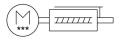
## Electric cylinder unit EPCS-BS-45-300-10P-A-ST-M-H1-PLK-AA

**FESTO** 

Part number: 8118286





General operating condition

## **Data sheet**

Feature	Value
Size	45
Stroke	300 mm
Stroke reserve	0 mm
Piston rod thread	M10x1.25
Reversing backlash	100 μm
Screw diameter	10 mm
Spindle pitch	10 mm/U
Max. angle of rotation of the piston rod +/-	1 deg
Mounting position	Any
Piston rod end	External thread
Motor type	Stepper motor
Structural design	Electric actuator with ball screw drive With integrated drive
Spindle type	Ball screw drive
Symbol	00997294
Protection against torsion/guide	With plain-bearing guide
Homing	Fixed stop block positive Fixed stop block, negative Reference switch
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	5 m/s <sup>2</sup>
Max. speed	0.23 m/s
Speed "Speed Press"	0.01 m/s
Repetition accuracy	±0.02 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	3000 mA

Logic mas. current consumption	Feature	Value
Nominal current   SA   Parameterization interface   SC interface	Logic max. current consumption	0.3 A
Parameterization interface  Rotor position sensor resolution  16 bit  Permissible voltage fluctuations  1-7-15 %  Power supply, per of connection  Power supply, per of connection  Power supply, connection technology  M124.1 roded as per EN 61076 2 111  Power supply, connection technology  M24.1 roded as per EN 61076 2 111  Power supply, connection partiern  00999989  Certification  Roth compliance mark  Certification  Roth Certific	DC nominal voltage	24 V
Descriptorian sensor resolution   16 bit	Nominal current	3 A
Retor position sensor resolution  Feminisable voltage fluctuations  -/-15 %  Power supply, top of connection  Plug  Power supply, power for inchmology  M1241, T-coded as per EN 61076-2-111  Power supply, connection technology  M241, T-coded as per EN 61076-2-111  Power supply, connection pattern  00999899  Certification  KC characters  KC Emarking (see declaration of conformity)  RC parking (see declaration of conformity)  RC per EU RMS directive  AS per EU RMS directive  WCA marking (see declaration of conformity)  With Kards instructions for LMC  Io LIK Rards instructions for LMC  With Rards instructions for LMC  LABS (PMIS) conformity  With Rards are an expert per PN 942017-5 and EN 60068-2-27  Corrosion resistance class (LRC)  O No. corrosion stress  Class of excepting to 150 14644-1  LABS (PMIS) conformity  With Rards are thuritity  O 90%  Rards in thuritity  O 90%  Rards in thuritity  O 90%  Rards in thuritity  O 90%  Rards or an excepting to 150 14644-1  With Labs or an exception the properties of the PMIS or Labs or American Science of the PMIS or American Science of	Parameterization interface	IO-Link®
Permissible voltage fluctuations // -15 % Power supply, tope of connection chemical on Plug Power supply, connection partiers // -15 % Power supply, connection for conformity) Power supply, connection for conformity // -15 % Power supply (seed eclaration of conformity) Power supply (seed eclaration of conformity) Power supply (seed eclaration for conformity) Power supp		User interface
Power supply, type of connection Chrology  Power supply, name of pins, lyines  4 4  Power supply, connection technology  M12x1, T-coded as per EN 61076-2-111  Obeyses supply, namber of pins, lyines  4 4  Power supply, connection pattern  Obeyses 999  Certification  RCM compilance mark  KC EMC  CE marking (see declaration of conformity)  As per EU BMC directive  As per EU BMC directive  UKCA marking (see declaration of conformity)  To UK instructions for EMC  UKCA marking (see declaration of conformity)  To UK Rent's instructions  Vibration resistance  Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6  Shock resistance  Shock resistance (lass (CRC)  O No cornosion stress  LLSS (PWIS) conformity  Vibration resistance (lass (CRC)  O No Cornosion oresistance class (CRC)  Cornosio	Rotor position sensor resolution	16 bit
Power supply, connection technology  M12x1, T-coded as per EN 61076-2-111  Power supply, connection pattern  00999599  Cartification  KC characters  KC EMA  CE marking (see declaration of conformity)  As per EU ENG directive As per EU AC directive As per EU AC directive As per EU ENG directive As per EU ENG directive As per EU AC di	Permissible voltage fluctuations	+/- 15 %
Power supply, number of pins/wires  Power supply, connection pattern  Coefficiation  RCM compliance mark  KC characters  KC Emarking (see declaration of conformity)  As per EU EMC directive As aper EU EMC direction As aper EU EMC direction As aper EU EU EMC direction As aper EU EU EMC direction	Power supply, type of connection	Plug
Power supply, connection pattern Certification RCM compliance mark Ccritication RCM compliance mark CC branking (see declaration of conformity) As per ELL BMC directive As per ELL BMC directive As per ELL BMC directive UKCA marking (see declaration of conformity) To LK instructions for EMC To LK Robis instructions Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27  Corrosion resistance Corrosion resistance class (CRC) O - No corrosion stress  Class 9 according to ISO 1464-1  LABS (WIS) conformity VDMA24364 zone III LBS 9 according III Clearnoom class Class 9 according III Clearnoom	Power supply, connection technology	M12x1, T-coded as per EN 61076-2-111
Certification RCM compliance mark  KC characters CE marking (see declaration of conformity)  As per EU BMC directive As per EU	Power supply, number of pins/wires	4
KC characters KC Emarking (see declaration of conformity) As per EU RMC directive As per EU RMC die As	Power supply, connection pattern	00995989
EE marking (see declaration of conformity)  As per EU RMC directive As per EU ROIS directive As per EU ROIS directive IUKCA marking (see declaration of conformity)  To UK instructions for FMC To UK ROIS instructions  To UK ROIS instructions  To UK ROIS instructions  Transport a pipulacian nest with severity level 1 as per FN 942017-4 and EN 60068-2-6  Shock resistance Shock resistance class (CRC) O - No corrosion sitesses  Corrosion resistance class (CRC)  LABS (PWIS) conformity VDMA24364 zone III  Cleanroom class Class 9 according to ISO 14644-1  Storage temperature -2-0° 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 of 30°C, the power must be reduced by 2% per K.  Max. torque Mx O N In  Max. torque Mx As. torque Mx As. availal force on actuator shaft III 380 N  Max. redial force on actuator shaft III 380 N  Max. refed force Fx III 390 N  Max. feed force Fx III 390 N  Max. feed force Fx III 390 N  Max. feed force payload, horizontal Additional moving mass per 10 mm stroke III 39 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Maditional moving mass per 10 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving mass at 0 mm stroke III 89 g  Moving	Certification	RCM compliance mark
As per EU RoHS directive UKCA marking (see declaration of conformity)  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 EN 60068-2-6 Shock resistance  Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27 Corrocion resistance class (CRC)  O - No corrosion stress  LABS (PWIS) conformity  VDMA24364 zone III  Cleanroom class  Class 9 according to ISO 14644-1  Storage temperature  - 2-0° C60° C  Relative air humidity  O - 90° 8 Non-condensing  Degree of protection  PH40  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.  Max. torque MX  O Nm  Max. torque MX  O Nm  Max. torque MX  D Nm  Max. torque M2  D Nm  Max. radial force on actuator shaft  180 N  Max. radial force on actuator shaft  180 N  Max. radial force on payload, horizontal  Guide value for payload, vertical  13 kg  Maintenance interval  Life time lubrication  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  Additional moving mass per 10 mm stroke  Additional moving mass per 10 mm stroke  4 9 g  Product weight  Product weight  D configurable  Not galancially isolated  OL clink®, conficially isolated  OL-link®, protocol version  OL-link®, protocol versi	KC characters	KC EMC
To UK ROHS instructions	CE marking (see declaration of conformity)	
EM 60068-2-6	UKCA marking (see declaration of conformity)	
Corrosion resistance class (CRC)  O - No corrosion stress  LABS (PWIS) conformity  VDMAZ4364 zone III  Cleanroom class  Class 9 according to ISO 14644-1  Storage temperature  -20°C60°C  Relative air humidity  O -90 % Non-condensing  Degree of protection  IP40  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 28° per K.  Max. torque Mx  O Nm  Max. torque My  2.9 Nm  Max. torque Mz  Max. radial force on actuator shaft  180 N  Max. radial force on actuator shaft  180 N  Max. feef force Fx  250 N  Guide value for payload, horizontal  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  179 g  Additional moving mass per 10 mm stroke  1185 g  Additional weight per 10 mm stroke  1185 g  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Configurable  Not galvanically isolated  Not galvanically isolated  IO-Link®, protocol version  Device V 1.1  IO-Link®, protocol version  Device V 1.1  IO-Link®, protocol version  IO-Link®, protocol version  IO-Link®, protocol version  Device V 1.1  IO-Link®, protocol version  IO-Link®, protocol version	Vibration resistance	
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 an ambient temperature of 30°C, the power must be reduced by 2% per K.  Max. torque Mx  Max. torque My  2.9 Nm  Max. torque My  2.9 Nm  Max. torque Mz  Max. fore on actuator shaft  180 N  Max. fore on actuator shaft  180 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  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  Number of digital logic inputs 2 4 V DC  2  Number of digital logic inputs 2 4 V DC  2  Number of digital logic inputs 2 4 V DC  2  Number of digital logic inputs 2 4 V DC  2  Number of digital logic inputs 2 Poolingurable Not galvanically isolated  Of-Link®, SiO mode support  Ves  Of-Link®, port class  A	Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
Clean pour 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 an ambient temperature of 30°C, the power must be reduced by 2% per K.  Max. torque Mx  0 Nm  Max. torque My  2.9 Nm  Max. torque My  2.9 Nm  Max. torque Mz  3.9 Nm  Max. torque Mz  40 Ng  Max. for en actuator shaft  180 N  Max. for en on actuator shaft  180 N  Max. feed force Fx  250 N  Guide value for payload, horizontal  Guide value for payload, vertical  13 kg  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Product weight  2415 g  Basic weight with 0 mm stroke  Additional weight per 10 mm stroke  1185 g  Additional weight per 10 mm stroke  1185 g  Additional weight per 10 mm stroke  138 g  Additional weight per 10 mm stroke  141 g  Number of digital logic inputs  2 Uchracteristics of logic input  Characteristics of logic input  Characteristics of logic input  Ves  Ol-Link®, protocl version  Device V 1.1  Ol-Link®, protocl class  A Class of Communication mode  Ol-Link®, protoclass	Corrosion resistance class (CRC)	0 - No corrosion stress
Storage temperature -20 °C 60 °C Relative air humidity 0 -9 0 % Non-condensing  Degree of protection   IP40  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 29% per K.  Max. torque Mx   O Nm   Max. torque My   2.9 Nm   Max. torque My   2.9 Nm   Max. radial force on actuator shaft   180 N   Max. feed force Fx   250 N   Guide value for payload, horizontal   40 kg   Guide value for payload, vertical   13 kg   Maintenance interval   Life-time lubrication   Moving mass at 0 mm stroke   179 g   Additional moving mass per 10 mm stroke   4.9 g   Product weight   2415 g   Basic weight with 0 mm stroke   41 g   Number of digital logic outputs 24 V DC   2 Number of digital logic inputs   2 Logic input specification   Moving range of logic input   24 V   Characteristics of logic input   Configurable   Nort ange of logic input   Configurable   Not againanced in the condition   Device V 1.1   IO-Link®, protocol version   Device V 1.1   IO-Link®, communication mode   COM3 (230.4 kBd)   IO-Link®, port 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  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Max. torque Mx  Max. torque My  2.9 Nm  Max. torque Mz  2.9 Nm  Max. torque Mz  3.9 Nm  Max. torque Mz  40 Ng  Guide value for payload, horizontal  Guide value for payload, horizontal  Guide value for payload, vertical  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  4.9 g  Product weight  Basic weight with 0 mm stroke  4.1 g  Mumber of digital logic outputs 24 V DC  Number of digital logic inputs  24 V  Characteristics of logic input  Configurable  Not galvanically isolated  IO-Link®, SIO mode support  Prot Link®, protocol version  Device V 1.1  III  O-Link®, protocol version  IP40  Product weight per 10 mm de  OOM3 (230.4 kBd)  OO Link®, port class	Cleanroom class	Class 9 according to ISO 14644-1
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.  Max. torque Mx   0 Nm   Max. torque My   2.9 Nm   Max. torque Mz   2.9 Nm   Max. radial force on actuator shaft   180 N   Max. redial force on actuator shaft   180 N   Max. teed force Fx   250 N   Guide value for payload, horizontal   40 kg   Guide value for payload, vertical   13 kg   Maintenance interval   Life-time lubrication   Moving mass at 0 mm stroke   179 g   Additional moving mass per 10 mm stroke   4.9 g   Product weight   2415 g   Basic weight with 0 mm stroke   41 g   Number of digital logic outputs 24 V DC   2   Number of digital logic inputs   2 Logic inputs   2 Logic input   24 V   Characteristics of logic input   24 V   Characteristics of logic input   Configurable   Not galvanically isolated   IO-Link®, 510 mode support   Yes   IO-Link®, protocol version   Device V 1.1   IO-Link®, protocol version   Device V 1.1   IO-Link®, communication mode   COM3 (230.4 kBd)   IO-Link®, port class   A	Storage temperature	-20 °C 60 °C
Protection class  III  Ambient temperature  O °C 50 °C  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Max. torque Mx  O Nm  Max. torque My  2.9 Nm  Max. torque Mz  2.9 Nm  Max. radial force on actuator shaft  180 N  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  Maintenance interval  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  4.9 g  Product weight  Basic weight with 0 mm stroke  41 g  Number of digital logic outputs 24 V DC  Number of digital logic inputs  Logic input specification  Work range of logic input  Configurable  Not galvanically isolated  Not galvanically isolated  Not galvanically isolated  10-Link®, SIO mode support  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, port class  A	Relative air humidity	
Ambient temperature  Note on ambient temperature  Above an ambient temperature of 30°C, the power must be reduced by 2% per K.  Nax. torque Mx  O Nm  Max. torque My  2.9 Nm  Max. torque Mz  2.9 Nm  Max. radial force on actuator shaft  180 N  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  4.9 g  Product weight  Basic weight with 0 mm stroke  1185 g  Additional weight per 10 mm stroke  1185 g  Additional weight per 10 mm stroke  141 g  Number of digital logic outputs 24 V DC  2  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Configurable  Not galvanically isolated  Device V 1.1  IO-Link®, SIO mode support  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class	Degree of protection	IP40
Above an ambient temperature 2% per K.  Max. torque Mx 0 Nm  Max. torque My 2.9 Nm  Max. torque Mz 2.9 Nm  Moving mass at 0 mm stroke 179 g  Additional moving mass per 10 mm stroke 179 g  Additional moving mass per 10 mm stroke 185 g  Additional moving mass per 10 mm stroke 185 g  Additional weight per 10 mm stroke 185 g  Additional weight per 10 mm stroke 185 g  Number of digital logic outputs 24 V DC 2  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 Not galvanically isolated 10-Link®, SIO mode support Yes  IO-Link®, SIO mode support Yes  IO-Link®, port class A	Protection class	III
2% per K.  Max. torque Mx  0 Nm  Max. torque My  2.9 Nm  Max. torque Mz  2.9 Nm  Max. roque Mz  2.9 Nm  Max. roque force on actuator shaft  180 N  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  13 kg  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  4.9 g  Product weight  2415 g  Basic weight with 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 u  Logic input specification  Based on IEC 61131-2, type 1  Work range of logic input  Characteristics of logic input  Characteristics of logic input  Yes  IO-Link®, SIO mode support  Ves  IO-Link®, port class  A	Ambient temperature	0 °C 50 °C
Max. torque My  2.9 Nm  Max. torque Mz  2.9 Nm  Max. radial force on actuator shaft  180 N  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  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  41 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  Ves  IO-Link®, SIO mode support  Ves  IO-Link®, port class  A  Yes  10-Link®, port class  A  Yes  180 N  180 N	Note on ambient temperature	
Max. torque Mz  Max. radial force on actuator shaft  Max. radial force on actuator shaft  180 N  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  13 kg  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  4.9 g  Product weight  Basic weight with 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 ucgic 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®, protocol version  Device V 1.1  IO-Link®, port class  A	Max. torque Mx	0 Nm
Max. radial force on actuator shaft  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  4.9 g  Product weight  2415 g  Basic weight with 0 mm stroke  41 g  Number of digital logic outputs 24 V DC  Number of digital logic inputs  2 c  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®, port class  A   40 kg  40 kg  40 kg  41 g  82  42 y g  43 g  44 y g  44 y g  45 g  46 ditional weight per 10 mm stroke  41 g  Number of digital logic inputs  2 U  Configurable Not galvanically isolated  Not galvanically isolated  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class	Max. torque My	2.9 Nm
Max. radial force on actuator shaft  Max. feed force Fx  250 N  Guide value for payload, horizontal  40 kg  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  179 g  Additional moving mass per 10 mm stroke  4.9 g  Product weight  2415 g  Basic weight with 0 mm stroke  41 g  Number of digital logic outputs 24 V DC  Number of digital logic inputs  2 c  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®, port class  A   40 kg  40 kg  40 kg  41 g  82  42 y g  43 g  44 y g  44 y g  45 g  46 ditional weight per 10 mm stroke  41 g  Number of digital logic inputs  2 U  Configurable Not galvanically isolated  Not galvanically isolated  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class	Max. torque Mz	2.9 Nm
Guide value for payload, horizontal  Guide value for payload, vertical  Maintenance interval  Life-time lubrication  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  4.9 g  Additional weight per 10 mm stroke  41 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  Configurable Not galvanically isolated  IO-Link®, SIO mode support  Yes  IO-Link®, rotocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class		
Guide value for payload, vertical  Maintenance interval  Life-time lubrication  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  4.9 g  Product weight  Basic weight with 0 mm stroke  1185 g  Additional weight per 10 mm stroke  41 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  Characteristics of logic input  Configurable Not galvanically isolated  IO-Link®, SIO mode support  Ves  IO-Link®, rorotcol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class	Max. feed force Fx	250 N
Maintenance interval Life-time lubrication  Moving mass at 0 mm stroke 179 g Additional moving mass per 10 mm stroke 4.9 g Product weight 2415 g Basic weight with 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 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) IO-Link®, port class	Guide value for payload, horizontal	40 kg
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  All 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  Yes  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class	Guide value for payload, vertical	13 kg
Additional moving mass per 10 mm stroke Product weight Basic weight with 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 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®, protocol version Device V 1.1 IO-Link®, communication mode COM3 (230.4 kBd) IO-Link®, port class	Maintenance interval	Life-time lubrication
Product weight 2415 g Basic weight with 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  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 Not galvanically isolated 10-Link®, protocol version Device V 1.1  IO-Link®, communication mode COM3 (230.4 kBd)  IO-Link®, port class A	Moving mass at 0 mm stroke	179 g
Basic weight with 0 mm stroke Additional weight per 10 mm stroke 41 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 Configurable Not galvanically isolated  IO-Link®, SIO mode support Ves  IO-Link®, communication mode COM3 (230.4 kBd)  IO-Link®, port class A	Additional moving mass per 10 mm stroke	4.9 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  Ves  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  A	Product weight	2415 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  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)  A	Basic weight with 0 mm stroke	1185 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  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)  A		-
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  Yes  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  A	·	
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)  IO-Link®, port class  A	· ·	
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)  IO-Link®, port class  A		Based on IEC 61131-2, type 1
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)  IO-Link®, port class  A		
IO-Link®, SIO mode support  Yes  IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class  A	·	
IO-Link®, protocol version  Device V 1.1  IO-Link®, communication mode  COM3 (230.4 kBd)  IO-Link®, port class  A	IO-Link®, SIO mode support	
IO-Link®, communication mode COM3 (230.4 kBd) IO-Link®, port class A		
IO-Link®, port class A		
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Feature	Value
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	32 bit force 32 bit position 32 bit speed
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	NPN (negative switching) PNP (positive switching)
Input switching logic	NPN (negative switching) PNP (positive switching)
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
Housing material	Wrought aluminum alloy, smooth-anodized
Piston rod material	High-alloy stainless steel
Spindle nut material	Steel
Spindle material	Roller bearing steel