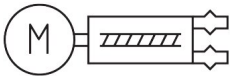
Parallel gripper
HEPP-42-56-EC-B

Part number: 8146657





Data sheet

Feature	Value
Size	42
Total stroke	56 mm
Stroke per gripper jaws	28 mm
Max. gripper jaw clearance Sy	0.35 mm
Repetition accuracy in ± mm	0.02 mm
Number of gripper jaws	2
Drive system	Electrical
Mounting position	Any
Controller operating mode	Interpolated mode via fieldbus
Gripper function	Parallel
Design	Toothed belt Electric gripper With brake With ball screw
Guide	Roller bearing guide
Position detection	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, encoder measuring principle	magnetic
Ready status indication	LED
Positioning speed per gripper finger	50 mm/s
Positioning acceleration per gripper finger	1 m/s²
Gripping speed per gripper finger	3 mm/s
Number of MAC addresses	4
Max. current consumption	4000 mA
Max. current consumption, load	3 A
Max. current consumption, logic	1 A
Nominal operating voltage DC	24 V
Nominal voltage for logic power supply DC	24 V

Feature	Value
Nominal voltage load voltage DC	24 V
Nominal motor current	5 A
Permissible range for load power supply	±10%
Permissible range for logic voltage	±10%
KC mark	KC-EMV
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
Shock resistance	Shock test with severity level 2 to 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	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 6 according to ISO 14644-1
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Relative air humidity	0 - 95% Non-condensing
Sound pressure 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 kgcm²
Max. force on gripper jaw Fz static	1100 N
Max. torque at gripper Mx static	13.9 Nm
Max. torque at gripper My static	38.5 Nm
Max. torque at gripper Mz static	13.9 Nm
Rated load	3 kg
Nominal torque	0.185 Nm
Lubrication interval for guide components	1 MioCyc
Product weight	2600 g
Communication profile	CiA402 EoE (Ethernet over EtherCAT) FoE (File over EtherCAT)
Field bus, connection type	Socket
Field bus, connection system	M12x1, D-coded to EN 61076-2-101
Field bus, connection pattern	4
Field bus, protocol	EtherCAT®
Electrical connection	2x M12
Fieldbus link	EtherCAT®
Type of mounting	Via female thread and centring sleeve
Note on materials	RoHS compliant
Material housing	Anodised aluminium
Material gripper jaws	Steel