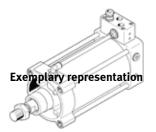
## Linear actuator DFPI-125--

Part number: 5087658

with integrated potentiometric distance measuring system, doubleacting, piston diameter 125 mm, fastening interfaces according to ISO 15552 on bearing and end caps.

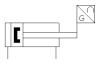


## **Data sheet**

Overall data sheet - Individual values depend upon your configuration.

| Feature  | Value  |
|--|--|
| Size of actuator   | 125  |
| Stroke   | 40 990 mm  |
| Piston diameter  | 125 mm   |
| Based on the standard                                    | ISO 15552  |
| 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  |
| Polarity protected                                       | Yes  |
| 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                               | 9 30 V   |
| Recommended wiper current                                | < 0.1 μA   |
| Max. intermittent wiper current                          | 10 mA  |
| Power supply   | 2-wire   |
| 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  |
| ATEX category Gas  | II 2G  |
| ATEX category Dust                                       | II 2D  |
| Explosion ignition protection type Gas                   | Ex h IIC T4 Gb   |
| Explosion ignition protection type Dust                  | Ex h IIIC T120°C Db  |
| 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                       |

**FESTO** 



## FESTO

| Feature  | Value                                      |
|--|--|
| PWIS conformity  | VDMA24364 zone III                         |
| Storage temperature                                      | -20 80 °C                                  |
| Relative air humidity                                    | 5 - 100 %                                  |
|  | Condensing                                 |
|  | non-condensing                             |
| Protection class   | IP65                                       |
|  | IP67                                       |
|  | ТРб9К                                      |
|  | NEMA 4                                     |
| Vibration resistance per DIN/IEC 68, parts 2 - 6         | Tested in accordance with severity level 2 |
| Ambient temperature                                      | -20 80 °C                                  |
| Impact energy in end positions                           | 1)   |
| 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               | 0.803 l                                    |
| Air consumption advancing per 10 mm stroke               | 0.859 l                                    |
| Moving mass with 0 mm stroke                             | 1,900 g                                    |
| Additional mass factor per 10 mm of stroke               | 53 g                                       |
| Basic weight for 0 mm stroke                             | 7,500 g                                    |
| Additional weight per 10 mm stroke                       | 134 g                                      |
| Hysteresis   | 0.4 mm                                     |
| Independent linearity                                    | ±0,05 %                                    |
| Repetition accuracy in ± %FS                             | 1 %FS                                      |
| Repetition accuracy in ± mm                              | 0.7 mm                                     |
| Electrical connection                                    | 2-pin                                      |
|  | 3-pin                                      |
|  | 4-pin                                      |
|  | 5-pin                                      |
|  | A-coded                                    |
|  | Cable fitting, M16x1.5                     |
|  | M12x1                                      |
|  | Straight plug / screw terminal             |
|  | Plug straight                              |
|  | With specific accessories                  |
| Pneumatic connection                                     | G3/8                                       |
|  | G1/2                                       |
|  | For tubing outside diameter 8 mm           |
|  | With specific accessories                  |
| Materials note   | Conforms to RoHS                           |
| Material of end caps                                     | Coated wrought aluminium alloy             |
| Material underneath cover                                | Coated die-cast aluminium                  |
| Material electrical connection                           | Nickel-plated brass                        |
|  | High alloy steel, non-corrosive            |
| Material piston rod                                      | High alloy steel, non-corrosive            |
| Material piston rod wiper seal                           | TPE-U(PU)                                  |
| Pipe material  | High alloy steel, non-corrosive            |
| Material tubing  | PE   |
| Material screws  | Coated steel                               |
|  | High alloy steel, non-corrosive            |
| Material static seals                                    | NBR  |
| Material fitting   | Nickel-plated brass                        |
|  | High alloy steel, non-corrosive            |
| Material tie rod   | High alloy steel, non-corrosive            |
| Material cylinder barrel                                 | Smooth-anodised wrought aluminium alloy    |