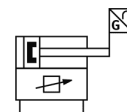
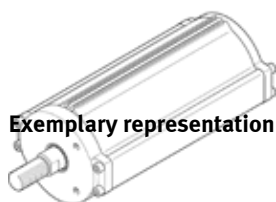


# Linear actuator DFPI-125- -ND2P-C1V

Part number: 558190

FESTO

With integrated displacement encoder, positioner and valve manifold.



Exemplary representation

## Data sheet

| Feature  | Value   |
|--|---|
| Size of actuator   | 125   |
| Flange hole pattern                                      | F10   |
| Stroke   | 40 ... 990 mm   |
| Stroke reserve   | 3 mm  |
| Piston diameter  | 125 mm  |
| Based on the standard                                    | DIN 3358  |
| Cushioning   | No cushioning   |
| Assembly position  | Any   |
| Mode of operation  | double-acting   |
| Design structure   | Piston rod<br>Cylinder barrel   |
| Outdoor use  | C1 - weather protected locations of use   |
| Position detection                                       | For proximity sensor<br>With integrated displacement encoder                    |
| Measuring method: displacement encoder                   | Potentiometer   |
| Polarity protected                                       | for operating voltage<br>for set point value<br>Initialization connection       |
| Working pressure   | 3 ... 8 bar   |
| Nominal working pressure                                 | 6 bar   |
| Max. speed, advancing                                    | 0.049 m/s   |
| Max. speed, retracting                                   | 0.048 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<br>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 %<br>Condensing  |
| Protection class   | IP65<br>IP67<br>IP69K<br>NEMA 4<br>in assembled condition<br>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           | 6,881 N                                      |
| Theoretical force at 6 bar, advance stroke          | 7,363 N                                      |
| Air consumption returning per 10 mm stroke          | 0.8027 l                                     |
| Air consumption advancing per 10 mm stroke          | 0.859 l                                      |
| Moving mass with 0 mm stroke                        | 1,944 g                                      |
| Additional weight per 10 mm stroke                  | 145 g  |
| Additional weight of displacement encoder per 10 mm | 2 g  |
| Basic weight for 0 mm stroke                        | 7,693 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<br>Straight plug / screw terminal      |
| Mounting type                                       | On flange to DIN 3358                        |
| Pneumatic connection                                | G1/4   |
| Materials note                                      | Contains PWIS substances<br>Conforms to RoHS |
| Materials information for cover                     | Wrought Aluminum alloy<br>Anodized           |
| Material information, lower seal                    | Wrought Aluminum alloy<br>Anodized           |
| 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<br>Anodized           |