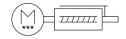
Electric cylinder unit EPCS-BS-45-50-3P-A-ST-M-H1-PLK-AA

FESTO

Part number: 8118275





General operating condition

Data sheet

Feature	Value
Size	45
Stroke	50 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Reversing backlash theoretical	100 μm
Spindle diameter	10 mm
Spindle pitch	3 mm/U
Torsional backlash at piston rod +/-	1 deg
Mounting position	optional
Piston-rod end	Male thread
Type of motor	Stepper motor
Design	Electric cylinder With ball screw drive With integrated drive
Spindle type	Ball screw drive
Symbol	00997294
Protection against torque/guide	With plain-bearing guide
Referencing	Positive fixed stop block Negative fixed stop block Reference switch
Rotor position sensor	Absolute single-turn encoder
Rotor position sensor, encoder measuring principle	Magnetic
Temperature monitoring	Switch-off for excessive temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Ready status indication	LED
Max. acceleration	1.5 m/s ²
Max. speed	0.074 m/s
Speed "Speed press"	0.01 m/s
Repetition accuracy	±0.02 mm
Features of digital logic outputs	Configurable Not galvanically isolated
Duty cycle	100%
Insulation protection class	В
Max. current digital logic outputs	100 mA
Max. current consumption	3000 mA

Norminal voltage DC	Feature	Value
Nominal current Parameterisation interface Notor position transducer resolution Notor position transducer resolution Noter position transducer resolution Noter supply, connection type Plugs Power supply, connection type Plugs Power supply, connection system Noter supply, connection pattern Nower supply nower supply, connection pattern Nower supply, connection p	Max. current consumption, logic	0.3 A
Nominal current Parameterisation interface Notor position transducer resolution Notor position transducer resolution Noter position transducer resolution Noter supply, connection type Plugs Power supply, connection type Plugs Power supply, connection system Noter supply, connection pattern Nower supply nower supply, connection pattern Nower supply, connection p	Nominal voltage DC	24 V
User interface Rotor position transducer resolution	Nominal current	3 A
Rotor position transducer resolution 16 bit Permissible voltage fluctuations 7-7-15% 9-19% 9-1998 9-1998 9-1998 9-1998 9-1998 9-1998 9-1998 9-1998 9-1998 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-19999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-19999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999 9-1999	Parameterisation interface	IO-Link
Permissible voltage fluctuations // 15% Power supply, connection type Plugs power supply, connection type Plugs power supply, connection pattern 00995989 Approval Continued Conti		User interface
Power supply, connection type power supply, connection system M12x1, T-coded according to EN 61076-2-111 Powers supply, number of pinsy wires 4 Power supply, connection pattern O0995999 Approval RCM trademark RC mark RC mark RC mark (see declaration of conformity) To EU ENC Directive In accordance with EU ROHS Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC Directive INCA marking (see declaration of conformity) To EU ENC ENC DIRECTION To EU ENC EU ENC EU EN ENC EU EN ENC EU	Rotor position transducer resolution	16 bit
power supply, connection system Power supply, number of pins/wires A Power supply, connection pattern O0995989 Approval RCK mark RC mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROHS Directive In Cult Rohs Shrective In Cult Rohs Shrective In Cult Rohs Instructions In UK instructions for EMC To UK Rohs' instructions In UK Rohs' instructions Shock resistance Shock resistance Shock tests with severity level 1 to FN 942017-5 and EN 60068-2-2 Corrosion resistance Shock tests with severity level 1 to FN 942017-5 and EN 60068-2-3 Corrosion resistance Corrosion resistance Class CRC O-No corrosion stress Class 9 according to ISO 14644-1 Clearroom class III Monbient temperature O-9-0% Note on ambient temperature O-9-0% Note on ambient temperature O-9-0% Note on ambient temperature Power must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment MX O-Nm Max. moment MX O-N	Permissible voltage fluctuations	+/- 15%
Power supply, number of pins/wires Power supply, connection pattern Oog95989 RCM trademark KC mark CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU ROH's Directive IUKCA marking (see declaration of conformity) To UK instructions for EMC TO UK ROH's Instructions Vibration resistance Shock resistance Shock resistance Shock resistance class CRC On No corrosion stress Labs GPWIS Conformity UMA23642 and III Cleanroom class Class 9 according to 150 14644-1 Cleanroom class Class 9 according to 150 14644-1 Cleanroom class Class 9 according to 150 14644-1 Cleanroom class III Ambient temperature O 20°C 60°C Relative air humidity OP Ower must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment Mix Ambient temperature O N N Max. moment Mix Aux. moment Mix Max. moment Mix Max. moment Mix Max. read force at drive shaft 130 N Max. read force at drive shaft 130 N Max. read force value effective load, horizontal Reference value effective load, chrizontal Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke Additional moving input Moving graph for 0 mm stroke Additional moving input Based on IEC 61131-2, type 1 Moving graph for 0 mm stroke Additional logic inputs 24 V DC 2 Number of digital logic inputs 54 V DC 2 Number of logic input Configurable Not configurable Not configurable Not galvanically isolated Ol-Link, Protocol version Device V 1.1 Dichink, Protocol version Device V 1.1 Dichink, Protocol version Ol-Link, Protocol version Device V 1.1 Dichink, Protocol version	Power supply, connection type	Plugs
Power supply, connection pattern Approval Approval Approval Approval Approval Approval Approval CE mark (see declaration of conformity) In accordance with EU Boht S Directive It Is It is instructions for EMC Is UK instructions for EMC Composed to the Composed to	power supply, connection system	M12x1, T-coded according to EN 61076-2-111
Approval KC mark Koe declaration of conformity) To EU EMC Directive In accordance with EU RoHS Directive In accordance with EU RoHS Directive In CUK marking (see declaration of conformity) To UK RoHS Instructions Shock resistance Shock test with severity level 1 to FN 942017-4 and EN 600682-27 Corrosion resistance class CRC O - No corrosion stress Corrosion resistance class CRC O - No corrosion stress Class 9 according to ISO 14644-1 Clean room class Class 9 according to ISO 14644-1 Clean room class Class 9 according to ISO 14644-1 Clean room class III Ambient temperature O - 50 % Non-condensing Degree of protection IP40 Protection class III Ambient temperature O - 50 % Non-condensing Note on ambient temperature O - 50 % Non-condensing Degree of protection class III Ambient temperature O - 50 % Non-condensing Degree of protection class III Ambient temperature O - 50 % Non-condensing Degree of protection class III Ambient temperature O - 50 % Non-condensing Degree of protection class III Ambient temperature O - 50 % Device of the state of the shaft of t	Power supply, number of pins/wires	4
KC mark CE mark (see declaration of conformity) CE mark (see declaration of conformity) To EU EMC Directive In accordance with EU RoHS Directive In accordance with EU RoHS Directive In accordance with EU RoHS Directive In UK ROHS Instructions In UK ROHS Instructions Vibration resistance Shock resistance Shock resistance Shock resistance Shock resistance (ass CRC O. No corrosion stress Corrosion resistance class CRC O. No corrosion stress Corrosion resistance class CRC Corrosion resistance class CRC O. No corrosion stress Class 9 according to 150 14644-1 Class 14 14 14 14 14 14 14 14 14 14 14 14 14	Power supply, connection pattern	00995989
EE mark (see declaration of conformity) To EU EMC Directive To UK Rostructions for EMC To UK RostS instructions To UK RostS instructions To UK RostS instructions Tansport a pagilection test with severity level 1 to FN 942017-4 and EN 60068-2-6 Shock resistance Shock resistance Shock resistance (ass CRC) O No corrosion stress Corrosion resistance class CRC LABS (PWIS) conformity VDMA24364 zone III Cleanroom class Class 9 according to ISO 14644-1 Storage temperature (20 °C 60 °C Relative air humidity O 90% Non-condensing Degree of protection IP40 Protection class III Ambient temperature O °C 50 °C Note on ambient temperature Power must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment Mx O N M Max. moment My Aux. moment My Aux. moment My Aux. and afforce at drive shaft III and N Max. feed force Fx Reference value effective load, horizontal Reference value effective load, vertical Jie Tien lubrication Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke Number of digital logic outputs 24 V DC Rads (Protection load) Number of digital logic input Sessed input Verent of the sessed on IEC 61131-2, type 1 Verent of logic input Verent of logic input O configurable Not galvanically isolated OI-Link, Protocol version D evice V I.1 OLink, Protocol version O CMJ 3(23.4 kBaud) OI-Link, Prot class A HEAD COMMAN ACCOUNTINE	Approval	RCM trademark
In accordance with EU ROHS Directive UKCA marking (see declaration of conformity) IO LIK instructions for EMC TO LIK ROHS instructions To LIK instructions for EMC TO LIK ROHS instructions COOKS 2 - 6 Shock resistance Shock test with severity level 1 to FN 942017-4 and EN 60068 2 - 27 Corrosion resistance class CRC O - No corrosion stress CLABS (CWIS) conformity VDMA2364 zane III Cleanroom class Class 9 according to ISO 14644-1 Storage temperature Relative air humidity O - 90% Non-condensing Degree of protection IPAO Protection class III Ambient temperature O °C 50 °C Note on ambient temperature Note on ambient temperature O °C 50 °C Max. moment Mx Amax. moment Mx Amax. moment Mx Amax. moment Mx Ax. radial force at drive shaft Max. radial fo	KC mark	KC-EMV
To UK ROHS instructions	CE mark (see declaration of conformity)	
60068-2-6 Shock resistance Shock resistance Shock resistance Shock resistance Shock resistance resistance class CRC O - No corrosion stress LABS (PWIS) conformity VDMA24364 zone III Clean room class Class 9 according to ISO 14644-1 Storage temperature 2-0 °C60 °C Relative air humidity O - 90% Non-condensing Degree of protection Protection Protection class III Ambient temperature O °C50 °C Note on ambient temperature Power must be reduced by 2% per K at ambient temperature sabove 30°C 50 °C Max. moment Mx O Nm Max. moment Mx O Nm Max. moment My 2.9 km Max. moment Mz 2.9 km Max. radial force at drive shaft 180 N Max. feed force FX 450 N Reference value effective load, horizontal 60 kg Reference value effective load, vertical 138 kg Maintenance interval IIIe-time lubrication Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 41 g Mumber of digital logic outputs 24 V DC 2 Number of digital logic input 2a V Specification logic input 2a V Features of logic input 2a V Features of logic input 2a V Co-link, Port class A O-Link, Port class A Collink, Port class A	UKCA marking (see declaration of conformity)	
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LABS (PWIS) conformity Cleanroom class Class 9 according to ISO 14644-1 Storage temperature 20 °C 60 °C Relative air humidity 0-90% Non-condensing Degree of protection IP40 Protection class III Ambient temperature 0 °C 50 °C Note on ambient temperature above 30°C. Max. moment My 2.9 Nm Max. moment My 2.9 Nm Max. readial force at drive shaft 180 N Max. readial force at drive shaft 180 N Reference value effective load, horizontal 0 ok g Reference value effective load, vertical 23 kg Ilfe-time lubrication Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 149 g Product weight 1390 g Basic weight for 0 mm stroke 1185 g Additional weight per 10 mm stroke 1185 g Additional weight per 10 mm stroke 1185 g Additional weight per 10 mm stroke 1185 g Nomber of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 3 Configurable Not galvanically isolated 10-Link, Protecol version	Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Clean room class Class 9 according to ISO 14644-1 Storage temperature 20 °C 60 °C Relative air humidity Degree of protection PA40 Protection class III Ambient temperature 0 °C 50 °C Note on ambient temperature Power must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment Mx 0 Nm Max. moment My 2.9 Nm Max. moment My 3.9 Nm Max. radial force at drive shaft 180 N Max. feed force Fx 450 N Reference value effective load, horizontal 60 kg Reference value effective load, vertical Maintenance interval Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 4.9 g Product weight 1390 g Basic weight for 0 mm stroke Additional weight per 10 mm stroke 41 g Number of digital logic outputs 24 V DC 2 Number of digital logic input Specification logic input Configurable Not galvanically isolated 10-Link, Port class A (2003 (230.4 kBaud) 10-Link, Port class A (2004 C 60 °C Power must be reduced by 2% per K at ambient temperatures above 30°C. By or C 50 °C Power must be reduced by 2% per K at ambient temperatures above 30°C. By or C 50 °C Nm moment My 9 Nm 450 N 460 N 479 g 49 g 49 g 49 g 49 g 40 g 41 g 40 g	Corrosion resistance class CRC	0 - No corrosion stress
Storage temperature 20 °C 60 °C Relative air humidity 0.99% Non-condensing Degree of protection IP40 Protection class III Ambient temperature 0 °C 50 °C Note on ambient temperature 20 °C 50 °C Note on ambient temperature 30 °C 50 °C Max. moment Mx 0 Nm Max. moment My 2.9 Nm Max. moment My 2.9 Nm Max. moment Mz 2.9 Nm Max. radial force at drive shaft 180 N Max. red force Fx 450 N Reference value effective load, horizontal 60 kg Reference value effective load, vertical 23 kg Maintenance interval Life-time lubrication Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 4.9 g Product weight 1390 g Basic weight for 0 mm stroke 41 8 Number of digital logic outputs 24 V DC 2 Number of digital logic input 24 V DC Number of digital logic input 24 V DC Number of logic input 24 V DC Polink, S10-Mode support Vestore 10 Configurable Not galvanically isolated 10-Link, Protocol version Device V 1.1 Di-Link, Protocol version COM3 (230.4 kBaud) Link, Fort class A	LABS (PWIS) conformity	VDMA24364 zone III
Relative air humidity Degree of protection Degree of protection Protection class III Ambient temperature O °C 50 °C Note on ambient temperature Power must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment Mx O Nm Max. moment My 2.9 Nm Max. moment Mz 2.9 Nm Max. moment Mz Max. redial force at drive shaft 180 N Max. feed force Fx 450 N Reference value effective load, horizontal 60 kg Reference value effective load, vertical 23 kg Maintenance interval Life-time lubrication Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 1390 g Basic weight for 0 mm stroke 41 g Number of digital logic outputs 24 V DC 2 Number of digital logic input Protection in put Working range of logic input Configurable Not galvanically isolated Ol-Link, S10-Mode support Protection in Sick (SM) (SM) (SM) (SM) (SM) (SM) (SM) (SM)	Cleanroom class	Class 9 according to ISO 14644-1
Degree of protection IP40 Protection class III Ambient temperature 0°C 50°C Note on ambient temperature Power must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment Mx O Nm Max. moment My 2.9 Nm Max. moment Mz 2.9 Nm Max. radial force at drive shaft 180 N Max. red force Fx 450 N Reference value effective load, horizontal 60 kg Reference value effective load, vertical 23 kg Maintenance interval Life-time lubrication Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 4.9 g Product weight 1390 g Basic weight for 0 mm stroke 418 g Number of digital logic outputs 24 V DC 2 Number of digital logic input 24 V Features of logic input Configurable Not galvanically isolated Ol-Link, Flot Color Version Device V 1.1 Ol-Link, Port class A	Storage temperature	-20 °C 60 °C
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Note on ambient temperature Power must be reduced by 2% per K at ambient temperatures above 30°C. Max. moment Mx 0 NM Max. moment My 2.9 Nm Max. moment Mz 2.9 Nm Max. radial force at drive shaft 180 N Max. feed force Fx 450 N Reference value effective load, horizontal 60 kg Reference value effective load, vertical 23 kg Maintenance interval Life-time lubrication Moving mass for 0 mm stroke 179 g Additional moving mass per 10 mm stroke 4.9 g Product weight 1390 g Basic weight for 0 mm stroke Additional weight per 10 mm stroke Additional weight per 10 mm stroke Number of digital logic outputs 24 V DC Number of digital logic input Based on IEC 61131-2, type 1 Working range of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Ves IO-Link, Protocol version Device V 1.1 IO-Link, Port class A	Protection class	III
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Max. moment My Ax. moment Mz Ax. radial force at drive shaft Ax. radial force at drive shaft Bax. feed force Fx A50 N Reference value effective load, horizontal Ax. feed force Fx A50 N Reference value effective load, vertical Baxeference value effective load, vertical Additional moving mass for 0 mm stroke Additional moving mass per 10 mm stroke Additional moving mass per 10 mm stroke Basic weight for 0 mm stroke Additional weight per 10 mm stroke Colliction logic inputs Additional weight per 10 mm stroke As gettime lubrication As per defective load, horizontal per defective load, weight per defective load,	Note on ambient temperature	
Max. moment Mz Max. radial force at drive shaft Max. feed force Fx 450 N Reference value effective load, horizontal Reference value effective load, vertical Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke Additional moving mass per 10 mm stroke Basic weight for 0 mm stroke Additional weight per 10 mm stroke Configurable of logic input Based on IEC 61131-2, type 1 Configurable Not galvanically isolated IO-Link, SIO-Mode support Yes IO-Link, Protocol version Device V 1.1 IO-Link, communication mode COM3 (230.4 kBaud) IO-Link, Port class	Max. moment Mx	0 Nm
Max. radial force at drive shaft180 NMax. feed force Fx450 NReference value effective load, horizontal60 kgReference value effective load, vertical23 kgMaintenance intervalLife-time lubricationMoving mass for 0 mm stroke179 gAdditional moving mass per 10 mm stroke4.9 gProduct weight1390 gBasic weight for 0 mm stroke41 gAdditional weight per 10 mm stroke41 gNumber of digital logic outputs 24 V DC2Specification logic input24 VFeatures of logic input24 VFeatures of logic inputConfigurable Not galvanically isolated10-Link, S10-Mode supportYes10-Link, Protocol versionDevice V 1.110-Link, communication modeCOM3 (230.4 kBaud)10-Link, Port classA	Max. moment My	2.9 Nm
Max. radial force at drive shaft180 NMax. feed force Fx450 NReference value effective load, horizontal60 kgReference value effective load, vertical23 kgMaintenance intervalLife-time lubricationMoving mass for 0 mm stroke179 gAdditional moving mass per 10 mm stroke4.9 gProduct weight1390 gBasic weight for 0 mm stroke41 gAdditional weight per 10 mm stroke41 gNumber of digital logic outputs 24 V DC2Specification logic input24 VFeatures of logic input24 VFeatures of logic inputConfigurable Not galvanically isolated10-Link, S10-Mode supportYes10-Link, Protocol versionDevice V 1.110-Link, communication modeCOM3 (230.4 kBaud)10-Link, Port classA	Max. moment Mz	2.9 Nm
Reference value effective load, horizontal Reference value effective load, vertical 23 kg Maintenance interval Life-time lubrication Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke 4.9 g Product weight 1390 g Basic weight for 0 mm stroke 41 g Number of digital logic outputs 24 V DC Number of digital logic input Specification logic input Working range of logic input Features of logic input Configurable Not galvanically isolated 10-Link, S10-Mode support Ves 10-Link, Protocol version Device V 1.1 COM3 (230.4 kBaud) IC-Link, Port class A If petime lubrication 23 kg 4.9 g 4.	Max. radial force at drive shaft	
Reference value effective load, vertical Maintenance interval Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke Additional moving mass per 10 mm stroke Product weight Basic weight for 0 mm stroke Additional weight per 10 mm stroke Additional weight per 10 mm stroke Additional weight per 10 mm stroke Additional weight logic outputs 24 V DC Number of digital logic inputs Specification logic input Based on IEC 61131-2, type 1 Working range of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Yes IO-Link, Protocol version Device V 1.1 IO-Link, Communication mode COM3 (230.4 kBaud) IC-Link, Port class	Max. feed force Fx	450 N
Maintenance interval Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke A179 g Product weight Basic weight for 0 mm stroke Additional weight per 10 mm stroke Additional weight per 10 mm stroke A1 g Number of digital logic outputs 24 V DC Number of digital logic input Based on IEC 61131-2, type 1 Working range of logic input Working range of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Ves IO-Link, Protocol version Device V 1.1 IO-Link, Port class A Life-time lubrication Life-time lubrication Life-time lubrication Life-time lubrication Life-time lubrication Life-time lubrication 179 g A9 Life-time lubrication Life-time lubrication A9 Life-time lubrication Life-time lubrication Life-time lubrication A9 A9 A A Life-time lubrication Life-time lubrication Life-time lubrication A9 A A Life-time lubrication A9 A A A A A A A A A A A A	Reference value effective load, horizontal	60 kg
Moving mass for 0 mm stroke Additional moving mass per 10 mm stroke 4.9 g Product weight Basic weight for 0 mm stroke Additional weight per 10 mm stroke Additional weight per 10 mm stroke Additional weight per 10 mm stroke Additional weight logic outputs 24 V DC Number of digital logic inputs 2 Specification logic input Based on IEC 61131-2, type 1 Working range of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Ves IO-Link, Protocol version Device V 1.1 IO-Link, Port class A	Reference value effective load, vertical	23 kg
Additional moving mass per 10 mm stroke Product weight 1390 g Basic weight for 0 mm stroke 1185 g Additional weight per 10 mm stroke 41 g Number of digital logic outputs 24 V DC 2 Number of digital logic input 2 Specification logic input Based on IEC 61131-2, type 1 Working range of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Yes IO-Link, communication mode COM3 (230.4 kBaud) A A A A A A A A A A A A A	Maintenance interval	Life-time lubrication
Product weight Basic weight for 0 mm stroke 1185 g Additional weight per 10 mm stroke 41 g Number of digital logic outputs 24 V DC 2 Number of digital logic inputs 2 Specification logic input Based on IEC 61131-2, type 1 Working range of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Ves IO-Link, communication mode COM3 (230.4 kBaud) A 1390 g 1185	Moving mass for 0 mm stroke	179 g
Basic weight for 0 mm stroke Additional weight per 10 mm stroke Auditional weight per	Additional moving mass per 10 mm stroke	4.9 g
Basic weight for 0 mm stroke Additional weight per 10 mm stroke Auditional weight per		
Additional weight per 10 mm stroke Number of digital logic outputs 24 V DC Number of digital logic inputs Specification logic input Working range of logic input Eatures of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Ves IO-Link, Protocol version Device V 1.1 IO-Link, Port class A A 41 g 41 g 41 g 42 Q Communication mode Communication mode 41 g 41 g 41 g Communication mode Communication mode 42 Q Configurable Not galvanically isolated Communication mode Communication mode Communication mode A		
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Specification logic input Working range of logic input 24 V Features of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support Yes IO-Link, Protocol version Device V 1.1 IO-Link, Port class A Based on IEC 61131-2, type 1 24 V Configurable Not galvanically isolated Configurable Not galvanically isolated Yes COM3 (230.4 kBaud) A		
Working range of logic input Features of logic input Configurable Not galvanically isolated IO-Link, SIO-Mode support IO-Link, Protocol version Device V 1.1 IO-Link, communication mode COM3 (230.4 kBaud) A		Based on IEC 61131-2, type 1
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IO-Link, communication mode COM3 (230.4 kBaud) IO-Link, Port class A	1	
IO-Link, Port class A		COM3 (230.4 kBaud)
	IO-Link, Number of ports	1

Feature	Value
IO-Link, Process data length OUT	2 bytes
IO-Link, Process data content OUT	Move in 1 bit Move out 1 bit Quit Error 1 bit Move intermediate 1 bit
IO-Link, Process data length IN	2 bytes
IO-Link, Process data content IN	State Device 1 bit State In 1 bit State Intermediate 1 bit State Move 1 bit State Out 1 bit
IO-Link, Service data IN	32-bit force 32-bit position 32-bit speed
IO-Link, Min. cycle time	1 ms
IO-Link, Data storage required	500 Byte
Max. cable length	15 m outputs 15 m inputs 20 m with IO-Link® operation
Switching logic for outputs	NPN (negative switching) PNP (positive switching)
Switching logic for inputs	NPN (negative switching) PNP (positive switching)
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded according to EN 61076-2-101
Logic interface, number of pins/wires	8
Logic interface, plug pattern	00992264
Type of mounting	Via female thread With accessories
Note on materials	RoHS-compliant
Material housing	Smooth-anodised wrought aluminium alloy
Material piston rod	High-alloy stainless steel
Material spindle nut	Steel
Material spindle	Rolled steel