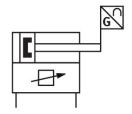
## Linear actuator **DFPI-160- -ND2P-C1V-NB3P-R-A**Part number: 4588972

**FESTO** 





## **Data sheet**

Feature	Value
Size of valve actuator	160
Stroke	40 mm990 mm
Piston diameter	160 mm
Based on norm	ISO 15552
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Double-acting
Structural design	Piston Piston rod Tie rod Cylinder barrel
Position sensing	With integrated linear potentiometer
Measuring principle of linear potentiometer	Potentiometer
Reverse polarity protection	Initialization connection for operating voltage for setpoint value
Operating pressure	0.3 MPa0.8 MPa 3 bar8 bar 43.5 psi116 psi
Nominal operating pressure	0.6 MPa 6 bar 87 psi
Analog output	4 - 20 mA
DC operating voltage range	21.6 V26.4 V
Max. current consumption	220 mA
Nominal operating voltage DC	24 V
Setpoint input	4 mA20 mA
Certification	RCM compliance mark
KC characters	KC EMC
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive

Section   Sect	Feature	Value
Explosion protection certification outside the EU  Explosion protection certification outside the EU  Explosion protection certification outside the EU  Explosion protection  Zone 2 (UKEO) Zone 2 (UKEO) Zone 22 (UKEO) Zone 22 (UKEO) Zone 22 (UKEO)  ATEX category gas  ATEX category for dust II 30  ATEX category for dust II 30  ATEX category for dust II 30  Exe et IC T4 X.6c  Explosive ambient temperature  Departing medium  Compressed air as per 150 B573-1:2010 [7:4:4] Information on operating and pilot media Operation with oil lubarization possible (required for further use) Continuous shock resistance to INI/EC 68 Part 2-82  Tested as per severity level 2  ALSS (PWIS) Conformity  Storage temperature  5 **C60 **C**  Temperature of medium 5 **C60 **C**  Temperature of medium 5 **C60 **C**  Relative air humidity 5 **100 **S  Condensing  Degree of protection  IP65 IP67 IP69K ALSA 4  Wibration resistance to DNI/EC 68 Part 2-6  Tested as per severity level 2  Arbibent temperature  5 **C60 **C**  Tested as per severity level 2  Arbibent temperature  5 **C60 **C**  Relative air humidity 5 **100 **S  Condensing  Degree of protection  IP65 IP67 IP69K ALSA 4  Wibration resistance to DNI/EC 68 Part 2-6  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C50 **C*  Tested as per severity level 2  Arbibent temperature  5 **C60 **C*  Tested as per severity level 2  Arbibent temperature  5 **C60 **C*  Tested as per severity level 2  Arbiben	UKCA marking (see declaration of conformity)	
Explosion protection certification outside the EU  Explosion prevention and protection  Zone 2 (MEX) Zone 2 (		
Epilosion prevention and protection  Zone 2 (ATEX) Zone 2	Explosion protection certification outside the FII	
Zone 2 (MEX)   Zone 22 (ATEX)   Zone 2	Exposion protection certification outside the 20	. ,
Zone 22 (AFEX   Zone 22 (AFE	Explosion prevention and protection	
ATEX category gas  ATEX category for dust  ATEX category for dust  Type of fightion protection for gas  Ex category for dust  Explosive ambient temperature  -5°C <= Ta <= +50°C  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operation with oil lubrication possible (required for further use)  Continuous shock resistance to DIN/IEC 68 Part 2-82  LABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  -5°C50°C  Temperature of medium  -5°C40°C  Relative air humidity  Degree of protection  Pe82  Pe82  Pe82  Pe84  Ambient temperature  -5°C50°C  Tested as per severity level 2  Ambient temperature of medium  Air consumption advancing per 10 mm stroke  Air consumption, retracting, per 10 mm stroke  Air consumption, retracting, per 10 mm stroke  Additional veight, or mistore  Additional veight per 10 mm stroke  1 1965  Pe85  Perection of analog output  1 1965  Perectical connection  For pneumatic ubing outside diameter 8 mm for pneumatic ubing outside diameter 9 mm with specific accessories  Note on material  Note of material  Note o		
ATEX category for dust  Type of Ignition protection for gas  Ex ce IIC TA X Gc  Explosive ambient temperature  5°C <= Ta <= +5°C <  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Continuous shock resistance to DIN/IEC 68 Part 2-82  LAGS (PWIS) conformity  VDMA2364 zone III  Storage temperature  5°C <0.40°C  Temperature of medium  9°C <0.40°C  Temperature of medium  19°C <0.40°C  Tem		
Type of fignition protection for gas  Fixe of (Egnition) protection for dust Ext to IIC 1120°C.X Dc Explosive ambient temperature  -5°C. <= Ta <= +5°°C.  Operating medium  Compressed air as per SD 8573-1:2010 [7:4-4]  Information on operating and pilot media Operation with oil lubrication possible (required for further use) Operating medium Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation with oil lubrication possible (required for further use) Operation for medium Operation for the severity level 2 Operation for death of the severity level 2 Operation for further use) Operation for death of the severity level 2 Operation for further use) Operation further use) Operation for further use) Operation for further use) Operation fur	ATEX category gas	II 3G
Ext   III   T120°C X DC   Explosive ambient temperature	ATEX category for dust	II 3D
Explosive amblent temperature  Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4]  Information on operating and pilot media  Operating medium  Continuous shock resistance to DIN/IEC 68 Part 2-82  Tested as per severity level 2  IABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  5°C50 °C  Temperature of medium  5°C60 °C  Relative air humidity  Condensing  Degree of protection  IP65  IP67  IP690  NEMA 4  VIbration resistance to DIN/IEC 68 Part 2-6  Ambient temperature  5°C50 °C  Tested as per severity level 2  Ambient temperature  5°C50 °C  Tested as per severity level 2  Ambient temperature  5°C50 °C  Tested as per severity level 2  Ambient temperature  5°C50 °C  Theoretical force at 6 bar, retracting  11581 N  Theoretical force at 6 bar, advancing  12064 N  Air consumption, retracting, per 10 mm stroke  1.351 I  Air consumption, retracting, per 10 mm stroke  1.407 I  Mowing mass at 0 mm stroke  Additional weight with 0 mm stroke  Additional weight with 0 mm stroke  1.4330 g  Additional weight with 0 mm stroke  1.965  Presision of analog output  1 %FS  Size of dead space  1 5°FS  Positioning accuracy  1 1 %FS  Positioning accuracy in s%FS  1 1 %FS  Presidion of material  Note on mat	Type of ignition protection for gas	Ex ec IIC T4 X Gc
Operating medium  Compressed air as per ISO 8573-1:2010 [7:4:4] Information on operating and pilot media Operation with oil lubrication possible (required for further use) Continuous shock resistance to DIN/IEC 68 Part 2-82  LABS (PWIS) conformity VDMA24364 zone III Storage temperature 59 °C.,40 °C Relative air humidity 5, 100 % Condensing Degree of protection IP65 IP67 IP69 IP69 IP69 IP69 IP69 IP69 Ambient temperature 59 °C.,40 °C Relative air humidity IP69 IP69 IP69 IP69 IP69 IP69 IP69 IP69	Type of (ignition) protection for dust	Ex tc IIIC T120°C X Dc
Information on operating and pilot media Continuous shock resistance to DIN/IEC 68 Part 2-82 Iested as per severity level 2 LABS (PWIS) conformity  YDMA24364 zone III  5°C50°C  Temperature 5°C40°C  Temperature of medium 5°C40°C  Relative air humidity 5°100% Condensing  Degree of protection PP65 PP67 PP69K NEMA 4  Wibration resistance to DIN/IEC 68 Part 2-6  Tested as per severity level 2  Ambient temperature 5°C50°C  Tested as per severity level 2  Ambient temperature 5°C50°C  Tested as per severity level 2  Ambient temperature 5°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Ambient temperature 15°C50°C  Tested as per severity level 2  Tested	Explosive ambient temperature	-5°C <= Ta <= +50°C
Continuous shock resistance to DIN/IEC 68 Part 2-82  LABS (PMS) conformity  VDMA24364 zone III  Storage temperature  -5 °C50 °C  Temperature of medium  -5 °C60 °C  Relative air humidity  Degree of protection  P65  P66  P69  Wibration resistance to DIN/IEC 68 Part 2-6  Ambient temperature  -5 °C50 °C  Tested as per severity level 2  Ambient temperature  -5 °C50 °C  Tested as per severity level 2  Ambient temperature  -5 °C50 °C  Theoretical force at 6 bar, retracting  11561 N  Theoretical force at 6 bar, retracting  12064 N  Air consumption, retracting, per 10 mm stroke  1.351 1  Air consumption advancing per 10 mm stroke  1.407 1  Moving mass at 0 mm stroke  3700 g  Additional moving mass per 10 mm stroke  14330 g  Additional weight per 10 mm stroke  200 g  Precision of analog output  1 °FS  Size of dead space  1 °FS  1 °FS  Positioning accuracy  Relative air number of medium  Note on materials  Note on materials  Material of end caps  Wrought aluminum alloy, coated  Material of end caps  Wrought aluminum alloy, coated  High-alloy stainless steel  NBR  Tie rod material  High-alloy stainless steel	Operating medium	
LABS (PWIS) conformity  VDMA24364 zone III  Storage temperature  -5 °C50 °C  Temperature of medium  -5 °C50 °C  Relative air humidity  5 -100 %  Condensing  Degree of protection  Ple5 Ple6 Ple7 Ple6 NRMA 4  Vibration resistance to DIN/IEC 68 Part 2-6  Ambient temperature  -5 °C50 °C  Theoretical force at 6 bar, retracting  11581 N  Theoretical force at 6 bar, advancing  12064 N  Air consumption, retracting, per 10 mm stroke  1,4071  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  89 g  Basic weight with 0 mm stroke  414330 g  Additional weight per 10 mm stroke  200 g  Precision of analog output  1 °KFS  Size of dead space  1 'WFS  Ple5 Ple5 Ple6 Ple6 Ple7 Ple7 Ple7 Ple7 Ple7 Ple7 Ple7 Ple7	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Storage temperature   5°C50°C   Temperature of medium   5°C40°C   Temperature of medium   5°C40°C   Southers of the state of t	Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested as per severity level 2
Temperature of medium  5 °C40 °C Relative air humidity  5 100 % Condensing  Degree of protection  IP65 IP67 IP69K NEMA A  AWIDration resistance to DIN/IEC 68 Part 2-6  Tested as per severity level 2  Ambient temperature  5 °C50 °C  Theoretical force at 6 bar, retracting  11581 N  Theoretical force at 6 bar, advancing  12064 N  Air consumption, retracting, per 10 mm stroke  1.351 I  Air consumption advancing per 10 mm stroke  1.407 I  Moving mass at 0 mm stroke  3700 g  Additional moving mass per 10 mm stroke  89 g  88 saic weight with 0 mm stroke  44330 g  Additional weight per 10 mm stroke  200 g  Precision of analog output  1 %FS  52ce of dead space  1 %FS  Positioning accuracy  1.0 %FS  Repetition accuracy in ± %FS  1 %FS  Positioning accuracy  1.0 %FS  Repetition accuracy in ± %FS  1 %FS  Preumatic connection  For pneumatic tubing outside diameter 8 mm for pneumatic tubing outside diameter 8 mm for pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Piston rod material  Material of screws  Steel, coated High-alloy stainless steel  NBR  Material of screws  Steel, coated High-alloy stainless steel  NBR  Tie rod material  High-alloy stainless steel	LABS (PWIS) conformity	
Relative air humidity  Degree of protection  Degree of protection  Degree of protection  Pe65 Pe67 Pe60K NEMA 4  Arbient temperature  15°C50°C  Tested as per severity level 2  Ambient temperature  15°C50°C  Theoretical force at 6 bar, retracting  11581 N  Theoretical force at 6 bar, advancing  12064 N  Air consumption, retracting, per 10 mm stroke  1.351 1  Air consumption advancing per 10 mm stroke  1.407 1  Moving mass at 0 mm stroke  3700 g  Additional moving mass per 10 mm stroke  14330 g  Additional moving mass per 10 mm stroke  14330 g  Additional moving mass per 10 mm stroke  14330 g  Additional weight per 10 mm stroke  200 g  Precision of analog output  1 %FS  Size of dead space  1 %FS  Positioning accuracy  1.0%FS  Positioning accuracy  1.0%FS  Repetition accuracy in ± %FS  1 %FS  Electrical connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Piston rod material  MaR  Material of screws  Steel, coated High-alloy stainless steel  NBR  Tie rod material  High-alloy stainless steel	· · · · · · · · · · · · · · · · · · ·	
Degree of protection  Pesser of pesser of protection  Pesser of	·	
Degree of protection    P65	Relative air humidity	
IP67   IP69K   NEMA 4	Degree of protection	
NEMA 4  Vibration resistance to DIN/IEC 68 Part 2-6  Ambient temperature  -5 °C50 °C  Theoretical force at 6 bar, retracting 11581 N  Theoretical force at 6 bar, retracting 12064 N  Air consumption, retracting, per 10 mm stroke 1.351 I  Air consumption advancing per 10 mm stroke 1.407 I  Moving mass at 0 mm stroke 3700 g  Additional moving mass per 10 mm stroke 89 g  Basic weight with 0 mm stroke 200 g  Precision of analog output 1%F5  Size of dead space 1 %F5  Hysteresis in ± %F5 1 %F5 Positioning accuracy 1.0 %F5  Repetition accuracy in ± %F5 1 %F5  Electrical connection 5-pin Straight plug/screw terminal with specific accessories  Note on materials RoHS-compiliant Material of end caps Lower cover material Piston rod material Piston rod material Piston of wiper material NBR Material of screws Stael, coated High-alloy stainless steel High-alloy stainless steel High-alloy stainless steel	begree or protection	
Vibration resistance to DIN/IEC 68 Part 2-6 Ambient temperature -5 °C50 °C Theoretical force at 6 bar, retracting 11581 N Theoretical force at 6 bar, advancing 12064 N Air consumption, retracting, per 10 mm stroke 1.351 I Air consumption advancing per 10 mm stroke 1.407 I Moving mass at 0 mm stroke 3700 g Additional moving mass per 10 mm stroke 89 g Basic weight with 0 mm stroke 1330 g Additional weight per 10 mm stroke 200 g Precision of analog output 1 %FS Size of dead space 1 %FS 1 %FS Positioning accuracy Repetition accuracy in ± %FS 1 %FS Position accuracy in ± %FS 1 %FS Electrical connection For pneumatic connection For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories Note on materials Note on materials Mover cover material Lower cover material Piston rod wiper material NBR Material of screws Stael, casel material High-alloy stainless steel High-alloy stainless steel High-alloy stainless steel High-alloy stainless steel		
Ambient temperature	Vibration resistance to DIN/IEC 49 Days 2.4	
Theoretical force at 6 bar, retracting Theoretical force at 6 bar, advancing 12064 N Air consumption, retracting, per 10 mm stroke 1.351 l Air consumption advancing per 10 mm stroke 1.407 l Moving mass at 0 mm stroke 3700 g Additional moving mass per 10 mm stroke 89 g Basic weight with 0 mm stroke 200 g Precision of analog output 1 %FS Size of dead space 1 %FS Positioning accuracy Repetition accuracy in ± %FS 1 1 %FS Electrical connection Straight plug/screw terminal with specific accessories Pneumatic connection For pneumatic tubing outside diameter 8 mm for pneumatic tubing outside diameter 10 mm with specific accessories Note on materials Material of end caps Wrought aluminum alloy, coated User cover material Piston rod wiper material NBR Material of screws Stall users Stall users High-alloy stainless steel High-alloy stainless steel High-alloy stainless steel	·	, ,
Theoretical force at 6 bar, advancing Air consumption, retracting, per 10 mm stroke 1.351 l Air consumption advancing per 10 mm stroke 1.407 l Moving mass at 0 mm stroke 3700 g Additional moving mass per 10 mm stroke 89 g Basic weight with 0 mm stroke 200 g Precision of analog output 1 %FS Size of dead space 1 %FS Positioning accuracy 1.0 %FS Position accuracy in ± %FS 1 %FS 1 %FS 1 %FS Electrical connection 5-pin Straight plug/screw terminal with specific accessories Pneumatic connection For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories Note on materials Material of end caps Uwrought aluminum alloy, coated Coated die-cast aluminum Piston rod material NBR Material of screws Steel, coated High-alloy stainless steel Static seal material High-alloy stainless steel	·	
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Air consumption advancing per 10 mm stroke  Moving mass at 0 mm stroke  Additional moving mass per 10 mm stroke  89 g  Basic weight with 0 mm stroke  14330 g  Additional weight per 10 mm stroke  200 g  Precision of analog output  1 %FS  Size of dead space  Hysteresis in ± %FS  1 %FS  Positioning accuracy  1.0 %FS  Repetition accuracy in ± %FS  Electrical connection  For pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 8 mm For pneumatic accuracy  Note on materials  RehS-compliant  Material of end caps  Lower cover material  High-alloy stainless steel  Static seal material  NBR  Material of screws  Static seal material  High-alloy stainless steel  High-alloy stainless steel	<u>-</u>	
Moving mass at 0 mm stroke Additional moving mass per 10 mm stroke Basic weight with 0 mm stroke 14330 g Additional weight per 10 mm stroke 200 g Precision of analog output 1 %FS Size of dead space 1 %FS 1 %FS Positioning accuracy 1.0 %FS Repetition accuracy in ± %FS 1 %FS 1 %FS 1 %FS Position accuracy in ± %FS 1 %FS Precision of analog output 1.0 %FS Repetition accuracy in ± %FS 1 %FS Repetition accuracy in ± %FS Repetition accuracy		
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Basic weight with 0 mm stroke Additional weight per 10 mm stroke 200 g Precision of analog output 1 %FS Size of dead space 1 %FS Hysteresis in ± %FS 2 1 %FS Positioning accuracy 1.0 %FS Repetition accuracy in ± %FS 1 %FS Electrical connection 5-pin Straight plug/screw terminal with specific accessories Pneumatic connection For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials RoHS-compliant Wrought aluminum alloy, coated Lower cover material Lower cover material Piston rod material Material of screws Material of screws Steel, coated High-alloy stainless steel High-alloy stainless steel Static seal material NBR High-alloy stainless steel High-alloy stainless steel		
Additional weight per 10 mm stroke Precision of analog output  1 %FS Size of dead space 1 %FS Hysteresis in ± %FS 1 %FS Positioning accuracy 1.0 %FS Repetition accuracy in ± %FS 1 %FS Electrical connection Straight plug/screw terminal with specific accessories Pneumatic connection For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials RoHS-compliant Material of end caps Lower cover material Lower cover material Piston rod material Piston rod wiper material Material of screws Material of screws Steel, coated High-alloy stainless steel Static seal material High-alloy stainless steel High-alloy stainless steel High-alloy stainless steel High-alloy stainless steel	Basic weight with 0 mm stroke	-
Precision of analog output  1 %FS  Size of dead space  1 %FS  Hysteresis in ± %FS  1 %FS  Positioning accuracy  1.0 %FS  Repetition accuracy in ± %FS  1 %FS  Electrical connection  S-pin Straight plug/screw terminal with specific accessories  Pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Uvrought aluminum alloy, coated  Lower cover material  Piston rod material  Piston rod wiper material  Material of screws  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  High-alloy stainless steel  High-alloy stainless steel		4
Size of dead space 1 %FS Hysteresis in ± %FS 1 %FS Positioning accuracy 1.0 %FS Repetition accuracy in ± %FS 1 %FS Electrical connection 5-pin Straight plug/screw terminal with specific accessories Pneumatic connection For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories Note on materials RoHS-compliant Material of end caps Wrought aluminum alloy, coated Lower cover material Coated die-cast aluminum Piston rod material High-alloy stainless steel Piston rod wiper material NBR Material of screws Steel, coated High-alloy stainless steel Static seal material NBR Tie rod material High-alloy stainless steel High-alloy stainless steel	Precision of analog output	
Positioning accuracy Repetition accuracy in ± %FS  Electrical connection Straight plug/screw terminal with specific accessories  Pneumatic connection For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials RoHS-compliant  Material of end caps Lower cover material Coated die-cast aluminum Piston rod material High-alloy stainless steel  Material of screws Steel, coated High-alloy stainless steel  Static seal material NBR  Tie rod material High-alloy stainless steel High-alloy stainless steel	Size of dead space	
Repetition accuracy in ± %FS  Electrical connection  S-pin Straight plug/screw terminal with specific accessories  Pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Lower cover material  Lower cover material  Piston rod material  High-alloy stainless steel  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel  High-alloy stainless steel	Hysteresis in ± %FS	1 %FS
Electrical connection  5-pin Straight plug/screw terminal with specific accessories  Pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Coated die-cast aluminum  Piston rod material  High-alloy stainless steel  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel	Positioning accuracy	1.0 %FS
Straight plug/screw terminal with specific accessories  Pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Coated die-cast aluminum  Piston rod material  High-alloy stainless steel  Piston rod wiper material  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel	Repetition accuracy in ± %FS	1 %FS
with specific accessories  Pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Coated die-cast aluminum  Piston rod material  High-alloy stainless steel  Piston rod wiper material  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel	Electrical connection	5-pin
Pneumatic connection  For pneumatic tubing outside diameter 8 mm For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Coated die-cast aluminum  Piston rod material  High-alloy stainless steel  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel		
For pneumatic tubing outside diameter 10 mm with specific accessories  Note on materials  RoHS-compliant  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Coated die-cast aluminum  Piston rod material  High-alloy stainless steel  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel	Pneumatic connection	· · ·
Note on materials  Material of end caps  Wrought aluminum alloy, coated  Lower cover material  Coated die-cast aluminum  Piston rod material  High-alloy stainless steel  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel  High-alloy stainless steel	The animal confidence of the c	For pneumatic tubing outside diameter 10 mm
Material of end caps  Lower cover material  Piston rod material  Piston rod wiper material  Material of screws  Material of screws  Steel, coated High-alloy stainless steel  NBR  Material of screws  MBR  Static seal material  NBR  High-alloy stainless steel  NBR  High-alloy stainless steel  NBR		
Lower cover material  Piston rod material  Piston rod wiper material  Piston rod wiper material  NBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  NBR  Tie rod material  High-alloy stainless steel  High-alloy stainless steel	Note on materials	
Piston rod material High-alloy stainless steel Piston rod wiper material NBR  Material of screws Steel, coated High-alloy stainless steel Static seal material NBR  Tie rod material High-alloy stainless steel	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Piston rod wiper material  MBR  Material of screws  Steel, coated High-alloy stainless steel  Static seal material  NBR  Tie rod material  High-alloy stainless steel		
Material of screws Steel, coated High-alloy stainless steel Static seal material NBR Tie rod material High-alloy stainless steel		
High-alloy stainless steel  Static seal material NBR  Tie rod material High-alloy stainless steel		
Static seal material NBR Tie rod material High-alloy stainless steel	Material of Screws	
Tie rod material High-alloy stainless steel	Static seal material	
5 ,	Tie rod material	
,	Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized