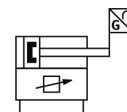
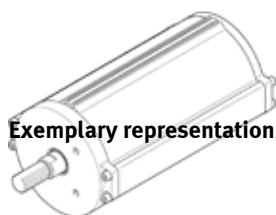


# Linear actuator DFPI-160- -ND2P-C1V

Part number: 558191

FESTO

With integrated displacement encoder, positioner and valve manifold.



## Data sheet

Feature	Value
Size of actuator	160
Flange hole pattern	F10
Stroke	40 ... 990 mm
Stroke reserve	3 mm
Piston diameter	160 mm
Based on the standard	DIN 3358
Cushioning	No cushioning
Assembly position	Any
Mode of operation	double-acting
Design structure	Piston rod Cylinder barrel
Outdoor use	C1 - weather protected locations of use
Position detection	For proximity sensor With integrated displacement encoder
Measuring method: displacement encoder	Potentiometer
Polarity protected	for operating voltage for set point value Initialization connection
Working pressure	3 ... 8 bar
Nominal working pressure	6 bar
Max. speed, advancing	0.031 m/s
Max. speed, retracting	0.031 m/s
Operating voltage range DC	21.6 ... 26.4 V
Nominal operating voltage DC	24 V
ATEX category Gas	II 3G
Explosion ignition protection type Gas	Ex nA II T4 X
ATEX category Dust	II 3D
Explosion ignition protection type Dust	Ex tD A22 IP65/67/69k T120°C X
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)
CE symbol (see declaration of conformity)	according to EU-EMV guideline according to EU-Ex protection guideline (ATEX)
Continuous shock resistance per DIN/IEC 68, parts 2 - 82	Tested in accordance with severity level 2
Corrosion resistance classification CRC	3
Relative air humidity	5 - 95 % Condensing
Protection class	IP65 IP67 IP69K NEMA 4 in assembled condition to IEC 60529

Feature	Value
Vibration resistance per DIN/IEC 68, parts 2 - 6	Tested in accordance with severity level 2
Ambient temperature	-5 ... 50 °C
Theoretical force at 6 bar, return stroke	11,581 N
Theoretical force at 6 bar, advance stroke	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 weight per 10 mm stroke	159 g
Additional weight of displacement encoder per 10 mm	2 g
Basic weight for 0 mm stroke	9,099 g
Additional mass factor per 10 mm of stroke	52 g
Size of the dead zone	2 %
Max. line length	30 m
Electrical connection	5-pin Straight plug / screw terminal
Mounting type	On flange to DIN 3358
Pneumatic connection	G1/4
Materials note	Contains PWIS substances Conforms to RoHS
Materials information for cover	Wrought Aluminum alloy Painted
Material information, lower seal	Aluminum die cast Painted
Materials information for seals	NBR
Materials information for piston rod	High alloy steel, non-corrosive
Screw material data	Steel
Materials information for cylinder barrel	Wrought Aluminum alloy Anodized