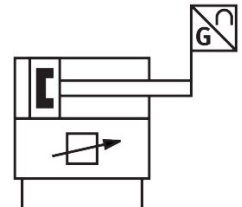


Linear actuator

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

Part number: 4591209

FESTO



Data sheet

Feature	Value
Size of valve actuator	250
Stroke	40 mm...990 mm
Piston diameter	250 mm
Based on norm	ISO 15552
Cushioning	No cushioning
Mounting position	Any
Mode of operation	Double-acting
Structural design	Piston Piston rod Tie rod 1 Cylinder barrel
Position sensing	With integrated linear potentiometer
Measuring principle of linear potentiometer	Potentiometer
Reverse polarity protection	Initialization connection For operating voltage For setpoint
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 87 psi
Analog output	4 - 20 mA
DC operating voltage range	21.6 V...26.4 V
Max. current consumption	220 mA
Nominal operating voltage DC	24 V
Setpoint input	4 mA...20 mA
Certification	RCM compliance mark
KC characters	KC-EMV
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)	To UK instructions for EMC acc. to UK EX instructions

Feature	Value
	To UK RoHS instructions
Explosion protection certification outside the EU	EPL Dc (GB) EPL Gc (GB)
Explosion prevention and protection	Zone 2 (ATEX) Zone 2 (UKEX) Zone 22 (ATEX) Zone 22 (UKEX)
ATEX category gas	II 3G
ATEX category for dust	II 3D
Type of ignition protection for gas	Ex ec IIC T4 X Gc
Type of (ignition) protection for dust	Ex tc IIIC T120°C X Dc
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	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	-5 °C...50 °C
Temperature of medium	-5 °C...40 °C
Relative air humidity	5 - 100% Condensating
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	-5 °C...50 °C
Theoretical force at 6 bar, retracting	28274 N
Theoretical force at 6 bar, advancing	29452 N
Air consumption, retracting, per 10 mm stroke	3.299 l
Air consumption advancing per 10 mm stroke	3.436 l
Moving mass at 0 mm stroke	9300 g
Additional moving mass per 10 mm stroke	134 g
Basic weight with 0 mm stroke	35370 g
Additional weight per 10 mm stroke	358 g
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	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	Coated steel high-alloy stainless steel
Static seal material	NBR
Tie rod material	high-alloy stainless steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized