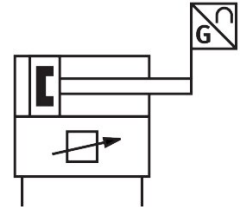


Linear drive DFPI-250- -ND2P-C1V-NB3P-R-A

Part number: 4591209

FESTO



 General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Size of valve actuator	250
Stroke	40 mm ... 990 mm
Piston diameter	250 mm
Based on standard	ISO 15552
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Double-acting
Design	Piston Piston rod Tie rod 1 Cylinder barrel
Position detection	Via integrated displacement encoder
Symbol	00992806
Functional principle of measuring system	Potentiometer
Reverse polarity protection	Initialisation connection For operating voltage For setpoint value
Operating pressure	0.3 MPa ... 0.8 MPa
Operating pressure	3 bar ... 8 bar
Operating pressure	43.5 psi ... 116 psi
Nominal operating pressure	0.6 MPa
Nominal operating pressure	6 bar
Nominal operating pressure	87 psi
Analogue output	4 - 20 mA
Operational voltage range DC	21.6 V ... 26.4 V
Max. current consumption	220 mA
Nominal operating voltage DC	24 V
Setpoint value input	4 mA ... 20 mA
Approval	RCM
KC mark	KC-EMV
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 RoHS instructions

Feature	Value
Explosion protection certification outside the EU	EPL Dc (GB) EPL Gc (GB)
Explosion protection	Zone 2 (ATEX) Zone 2 (UKEX) Zone 22 (ATEX) Zone 22 (UKEX)
ATEX category gas	II 3G
ATEX category dust	II 3D
Explosion ignition protection type for gas	Ex ec IIC T4 X Gc
Explosion ignition protection type for dust	Ex tc IIIC T120°C X Dc
Explosion ambient temperature	-5°C ≤ Ta ≤ +50°C
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	-5 °C ... 50 °C
Media temperature	-5 °C ... 40 °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	-5 °C ... 50 °C
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	28274 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	29452 N
Air consumption on return stroke per 10 mm	3.299 l
Air consumption on advance stroke per 10 mm	3.436 l
Moving mass for 0 mm stroke	9300 g
Additional moving mass per 10 mm stroke	134 g
Basic weight for 0 mm stroke	35370 g
Additional weight per 10 mm stroke	358 g
Analogue output accuracy	1 %FS
Dead zone size	1 %FS
Hysteresis in ± %FS	1 %FS
Positioning accuracy	1.0 %FS
Repetition accuracy in ± %FS	1 %FS
Electrical connection	Straight plug connector/screw terminal With specific accessories
Pneumatic connection	For tubing O.D. 8 mm For tubing outside diameter of 10 mm With specific accessories
Note on materials	RoHS compliant
Material end cap	Coated wrought aluminium alloy
Material underneath cover	Die-cast aluminium, coated
Material piston rod	High-alloy stainless steel
Material piston rod wiper	NBR
Material screws	Coated steel High-alloy stainless steel
Material static seals	NBR
Material tie rod	High-alloy stainless steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy