

# ISO cylinder DSBF-C-...-32- -

Part number: 570077

**FESTO**



## Data sheet

| Feature                                      | Value                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stroke                                       | 1 mm...2800 mm                                                                                                                                                                                                                                                                                                                                   |
| Piston diameter                              | 32 mm                                                                                                                                                                                                                                                                                                                                            |
| Piston rod thread                            | M6<br>M10x1.25                                                                                                                                                                                                                                                                                                                                   |
| Based on norm                                | ISO 15552                                                                                                                                                                                                                                                                                                                                        |
| Cushioning                                   | Elastic cushioning rings/pads at both ends<br>Self-adjusting pneumatic end-position cushioning<br>Pneumatic cushioning, adjustable at both ends                                                                                                                                                                                                  |
| Mounting position                            | Any                                                                                                                                                                                                                                                                                                                                              |
| Conforms to standard                         | ISO 15552                                                                                                                                                                                                                                                                                                                                        |
| Piston rod end                               | External thread<br>Internal thread                                                                                                                                                                                                                                                                                                               |
| Structural design                            | Piston<br>Piston rod<br>Profile barrel                                                                                                                                                                                                                                                                                                           |
| Position sensing                             | Via proximity switch                                                                                                                                                                                                                                                                                                                             |
| Variants                                     | For unlubricated operation<br>Increased chemical resistance<br>Hard scraper<br>Extended external thread piston rod<br>Internal thread on piston rod<br>Extended piston rod<br>Uniform, slow movement<br>Low friction<br>Through piston rod<br>Heat-resistant seals max. 120°C<br>Temperature range 0 to + 150°C<br>Temperature range -40 to 80°C |
| Operating pressure                           | 0.01 MPa...1.2 MPa<br>0.1 bar...12 bar                                                                                                                                                                                                                                                                                                           |
| Mode of operation                            | Double-acting                                                                                                                                                                                                                                                                                                                                    |
| CE marking (see declaration of conformity)   | as per EU explosion protection directive (ATEX)                                                                                                                                                                                                                                                                                                  |
| UKCA marking (see declaration of conformity) | acc. to UK EX instructions                                                                                                                                                                                                                                                                                                                       |
| Explosion prevention and protection          | Zone 1 (ATEX)<br>Zone 1 (UKEX)<br>Zone 2 (ATEX)<br>Zone 21 (ATEX)<br>Zone 21 (UKEX)                                                                                                                                                                                                                                                              |

| Feature                                                | Value                                                                        |
|--------------------------------------------------------|------------------------------------------------------------------------------|
|                                                        | Zone 22 (ATEX)                                                               |
| ATEX category gas                                      | II 2G                                                                        |
| ATEX category for dust                                 | II 2D                                                                        |
| Type of ignition protection for gas                    | Ex h IIC T4 Gb                                                               |
| Type of (ignition) protection for dust                 | Ex h IIIC T120°C Db                                                          |
| Explosive ambient temperature                          | -20°C ≤ Ta ≤ +60°C                                                           |
| Explosion protection certification outside the EU      | EPL Db (GB)<br>EPL Gb (GB)                                                   |
| Operating medium                                       | Compressed air as per ISO 8573-1:2010 [7:4:4]                                |
| Information on operating and pilot media               | Operation with oil lubrication possible (required for further use)           |
| Corrosion resistance class (CRC)                       | 3 - High corrosion stress                                                    |
| LABS (PWIS) conformity                                 | VDMA24364-B2-L<br>VDMA24364 Zone III                                         |
| For use in the food industry                           | See supplementary material information                                       |
| Ambient temperature                                    | -40 °C...150 °C                                                              |
| Impact energy in the end positions                     | 0.2 J...0.4 J                                                                |
| Cushioning length                                      | 16 mm...17 mm                                                                |
| Theoretical force at 6 bar, retracting                 | 415 N                                                                        |
| Theoretical force at 6 bar, advancing                  | 415 N...483 N                                                                |
| Weight surcharge per 10 mm piston rod extension        | 9 g                                                                          |
| Weight surcharge per 10 mm piston rod thread extension | 6 g                                                                          |
| Type of mounting                                       | Alternatively:<br>With internal thread<br>With accessories                   |
| Pneumatic connection                                   | G1/8                                                                         |
| Note on materials                                      | RoHS compliant                                                               |
| Cover material                                         | Die-cast aluminum, coated                                                    |
| Piston seal material                                   | FPM<br>TPE-U(PU)                                                             |
| Material of piston                                     | Wrought aluminum alloy                                                       |
| Piston rod material                                    | high-alloy stainless steel, hard chrome plated<br>high-alloy stainless steel |
| Piston rod wiper material                              | FPM<br>Protective grounding<br>TPE-U(PU)                                     |
| Buffer seal material                                   | FPM<br>TPE-U(PU)                                                             |
| Cushion piston material                                | Aluminum<br>POM                                                              |
| Material of cylinder barrel                            | Wrought aluminum alloy, anodized                                             |
| Nut material                                           | high-alloy stainless steel                                                   |
| Rod wiper material                                     | PTFE-reinforced                                                              |
| Material of bearing                                    | Bronze<br>Metal polymer compound<br>POM                                      |
| Flange screws material                                 | Steel, galvanized                                                            |