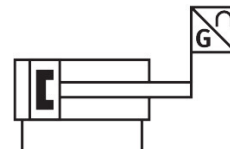
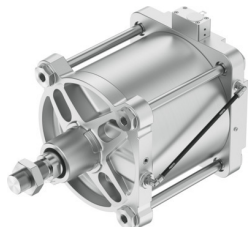


# Linear drive

## DFPI-320- -ND2P-E-NB3P

Part number: 2186271

FESTO



## Data sheet

Feature	Value
Size of valve actuator	320
Stroke	40 mm...990 mm
Piston diameter	320 mm
Based on standard	ISO 15552
Cushioning	No cushioning
Mounting position	optional
Mode of operation	Double-acting
Design	Piston Piston rod Tie rod Cylinder barrel
Position detection	With integrated displacement encoder
Functional principle of measuring system	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
Operational voltage range DC	0 V...15 V
Recommended wiper current	0.1 µA
Max. wiper current, short-time	10 mA
CE mark (see declaration of conformity)	To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection	Zone 1 (ATEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 22 (ATEX)
ATEX category gas	II 2G
ATEX category dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ignition protection type for dust	Ex h IIIC T120°C Db
Explosion ambient temperature	-20°C ≤ Ta ≤ +60°C

Feature	Value
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested to 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 to severity level 2
Ambient temperature	-20 °C...80 °C
Impact energy in end positions	2.4 J
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	46385 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	48255 N
Air consumption on return stroke per 10 mm	5.412 l
Air consumption on advance stroke per 10 mm	5.63 l
Moving mass for 0 mm stroke	16500 g
Additional moving mass per 10 mm stroke	227 g
Basic weight for 0 mm stroke	57700 g
Additional weight per 10 mm stroke	582 g
Hysteresis	0.33 mm
Non-dependent linearity	±0.04%
Repetition accuracy in ± mm	0.12 mm
Electrical connection	3-pin Straight plug connector/screw terminal With specific accessories
Pneumatic connection	For tubing O.D. 8 mm With specific accessories
Note on materials	RoHS-compliant
Material end cap	Coated wrought aluminium alloy
Material underneath cover	Die-cast aluminium, coated
Material electrical connection	Nickel-plated brass
Material piston rod	High-alloy stainless steel
Material piston rod wiper	NBR
Material tubing	PE
Material screws	Coated steel High-alloy stainless steel
Material static seals	NBR
Material fitting	Nickel-plated brass
Material tie rod	High-alloy stainless steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy