## Linear actuator DFPI-125- -ND2P-C1V-A

Part number: 1548020 Product to be discontinued

with integrated electropneuamatic positioner, double-acting, piston diameter 125 mm, fastening interfaces for fittings according to DIN EN ISO 5210 on bearing cap, electric/pneumatic connection via plastic flange-type socket, 4-line, 24 VDC power supply, setpoint input 4...20 mA, position feedback signal 4...20 mA, advancing piston rod safety position.

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



## **Data sheet**

| Feature   | Value  |  |
|---|--|--|
| Size of actuator                                  | 125  |  |
| Flange hole pattern                               | F10  |  |
| Stroke  | 40 990 mm                                      |  |
| Stroke reserve                                    | 3 mm   |  |
| Piston diameter                                   | 125 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                                  |  |
| 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  |  |
| 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  |  |

**FESTO** 



## FESTO

| Feature  | Value  |
|--|--|
| ATEX category Dust                                       | II 3D  |
| Explosion ignition protection type Gas                   | Ex ec IIC T4 X Gc  |
| 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                       |
| 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 | 6.881 N  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance    | 7,363 N  |
| Air consumption returning per 10 mm stroke               | 0.8027 l   |
| Air consumption advancing per 10 mm stroke               | 0.8591   |
| Moving mass with 0 mm stroke                             | 1,944 g  |
| Additional mass factor per 10 mm of stroke               | 52 g   |
| Basic weight for 0 mm stroke                             | 7,693 g  |
| Additional weight per 10 mm stroke                       | 145 g  |
| Additional weight of displacement encoder per 10 mm      | 2 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                                   |
| Pneumatic connection                                     | G1/4   |
| 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 cylinder barrel                                 | Smooth-anodised wrought aluminium alloy                          |