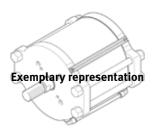
## Linear actuator DFPI-250- -ND2P-E-P-G2

Part number: 1808253 Product to be discontinued

with integrated potentiometric distance measuring system, doubleacting, piston diameter 250 mm, fastening interfaces for fittings according to DIN EN ISO 5210 on bearing cap, electric/pneumatic connection via metallic flange-type socket and connecting cable NHSB (accessories).

Type to be discontinued. Available until 2024. See Support Portal for alternative products.





**FESTO** 

## **Data sheet**

Feature	Value
Size of actuator	250
Flange hole pattern	F10
	F14
Stroke	40 990 mm
Stroke reserve	4 mm
Piston diameter	250 mm
Fitting connection conforms to standard	ISO 5210
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
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
Operating voltage range DC	0 15 V
KC mark	KC-EMV
CE symbol (see declaration of conformity)	according to EU-Ex protection guideline (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
ATEX category Gas	II 2G
ATEX category Dust	II 2D
Explosion ignition protection type Gas	Ex h IIC T4 Gb X
Explosion ignition protection type Dust	Ex h IIIC T120°C Db X
Explosion-proof ambient temperature	-20°C <= Ta <= +60°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
Storage temperature	-20 60 °C
Relative air humidity	5 - 100 %
,	Condensing
Protection class	IP65
	IP67



Feature	Value	
	IP69K	
	NEMA 4	
Vibration resistance per DIN/IEC 68, parts 2 - 6	Tested in accordance with severity level 2	
Ambient temperature	-20 60 °C	
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	28,698 N	
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	29,452 N	
Air consumption returning per 10 mm stroke	3.3482	
Air consumption advancing per 10 mm stroke	3.4361	
Moving mass with 0 mm stroke	7,059 g	
Additional mass factor per 10 mm of stroke	87 g	
Basic weight for 0 mm stroke	22,569 g	
Additional weight per 10 mm stroke	325 g	
Additional weight of displacement encoder per 10 mm	2 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 tubing outside diameter 8 mm	
	With specific accessories	
Materials note	Contains PWIS substances	
	Conforms to RoHS	
Material of end caps	Anodised wrought aluminium alloy	
Material underneath cover	Anodised wrought aluminium alloy	
Material piston rod	High alloy steel, non-corrosive	
Material piston rod wiper seal	NBR	
Material screws	High alloy steel, non-corrosive	
Material static seals	NBR	
Material tie rod	High alloy steel, non-corrosive	
Material cylinder barrel	High alloy steel, non-corrosive	