

Linear actuator

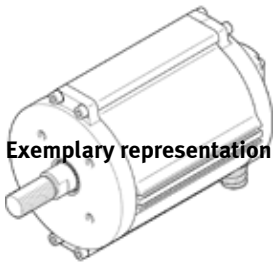
DFPI-160- -ND2P-E-P-G2

Part number: 1808242
Product to be discontinued

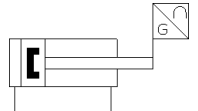
FESTO

with integrated potentiometric distance measuring system, double-acting, piston diameter 160 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.



Exemplary representation



Data sheet

Feature	Value
Size of actuator	160
Flange hole pattern	F10
Stroke	40 ... 990 mm
Stroke reserve	3 mm
Piston diameter	160 mm
Fitting connection conforms to standard	ISO 5210
Cushioning	No cushioning
Assembly position	Any
Mode of operation	double-acting
Design structure	Piston Piston rod Profile 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 IP69K NEMA 4

Feature	Value
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	11,581 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	12,064 N
Air consumption returning per 10 mm stroke	1.3511 l
Air consumption advancing per 10 mm stroke	1.4074 l
Moving mass with 0 mm stroke	2,250 g
Additional mass factor per 10 mm of stroke	52 g
Basic weight for 0 mm stroke	6,529 g
Additional weight per 10 mm stroke	159 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	Coated die-cast aluminium Anodised wrought aluminium alloy
Material underneath cover	Coated die-cast aluminium 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 cylinder barrel	Smooth-anodised wrought aluminium alloy