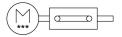
## Electric cylinder unit EPCE-TB-60-10-FL-ST-M-H1-PLK-AA

**FESTO** 

Part number: 8102163





General operating condition

## **Data sheet**

Feature	Value
Drive pinion effective diameter	10.18 mm
Size	60
Stroke	10 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Toothed belt elongation	0.375 %
Toothed belt pitch	2 mm
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor
Position sensing	Motor encoder
Structural design	Electric actuator with toothed belt With integrated drive
Symbol	00997342
Protection against torsion/guide	With plain-bearing guide
Homing	Fixed stop block positive Fixed stop block, negative
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Temperature monitoring	Shutdown in the event of over 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	9 m/s²
Max. speed	0.6 m/s
Speed "Speed Press"	0.02 m/s
Repetition accuracy	±0.05 mm
Characteristics of digital logic outputs	Configurable Not galvanically isolated
Duty cycle	100%
Insulation protection class	В
Max. current of digital logic outputs	100 mA
Max. current consumption	5300 mA
Logic max. current consumption	0.3 A

Nominal current  5.3.A Parameter frazilation interface  Notion position sensor resolution  16 bit  Power supply, togen of connection  Phus Power supply, connection rectinology  National Current  Nominal Current	Feature	Value
Parameterization interface  Rotor position sensor resolution  16 bit  Permissible voltage fluctuations  4-7-19 %  Power supply, to per Comnection  Power supply, connection technology  M12x1, T-coded as per EN 61076-2-111  A power supply, under of pins'wires  A Power supply, under of pins'wires  A Power supply, under of pins'wires  A Power supply, connection pattern  Composition	DC nominal voltage	24 V
User interface	Nominal current	5.3 A
Rotor position sensor resolution 16 bit  Permissibit voitage fluctuations 4-7-19 % Permissibit voitage fluctuations 4-7-19 % Power supply, top of connection Plug Power supply, connection technology M1221, I coded as per EN 61076 2-111 Power supply, connection pattern 00999989 Certification RCM compliance mark CE marking (see declaration of conformity) Apper EU ROHS directive CE marking (see declaration of conformity) Apper EU ROHS directive UKCA marking (see declaration of conformity) Apper EU ROHS directive UKCA marking (see declaration of conformity) To UK instructions for EMC Of UK RoHS instructions  Vibration resistance Transport application test with severity level 1 as per FN 942017-4 and EN 60068 2-6 Shock resistance Shock test with severity level 1 as per FN 942017-5 and EN 60068 2-7 Corrosion resistance class (CRC) On No. corrosion stress URLAS (PWIS) conformity VOMA24364 zone III Storage temperature 20 °C60 °C Relative air humidity On 90 % Deeper of protection Place Protection class III Ambient temperature Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Max. torque MY Ma	Parameterization interface	IO-Link®
Permissible voltage fluctuations // 15 % Power supply, togen of connection Pring Power supply, togen of connection expension Power supply, number of pins/wires // 4 P		User interface
Prover supply, type of connection Plug Prover supply, connection technology M12x1, T-coded as per EN 61076-2-111  Prover supply, connection pattern O0999989 Certification RCM compliance mark CC marking (see declaration of conformity) A per EU RMS directive UNCA marking (see declaration of conformity) A per EU RMS directive UNCA marking (see declaration of conformity) To LK instructions for EMC To LK Romanniance UNCA marking (see declaration of conformity) WINCA marking (see declaration of conformity) UNCA marking (see declaration see for EMC of Conformity (see EMC of Conformity) UNCA marking (see declaration of conformity (see EMC of Conformity) UNCA marking (see declaration of conformity (see EMC of Conformity) UNCA marking (see declaration of conformity (see EMC of Conformity) UNCA marking (see declaration see EMC of Unca Marking	Rotor position sensor resolution	16 bit
Power supply, connection technology M12x1, T-coded as per EN 61076-2-111  Power supply, number of pinsy, wires A D0995789 Certification RCM compliance mark CC characters RC Characters	Permissible voltage fluctuations	+/- 15 %
Power supply, number of pins/wires  A Power supply, connection pattern  O 0995989  CErtification  RCM compliance mark  KC cEndication  KC characters  KC EMC  Emarking (see declaration of conformity)  As per EU EMC directive As per EU EMC direction As active and an active and active an	Power supply, type of connection	Plug
Power supply, connection pattern Certification RCM compliance mark CCE marking (see declaration of conformity) RCM Camarking (see declaration of conformity) RCM Camarking (see declaration of conformity) RCM To LIK RoMS directive As per EU EMC directive RCM Committing (see declaration of conformity) RCM marking (see declaration of conformity) RCM Committing (see declaration of committing	Power supply, connection technology	M12x1, T-coded as per EN 61076-2-111
Certification RCM compliance mark KC characters KC Emarking (see declaration of conformity)  As per EU EMC directive As per EU RMC directive To UK ROMS directive To UK ROMS directive To UK ROMS instructions Vibration resistance Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-72 Corrosion resistance class (CRC) O - No corrosion stress Associations Corrosion resistance class (CRC) O - No corrosion stress  LABS (PWIS) conformity VDMA24364 zone III Storage temperature 20°C60°C Relative air humidity O - 90 % Degree of protection PAG Protection class III Ambient temperature O °C50°C Note on ambient temperature Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Wimpact energy in the end positions O.0161  Max. torque MX O Nm Max. torque MX O Nm Max. torque My 1 Nm Max. torque My	Power supply, number of pins/wires	4
KC Emarking (see declaration of conformity)  As per EU RMC directive To UK RoHS instructions for EMC To UK RoHS instructions Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6 Shock resistance Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-7 Corrosion resistance class (CRC) 0 - No corrosion stress Shock resistance class (CRC) 0 - No corrosion stress Corrosion resistance class (CRC) Corrosion resistance class (CRC) Corrosion resistance class (CRC) Corrosion resistance class (CRC) Corrosion resistance class (C	Power supply, connection pattern	00995989
CE marking (see declaration of conformity)  As per EU EMC directive As per EU Rotifs directive As per EU Rotifs directive (MCA marking (see declaration of conformity)  To UK instructions for EMC To UK Rotifs instructions  Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance class (CRC)  0 - No corrosion stress  LABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  20 °C	Certification	RCM compliance mark
As per EU RoHS directive UKCA marking (see declaration of conformity) To UK instructions for EMC To UK RoHS instructions Transport application test with severity level 1 as per FN 942017.4 and che 60068.2 of 6	KC characters	KC EMC
To UK RoHS instructions  Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-7  Corrosion resistance class (CRC)  0 - No corrosion stress  LABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  20 °C 60 °C  Relative air humidity  0 - 90 %  Degree of protection  IP40  Protection class  III  Ambient temperature  0 °C 50 °C  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Impact energy in the end positions  0.016 1  Max. torque Mx  Abax. torque Mx  Max. torque My  1 Nm	CE marking (see declaration of conformity)	
EM 60068-2-6 Shock resistance Shock resistance Shock resistance (ass (CRC) O-No corrosion stress  LABS (PWIS) conformity VDMA24364 zone III Storage temperature -20°C	UKCA marking (see declaration of conformity)	
Corrosion resistance class (CRC)  O - No corrosion stress  LABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  -20 °C 60 °C  Relative air humidity  O - 90 %  Degree of protection  IP40  Protection class  III  Abbient temperature  O°C 50 °C  Note on ambient temperature  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Impact energy in the end positions  O.016 J  Max. torque Mx  O Nm  Max. torque Mx  1 Nm  Max. torque My  1 Nm  Max. feed force Fx  Guide value for payload, horizontal  Guide value for payload, vertical  Feed constant  32 mm/U  Reference service life  Maintenance interval  Life-time lubrication  Moving mass  198 g  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Additional moving mass per 10 mm stroke  Additional weight per 10 mm stroke  Additional mover and the maximum and the maximum and the maximum and	Vibration resistance	
LABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  20 °C 60 °C  Degree of protection  IP40  Protection class  III  Ambient temperature  0 °C 50 °C  Above an ambient temperature of 30°C, the power must be reduced by 28 per K.  Impact energy in the end positions  0.016 J  Max. torque Mx  0 Nm  Max. torque Mx  1 Nm  Max. torque My  May torque My  1 Nm  Max. torque My  1 Nm  Nom  Max. t	Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
Storage temperature 20 °C 60 °C Relative air humidity 0-90 %  Degree of protection   P40 Protection class   III Ambient temperature 0 °C 50 °C Note on ambient temperature   Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Impact energy in the end positions   O.016   Max. torque Mx   O Nm   Max. torque Mx   1 Nm   Max. torque My   1 Nm   Max. torque Mz   1 Nm   Max. feed force Fx   150 N   Guide value for payload, horizontal   10 kg   Guide value for payload, vertical   5 kg   Feed constant   32 mm/U   Reference service life   100 km   Maintenance interval   Life-time lubrication   Moving mass   198 g   Moving mass at 0 mm stroke   188 g   Modificial moving mass per 10 mm stroke   9.75 g   Product weight   3396 g   Basic weight with 0 mm stroke   46 g   Number of digital logic outputs 24 V DC   2   Number of digital logic outputs 24 V DC   2   Number of digital logic input   24 V   Characteristics of logic input   24 V   Characteristics of logic input   Configurable   Not galvanically isolated   Device V 1.1   DOLING®, SIO mode support   Percent and to the configurable   Not galvanically isolated   Device V 1.1   DOLING®, protocol version   Device V 1.1   DOLING®, communication mode   COM3 (230.4 kBd)	Corrosion resistance class (CRC)	0 - No corrosion stress
Relative air humidity 0 - 90 % Degree of protection   IP40   Protection class   III   Abbue an ambient temperature   0 °C 50 °C   Note on ambient temperature   Abbue an ambient temperature of 30 °C, the power must be reduced by 2% per K.  Impact energy in the end positions   O.016 J   Max. torque Mx   0 Nm   Max. torque My   1 Nm   Max. torque My   1 Nm   Max. torque Mz   1 Nm   Max. torque Mz   1 Nm   Max. torque Mz   1 Nm   Max. torque Freed force Fx   150 N   Guide value for payload, horizontal   10 kg   Guide value for payload, vertical   5 kg   Feed constant   32 mm/U   Reference service life   100 km   Maintenance interval   Life-time lubrication   Moving mass   198 g   Moving mass   198 g   Moving mass at 0 mm stroke   188 g   Additional moving mass per 10 mm stroke   9.75 g   Product weight   1396 g   Basic weight with 0 mm stroke   46 g   Number of digital logic outputs 24 V DC   2   Number of digital logic input   24 V   Characteristics of logic input   24 V   Characteristics of logic input   Configurable   Not galvanically isolated   Iol-Link®, SIO mode support   Yes   Iol-Link®, SIO mode support   Per (OM3 (230.4 kBd))	LABS (PWIS) conformity	VDMA24364 zone III
Degree of protection IP40 Protection class III Ambient temperature 0°C50°C Note on ambient temperature Above an ambient temperature of 30°C, the power must be reduced by 2% per K. Impact energy in the end positions 0.016 J Max. torque Mx 0 Nm Max. torque My 1 Nm Max. torque Mz 1 Nm Max. torque Mz 1 Nm Max. torque Mz 150 N Guide value for payload, horizontal 10 kg Guide value for payload, vertical 5 kg Feed constant 32 mm/U Reference service life 100 km Maintenance interval Life-time lubrication Moving mass at 0 mm stroke 188 g Additional moving mass per 10 mm stroke 9.75 g Product weight with 0 mm stroke 46 g Number of digital logic inputs 24 V DC 2 Number of digital logic inputs 24 V DC 2 Logic input specification Based on IEC 61131-2, type 1 Uol-Link®, SlO mode support Ves	Storage temperature	-20 °C 60 °C
Protection class III  Ambient temperature 0°C 50°C  Note on ambient temperature 2% per K.  Impact energy in the end positions 0.016 J  Max. torque Mx 0 Nm  Max. torque My 1 Nm  Max. torque My 10 Ng	Relative air humidity	0 - 90 %
Ambient temperature  Note on ambient temperature  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 2% per K.  Note on ambient temperature of 30°C, the power must be reduced by 20°C, the power mu	Degree of protection	IP40
Above an ambient temperature  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Impact energy in the end positions  O.016 J  Max. torque Mx  O.Nm  Max. torque My  1 Nm  Max. torque Mz  1 Nm  Max. feed force Fx  150 N  Guide value for payload, horizontal  10 kg  Guide value for payload, vertical  5 kg  Feed constant  22 mm/U  Reference service life  100 km  Maintenance interval  Life-time lubrication  Moving mass  198 g  Moving mass at 0 mm stroke  188 g  Additional moving mass per 10 mm stroke  1396 g  Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  Number of digital logic outputs 24 V DC  Number of digital logic inputs  Logic input specification  Based on IEC 61131-2, type 1  Work 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  A 0.016 J  Nm  Above an ambient temperature of 30°C, the power must be reduced by 29°C, the power must be reduced by 29°C, the power must be reduced by 20°N mm  In Max. torque Mx  I Nm  I Sio N  Gold (30.4 kBd)  I Sio	Protection class	III
2% per K.  Impact energy in the end positions  0.016 J  Max. torque Mx 0 Nm  Max. torque My 1 Nm  Max. torque Mz 1 1 Nm  Max. feed force Fx 150 N  Guide value for payload, horizontal 30 kg  Guide value for payload, vertical 5 kg  Feed constant 32 mm/U  Reference service life 100 km  Maintenance interval Life-time lubrication Moving mass 198 g  Moving mass at 0 mm stroke 188 g  Additional moving mass per 10 mm stroke 1396 g  Basic weight with 0 mm stroke 1350 g  Additional weight per 10 mm stroke 46 g  Number of digital logic outputs 24 V DC  2 Unumber of digital logic inputs Ucharacteristics of logic input Characteristics of logic input Characteristics of logic input Characteristics of logic input Ol-Link®, SlO mode support Ves Uol-Link®, protocol version Device V 1.1 Union Max. torque Mx. In Mm Day of Mim. Device V 1.1 Union Max. torque Mx. In Mm Ann. Ann. Ann. Ann. Ann. Ann. Ann. Ann.	Ambient temperature	0 °C 50 °C
2% per K.  Impact energy in the end positions  0.016 J  Max. torque Mx 0 Nm  Max. torque My 1 Nm  Max. torque Mz 1 1 Nm  Max. feed force Fx 150 N  Guide value for payload, horizontal 30 kg  Guide value for payload, vertical 5 kg  Feed constant 32 mm/U  Reference service life 100 km  Maintenance interval Life-time lubrication Moving mass 198 g  Moving mass at 0 mm stroke 188 g  Additional moving mass per 10 mm stroke 1396 g  Basic weight with 0 mm stroke 1350 g  Additional weight per 10 mm stroke 46 g  Number of digital logic outputs 24 V DC  2 Unumber of digital logic inputs Ucharacteristics of logic input Characteristics of logic input Characteristics of logic input Characteristics of logic input Ol-Link®, SlO mode support Ves Uol-Link®, protocol version Device V 1.1 Union Max. torque Mx. In Mm Day of Mim. Device V 1.1 Union Max. torque Mx. In Mm Ann. Ann. Ann. Ann. Ann. Ann. Ann. Ann.	Note on ambient temperature	Above an ambient temperature of 30°C, the power must be reduced by
Max. torque Mx  Max. torque My  1 Nm  Max. torque Mz  1 Nm  Max. torque Mz  1 Nm  Max. feed force Fx  150 N  Guide value for payload, horizontal  10 kg  Guide value for payload, vertical  5 kg  Feed constant  82 mm/U  Reference service life  100 km  Maintenance interval  Life-time lubrication  Moving mass  198 g  Moving mass at 0 mm stroke  188 g  Additional moving mass per 10 mm stroke  9.75 g  Product weight  1396 g  Basic weight with 0 mm stroke  1350 g  Additional weight per 10 mm stroke  1350 g  Additional weight per 10 mm stroke  Number of digital logic outputs 24 V DC  2  Number of digital logic inputs  2 Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Characteristics of logic input  Characteristics of logic input  Yes  10-Link®, SIO mode support  Yes  10-Link®, protocol version  Device V 1.1  10-Link®, communication mode  COM3 (230.4 kBd)	<u> </u>	
Max. torque My  1 Nm  Max. torque Mz  1 Nm  Max. feed force Fx  150 N  Guide value for payload, horizontal  10 kg  Guide value for payload, vertical  Feed constant  82 mm/U  Reference service life  100 km  Maintenance interval  Life-time lubrication  Moving mass  198 g  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Product weight  1396 g  Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  Additional weight per 10 mm stroke  Additional weight per 10 mm stroke  Number of digital logic outputs 24 V DC  2  Number of digital logic input  Work range of logic input  Characteristics of logic input  Characteristics of logic input  Characteristics of logic input  Ves  IO-Link®, S10 mode support  Yes  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)	Impact energy in the end positions	0.016 J
Max. torque Mz  Max. feed force Fx  150 N  Guide value for payload, horizontal  Guide value for payload, vertical  Feed constant  Reference service life  100 km  Maintenance interval  Life-time lubrication  Moving mass  198 g  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Product weight  Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  Additional	Max. torque Mx	0 Nm
Max. feed force Fx  Guide value for payload, horizontal  Guide value for payload, vertical  Feed constant  Reference service life  Maintenance interval  Moving mass  Moving mass  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Basic weight with 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  2  Number of digital logic input  Work range of logic input  Characteristics of logic input  Characteristics of logic input  Ves  IO-Link®, SIO mode support  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode	Max. torque My	1 Nm
Guide value for payload, horizontal Guide value for payload, vertical Feed constant Reference service life 100 km Maintenance interval Life-time lubrication Moving mass 198 g Moving mass at 0 mm stroke Additional moving mass per 10 mm stroke Product weight Basic weight with 0 mm stroke 1350 g Additional weight per 10 mm stroke 46 g Number of digital logic outputs 24 V DC 2 Number of digital logic input Uork range of logic input Characteristics of logic input Characteristics of logic input Ves 10-Link®, SIO mode support Ves 10-Link®, protocol version Device V 1.1 Clock of Mm Device V 1.1 COM3 (230.4 kBd)	Max. torque Mz	1 Nm
Guide value for payload, vertical Feed constant Reference service life 100 km Maintenance interval Life-time lubrication Moving mass 198 g Moving mass at 0 mm stroke 188 g Additional moving mass per 10 mm stroke 9.75 g Product weight 1396 g Basic weight with 0 mm stroke 1350 g Additional weight per 10 mm stroke 46 g Number of digital logic outputs 24 V DC 2 Number of digital logic inputs Logic input specification Based on IEC 61131-2, type 1 Work range of logic input Characteristics of logic input Characteristics of logic input Ves 10-Link®, SIO mode support Ves 10-Link®, protocol version Device V 1.1 10-Link®, communication mode COM3 (230.4 kBd)	Max. feed force Fx	
Reference service life 100 km  Maintenance interval Life-time lubrication  Moving mass 198 g  Moving mass at 0 mm stroke 188 g  Additional moving mass per 10 mm stroke 9.75 g  Product weight 1396 g  Basic weight with 0 mm stroke 1350 g  Additional weight per 10 mm stroke 46 g  Number of digital logic outputs 24 V DC 2  Number of digital logic inputs 2  Logic input specification Based on IEC 61131-2, type 1  Work range of logic input  Characteristics of logic input  Characteristics of logic input  Ves  IO-Link®, SIO mode support  Ves  IO-Link®, communication mode  COM3 (230.4 kBd)	Guide value for payload, horizontal	
Reference service life  Maintenance interval  Life-time lubrication  Moving mass  198 g  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  9.75 g  Product weight  1396 g  Basic weight with 0 mm stroke  1350 g  Additional weight per 10 mm stroke  46 g  Number of digital logic outputs 24 V DC  2  Number of digital logic inputs  2  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Characteristics 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	Guide value for payload, vertical	5 kg
Maintenance interval  Moving mass  198 g  Moving mass at 0 mm stroke  188 g  Additional moving mass per 10 mm stroke  9.75 g  Product weight  1396 g  Basic weight with 0 mm stroke  1350 g  Additional weight per 10 mm stroke  46 g  Number of digital logic outputs 24 V DC  2  Number of digital logic inputs  2  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Characteristics of logic input  Characteristics of logic input  O-Link®, SIO mode support  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  Light librication  Light librication  Life-time lubrication  198 g  Chief et me lubrication  198 g  Configurable Not galvanically isolated  COM3 (230.4 kBd)	Feed constant	32 mm/U
Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Product weight  Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  Additional moving mass per 10 mm stroke  Based on IEC 61131-2, type 1  2 V  Configurable Not galvanically isolated  Not galvanically isolated  Not galvanically isolated  IO-Link®, SIO mode support  Yes  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)	Reference service life	100 km
Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Product weight  Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  Ad g  Number of digital logic outputs 24 V DC  2  Number of digital logic inputs  2  Logic input specification  Based on IEC 61131-2, type 1  24 V  Characteristics 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 kBd)	Maintenance interval	Life-time lubrication
Additional moving mass per 10 mm stroke Product weight 1396 g  Basic weight with 0 mm stroke 1350 g  Additional weight per 10 mm stroke 46 g  Number of digital logic outputs 24 V DC  2  Number of digital logic inputs 2  Logic input specification Based on IEC 61131-2, type 1  Work range of logic input 24 V  Characteristics of logic input Characteristics of logic input Ves  IO-Link®, SIO mode support Ves  IO-Link®, communication mode COM3 (230.4 kBd)	Moving mass	198 g
Product weight Basic weight with 0 mm stroke 1350 g  Additional weight per 10 mm stroke 46 g  Number of digital logic outputs 24 V DC 2  Number of digital logic inputs 2  Logic input specification Based on IEC 61131-2, type 1  Work range of logic input 24 V  Characteristics of logic input Configurable Not galvanically isolated  IO-Link®, SIO mode support Ves IO-Link®, protocol version Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)	Moving mass at 0 mm stroke	188 g
Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  Number of digital logic outputs 24 V DC  Number of digital logic inputs  2  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Configurable Not galvanically isolated  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  1350 g  1350 g  1350 g  146 g  Configurable Not galvanically isolated  COM3 (230.4 kBd)	Additional moving mass per 10 mm stroke	9.75 g
Additional weight per 10 mm stroke  Number of digital logic outputs 24 V DC  Number of digital logic inputs  2  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Characteristics of logic input  Configurable Not galvanically isolated  IO-Link®, SIO mode support  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  46 g  Communication mode  46 g  Communication mode  46 g  Communication mode  Communication mode	Product weight	1396 g
Number of digital logic outputs 24 V DC  Number of digital logic inputs  2  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Configurable Not galvanically isolated  IO-Link®, SIO mode support  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  2  Communication mode  2  Communication mode  Device V 1.1	Basic weight with 0 mm stroke	1350 g
Number of digital logic inputs  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Configurable Not galvanically isolated  IO-Link®, SIO mode support  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)	Additional weight per 10 mm stroke	46 g
Logic input specification  Based on IEC 61131-2, type 1  24 V  Characteristics 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 kBd)	Number of digital logic outputs 24 V DC	2
Work range of logic input  Characteristics 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 kBd)	Number of digital logic inputs	2
Characteristics of logic input  Configurable Not galvanically isolated  O-Link®, SIO mode support  Yes  O-Link®, protocol version  Device V 1.1  O-Link®, communication mode  COM3 (230.4 kBd)	Logic input specification	Based on IEC 61131-2, type 1
Not galvanically isolated  IO-Link®, SIO mode support  Yes  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)	Work range of logic input	24 V
IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)	Characteristics of logic input	
IO-Link®, communication mode COM3 (230.4 kBd)	IO-Link®, SIO mode support	Yes
	IO-Link®, protocol version	Device V 1.1
IO-Link®, port class	IO-Link®, communication mode	COM3 (230.4 kBd)
	IO-Link®, port class	A

Feature	Value
IO-Link®, number of ports	1
IO-Link®, process data width OUT	2 Byte
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 width IN	2 Byte
IO-Link®, process data content IN	State In 1 bit State Out 1 bit State Move 1 bit State Device 1 bit State Intermediate 1 bit
IO-Link®, service data contents IN	Speed 32 bit Position 32 bit Force 32 bit
IO-Link®, minimum cycle time	1 ms
IO-Link®, data memory required	500 byte
Max. cable length	15 m outputs 15 m inputs 20 m for IO-Link® operation
Switching logic at outputs	PNP (positive switching)
Input switching logic	PNP (positive switching)
IO-Link®, Connection technology	Plug
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded as per EN 61076-2-101
Logic interface, number of poles/wires	8
Logic interface, connection pattern	00992264
Type of mounting	With internal thread With accessories
Note on materials	RoHS-compliant
Cover material	Wrought aluminum alloy, anodized
Housing material	Wrought aluminum alloy, anodized
Piston rod material	High-alloy stainless steel
Toothed belt material	Polychloroprene with glass fiber