal product definition for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils
Cleanroom class	Class 6 according to ISO 14644-1
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Relative air humidity	0 - 95 % Non-condensing
Noise level	60 dB(A)
Degree of protection	IP40
Ambient temperature	0 °C...50 °C
Total gripping force	680 N
Gripping force per gripper jaw	340 N
Mass moment of inertia	85 kgcm ²
Maximum force on gripper jaw Fz, static	1100 N
Maximum torque on gripper jaw, Mx static	13.9 Nm
Maximum torque on gripper jaw, My static	38.5 Nm
Maximum torque on gripper jaw, Mz static	13.9 Nm
Rated load	3 kg
Nominal torque	0.185 Nm
Relubrication interval for guidance elements	1 MioCyc
Product weight	2600 g
Communication profile	CiA402 EoE (Ethernet over EtherCAT) FoE (File over EtherCAT)
Fieldbus interface, connection type	Socket
Fieldbus interface, connection technology	M12x1, D-coded as per EN 61076-2-101
Fieldbus interface, number of poles/wires	4
Fieldbus interface, protocol	EtherCAT
Electrical connection	2x M12
Fieldbus coupling	EtherCAT
Type of mounting	With internal thread and centering sleeve
Note on materials	RoHS-compliant
Housing material	Aluminum, anodized
Gripper jaw material	Steel