

# Standards-based cylinder DSBC-...-80- -F1A-

Part number: 8150691

FESTO



General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature  | Value  |
|--|--|
| Stroke   | 1 mm ... 2800 mm   |
| Piston diameter                                    | 80 mm  |
| Piston rod thread                                  | M12  |
| Cushioning   | Elastic cushioning rings/plates at both ends<br>Self-adjusting pneumatic end-position cushioning<br>Pneumatic cushioning, adjustable at both ends  |
| Mounting position                                  | optional   |
| Conforms to standard                               | ISO 15552  |
| Piston-rod end                                     | Male thread<br>Female thread   |
| Design   | Piston<br>Piston rod<br>Profile barrel   |
| Position detection                                 | Via proximity switch   |
| Symbol   | 00991217<br>00991218<br>00991235<br>00991237<br>00992970<br>00992971   |
| Variants   | Advancing stroke adjustment<br>Weld spatter protection<br>Extended male piston rod thread<br>Piston rod with external hexagon<br>Low friction<br>Sensor slots on 3 profile sides<br>Additional PTFE piston guide |
| Operating pressure                                 | 0.04 MPa ... 1.2 MPa   |
| Operating pressure                                 | 0.4 bar ... 12 bar   |
| Mode of operation                                  | Double-acting  |
| Operating medium                                   | Compressed air to ISO 8573-1:2010 [7:4:4]  |
| Note on operating and pilot medium                 | Lubricated operation possible (in which case lubricated operation will always be required)   |
| Corrosion resistance class CRC                     | 2 - Moderate corrosion stress  |
| LABS (PWIS) conformity                             | VDMA24364-C1-L   |
| Suitability for the production of Li-ion batteries | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)   |
| Ambient temperature                                | -20 °C ... 80 °C   |
| Impact energy in end positions                     | 1.4 J ... 1.8 J  |
| Cushioning length                                  | 31 mm  |

| <b>Feature</b>   | <b>Value</b>                            |
|--|---|
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 2721 N                                  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 3016 N                                  |
| Additional weight per piston rod extension of 10 mm          | 39 g                                    |
| Additional weight per piston rod thread extension of 10 mm   | 22 g                                    |
| Type of mounting   | Via female thread<br>With accessories   |
| Pneumatic connection   | G3/8                                    |
| Note on materials  | RoHS-compliant                          |
| Material cover   | Coated die-cast aluminium               |
| Material piston seal   | TPE-U(PU)                               |
| Material piston  | Wrought aluminium alloy                 |
| Material piston rod  | High-alloy steel                        |
| Material piston rod wiper                                    | TPE-U(PU)                               |
| Buffer seal material   | TPE-U(PU)                               |
| Material of cushioning boss                                  | POM                                     |
| Material cylinder barrel                                     | Smooth-anodised wrought aluminium alloy |
| Material nut   | Steel, nickel-plated                    |
| Material bearing   | POM                                     |
| Material collar screws                                       | Steel, nickel-plated                    |