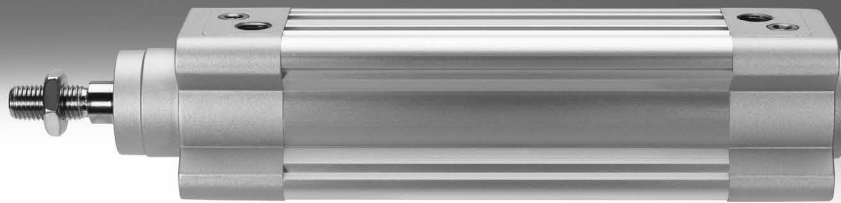


## Standards-based cylinders DSBC, to ISO 15552

**FESTO**



Festo Core Range  
Solves the majority of your automation tasks

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Simply good: Expected high Festo quality  
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With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.

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for the  
star!

## Key features

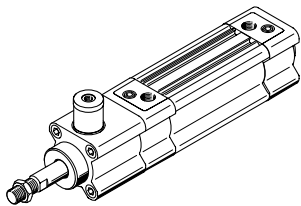
### At a glance



- Standards-based cylinders to ISO15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA24562, NFE49003.1 and UNI 10290)

- Double-acting
- For contactless position sensing
- Available with protection against rotation
- EX4: for use in potentially explosive areas
- Wide range of accessories enables the cylinder to be installed virtually anywhere
- Three types of cushioning available:
  - P cushioning: elastic cushioning rings/plates at both ends
  - PPS cushioning: pneumatic cushioning, self-adjusting at both ends
  - PPV cushioning: pneumatic cushioning, adjustable at both ends
- The variants can be configured according to individual needs using a modular product system
- Excellent flexibility thanks to a wide range of variants

### DSBC-...-C – with clamping unit, standard hole pattern

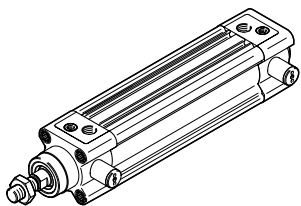


- Standard hole pattern
- Piston rod can be clamped in any position
- The piston rod can be held in position for long periods even with alternating loads, fluctuating operating pressure or leaks in the system

Additional measures are required for use in safety-related applications; in Europe, for example, the standards listed under the EC Machinery Directive must be observed.

Without additional measures in accordance with legally specified minimum requirements, the product is not suitable as a safety-related component in control systems.

### DSBC-...-E1/-E2/-E3 – with end-position locking, standard hole pattern

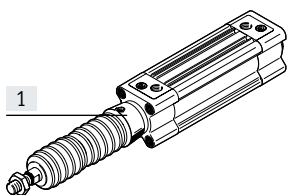


- Standard hole pattern
- Positive locking in the end position as a drop guard. In the event of a pressure drop, the piston rod is locked in its end position.
- Optionally at one or both ends

Additional measures are required for use in safety-related applications; in Europe, for example, the standards listed under the EC Machinery Directive must be observed.

Without additional measures in accordance with legally specified minimum requirements, the product is not suitable as a safety-related component in control systems.

### DSBC-...-P2 – with bellows kit DADB, standard hole pattern



The bellows protects the piston rod, the seal and the bearing from the effects of a wide range of media, which has a positive impact on the service life of these components.

The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air for the kit must be ducted via a pressure compensation hole in the connection part [1].

The kit protects the piston rod, seal and bearing against a wide variety of media, for example:

- Dust
- Chippings
- Oil
- Grease
- Petrol

### Ordering the bellows kit

An extended piston rod is absolutely essential if a bellows kit is to be used. The bellows kit can be ordered via the modular product system or as an accessory. The following must be noted in this case:

#### Ordering via the modular product system:

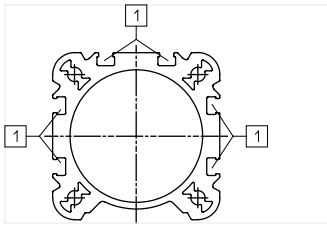
The bellows kit is supplied mounted on the bearing cap using feature P2. The required piston rod extension is automatically taken into consideration. This means that there is no need to specify a value for feature ...E.

#### Ordering as an accessory:

If the bellows kit is ordered as an accessory, the required value → page 52 must be entered for feature ...E in the modular product system.

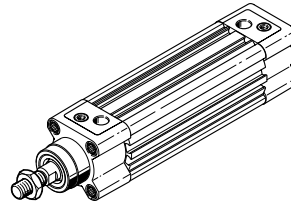
## Key features

### DSBC-...-D3 – Sensor slots on 3 sides



The piston position can be sensed on 3 sides of the drive if feature D3 is selected in the modular product system.

[1] Sensor slot for proximity switch



#### Note

DSBC-32-...-D3: Proximity switches with the mounting type “inserted in the slot lengthways” are not compatible.

### Position sensing/force control

With position transmitter SMAT, SDAT → page 62



Analogue position feedback possible

- Analogue output  
– 0 ... 10 V

With proportional-pressure regulator VPPM



Stepless adjustment of the gripping force possible

- Setpoint value input  
– 0 ... 10 V  
– 4 ... 20 mA

### For manufacturing Li-ion batteries

DSBC-...-F1A

Recommended for production plants for manufacturing Li-ion batteries. Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.

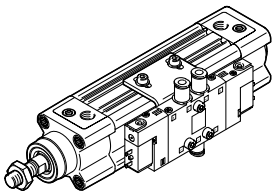
### Accessories

Please contact your Festo representative for information on which accessories are suitable for manufacturing Li-ion batteries.

### Optional accessories

Mounting kit DAVM

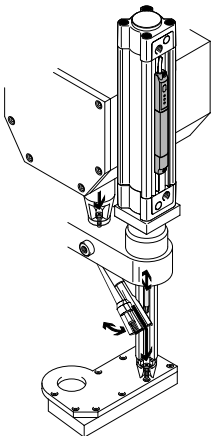
→ Page 1



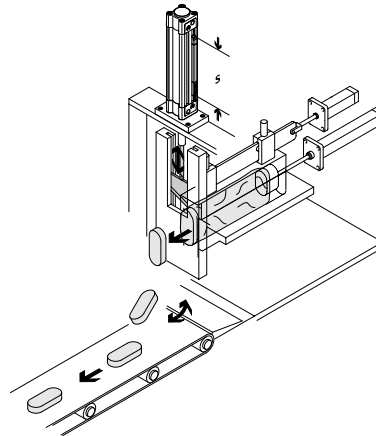
- For lateral valve mounting, directly on the drive
- Particularly suitable for decentralised use in large systems
- Mounting is only possible on the side on which the pneumatic connections are located

### Application examples






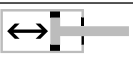

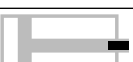
Automatic screw machine







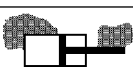
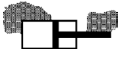

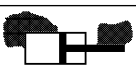


For process control



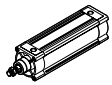
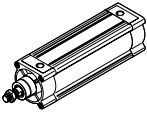
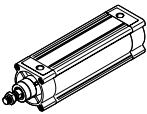
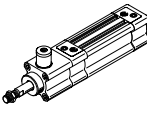
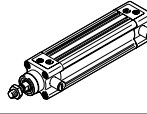
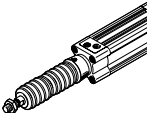
## Key features

| Variants from the modular product system   |   |   |
|--|---|---|
| Symbol   | Key features                              | Description   |
|  | Q Square piston rod                       | Protection against rotation. For position-oriented feeding  |
|  | C Clamping unit                           | Integrated clamping unit on the piston rod  |
|  | E1/E2/E3 End-position locking             | Positive locking in the end position as a drop guard. If there is a drop in pressure, the cylinder is secured in its end position to prevent it from dropping   |
|  | L Low friction                            | <ul style="list-style-type: none"> <li>• Break-away pressure: low</li> <li>• Dynamic response: suitable for very fast movements, especially at low operating pressures</li> </ul> Application example: very dynamic movements with no standstill  |
|  | U Constant, slow movement                 | <ul style="list-style-type: none"> <li>• Break-away pressure: Very low</li> <li>• Dynamic response: suitable for very slow, constant and stick-slip-free movements</li> </ul> Application example: slow, constant feed motion   |
|  | L1 Low friction for balancer applications | <ul style="list-style-type: none"> <li>• Break-away pressure: low</li> <li>• Dynamic response: suitable for slow movements with constant application of pressure at one end. System friction is independent of operating pressure</li> </ul> Application example: mass balancing (balancer, belt tensioner with constant feed motion) |
|  | T Through piston rod                      | For working at both ends with the same force in the forward and return stroke, for attaching external stops   |
|  | F Female thread on the piston rod         | –   |

## Key features

| Variants from the modular product system  |  |  |
|---|--|--|
| Symbol  | Key features   | Description  |
|    | R3 High corrosion protection   | All external cylinder surfaces comply with corrosion resistance class 3 to Festo standard 940 070. The piston rod is made from corrosion- and acid-resistant steel   |
|    | T1 Heat-resistant seals  | Temperature range 0 ... +120°C   |
|    | T3 Low temperature   | Temperature range -40 ... +80°C  |
|    | T4 Heat-resistant seals  | Temperature range 0 ... +150°C   |
|    | A1 Scraper variant   | Increased chemical resistance:<br>For longer service life, e.g. when using cooling lubricants.   |
|    | A2 Scraper variant   | Hard scraper:<br>The cylinder has a hard-chromium plated piston rod and a hard scraper, which protects against dry, dusty and viscous media  |
|    | A3 Scraper variant   | Unlubricated operation:<br>Cleaning processes degrease the piston rod. A special piston rod seal designed for unlubricated operation permits a longer service life compared to the standard seal                     |
|    | A6 Scraper variant   | Metal scraper:<br>The cylinder has a hard-chrome-plated piston rod and metal scraper, which scrapes off hard particles (e.g. welding spatter) that stick to the piston rod.<br>Application: Use in welding equipment |
|   | F1A Recommended for production plants for manufacturing Li-ion batteries | Cylinders free of copper, zinc and nickel ( $\leq 1\%$ )   |
|  | ...E Extended piston rod   | –  |
|  | ...L Extended piston rod thread  | –  |

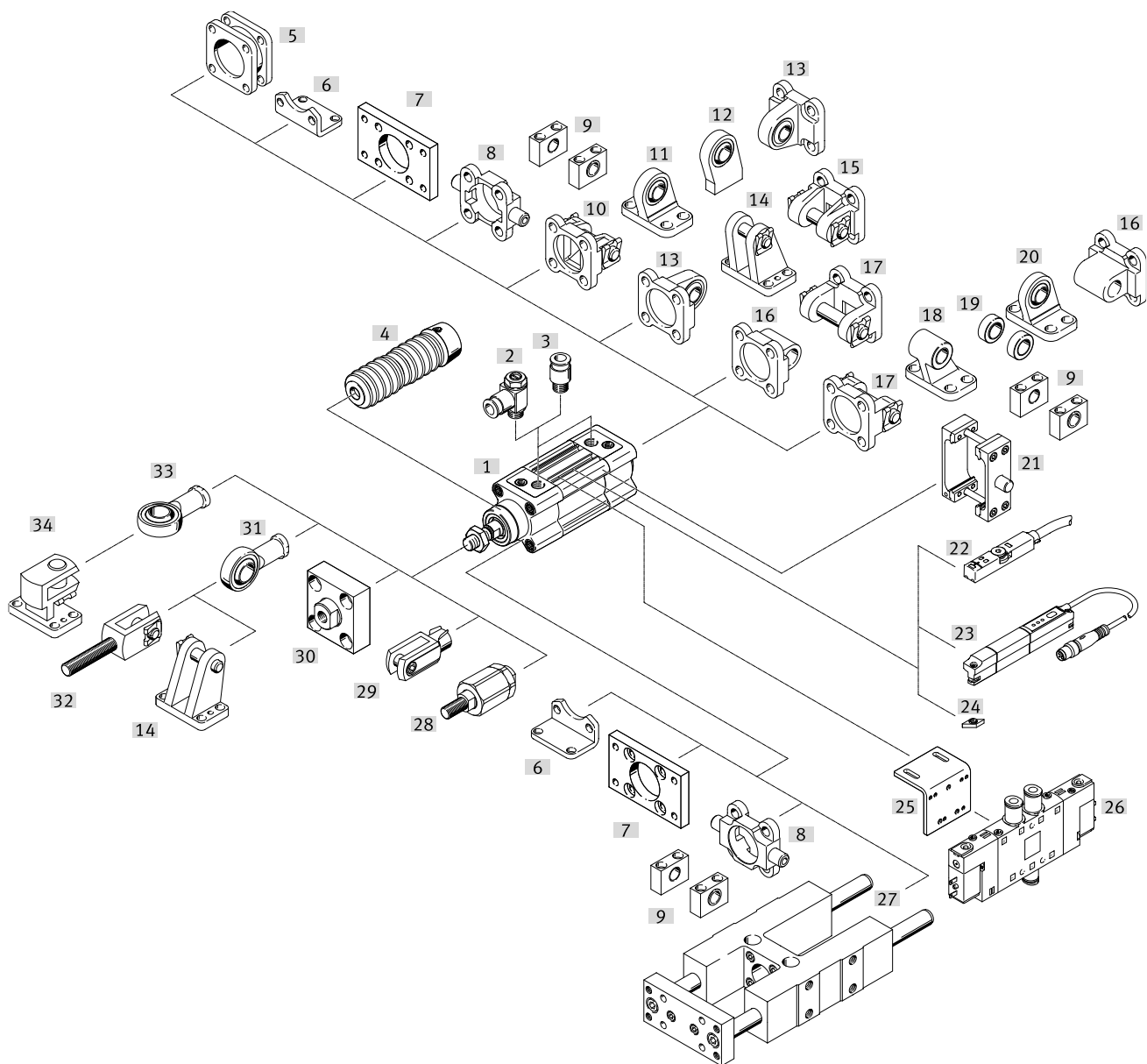
Product range overview

| Function  | Version   | Type                    | Piston ø                     | Stroke      | Through piston rod | Piston rod with female thread | Sensor slot on 3 sides | Cushioning | PPS | PPV |   |
|---|---|-------------------------|------------------------------|-------------|--------------------|-------------------------------|------------------------|------------|-----|-----|---|
|   |   |                         | [mm]                         | [mm]        |                    |                               |                        |            |     |     |   |
| Double-acting   | <b>DSBC-...</b>   |                         |                              |             |                    |                               |                        |            |     |     |   |
|   |    | DSBC-...                | 32, 40, 50, 63, 80, 100, 125 | 1 ... 2800  |                    | ■                             | ■                      | ■          | ■   | ■   | ■ |
|   | <b>DSBC-...-Q – with protection against rotation</b>                                |                         |                              |             |                    |                               |                        |            |     |     |   |
|   |    | DSBC-...-Q              | 32, 40, 50, 63, 80, 100      | 1 ... 1500  |                    | ■                             | ■                      | ■          | ■   | ■   | ■ |
|   | <b>DSBC-...-L/-U/-L1 – with special running characteristics</b>                     |                         |                              |             |                    |                               |                        |            |     |     |   |
|   |    | DSBC-...-L              | 32, 40, 50, 63, 80, 100      | 1 ... 2800  |                    | –                             | ■                      | ■          | ■   | ■   | ■ |
|   |   | DSBC-...-U              | 32, 40, 50, 63, 80, 100, 125 | 1 ... 2800  |                    | –                             | ■                      | ■          | ■   | ■   | ■ |
|   |   | DSBC-...-L1             | 32, 40, 50, 63, 80, 100, 125 | 10 ... 1000 |                    | –                             | ■                      | ■          | ■   | ■   | – |
|   | <b>DSBC-...-C – with clamping unit, standard hole pattern</b>                       |                         |                              |             |                    |                               |                        |            |     |     |   |
|   |  | DSBC-...-C              | 32, 40, 50, 63, 80, 100, 125 | 10 ... 2000 |                    | ■                             | ■                      | ■          | ■   | ■   | ■ |
| <b>DSBC-...-E1/-E2/-E3 – with end-position locking, standard hole pattern</b>       |   |                         |                              |             |                    |                               |                        |            |     |     |   |
|  | DSBC-...-E1/<br>-E2/-E3   | 32, 40, 50, 63, 80, 100 | 10 ... 2000                  |             | –                  | ■                             | ■                      | ■          | –   | ■   |   |
| <b>DSBC-...-P2 – with protective bellows, standard hole pattern</b>                 |   |                         |                              |             |                    |                               |                        |            |     |     |   |
|  | DSBC-...-P2   | 32, 40, 50, 63, 80, 100 | 10 ... 500                   |             | ■                  | ■                             | ■                      | ■          | ■   | ■   |   |

Product range overview

| Type   | Position sensing | High corrosion protection | Temperature range<br>0 ... +120°C | Temperature range<br>-40 ... +80°C | Temperature range<br>0 ... +150°C | Scraper variant<br>Increased chemical re-<br>sistance | Scraper variant<br>Hard scraper | Scraper variant for unlu-<br>bricated operation | Scraper variant metal<br>scraper | For manufacturing Li-ion<br>batteries | EU certification | Piston rod extension | Extended piston rod<br>thread |
|--|------------------|---------------------------|-----------------------------------|------------------------------------|-----------------------------------|---|---------------------------------|---|----------------------------------|---------------------------------------|------------------|----------------------|-------------------------------|
|  | A                | R3                        | T1                                | T3                                 | T4                                | A1  | A2                              | A3  | A6                               | F1A                                   | EX4              | ...E                 | ...L                          |
| <b>DSBC...-Q – with protection against rotation</b>                          |                  |                           |                                   |                                    |                                   |   |                                 |   |                                  |                                       |                  |                      |                               |
| DSBC...-Q  | ■                | ■                         | ■                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | ■                | ■                    | ■                             |
| <b>DSBC...-L/-U/-L1 – with special running characteristics</b>               |                  |                           |                                   |                                    |                                   |   |                                 |   |                                  |                                       |                  |                      |                               |
| DSBC...-L  | ■                | -                         | -                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | -                | ■                    | ■                             |
| DSBC...-U  | ■                | -                         | -                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | -                | ■                    | ■                             |
| DSBC...-L1   | ■                | -                         | -                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | -                | ■                    | ■                             |
| <b>DSBC...-C – with clamping unit, standard hole pattern</b>                 |                  |                           |                                   |                                    |                                   |   |                                 |   |                                  |                                       |                  |                      |                               |
| DSBC...-C  | ■                | -                         | -                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | -                | ■                    | ■                             |
| <b>DSBC...-E1/-E2/-E3 – with end-position locking, standard hole pattern</b> |                  |                           |                                   |                                    |                                   |   |                                 |   |                                  |                                       |                  |                      |                               |
| DSBC...-E1/ E2/ E3   | ■                | -                         | -                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | -                | ■                    | ■                             |
| <b>DSBC...-P2 – with protective bellows, standard hole pattern</b>           |                  |                           |                                   |                                    |                                   |   |                                 |   |                                  |                                       |                  |                      |                               |
| DSBC...-P2   | ■                | ■                         | -                                 | -                                  | -                                 | -   | -                               | -   | -                                | -                                     | -                | ■                    | ■                             |

## Peripherals overview



| Mounting attachments and accessories |                                 | Description   | DSBC...- |            |   |              |   | → Page/<br>Internet |
|--------------------------------------|---------------------------------|---|----------|------------|---|--------------|---|---------------------|
|                                      |                                 |   |          | L/U/<br>L1 | C | E1/E2/<br>E3 | T |                     |
| [1]                                  | Standards-based cylinder DSBC   | Standards-based cylinder without accessories, basic design  |          |            |   |              |   | 11                  |
| [2]                                  | One-way flow control valve GRLA | For regulating speed  | ■        | ■          | ■ | ■            | ■ | 63                  |
| [3]                                  | Push-in fitting QS              | For connecting tubing with standard O.D.  | ■        | ■          | ■ | ■            | ■ | QS                  |
| [4]                                  | Bellows kit DADB                | <ul style="list-style-type: none"> <li>Protects the cylinder (piston rod, seal and bearings) against a wide range of media and thus prevents premature wear</li> <li>Can only be used in combination with an extended piston rod (E)</li> </ul> | ■        | -          | - | -            | ■ | 52                  |
| [5]                                  | Multi-position kit DPNC         | For connecting two cylinders with the same piston diameter to form a multi-position cylinder  | ■        | -          | ■ | ■            | ■ | 56                  |
| [6]                                  | Foot mounting HNC/CRHNC         | For bearing or end caps   | ■        | ■          | ■ | ■            | ■ | 41                  |

1) Cannot be mounted in combination with E1.  
 Can only be mounted on the end cap in combination with E2.  
 Can only be mounted on the bearing cap in combination with E3.



## Peripherals overview

|              | Description                              | DSBC-...-   |            |   |              |                 | → Page/<br>Internet |    |
|--------------|--|---|------------|---|--------------|-----------------|---------------------|----|
|              |  |   | L/U/<br>L1 | C | E1/E2/<br>E3 | T               |                     |    |
| [7]          | Flange mounting<br>FNC/CRFNG             | • For bearing or end caps<br>• Cannot be used on the bearing cap in combination with bellows kit DADB | ■          | ■ | ■            | ■               | ■                   | 42 |
| [8]          | Trunnion flange<br>ZNCf/CRZNG            | • For bearing or end caps<br>• Cannot be used on the bearing cap in combination with bellows kit DADB | ■          | ■ | ■            | ■ <sup>1)</sup> | ■                   | 43 |
| [9]          | Trunnion support<br>LNZG/CRLNZG          | –   | ■          | ■ | ■            | ■ <sup>1)</sup> | ■                   | 44 |
| [10]<br>[15] | Swivel flange<br>SNC                     | For end caps  | ■          | ■ | ■            | ■               | –                   | 45 |
| [11]         | Clevis foot<br>LSNG                      | With spherical bearing  | ■          | ■ | ■            | ■               | –                   | 50 |
| [12]         | Clevis foot<br>LSNSG                     | Weld-on, with spherical bearing   | ■          | ■ | ■            | ■               | –                   | 50 |
| [13]         | Swivel flange<br>SNCS/CRSNCS/SNCS-...-R3 | With spherical bearing for end caps   | ■          | ■ | ■            | ■               | –                   | 47 |
| [14]         | Clevis foot<br>LBG/LBG-...-R3            | –   | ■          | ■ | ■            | ■               | –                   | 50 |
| [16]         | Swivel flange<br>SNCL                    | For end caps  | ■          | ■ | ■            | ■               | –                   | 48 |
| [17]         | Swivel flange<br>SNCB/SNCB-...-R3        | For end caps  | ■          | ■ | ■            | ■               | –                   | 46 |
| [18]         | Clevis foot<br>LNG/CRLNG                 | –   | ■          | ■ | ■            | ■               | –                   | 50 |
| [19] [20]    | Clevis foot<br>LSN                       | With spherical bearing  | ■          | ■ | ■            | ■               | –                   | 50 |
| [21]         | Trunnion flange kit<br>DAMT              | For mounting anywhere along the cylinder profile barrel   | ■          | ■ | ■            | ■               | ■                   | 49 |
| [22]         | Proximity switch<br>SME/SMT-8M/SDBT-MS   | Can be integrated into the cylinder profile   | ■          | ■ | ■            | ■               | ■                   | 61 |
| [23]         | Position transmitter<br>SMAT/SDAT        | • Continuously senses the position of the piston<br>• Has an analogue output                          | ■          | ■ | ■            | ■               | ■                   | 62 |
| [24]         | Slot nut<br>ABAN                         | Inserted in the slot from above   | ■          | ■ | ■            | ■               | ■                   | 63 |
| [25]         | Mounting kit<br>DAVM                     | For mounting the valve  | ■          | ■ | ■            | ■               | ■                   | 57 |
| [26]         | Solenoid valve<br>CPE/VUVG/VUVS          | For standards-based cylinders   | ■          | ■ | ■            | ■               | ■                   | 57 |
| [27]         | Guide unit<br>FENG                       | For protecting standards-based cylinders against rotation at high torques                             | ■          | ■ | ■            | –               | ■                   | 60 |
| [28]         | Self-aligning rod coupler<br>FK, CRFK    | To compensate for radial and angular deviations   | ■          | ■ | ■            | ■               | ■                   | 51 |
| [29]         | Rod clevis<br>SG/CRSG                    | Permits a swivelling movement of the cylinder in one plane  | ■          | ■ | ■            | ■               | ■                   | 51 |
| [30]         | Coupling piece<br>KSG                    | To compensate for radial deviations   | ■          | ■ | ■            | ■               | ■                   | 51 |
|              | Coupling piece<br>KSZ                    | For cylinders with a non-rotating piston rod to compensate for radial deviations                      | ■          | ■ | ■            | ■               | ■                   | 51 |
| [31] [33]    | Rod eye<br>SGS/CRSGS                     | With spherical bearing  | ■          | ■ | ■            | ■               | ■                   | 51 |
| [32]         | Rod clevis<br>SGA                        | With male thread  | ■          | ■ | ■            | ■               | ■                   | 51 |
| [34]         | Right-angle clevis foot<br>LQG           | –   | ■          | ■ | ■            | ■               | ■                   | 50 |
| –            | Slot cover<br>ABP-5-S                    | For protecting the sensor cables and the sensor slots from contamination                              | ■          | ■ | ■            | ■               | ■                   | 63 |

## Type codes

|      |   |  |
|------|---|--|
| 001  | Series  |  |
| DSBC | Standards-based cylinder, double-acting, based on ISO 15552 |  |

|     |                                  |  |
|-----|----------------------------------|--|
| 002 | Protection against rotation      |  |
|     | None                             |  |
| Q   | With protection against rotation |  |

|     |  |  |
|-----|--|--|
| 003 | Running characteristics                |  |
|     | Standard                               |  |
| L   | Low friction                           |  |
| U   | Uniform, slow movement                 |  |
| L1  | Low friction for balancer applications |  |

|     |                      |  |
|-----|----------------------|--|
| 004 | Piston diameter [mm] |  |
| 32  | 32                   |  |
| 40  | 40                   |  |
| 50  | 50                   |  |
| 63  | 63                   |  |
| 80  | 80                   |  |
| 100 | 100                  |  |
| 125 | 125                  |  |

|     |             |  |
|-----|-------------|--|
| 005 | Stroke [mm] |  |
| 20  | 20          |  |
| 25  | 25          |  |
| 30  | 30          |  |
| 40  | 40          |  |
| 50  | 50          |  |
| 60  | 60          |  |
| 70  | 70          |  |
| 80  | 80          |  |
| 100 | 100         |  |
| 125 | 125         |  |
| 150 | 150         |  |
| 160 | 160         |  |
| 200 | 200         |  |
| 250 | 250         |  |
| 300 | 300         |  |
| 320 | 320         |  |
| 400 | 400         |  |
| 500 | 500         |  |
| ... | 1 ... 2800  |  |

|     |               |  |
|-----|---------------|--|
| 006 | Clamping unit |  |
|     | None          |  |
| C   | Attached      |  |

|     |                           |  |
|-----|---------------------------|--|
| 007 | End-position locking      |  |
|     | None                      |  |
| E1  | Both sides                |  |
| E2  | With advanced piston rod  |  |
| E3  | With retracted piston rod |  |

|     |                    |  |
|-----|--------------------|--|
| 008 | Piston rod type    |  |
|     | At one end         |  |
| T   | Through piston rod |  |

|     |                        |  |
|-----|------------------------|--|
| 009 | Piston rod thread type |  |
|     | Male thread            |  |
| F   | Female thread          |  |

|     |                                      |  |
|-----|--------------------------------------|--|
| 010 | Profile type                         |  |
| D3  | Sensor slots on 3 profile sides      |  |
|     | Sensor slot on one profile side only |  |

|     |   |  |
|-----|---|--|
| 011 | Cushioning  |  |
| P   | Elastic cushioning rings/plates on both sides     |  |
| PPS | Pneumatic cushioning, self-adjusting at both ends |  |
| PPV | Pneumatic cushioning, adjustable at both ends     |  |

|     |                      |  |
|-----|----------------------|--|
| 012 | Position sensing     |  |
| A   | For proximity sensor |  |

|     |                           |  |
|-----|---------------------------|--|
| 013 | Corrosion protection      |  |
|     | Standard                  |  |
| R3  | High corrosion protection |  |

|     |                                 |  |
|-----|---------------------------------|--|
| 014 | Temperature range               |  |
|     | Standard                        |  |
| T1  | Heat-resistant seals max. 120°C |  |
| T3  | -40 ... +80°C                   |  |
| T4  | 0 ... +150°C                    |  |

|     |                              |  |
|-----|------------------------------|--|
| 015 | Protection against particles |  |
|     | Standard                     |  |
| P2  | Bellows on bearing cap       |  |

|     |                               |  |
|-----|-------------------------------|--|
| 016 | Scraper variant               |  |
|     | None                          |  |
| A1  | Increased chemical resistance |  |
| A2  | Hard scraper                  |  |
| A3  | For unlubricated operation    |  |
| A6  | Metal scraper                 |  |

|     |  |  |
|-----|--|--|
| 017 | Special material properties  |  |
|     | None   |  |
| F1A | Recommended for production facilities for the manufacture of lithium-ion batteries |  |

|     |                  |  |
|-----|------------------|--|
| 018 | EU certification |  |
|     | None             |  |
| EX4 | II 2GD           |  |

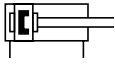
|      |                      |  |
|------|----------------------|--|
| 019  | Piston rod extension |  |
|      | None                 |  |
| ...E | 1 ... 500 mm         |  |

|      |                             |  |
|------|-----------------------------|--|
| 020  | Piston rod thread extension |  |
|      | None                        |  |
| ...L | 0 ... 70 mm                 |  |

## Datasheet

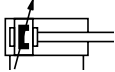
## Function

Elastic cushioning (P)



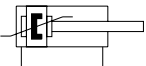
- Ø - Diameter  
32 ... 125 mm

Adjustable pneumatic cushioning PPV



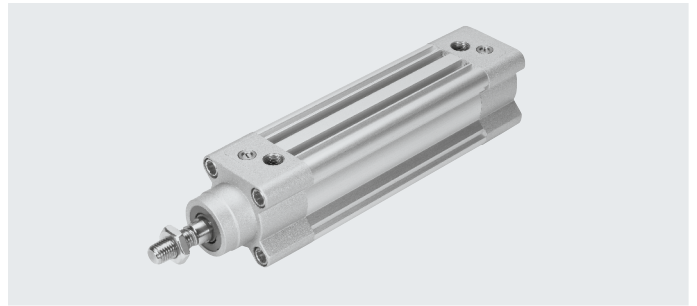
- | - Stroke length  
1 ... 2800 mm

Self-adjusting cushioning PPS



www.festo.com

- 🔧 - Repair service  
Ø 125 mm



| General technical data  |   |          |         |         |         |         |       |
|-------------------------|---|----------|---------|---------|---------|---------|-------|
| Piston Ø                | 32  | 40       | 50      | 63      | 80      | 100     | 125   |
| Design                  | Piston / piston rod / profile barrel              |          |         |         |         |         |       |
| Operating mode          | Double-acting                                     |          |         |         |         |         |       |
| Pneumatic connection    | G1/8  | G1/4     | G1/4    | G3/8    | G3/8    | G1/2    | G1/2  |
| Piston rod thread       | M10x1.25  | M12x1.25 | M16x1.5 | M16x1.5 | M20x1.5 | M20x1.5 | M27x2 |
| Stroke                  |   |          |         |         |         |         |       |
| DSBC... [mm]            | 1 ... 2800  |          |         |         |         |         |       |
| DSBC...-Q [mm]          | 1 ... 1500  |          |         |         |         |         | -     |
| DSBC...-L1 [mm]         | 10 ... 1000                                       |          |         |         |         |         |       |
| DSBC...-C [mm]          | 10 ... 2000                                       |          |         |         |         |         |       |
| DSBC...-E1/-E2/-E3 [mm] | 10 ... 2000                                       |          |         |         |         |         | -     |
| DSBC...-P2 [mm]         | 10 ... 500  |          |         |         |         |         | -     |
| DSBC...-E [mm]          | 1 ... 2000  |          |         |         |         |         |       |
| DSBC...-L [mm]          | 1 ... 2000  |          |         |         |         |         |       |
| Cushioning              |   |          |         |         |         |         |       |
| DSBC...-P               | Elastic cushioning rings/plates at both ends      |          |         |         |         |         |       |
| DSBC...-PPV             | Pneumatic cushioning, adjustable at both ends     |          |         |         |         |         |       |
| DSBC...-PPS             | Pneumatic cushioning, self-adjusting at both ends |          |         |         |         |         |       |
| Cushioning length       |   |          |         |         |         |         |       |
| DSBC...-PPV [mm]        | 17  | 19       | 22      | 22      | 31      | 31      | 45    |
| DSBC...-E1/-E2/-E3 [mm] | 17  | 19       | 15      | 15      | 15      | 15      | -     |
| Position sensing        | Via proximity switch                              |          |         |         |         |         |       |
| Type of mounting        | With female thread/accessories                    |          |         |         |         |         |       |
| Mounting position       | Any   |          |         |         |         |         |       |

## Datasheet

| Operating and environmental conditions       |       |  |               |              |              |               |              |               |   |
|--|-------|--|---------------|--------------|--------------|---------------|--------------|---------------|---|
| Piston ø                                     |       | 32   | 40            | 50           | 63           | 80            | 100          | 125           |   |
| Operating medium                             |       | Compressed air to ISO 8573-1:2010 [7:4:4]  |               |              |              |               |              |               |   |
| Note on the operating/pilot medium           |       | Lubricated operation possible (in which case lubricated operation will always be required) |               |              |              |               |              |               |   |
| Operating pressure                           |       |  |               |              |              |               |              |               |   |
| DSBC...                                      | [MPa] | 0.06 ... 1.2   |               | 0.04 ... 1.2 |              | 0.02 ... 1.0  |              |               |   |
|  | [bar] | 0.6 ... 12   |               | 0.4 ... 12   |              | 0.2 ... 10    |              |               |   |
| DSBC...-Q                                    | [MPa] | 0.1 ... 1.2  |               |              |              |               |              | –             |   |
|  | [bar] | 1 ... 12   |               |              |              |               |              | –             |   |
| DSBC...-Q-C                                  | [MPa] | 0.15 ... 1.0   |               |              |              |               |              | –             |   |
|  | [bar] | 1.5 ... 10   |               |              |              |               |              | –             |   |
| DSBC...-Q-T1                                 | [MPa] | 0.1 ... 0.8  |               |              |              |               |              | –             |   |
|  | [bar] | 1 ... 8  |               |              |              |               |              | –             |   |
| DSBC...-L <sup>1)</sup>                      | [MPa] | 0.03 ... 1.2   | 0.025 ... 1.2 |              | 0.02 ... 1.2 | 0.015 ... 1.2 |              | –             |   |
|  | [bar] | 0.3 ... 12   | 0.25 ... 12   |              | 0.2 ... 12   | 0.15 ... 12   |              | –             |   |
| DSBC...-U <sup>1)</sup>                      | [MPa] | 0.01 ... 1.2   |               |              |              | 0.005 ... 1.2 |              | 0.005 ... 1.0 |   |
|  | [bar] | 0.1 ... 12   |               |              |              | 0.05 ... 12   |              | 0.05 ... 10   |   |
| DSBC...-L1 <sup>1)</sup>                     | [MPa] | 0.03 ... 1.2   | 0.025 ... 1.2 |              | 0.02 ... 1.2 | 0.015 ... 1.2 |              | 0.01 ... 1.0  |   |
|  | [bar] | 0.3 ... 12   | 0.25 ... 12   |              | 0.2 ... 12   | 0.15 ... 12   |              | 0.1 ... 10    |   |
| DSBC...-C <sup>2)</sup>                      | [MPa] | 0.15 ... 1.0   |               |              |              |               |              |               |   |
|  | [bar] | 1.5 ... 10   |               |              |              |               |              |               |   |
| DSBC...-E1/-E2/-E3                           | [MPa] | 0.25 ... 1.2   |               | 0.15 ... 1.2 |              |               |              | –             |   |
|  | [bar] | 2.5 ... 12   |               | 1.5 ... 12   |              |               |              | –             |   |
| DSBC...-T <sup>3)</sup> /T3/-A2              | [MPa] | 0.1 ... 1.2  |               |              |              |               |              | 0.1 ... 1.0   |   |
|  | [bar] | 1 ... 12   |               |              |              |               |              | 1 ... 10      |   |
| DSBC...-T3-A6                                | [MPa] | 0.15 ... 1.2   |               |              |              |               |              |               |   |
|  | [bar] | 1.5 ... 12   |               |              |              |               |              |               |   |
| DSBC...-A3                                   | [MPa] | 0.15 ... 1.2   | 0.1 ... 1.2   |              | 0.06 ... 1.2 |               | 0.06 ... 1.0 |               |   |
|  | [bar] | 1.5 ... 12   | 1 ... 12      |              | 0.6 ... 12   |               | 0.6 ... 10   |               |   |
| DSBC...-A6                                   | [MPa] | 0.15 ... 1.2   |               |              |              |               |              |               |   |
|  | [bar] | 1.5 ... 12   |               |              |              |               |              |               |   |
| DSBC...-D3                                   | [MPa] | 0.08 ... 1.2   | 0.06 ... 1.2  |              | 0.04 ... 1.2 |               | 0.02 ... 1.0 |               |   |
|  | [bar] | 0.8 ... 12   | 0.6 ... 12    |              | 0.4 ... 12   |               | 0.2 ... 10   |               |   |
| Ambient temperature <sup>4)</sup>            |       |  |               |              |              |               |              |               |   |
| DSBC...                                      | [°C]  | –20 ... +80  |               |              |              |               |              |               |   |
| DSBC...-L/-U                                 | [°C]  | +5 ... +80   |               |              |              |               |              |               |   |
| DSBC...-L1                                   | [°C]  | 0 ... +60  |               |              |              |               |              |               |   |
| DSBC...-A1                                   | [°C]  | 0 ... +80  |               |              |              |               |              |               |   |
| DSBC...-A6                                   | [°C]  | –20 ... +80  |               |              |              |               |              |               |   |
| DSBC...-T1-A6                                | [°C]  | 0 ... +120   |               |              |              |               |              |               |   |
| DSBC...-T3-A6                                | [°C]  | –40 ... +80  |               |              |              |               |              |               |   |
| DSBC...-T4-A6                                | [°C]  | 0 ... +150   |               |              |              |               |              |               |   |
| DSBC...-C                                    | [°C]  | –10 ... +80  |               |              |              |               |              |               |   |
| DSBC...-T1                                   | [°C]  | 0 ... +120   |               |              |              |               |              |               |   |
| DSBC...-T3                                   | [°C]  | –40 ... +80  |               |              |              |               |              |               |   |
| DSBC...-T4                                   | [°C]  | 0 ... +150   |               |              |              |               |              |               |   |
| DSBC...-P2                                   | [°C]  | –10 ... +80  |               |              |              |               |              |               | – |
| DSBC...-EX4                                  | [°C]  | –20 ... +60  |               |              |              |               |              |               |   |
| Corrosion resistance class CRC <sup>5)</sup> |       |  |               |              |              |               |              |               |   |
| DSBC...                                      |       | 2 - Moderate corrosion stress  |               |              |              |               |              |               |   |
| DSBC...-R3                                   |       | 3 - High corrosion stress  |               |              |              |               |              |               |   |

1) Values apply only for strokes ≤ 500 mm and after 10 double strokes.

In combination with cushioning PPV/PPS, the specifications only apply outside the cushioning range.

2) Note min. release pressure → page 19

3) With variant T (through piston rod), the minimum operating pressure may increase slightly after an idle period of > 24 hours.

4) Note operating range of proximity switches.

5) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Datasheet

| Weight [g]  |     |      |      |      |      |      |       |
|---|-----|------|------|------|------|------|-------|
| Piston ø  | 32  | 40   | 50   | 63   | 80   | 100  | 125   |
| <b>DSBC...</b>                                      |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 465 | 740  | 1190 | 1740 | 2660 | 3665 | 6611  |
| Additional weight per 10 mm stroke                  | 27  | 37   | 56   | 62   | 92   | 101  | 151   |
| Moving mass with 0 mm stroke                        | 110 | 205  | 365  | 430  | 810  | 1000 | 2245  |
| Moving mass per 10 mm stroke                        | 9   | 16   | 25   | 25   | 39   | 39   | 63    |
| <b>DSBC...-Q</b>                                    |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 503 | 755  | 1241 | 1821 | 2717 | 3827 | –     |
| Additional weight per 10 mm stroke                  | 26  | 32   | 51   | 57   | 85   | 94   | –     |
| Moving mass with 0 mm stroke                        | 103 | 170  | 332  | 391  | 757  | 890  | –     |
| Moving mass per 10 mm stroke                        | 8   | 11   | 20   | 20   | 32   | 32   | –     |
| <b>DSBC...-L1</b>                                   |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 465 | 741  | 1200 | 1759 | 2651 | 3693 | 6651  |
| Additional weight per 10 mm stroke                  | 27  | 37   | 56   | 62   | 92   | 101  | 151   |
| Moving mass with 0 mm stroke                        | 110 | 206  | 375  | 449  | 801  | 1028 | 2285  |
| Moving mass per 10 mm stroke                        | 9   | 16   | 25   | 25   | 39   | 39   | 63    |
| <b>DSBC...-C</b>                                    |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 745 | 1175 | 1940 | 2920 | 5075 | 6965 | 12860 |
| Additional weight per 10 mm stroke                  | 25  | 35   | 56   | 62   | 95   | 103  | 151   |
| Moving mass with 0 mm stroke                        | 160 | 290  | 540  | 620  | 1200 | 1425 | 3035  |
| Moving mass per 10 mm stroke                        | 9   | 16   | 25   | 25   | 39   | 39   | 63    |
| <b>DSBC...-E1/-E2/-E3</b>                           |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     |     |      |      |      |      |      |       |
| DSBC...-E1  | 505 | 780  | 1312 | 1862 | 3018 | 4023 | –     |
| DSBC...-E2  | 485 | 760  | 1251 | 1801 | 2839 | 3844 | –     |
| DSBC...-E3  | 485 | 760  | 1251 | 1801 | 2839 | 3844 | –     |
| Additional weight per 10 mm stroke                  | 27  | 37   | 56   | 62   | 92   | 101  | –     |
| Moving mass with 0 mm stroke                        | 110 | 205  | 365  | 430  | 810  | 1000 | –     |
| Moving mass per 10 mm stroke                        | 9   | 16   | 25   | 25   | 39   | 39   | –     |
| <b>DSBC...-T</b>                                    |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 581 | 924  | 1523 | 2103 | 3243 | 4353 | 7450  |
| Additional weight per 10 mm stroke                  | 34  | 53   | 81   | 87   | 131  | 140  | 214   |
| Moving mass with 0 mm stroke                        | 181 | 339  | 613  | 684  | 1292 | 1516 | 3084  |
| Moving mass per 10 mm stroke                        | 18  | 32   | 50   | 50   | 78   | 78   | 126   |
| <b>DSBC...-F</b>                                    |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 453 | 721  | 1145 | 1695 | 2570 | 3575 | 6391  |
| Additional weight per 10 mm stroke                  | 27  | 37   | 56   | 62   | 92   | 101  | 151   |
| Moving mass with 0 mm stroke                        | 98  | 186  | 320  | 385  | 720  | 910  | 2023  |
| Moving mass per 10 mm stroke                        | 9   | 16   | 25   | 25   | 39   | 39   | 63    |
| <b>DSBC...-D3</b>                                   |     |      |      |      |      |      |       |
| Product weight with 0 mm stroke                     | 480 | 768  | 1216 | 1774 | 2720 | 3728 | 6768  |
| Additional weight per 10 mm stroke                  | 31  | 49   | 78   | 92   | 143  | 165  | 247   |
| Moving mass with 0 mm stroke                        | 110 | 205  | 365  | 430  | 810  | 1000 | 2245  |
| Moving mass per 10 mm stroke                        | 9   | 16   | 25   | 25   | 39   | 39   | 63    |
| <b>DSBC...E</b>                                     |     |      |      |      |      |      |       |
| Additional weight per piston rod extension of 10 mm | 9   | 16   | 25   | 25   | 39   | 39   | 63    |
| <b>DSBC...L</b>                                     |     |      |      |      |      |      |       |
| Additional weight per piston rod extension of 10 mm | 6   | 8    | 14   | 14   | 22   | 22   | 41    |

## Datasheet

| ATEX <sup>1)</sup>                                |   |
|---|---|
| ATEX category for gas                             | II 2G                                       |
| Type of ignition protection for gas               | Ex h IIC T4 Gb                              |
| ATEX category for dust                            | II 2D                                       |
| Type of ignition protection for dust              | Ex h IIIC T120°C Db                         |
| Explosion-proof ambient temperature               | -20°C ≤ Ta ≤ +60°C                          |
| CE marking (see declaration of conformity)        | To EU Explosion Protection Directive (ATEX) |
| UKCA marking (see declaration of conformity)      | To UK explosion regulations                 |
| Explosion protection certification outside the EU | EPL Gb (GB)                                 |
|   | EPL Db (GB)                                 |

1) Note the ATEX certification of the accessories.

| Forces [N] and impact energy [J]        |                   |      |      |      |      |      |      |
|---|-------------------|------|------|------|------|------|------|
| Piston ø                                | 32                | 40   | 50   | 63   | 80   | 100  | 125  |
| Theoretical force at 6 bar, advancing   | 483               | 754  | 1178 | 1870 | 3016 | 4712 | 7363 |
| Theoretical force at 6 bar, retracting  | 415               | 633  | 990  | 1682 | 2721 | 4418 | 6881 |
| Max. impact energy in the end positions |                   |      |      |      |      |      |      |
| DSBC...                                 | 0.4 <sup>1)</sup> | 0.7  | 1.0  | 1.3  | 1.8  | 2.5  | 3.3  |
| DSBC...-L/-U/-T1/-T3/-T4                | 0.2 <sup>1)</sup> | 0.35 | 0.5  | 0.65 | 0.9  | 1.25 | 1.65 |
| DSBC...-L1                              | 0.1               | 0.2  | 0.3  | 0.4  | 0.9  | 1.25 | 1.65 |

1) The max. energy in combination with the trunnion mounting kit DAMT is 0.1 J.

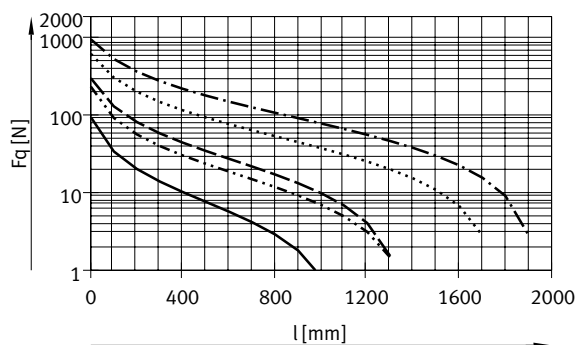
Permissible impact speed: 
$$V = \sqrt{\frac{2 \times E}{m_1 + m_2}}$$

Maximum permissible mass: 
$$m_2 = \frac{2 \times E}{v^2} - m_1$$

- V Permissible impact speed
- E Max. impact energy
- m1 Moving mass (drive)
- m2 Moving payload

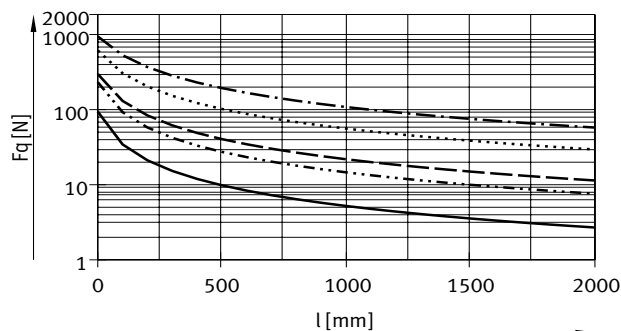
### Max. transverse force F<sub>q</sub> as a function of stroke length l

Horizontal installation



- ø 32
- · - · - · ø 40
- - - - - ø 50/63
- · · · · ø 80/100
- · - · - · ø 125

Vertical installation



#### Note

No transverse forces are permitted in combination with feature DSBC...-L1.

| Permissible torsional backlash for variant Q – with protection against rotation |     |       |      |       |       |       |       |
|---|-----|-------|------|-------|-------|-------|-------|
| Piston ø  | 32  | 40    | 50   | 63    | 80    | 100   |       |
| Torsional backlash  | [°] | ±0.65 | ±0.6 | ±0.45 | ±0.45 | ±0.45 | ±0.45 |

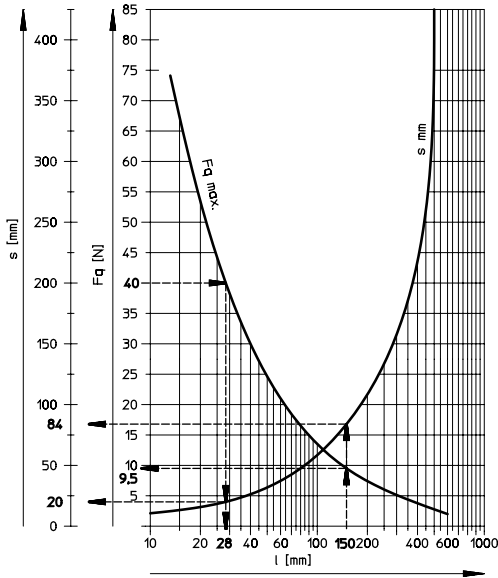
Datasheet

Max. transverse force  $F_q$  as a function of stroke length  $l$  and lever arm  $s$

Q – With protection against rotation

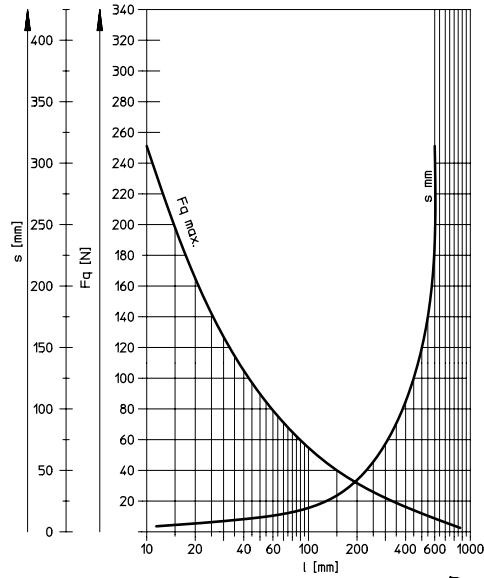
Ø 32

Max. torque = 800 Nmm/max. stroke = 300 mm



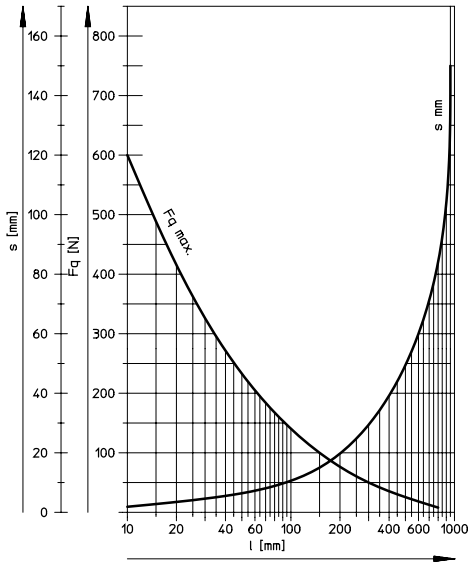
Ø 40

Max. torque = 1100 Nmm/max. stroke = 400 mm



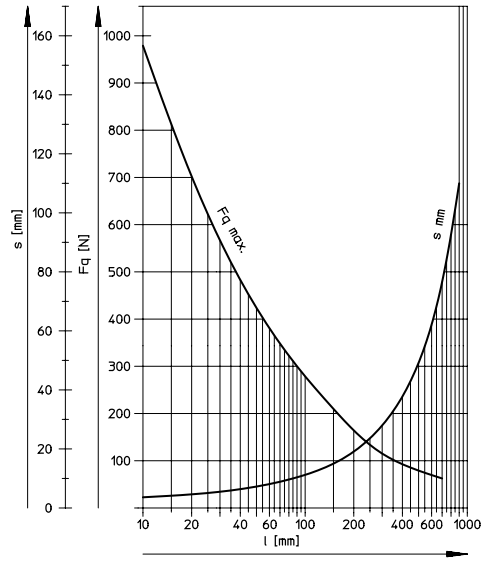
Ø 50/63

Max. torque = 1500 Nmm/max. stroke = 500 mm



Ø 80/100

Max. torque = 3000 Nmm/max. stroke = 600 mm



Examples for piston diameter 32 mm

Example 1:

Stroke length  $l$  = 150 mm

Result: permissible

Lateral force  $F_q$  = 9.5 N

Lever arm  $s$  = 84 mm

Example 2:

Lateral force  $F_q$  = 40°N

Result: permissible

Stroke length  $l$  = 28 mm

Lever arm  $s$  = 20 mm

Example 3:

Stroke length  $l$  = 150 mm

Lever arm  $s$  = 100 mm

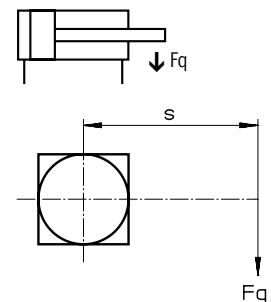
$$F_q = \frac{M}{s} = \frac{800 \text{ Nmm}}{100 \text{ mm}}$$

$M$  = max. torque

$s$  = lever arm

Result: permissible

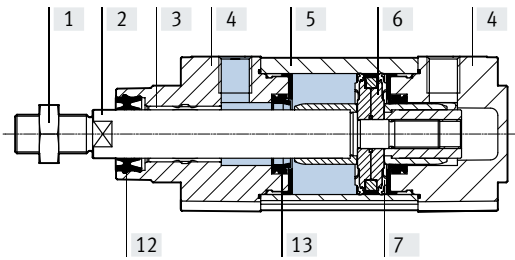
$F_q = 8 \text{ N} < F_{q_{max.}} = 9.5 \text{ N}$



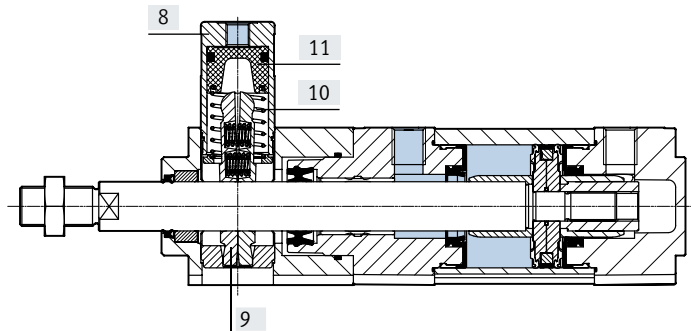
## Datasheet

### Materials

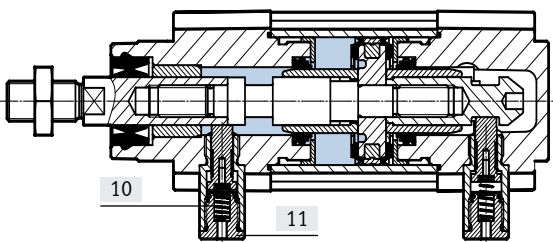
Sectional view – Basic design



With clamping unit



With end-position locking



Standards-based cylinder

|      |   |  |
|------|---|--|
| [1]  | Nut                                       |  |
|      | DSBC...                                   | Galvanised steel                               |
|      | DSBC...-R3                                | High-alloy stainless steel                     |
|      | DSBC...-F1A                               | Steel, chemically nickel-plated                |
| [2]  | Piston rod                                |  |
|      | DSBC...                                   | High-alloy steel                               |
|      | DSBC...-R3                                | High-alloy stainless steel                     |
|      | DSBC...-A2/-A6/-T3-A6/-T4-A6              | Hard-chrome-plated tempered steel              |
|      | DSBC...-T1-A6                             | High-alloy stainless steel, hard chrome-plated |
| [3]  | Bearings                                  |  |
|      | DSBC...                                   | POM  |
|      | DSBC...-E1/-E2/-E3/-SL/-EX4/-A2/-Q/-Q-T1  | Bronze   |
|      | DSBC...-L/-U/-T1/-T1-A1/-T1-A6/-T4-A6/-D3 | Metal polymer compound                         |
| [4]  | Cover                                     | Coated die-cast aluminium                      |
| [5]  | Profile tube                              | Anodised wrought aluminium alloy               |
| [6]  | Cushioning boss                           |  |
|      | DSBC...                                   | POM  |
|      | DSBC...-L/-T1/-T1-A1/-T1-A6               | Metal polymer compound                         |
|      | DSBC...-T4/-T4-A6                         | Anodised wrought aluminium alloy               |
| [7]  | Piston seal                               |  |
|      | DSBC...                                   | TPE-U(PU)                                      |
|      | DSBC...-L/-U/-T1/-T4                      | FPM  |
|      | DSBC...-T3                                | TPE-U (PU) (suitable for low temperatures)     |
|      | DSBC...-L1                                | HNBR   |
| [8]  | Housing, clamping unit                    | Anodised wrought aluminium alloy               |
| [9]  | Clamping jaws, clamping unit              | Brass  |
| [10] | Spring                                    |  |
|      | DSBC...-C                                 | Spring steel                                   |
|      | DSBC...-E1/E2/E3                          | High-alloy stainless steel                     |
| [11] | Piston                                    |  |
|      | DSBC...-C                                 | POM  |
|      | DSBC...-E1/E2/E3                          | Hardened steel                                 |



## Datasheet

| Standards-based cylinder |   |
|--------------------------|---|
| [12]                     | Piston rod wiper seal   |
|                          | DSBC... TPE-U(PU)   |
|                          | DSBC...-L/-U FPM  |
|                          | DSBC...-L1 HNBR   |
|                          | DSBC...-T1/-T4/-A1 FPM  |
|                          | DSBC...-T3 TPE-U(PU)  |
|                          | DSBC...-T4-A6 Brass   |
|                          | DSBC...-A3 UHMW-PE  |
| [13]                     | Buffer seal   |
|                          | DSBC... PUR   |
|                          | DSBC...-L TPE-U(PU)   |
|                          | DSBC...-U/-T1/-T1-A1/-T1-A6/-Q-T1/-T4 FPM   |
|                          | DSBC...-T3 PUR (suitable for low temperatures)  |
| -                        | Piston rod scraper  |
|                          | DSBC...-A6/-T3-A6 CuZn  |
|                          | DSBC...-T3/-A2 PTFE-reinforced  |
|                          | DSBC...-T4-A6 Brass   |
|                          | DSBC...-D3 TPE-E  |
| -                        | Housing, end-position locking High-alloy steel  |
| -                        | Flange screw  |
|                          | DSBC... Galvanised steel  |
|                          | DSBC...-F1A Steel, chemically nickel-plated   |
| -                        | Note on materials   |
|                          | DSBC... RoHS-compliant  |
|                          | DSBC...-F1A Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
|                          | LABS (PWIS) conformity  |
|                          | DSBC... VDMA 24364-B1/B2-L  |
|                          | DSBC...-L/U/-T3/-T4/-A3 VDMA 24364-Zone III   |
|                          | DSBC...-F1A VDMA 24364-C1-L   |
|                          | Cleanroom class   |
|                          | DSBC-32 ... 50 Class 6 to ISO 14644-1   |

## Datasheet

## Technical data DBSC-...-E1/-E2/-E3 – With end-position locking

- End-position locking should only be used in conjunction with double-acting cylinders with exhaust air flow control in order to ensure that the lock is always completely released prior to starting the drive movement.
- The end-position locking may only be released if the forces at the piston have reached equilibrium. Otherwise, a sudden movement of the piston rod could cause accidents. Blocking off the compressed air supply at both ends (e.g. with a 5/3-way valve) does not provide any safety.
- The piston rod can be locked in any stroke position once the drive is brought mechanically into its end position.
- A very tightly set end-position cushioning (more than 50% closed) can result in the locking bolt not engaging reliably, resulting in premature wear.
- The exhaust bore must not be closed.

| Piston $\varnothing$                              | 32                                       | 40  | 50          | 63   | 80   | 100  |
|---|--|-----|-------------|------|------|------|
| Operating mode of end-position locking            | Positive interlocking with stop cylinder |     |             |      |      |      |
|   | Release through compressed air           |     |             |      |      |      |
| Static holding force [N]                          | 500                                      | 500 | 2000        | 2000 | 5000 | 5000 |
| Max. axial backlash with end position locked [mm] | 1.3                                      | 1.3 | 1.3         | 1.5  | 1.5  | 1.5  |
| Min. unlocking pressure                           | [MPa] $\leq 0.25$                        |     | $\leq 0.15$ |      |      |      |
|   | [bar] $\leq 2.5$                         |     | $\leq 1.5$  |      |      |      |
| Max. locking pressure                             | [MPa] $\geq 0.05$                        |     |             |      |      |      |
|   | [bar] $\geq 0.5$                         |     |             |      |      |      |

## Sizing example

When sizing pneumatic cylinders it is recommended as a basic principle that only 50% of the indicated theoretical forces (see above) be used.

**Assuming:**

Mounting position = vertical

Workpiece load = 44 kg

$$F = m \times g = 44 \text{ kg} \times 9.81 \text{ m/s}^2 \\ = 431.6 \text{ N}$$

**To be determined:**

Suitable piston diameter

**Example with 32 mm piston diameter:**

Theoretical force at 6 bar, advancing = 483 N

50% of the theoretical force = 241.5 N

Static holding force with 32 mm piston diameter = 500 N

The static holding force of end-position locking is within the permissible range (max. 500 N) for a workpiece load of 44 kg (431.6 N); however, the cylinder would be at 89% capacity.

**Results:**

A cylinder with a piston diameter of 40 mm is therefore recommended for this application.

## Datasheet

## Technical data DSBC...C – with clamping unit

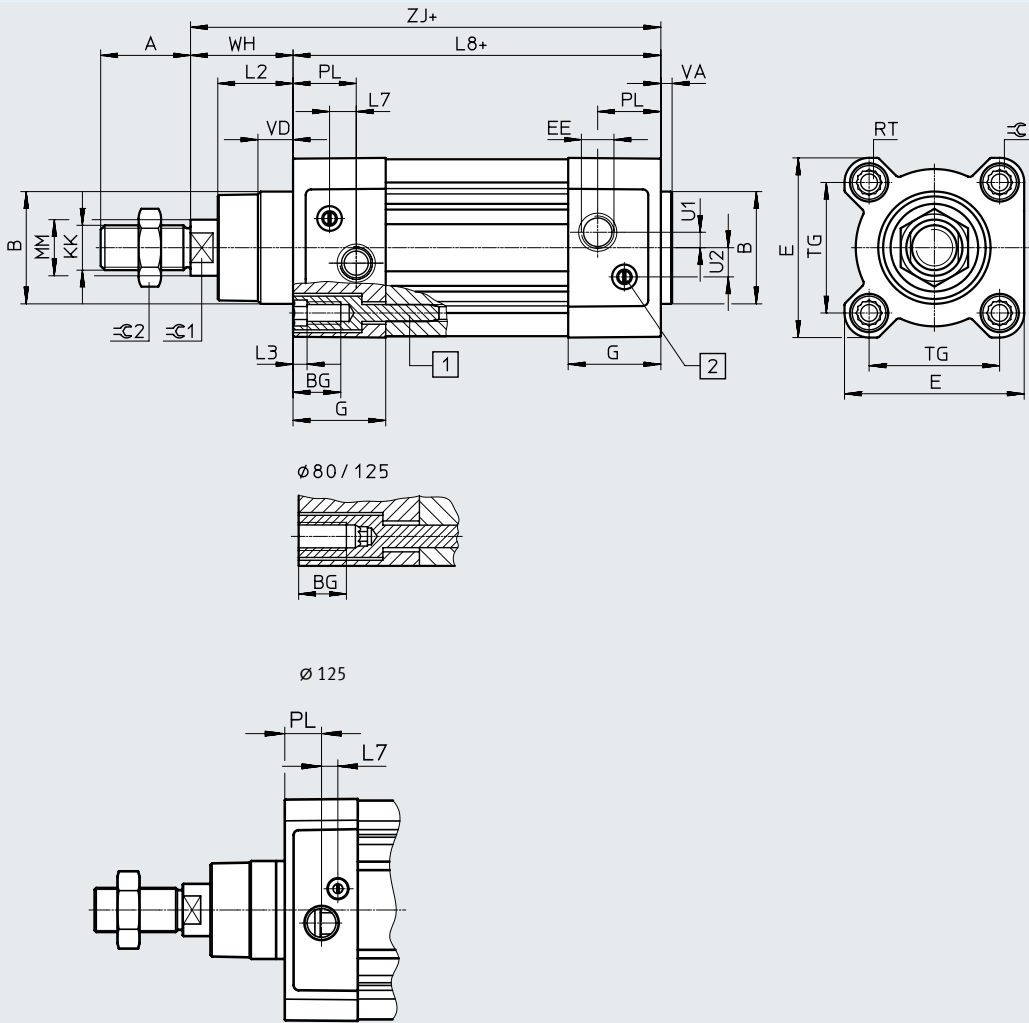
- The specified holding force refers to a static load. If this value is exceeded, the piston rod may slip. Dynamic forces occurring during operation must not exceed the static holding force. The clamping unit is not backlash-free in the clamped condition if varying loads are applied to the piston rod.
- The clamping unit may only be released if the forces at the piston have reached equilibrium. Otherwise, a sudden movement of the piston rod could cause accidents. Blocking off the compressed air supply at both ends (e.g. with a 5/3-way valve) does not provide any safety.

| Piston $\varnothing$            |       | 32                             | 40   | 50   | 63   | 80   | 100  | 125  |
|---------------------------------|-------|--------------------------------|------|------|------|------|------|------|
| Mode of operation clamping unit |       | At both ends                   |      |      |      |      |      |      |
|                                 |       | Clamping through spring force  |      |      |      |      |      |      |
|                                 |       | Release through compressed air |      |      |      |      |      |      |
| Static holding force            | [N]   | 600                            | 1000 | 1400 | 2000 | 5000 | 5000 | 7500 |
| Max. axial play under load      | [mm]  | 0.5                            | 0.5  | 0.8  | 0.8  | 0.8  | 0.8  | 1.8  |
| Min. release pressure           | [MPa] | 0.3                            |      |      |      |      |      |      |
|                                 | [bar] | 3                              |      |      |      |      |      |      |

Datasheet

Dimensions

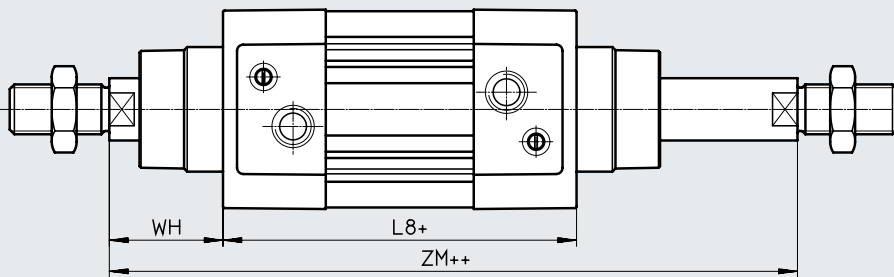
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- + = plus stroke length
- [1] Socket head screw with female thread for mounting components
- [2] Adjusting screw for adjustable end-position cushioning
- [3] Sensor slot for proximity switch

Variant

T – Through piston rod



- + = plus stroke length
- ++ = plus 2x stroke length

## Datasheet

| ∅<br>[mm] | A<br>-0.5 | B<br>∅<br>d11 | BG<br>min. | E<br>+0.5 | EE   | G<br>-0.2 | U2)<br>±0.1 | U1<br>±0.1 | KK       |
|-----------|-----------|---------------|------------|-----------|------|-----------|-------------|------------|----------|
| 32        | 22        | 30            | 16         | 45        | G1/8 | 28        | 5.7         | 5.25       | M10x1.25 |
| 40        | 24        | 35            | 16         | 54        | G1/4 | 33        | 8           | 4          | M12x1.25 |
| 50        | 32        | 40            | 16         | 64        | G1/4 | 33        | 10.4        | 5.5        | M16x1.5  |
| 63        | 32        | 45            | 16         | 75        | G3/8 | 40.5      | 12.75       | 6.25       | M16x1.5  |
| 80        | 40        | 45            | 17         | 93        | G3/8 | 43        | 12.5        | 8          | M20x1.5  |
| 100       | 40        | 55            | 17         | 110       | G1/2 | 48        | 13.5        | 10         | M20x1.5  |
| 125       | 54        | 60            | 20         | 136       | G1/2 | 44.7      | 13          | 8          | M27x2    |

| ∅<br>[mm] | L2                   | L3<br>max. | L7  | L8<br>±0.4 | MM<br>∅ | PL<br>±0.1 | RT  | TG<br>±0.3 |
|-----------|----------------------|------------|-----|------------|---------|------------|-----|------------|
| 32        | 18 <sub>-0.2</sub>   | 5          | 6.5 | 94         | 12      | 19.5       | M6  | 32.5       |
| 40        | 21.3 <sub>-0.2</sub> | 5          | 7.5 | 105        | 16      | 22.5       | M6  | 38         |
| 50        | 26.8 <sub>-0.2</sub> | 5          | 9.5 | 106        | 20      | 22.5       | M8  | 46.5       |
| 63        | 27 <sub>-0.2</sub>   | 5          | 9   | 121        | 20      | 27.5       | M8  | 56.5       |
| 80        | 34.2 <sub>-0.2</sub> | –          | 11  | 128        | 25      | 30         | M10 | 72         |
| 100       | 38 <sub>-0.2</sub>   | –          | 7.5 | 138        | 25      | 31.5       | M10 | 89         |
| 125       | 45.5 <sub>-0.3</sub> | –          | 10  | 160        | 32      | 22.5       | M12 | 110        |

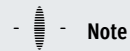
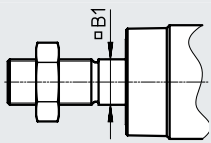
| ∅<br>[mm] | VA                | VD<br>+0.5 | WH<br>+2.2 | ZJ<br>+1.8 | ZM<br>+1 | ⊖C1 | ⊖C2 | ⊖C3 |
|-----------|-------------------|------------|------------|------------|----------|-----|-----|-----|
| 32        | 4 <sub>-0.2</sub> | 10         | 25         | 119.1      | 146.1    | 10  | 17  | 6   |
| 40        | 4 <sub>-0.2</sub> | 10.5       | 28.7       | 133.9      | 164.8    | 13  | 19  | 6   |
| 50        | 4 <sub>-0.2</sub> | 11.5       | 35.6       | 141.8      | 179.8    | 17  | 24  | 8   |
| 63        | 4 <sub>-0.2</sub> | 15         | 35.9       | 157.1      | 195.4    | 17  | 24  | 8   |
| 80        | 4 <sub>-0.2</sub> | 15.7       | 45.4       | 173.6      | 221      | 22  | 30  | 6   |
| 100       | 4 <sub>-0.2</sub> | 19.2       | 49.3       | 187.5      | 238.8    | 22  | 30  | 6   |
| 125       | 6 <sub>-0.3</sub> | 20.5       | 64.1       | 225        | 290      | 27  | 41  | 8   |

## Datasheet

### Dimensions – Variants

Download CAD data → [www.festo.com](http://www.festo.com)

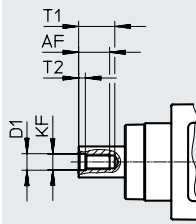
Q – With protection against rotation



**Note**

In combination with variant T, the piston rod is protected against rotation at one end.

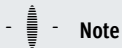
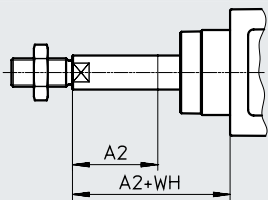
F – Female thread



**Note**

In combination with variant T, the piston rod has female threads at both ends.

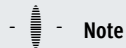
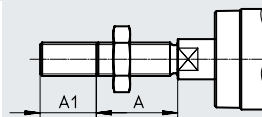
...E – Extended piston rod



**Note**

Piston rod extension at one end in combination with variant T.  
In combination with variants T and Q, the piston rod is extended only at the square piston rod

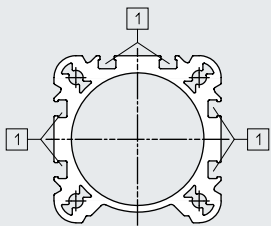
...L – Extended piston rod thread



**Note**

In combination with variant T, the piston rod thread is extended at both ends.

D3 – Sensor slot on 3 sides



[1] Sensor slot for proximity switch

## Datasheet

| ∅<br>[mm] | A  | A1   |      | A2   |      | AF<br>min. |
|-----------|----|------|------|------|------|------------|
|           |    | min. | max. | min. | max. |            |
| 32        | 22 | 1    | 35   | 1    | 500  | 12         |
| 40        | 24 | 1    | 35   | 1    | 500  | 12         |
| 50        | 32 | 1    | 70   | 1    | 500  | 16         |
| 63        | 32 | 1    | 70   | 1    | 500  | 16         |
| 80        | 40 | 1    | 70   | 1    | 500  | 20         |
| 100       | 40 | 1    | 70   | 1    | 500  | 20         |
| 125       | 54 | 1    | 70   | 1    | 500  | 32         |

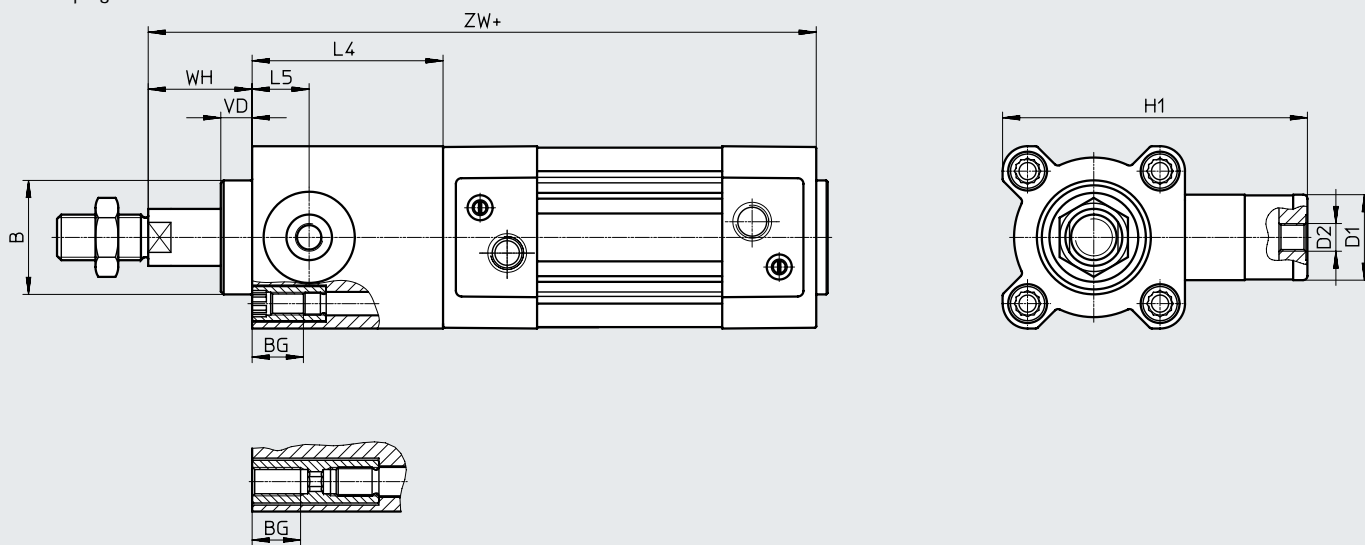
| ∅<br>[mm] | B1 | D1   | KF  | T1   | T2  | WH<br>+2.2 |
|-----------|----|------|-----|------|-----|------------|
|           |    |      |     | max. |     |            |
| 32        | 10 | 6.4  | M6  | 16   | 2.6 | 25         |
| 40        | 12 | 8.4  | M8  | 16   | 3.3 | 28.7       |
| 50        | 16 | 10.5 | M10 | 21   | 4.7 | 35.6       |
| 63        | 16 | 10.5 | M10 | 21   | 4.7 | 35.9       |
| 80        | 20 | 13   | M12 | 26.5 | 6.1 | 45.4       |
| 100       | 20 | 13   | M12 | 26.5 | 6.1 | 49.3       |
| 125       | –  | 17   | M16 | 40   | 8   | 64.1       |

Datasheet

Dimensions – Variants

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C – Clamping unit



- **Note**

The clamping unit can only be selected with variant T in conjunction with variant Q.

The clamping unit is mounted on the round piston rod end in combination with variants T and Q.

+ = plus stroke length

| ∅<br>[mm] | B<br>∅<br>d11 | BG | D1 | D2   | H1  | L4<br>±0.2 | L5   | VD   | WH | ZW<br>±1.8 |
|-----------|---------------|----|----|------|-----|------------|------|------|----|------------|
| 32        | 30            | 16 | 20 | M5   | 67  | 45         | 14   | 11.5 | 26 | 164.1      |
| 40        | 35            | 16 | 24 | G1/8 | 88  | 53         | 16   | 11.5 | 30 | 186.9      |
| 50        | 40            | 16 | 30 | G1/8 | 107 | 67         | 20   | 11   | 37 | 208.8      |
| 63        | 45            | 16 | 38 | G1/8 | 123 | 76         | 24   | 11   | 37 | 233.1      |
| 80        | 45            | 17 | 48 | G1/8 | 165 | 95         | 31.5 | 12.5 | 46 | 268.6      |
| 100       | 55            | 17 | 48 | G1/8 | 174 | 98         | 31   | 12   | 51 | 285.7      |
| 125       | 60            | 20 | 65 | G1/8 | 208 | 125        | 42   | 27.5 | 65 | 349.3      |

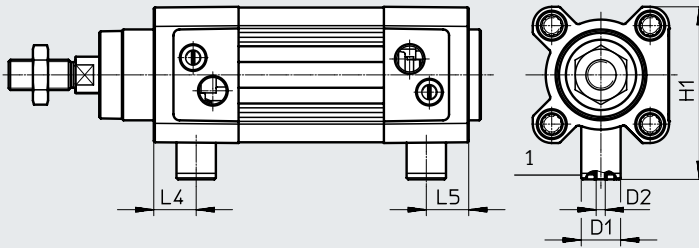


## Datasheet

## Dimensions – Variants

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## E1/E2/E3 – End-position locking

-  - **Note**

- [1] The connection is used for the manual locking and/or ducted exhaust air. It must not be sealed or pressurised.

## E1 - End-position locking at both ends

| $\varnothing$<br>[mm] | D1<br>$\varnothing$ | D2 | H1    | L4   | L5   |
|-----------------------|---------------------|----|-------|------|------|
| 32                    | 13                  | M3 | 57.5  | 14   | 14   |
| 40                    | 13                  | M3 | 64    | 17   | 17   |
| 50                    | 20                  | M5 | 78.5  | 18   | 18   |
| 63                    | 20                  | M5 | 84.5  | 25   | 25   |
| 80                    | 30                  | M5 | 105   | 22   | 22   |
| 100                   | 30                  | M5 | 113.5 | 25.5 | 25.5 |

## E2 – End-position locking with advanced piston rod

| $\varnothing$<br>[mm] | D1<br>$\varnothing$ | D2 | H1    | L4   |
|-----------------------|---------------------|----|-------|------|
| 32                    | 13                  | M3 | 57.5  | 14   |
| 40                    | 13                  | M3 | 64    | 17   |
| 50                    | 20                  | M5 | 78.5  | 18   |
| 63                    | 20                  | M5 | 84.5  | 25   |
| 80                    | 30                  | M5 | 105   | 22   |
| 100                   | 30                  | M5 | 113.5 | 25.5 |

## E3 – End-position locking with retracted piston rod

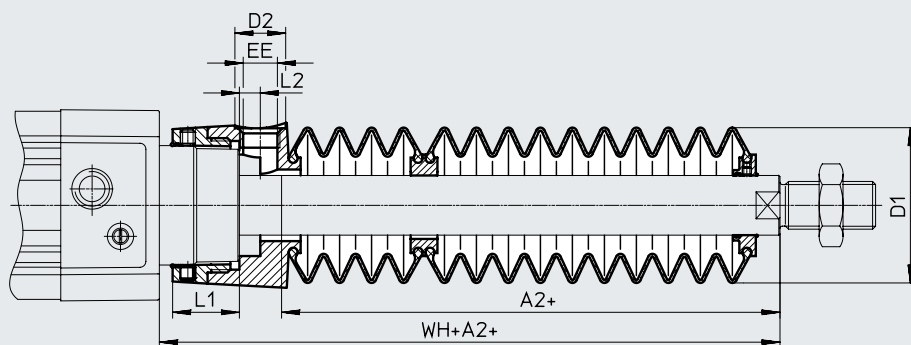
| $\varnothing$<br>[mm] | D1<br>$\varnothing$ | D2 | H1    | L5   |
|-----------------------|---------------------|----|-------|------|
| 32                    | 13                  | M3 | 57.5  | 14   |
| 40                    | 13                  | M3 | 64    | 17   |
| 50                    | 20                  | M5 | 78.5  | 18   |
| 63                    | 20                  | M5 | 84.5  | 25   |
| 80                    | 30                  | M5 | 105   | 22   |
| 100                   | 30                  | M5 | 113.5 | 25.5 |

## Datasheet

### Dimensions – Variants

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P2 – Protective bellows on the bearing cap



+ = plus stroke length

| ∅<br>Stroke<br>[mm] | 32               |            |    |      |      |     |       | 40               |            |    |      |      |     |       |
|---------------------|------------------|------------|----|------|------|-----|-------|------------------|------------|----|------|------|-----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1   | L2  | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1   | L2  | WH+A2 |
| 10 ... 50           | 29               | 38         | 14 | G1/8 | 12.9 | 5.4 | 55    | 28               | 46         | 14 | G1/8 | 16.3 | 5.4 | 56.7  |
| 51 ... 125          | 47               |            |    |      |      |     | 73    | 43               |            |    |      |      |     | 71.7  |
| 126 ... 175         | 61               |            |    |      |      |     | 87    | 56               |            |    |      |      |     | 84.7  |
| 176 ... 250         | 80               |            |    |      |      |     | 106   | 72               |            |    |      |      |     | 100.7 |
| 251 ... 300         | 96               |            |    |      |      |     | 122   | 86               |            |    |      |      |     | 114.7 |
| 301 ... 350         | 112              |            |    |      |      |     | 138   | 100              |            |    |      |      |     | 128.7 |
| 351 ... 375         | 114              |            |    |      |      |     | 140   | 101              |            |    |      |      |     | 129.7 |
| 376 ... 425         | 130              |            |    |      |      |     | 156   | 115              |            |    |      |      |     | 143.7 |
| 426 ... 475         | 145              |            |    |      |      |     | 171   | 130              |            |    |      |      |     | 158.7 |
| 476 ... 500         | 147              |            |    |      |      |     | 173   | 131              |            |    |      |      |     | 159.7 |

| ∅<br>Stroke<br>[mm] | 50               |            |    |      |       |    |       | 63               |            |    |      |      |    |       |
|---------------------|------------------|------------|----|------|-------|----|-------|------------------|------------|----|------|------|----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1    | L2 | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1   | L2 | WH+A2 |
| 10 ... 50           | 28               | 57         | 17 | G1/4 | 22.35 | 7  | 63.6  | 28               | 57         | 17 | G1/4 | 22.4 | 7  | 63.9  |
| 51 ... 125          | 46               |            |    |      |       |    | 81.6  | 46               |            |    |      |      |    | 81.9  |
| 126 ... 175         | 56               |            |    |      |       |    | 91.6  | 56               |            |    |      |      |    | 91.9  |
| 176 ... 250         | 73               |            |    |      |       |    | 108.6 | 73               |            |    |      |      |    | 108.9 |
| 251 ... 300         | 86               |            |    |      |       |    | 121.6 | 86               |            |    |      |      |    | 121.9 |
| 301 ... 350         | 97               |            |    |      |       |    | 132.6 | 97               |            |    |      |      |    | 132.9 |
| 351 ... 375         | 105              |            |    |      |       |    | 140.6 | 105              |            |    |      |      |    | 140.9 |
| 376 ... 425         | 116              |            |    |      |       |    | 151.6 | 116              |            |    |      |      |    | 151.9 |
| 426 ... 475         | 126              |            |    |      |       |    | 161.6 | 126              |            |    |      |      |    | 161.9 |
| 476 ... 500         | 134              |            |    |      |       |    | 169.6 | 134              |            |    |      |      |    | 169.9 |

1) The dimension corresponds to the E value (piston rod extension) of the drive


## Datasheet

| ∅<br>Stroke<br>[mm] | 80               |            |    |      |    |    |       | 100              |            |    |      |    |    |       |
|---------------------|------------------|------------|----|------|----|----|-------|------------------|------------|----|------|----|----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1 | L2 | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1 | L2 | WH+A2 |
| 10 ... 50           | 25               | 93         | 17 | G1/4 | 28 | 4  | 70.4  | 25               | 93         | 17 | G1/4 | 28 | 4  | 74.3  |
| 51 ... 125          | 37               |            |    |      |    |    | 82.4  | 37               |            |    |      |    |    | 86.3  |
| 126 ... 175         | 49               |            |    |      |    |    | 94.4  | 49               |            |    |      |    |    | 98.3  |
| 176 ... 250         | 62               |            |    |      |    |    | 107.4 | 62               |            |    |      |    |    | 111.3 |
| 251 ... 300         | 74               |            |    |      |    |    | 119.4 | 74               |            |    |      |    |    | 123.3 |
| 301 ... 350         | 86               |            |    |      |    |    | 131.4 | 86               |            |    |      |    |    | 135.3 |
| 351 ... 375         | 87               |            |    |      |    |    | 132.4 | 87               |            |    |      |    |    | 136.3 |
| 376 ... 425         | 98               |            |    |      |    |    | 143.4 | 98               |            |    |      |    |    | 147.3 |
| 426 ... 475         | 110              |            |    |      |    |    | 155.4 | 110              |            |    |      |    |    | 159.3 |
| 476 ... 500         | 111              |            |    |      |    |    | 156.4 | 111              |            |    |      |    |    | 160.3 |

1) The dimension corresponds to the E value (piston rod extension) of the drive


Datasheet

| Ordering data    |                |                                  |                     |                                    |                     |
|------------------|----------------|----------------------------------|---------------------|------------------------------------|---------------------|
| Piston ø<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                     | With self-adjusting cushioning PPS |                     |
|                  |                | Part no.                         | Type                | Part no.                           | Type                |
| 32               | 20             | ★ 2123069                        | DSBC-32-20-PPVA-N3  | ★ 2123085                          | DSBC-32-20-PPSA-N3  |
|                  | 25             | ★ 1376422                        | DSBC-32-25-PPVA-N3  | ★ 1376467                          | DSBC-32-25-PPSA-N3  |
|                  | 30             | ★ 2123070                        | DSBC-32-30-PPVA-N3  | ★ 2123086                          | DSBC-32-30-PPSA-N3  |
|                  | 40             | ★ 1376423                        | DSBC-32-40-PPVA-N3  | ★ 1376468                          | DSBC-32-40-PPSA-N3  |
|                  | 50             | ★ 1376424                        | DSBC-32-50-PPVA-N3  | ★ 1376469                          | DSBC-32-50-PPSA-N3  |
|                  | 60             | ★ 2123071                        | DSBC-32-60-PPVA-N3  | ★ 2123087                          | DSBC-32-60-PPSA-N3  |
|                  | 70             | ★ 2123072                        | DSBC-32-70-PPVA-N3  | ★ 2123088                          | DSBC-32-70-PPSA-N3  |
|                  | 80             | ★ 1376425                        | DSBC-32-80-PPVA-N3  | ★ 1376470                          | DSBC-32-80-PPSA-N3  |
|                  | 100            | ★ 1376426                        | DSBC-32-100-PPVA-N3 | ★ 1376471                          | DSBC-32-100-PPSA-N3 |
|                  | 125            | ★ 1376427                        | DSBC-32-125-PPVA-N3 | ★ 1376472                          | DSBC-32-125-PPSA-N3 |
|                  | 150            | ★ 2123073                        | DSBC-32-150-PPVA-N3 | ★ 2123089                          | DSBC-32-150-PPSA-N3 |
|                  | 160            | ★ 1376428                        | DSBC-32-160-PPVA-N3 | ★ 1376473                          | DSBC-32-160-PPSA-N3 |
|                  | 200            | ★ 1376429                        | DSBC-32-200-PPVA-N3 | ★ 1376474                          | DSBC-32-200-PPSA-N3 |
|                  | 250            | ★ 1376430                        | DSBC-32-250-PPVA-N3 | ★ 1376475                          | DSBC-32-250-PPSA-N3 |
|                  | 300            | ★ 2123074                        | DSBC-32-300-PPVA-N3 | ★ 2123090                          | DSBC-32-300-PPSA-N3 |
|                  | 320            | ★ 1376431                        | DSBC-32-320-PPVA-N3 | ★ 1376476                          | DSBC-32-320-PPSA-N3 |
|                  | 400            | ★ 1376432                        | DSBC-32-400-PPVA-N3 | ★ 1376477                          | DSBC-32-400-PPSA-N3 |
| 500              | ★ 1376433      | DSBC-32-500-PPVA-N3              | ★ 1376478           | DSBC-32-500-PPSA-N3                |                     |
| 40               | 20             | ★ 2123166                        | DSBC-40-20-PPVA-N3  | ★ 2123780                          | DSBC-40-20-PPSA-N3  |
|                  | 25             | ★ 1376656                        | DSBC-40-25-PPVA-N3  | ★ 1376903                          | DSBC-40-25-PPSA-N3  |
|                  | 30             | ★ 2123167                        | DSBC-40-30-PPVA-N3  | ★ 2123781                          | DSBC-40-30-PPSA-N3  |
|                  | 40             | ★ 1376657                        | DSBC-40-40-PPVA-N3  | ★ 1376904                          | DSBC-40-40-PPSA-N3  |
|                  | 50             | ★ 1376658                        | DSBC-40-50-PPVA-N3  | ★ 1376905                          | DSBC-40-50-PPSA-N3  |
|                  | 60             | ★ 2123224                        | DSBC-40-60-PPVA-N3  | ★ 2123782                          | DSBC-40-60-PPSA-N3  |
|                  | 70             | ★ 2123225                        | DSBC-40-70-PPVA-N3  | ★ 2123783                          | DSBC-40-70-PPSA-N3  |
|                  | 80             | ★ 1376659                        | DSBC-40-80-PPVA-N3  | ★ 1376906                          | DSBC-40-80-PPSA-N3  |
|                  | 100            | ★ 1376660                        | DSBC-40-100-PPVA-N3 | ★ 1376907                          | DSBC-40-100-PPSA-N3 |
|                  | 125            | ★ 1376661                        | DSBC-40-125-PPVA-N3 | ★ 1376908                          | DSBC-40-125-PPSA-N3 |
|                  | 150            | ★ 2123226                        | DSBC-40-150-PPVA-N3 | ★ 2123784                          | DSBC-40-150-PPSA-N3 |
|                  | 160            | ★ 1376662                        | DSBC-40-160-PPVA-N3 | ★ 1376909                          | DSBC-40-160-PPSA-N3 |
|                  | 200            | ★ 1376663                        | DSBC-40-200-PPVA-N3 | ★ 1376910                          | DSBC-40-200-PPSA-N3 |
|                  | 250            | ★ 1376664                        | DSBC-40-250-PPVA-N3 | ★ 1376911                          | DSBC-40-250-PPSA-N3 |
|                  | 300            | ★ 2123227                        | DSBC-40-300-PPVA-N3 | ★ 2123785                          | DSBC-40-300-PPSA-N3 |
|                  | 320            | ★ 1376665                        | DSBC-40-320-PPVA-N3 | ★ 1376912                          | DSBC-40-320-PPSA-N3 |
|                  | 400            | ★ 1376666                        | DSBC-40-400-PPVA-N3 | ★ 1376913                          | DSBC-40-400-PPSA-N3 |
| 500              | ★ 1376667      | DSBC-40-500-PPVA-N3              | ★ 1376914           | DSBC-40-500-PPSA-N3                |                     |

 **Note**  
Other variants in the modular product system → page 36

## Datasheet

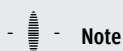
| Ordering data                |                |                                  |                     |                                    |                     |
|------------------------------|----------------|----------------------------------|---------------------|------------------------------------|---------------------|
| Piston $\varnothing$<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                     | With self-adjusting cushioning PPS |                     |
|                              |                | Part no.                         | Type                | Part no.                           | Type                |
| 50                           | 20             | ★ 2098969                        | DSBC-50-20-PPVA-N3  | ★ 2102628                          | DSBC-50-20-PPSA-N3  |
|                              | 25             | ★ 1366948                        | DSBC-50-25-PPVA-N3  | ★ 1376301                          | DSBC-50-25-PPSA-N3  |
|                              | 30             | ★ 2098970                        | DSBC-50-30-PPVA-N3  | ★ 2102629                          | DSBC-50-30-PPSA-N3  |
|                              | 40             | ★ 1366949                        | DSBC-50-40-PPVA-N3  | ★ 1376304                          | DSBC-50-40-PPSA-N3  |
|                              | 50             | ★ 1366950                        | DSBC-50-50-PPVA-N3  | ★ 1376305                          | DSBC-50-50-PPSA-N3  |
|                              | 60             | ★ 2098972                        | DSBC-50-60-PPVA-N3  | ★ 2102630                          | DSBC-50-60-PPSA-N3  |
|                              | 70             | ★ 2098973                        | DSBC-50-70-PPVA-N3  | ★ 2102631                          | DSBC-50-70-PPSA-N3  |
|                              | 80             | ★ 1366951                        | DSBC-50-80-PPVA-N3  | ★ 1376306                          | DSBC-50-80-PPSA-N3  |
|                              | 100            | ★ 1366952                        | DSBC-50-100-PPVA-N3 | ★ 1376307                          | DSBC-50-100-PPSA-N3 |
|                              | 125            | ★ 1366953                        | DSBC-50-125-PPVA-N3 | ★ 1376308                          | DSBC-50-125-PPSA-N3 |
|                              | 150            | ★ 2098974                        | DSBC-50-150-PPVA-N3 | ★ 2102632                          | DSBC-50-150-PPSA-N3 |
|                              | 160            | ★ 1366954                        | DSBC-50-160-PPVA-N3 | ★ 1376309                          | DSBC-50-160-PPSA-N3 |
|                              | 200            | ★ 1366955                        | DSBC-50-200-PPVA-N3 | ★ 1376310                          | DSBC-50-200-PPSA-N3 |
|                              | 250            | ★ 1366956                        | DSBC-50-250-PPVA-N3 | ★ 1376311                          | DSBC-50-250-PPSA-N3 |
|                              | 300            | ★ 2098975                        | DSBC-50-300-PPVA-N3 | ★ 2102633                          | DSBC-50-300-PPSA-N3 |
|                              | 320            | ★ 1366957                        | DSBC-50-320-PPVA-N3 | ★ 1376312                          | DSBC-50-320-PPSA-N3 |
|                              | 400            | ★ 1366958                        | DSBC-50-400-PPVA-N3 | ★ 1376313                          | DSBC-50-400-PPSA-N3 |
| 500                          | ★ 1366959      | DSBC-50-500-PPVA-N3              | ★ 1376314           | DSBC-50-500-PPSA-N3                |                     |
| 63                           | 20             | ★ 2125490                        | DSBC-63-20-PPVA-N3  | ★ 2126684                          | DSBC-63-20-PPSA-N3  |
|                              | 25             | ★ 1383578                        | DSBC-63-25-PPVA-N3  | ★ 1383632                          | DSBC-63-25-PPSA-N3  |
|                              | 30             | ★ 2125491                        | DSBC-63-30-PPVA-N3  | ★ 2126685                          | DSBC-63-30-PPSA-N3  |
|                              | 40             | ★ 1383579                        | DSBC-63-40-PPVA-N3  | ★ 1383633                          | DSBC-63-40-PPSA-N3  |
|                              | 50             | ★ 1383580                        | DSBC-63-50-PPVA-N3  | ★ 1383634                          | DSBC-63-50-PPSA-N3  |
|                              | 60             | ★ 2125492                        | DSBC-63-60-PPVA-N3  | ★ 2126686                          | DSBC-63-60-PPSA-N3  |
|                              | 70             | ★ 2125493                        | DSBC-63-70-PPVA-N3  | ★ 2126687                          | DSBC-63-70-PPSA-N3  |
|                              | 80             | ★ 1383581                        | DSBC-63-80-PPVA-N3  | ★ 1383635                          | DSBC-63-80-PPSA-N3  |
|                              | 100            | ★ 1383582                        | DSBC-63-100-PPVA-N3 | ★ 1383636                          | DSBC-63-100-PPSA-N3 |
|                              | 125            | ★ 1383583                        | DSBC-63-125-PPVA-N3 | ★ 1383637                          | DSBC-63-125-PPSA-N3 |
|                              | 150            | ★ 2125494                        | DSBC-63-150-PPVA-N3 | ★ 2126688                          | DSBC-63-150-PPSA-N3 |
|                              | 160            | ★ 1383584                        | DSBC-63-160-PPVA-N3 | ★ 1383638                          | DSBC-63-160-PPSA-N3 |
|                              | 200            | ★ 1383585                        | DSBC-63-200-PPVA-N3 | ★ 1383639                          | DSBC-63-200-PPSA-N3 |
|                              | 250            | ★ 1383586                        | DSBC-63-250-PPVA-N3 | ★ 1383640                          | DSBC-63-250-PPSA-N3 |
|                              | 300            | ★ 2125495                        | DSBC-63-300-PPVA-N3 | ★ 2126689                          | DSBC-63-300-PPSA-N3 |
|                              | 320            | ★ 1383587                        | DSBC-63-320-PPVA-N3 | ★ 1383641                          | DSBC-63-320-PPSA-N3 |
|                              | 400            | ★ 1383588                        | DSBC-63-400-PPVA-N3 | ★ 1383642                          | DSBC-63-400-PPSA-N3 |
| 500                          | ★ 1383589      | DSBC-63-500-PPVA-N3              | ★ 1383643           | DSBC-63-500-PPSA-N3                |                     |

 **Note**

Other variants in the modular product system → page 36

## Datasheet

| Ordering data                |                |                                  |                     |                                    |                     |
|------------------------------|----------------|----------------------------------|---------------------|------------------------------------|---------------------|
| Piston $\varnothing$<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                     | With self-adjusting cushioning PPS |                     |
|                              |                | Part no.                         | Type                | Part no.                           | Type                |
| 80                           | 20             | ★ 2126594                        | DSBC-80-20-PPVA-N3  | ★ 2126636                          | DSBC-80-20-PPSA-N3  |
|                              | 25             | ★ 1383333                        | DSBC-80-25-PPVA-N3  | ★ 1383366                          | DSBC-80-25-PPSA-N3  |
|                              | 30             | ★ 2126595                        | DSBC-80-30-PPVA-N3  | ★ 2126637                          | DSBC-80-30-PPSA-N3  |
|                              | 40             | ★ 1383334                        | DSBC-80-40-PPVA-N3  | ★ 1383367                          | DSBC-80-40-PPSA-N3  |
|                              | 50             | ★ 1383335                        | DSBC-80-50-PPVA-N3  | ★ 1383368                          | DSBC-80-50-PPSA-N3  |
|                              | 60             | ★ 2126597                        | DSBC-80-60-PPVA-N3  | ★ 2126638                          | DSBC-80-60-PPSA-N3  |
|                              | 70             | ★ 2126598                        | DSBC-80-70-PPVA-N3  | ★ 2126639                          | DSBC-80-70-PPSA-N3  |
|                              | 80             | ★ 1383336                        | DSBC-80-80-PPVA-N3  | ★ 1383369                          | DSBC-80-80-PPSA-N3  |
|                              | 100            | ★ 1383337                        | DSBC-80-100-PPVA-N3 | ★ 1383370                          | DSBC-80-100-PPSA-N3 |
|                              | 125            | ★ 1383338                        | DSBC-80-125-PPVA-N3 | ★ 1383371                          | DSBC-80-125-PPSA-N3 |
|                              | 150            | ★ 2126599                        | DSBC-80-150-PPVA-N3 | ★ 2126640                          | DSBC-80-150-PPSA-N3 |
|                              | 160            | ★ 1383339                        | DSBC-80-160-PPVA-N3 | ★ 1383372                          | DSBC-80-160-PPSA-N3 |
|                              | 200            | ★ 1383340                        | DSBC-80-200-PPVA-N3 | ★ 1383373                          | DSBC-80-200-PPSA-N3 |
|                              | 250            | ★ 1383341                        | DSBC-80-250-PPVA-N3 | ★ 1383374                          | DSBC-80-250-PPSA-N3 |
|                              | 300            | ★ 2126600                        | DSBC-80-300-PPVA-N3 | ★ 2126641                          | DSBC-80-300-PPSA-N3 |
|                              | 320            | ★ 1383342                        | DSBC-80-320-PPVA-N3 | ★ 1383375                          | DSBC-80-320-PPSA-N3 |
|                              | 400            | ★ 1383343                        | DSBC-80-400-PPVA-N3 | ★ 1383376                          | DSBC-80-400-PPSA-N3 |
| 500                          | ★ 1383344      | DSBC-80-500-PPVA-N3              | ★ 1383377           | DSBC-80-500-PPSA-N3                |                     |

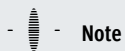


**Note**

Other variants in the modular product system → page 36

## Datasheet

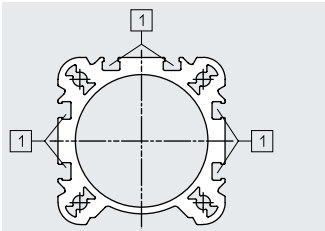
| Ordering data                |                |                                  |                      |                                    |                      |
|------------------------------|----------------|----------------------------------|----------------------|------------------------------------|----------------------|
| Piston $\varnothing$<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                      | With self-adjusting cushioning PPS |                      |
|                              |                | Part no.                         | Type                 | Part no.                           | Type                 |
| 32                           | 1 ... 2800     | 1463254                          | DSBC-32-...-PPVA-N3  | 1463252                            | DSBC-32-...-PPSA-N3  |
| 40                           | 1 ... 2800     | 1462834                          | DSBC-40-...-PPVA-N3  | 1462835                            | DSBC-40-...-PPSA-N3  |
| 50                           | 1 ... 2800     | 1463766                          | DSBC-50-...-PPVA-N3  | 1463768                            | DSBC-50-...-PPSA-N3  |
| 63                           | 1 ... 2800     | 1463483                          | DSBC-63-...-PPVA-N3  | 1463481                            | DSBC-63-...-PPSA-N3  |
| 80                           | 1 ... 2800     | 1463504                          | DSBC-80-...-PPVA-N3  | 1463500                            | DSBC-80-...-PPSA-N3  |
| 100                          | 25             | 1384804                          | DSBC-100-25-PPVA-N3  | 1384890                            | DSBC-100-25-PPSA-N3  |
|                              | 40             | 1384805                          | DSBC-100-40-PPVA-N3  | 1384891                            | DSBC-100-40-PPSA-N3  |
|                              | 50             | 1384806                          | DSBC-100-50-PPVA-N3  | 1384892                            | DSBC-100-50-PPSA-N3  |
|                              | 80             | 1384807                          | DSBC-100-80-PPVA-N3  | 1384893                            | DSBC-100-80-PPSA-N3  |
|                              | 100            | 1384808                          | DSBC-100-100-PPVA-N3 | 1384894                            | DSBC-100-100-PPSA-N3 |
|                              | 125            | 1384809                          | DSBC-100-125-PPVA-N3 | 1384895                            | DSBC-100-125-PPSA-N3 |
|                              | 160            | 1384810                          | DSBC-100-160-PPVA-N3 | 1384896                            | DSBC-100-160-PPSA-N3 |
|                              | 200            | 1384811                          | DSBC-100-200-PPVA-N3 | 1384897                            | DSBC-100-200-PPSA-N3 |
|                              | 250            | 1384812                          | DSBC-100-250-PPVA-N3 | 1384898                            | DSBC-100-250-PPSA-N3 |
|                              | 320            | 1384813                          | DSBC-100-320-PPVA-N3 | 1384899                            | DSBC-100-320-PPSA-N3 |
|                              | 400            | 1384814                          | DSBC-100-400-PPVA-N3 | 1384900                            | DSBC-100-400-PPSA-N3 |
|                              | 500            | 1384815                          | DSBC-100-500-PPVA-N3 | 1384901                            | DSBC-100-500-PPSA-N3 |
| 1 ... 2800                   | 1463598        | DSBC-100-...-PPVA-N3             | 1463558              | DSBC-100-...-PPSA-N3               |                      |
| 125                          | 25             | 1804956                          | DSBC-125-25-PPVA-N3  | 1804661                            | DSBC-125-25-PPSA-N3  |
|                              | 40             | 1804957                          | DSBC-125-40-PPVA-N3  | 1804662                            | DSBC-125-40-PPSA-N3  |
|                              | 50             | 1804958                          | DSBC-125-50-PPVA-N3  | 1804663                            | DSBC-125-50-PPSA-N3  |
|                              | 80             | 1804959                          | DSBC-125-80-PPVA-N3  | 1804664                            | DSBC-125-80-PPSA-N3  |
|                              | 100            | 1804960                          | DSBC-125-100-PPVA-N3 | 1804665                            | DSBC-125-100-PPSA-N3 |
|                              | 125            | 1804961                          | DSBC-125-125-PPVA-N3 | 1804666                            | DSBC-125-125-PPSA-N3 |
|                              | 160            | 1804962                          | DSBC-125-160-PPVA-N3 | 1804667                            | DSBC-125-160-PPSA-N3 |
|                              | 200            | 1804963                          | DSBC-125-200-PPVA-N3 | 1804668                            | DSBC-125-200-PPSA-N3 |
|                              | 250            | 1804964                          | DSBC-125-250-PPVA-N3 | 1804669                            | DSBC-125-250-PPSA-N3 |
|                              | 320            | 1804965                          | DSBC-125-320-PPVA-N3 | 1804671                            | DSBC-125-320-PPSA-N3 |
|                              | 400            | 1804966                          | DSBC-125-400-PPVA-N3 | 1804672                            | DSBC-125-400-PPSA-N3 |
|                              | 500            | 1804967                          | DSBC-125-500-PPVA-N3 | 1804673                            | DSBC-125-500-PPSA-N3 |
|                              | 1 ... 2800     | 1755348                          | DSBC-125-...-PPVA-N3 | 1755619                            | DSBC-125-...-PPSA-N3 |

**Note**

Other variants in the modular product system → page 36

## Datasheet


### Ordering data – Versions for DSBC...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

[1] Sensor slot for proximity switch

| Piston ø<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                        | With self-adjusting cushioning PPS |                        |
|------------------|----------------|----------------------------------|------------------------|------------------------------------|------------------------|
|                  |                | Part no.                         | Type                   | Part no.                           | Type                   |
| 32               | 20             | 3656511                          | DSBC-32-20-D3-PPVA-N3  | 3659374                            | DSBC-32-20-D3-PPSA-N3  |
|                  | 25             | 3656512                          | DSBC-32-25-D3-PPVA-N3  | 3659375                            | DSBC-32-25-D3-PPSA-N3  |
|                  | 30             | 3656513                          | DSBC-32-30-D3-PPVA-N3  | 3659376                            | DSBC-32-30-D3-PPSA-N3  |
|                  | 40             | 3656514                          | DSBC-32-40-D3-PPVA-N3  | 3659377                            | DSBC-32-40-D3-PPSA-N3  |
|                  | 50             | 3656515                          | DSBC-32-50-D3-PPVA-N3  | 3659378                            | DSBC-32-50-D3-PPSA-N3  |
|                  | 60             | 3656516                          | DSBC-32-60-D3-PPVA-N3  | 3659379                            | DSBC-32-60-D3-PPSA-N3  |
|                  | 70             | 3656517                          | DSBC-32-70-D3-PPVA-N3  | 3659380                            | DSBC-32-70-D3-PPSA-N3  |
|                  | 80             | 3656518                          | DSBC-32-80-D3-PPVA-N3  | 3659381                            | DSBC-32-80-D3-PPSA-N3  |
|                  | 100            | 3656519                          | DSBC-32-100-D3-PPVA-N3 | 3659382                            | DSBC-32-100-D3-PPSA-N3 |
|                  | 125            | 3656520                          | DSBC-32-125-D3-PPVA-N3 | 3659383                            | DSBC-32-125-D3-PPSA-N3 |
|                  | 150            | 3656521                          | DSBC-32-150-D3-PPVA-N3 | 3659384                            | DSBC-32-150-D3-PPSA-N3 |
|                  | 160            | 3656522                          | DSBC-32-160-D3-PPVA-N3 | 3659385                            | DSBC-32-160-D3-PPSA-N3 |
|                  | 200            | 3656523                          | DSBC-32-200-D3-PPVA-N3 | 3659386                            | DSBC-32-200-D3-PPSA-N3 |
|                  | 250            | 3656524                          | DSBC-32-250-D3-PPVA-N3 | 3659387                            | DSBC-32-250-D3-PPSA-N3 |
|                  | 300            | 3656525                          | DSBC-32-300-D3-PPVA-N3 | 3659388                            | DSBC-32-300-D3-PPSA-N3 |
| 320              | 3656526        | DSBC-32-320-D3-PPVA-N3           | 3659389                | DSBC-32-320-D3-PPSA-N3             |                        |
| 400              | 8165440        | DSBC-32-400-D3-PPVA-N3           | 8165446                | DSBC-32-400-D3-PPSA-N3             |                        |
| 500              | 8165460        | DSBC-32-500-D3-PPVA-N3           | 8165461                | DSBC-32-500-D3-PPSA-N3             |                        |
| 40               | 20             | 3660615                          | DSBC-40-20-D3-PPVA-N3  | 3660759                            | DSBC-40-20-D3-PPSA-N3  |
|                  | 25             | 3660616                          | DSBC-40-25-D3-PPVA-N3  | 3660760                            | DSBC-40-25-D3-PPSA-N3  |
|                  | 30             | 3660617                          | DSBC-40-30-D3-PPVA-N3  | 3660761                            | DSBC-40-30-D3-PPSA-N3  |
|                  | 40             | 3660618                          | DSBC-40-40-D3-PPVA-N3  | 3660762                            | DSBC-40-40-D3-PPSA-N3  |
|                  | 50             | 3660619                          | DSBC-40-50-D3-PPVA-N3  | 3660763                            | DSBC-40-50-D3-PPSA-N3  |
|                  | 60             | 3660620                          | DSBC-40-60-D3-PPVA-N3  | 3660764                            | DSBC-40-60-D3-PPSA-N3  |
|                  | 70             | 3660621                          | DSBC-40-70-D3-PPVA-N3  | 3660765                            | DSBC-40-70-D3-PPSA-N3  |
|                  | 80             | 3660622                          | DSBC-40-80-D3-PPVA-N3  | 3660766                            | DSBC-40-80-D3-PPSA-N3  |
|                  | 100            | 3660623                          | DSBC-40-100-D3-PPVA-N3 | 3660767                            | DSBC-40-100-D3-PPSA-N3 |
|                  | 125            | 3660624                          | DSBC-40-125-D3-PPVA-N3 | 3660768                            | DSBC-40-125-D3-PPSA-N3 |
|                  | 150            | 3660625                          | DSBC-40-150-D3-PPVA-N3 | 3660769                            | DSBC-40-150-D3-PPSA-N3 |
|                  | 160            | 3660626                          | DSBC-40-160-D3-PPVA-N3 | 3660770                            | DSBC-40-160-D3-PPSA-N3 |
|                  | 200            | 3660627                          | DSBC-40-200-D3-PPVA-N3 | 3660771                            | DSBC-40-200-D3-PPSA-N3 |
|                  | 250            | 3660628                          | DSBC-40-250-D3-PPVA-N3 | 3660772                            | DSBC-40-250-D3-PPSA-N3 |
|                  | 300            | 3660629                          | DSBC-40-300-D3-PPVA-N3 | 3660773                            | DSBC-40-300-D3-PPSA-N3 |
| 320              | 3660630        | DSBC-40-320-D3-PPVA-N3           | 3660774                | DSBC-40-320-D3-PPSA-N3             |                        |
| 400              | 8165582        | DSBC-40-400-D3-PPVA-N3           | 8165583                | DSBC-40-400-D3-PPSA-N3             |                        |
| 500              | 8165584        | DSBC-40-500-D3-PPVA-N3           | 8165586                | DSBC-40-500-D3-PPSA-N3             |                        |

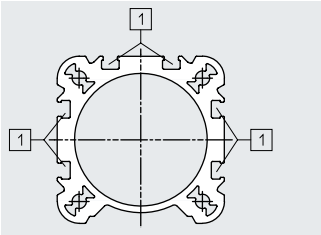
 **Note**

Other variants in the modular product system → page 36



## Datasheet


## Ordering data – Versions for DSBC-...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

[1] Sensor slot for proximity switch

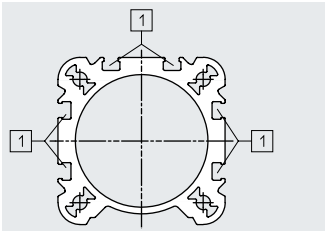
| Piston $\varnothing$<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                        | With self-adjusting cushioning PPS |                        |
|------------------------------|----------------|----------------------------------|------------------------|------------------------------------|------------------------|
|                              |                | Part no.                         | Type                   | Part no.                           | Type                   |
| 50                           | 20             | 3659467                          | DSBC-50-20-D3-PPVA-N3  | 3659491                            | DSBC-50-20-D3-PPSA-N3  |
|                              | 25             | 3659468                          | DSBC-50-25-D3-PPVA-N3  | 3659492                            | DSBC-50-25-D3-PPSA-N3  |
|                              | 30             | 3659469                          | DSBC-50-30-D3-PPVA-N3  | 3659493                            | DSBC-50-30-D3-PPSA-N3  |
|                              | 40             | 3659470                          | DSBC-50-40-D3-PPVA-N3  | 3659494                            | DSBC-50-40-D3-PPSA-N3  |
|                              | 50             | 3659471                          | DSBC-50-50-D3-PPVA-N3  | 3659495                            | DSBC-50-50-D3-PPSA-N3  |
|                              | 60             | 3659472                          | DSBC-50-60-D3-PPVA-N3  | 3659496                            | DSBC-50-60-D3-PPSA-N3  |
|                              | 70             | 3659473                          | DSBC-50-70-D3-PPVA-N3  | 3659497                            | DSBC-50-70-D3-PPSA-N3  |
|                              | 80             | 3659474                          | DSBC-50-80-D3-PPVA-N3  | 3659498                            | DSBC-50-80-D3-PPSA-N3  |
|                              | 100            | 3659475                          | DSBC-50-100-D3-PPVA-N3 | 3659499                            | DSBC-50-100-D3-PPSA-N3 |
|                              | 125            | 3659476                          | DSBC-50-125-D3-PPVA-N3 | 3659500                            | DSBC-50-125-D3-PPSA-N3 |
|                              | 150            | 3659477                          | DSBC-50-150-D3-PPVA-N3 | 3659501                            | DSBC-50-150-D3-PPSA-N3 |
|                              | 160            | 3659478                          | DSBC-50-160-D3-PPVA-N3 | 3659502                            | DSBC-50-160-D3-PPSA-N3 |
|                              | 200            | 3659479                          | DSBC-50-200-D3-PPVA-N3 | 3659503                            | DSBC-50-200-D3-PPSA-N3 |
|                              | 250            | 3659480                          | DSBC-50-250-D3-PPVA-N3 | 3659504                            | DSBC-50-250-D3-PPSA-N3 |
|                              | 300            | 3659481                          | DSBC-50-300-D3-PPVA-N3 | 3659505                            | DSBC-50-300-D3-PPSA-N3 |
|                              | 320            | 3659482                          | DSBC-50-320-D3-PPVA-N3 | 3659506                            | DSBC-50-320-D3-PPSA-N3 |
| 400                          | 8165587        | DSBC-50-400-D3-PPVA-N3           | 8165588                | DSBC-50-400-D3-PPSA-N3             |                        |
| 500                          | 8165589        | DSBC-50-500-D3-PPVA-N3           | 8165590                | DSBC-50-500-D3-PPSA-N3             |                        |
| 63                           | 20             | 3657859                          | DSBC-63-20-D3-PPVA-N3  | 3657811                            | DSBC-63-20-D3-PPSA-N3  |
|                              | 25             | 3657860                          | DSBC-63-25-D3-PPVA-N3  | 3657812                            | DSBC-63-25-D3-PPSA-N3  |
|                              | 30             | 3657861                          | DSBC-63-30-D3-PPVA-N3  | 3657813                            | DSBC-63-30-D3-PPSA-N3  |
|                              | 40             | 3657862                          | DSBC-63-40-D3-PPVA-N3  | 3657814                            | DSBC-63-40-D3-PPSA-N3  |
|                              | 50             | 3657863                          | DSBC-63-50-D3-PPVA-N3  | 3657815                            | DSBC-63-50-D3-PPSA-N3  |
|                              | 60             | 3657864                          | DSBC-63-60-D3-PPVA-N3  | 3657816                            | DSBC-63-60-D3-PPSA-N3  |
|                              | 70             | 3657865                          | DSBC-63-70-D3-PPVA-N3  | 3657817                            | DSBC-63-70-D3-PPSA-N3  |
|                              | 80             | 3657866                          | DSBC-63-80-D3-PPVA-N3  | 3657818                            | DSBC-63-80-D3-PPSA-N3  |
|                              | 100            | 3657867                          | DSBC-63-100-D3-PPVA-N3 | 3657819                            | DSBC-63-100-D3-PPSA-N3 |
|                              | 125            | 3657868                          | DSBC-63-125-D3-PPVA-N3 | 3657820                            | DSBC-63-125-D3-PPSA-N3 |
|                              | 150            | 3657869                          | DSBC-63-150-D3-PPVA-N3 | 3657821                            | DSBC-63-150-D3-PPSA-N3 |
|                              | 160            | 3657870                          | DSBC-63-160-D3-PPVA-N3 | 3657822                            | DSBC-63-160-D3-PPSA-N3 |
|                              | 200            | 3657871                          | DSBC-63-200-D3-PPVA-N3 | 3657823                            | DSBC-63-200-D3-PPSA-N3 |
|                              | 250            | 3657872                          | DSBC-63-250-D3-PPVA-N3 | 3657824                            | DSBC-63-250-D3-PPSA-N3 |
|                              | 300            | 3657873                          | DSBC-63-300-D3-PPVA-N3 | 3657825                            | DSBC-63-300-D3-PPSA-N3 |
|                              | 320            | 3657874                          | DSBC-63-320-D3-PPVA-N3 | 3657826                            | DSBC-63-320-D3-PPSA-N3 |
| 400                          | 8165591        | DSBC-63-400-D3-PPVA-N3           | 8165592                | DSBC-63-400-D3-PPSA-N3             |                        |
| 500                          | 8165593        | DSBC-63-500-D3-PPVA-N3           | 8165594                | DSBC-63-500-D3-PPSA-N3             |                        |

 Note

Other variants in the modular product system → page 36

## Datasheet


### Ordering data – Versions for DSBC...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

[1] Sensor slot for proximity switch

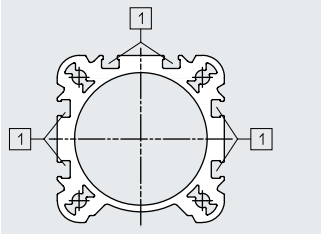
| Piston ø<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                         | With self-adjusting cushioning PPS |                         |
|------------------|----------------|----------------------------------|-------------------------|------------------------------------|-------------------------|
|                  |                | Part no.                         | Type                    | Part no.                           | Type                    |
| 80               | 20             | 3656631                          | DSBC-80-20-D3-PPVA-N3   | 3656854                            | DSBC-80-20-D3-PPSA-N3   |
|                  | 25             | 3656632                          | DSBC-80-25-D3-PPVA-N3   | 3656855                            | DSBC-80-25-D3-PPSA-N3   |
|                  | 30             | 3656633                          | DSBC-80-30-D3-PPVA-N3   | 3656856                            | DSBC-80-30-D3-PPSA-N3   |
|                  | 40             | 3656634                          | DSBC-80-40-D3-PPVA-N3   | 3656857                            | DSBC-80-40-D3-PPSA-N3   |
|                  | 50             | 3656635                          | DSBC-80-50-D3-PPVA-N3   | 3656858                            | DSBC-80-50-D3-PPSA-N3   |
|                  | 60             | 3656636                          | DSBC-80-60-D3-PPVA-N3   | 3656859                            | DSBC-80-60-D3-PPSA-N3   |
|                  | 70             | 3656637                          | DSBC-80-70-D3-PPVA-N3   | 3656860                            | DSBC-80-70-D3-PPSA-N3   |
|                  | 80             | 3656638                          | DSBC-80-80-D3-PPVA-N3   | 3656861                            | DSBC-80-80-D3-PPSA-N3   |
|                  | 100            | 3656639                          | DSBC-80-100-D3-PPVA-N3  | 3656862                            | DSBC-80-100-D3-PPSA-N3  |
|                  | 125            | 3656640                          | DSBC-80-125-D3-PPVA-N3  | 3656863                            | DSBC-80-125-D3-PPSA-N3  |
|                  | 150            | 3656641                          | DSBC-80-150-D3-PPVA-N3  | 3656864                            | DSBC-80-150-D3-PPSA-N3  |
|                  | 160            | 3656642                          | DSBC-80-160-D3-PPVA-N3  | 3656865                            | DSBC-80-160-D3-PPSA-N3  |
|                  | 200            | 3656643                          | DSBC-80-200-D3-PPVA-N3  | 3656866                            | DSBC-80-200-D3-PPSA-N3  |
|                  | 250            | 3656644                          | DSBC-80-250-D3-PPVA-N3  | 3656867                            | DSBC-80-250-D3-PPSA-N3  |
|                  | 300            | 3656645                          | DSBC-80-300-D3-PPVA-N3  | 3656868                            | DSBC-80-300-D3-PPSA-N3  |
| 320              | 3656646        | DSBC-80-320-D3-PPVA-N3           | 3656869                 | DSBC-80-320-D3-PPSA-N3             |                         |
| 400              | 8165595        | DSBC-80-400-D3-PPVA-N3           | 8165596                 | DSBC-80-400-D3-PPSA-N3             |                         |
| 500              | 8165597        | DSBC-80-500-D3-PPVA-N3           | 8165598                 | DSBC-80-500-D3-PPSA-N3             |                         |
| 100              | 25             | 8165653                          | DSBC-100-25-D3-PPVA-N3  | 8165693                            | DSBC-100-25-D3-PPSA-N3  |
|                  | 40             | 8165656                          | DSBC-100-40-D3-PPVA-N3  | 8165690                            | DSBC-100-40-D3-PPSA-N3  |
|                  | 50             | 8165658                          | DSBC-100-50-D3-PPVA-N3  | 8165695                            | DSBC-100-50-D3-PPSA-N3  |
|                  | 80             | 8165660                          | DSBC-100-80-D3-PPVA-N3  | 8165697                            | DSBC-100-80-D3-PPSA-N3  |
|                  | 100            | 8165649                          | DSBC-100-100-D3-PPVA-N3 | 8165689                            | DSBC-100-100-D3-PPSA-N3 |
|                  | 125            | 8165650                          | DSBC-100-125-D3-PPVA-N3 | 8165694                            | DSBC-100-125-D3-PPSA-N3 |
|                  | 160            | 8165651                          | DSBC-100-160-D3-PPVA-N3 | 8165686                            | DSBC-100-160-D3-PPSA-N3 |
|                  | 200            | 8165652                          | DSBC-100-200-D3-PPVA-N3 | 8165688                            | DSBC-100-200-D3-PPSA-N3 |
|                  | 250            | 8165654                          | DSBC-100-250-D3-PPVA-N3 | 8165691                            | DSBC-100-250-D3-PPSA-N3 |
|                  | 320            | 8165655                          | DSBC-100-320-D3-PPVA-N3 | 8165696                            | DSBC-100-320-D3-PPSA-N3 |
|                  | 400            | 8165657                          | DSBC-100-400-D3-PPVA-N3 | 8165692                            | DSBC-100-400-D3-PPSA-N3 |
| 500              | 8165659        | DSBC-100-500-D3-PPVA-N3          | 8165687                 | DSBC-100-500-D3-PPSA-N3            |                         |

 **Note**

Other variants in the modular product system → page 36

## Datasheet


## Ordering data – Versions for DSBC-...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

[1] Sensor slot for proximity switch

| Piston $\varnothing$<br>[mm] | Stroke<br>[mm] | With end-position cushioning PPV |                                | With self-adjusting cushioning PPS |                                |
|------------------------------|----------------|----------------------------------|--------------------------------|------------------------------------|--------------------------------|
|                              |                | Part no.                         | Type                           | Part no.                           | Type                           |
| 125                          | 25             | <b>8165670</b>                   | <b>DSBC-125-25-D3-PPVA-N3</b>  | <b>8165669</b>                     | <b>DSBC-125-25-D3-PPSA-N3</b>  |
|                              | 40             | <b>8165676</b>                   | <b>DSBC-125-40-D3-PPVA-N3</b>  | <b>8165675</b>                     | <b>DSBC-125-40-D3-PPSA-N3</b>  |
|                              | 50             | <b>8165680</b>                   | <b>DSBC-125-50-D3-PPVA-N3</b>  | <b>8165679</b>                     | <b>DSBC-125-50-D3-PPSA-N3</b>  |
|                              | 80             | <b>8165684</b>                   | <b>DSBC-125-80-D3-PPVA-N3</b>  | <b>8165683</b>                     | <b>DSBC-125-80-D3-PPSA-N3</b>  |
|                              | 100            | <b>8165662</b>                   | <b>DSBC-125-100-D3-PPVA-N3</b> | <b>8165661</b>                     | <b>DSBC-125-100-D3-PPSA-N3</b> |
|                              | 125            | <b>8165664</b>                   | <b>DSBC-125-125-D3-PPVA-N3</b> | <b>8165663</b>                     | <b>DSBC-125-125-D3-PPSA-N3</b> |
|                              | 160            | <b>8165666</b>                   | <b>DSBC-125-160-D3-PPVA-N3</b> | <b>8165665</b>                     | <b>DSBC-125-160-D3-PPSA-N3</b> |
|                              | 200            | <b>8165668</b>                   | <b>DSBC-125-200-D3-PPVA-N3</b> | <b>8165667</b>                     | <b>DSBC-125-200-D3-PPSA-N3</b> |
|                              | 250            | <b>8165672</b>                   | <b>DSBC-125-250-D3-PPVA-N3</b> | <b>8165671</b>                     | <b>DSBC-125-250-D3-PPSA-N3</b> |
|                              | 320            | <b>8165674</b>                   | <b>DSBC-125-320-D3-PPVA-N3</b> | <b>8165673</b>                     | <b>DSBC-125-320-D3-PPSA-N3</b> |
|                              | 400            | <b>8165678</b>                   | <b>DSBC-125-400-D3-PPVA-N3</b> | <b>8165677</b>                     | <b>DSBC-125-400-D3-PPSA-N3</b> |
|                              | 500            | <b>8165682</b>                   | <b>DSBC-125-500-D3-PPVA-N3</b> | <b>8165681</b>                     | <b>DSBC-125-500-D3-PPSA-N3</b> |

 **Note**

Other variants in the modular product system → page 36

## Ordering data – Modular product system

| Ordering table              |   |         |         |         |         |         |         |            |             |            |   |
|-----------------------------|---|---------|---------|---------|---------|---------|---------|------------|-------------|------------|---|
| Size                        | 32  | 40      | 50      | 63      | 80      | 100     | 125     | Conditions | Code        | Enter code |   |
| Module no.                  | 1463250   | 1461995 | 1463770 | 1463475 | 1463495 | 1463520 | 1722457 |            |             |            |   |
| Function                    | Standards-based cylinder, double-acting, based on ISO 15552 |         |         |         |         |         |         |            | <b>DSBC</b> | DSBC       |   |
| Protection against rotation | None  |         |         |         |         |         |         |            | ★           |            |   |
|                             | With protection against rotation                            |         |         |         |         |         | –       | [1]        | ★ -Q        |            |   |
| Running characteristics     | Standard  |         |         |         |         |         |         |            | ★           |            |   |
|                             | Low friction  |         |         |         |         |         | –       | [2]        | L           |            |   |
|                             | Constant, slow movement                                     |         |         |         |         |         |         |            | [2]         | U          |   |
|                             | Low friction for balancer applications                      |         |         |         |         |         |         |            | [3]         | L1         |   |
| Piston ø [mm]               | 32  | 40      | 50      | 63      | 80      | 100     | 125     |            | ★ -...      |            |   |
| Stroke [mm]                 | 1 ... 2800  |         |         |         |         |         |         |            |             | ★ -...     |   |
| Piston rod type             | On one side   |         |         |         |         |         |         |            |             | ★          |   |
|                             | Through piston rod  |         |         |         |         |         |         |            | [4] [5]     | ★ -T       |   |
| Piston rod thread type      | Male thread   |         |         |         |         |         |         |            |             | ★          |   |
|                             | Female thread   |         |         |         |         |         |         | [6]        | ★ F         |            |   |
| Profile type                | Sensor slot on one side                                     |         |         |         |         |         |         |            |             | ★          |   |
|                             | Sensor slot on three sides                                  |         |         |         |         |         |         |            |             | ★ D3       |   |
| Cushioning                  | Elastic cushioning rings/plates at both ends                |         |         |         |         |         |         |            |             | -P         |   |
|                             | Pneumatic cushioning, self-adjusting at both ends           |         |         |         |         |         |         |            |             | ★ -PPS     |   |
|                             | Pneumatic cushioning, adjustable at both ends               |         |         |         |         |         |         | [5]        | ★ -PPV      |            |   |
| Position sensing            | Via proximity switch  |         |         |         |         |         |         |            |             | ★ A        | A |

[1] Q Only up to a stroke of 1500 mm


[2] L, U Not with Q

[3] L1 Only up to a stroke of 1000 mm


[4] T Not with L, U

[5] T, PPV Not with L1

[6] F Not with N3

 - **Note**

If feature L is used in combination with transverse forces or strokes of above 500 mm, suitable measures must be taken to support the piston rod. The operating pressure (→ page 12) is applicable for strokes up to 500 mm


 - **Note**

If feature L1 is used in combination with strokes of above 500 mm, suitable measures must be taken to support the piston rod. The operating pressure (→ page 12) is applicable for strokes up to 500 mm.

## Ordering data – Modular product system

| Ordering table               |                                   |                                     |    |          |    |     |     |                                 |        |            |
|------------------------------|-----------------------------------|-------------------------------------|----|----------|----|-----|-----|---------------------------------|--------|------------|
| Size                         | 32                                | 40                                  | 50 | 63       | 80 | 100 | 125 | Conditions                      | Code   | Enter code |
| Standard                     | Based on ISO 15552                |                                     |    |          |    |     |     |                                 | ★      |            |
|                              | Conforms to ISO 15552             |                                     |    |          |    |     |     |                                 | ★ -N3  |            |
| Corrosion protection         | Standard                          |                                     |    |          |    |     |     |                                 | ★      |            |
|                              | High corrosion protection         |                                     |    |          |    |     |     | [6]                             | ★ R3   |            |
| Temperature range            | Standard                          |                                     |    |          |    |     |     |                                 | ★      |            |
|                              | [°C]                              | Heat-resistant seals up to max. 120 |    |          |    |     |     | [6] [7]                         | ★ T1   |            |
|                              | [°C]                              | -40 ... +80                         |    |          |    |     |     | [6] [7] [8]                     | T3     |            |
|                              | [°C]                              | 0 ... +150                          |    |          |    |     |     | [6] [7] [8]                     | T4     |            |
| Protection against particles | Standard                          |                                     |    |          |    |     |     |                                 | ★      |            |
|                              | Protective bellows on bearing cap |                                     |    |          |    |     | -   | [6] [8] [9] [10] [11]           | P2     |            |
| Scraper variant              | None                              |                                     |    |          |    |     |     |                                 | ★      |            |
|                              | Increased chemical resistance     |                                     |    |          |    |     |     | [6] [7] [8] [10] [12] [13] [14] | A1     |            |
|                              | Hard scraper                      |                                     |    |          |    |     |     | [6] [8] [10] [13] [15]          | A2     |            |
|                              | For unlubricated operation        |                                     |    |          |    |     |     | [6] [8] [10] [13] [14]          | A3     |            |
|                              | Metal scraper                     |                                     |    |          |    |     |     | [6] [8] [13] [14] [15]          | A6     |            |
| EU certification             | None                              |                                     |    |          |    |     |     |                                 | ★      |            |
|                              | [mm]                              | II 2GD                              |    |          |    |     |     | [6] [10] [13]                   | EX4    |            |
| Piston rod extension         | None                              |                                     |    |          |    |     |     |                                 |        |            |
|                              | [mm]                              | 1 ... 500                           |    |          |    |     |     | [9] [16]                        | ★ ...E |            |
| Piston rod thread extension  | None                              |                                     |    |          |    |     |     |                                 |        |            |
|                              | [mm]                              | 1 ... 35                            |    | 1 ... 70 |    |     |     | [9] [16] [17]                   | -...L  |            |

|      |   |                                |
|------|---|--------------------------------|
| [6]  | R3, T1, T3, T4, P2, A1, A2, A3, A6, EX4 | Not with L, U, L1              |
| [7]  | T1, T3, T4, A1                          | Not with PPS                   |
| [8]  | T3, T4, P2, A1, A2, A3, A6              | Not with Q                     |
| [9]  | P2, ...E, ...L                          | Not with N3                    |
| [10] | P2, A1, A2, A3, EX4                     | Not with T1, T3, T4            |
| [11] | P2                                      | Only up to a stroke of 500 mm  |
| [12] | A1                                      | Not with P                     |
| [13] | A1, A2, A3, A6, EX4                     | Not with P2                    |
| [14] | A1, A3, A6                              | Not with EX4                   |
| [15] | A2, A6                                  | Not with R3                    |
| [16] | ...E, ...L                              | Only up to a stroke of 2000 mm |
| [17] | ...L                                    | Not with F                     |

 - **Note**

The piston rod extension for the protective bellows is automatically taken into consideration when feature P2 is selected. This means that there is no need to specify a value for feature ...E.

 - **Note**

When feature ...E is selected in combination with feature P2, the part of the piston rod extension ...E is not covered by the protective bellows.

 - **Note**

When feature P2 is selected in combination with feature T (through piston rod), the protective bellows is mounted at one end only.

## Ordering data – Modular product system

| Ordering table                   |   |                |                |                |                |                |                |            |        |            |   |
|----------------------------------|---|----------------|----------------|----------------|----------------|----------------|----------------|------------|--------|------------|---|
| Size                             | 32  | 40             | 50             | 63             | 80             | 100            | 125            | Conditions | Code   | Enter code |   |
| Module no.                       | <b>1463250</b>  | <b>1461995</b> | <b>1463770</b> | <b>1463475</b> | <b>1463495</b> | <b>1463520</b> | <b>1722457</b> |            |        |            |   |
| Function                         | Standards-based cylinder, double-acting, based on ISO 15552 |                |                |                |                |                |                |            | DSBC   | DSBC       |   |
| Protection against rotation      | None  |                |                |                |                |                |                |            | ★      |            |   |
|                                  | With protection against rotation                            |                |                |                |                |                |                | –          | [1]    | ★ -Q       |   |
| Piston ø [mm]                    | 32  | 40             | 50             | 63             | 80             | 100            | 125            |            | ★ -... |            |   |
| Stroke [mm]                      | 10 ... 2000   |                |                |                |                |                |                |            |        | ★ -...     |   |
| Clamping unit                    | Attached  |                |                |                |                |                |                |            |        | ★ -C       | C |
| Piston rod type                  | On one side   |                |                |                |                |                |                |            |        | ★          |   |
|                                  | Through piston rod  |                |                |                |                |                |                |            | [2]    | ★ T        |   |
| Piston rod thread type           | Male thread   |                |                |                |                |                |                |            |        | ★          |   |
|                                  | Female thread   |                |                |                |                |                |                |            |        | ★ F        |   |
| Profile type                     | Sensor slot on one side                                     |                |                |                |                |                |                |            |        | ★          |   |
|                                  | Sensor slot on three sides                                  |                |                |                |                |                |                |            |        | ★ D3       |   |
| Cushioning                       | Elastic cushioning rings/plates at both ends                |                |                |                |                |                |                |            |        | -P         |   |
|                                  | Pneumatic cushioning, self-adjusting at both ends           |                |                |                |                |                |                |            |        | ★ -PPS     |   |
|                                  | Pneumatic cushioning, adjustable at both ends               |                |                |                |                |                |                |            |        | ★ -PPV     |   |
| Position sensing                 | Via proximity switch  |                |                |                |                |                |                |            |        | ★ A        | A |
| Piston rod extension [mm]        | None  |                |                |                |                |                |                |            |        |            |   |
|                                  | 1 ... 500   |                |                |                |                |                |                |            |        | ★ -...E    |   |
| Piston rod thread extension [mm] | None  |                |                |                |                |                |                |            |        |            |   |
|                                  | 1 ... 35  |                | 1 ... 70       |                |                |                |                |            | [3]    | -...L      |   |

[1] Q Only up to a stroke of 1500 mm

[2] T Mandatory with Q

[3] ...L Not with F

## Ordering data – Modular product system

| Ordering table                   |   |                |                |                |                |                |            |              |            |
|----------------------------------|---|----------------|----------------|----------------|----------------|----------------|------------|--------------|------------|
| Size                             | 32  | 40             | 50             | 63             | 80             | 100            | Conditions | Code         | Enter code |
| Module no.                       | <b>1463250</b>  | <b>1461995</b> | <b>1463770</b> | <b>1463475</b> | <b>1463495</b> | <b>1463520</b> |            |              |            |
| Function                         | Standards-based cylinder, double-acting, based on ISO 15552 |                |                |                |                |                |            | <b>DSBC</b>  | DSBC       |
| Piston Ø [mm]                    | 32  | 40             | 50             | 63             | 80             | 100            |            | -...         |            |
| Stroke [mm]                      | 10 ... 2000   |                |                |                |                |                |            | -...         |            |
| End-position locking             | At both ends  |                |                |                |                |                |            | <b>E1</b>    |            |
|                                  | With advanced piston rod                                    |                |                |                |                |                |            | <b>E2</b>    |            |
|                                  | With retracted piston rod                                   |                |                |                |                |                |            | <b>E3</b>    |            |
| Piston rod thread type           | Male thread   |                |                |                |                |                |            |              |            |
|                                  | Female thread   |                |                |                |                |                |            | <b>F</b>     |            |
| Profile type                     | Sensor slot on one side                                     |                |                |                |                |                |            |              |            |
|                                  | Sensor slot on three sides                                  |                |                |                |                |                |            | <b>D3</b>    |            |
| Cushioning                       | Elastic cushioning rings/plates at both ends                |                |                |                |                |                |            | <b>-P</b>    |            |
|                                  | Pneumatic cushioning, adjustable at both ends               |                |                |                |                |                |            | <b>-PPV</b>  |            |
| Position sensing                 | Via proximity switch  |                |                |                |                |                |            | <b>A</b>     | A          |
| Piston rod extension [mm]        | None  |                |                |                |                |                |            |              |            |
|                                  | 1 ... 500   |                |                |                |                |                |            | <b>-...E</b> |            |
| Piston rod thread extension [mm] | None  |                |                |                |                |                |            |              |            |
|                                  | 1 ... 35  |                | 1 ... 70       |                |                |                | [1]        | <b>-...L</b> |            |

[1] ...L Not with F

## Ordering data – Modular product system

| Ordering table              |  |           |         |         |         |         |         |            |             |              |     |
|-----------------------------|--|-----------|---------|---------|---------|---------|---------|------------|-------------|--------------|-----|
| Size                        | 32   | 40        | 50      | 63      | 80      | 100     | 125     | Conditions | Code        | Enter code   |     |
| Module no.                  | 8150687  | 8150688   | 8150689 | 8150690 | 8150691 | 8150692 | 8150693 |            |             |              |     |
| Function                    | Standards-based cylinder, double-acting, based on ISO 15552          |           |         |         |         |         |         |            | <b>DSBC</b> | DSBC         |     |
| Piston ø [mm]               | 32   | 40        | 50      | 63      | 80      | 100     | 125     |            | -...        |              |     |
| Stroke [mm]                 | 1 ... 2800   |           |         |         |         |         |         |            |             | -...         |     |
| Piston rod type             | On one side  |           |         |         |         |         |         |            |             |              |     |
|                             | Through piston rod   |           |         |         |         |         |         |            |             | <b>T</b>     |     |
| Piston rod thread type      | Male thread  |           |         |         |         |         |         |            |             |              |     |
|                             | Female thread  |           |         |         |         |         |         | [1]        |             | <b>F</b>     |     |
| Profile type                | Sensor slot on one side  |           |         |         |         |         |         |            |             |              |     |
|                             | Sensor slot on three sides   |           |         |         |         |         |         |            |             | <b>D3</b>    |     |
| Cushioning                  | Elastic cushioning rings/plates at both ends                         |           |         |         |         |         |         |            |             | <b>-P</b>    |     |
|                             | Pneumatic cushioning, self-adjusting at both ends                    |           |         |         |         |         |         |            |             | <b>-PPS</b>  |     |
|                             | Pneumatic cushioning, adjustable at both ends                        |           |         |         |         |         |         |            |             | <b>-PPV</b>  |     |
| Position sensing            | Via proximity switch   |           |         |         |         |         |         |            |             | <b>A</b>     | A   |
| Standard                    | Based on ISO 15552   |           |         |         |         |         |         |            |             |              |     |
|                             | Conforms to ISO 15552  |           |         |         |         |         |         |            |             | <b>-N3</b>   |     |
| Special material properties | Recommended for production plants for manufacturing Li-ion batteries |           |         |         |         |         |         |            |             | <b>F1A</b>   | F1A |
| Piston rod extension        | None   |           |         |         |         |         |         |            |             |              |     |
|                             | [mm]   | 1 ... 500 |         |         |         |         |         |            | [1] [2]     | <b>-...E</b> |     |
| Extended piston rod thread  | None   |           |         |         |         |         |         |            |             |              |     |
|                             | [mm]   | 1 ... 70  |         |         |         |         |         |            | [1] [2] [3] | <b>-...L</b> |     |

[1] F, ...E, ...L Not with N3

[2] ...E, ...L Only up to a stroke of 2000 mm

[3] ...L Not with F



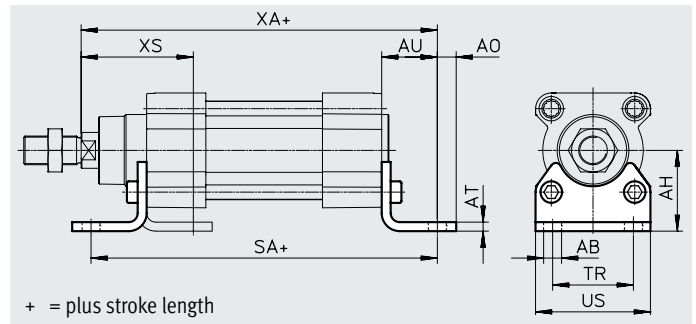
## Accessories

### Foot mounting HNC/CRHNC

Material:

HNC: Galvanised steel

CRHNC: High-alloy steel



#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | AB<br>$\varnothing$ | AH | AO   | AT | AU | SA      |           | TR | US  | XA      |           | XS   |
|---------------------------|---------------------|----|------|----|----|---------|-----------|----|-----|---------|-----------|------|
|                           |                     |    |      |    |    | DSBC... | DSBC...-C |    |     | DSBC... | DSBC...-C |      |
| 32                        | 7                   | 32 | 6.5  | 4  | 24 | 142     | 187       | 32 | 45  | 143.1   | 188.1     | 46   |
| 40                        | 10                  | 36 | 9    | 4  | 28 | 161     | 214       | 36 | 54  | 161.9   | 214.9     | 52.7 |
| 50                        | 10                  | 45 | 9.5  | 5  | 32 | 170     | 237       | 45 | 64  | 173.8   | 240.8     | 62.6 |
| 63                        | 10                  | 50 | 12.5 | 5  | 32 | 185     | 261       | 50 | 75  | 189.1   | 265.1     | 62.9 |
| 80                        | 12                  | 63 | 15   | 6  | 41 | 210     | 305       | 63 | 93  | 214.6   | 309.6     | 80.4 |
| 100                       | 14.5                | 71 | 17.5 | 6  | 41 | 220     | 318       | 75 | 110 | 228.5   | 326.7     | 84.3 |
| 125                       | 16.5                | 90 | 22   | 8  | 45 | 250     | 375       | 90 | 131 | 270     | 394.3     | 102  |

| For $\varnothing$<br>[mm] | Basic version     |            |          |                    | Corrosion resistant |            |          |                    |
|---------------------------|-------------------|------------|----------|--------------------|---------------------|------------|----------|--------------------|
|                           | CRC <sup>1)</sup> | Weight [g] | Part no. | Type <sup>2)</sup> | CRC <sup>1)</sup>   | Weight [g] | Part no. | Type <sup>2)</sup> |
| 32                        | 2                 | 144        | ★ 174369 | HNC-32             | 4                   | 139        | 176937   | CRHNC-32           |
| 40                        | 2                 | 193        | ★ 174370 | HNC-40             | 4                   | 188        | 176938   | CRHNC-40           |
| 50                        | 2                 | 353        | ★ 174371 | HNC-50             | 4                   | 341        | 176939   | CRHNC-50           |
| 63                        | 2                 | 436        | ★ 174372 | HNC-63             | 4                   | 424        | 176940   | CRHNC-63           |
| 80                        | 2                 | 829        | ★ 174373 | HNC-80             | 4                   | 809        | 176941   | CRHNC-80           |
| 100                       | 2                 | 1009       | 174374   | HNC-100            | 4                   | 990        | 176942   | CRHNC-100          |
| 125                       | 2                 | 1902       | 174375   | HNC-125            | 4                   | 1920       | 176943   | CRHNC-125          |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

2) Suitable for ATEX

## Accessories

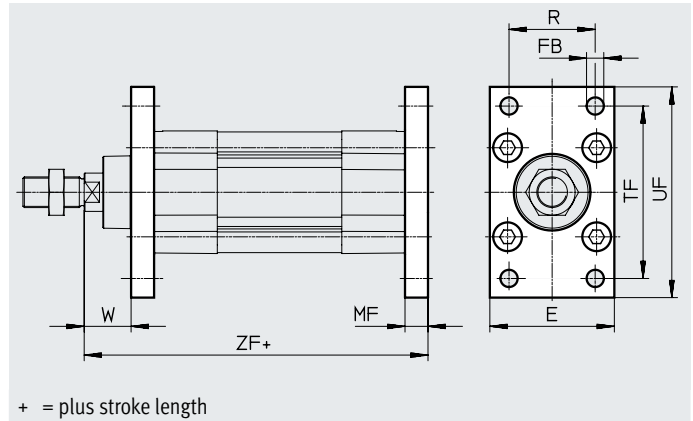
### Flange mounting FNC/CRFNG

Material:

FNC: Galvanised steel

CRFNG: high-alloy steel

RoHS-compliant



+ = plus stroke length

#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | E   | FB<br>$\varnothing$<br>H13 | MF | R  | TF  | UF  | W    | ZF      |           |
|---------------------------|-----|----------------------------|----|----|-----|-----|------|---------|-----------|
|                           |     |                            |    |    |     |     |      | DSBC... | DSBC...-C |
| 32                        | 45  | 7                          | 10 | 32 | 64  | 80  | 16   | 129.1   | 174.1     |
| 40                        | 54  | 9                          | 10 | 36 | 72  | 90  | 18.7 | 143.9   | 196.9     |
| 50                        | 65  | 9                          | 12 | 45 | 90  | 110 | 23.6 | 153.8   | 220.8     |
| 63                        | 75  | 9                          | 12 | 50 | 100 | 120 | 23.9 | 169.1   | 245.1     |
| 80                        | 93  | 12                         | 16 | 63 | 126 | 150 | 29.4 | 189.6   | 284.6     |
| 100                       | 110 | 14                         | 16 | 75 | 150 | 175 | 33.3 | 203.5   | 301.7     |
| 125                       | 132 | 16                         | 20 | 90 | 180 | 210 | 45   | 245     | 369.3     |

| For $\varnothing$<br>[mm] | Basic version     |               |          |                    | Corrosion resistant |               |          |                    |
|---------------------------|-------------------|---------------|----------|--------------------|---------------------|---------------|----------|--------------------|
|                           | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type <sup>2)</sup> | CRC <sup>1)</sup>   | Weight<br>[g] | Part no. | Type <sup>2)</sup> |
| 32                        | 1                 | 221           | ★ 174376 | FNC-32             | 4                   | 220           | 161846   | CRFNG-32           |
| 40                        | 1                 | 291           | ★ 174377 | FNC-40             | 4                   | 291           | 161847   | CRFNG-40           |
| 50                        | 1                 | 536           | ★ 174378 | FNC-50             | 4                   | 526           | 161848   | CRFNG-50           |
| 63                        | 1                 | 679           | ★ 174379 | FNC-63             | 4                   | 680           | 161849   | CRFNG-63           |
| 80                        | 1                 | 1495          | ★ 174380 | FNC-80             | 4                   | 1508          | 161850   | CRFNG-80           |
| 100                       | 1                 | 2041          | 174381   | FNC-100            | 4                   | 2054          | 161851   | CRFNG-100          |
| 125                       | 1                 | 3775          | 174382   | FNC-125            | 4                   | 3787          | 185363   | CRFNG-125          |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

2) Suitable for ATEX

## Accessories

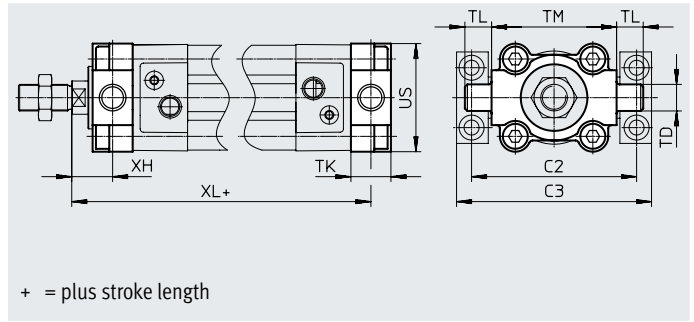
### Trunnion flange ZNCF/CRZNG

Material:

ZNCF: Stainless steel casting

CRZNG: Electropolished stainless steel casting

RoHS-compliant



#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | C2) | C3) | TD<br>$\varnothing$<br>e9 | TK | TL | TM  | US  | XH   | XL      |           |
|---------------------------|-----|-----|---------------------------|----|----|-----|-----|------|---------|-----------|
|                           |     |     |                           |    |    |     |     |      | DSBC... | DSBC...-C |
| 32                        | 71  | 86  | 12                        | 16 | 12 | 50  | 45  | 18   | 127.1   | 172.1     |
| 40                        | 87  | 105 | 16                        | 20 | 16 | 63  | 54  | 18.7 | 143.9   | 196.9     |
| 50                        | 99  | 117 | 16                        | 24 | 16 | 75  | 64  | 23.6 | 153.8   | 220.8     |
| 63                        | 116 | 136 | 20                        | 24 | 20 | 90  | 75  | 23.9 | 169.1   | 245.1     |
| 80                        | 136 | 156 | 20                        | 28 | 20 | 110 | 93  | 31.4 | 187.6   | 282.6     |
| 100                       | 164 | 189 | 25                        | 38 | 25 | 132 | 110 | 30.3 | 206.5   | 304.7     |
| 125                       | 192 | 217 | 25                        | 50 | 25 | 160 | 131 | 40   | 250     | 374.3     |

| For $\varnothing$<br>[mm] | Basic version     |               |          |                    | Corrosion resistant |               |          |                    |
|---------------------------|-------------------|---------------|----------|--------------------|---------------------|---------------|----------|--------------------|
|                           | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type <sup>2)</sup> | CRC <sup>1)</sup>   | Weight<br>[g] | Part no. | Type <sup>2)</sup> |
| 32                        | 2                 | 150           | 174411   | ZNCF-32            | 4                   | 150           | 161852   | CRZNG-32           |
| 40                        | 2                 | 285           | 174412   | ZNCF-40            | 4                   | 285           | 161853   | CRZNG-40           |
| 50                        | 2                 | 473           | 174413   | ZNCF-50            | 4                   | 473           | 161854   | CRZNG-50           |
| 63                        | 2                 | 687           | 174414   | ZNCF-63            | 4                   | 687           | 161855   | CRZNG-63           |
| 80                        | 2                 | 1296          | 174415   | ZNCF-80            | 4                   | 1296          | 161856   | CRZNG-80           |
| 100                       | 2                 | 2254          | 174416   | ZNCF-100           | 4                   | 2254          | 161857   | CRZNG-100          |
| 125                       | 2                 | 3484          | 174417   | ZNCF-125           | 4                   | 3484          | 185362   | CRZNG-125          |

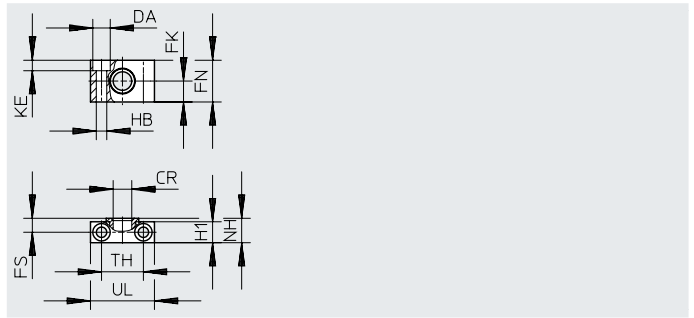
1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

2) Suitable for ATEX

## Accessories

### Trunnion support LNZG

Material:  
Trunnion support: Anodised aluminium  
Plain bearing: Plastic  
RoHS-compliant



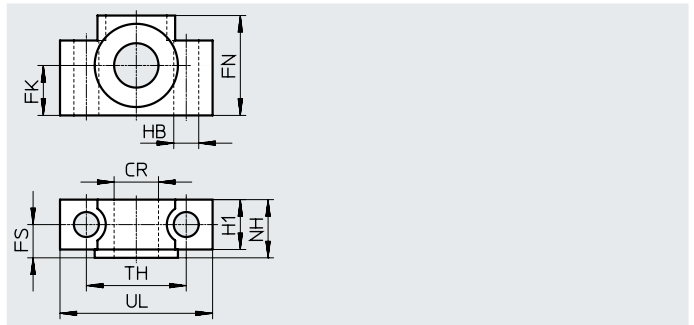
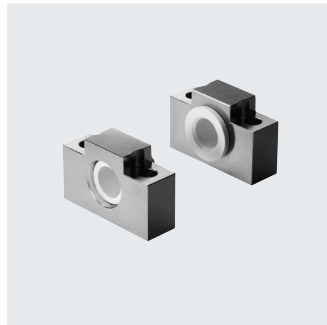
#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | CR<br>$\varnothing$<br>D11 | DA<br>$\varnothing$<br>H13 | FK<br>$\varnothing$<br>$\pm 0.1$ | FN | FS   | H1   | HB<br>$\varnothing$<br>H13 | KE  | NH   | TH<br>$\pm 0.2$ | UL | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type         |
|---------------------------|----------------------------|----------------------------|----------------------------------|----|------|------|----------------------------|-----|------|-----------------|----|-------------------|---------------|----------|--------------|
| 32                        | 12                         | 11                         | 15                               | 30 | 10.5 | 15   | 6.6                        | 6.8 | 18   | 32              | 46 | 2                 | 90            | 32959    | LNZG-32      |
| 40, 50                    | 16                         | 15                         | 18                               | 36 | 12   | 18   | 9                          | 9   | 21   | 36              | 55 | 2                 | 140           | 32960    | LNZG-40/50   |
| 63, 80                    | 20                         | 18                         | 20                               | 40 | 13   | 20   | 11                         | 11  | 23   | 42              | 65 | 2                 | 190           | 32961    | LNZG-63/80   |
| 100, 125                  | 25                         | 20                         | 25                               | 50 | 16   | 24.5 | 14                         | 13  | 28.5 | 50              | 75 | 2                 | 320           | 32962    | LNZG-100/125 |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

### Trunnion support CRLNZG

Material:  
High-alloy steel  
RoHS-compliant



#### Dimensions and ordering data

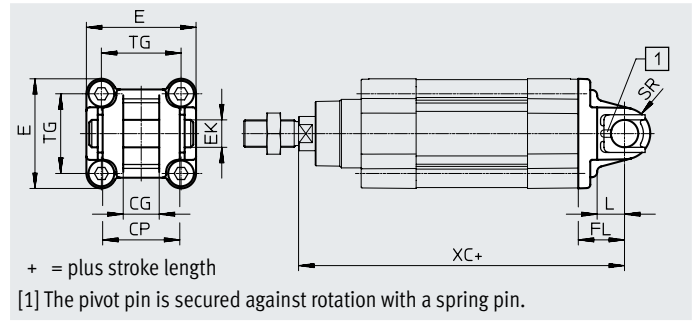
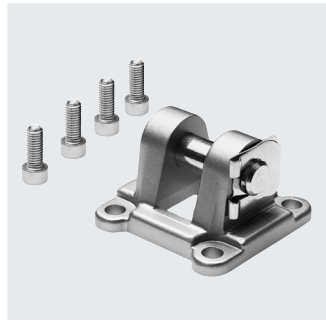
| For $\varnothing$<br>[mm] | CR<br>$\varnothing$<br>D11 | FK<br>$\varnothing$<br>$\pm 0.1$ | FN | FS   | H1   | HB<br>$\varnothing$<br>H13 | NH   | TH<br>$\pm 0.2$ | UL | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type           |
|---------------------------|----------------------------|----------------------------------|----|------|------|----------------------------|------|-----------------|----|-------------------|---------------|----------|----------------|
| 32                        | 12                         | 15                               | 30 | 10.5 | 15   | 6.6                        | 18   | 32              | 46 | 4                 | 205           | 161874   | CRLNZG-32      |
| 40, 50                    | 16                         | 18                               | 36 | 12   | 18   | 9                          | 21   | 36              | 55 | 4                 | 323           | 161875   | CRLNZG-40/50   |
| 63, 80                    | 20                         | 20                               | 40 | 13   | 20   | 11                         | 23   | 42              | 65 | 4                 | 435           | 161876   | CRLNZG-63/80   |
| 100, 125                  | 25                         | 25                               | 50 | 16   | 24.5 | 14                         | 28.5 | 50              | 75 | 4                 | 739           | 161877   | CRLNZG-100/125 |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Accessories

### Swivel flange SNC

Material:  
Die-cast aluminium  
RoHS-compliant



#### Dimensions and ordering data

| For $\varnothing$ | CG  | CP  | E                 | EK<br>$\varnothing$ | FL        | L  | SR |
|-------------------|-----|-----|-------------------|---------------------|-----------|----|----|
| [mm]              | H14 | h14 |                   | H9                  | $\pm 0.2$ |    |    |
| 32                | 14  | 34  | $45^{+0.2/-0.5}$  | 10                  | 22        | 13 | 10 |
| 40                | 16  | 40  | $54_{-0.5}$       | 12                  | 25        | 16 | 12 |
| 50                | 21  | 45  | $64_{-0.6}$       | 16                  | 27        | 16 | 12 |
| 63                | 21  | 51  | $75_{-0.6}$       | 16                  | 32        | 21 | 16 |
| 80                | 25  | 65  | $93_{-0.8}$       | 20                  | 36        | 22 | 16 |
| 100               | 25  | 75  | $110^{+0.3/-0.8}$ | 20                  | 41        | 27 | 20 |
| 125               | 37  | 97  | $131_{-0.8}$      | 30                  | 50        | 30 | 25 |

| For $\varnothing$ | TG   | XC      |           | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type <sup>2)</sup> |
|-------------------|------|---------|-----------|-------------------|---------------|----------|--------------------|
|                   |      | DSBC... | DSBC...-C |                   |               |          |                    |
| [mm]              |      |         |           |                   |               |          |                    |
| 32                | 32.5 | 141.1   | 186.1     | 1                 | 93            | ★ 174383 | SNC-32             |
| 40                | 38   | 158.9   | 211.9     | 1                 | 140           | ★ 174384 | SNC-40             |
| 50                | 46.5 | 168.8   | 235.8     | 1                 | 234           | ★ 174385 | SNC-50             |
| 63                | 56.5 | 189.1   | 265.1     | 1                 | 331           | ★ 174386 | SNC-63             |
| 80                | 72   | 209.6   | 304.6     | 1                 | 618           | ★ 174387 | SNC-80             |
| 100               | 89   | 228.5   | 326.7     | 1                 | 865           | 174388   | SNC-100            |
| 125               | 110  | 275     | 399.3     | 1                 | 1728          | 174389   | SNC-125            |

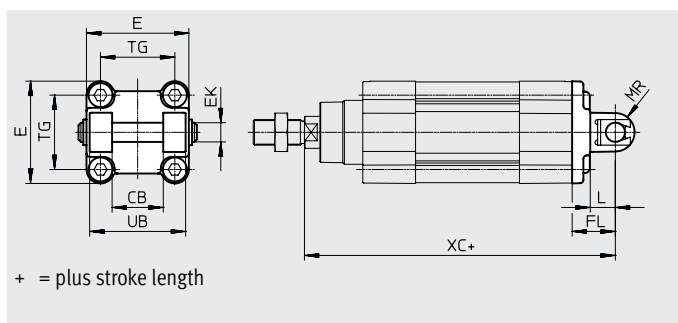
1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

2) Suitable for ATEX

## Accessories

### Swivel flange SNCB/SNCB-...-R3

Material:  
 SNCB: Die-cast aluminium  
 SNCB-...-R3: Die-cast aluminium with  
 protective coating  
 RoHS-compliant



#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | CB<br>H14 | E<br>$45+0.2/-0.5$ | EK<br>$\varnothing$<br>H9/e8 | FL<br>$\pm 0.2$ | L  | MR<br>-0.5 | TG   | UB<br>h14 | XC       |            |
|---------------------------|-----------|--------------------|------------------------------|-----------------|----|------------|------|-----------|----------|------------|
|                           |           |                    |                              |                 |    |            |      |           | DSBC-... | DSBC-...-C |
| 32                        | 26        | $45+0.2/-0.5$      | 10                           | 22              | 13 | 8.5        | 32.5 | 45        | 141.1    | 186.1      |
| 40                        | 28        | $54_{-0.5}$        | 12                           | 25              | 16 | 12         | 38   | 52        | 158.9    | 211.9      |
| 50                        | 32        | $64_{-0.6}$        | 12                           | 27              | 16 | 12         | 46.5 | 60        | 168.8    | 235.8      |
| 63                        | 40        | $75_{-0.6}$        | 16                           | 32              | 21 | 16         | 56.5 | 70        | 189.1    | 265.1      |
| 80                        | 50        | $93_{-0.8}$        | 16                           | 36              | 22 | 16         | 72   | 90        | 209.6    | 304.6      |
| 100                       | 60        | $110+0.3/-0.8$     | 20                           | 41              | 27 | 20         | 89   | 110       | 228.5    | 326.7      |
| 125                       | 70        | $131_{-0.8}$       | 25                           | 50              | 30 | 25         | 110  | 130       | 275      | 399.3      |

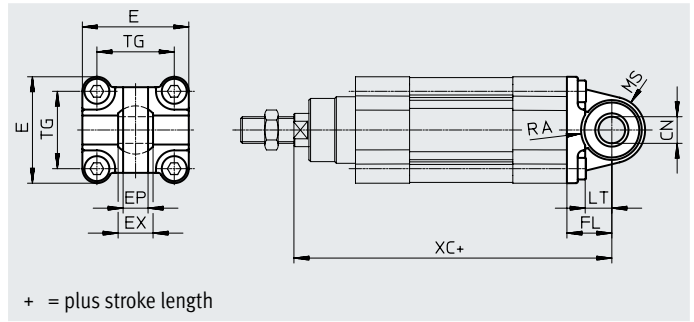
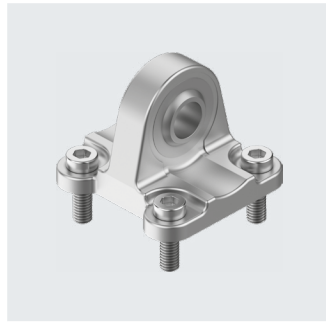
| For $\varnothing$<br>[mm] | Basic version     |               |          |          | R3 – High corrosion protection |               |          |             |
|---------------------------|-------------------|---------------|----------|----------|--------------------------------|---------------|----------|-------------|
|                           | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type     | CRC <sup>1)</sup>              | Weight<br>[g] | Part no. | Type        |
| 32                        | 1                 | 103           | ★ 174390 | SNCB-32  | 3                              | 100           | 176944   | SNCB-32-R3  |
| 40                        | 1                 | 155           | ★ 174391 | SNCB-40  | 3                              | 151           | 176945   | SNCB-40-R3  |
| 50                        | 1                 | 232           | ★ 174392 | SNCB-50  | 3                              | 228           | 176946   | SNCB-50-R3  |
| 63                        | 1                 | 375           | ★ 174393 | SNCB-63  | 3                              | 371           | 176947   | SNCB-63-R3  |
| 80                        | 1                 | 636           | ★ 174394 | SNCB-80  | 3                              | 632           | 176948   | SNCB-80-R3  |
| 100                       | 1                 | 1035          | 174395   | SNCB-100 | 3                              | 986           | 176949   | SNCB-100-R3 |
| 125                       | 1                 | 1860          | 174396   | SNCB-125 | 3                              | 1776          | 176950   | SNCB-125-R3 |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Accessories

### Swivel flange SNCS/CRSNCS/SNCS-...-R3

Material:  
 SNCS 32 ... 50: Die-cast aluminium  
 SNCS 63 ... 125:  
 Wrought aluminium alloy  
 CRSNCS 32 ... 80:  
 High-alloy stainless steel  
 SNCS-...-R3 100 ... 125:  
 Wrought aluminium alloy with protective coating  
 RoHS-compliant



#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | CN<br>$\varnothing$  |                | E                  |                    | EP<br>$\pm 0.2$ | EX | FL<br>$\pm 0.2$ | LT |
|---------------------------|----------------------|----------------|--------------------|--------------------|-----------------|----|-----------------|----|
|                           | DSBC...              | DSBC-...-R3    | DSBC...            | DSBC-...-R3        |                 |    |                 |    |
| 32                        | 10 <sup>+0.013</sup> | 10+0.015/-0.04 | 45+0.2/-0.5        | 45-0.5             | 10.5            | 14 | 22              | 13 |
| 40                        | 12 <sup>+0.015</sup> | 12+0.018/-0.04 | 54 <sub>-0.5</sub> | 54 <sub>-0.5</sub> | 12              | 16 | 25              | 16 |
| 50                        | 16 <sup>+0.015</sup> | 16+0.018/-0.04 | 64 <sub>-0.6</sub> | 64 <sub>-0.6</sub> | 15              | 21 | 27              | 16 |
| 63                        | 16 <sup>+0.015</sup> | 16+0.018/-0.04 | 74.5 $\pm 0.5$     | 75 <sub>-0.6</sub> | 15              | 21 | 32              | 21 |
| 80                        | 20 <sup>+0.018</sup> | 20+0.021/-0.04 | 92.2 $\pm 0.8$     | 93 <sub>-0.8</sub> | 18              | 25 | 36              | 22 |
| 100                       | 20 <sup>+0.018</sup> | 20+0.021/-0.04 | 109+1/-0.7         | 109+1/-0.7         | 18              | 25 | 41              | 27 |
| 125                       | 30 <sup>+0.018</sup> | 30+0.021/-0.04 | 132+1/-0.7         | 132+1/-0.7         | 25              | 37 | 50              | 30 |

| For $\varnothing$<br>[mm] | MS                 |                    | RA            |                   | TG   | XC      |            |
|---------------------------|--------------------|--------------------|---------------|-------------------|------|---------|------------|
|                           | DSBC...            | DSBC-...-R3        | DSBC...<br>+1 | DSBC-...-R3<br>+1 |      | DSBC... | DSBC-...-C |
| 32                        | 15 <sup>+0.5</sup> | 15 <sup>+0.5</sup> | 14.5          | 14.5              | 32.5 | 141.1   | 186.1      |
| 40                        | 17 <sup>+0.5</sup> | 17 <sup>+0.5</sup> | 17.5          | 17.5              | 38   | 158.9   | 211.9      |
| 50                        | 20 <sup>+0.5</sup> | 20 <sup>+0.5</sup> | 18.5          | 19                | 46.5 | 168.8   | 235.8      |
| 63                        | 23 <sub>-0.5</sub> | 22 <sup>+0.5</sup> | 23            | 23                | 56.5 | 189.1   | 265.1      |
| 80                        | 28 <sub>-0.5</sub> | 27 <sup>+0.5</sup> | 25            | 25                | 72   | 209.6   | 304.6      |
| 100                       | 30 $\pm 0.5$       | 30 $\pm 0.5$       | 95            | 100               | 89   | 228.5   | 326.7      |
| 125                       | 39 $\pm 0.5$       | 39 $\pm 0.5$       | 100           | 100               | 110  | 275     | 326.7      |

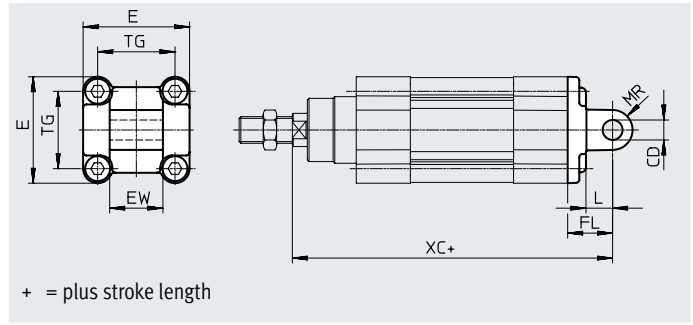
| For $\varnothing$<br>[mm] | Basic version     |               |          |          | High corrosion protection |               |          |             |
|---------------------------|-------------------|---------------|----------|----------|---------------------------|---------------|----------|-------------|
|                           | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type     | CRC <sup>1)</sup>         | Weight<br>[g] | Part no. | Type        |
| 32                        | 1                 | 86            | ★ 174397 | SNCS-32  | 4                         | 161           | 2895920  | CRSNCS-32   |
| 40                        | 1                 | 122           | ★ 174398 | SNCS-40  | 4                         | 239           | 2895921  | CRSNCS-40   |
| 50                        | 1                 | 216           | ★ 174399 | SNCS-50  | 4                         | 403           | 2895922  | CRSNCS-50   |
| 63                        | 2                 | 281           | ★ 174400 | SNCS-63  | 4                         | 576           | 2895923  | CRSNCS-63   |
| 80                        | 2                 | 557           | ★ 174401 | SNCS-80  | 4                         | 1173          | 2895924  | CRSNCS-80   |
| 100                       | 2                 | 683           | 174402   | SNCS-100 | 3                         | 684           | 2895925  | SNCS-100-R3 |
| 125                       | 2                 | 1369          | 174403   | SNCS-125 | 3                         | 1369          | 2895926  | SNCS-125-R3 |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Accessories

### Swivel flange SNCL

Material:  
Die-cast aluminium  
RoHS-compliant



#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | CD<br>$\varnothing$<br>H9 | E                 | EW<br>h12 | FL<br>$\pm 0.2$ | L  | MR |
|---------------------------|---------------------------|-------------------|-----------|-----------------|----|----|
| 32                        | 10                        | $45^{+0.2/-0.5}$  | 26        | 22              | 13 | 10 |
| 40                        | 12                        | $54_{-0.5}$       | 28        | 25              | 16 | 12 |
| 50                        | 12                        | $64_{-0.6}$       | 32        | 27              | 16 | 12 |
| 63                        | 16                        | $75_{-0.6}$       | 40        | 32              | 21 | 16 |
| 80                        | 16                        | $93_{-0.8}$       | 50        | 36              | 22 | 16 |
| 100                       | 20                        | $110^{+0.3/-0.8}$ | 60        | 41              | 27 | 20 |
| 125                       | 25                        | $131_{-0.8}$      | 70        | 50              | 30 | 25 |

| For $\varnothing$<br>[mm] | TG   | XC       |            | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type     |
|---------------------------|------|----------|------------|-------------------|---------------|----------|----------|
|                           |      | DSBC-... | DSBC-...-C |                   |               |          |          |
| 32                        | 32.5 | 141.1    | 186.1      | 1                 | 71            | ★ 174404 | SNCL-32  |
| 40                        | 38   | 158.9    | 211.9      | 1                 | 95            | ★ 174405 | SNCL-40  |
| 50                        | 46.5 | 168.8    | 235.8      | 1                 | 158           | ★ 174406 | SNCL-50  |
| 63                        | 56.5 | 189.1    | 265.1      | 1                 | 225           | ★ 174407 | SNCL-63  |
| 80                        | 72   | 209.6    | 304.6      | 1                 | 436           | ★ 174408 | SNCL-80  |
| 100                       | 89   | 228.5    | 326.7      | 1                 | 606           | 174409   | SNCL-100 |
| 125                       | 110  | 275      | 399.3      | 1                 | 1135          | 174410   | SNCL-125 |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

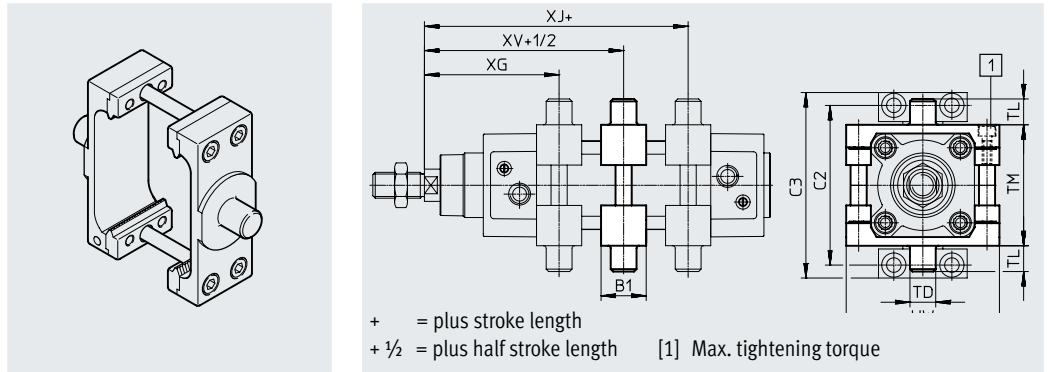


## Accessories

### Trunnion mounting kit DAMT

The kit can be attached at any position along the profile barrel of the cylinder.

Material:  
Galvanised steel  
RoHS-compliant



#### Dimensions and ordering data







| For $\varnothing$<br>[mm] | B1 | C2) | C3) | TD<br>$\varnothing$<br>e9 | TL | TM  | UW  |
|---------------------------|----|-----|-----|---------------------------|----|-----|-----|
| 32                        | 30 | 71  | 86  | 12                        | 12 | 50  | 65  |
| 40                        | 32 | 87  | 105 | 16                        | 16 | 63  | 75  |
| 50                        | 34 | 99  | 117 | 16                        | 16 | 75  | 95  |
| 63                        | 41 | 116 | 136 | 20                        | 20 | 90  | 105 |
| 80                        | 44 | 136 | 156 | 20                        | 20 | 110 | 130 |
| 100                       | 48 | 164 | 189 | 25                        | 25 | 132 | 145 |
| 125                       | 50 | 192 | 217 | 25                        | 25 | 160 | 177 |

| For $\varnothing$<br>[mm] | XG<br>min. | XJ<br>max. | XV        | Max.<br>tightening torque<br>[Nm] | CRC <sup>1)</sup> | Weight<br>[g] | Part no.  | Type <sup>2)</sup> |
|---------------------------|------------|------------|-----------|-----------------------------------|-------------------|---------------|-----------|--------------------|
| 32                        | 69±1.4     | 76±1.4     | 73±1.4    | 4+1                               | 1                 | 213           | ★ 2213233 | DAMT-V1-32-A       |
| 40                        | 77.7±1.4   | 84.9±1.4   | 81.2±1.4  | 8+1                               | 1                 | 388           | ★ 2214899 | DAMT-V1-40-A       |
| 50                        | 85.6±1.4   | 91.8±1.4   | 88.6±1.4  | 8+2                               | 1                 | 608           | ★ 2214909 | DAMT-V1-50-A       |
| 63                        | 96.9±1.8   | 96.1±1.8   | 96.4±1.8  | 18+2                              | 1                 | 911           | ★ 2214971 | DAMT-V1-63-A       |
| 80                        | 110.4±1.8  | 108.6±1.8  | 109.4±1.8 | 28+2                              | 1                 | 1494          | ★ 163529  | DAMT-V1-80-A       |
| 100                       | 121.3±1.8  | 115.5±1.8  | 118.3±1.8 | 28+2                              | 1                 | 2095          | 163530    | DAMT-V1-100-A      |
| 125                       | 134.7±1.8  | 155.3±1.8  | 145±1.8   | 40+2                              | 1                 | 3548          | 1812524   | DAMT-V8-125-A      |


1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)


2) Suitable for ATEX

## Accessories

| Ordering data – Mounting components  |                   |          |          | Ordering data – Mounting components   |                   |          |           |
|--|-------------------|----------|----------|---|-------------------|----------|-----------|
| Designation  | For $\varnothing$ | Part no. | Type     | Designation   | For $\varnothing$ | Part no. | Type      |
| <b>Clevis foot LNG</b>   |                   |          |          | <b>Clevis foot LSN</b>  |                   |          |           |
|  | 32                | ★ 33890  | LNG-32   |  | 32                | 5561     | LSN-32    |
|  | 40                | ★ 33891  | LNG-40   |   | 40                | 5562     | LSN-40    |
|  | 50                | ★ 33892  | LNG-50   |   | 50                | 5563     | LSN-50    |
|  | 63                | ★ 33893  | LNG-63   |   | 63                | 5564     | LSN-63    |
|  | 80                | ★ 33894  | LNG-80   |   | 80                | 5565     | LSN-80    |
|  | 100               | 33895    | LNG-100  |   | 100               | 5566     | LSN-100   |
|  | 125               | 33896    | LNG-125  |   | 125               | 6987     | LSN-125   |
| <b>Clevis foot LSNG</b>  |                   |          |          | <b>Clevis foot LSNSG</b>  |                   |          |           |
|  | 32                | 31740    | LSNG-32  |  | 32                | 31747    | LSNSG-32  |
|  | 40                | 31741    | LSNG-40  |   | 40                | 31748    | LSNSG-40  |
|  | 50                | 31742    | LSNG-50  |   | 50                | 31749    | LSNSG-50  |
|  | 63                | 31743    | LSNG-63  |   | 63                | 31750    | LSNSG-63  |
|  | 80                | 31744    | LSNG-80  |   | 80                | 31751    | LSNSG-80  |
|  | 100               | 31745    | LSNG-100 |   | 100               | 31752    | LSNSG-100 |
|  | 125               | 31746    | LSNG-125 |   | 125               | 31753    | LSNSG-125 |
| <b>Clevis foot LBG<sup>1)</sup></b>  |                   |          |          | <b>Right-angle clevis foot LQG<sup>1)</sup></b>                                   |                   |          |           |
|  | 32                | 31761    | LBG-32   |  | 32                | 31768    | LQG-32    |
|  | 40                | 31762    | LBG-40   |   | 40                | 31769    | LQG-40    |
|  | 50                | 31763    | LBG-50   |   | 50                | 31770    | LQG-50    |
|  | 63                | 31764    | LBG-63   |   | 63                | 31771    | LQG-63    |
|  | 80                | 31765    | LBG-80   |   | 80                | 31772    | LQG-80    |
|  | 100               | 31766    | LBG-100  |   | 100               | 31773    | LQG-100   |
|  | 125               | 31767    | LBG-125  |   | 125               | 31774    | LQG-125   |


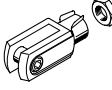
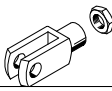
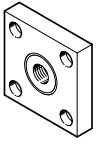
1) Suitable for ATEX

| Ordering data – Mounting components, corrosion-resistant                           |                   |          |           | Ordering data – Mounting components, corrosion-resistant |                   |          |           |
|--|-------------------|----------|-----------|--|-------------------|----------|-----------|
| Designation  | For $\varnothing$ | Part no. | Type      | Designation  | For $\varnothing$ | Part no. | Type      |
| <b>Clevis foot CRLNG</b>   |                   |          |           | <b>Clevis foot CRLNG</b>                                 |                   |          |           |
|  | 32                | 161840   | CRLNG-32  |  | 32                | 161840   | CRLNG-32  |
|  | 40                | 161841   | CRLNG-40  |  | 40                | 161841   | CRLNG-40  |
|  | 50                | 161842   | CRLNG-50  |  | 50                | 161842   | CRLNG-50  |
|  | 63                | 161843   | CRLNG-63  |  | 63                | 161843   | CRLNG-63  |
|  | 80                | 161844   | CRLNG-80  |  | 80                | 161844   | CRLNG-80  |
|  | 100               | 161845   | CRLNG-100 |  | 100               | 161845   | CRLNG-100 |
|  | 125               | 176951   | CRLNG-125 |  | 125               | 176951   | CRLNG-125 |

| Ordering data – Mounting components, high corrosion protection                     |                   |          |            | Ordering data – Mounting components, high corrosion protection |                   |          |            |
|--|-------------------|----------|------------|--|-------------------|----------|------------|
| Designation  | For $\varnothing$ | Part no. | Type       | Designation  | For $\varnothing$ | Part no. | Type       |
| <b>Clevis foot LBG-R3</b>  |                   |          |            | <b>Clevis foot LBG-R3</b>                                      |                   |          |            |
|  | 32                | 2078790  | LBG-32-R3  |  | 32                | 2078790  | LBG-32-R3  |
|  | 40                | 2078792  | LBG-40-R3  |  | 40                | 2078792  | LBG-40-R3  |
|  | 50                | 2078794  | LBG-50-R3  |  | 50                | 2078794  | LBG-50-R3  |
|  | 63                | 2078795  | LBG-63-R3  |  | 63                | 2078795  | LBG-63-R3  |
|  | 80                | 2078797  | LBG-80-R3  |  | 80                | 2078797  | LBG-80-R3  |
|  | 100               | 2078799  | LBG-100-R3 |  | 100               | 2078799  | LBG-100-R3 |
|  | 125               | 2078837  | LBG-125-R3 |  | 125               | 2078837  | LBG-125-R3 |

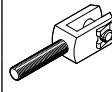
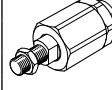
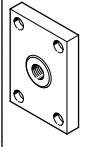
## Accessories

## Ordering data – Piston rod attachments


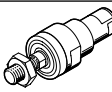
| Designation  | For ø | Part no. | Type         |
|--|-------|----------|--------------|
| <b>Rod eye SGS</b>   |       |          |              |
|   | 32    | ★ 9261   | SGS-M10x1.25 |
|  | 40    | ★ 9262   | SGS-M12x1.25 |
|  | 50    | ★ 9263   | SGS-M16x1.5  |
|  | 63    |          |              |
|  | 80    | ★ 9264   | SGS-M20x1.5  |
|  | 100   |          |              |
|  | 125   | 10774    | SGS-M27x2    |
| <b>Rod clevis SG<sup>1)</sup></b>  |       |          |              |
|   | 32    | ★ 6144   | SG-M10x1.25  |
|  | 40    | ★ 6145   | SG-M12x1.25  |
|  | 50    | ★ 6146   | SG-M16x1.5   |
|  | 63    |          |              |
|  | 80    | ★ 6147   | SG-M20x1.5   |
|   | 100   |          |              |
|  | 125   | 14987    | SG-M27x2-B   |
| <b>Coupling piece KSG<sup>1)</sup></b>   |       |          |              |
|  | 32    | 32963    | KSG-M10x1.25 |
|  | 40    | 32964    | KSG-M12x1.25 |
|  | 50    | 32965    | KSG-M16x1.5  |
|  | 63    |          |              |
|  | 80    | 32966    | KSG-M20x1.5  |
|  | 100   |          |              |
|  | 125   | 32967    | KSG-M27x2    |

1) Suitable for ATEX

Datasheets → Internet: piston rod attachment

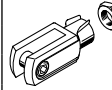
| Designation  | For ø | Part no. | Type         |
|--|-------|----------|--------------|
| <b>Rod clevis SGA<sup>1)</sup></b>   |       |          |              |
|   | 32    | 32954    | SGA-M10x1.25 |
|  | 40    | 10767    | SGA-M12x1.25 |
|  | 50    | 10768    | SGA-M16x1.5  |
|  | 63    |          |              |
|  | 80    | 10769    | SGA-M20x1.5  |
|  | 100   |          |              |
|  | 125   | 10770    | SGA-M27x2    |
| <b>Self-aligning rod coupler FK<sup>1)</sup></b>                                   |       |          |              |
|   | 32    | ★ 6140   | FK-M10x1.25  |
|  | 40    | ★ 6141   | FK-M12x1.25  |
|  | 50    | ★ 6142   | FK-M16x1.5   |
|  | 63    |          |              |
|  | 80    | ★ 6143   | FK-M20x1.5   |
|  | 100   |          |              |
|  | 125   | 10485    | FK-M27x2     |
| <b>Coupling piece KSZ<sup>1)</sup></b>   |       |          |              |
|  | 32    | 36125    | KSZ-M10x1.25 |
|  | 40    | 36126    | KSZ-M12x1.25 |
|  | 50    | 36127    | KSZ-M16x1.5  |
|  | 63    |          |              |
|  | 80    | 36128    | KSZ-M20x1.5  |
|  | 100   |          |              |
|  | 125   | –        | –            |

## Ordering data – Piston rod attachments, corrosion-resistant

| Designation   | For ø | Part no. | Type           |
|---|-------|----------|----------------|
| <b>Rod eye CRSGS</b>  |       |          |                |
|  | 32    | 195582   | CRSGS-M10x1.25 |
|   | 40    | 195583   | CRSGS-M12x1.25 |
|   | 50    | 195584   | CRSGS-M16x1.5  |
|   | 63    |          |                |
|   | 80    | 195585   | CRSGS-M20x1.5  |
|   | 100   |          |                |
|   | 125   | 195586   | CRSGS-M27x2    |
| <b>Self-aligning rod coupler CRFK<sup>1)</sup></b>                                  |       |          |                |
|  | 32    | 2305778  | CRFK-M10x1.25  |
|   | 40    | 2305779  | CRFK-M12x1.25  |
|   | 50    | 2490673  | CRFK-M16x1.5   |
|   | 63    |          |                |
|   | 80    | 2545677  | CRFK-M20x1.5   |
|   | 100   |          |                |

1) Suitable for ATEX

Datasheets → Internet: piston rod attachment

| Designation   | For ø | Part no. | Type          |
|---|-------|----------|---------------|
| <b>Rod clevis CRSG<sup>1)</sup></b>   |       |          |               |
|  | 32    | 13569    | CRSG-M10x1.25 |
|   | 40    | 13570    | CRSG-M12x1.25 |
|   | 50    | 13571    | CRSG-M16x1.5  |
|   | 63    |          |               |
|   | 80    | 13572    | CRSG-M20x1.5  |
|   | 100   |          |               |
|   | 125   | 185361   | CRSG-M27x2    |

## Accessories

### Bellows kit DADB



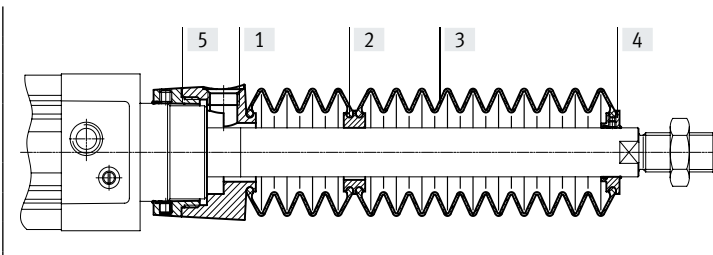
#### General technical data

| Type DADB-V6-  | 32  | 40         | 50         | 63         | 80         | 100        |
|--|---|------------|------------|------------|------------|------------|
| Max. stroke range of the cylinder <sup>1)</sup> [mm] | 10 ... 500  | 10 ... 500 | 10 ... 500 | 10 ... 500 | 10 ... 500 | 10 ... 500 |
| Type of mounting                                     | Via threaded pin  |            |            |            |            |            |
| Mounting position                                    | Any   |            |            |            |            |            |
| Media resistance                                     | Dust, chippings, oil, grease, fuel (→ Internet: media resistance) |            |            |            |            |            |
| Ambient temperature <sup>2)</sup> [°C]               | -10 ... +80   |            |            |            |            |            |
| Degree of protection                                 | IP54  |            |            |            |            |            |
| Corrosion resistance class CRC <sup>3)</sup>         | 3 - High corrosion stress   |            |            |            |            |            |

- 1) In conjunction with the bellows kit DADB  
 2) Note operating range of proximity switches and cylinder  
 3) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

#### Materials

##### Sectional view



#### Protective bellows

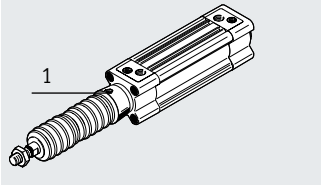
|     |                    |                |
|-----|--------------------|----------------|
| [1] | Connection         | Polyamide      |
| [2] | Adapter            | Polyamide      |
| [3] | Protective bellows | NBR            |
| [4] | End piece          | Polyamide      |
| [5] | Connector          | Polyamide      |
| -   | O-ring             | NBR            |
|     | Note on materials  | RoHS-compliant |

#### Weight [g]

| Type DADB-V6-<br>Stroke [mm] | 32  | 40  | 50  | 63  | 80  | 100 |
|------------------------------|-----|-----|-----|-----|-----|-----|
| 10 ... 50                    | 29  | 42  | 71  | 69  | 99  | 124 |
| 51 ... 125                   | 41  | 56  | 91  | 89  | 127 | 152 |
| 126 ... 175                  | 52  | 68  | 105 | 103 | 140 | 165 |
| 176 ... 250                  | 66  | 85  | 129 | 127 | 193 | 218 |
| 251 ... 300                  | 79  | 100 | 147 | 145 | 231 | 255 |
| 301 ... 350                  | 92  | 115 | 166 | 164 | 268 | 293 |
| 351 ... 375                  | 92  | 115 | 167 | 165 | 259 | 284 |
| 376 ... 425                  | 104 | 129 | 185 | 183 | 296 | 321 |
| 426 ... 475                  | 117 | 144 | 204 | 202 | 334 | 359 |
| 476 ... 500                  | 117 | 144 | 205 | 203 | 324 | 349 |

## Accessories

### Travel speed $v$ as a function of tubing length $l$



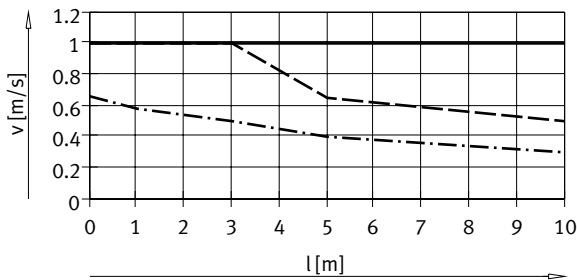
The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air must be ducted via a pressure

compensation hole in the connection part [1]. The pressure generated in the bellows kit by the positioning motion is primarily defined by the travel speed and the

tubing length. The recommended tubing length based on the travel speed of the drive can be read from the graph.

#### Advancing

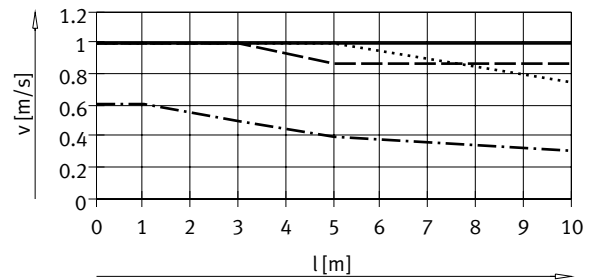
DADB-32 ... 100



— Ø 32/ 50/63  
 - - - - - Ø 40  
 ······ Ø 80/100

#### Retracting

DADB-32 ... 100



— Ø 32  
 - - - - - Ø 40  
 - - - - - Ø 50/63  
 ······ Ø 80/100

#### Note

The push-in fittings in the adjacent table must be used for the pressure compensation hole. Silencers can be used as an alternative. This reduces the travel speed slightly.

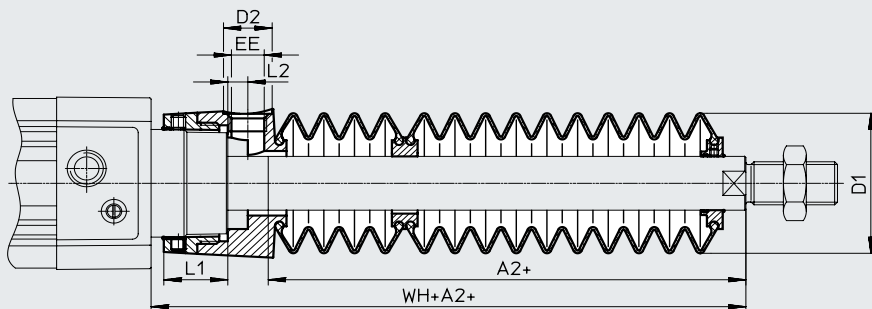
#### Tubing size and push-in fitting for pressure compensation hole

| Ø [mm]          | Tubing O.D. [mm] | Push-in fitting |                    |
|-----------------|------------------|-----------------|--------------------|
|                 |                  | Part no.        | Type               |
| 32, 40          | 8                | ★ 186109        | QS-G1/8-8-I        |
|                 |                  | 578376          | NPQH-DK-G18-Q8-P10 |
|                 |                  | 578362          | NPQH-D-G18-S8-P10  |
| 50, 63, 80, 100 | 12               | ★ 186350        | QS-G1/4-12         |
|                 |                  | 578344          | NPQH-D-G14-Q12-P10 |
|                 |                  | 578366          | NPQH-D-G14-S12-P10 |

Accessories

Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)



+ = plus stroke length

| ∅<br>Stroke<br>[mm] | 32               |            |    |      |      |     |       | 40               |            |    |      |      |     |       |
|---------------------|------------------|------------|----|------|------|-----|-------|------------------|------------|----|------|------|-----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1   | L2  | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1   | L2  | WH+A2 |
| 10 ... 50           | 29               | 38         | 14 | G1/8 | 12.9 | 5.4 | 55    | 28               | 46         | 14 | G1/8 | 16.3 | 5.4 | 56.7  |
| 51 ... 125          | 47               |            |    |      |      |     | 73    | 43               |            |    |      |      |     | 71.7  |
| 126 ... 175         | 61               |            |    |      |      |     | 87    | 56               |            |    |      |      |     | 84.7  |
| 176 ... 250         | 80               |            |    |      |      |     | 106   | 72               |            |    |      |      |     | 100.7 |
| 251 ... 300         | 96               |            |    |      |      |     | 122   | 86               |            |    |      |      |     | 114.7 |
| 301 ... 350         | 112              |            |    |      |      |     | 138   | 100              |            |    |      |      |     | 128.7 |
| 351 ... 375         | 114              |            |    |      |      |     | 140   | 101              |            |    |      |      |     | 129.7 |
| 376 ... 425         | 130              |            |    |      |      |     | 156   | 115              |            |    |      |      |     | 143.7 |
| 426 ... 475         | 145              |            |    |      |      |     | 171   | 130              |            |    |      |      |     | 158.7 |
| 476 ... 500         | 147              |            |    |      |      |     | 173   | 131              |            |    |      |      |     | 159.7 |

| ∅<br>Stroke<br>[mm] | 50               |            |    |      |       |    |       | 63               |            |    |      |      |    |       |
|---------------------|------------------|------------|----|------|-------|----|-------|------------------|------------|----|------|------|----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1    | L2 | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1   | L2 | WH+A2 |
| 10 ... 50           | 28               | 57         | 17 | G1/4 | 22.35 | 7  | 63.6  | 28               | 57         | 17 | G1/4 | 22.4 | 7  | 63.9  |
| 51 ... 125          | 46               |            |    |      |       |    | 81.6  | 46               |            |    |      |      |    | 81.9  |
| 126 ... 175         | 56               |            |    |      |       |    | 91.6  | 56               |            |    |      |      |    | 91.9  |
| 176 ... 250         | 73               |            |    |      |       |    | 108.6 | 73               |            |    |      |      |    | 108.9 |
| 251 ... 300         | 86               |            |    |      |       |    | 121.6 | 86               |            |    |      |      |    | 121.9 |
| 301 ... 350         | 97               |            |    |      |       |    | 132.6 | 97               |            |    |      |      |    | 132.9 |
| 351 ... 375         | 105              |            |    |      |       |    | 140.6 | 105              |            |    |      |      |    | 140.9 |
| 376 ... 425         | 116              |            |    |      |       |    | 151.6 | 116              |            |    |      |      |    | 151.9 |
| 426 ... 475         | 126              |            |    |      |       |    | 161.6 | 126              |            |    |      |      |    | 161.9 |
| 476 ... 500         | 134              |            |    |      |       |    | 169.6 | 134              |            |    |      |      |    | 169.9 |

| ∅<br>Stroke<br>[mm] | 80               |            |    |      |    |    |       | 100              |            |    |      |    |    |       |
|---------------------|------------------|------------|----|------|----|----|-------|------------------|------------|----|------|----|----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1 | L2 | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE   | L1 | L2 | WH+A2 |
| 10 ... 50           | 25               | 93         | 17 | G1/4 | 28 | 4  | 70.4  | 25               | 93         | 17 | G1/4 | 28 | 4  | 74.3  |
| 51 ... 125          | 37               |            |    |      |    |    | 82.4  | 37               |            |    |      |    |    | 86.3  |
| 126 ... 175         | 49               |            |    |      |    |    | 94.4  | 49               |            |    |      |    |    | 98.3  |
| 176 ... 250         | 62               |            |    |      |    |    | 107.4 | 62               |            |    |      |    |    | 111.3 |
| 251 ... 300         | 74               |            |    |      |    |    | 119.4 | 74               |            |    |      |    |    | 123.3 |
| 301 ... 350         | 86               |            |    |      |    |    | 131.4 | 86               |            |    |      |    |    | 135.3 |
| 351 ... 375         | 87               |            |    |      |    |    | 132.4 | 87               |            |    |      |    |    | 136.3 |
| 376 ... 425         | 98               |            |    |      |    |    | 143.4 | 98               |            |    |      |    |    | 147.3 |
| 426 ... 475         | 110              |            |    |      |    |    | 155.4 | 110              |            |    |      |    |    | 159.3 |
| 476 ... 500         | 111              |            |    |      |    |    | 156.4 | 111              |            |    |      |    |    | 160.3 |

1) The dimension corresponds to the E value (piston rod extension) of the drive

## Accessories

## Ordering data – Bellows kit

An extended piston rod (order code E) is absolutely essential when using a bellows kit → Ordering data – Modular product system.

The necessary dimension for order code E as a function of piston diameter and cylinder stroke as well as the corresponding bellows kit is indicated in the table below:

## Order example:

Selected standards-based cylinder:  
DSBC-32-320-PPV-A-...

The dimension for the corresponding E value (see table):  
112 mm

Complete order reference for standards-based cylinder:  
DSBC-32-320-PPV-A-...-112E

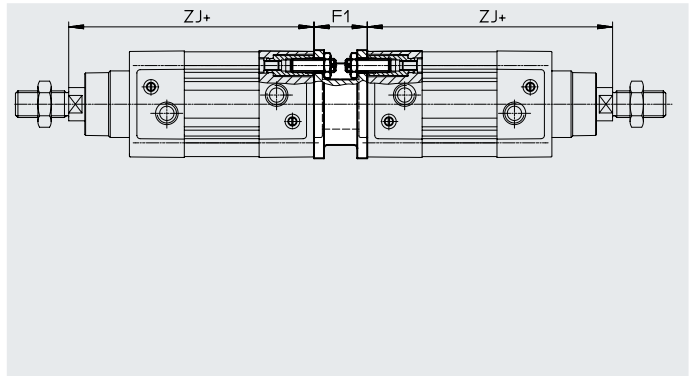
The corresponding bellows kit:  
DADB-V6-32-S301-350

| Cylinder data |             |                 | Bellows kit         |                     | Cylinder data |             |                      | Bellows kit |                      |
|---------------|-------------|-----------------|---------------------|---------------------|---------------|-------------|----------------------|-------------|----------------------|
| ∅             | Stroke      | Dimension for E | Part no.            | Type                | ∅             | Stroke      | Dimension for E      | Part no.    | Type                 |
| [mm]          | [mm]        | [mm]            |                     |                     | [mm]          | [mm]        | [mm]                 |             |                      |
| 32            | 10 ... 50   | 29              | 553271              | DADB-V6-32-S10-50   | 40            | 10 ... 50   | 28                   | 553291      | DADB-V6-40-S10-50    |
|               | 51 ... 125  | 47              | 553273              | DADB-V6-32-S51-125  |               | 51 ... 125  | 43                   | 553293      | DADB-V6-40-S51-125   |
|               | 126 ... 175 | 61              | 553275              | DADB-V6-32-S126-175 |               | 126 ... 175 | 56                   | 553295      | DADB-V6-40-S126-175  |
|               | 176 ... 250 | 80              | 553277              | DADB-V6-32-S176-250 |               | 176 ... 250 | 72                   | 553297      | DADB-V6-40-S176-250  |
|               | 251 ... 300 | 96              | 553279              | DADB-V6-32-S251-300 |               | 251 ... 300 | 86                   | 553399      | DADB-V6-40-S251-300  |
|               | 301 ... 350 | 112             | 553281              | DADB-V6-32-S301-350 |               | 301 ... 350 | 100                  | 553301      | DADB-V6-40-S301-350  |
|               | 351 ... 375 | 114             | 553283              | DADB-V6-32-S351-375 |               | 351 ... 375 | 101                  | 553303      | DADB-V6-40-S351-375  |
|               | 376 ... 425 | 130             | 553285              | DADB-V6-32-S376-425 |               | 376 ... 425 | 115                  | 553305      | DADB-V6-40-S376-425  |
|               | 426 ... 475 | 145             | 553287              | DADB-V6-32-S426-475 |               | 426 ... 475 | 130                  | 553307      | DADB-V6-40-S426-475  |
| 476 ... 500   | 147         | 553289          | DADB-V6-32-S476-500 | 476 ... 500         | 131           | 553309      | DADB-V6-40-S476-500  |             |                      |
| 50            | 10 ... 50   | 28              | 553311              | DADB-V6-50-S10-50   | 63            | 10 ... 50   | 28                   | 553331      | DADB-V6-63-S10-50    |
|               | 51 ... 125  | 46              | 553313              | DADB-V6-50-S51-125  |               | 51 ... 125  | 46                   | 553333      | DADB-V6-63-S51-125   |
|               | 126 ... 175 | 56              | 553315              | DADB-V6-50-S126-175 |               | 126 ... 175 | 56                   | 553335      | DADB-V6-63-S126-175  |
|               | 176 ... 250 | 73              | 553317              | DADB-V6-50-S176-250 |               | 176 ... 250 | 73                   | 553337      | DADB-V6-63-S176-250  |
|               | 251 ... 300 | 86              | 553319              | DADB-V6-50-S251-300 |               | 251 ... 300 | 86                   | 553339      | DADB-V6-63-S251-300  |
|               | 301 ... 350 | 97              | 553321              | DADB-V6-50-S301-350 |               | 301 ... 350 | 97                   | 553341      | DADB-V6-63-S301-350  |
|               | 351 ... 375 | 105             | 553323              | DADB-V6-50-S351-375 |               | 351 ... 375 | 105                  | 553343      | DADB-V6-63-S351-375  |
|               | 376 ... 425 | 116             | 553325              | DADB-V6-50-S376-425 |               | 376 ... 425 | 116                  | 553345      | DADB-V6-63-S376-425  |
|               | 426 ... 475 | 126             | 553327              | DADB-V6-50-S426-475 |               | 426 ... 475 | 126                  | 553347      | DADB-V6-63-S426-475  |
| 476 ... 500   | 134         | 553329          | DADB-V6-50-S476-500 | 476 ... 500         | 134           | 553349      | DADB-V6-63-S476-500  |             |                      |
| 80            | 10 ... 50   | 25              | 553351              | DADB-V6-80-S10-50   | 100           | 10 ... 50   | 25                   | 553371      | DADB-V6-100-S10-50   |
|               | 51 ... 125  | 37              | 553353              | DADB-V6-80-S51-125  |               | 51 ... 125  | 37                   | 553373      | DADB-V6-100-S51-125  |
|               | 126 ... 175 | 49              | 553355              | DADB-V6-80-S126-175 |               | 126 ... 175 | 49                   | 553375      | DADB-V6-100-S126-175 |
|               | 176 ... 250 | 62              | 553357              | DADB-V6-80-S176-250 |               | 176 ... 250 | 62                   | 553377      | DADB-V6-100-S176-250 |
|               | 251 ... 300 | 74              | 553359              | DADB-V6-80-S251-300 |               | 251 ... 300 | 74                   | 553379      | DADB-V6-100-S251-300 |
|               | 301 ... 350 | 86              | 553361              | DADB-V6-80-S301-350 |               | 301 ... 350 | 86                   | 553381      | DADB-V6-100-S301-350 |
|               | 351 ... 375 | 87              | 553363              | DADB-V6-80-S351-375 |               | 351 ... 375 | 87                   | 553383      | DADB-V6-100-S351-375 |
|               | 376 ... 425 | 98              | 553365              | DADB-V6-80-S376-425 |               | 376 ... 425 | 98                   | 553385      | DADB-V6-100-S376-425 |
|               | 426 ... 475 | 110             | 553367              | DADB-V6-80-S426-475 |               | 426 ... 475 | 110                  | 553387      | DADB-V6-100-S426-475 |
| 476 ... 500   | 111         | 553369          | DADB-V6-80-S476-500 | 476 ... 500         | 111           | 553389      | DADB-V6-100-S476-500 |             |                      |

## Accessories

### Multi-position kit DPNC

Material:  
 Flange: Wrought aluminium alloy  
 Threaded pins, hex nuts: Galvanised steel



#### Dimensions and ordering data

| For $\varnothing$<br>[mm] | F1 | ZJ               |            | Max.<br>Total stroke<br>[mm] | Weight<br>[g] | Part no. | Type <sup>1)</sup> |
|---------------------------|----|------------------|------------|------------------------------|---------------|----------|--------------------|
|                           |    | DSBC-...<br>+1.8 | DSBC-...-C |                              |               |          |                    |
| 32                        | 27 | 119.1            | 164.1      | 500                          | 292           | 174418   | DPNC-32            |
| 40                        | 27 | 133.9            | 186.9      | 800                          | 410           | 174419   | DPNC-40            |
| 50                        | 32 | 141.8            | 208.8      | 800                          | 335           | 174420   | DPNC-50            |
| 63                        | 28 | 157.1            | 233.1      | 700                          | 390           | 174421   | DPNC-63            |
| 80                        | 38 | 173.6            | 268.6      | 1000                         | 847           | 174422   | DPNC-80            |
| 100                       | 38 | 187.5            | 285.7      | 900                          | 1200          | 174423   | DPNC-100           |
| 125                       | 48 | 225              | 349.3      | 1000                         | 2102          | 174424   | DPNC-125           |

1) Suitable for ATEX

#### Note

The maximum total stroke length must not be exceeded when combining cylinders and multi-position kits.

### Connecting two cylinders with identical piston diameters to form a 3- or 4-position cylinder

A 3- or 4-position cylinder consists of two separate cylinders whose piston rods extend in opposite directions.

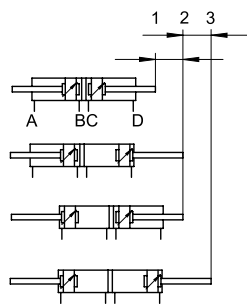
This means that, depending on the actuation and stroke pattern, this type of cylinder can assume up to four positions. In each case the cylinder is moved precisely

against a stop. Note that when one end of the piston rod is fixed, the cylinder barrel

executes the movement. The connections to the cylinder must therefore be flexible.

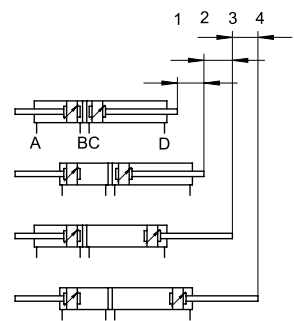
#### To achieve 3 positions

Two cylinders with the same stroke length must be connected to each other.



#### To achieve 4 positions

Two cylinders with different stroke lengths must be connected to each other.





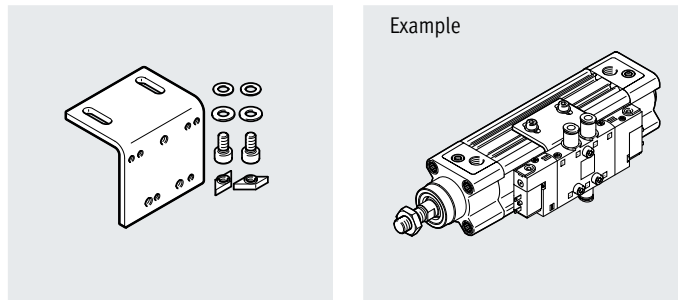
## Accessories

### Mounting kit DAVM

For lateral valve mounting, directly on the drive

Material:  
Mounting bracket, screws: Galvanised steel  
Slot nut: High-alloy stainless steel

The hole pattern on the angle bracket enables solenoid valves to be attached according to the allocation on the right. The following table shows a few solenoid valves that are available.



Allocation table, mounting kit for solenoid valves

| Mounting kit    | Solenoid valve |          |                    |
|-----------------|----------------|----------|--------------------|
| DAVM-MW-V1-32-V | CPE14          | VUVG-L14 | VUVS-L20           |
| DAVM-MW-V1-50-V | CPE18, CPE24   | VUVG-L18 | VUVS-L25, VUVS-L30 |

### Recommended solenoid valves CPE

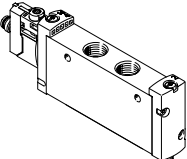
Datasheets → Internet: cpe



|              | For ø [mm]             | Mounting screw | Pneumatic connection | Function      | Part no.                | Type                     |
|--------------|------------------------|----------------|----------------------|---------------|-------------------------|--------------------------|
|              | <b>Single solenoid</b> |                |                      |               |                         |                          |
|              | 32, 40                 | M4x20          | G1/8                 | 5/2-way valve | <b>196941</b>           | <b>CPE14-M1BH-5L-1/8</b> |
|              | 50, 63                 | M4x25          | G1/4                 |               | <b>163142</b>           | <b>CPE18-M1H-5L-1/4</b>  |
|              | 80, 100, 125           | M5x30          | G3/8                 |               | <b>163166</b>           | <b>CPE24-M1H-5L-3/8</b>  |
|              | <b>Double solenoid</b> |                |                      |               |                         |                          |
|              | 32, 40                 | M4x20          | G1/8                 | 5/2-way valve | <b>196939</b>           | <b>CPE14-M1BH-5J-1/8</b> |
| 50, 63       | M4x25                  | G1/4           | <b>163143</b>        |               | <b>CPE18-M1H-5J-1/4</b> |                          |
| 80, 100, 125 | M5x30                  | G3/8           | <b>163167</b>        |               | <b>CPE24-M1H-5J-3/8</b> |                          |

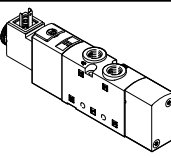
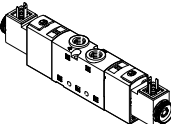
### Accessories for solenoid valves CPE


|                                   | For valve | Cable length [m] | Part no.        | Type                                |
|-----------------------------------|-----------|------------------|-----------------|-------------------------------------|
| <b>Connecting cable NEBV/KMEB</b> |           |                  |                 |                                     |
| Datasheets → Internet: nebv       |           |                  |                 |                                     |
|                                   | CPE14     | 2.5              | <b>8047679</b>  | <b>NEBV-Z4WA2L-R-E-2.5-N-LE2-S1</b> |
|                                   |           | 5                | <b>8047680</b>  | <b>NEBV-Z4WA2L-R-E-5-N-LE2-S1</b>   |
|                                   | CPE18     | 2.5              | ★ <b>151688</b> | <b>KMEB-1-24-2.5-LED</b>            |
|                                   | CPE24     | 5                | <b>151689</b>   | <b>KMEB-1-24-5-LED</b>              |
|                                   |           | 10               | <b>193457</b>   | <b>KMEB-1-24-10-LED</b>             |


## Accessories

| Recommended solenoid valves VUVG   |                        |                |                      |               |           | Datasheets → Internet: vuvg |
|--|------------------------|----------------|----------------------|---------------|-----------|-----------------------------|
|  | For ø [mm]             | Mounting screw | Pneumatic connection | Function      | Part no.  | Type                        |
|  | <b>Single solenoid</b> |                |                      |               |           |                             |
|  | 32, 40                 | M3x20          | G1/8                 | 5/2-way valve | ★ 8031508 | VUVG-L14-M52-MT-G18-1R8L    |
|  | 50, 63                 | M4x25          | G1/4                 |               | ★ 8031532 | VUVG-L18-M52-MT-G14-1R8L    |
|  | <b>Double solenoid</b> |                |                      |               |           |                             |
|  | 32, 40                 | M3x20          | G1/8                 | 5/2-way valve | ★ 574230  | VUVG-L14-B52-T-G18-1R8L     |
|  | 50, 63                 | M4x25          | G1/4                 |               | ★ 8031533 | VUVG-L18-B52-T-G14-1R8L     |

| Accessories for solenoid valves VUVG   |           |                              |              |          |                     | Datasheets → Internet: nebu |
|--|-----------|------------------------------|--------------|----------|---------------------|-----------------------------|
|  | For valve | Electrical connection        | Cable length | Part no. | Type                |                             |
| <b>Connecting cable NEBU</b>   |           |                              |              |          |                     |                             |
|  | VUVG-L14  | Straight socket, M8x1, 3-pin | 2.5 m        | ★ 541333 | NEBU-M8G3-K-2.5-LE3 |                             |
|  | VUVG-L18  |                              | 5 m          | ★ 541334 | NEBU-M8G3-K-5-LE3   |                             |
|  |           | Angled socket, M8x1, 3-pin   | 2.5 m        | ★ 541338 | NEBU-M8W3-K-2.5-LE3 |                             |
|  |           |                              | 5 m          | ★ 541341 | NEBU-M8W3-K-5-LE3   |                             |

| Recommended solenoid valves VUVS   |                                |                |                      |                            |                            | Datasheets → Internet: vuvS |
|--|--------------------------------|----------------|----------------------|----------------------------|----------------------------|-----------------------------|
|  | For ø [mm]                     | Mounting screw | Pneumatic connection | Function                   | Part no.                   | Type                        |
|   | <b>Single solenoid, type C</b> |                |                      |                            |                            |                             |
|  | 32, 40                         | M3x20          | G1/8                 | 5/2-way valve              | ★ 575263                   | VUVS-L20-M52-AD-G18-F7-1C1  |
|  |                                |                |                      |                            | ★ 575264                   | VUVS-L20-M52-MD-G18-F7-1C1  |
|  | 50, 63                         | M4x20          | G1/4                 |                            | ★ 575503                   | VUVS-L25-M52-AD-G14-F8-1C1  |
|  |                                |                |                      | ★ 575511                   | VUVS-L25-M52-MD-G14-F8-1C1 |                             |
|  | 80, 100, 125                   | M5x30          | G3/8                 | ★ 575596                   | VUVS-L30-M52-AD-G38-F8-1C1 |                             |
|  |                                |                | ★ 575604             | VUVS-L30-M52-MD-G38-F8-1C1 |                            |                             |
|  | <b>Double solenoid, type C</b> |                |                      |                            |                            |                             |
|  | 32, 40                         | M3x20          | G1/8                 | 5/2-way valve              | ★ 575265                   | VUVS-L20-B52-D-G18-F7-1C1   |
|  | 50, 63                         | M4x20          | G1/4                 |                            | ★ 575518                   | VUVS-L25-B52-D-G14-F8-1C1   |
|  | 80, 100, 125                   | M5x30          | G3/8                 |                            | ★ 575611                   | VUVS-L30-B52-D-G38-F8-1C1   |

| Accessories for solenoid valves VUVS   |  |                   |                   |      |          | Datasheets → Internet: vuvS |
|--|--|-------------------|-------------------|------|----------|-----------------------------|
|  | Description                                  | Part no.          | Type              |      |          |                             |
| <b>Plug socket MSSD</b>  |  |                   |                   |      |          |                             |
|  | <b>Plug pattern type C, to EN 175301-803</b> |                   |                   |      |          |                             |
|  | 3-pin, screw terminal                        | Cable fitting Pg7 | 0 ... 250 V AC/DC | IP65 | ★ 151687 | MSSDEB                      |

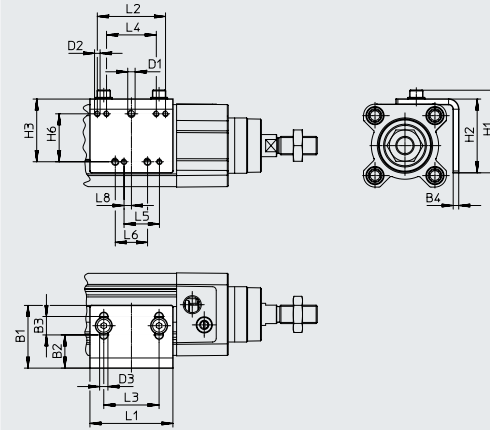
 **Note**  
 Dimensions and ordering data  
 → Page 1

Accessories

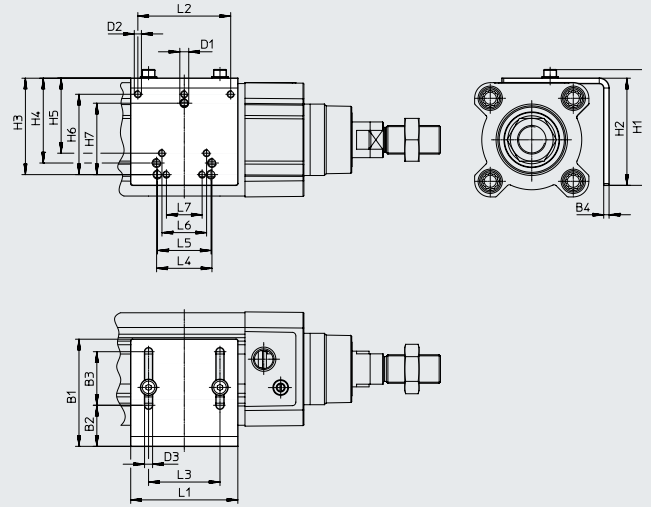
Dimensions and ordering data


Download CAD data → [www.festo.com](http://www.festo.com)

DAVM-MW-V1-32-V



DAVM-MW-V1-50-V



-  - **Note**

Mounting is only possible on the side on which the pneumatic connections are located.

Two slot nuts are included in the scope of delivery of the mounting kit. Additional slot nuts → page 63

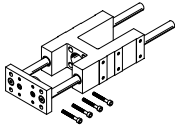
| For $\varnothing$<br>[mm] | B1 | B2 | B3 | B4 | D1 | D2 | D3<br>$\varnothing$ | H1   | H2 | H3 | H4   | H5 | H6 | H7 |
|---------------------------|----|----|----|----|----|----|---------------------|------|----|----|------|----|----|----|
| 32                        | 34 | 18 | 10 | 3  | M4 | M3 | 4.5                 | 44.8 | 40 | 34 | -    | -  | 26 | -  |
| 40                        |    |    |    |    |    |    |                     |      |    |    |      |    |    |    |
| 50                        | 60 | 23 | 30 | 3  | M5 | M4 | 4.5                 | 64.8 | 60 | 54 | 47.5 | 42 | 45 | 40 |
| 63                        |    |    |    |    |    |    |                     |      |    |    |      |    |    |    |
| 80                        |    |    |    |    |    |    |                     |      |    |    |      |    |    |    |
| 100                       |    |    |    |    |    |    |                     |      |    |    |      |    |    |    |
| 125                       |    |    |    |    |    |    |                     |      |    |    |      |    |    |    |

| For $\varnothing$<br>[mm] | L1 | L2 | L3 | L4 | L5   | L6   | L7 | L8 | CRC <sup>1)</sup> | Weight<br>[g] | Part no. | Type            |
|---------------------------|----|----|----|----|------|------|----|----|-------------------|---------------|----------|-----------------|
| 32                        | 45 | 37 | 30 | 27 | 19.2 | 17.5 | -  | 4  | 1                 | 76            | 2568514  | DAVM-MW-V1-32-V |
| 40                        |    |    |    |    |      |      |    |    |                   |               |          |                 |
| 50                        | 60 | 52 | 40 | 31 | 30   | 25   | 20 | -  | 1                 | 160           | 2612128  | DAVM-MW-V1-50-V |
| 63                        |    |    |    |    |      |      |    |    |                   |               |          |                 |
| 80                        |    |    |    |    |      |      |    |    |                   |               |          |                 |
| 100                       |    |    |    |    |      |      |    |    |                   |               |          |                 |
| 125                       |    |    |    |    |      |      |    |    |                   |               |          |                 |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Accessories

### Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only)

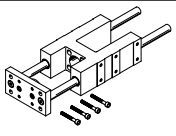


| Stroke [mm]               | Part no. | Type <sup>1)</sup> |
|---------------------------|----------|--------------------|
| <b>For diameter 32 mm</b> |          |                    |
| 10 ... 50                 | 34493    | FENG-32-50-KF      |
| 10 ... 100                | 34494    | FENG-32-100-KF     |
| 10 ... 160                | 34495    | FENG-32-160-KF     |
| 10 ... 200                | 34496    | FENG-32-200-KF     |
| 10 ... 250                | 150289   | FENG-32-250-KF     |
| 10 ... 320                | 34497    | FENG-32-320-KF     |
| 10 ... 400                | 150290   | FENG-32-400-KF     |
| 10 ... 500                | 34498    | FENG-32-500-KF     |
| <b>For diameter 50 mm</b> |          |                    |
| 10 ... 50                 | 34506    | FENG-50-50-KF      |
| 10 ... 100                | 34507    | FENG-50-100-KF     |
| 10 ... 160                | 34508    | FENG-50-160-KF     |
| 10 ... 200                | 34509    | FENG-50-200-KF     |
| 10 ... 250                | 34510    | FENG-50-250-KF     |
| 10 ... 320                | 34511    | FENG-50-320-KF     |
| 10 ... 400                | 150292   | FENG-50-400-KF     |
| 10 ... 500                | 34512    | FENG-50-500-KF     |
| <b>For diameter 80 mm</b> |          |                    |
| 10 ... 50                 | 34521    | FENG-80-50-KF      |
| 10 ... 100                | 34522    | FENG-80-100-KF     |
| 10 ... 160                | 34523    | FENG-80-160-KF     |
| 10 ... 200                | 34524    | FENG-80-200-KF     |
| 10 ... 250                | 34525    | FENG-80-250-KF     |
| 10 ... 320                | 34526    | FENG-80-320-KF     |
| 10 ... 400                | 34527    | FENG-80-400-KF     |
| 10 ... 500                | 34528    | FENG-80-500-KF     |

Datasheets → Internet: feng

| Stroke [mm]                | Part no. | Type <sup>1)</sup> |
|----------------------------|----------|--------------------|
| <b>For diameter 40 mm</b>  |          |                    |
| 10 ... 50                  | 34499    | FENG-40-50-KF      |
| 10 ... 100                 | 34500    | FENG-40-100-KF     |
| 10 ... 160                 | 34501    | FENG-40-160-KF     |
| 10 ... 200                 | 34502    | FENG-40-200-KF     |
| 10 ... 250                 | 34503    | FENG-40-250-KF     |
| 10 ... 320                 | 34504    | FENG-40-320-KF     |
| 10 ... 400                 | 150291   | FENG-40-400-KF     |
| 10 ... 500                 | 34505    | FENG-40-500-KF     |
| <b>For diameter 63 mm</b>  |          |                    |
| 10 ... 50                  | 34513    | FENG-63-50-KF      |
| 10 ... 100                 | 34514    | FENG-63-100-KF     |
| 10 ... 160                 | 34515    | FENG-63-160-KF     |
| 10 ... 200                 | 34516    | FENG-63-200-KF     |
| 10 ... 250                 | 34517    | FENG-63-250-KF     |
| 10 ... 320                 | 34518    | FENG-63-320-KF     |
| 10 ... 400                 | 34519    | FENG-63-400-KF     |
| 10 ... 500                 | 34520    | FENG-63-500-KF     |
| <b>For diameter 100 mm</b> |          |                    |
| 10 ... 50                  | 34529    | FENG-100-50-KF     |
| 10 ... 100                 | 34530    | FENG-100-100-KF    |
| 10 ... 160                 | 34531    | FENG-100-160-KF    |
| 10 ... 200                 | 34532    | FENG-100-200-KF    |
| 10 ... 250                 | 34533    | FENG-100-250-KF    |
| 10 ... 320                 | 34534    | FENG-100-320-KF    |
| 10 ... 400                 | 34535    | FENG-100-400-KF    |
| 10 ... 500                 | 34536    | FENG-100-500-KF    |

### Ordering data – Guide units for variable strokes



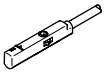
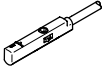
| For Ø [mm] | Stroke [mm] | With recirculating ball bearing guide |                    |
|------------|-------------|---------------------------------------|--------------------|
|            |             | Part no.                              | Type <sup>1)</sup> |
| 32         | 10 ... 500  | 34487                                 | FENG-32-...-KF     |
| 40         | 10 ... 500  | 34488                                 | FENG-40-...-KF     |
| 50         | 10 ... 500  | 34489                                 | FENG-50-...-KF     |
| 63         | 10 ... 500  | 34490                                 | FENG-63-...-KF     |
| 80         | 10 ... 500  | 34491                                 | FENG-80-...-KF     |
| 100        | 10 ... 500  | 34492                                 | FENG-100-...-KF    |

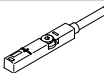
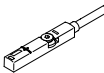
Datasheets → Internet: feng

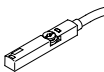
| With plain-bearing guide |                    |
|--------------------------|--------------------|
| Part no.                 | Type <sup>1)</sup> |
| 34481                    | FENG-32-...-GF     |
| 34482                    | FENG-40-...-GF     |
| 34483                    | FENG-50-...-GF     |
| 34484                    | FENG-63-...-GF     |
| 34485                    | FENG-80-...-GF     |
| 34486                    | FENG-100-...-GF    |


1) Suitable for ATEX



## Accessories

| Ordering data – Proximity switch for T-slot, magneto-resistive                    |  |                  |                       |                  |          |                           | Datasheets → Internet: smt |
|---|--|------------------|-----------------------|------------------|----------|---------------------------|----------------------------|
|   | Type of mounting   | Switching output | Electrical connection | Cable length [m] | Part no. | Type                      |                            |
| <b>N/O</b>  |  |                  |                       |                  |          |                           |                            |
|  | Inserted in the slot from above, flush with the cylinder profile, short design | PNP              | Cable, 3-core         | 2.5              | ★ 574335 | SMT-8M-A-PS-24V-E-2.5-OE  |                            |
|   |  |                  | Plug M8x1, 3-pin      | 0.3              | ★ 574334 | SMT-8M-A-PS-24V-E-0.3-M8D |                            |
|   |  |                  | Plug M12x1, 3-pin     | 0.3              | ★ 574337 | SMT-8M-A-PS-24V-E-0.3-M12 |                            |
|   |  | NPN              | Cable, 3-core         | 2.5              | ★ 574338 | SMT-8M-A-NS-24V-E-2.5-OE  |                            |
|   |  |                  | Plug M8x1, 3-pin      | 0.3              | ★ 574339 | SMT-8M-A-NS-24V-E-0.3-M8D |                            |
| <b>N/C</b>  |  |                  |                       |                  |          |                           |                            |
|  | Inserted in the slot from above, flush with the cylinder profile, short design | PNP              | Cable, 3-core         | 7.5              | ★ 574340 | SMT-8M-A-PO-24V-E-7.5-OE  |                            |

| Ordering data – Proximity switch for T-slot, magnetic reed                         |  |                  |                       |                  |          |                        | Datasheets → Internet: sme |
|--|--|------------------|-----------------------|------------------|----------|------------------------|----------------------------|
|  | Type of mounting   | Switching output | Electrical connection | Cable length [m] | Part no. | Type                   |                            |
| <b>N/O</b>   |  |                  |                       |                  |          |                        |                            |
|   | Inserted in the slot from above, flush with the cylinder profile | Contacting       | Cable, 3-core         | 2.5              | ★ 543862 | SME-8M-DS-24V-K-2.5-OE |                            |
|  |  |                  |                       | 5.0              | ★ 543863 | SME-8M-DS-24V-K-5.0-OE |                            |
|  |  |                  | Cable, 2-core         | 2.5              | ★ 543872 | SME-8M-ZS-24V-K-2.5-OE |                            |
|  |  |                  |                       | Plug M8x1, 3-pin | 0.3      | ★ 543861               | SME-8M-DS-24V-K-0.3-M8D    |
| <b>N/C</b>   |  |                  |                       |                  |          |                        |                            |
|  | Inserted in the slot from above, flush with the cylinder profile | Contacting       | Cable, 3-core         | 7.5              | ★ 546799 | SME-8M-DO-24V-K-7.5-OE |                            |

| Ordering data – Proximity switch for T-slot, NAMUR                                  |  |                  |                       |                  |          |                             | Datasheets → Internet: sdbt |
|---|--|------------------|-----------------------|------------------|----------|-----------------------------|-----------------------------|
|   | Type of mounting   | Switching output | Electrical connection | Cable length [m] | Part no. | Type                        |                             |
| <b>N/O</b>  |  |                  |                       |                  |          |                             |                             |
|  | Inserted in the slot from above, flush with cylinder profile | NAMUR            | Cable, 2-core         | 5                | 579071   | SDBT-MS-20NL-ZN-E-5-LE-EX6  |                             |
|   |  |                  |                       | 10               | 579072   | SDBT-MS-20NL-ZN-E-10-LE-EX6 |                             |

| Ordering data – Safety clip for ATEX zone   |  |           |          |            |
|---|--|-----------|----------|------------|
|   | Description  | For size  | Part no. | Type       |
|  | <ul style="list-style-type: none"> <li>Protects "equipment that is not intrinsically safe" against simple disconnection, here the plug of the proximity sensor SMT and connecting cable NEBU</li> <li>ATEX category: gas: II 3G / dust: II 3D</li> </ul> | Plug M8x1 | 548067   | NEAU-M8-GD |

| Ordering data – Connecting cables   |                               |                              |                  |          |                      | Datasheets → Internet: nebu |
|---|-------------------------------|------------------------------|------------------|----------|----------------------|-----------------------------|
|   | Electrical connection, left   | Electrical connection, right | Cable length [m] | Part no. | Type                 |                             |
|  | Straight socket, M8x1, 3-pin  | Cable, open end, 3-core      | 2.5              | ★ 541333 | NEBU-M8G3-K-2.5-LE3  |                             |
|   |                               |                              | 5                | ★ 541334 | NEBU-M8G3-K-5-LE3    |                             |
|   | Straight socket, M12x1, 5-pin | Cable, open end, 3-core      | 2.5              | ★ 541363 | NEBU-M12G5-K-2.5-LE3 |                             |
|   |                               |                              | 5                | ★ 541364 | NEBU-M12G5-K-5-LE3   |                             |
|  | Angled socket, M8x1, 3-pin    | Cable, open end, 3-core      | 2.5              | ★ 541338 | NEBU-M8W3-K-2.5-LE3  |                             |
|   |                               |                              | 5                | ★ 541341 | NEBU-M8W3-K-5-LE3    |                             |
|   | Angled socket, M12x1, 5-pin   | Cable, open end, 3-core      | 2.5              | 541367   | NEBU-M12W5-K-2.5-LE3 |                             |
|   |                               |                              | 5                | 541370   | NEBU-M12W5-K-5-LE3   |                             |

## Accessories

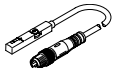
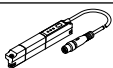
### Position transmitter

The position transmitter continuously senses the position of the piston.

It has an analogue output with an output signal that is proportional to the piston position.


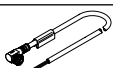
#### Ordering data – Position transmitter for T-slot

Datasheets → Internet: position transmitter

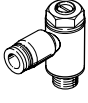
|  | For $\varnothing$ | Position measuring range | Analogue output |          | Type of mounting                | Electrical connection     | Cable length [m] | Part no.       | Type                                |
|--|-------------------|--------------------------|-----------------|----------|---------------------------------|---------------------------|------------------|----------------|-------------------------------------|
|  |                   |                          | [V]             | [mA]     |                                 |                           |                  |                |                                     |
|  | 32 ... 125        | 0 ... 40                 | 0 ... 10        | –        | Inserted in the slot from above | Plug M8x1, 4-pin, in-line | 0.3              | <b>553744</b>  | <b>SMAT-8M-U-E-0.3-M8D</b>          |
|  | 32 ... 125        | 0 ... 50                 | –               | 4 ... 20 | Inserted in the slot from above | Plug M8x1, 4-pin, in-line | 0.3              | <b>1531265</b> | <b>SDAT-MHS-M50-1L-SA-E-0.3-M8</b>  |
|  |                   | 0 ... 80                 |                 |          |                                 |                           |                  | <b>1531266</b> | <b>SDAT-MHS-M80-1L-SA-E-0.3-M8</b>  |
|  |                   | 0 ... 100                |                 |          |                                 |                           |                  | <b>1531267</b> | <b>SDAT-MHS-M100-1L-SA-E-0.3-M8</b> |
|  |                   | 0 ... 125                |                 |          |                                 |                           |                  | <b>1531268</b> | <b>SDAT-MHS-M125-1L-SA-E-0.3-M8</b> |
|  |                   | 0 ... 160                |                 |          |                                 |                           |                  | <b>1531269</b> | <b>SDAT-MHS-M160-1L-SA-E-0.3-M8</b> |
|  |                   | 0 ... 50                 |                 |          |                                 |                           |                  | <b>8115394</b> | <b>SDAT-MHS-M50-1L-SV-E-0.3-M8</b>  |



#### Ordering data – Connecting cables

Datasheets → Internet: nebu

|  | Electrical connection, left  | Electrical connection, right | Cable length [m] | Part no.      | Type                       |
|--|------------------------------|------------------------------|------------------|---------------|----------------------------|
|    | Straight socket, M8x1, 4-pin | Cable, open end, 4-core      | 2.5              | <b>541342</b> | <b>NEBU-M8G4-K-2.5-LE4</b> |
|  |                              |                              | 5                | <b>541343</b> | <b>NEBU-M8G4-K-5-LE4</b>   |
|  | Angled socket, M8x1, 4-pin   | Cable, open end, 4-core      | 2.5              | <b>541344</b> | <b>NEBU-M8W4-K-2.5-LE4</b> |
|  |                              |                              | 5                | <b>541345</b> | <b>NEBU-M8W4-K-5-LE4</b>   |

## Accessories

| Ordering data – One-way flow control valves                                       |            |                 |              | Datasheets → Internet: grla |                  |
|---|------------|-----------------|--------------|-----------------------------|------------------|
|   | Connection |                 | Material     | Part no.                    | Type             |
|   | Thread     | For tubing O.D. |              |                             |                  |
| <b>For exhaust air</b>  |            |                 |              |                             |                  |
|  | G1/8       | 4               | Metal design | ★ 193143                    | GRLA-1/8-QS-4-D  |
|   |            | 6               |              | ★ 193144                    | GRLA-1/8-QS-6-D  |
|   |            | 8               |              | ★ 193145                    | GRLA-1/8-QS-8-D  |
|   | G1/4       | 6               |              | ★ 193146                    | GRLA-1/4-QS-6-D  |
|   |            | 8               |              | ★ 193147                    | GRLA-1/4-QS-8-D  |
|   |            | 10              |              | ★ 193148                    | GRLA-1/4QS-10-D  |
|   | G3/8       | 6               |              | ★ 193149                    | GRLA-3/8-QS-6-D  |
|   |            | 8               |              | ★ 193150                    | GRLA-3/8-QS-8-D  |
|   |            | 10              |              | ★ 193151                    | GRLA-3/8-QS-10-D |
|   | G1/2       | 12              |              | ★ 193152                    | GRLA-1/2-QS-12-D |

| Ordering data  |  | Part no. | Type              | PU <sup>1)</sup> |
|--|--|----------|-------------------|------------------|
| Description  |  |          |                   |                  |
| <b>Slot cover for T-slot</b>   |  |          |                   |                  |
|   | Insertable, length 0.5 m                   | 151680   | ABP-5-S           | 2                |
| <b>Slot nut for T-slot</b>   |  |          |                   |                  |
|  | Inserted in the slot from above, thread M4 | 8028500  | ABAN-8-1M4-5-P2   | 2                |
|  |  | 8028501  | ABAN-8-1M4-5-P100 | 100              |

1) Packaging unit