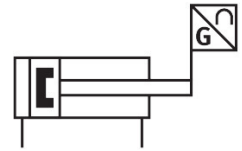


Linear actuator DFPI-100- -ND2P-E-NB3P

Part number: 2185733

FESTO



Data sheet

Feature	Value
Size of valve actuator	100
Stroke	40 mm...990 mm
Piston diameter	100 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
Operating pressure	0.3 MPa...0.8 MPa 3 bar...8 bar 43.5 psi...116 psi
Nominal operating pressure	0.6 MPa 6 bar
DC operating voltage range	0 V...15 V
Recommended contact current	0.1 µA
Max. short-time slider current	10 mA
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
UKCA marking (see declaration of conformity)	acc. to UK EX instructions
Explosion prevention and protection	Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)
ATEX category gas	II 2G
ATEX category for dust	II 2D
Type of ignition protection for gas	Ex h IIC T4 Gb
Type of (ignition) protection for dust	Ex h IIIC T120°C Db
Explosive ambient temperature	-20°C ≤ Ta ≤ +60°C

Feature	Value
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	Tested as per severity level 2
LABS (PWIS) conformity	VDMA24364 zone III
Storage temperature	-20 °C...80 °C
Relative air humidity	5 - 100 % Condensing
Degree of protection	IP65 IP67 IP69K NEMA 4
Vibration resistance to DIN/IEC 68 Part 2-6	Tested as per severity level 2
Ambient temperature	-20 °C...80 °C
Impact energy in the end positions	1.3 J
Theoretical force at 6 bar, retracting	4417 N
Theoretical force at 6 bar, advancing	4712 N
Air consumption, retracting, per 10 mm stroke	0.515 l
Air consumption advancing per 10 mm stroke	0.549 l
Moving mass at 0 mm stroke	1060 g
Additional moving mass per 10 mm stroke	28 g
Basic weight with 0 mm stroke	4900 g
Additional weight per 10 mm stroke	90 g
Hysteresis	0.33 mm
Independent linearity	±0.04 %
Repetition accuracy in ± mm	0.12 mm
Electrical connection	3-pin Straight plug/screw terminal with specific accessories
Pneumatic connection	For pneumatic tubing outside diameter 8 mm with specific accessories
Note on materials	RoHS-compliant
Material of end caps	Wrought aluminum alloy, coated
Lower cover material	Coated die-cast aluminum
Electrical connection material	Brass, nickel-plated
Piston rod material	High-alloy stainless steel
Piston rod wiper material	TPE-U(PU)
Material of pneumatic tubing	PE
Material of screws	Steel, coated High-alloy stainless steel
Static seal material	NBR
Material of pneumatic fitting	Brass, nickel-plated
Tie rod material	High-alloy stainless steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized