

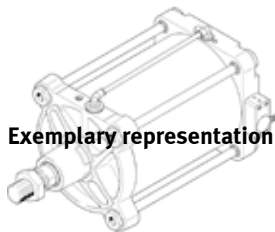
# Linear actuator

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

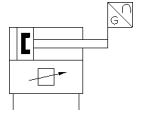
Part number: 4591209

FESTO

with integrated electropneumatic positioner, double-acting, piston diameter 250 mm, fastening interfaces according to ISO 15552 on bearing and end caps, electric/pneumatic connection via metallic flange-type socket and connecting cable NHSB (accessories), 4-line, 24 VDC power supply, setpoint input 4...20 mA, position feedback signal 4...20 mA, retracting piston rod safety position.



Exemplary representation



## Data sheet

Feature	Value
Size of actuator	250
Stroke	40 ... 990 mm
Piston diameter	250 mm
Based on the standard	ISO 15552
Cushioning	No cushioning
Assembly position	Any
Mode of operation	double-acting
Design structure	Piston Piston rod Tie rod Cylinder barrel
Position detection	With integrated displacement encoder
Measuring method: displacement encoder	Potentiometer
Polarity protected	for operating voltage for set point value Initialization connection
Operating pressure MPa	0.3 ... 0.8 MPa
Working pressure	3 ... 8 bar
Operating pressure	43.5 ... 116 psi
Nominal operating pressure	0.6 MPa
Nominal working pressure	6 bar
Nominal operating pressure (psi)	87 psi
Analog output	4 - 20 mA
Operating voltage range DC	21.6 ... 26.4 V
Max. current consumption	220 mA
Nominal operating voltage DC	24 V
Setpoint input	4 ... 20 mA
Authorization	RCM Mark
KC mark	KC-EMV
CE symbol (see declaration of conformity)	according to EU-EMV guideline according to EU-Ex protection guideline (ATEX) in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK EX instructions To UK RoHS instructions
Explosion protection certification outside the EU	EPL Dc (GB) EPL Gc (GB)
ATEX category Gas	II 3G
ATEX category Dust	II 3D
Explosion ignition protection type Gas	Ex ec IIC T4 X Gc

Feature	Value
Explosion ignition protection type Dust	Ex tc IIIC T120°C X Dc
Explosion-proof ambient temperature	-5 °C ≤ Ta ≤ +50°C
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)
Continuous shock resistance per DIN/IEC 68, parts 2 - 82	Tested in accordance with severity level 2
PWIS conformity	VDMA24364 zone III
Storage temperature	-5 ... 50 °C
Medium temperature	-5 ... 40 °C
Relative air humidity	5 - 100 % Condensing
Protection class	IP65 IP67 IP69K NEMA 4
Vibration resistance per DIN/IEC 68, parts 2 - 6	Tested in accordance with severity level 2
Ambient temperature	-5 ... 50 °C
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	28,274 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	29,452 N
Air consumption returning per 10 mm stroke	3.299 l
Air consumption advancing per 10 mm stroke	3.436 l
Moving mass with 0 mm stroke	9,300 g
Additional mass factor per 10 mm of stroke	134 g
Basic weight for 0 mm stroke	35,370 g
Additional weight per 10 mm stroke	358 g
Accuracy of analogue output	1 %FS
Size of the dead zone	1 %FS
Hysteresis 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 tubing outside diameter 8 mm For tubing outside diameter 10 mm With specific accessories
Materials note	Conforms to RoHS
Material of end caps	Coated wrought aluminium alloy
Material underneath cover	Coated die-cast aluminium
Material piston rod	High alloy steel, non-corrosive
Material piston rod wiper seal	NBR
Material screws	Coated steel High alloy steel, non-corrosive
Material static seals	NBR
Material tie rod	High alloy steel, non-corrosive
Material cylinder barrel	Smooth-anodised wrought aluminium alloy