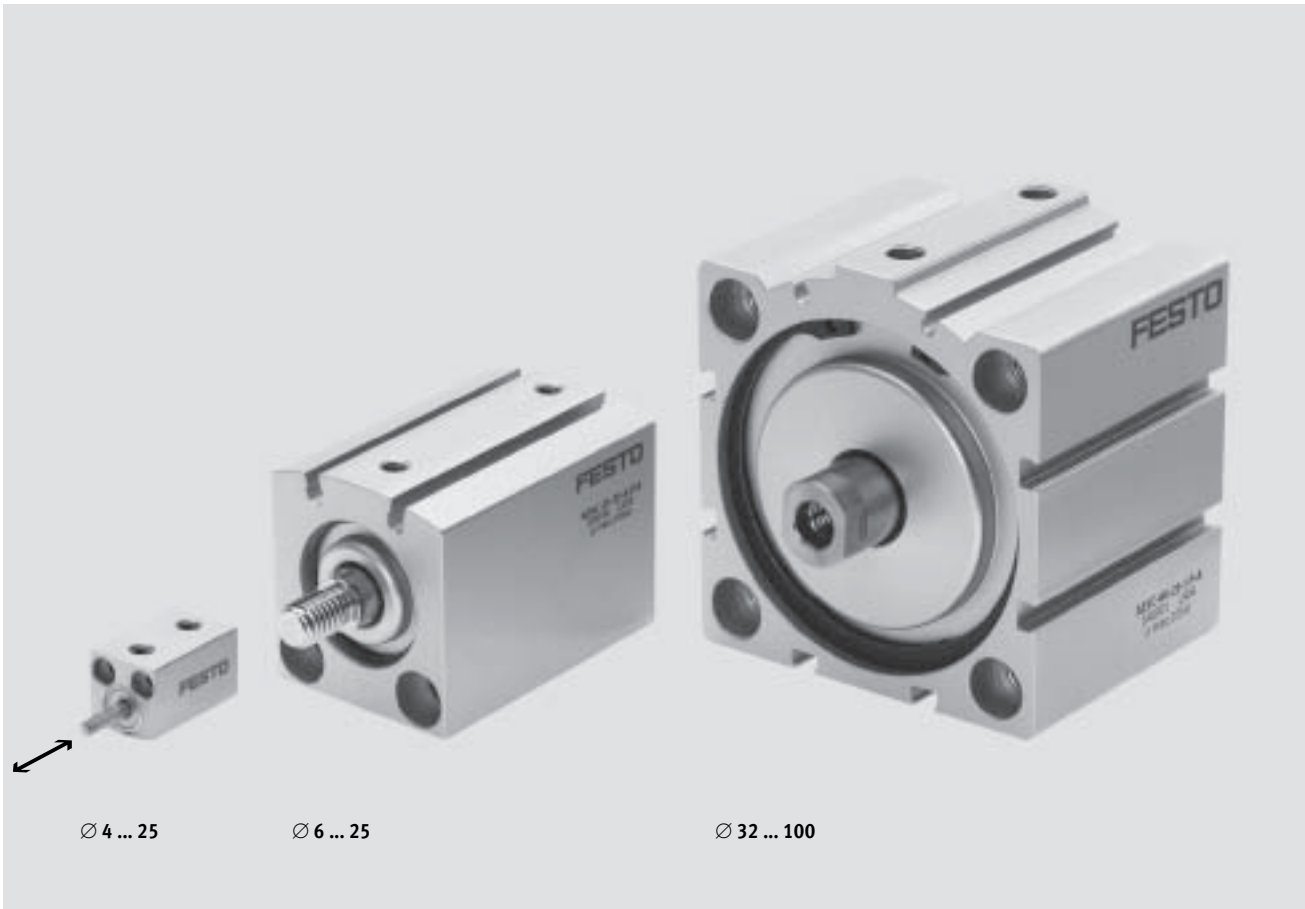




- Compact short-stroke cylinders with standard port pattern from  $\varnothing$  32 mm
- Optimised fitting space and height
- Adaptable housing and piston rod variants for individual applications

# Short-stroke cylinders ADVC/AEVC

Key features



### Brief description

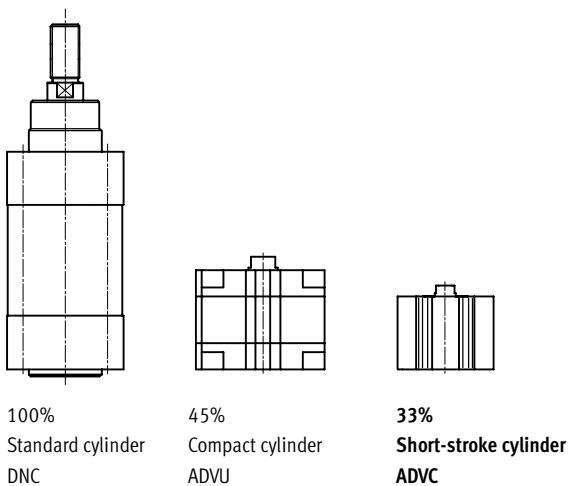
- - Diameter  
4 ... 100 mm
- - Stroke length  
2.5 ... 25 mm

Short-stroke cylinders are ideal for clamping tasks with short strokes, e.g. in retaining devices.

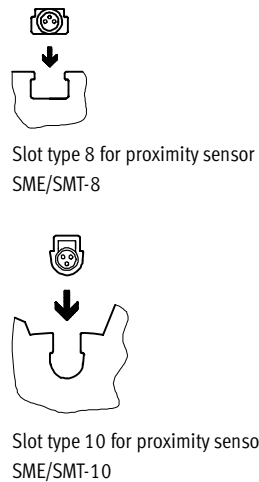
- The cylinders offer:
- Rapid response with applied pressure
  - Large clamping forces in comparison to their size
  - Minimal installation space

- Integrated sensor slots for contacting or contactless proximity sensors
- Mounting hole pattern to VDMA 24 562 for Ø 32 ... 100 mm

### Fitting space comparison with 10 mm stroke

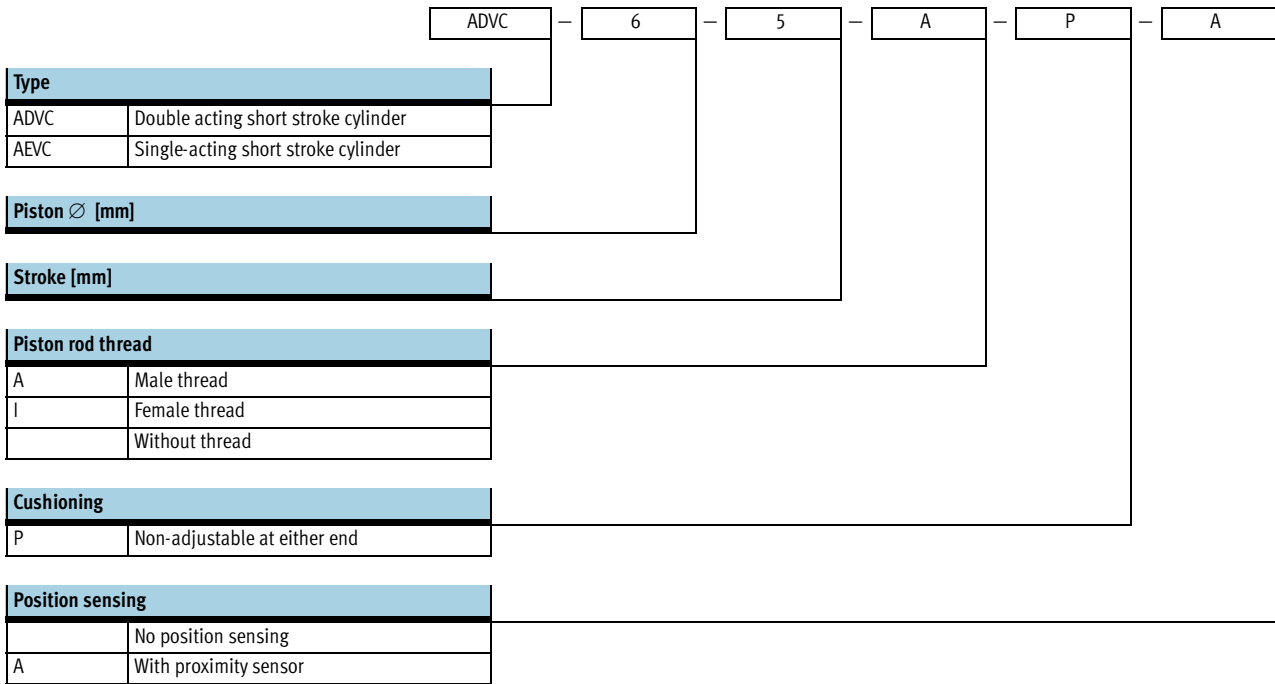


### Sensor slots



# Short-stroke cylinders ADVC/AEVC

Type codes



# Short-stroke cylinders ADVC/AEVC

Product range overview



Cylinders with piston rods  
Short-stroke cylinders

2.2

| Function            | Version                         | Type                                   | Piston $\varnothing$<br>[mm] | Stroke<br>[mm]    | Position sensing |
|---------------------|---------------------------------|----------------------------------------|------------------------------|-------------------|------------------|
| Double-acting       | <b>Without position sensing</b> |                                        |                              |                   |                  |
|                     |                                 | ADVC<br>$\varnothing$ 4 ... 25         | 4                            | 2.5; 5            | -                |
|                     |                                 |                                        | 6, 10, 12                    | 5, 10             |                  |
|                     |                                 |                                        | 16, 20, 25                   | 5, 10, 15, 20, 25 |                  |
|                     |                                 | ADVC<br>$\varnothing$ 32 ... 100       | 32, 40                       | 5, 10, 15, 20, 25 | -                |
|                     |                                 |                                        | 50, 63, 80, 100              | 10, 15, 20, 25    |                  |
|                     | <b>With position sensing</b>    |                                        |                              |                   |                  |
|                     |                                 | AEVC-...-A<br>$\varnothing$ 6 ... 25   | 6, 10, 12                    | 5, 10             | ■                |
|                     |                                 |                                        | 16, 20, 25                   | 5, 10, 15, 20, 25 |                  |
|                     |                                 | AEVC-...-A<br>$\varnothing$ 32 ... 100 | 32, 40                       | 5, 10, 15, 20, 25 | ■                |
| 50, 63, 80, 100     |                                 |                                        | 10, 15, 20, 25               |                   |                  |
| Single-acting       | <b>Without position sensing</b> |                                        |                              |                   |                  |
|                     |                                 | AEVC<br>$\varnothing$ 4 ... 25         | 4                            | 2.5; 5            | -                |
|                     |                                 |                                        | 6, 10, 12                    | 5, 10             |                  |
|                     |                                 |                                        | 16, 20, 25                   | 5, 10, 25         |                  |
|                     |                                 | AEVC<br>$\varnothing$ 32 ... 100       | 32                           | 5, 10, 25         | -                |
|                     |                                 |                                        | 40, 50, 63, 80, 100          | 10, 25            |                  |
|                     | <b>With position sensing</b>    |                                        |                              |                   |                  |
|                     |                                 | AEVC-...-A<br>$\varnothing$ 6 ... 25   | 6, 10, 12                    | 5, 10             | ■                |
|                     |                                 |                                        | 16, 20, 25                   | 5, 10, 25         |                  |
|                     |                                 | AEVC-...-A<br>$\varnothing$ 32 ... 100 | 32                           | 5, 10, 25         | ■                |
| 40, 50, 63, 80, 100 |                                 |                                        | 10, 25                       |                   |                  |

# Short-stroke cylinders ADVC/AEVC

Product range overview

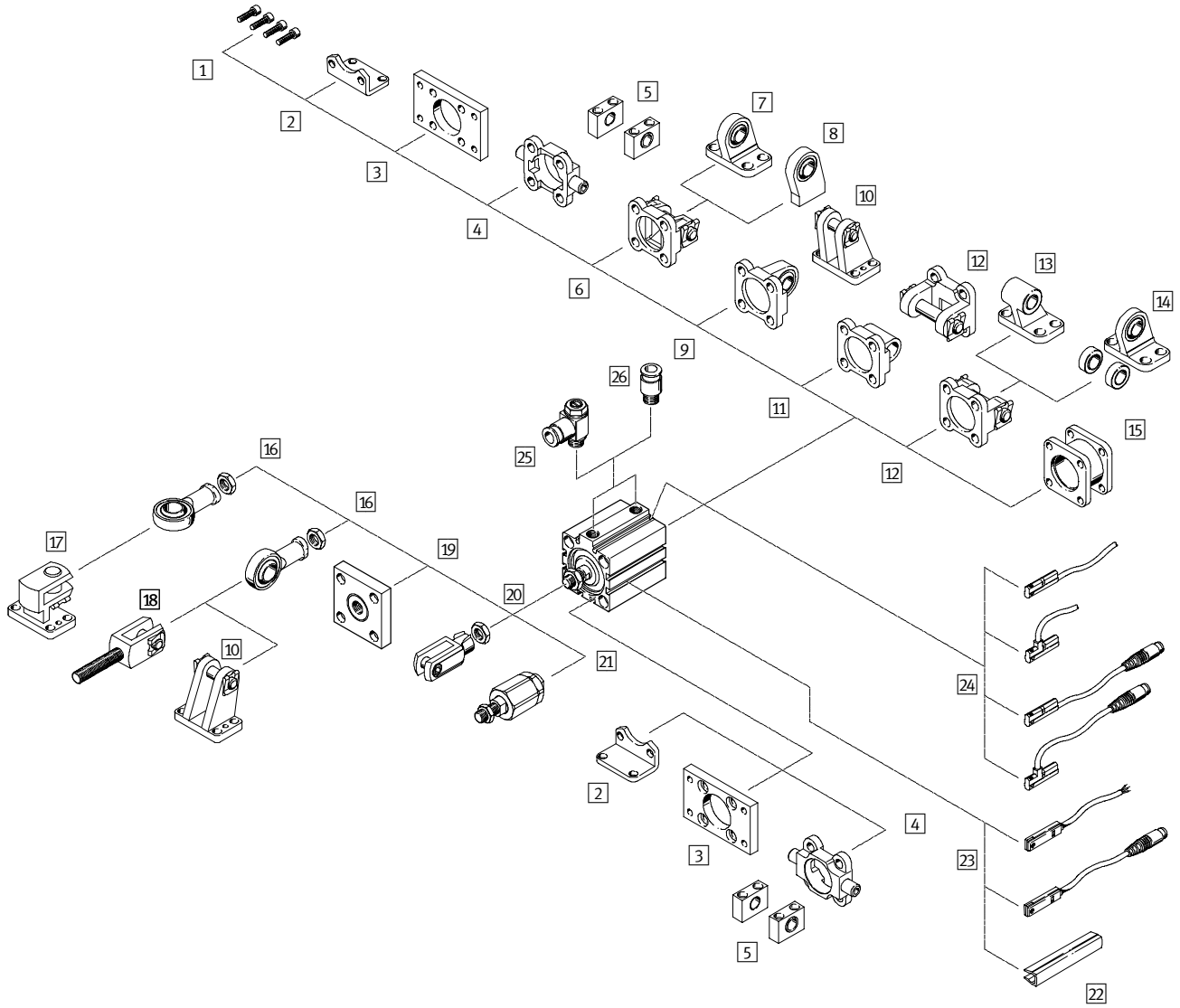
| Type                            | Piston rod       |                    |                 | Cushioning | → Page     |
|---------------------------------|------------------|--------------------|-----------------|------------|------------|
|                                 | With male thread | With female thread | Without thread  |            |            |
| <b>Without position sensing</b> |                  |                    |                 |            |            |
| ADVC<br>Ø 4 ... 25              | ■                | ■<br>From Ø 12     | ■<br>Ø 4 ... 12 | ■          | 1 / 2.2-8  |
| ADVC<br>Ø 32 ... 100            | ■                | ■                  | -               | ■          | 1 / 2.2-8  |
| <b>With position sensing</b>    |                  |                    |                 |            |            |
| ADVC-...-A<br>Ø 6 ... 25        | ■                | ■<br>From Ø 12     | ■<br>Ø 6 ... 12 | ■          | 1 / 2.2-14 |
| ADVC-...-A<br>Ø 32 ... 100      | ■                | ■                  | -               | ■          | 1 / 2.2-14 |
| <b>Without position sensing</b> |                  |                    |                 |            |            |
| AEVC<br>Ø 4 ... 25              | ■                | ■<br>From Ø 12     | ■<br>Ø 4 ... 12 | ■          | 1 / 2.2-20 |
| AEVC<br>Ø 32 ... 100            | ■                | ■                  | -               | ■          | 1 / 2.2-20 |
| <b>With position sensing</b>    |                  |                    |                 |            |            |
| AEVC-...-A<br>Ø 6 ... 25        | ■                | ■<br>From Ø 12     | ■<br>Ø 6 ... 12 | ■          | 1 / 2.2-25 |
| AEVC-...-A<br>Ø 32 ... 100      | ■                | ■                  | -               | ■          | 1 / 2.2-25 |

# Short-stroke cylinders ADVC/AEVC

Peripherals overview

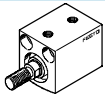


∅ 32 ... 100 mm



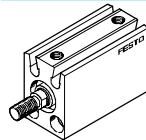
∅ 4 ... 25 mm

Without position sensing



∅ 6 ... 25 mm

With position sensing



Cylinders with piston rods  
Short-stroke cylinders

2.2

# Short-stroke cylinders ADVC/AEVC

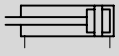
Peripherals overview



| Mounting attachments and accessories |                                 |             |               |              |                                   |
|--------------------------------------|---------------------------------|-------------|---------------|--------------|-----------------------------------|
|                                      | Brief description               | Piston Ø    |               |              | → Page                            |
|                                      |                                 | 4, 6, 12    | 10, 16 ... 25 | 32 ... 100   |                                   |
| 1                                    | Mounting screws                 | ■<br>DIN 84 | ■<br>DIN 912  | ■<br>DIN 912 | not included in scope of delivery |
| 2                                    | Foot mounting HNC               | -           | -             | ■            | 1 / 2.2-31                        |
| 3                                    | Flange mounting FNC             | -           | -             | ■            | 1 / 2.2-32                        |
| 4                                    | Trunnion flange ZNCF            | -           | -             | ■            | 1 / 2.2-33                        |
| 5                                    | Trunnion support LNZG           | -           | -             | ■            | 1 / 2.2-34                        |
| 6                                    | Swivel flange SNC               | -           | -             | ■            | 1 / 2.2-35                        |
| 7                                    | Clevis foot LSNG                | -           | -             | ■            | 1 / 2.2-39                        |
| 8                                    | Clevis foot LSNSG               | -           | -             | ■            | 1 / 2.2-39                        |
| 9                                    | Swivel flange SNCS              | -           | -             | ■            | 1 / 2.2-37                        |
| 10                                   | Clevis foot LBG                 | -           | -             | ■            | 1 / 2.2-39                        |
| 11                                   | Swivel flange SNCL              | -           | -             | ■            | 1 / 2.2-38                        |
| 12                                   | Swivel flange SNCB              | -           | -             | ■            | 1 / 2.2-36                        |
| 13                                   | Clevis foot LNG                 | -           | -             | ■            | 1 / 2.2-39                        |
| 14                                   | Clevis foot LSN                 | -           | -             | ■            | 1 / 2.2-39                        |
| 15                                   | Adapter kit DPNC                | -           | -             | ■            | 1 / 2.2-30                        |
| 16                                   | Rod eye SGS                     | -           | ■             | ■            | 1 / 2.2-40                        |
| 17                                   | Right-angle clevis foot LQG     | -           | ■             | ■            | 1 / 2.2-39                        |
| 18                                   | Rod clevis SGA                  | -           | -             | ■            | 1 / 2.2-40                        |
| 19                                   | Coupling piece KSG              | -           | -             | ■            | 1 / 2.2-40                        |
| 20                                   | Rod clevis SG                   | -           | ■             | ■            | 1 / 2.2-40                        |
| 21                                   | Self-aligning rod coupler FK    | ■<br>Ø 12   | ■             | ■            | 1 / 2.2-40                        |
| 22                                   | Slot cover ABP-5-S              | -           | -             | ■            | 1 / 2.2-41                        |
| 23                                   | Proximity sensors SME/SMT-8     | -           | -             | ■            | 1 / 2.2-41                        |
| 24                                   | Proximity sensors SME/SMT-10    | -           | ■             | ■            | 1 / 2.2-42                        |
| 25                                   | One-way flow control valve GRLA | ■           | ■             | ■            | 1 / 2.2-42                        |
| 26                                   | Push-in fitting QS              | ■           | ■             | ■            | Volume 3                          |

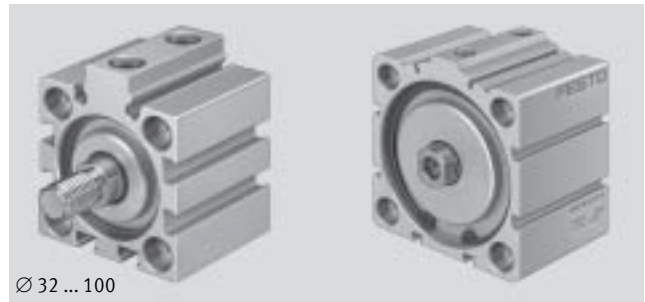
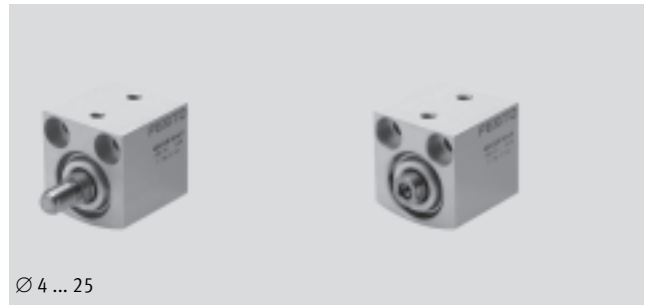
# Short-stroke cylinders ADVC

Technical data, double-acting – without position sensing



Ø - Diameter  
4 ... 100 mm

l - Stroke length  
2.5 ... 25 mm



| General technical data        |                                                     |    |    |    |    |    |    |                   |      |      |      |      |      |
|-------------------------------|-----------------------------------------------------|----|----|----|----|----|----|-------------------|------|------|------|------|------|
| Piston Ø                      | 4                                                   | 6  | 10 | 12 | 16 | 20 | 25 | 32                | 40   | 50   | 63   | 80   | 100  |
| Pneumatic connection          | M3                                                  | M3 | M5 | M5 | M5 | M5 | M5 | G1/8              | G1/8 | G1/8 | G1/8 | G1/8 | G1/4 |
| Piston rod with female thread | -                                                   | -  | -  | ■  | ■  | ■  | ■  | ■                 | ■    | ■    | ■    | ■    | ■    |
| Piston rod with male thread   | ■                                                   | ■  | ■  | ■  | ■  | ■  | ■  | ■                 | ■    | ■    | ■    | ■    | ■    |
| Piston rod without thread     | ■                                                   | ■  | ■  | ■  | -  | -  | -  | -                 | -    | -    | -    | -    | -    |
| Operating medium              | Filtered compressed air, lubricated or unlubricated |    |    |    |    |    |    |                   |      |      |      |      |      |
| Constructional design         | Piston                                              |    |    |    |    |    |    |                   |      |      |      |      |      |
|                               | Piston rod                                          |    |    |    |    |    |    |                   |      |      |      |      |      |
| Cushioning                    | Non-adjustable at either end                        |    |    |    |    |    |    |                   |      |      |      |      |      |
| Type of mounting              | Via through-holes                                   |    |    |    |    |    |    | Via through-holes |      |      |      |      |      |
|                               | -                                                   |    |    |    |    |    |    | Via accessories   |      |      |      |      |      |
| Mounting position             | Any                                                 |    |    |    |    |    |    |                   |      |      |      |      |      |

| Operating conditions                         |             |           |         |          |    |    |    |            |    |    |    |    |     |
|----------------------------------------------|-------------|-----------|---------|----------|----|----|----|------------|----|----|----|----|-----|
| Piston Ø                                     | 4           | 6         | 10      | 12       | 16 | 20 | 25 | 32         | 40 | 50 | 63 | 80 | 100 |
| Operating pressure [bar]                     | 2 ... 8     | 1.5 ... 8 | 1 ... 8 | 1 ... 10 |    |    |    | 0.6 ... 10 |    |    |    |    |     |
| Ambient temperature [°C]                     | -20 ... +80 |           |         |          |    |    |    |            |    |    |    |    |     |
| Corrosion resistance class CRC <sup>1)</sup> | 1           |           |         |          |    |    |    |            |    |    |    |    |     |

1) Corrosion resistance class 1 according to Festo standard 940 070  
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.



# Short-stroke cylinders ADVC

Technical data, double-acting – without position sensing



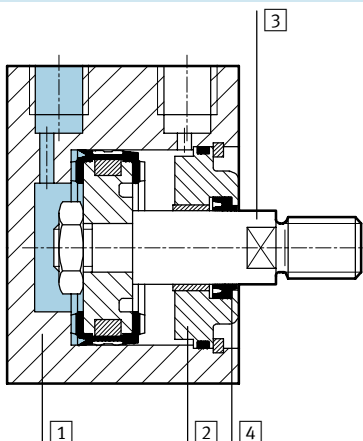
| Forces [N] and impact energy [J]      |       |       |      |      |      |      |      |      |      |       |       |       |       |
|---------------------------------------|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Piston Ø                              | 4     | 6     | 10   | 12   | 16   | 20   | 25   | 32   | 40   | 50    | 63    | 80    | 100   |
| Theoretical force at 6 bar, advancing | 7.5   | 17    | 47   | 68   | 121  | 189  | 295  | 483  | 754  | 1,178 | 1,870 | 3,016 | 4,712 |
| Theoretical force at 6 bar, returning | 5.7   | 13    | 40   | 51   | 91   | 141  | 247  | 415  | 686  | 1,056 | 1,750 | 2,847 | 4,418 |
| Max. impact energy at end positions   | 0.003 | 0.005 | 0.03 | 0.06 | 0.10 | 0.14 | 0.18 | 0.26 | 0.36 | 0.60  | 0.64  | 0.90  | 1.20  |

| Product weight [g] |          |      |    |    |     |     |     |     |     |     |     |       |       |
|--------------------|----------|------|----|----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| Stroke [mm]        | Piston Ø |      |    |    |     |     |     |     |     |     |     |       |       |
|                    | 4        | 6    | 10 | 12 | 16  | 20  | 25  | 32  | 40  | 50  | 63  | 80    | 100   |
| 2.5                | 4        | –    | –  | –  | –   | –   | –   | –   | –   | –   | –   | –     | –     |
| 5                  | 4.5      | 12.5 | 23 | 34 | 68  | 112 | 135 | 280 | 350 | –   | –   | –     | –     |
| 10                 | –        | 16   | 26 | 42 | 76  | 124 | 150 | 300 | 380 | 470 | 600 | 1,570 | 2,480 |
| 15                 | –        | –    | –  | –  | 84  | 136 | 165 | 320 | 410 | 505 | 650 | 1,655 | 2,570 |
| 20                 | –        | –    | –  | –  | 92  | 148 | 180 | 340 | 440 | 540 | 700 | 1,740 | 2,660 |
| 25                 | –        | –    | –  | –  | 100 | 160 | 195 | 360 | 470 | 575 | 750 | 1,825 | 2,750 |

| Moving load [g] |          |     |     |     |    |    |    |    |    |     |     |     |     |
|-----------------|----------|-----|-----|-----|----|----|----|----|----|-----|-----|-----|-----|
| Stroke [mm]     | Piston Ø |     |     |     |    |    |    |    |    |     |     |     |     |
|                 | 4        | 6   | 10  | 12  | 16 | 20 | 25 | 32 | 40 | 50  | 63  | 80  | 100 |
| 2.5             | 0.2      | –   | –   | –   | –  | –  | –  | –  | –  | –   | –   | –   | –   |
| 5               | 0.25     | 1.2 | 2.8 | 6.6 | 11 | 22 | 27 | 46 | 69 | –   | –   | –   | –   |
| 10              | –        | 1.5 | 3.3 | 7.7 | 13 | 25 | 30 | 51 | 74 | 127 | 178 | 339 | 719 |
| 15              | –        | –   | –   | –   | 15 | 28 | 33 | 56 | 79 | 135 | 186 | 351 | 739 |
| 20              | –        | –   | –   | –   | 17 | 31 | 36 | 61 | 84 | 143 | 194 | 363 | 759 |
| 25              | –        | –   | –   | –   | 19 | 34 | 39 | 66 | 89 | 151 | 202 | 375 | 779 |

## Materials

Sectional view



| Piston Ø          | 4                                 | 6 ... 100                         |
|-------------------|-----------------------------------|-----------------------------------|
| 1 Cylinder barrel | Anodised aluminium                | Anodised aluminium                |
| 2 Cover cap       | Anodised aluminium                | Anodised aluminium                |
| 3 Piston rod      | Anodised aluminium                | High-alloy steel                  |
| 4 Rod seal        | Hydrated nitrile rubber           | Polyurethane                      |
| Note on material  | Free of copper, PTFE and silicone | Free of copper, PTFE and silicone |

# Short-stroke cylinders ADVC

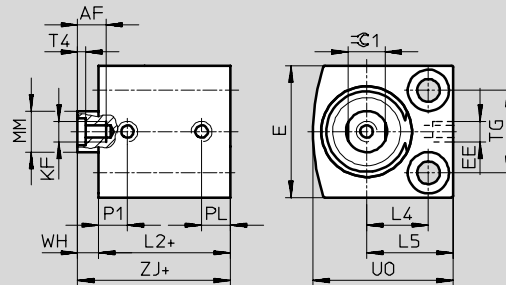
Technical data, double-acting – without position sensing



**Dimensions** Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

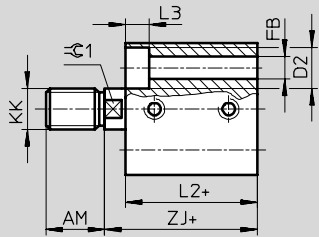
∅ 4 ... 25 mm

ADVC-...-I-P  
Piston rod with female thread

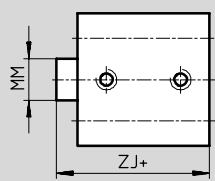


- Note  
**ADVC-4**  
Do not exceed maximum screw-in depth of 3 mm and maximum tightening torque of 0.7 Nm.

ADVC-...-A-P  
Piston rod with male thread



ADVC-...-P  
Piston rod without thread



+ = plus stroke length

| ∅<br>[mm] | Stroke<br>[mm] | AF<br>min. | AM<br>-0.5 | D2<br>∅  | E<br>max. | EE<br>∅ | FB<br>∅ | KF | KK | L2<br>+0.2 | L3  | L4   | L5   | MM<br>∅ | P1        | PL         | T4  | TG<br>±0.1 | UO<br>max. | WH  | ZJ<br>±0.8   | √C1 |
|-----------|----------------|------------|------------|----------|-----------|---------|---------|----|----|------------|-----|------|------|---------|-----------|------------|-----|------------|------------|-----|--------------|-----|
| 4         | 2.5            | -          | 6          | 3.3 +0.1 | 10        | M3      | 1.8     | -  | M2 | 10.5       | 1.8 | 4    | 6.5  | 2       | 3.7       | 3.2        | -   | 5.8        | 10         | 1   | 11.5         | -   |
|           | 5              | -          | 6          | 3.3 +0.1 | 10        | M3      | 1.8     | -  | M2 | 10.5       | 1.8 | 4    | 6.5  | 2       | 3.7       | 3.2        | -   | 5.8        | 10         | 1   | 11.5         | -   |
| 6         | 5              | -          | 6          | 5 +0.1   | 13        | M3      | 2.9     | -  | M3 | 11         | 2.9 | 6    | 9    | 3       | 4.7       | 3          | -   | 7          | 14         | 1   | 12           | -   |
|           | 10             | -          | 6          | 5 +0.1   | 13        | M3      | 2.9     | -  | M3 | 11         | 2.9 | 6    | 9    | 3       | 4.7       | 3          | -   | 7          | 14         | 1   | 12           | -   |
| 10        | 5              | -          | 8          | 5.8 +0.1 | 18        | M5      | 3.4     | -  | M4 | 16<br>14   | 3.4 | 8    | 11.5 | 4       | 5.2<br>6  | 5.2<br>5.5 | -   | 11         | 19         | 1.5 | 17.5<br>15.5 | -   |
|           | 10             | -          | 8          | 5.8 +0.1 | 18        | M5      | 3.4     | -  | M4 | 16<br>14   | 3.4 | 8    | 11.5 | 4       | 5.2<br>6  | 5.2<br>5.5 | -   | 11         | 19         | 1.5 | 17.5<br>15.5 | -   |
| 12        | 5              | 8          | 8          | 6 H13    | 20        | M5      | 3.4     | M3 | M5 | 18         | 3.4 | 9    | 13   | 6       | 5.75<br>9 | 5.75<br>6  | 1.5 | 13         | 22         | 4   | 22           | 5   |
|           | 10             | 8          | 8          | 6 H13    | 20        | M5      | 3.4     | M3 | M5 | 18         | 3.4 | 9    | 13   | 6       | 5.75<br>9 | 5.75<br>6  | 1.5 | 13         | 22         | 4   | 22           | 5   |
| 16        | 5              | 10         | 12         | 8 H13    | 25        | M5      | 4.5     | M4 | M6 | 18         | 4.6 | 11.5 | 16.5 | 8       | 6         | 6          | 2   | 15         | 27         | 4   | 22           | 7   |
|           | 10             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
|           | 15             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
|           | 20             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
| 20        | 5              | 12         | 12         | 10 H13   | 32        | M5      | 5.5     | M5 | M8 | 22         | 5.7 | 15   | 21   | 10      | 7.5       | 7          | 2   | 20         | 34         | 5   | 27           | 9   |
|           | 10             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
|           | 15             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
|           | 20             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
| 25        | 5              | 12         | 12         | 10 H13   | 38        | M5      | 5.5     | M5 | M8 | 22.5       | 5.7 | 15.5 | 21.5 | 10      | 8         | 6.5        | 2   | 26         | 37         | 5   | 27.5         | 9   |
|           | 10             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
|           | 15             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |
|           | 20             |            |            |          |           |         |         |    |    |            |     |      |      |         |           |            |     |            |            |     |              |     |

# Short-stroke cylinders ADVC

Technical data, double-acting – without position sensing

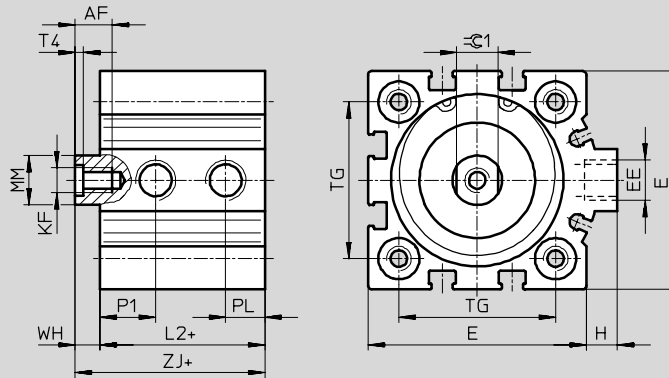


Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 32 ... 100 mm

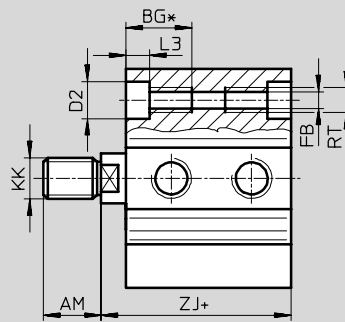
ADVC-...-I-P

Piston rod with female thread



ADVC-...-A-P\*\*

Piston rod with male thread



+ = plus stroke length

| ∅    | AF   | AM   | BG*  | D2      | E    | EE                            | FB  | H   | KF  | KK       |
|------|------|------|------|---------|------|-------------------------------|-----|-----|-----|----------|
| [mm] | min. | -0.5 | min. | ∅<br>F9 | max. |                               | ∅   |     |     |          |
| 32   | 12   | 14   | 21.7 | 9       | 45   | G <sup>1</sup> / <sub>8</sub> | 5.2 | 7   | M6  | M10x1.25 |
| 40   | 12   | 14   | 21.7 | 9       | 53.5 | G <sup>1</sup> / <sub>8</sub> | 5.2 | 7   | M6  | M10x1.25 |
| 50   | 16   | 16   | 22.8 | 11      | 63.5 | G <sup>1</sup> / <sub>8</sub> | 6.8 | 7   | M8  | M12x1.25 |
| 63   | 16   | 16   | 22.8 | 11      | 75   | G <sup>1</sup> / <sub>8</sub> | 6.8 | 7.5 | M8  | M12x1.25 |
| 80   | 20   | 22   | 25   | 14      | 93   | G <sup>1</sup> / <sub>8</sub> | 8.5 | 7   | M10 | M16x1.5  |
| 100  | 24   | 28   | 25   | 14      | 113  | G <sup>1</sup> / <sub>4</sub> | 8.5 | 13  | M12 | M20x1.5  |

| ∅    | L2   | L3  | MM | P1   | PL   | RT  | T4  | TG   | WH | ZJ   | ⊖C1 |
|------|------|-----|----|------|------|-----|-----|------|----|------|-----|
| [mm] | +0.2 |     | ∅  |      |      |     |     | ±0.1 |    | ±0.8 |     |
| 32   | 29   | 5.7 | 12 | 9    | 8.5  | M6  | 2.6 | 32.5 | 6  | 35   | 10  |
| 40   | 29.5 | 5.7 | 12 | 11   | 9    | M6  | 2.6 | 38   | 6  | 35.5 | 10  |
| 50   | 28   | 6.8 | 16 | 11.3 | 9.5  | M8  | 3.3 | 46.5 | 8  | 36   | 13  |
| 63   | 35   | 6.8 | 16 | 12.5 | 11.5 | M8  | 3.3 | 56.5 | 8  | 43   | 13  |
| 80   | 40   | 9   | 20 | 15   | 15   | M10 | 4.7 | 72   | 8  | 48   | 17  |
| 100  | 49   | 9   | 25 | 16.5 | 19   | M10 | 6.1 | 89   | 10 | 59   | 22  |

\* Continuous thread with short overall length

\*\* Nut for piston rod thread included in scope of delivery


# Short-stroke cylinders ADVC



Technical data, double-acting – without position sensing

Cylinders with piston rods  
Short-stroke cylinders

2.2


| Ordering data                                                                     |                  |                |                                |                |                                  |                |                              |              |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|----------------|----------------------------------|----------------|------------------------------|--------------|
| Type                                                                              | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                | Piston rod<br>with female thread |                | Piston rod<br>without thread |              |
|                                                                                   |                  |                | Part No.                       | Type           | Part No.                         | Type           | Part No.                     | Type         |
|  | 4                | 2.5            | 188 054                        | ADVC-4-2,5-A-P | -                                | -              | 526 897                      | ADVC-4-2,5-P |
|                                                                                   |                  | 5              | 188 055                        | ADVC-4-5-A-P   | -                                | -              | 526 898                      | ADVC-4-5-P   |
|                                                                                   | 6                | 5              | 188 066                        | ADVC-6-5-A-P   | -                                | -              | 526 899                      | ADVC-6-5-P   |
|                                                                                   |                  | 10             | 188 067                        | ADVC-6-10-A-P  | -                                | -              | 526 900                      | ADVC-6-10-P  |
|                                                                                   | 10               | 5              | 188 078                        | ADVC-10-5-A-P  | -                                | -              | 526 903                      | ADVC-10-5-P  |
|                                                                                   |                  | 10             | 188 079                        | ADVC-10-10-A-P | -                                | -              | 526 904                      | ADVC-10-10-P |
|                                                                                   | 12               | 5              | 188 094                        | ADVC-12-5-A-P  | 188 090                          | ADVC-12-5-I-P  | 530 568                      | ADVC-12-5-P  |
|                                                                                   |                  | 10             | 188 095                        | ADVC-12-10-A-P | 188 091                          | ADVC-12-10-I-P | 530 569                      | ADVC-12-10-P |
|                                                                                   | 16               | 5              | 188 123                        | ADVC-16-5-A-P  | 188 113                          | ADVC-16-5-I-P  | -                            | -            |
|                                                                                   |                  | 10             | 188 124                        | ADVC-16-10-A-P | 188 114                          | ADVC-16-10-I-P | -                            | -            |
|                                                                                   |                  | 15             | 188 125                        | ADVC-16-15-A-P | 188 115                          | ADVC-16-15-I-P | -                            | -            |
|                                                                                   |                  | 20             | 188 126                        | ADVC-16-20-A-P | 188 116                          | ADVC-16-20-I-P | -                            | -            |
|                                                                                   |                  | 25             | 188 127                        | ADVC-16-25-A-P | 188 117                          | ADVC-16-25-I-P | -                            | -            |
|                                                                                   | 20               | 5              | 188 155                        | ADVC-20-5-A-P  | 188 145                          | ADVC-20-5-I-P  | -                            | -            |
|                                                                                   |                  | 10             | 188 156                        | ADVC-20-10-A-P | 188 146                          | ADVC-20-10-I-P | -                            | -            |
|                                                                                   |                  | 15             | 188 157                        | ADVC-20-15-A-P | 188 147                          | ADVC-20-15-I-P | -                            | -            |
|                                                                                   |                  | 20             | 188 158                        | ADVC-20-20-A-P | 188 148                          | ADVC-20-20-I-P | -                            | -            |
|                                                                                   |                  | 25             | 188 159                        | ADVC-20-25-A-P | 188 149                          | ADVC-20-25-I-P | -                            | -            |
|                                                                                   | 25               | 5              | 188 187                        | ADVC-25-5-A-P  | 188 177                          | ADVC-25-5-I-P  | -                            | -            |
|                                                                                   |                  | 10             | 188 188                        | ADVC-25-10-A-P | 188 178                          | ADVC-25-10-I-P | -                            | -            |
| 15                                                                                |                  | 188 189        | ADVC-25-15-A-P                 | 188 179        | ADVC-25-15-I-P                   | -              | -                            |              |
| 20                                                                                |                  | 188 190        | ADVC-25-20-A-P                 | 188 180        | ADVC-25-20-I-P                   | -              | -                            |              |
| 25                                                                                |                  | 188 191        | ADVC-25-25-A-P                 | 188 181        | ADVC-25-25-I-P                   | -              | -                            |              |

 Core Range

# Short-stroke cylinders ADVC

Technical data, double-acting – without position sensing

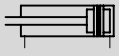


| Ordering data                                                                     |                  |                |                                |                |                                  |                |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|----------------|----------------------------------|----------------|
| Type                                                                              | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                | Piston rod<br>with female thread |                |
|                                                                                   |                  |                | Part No.                       | Type           | Part No.                         | Type           |
|  | 32               | 5              | 188 219                        | ADVC-32-5-A-P  | 188 209                          | ADVC-32-5-I-P  |
|                                                                                   |                  | 10             | 188 220                        | ADVC-32-10-A-P | 188 210                          | ADVC-32-10-I-P |
|                                                                                   |                  | 15             | 188 221                        | ADVC-32-15-A-P | 188 211                          | ADVC-32-15-I-P |
|                                                                                   |                  | 20             | 188 222                        | ADVC-32-20-A-P | 188 212                          | ADVC-32-20-I-P |
|                                                                                   |                  | 25             | 188 223                        | ADVC-32-25-A-P | 188 213                          | ADVC-32-25-I-P |
|                                                                                   | 40               | 5              | 188 247                        | ADVC-40-5-A-P  | 188 237                          | ADVC-40-5-I-P  |
|                                                                                   |                  | 10             | 188 248                        | ADVC-40-10-A-P | 188 238                          | ADVC-40-10-I-P |
|                                                                                   |                  | 15             | 188 249                        | ADVC-40-15-A-P | 188 239                          | ADVC-40-15-I-P |
|                                                                                   |                  | 20             | 188 250                        | ADVC-40-20-A-P | 188 240                          | ADVC-40-20-I-P |
|                                                                                   |                  | 25             | 188 251                        | ADVC-40-25-A-P | 188 241                          | ADVC-40-25-I-P |
|                                                                                   | 50               | 10             | 188 272                        | ADVC-50-10-A-P | 188 264                          | ADVC-50-10-I-P |
|                                                                                   |                  | 15             | 188 273                        | ADVC-50-15-A-P | 188 265                          | ADVC-50-15-I-P |
|                                                                                   |                  | 20             | 188 274                        | ADVC-50-20-A-P | 188 266                          | ADVC-50-20-I-P |
|                                                                                   |                  | 25             | 188 275                        | ADVC-50-25-A-P | 188 267                          | ADVC-50-25-I-P |
|                                                                                   | 63               | 10             | 188 296                        | ADVC-63-10-A-P | 188 288                          | ADVC-63-10-I-P |
|                                                                                   |                  | 15             | 188 297                        | ADVC-63-15-A-P | 188 289                          | ADVC-63-15-I-P |
|                                                                                   |                  | 20             | 188 298                        | ADVC-63-20-A-P | 188 290                          | ADVC-63-20-I-P |
|                                                                                   |                  | 25             | 188 299                        | ADVC-63-25-A-P | 188 291                          | ADVC-63-25-I-P |
|                                                                                   | 80               | 10             | 188 320                        | ADVC-80-10-A-P | 188 312                          | ADVC-80-10-I-P |
|                                                                                   |                  | 15             | 188 321                        | ADVC-80-15-A-P | 188 313                          | ADVC-80-15-I-P |
| 20                                                                                |                  | 188 322        | ADVC-80-20-A-P                 | 188 314        | ADVC-80-20-I-P                   |                |
| 25                                                                                |                  | 188 323        | ADVC-80-25-A-P                 | 188 315        | ADVC-80-25-I-P                   |                |
| 100                                                                               | 10               | 188 344        | ADVC-100-10-A-P                | 188 336        | ADVC-100-10-I-P                  |                |
|                                                                                   | 15               | 188 345        | ADVC-100-15-A-P                | 188 337        | ADVC-100-15-I-P                  |                |
|                                                                                   | 20               | 188 346        | ADVC-100-20-A-P                | 188 338        | ADVC-100-20-I-P                  |                |
|                                                                                   | 25               | 188 347        | ADVC-100-25-A-P                | 188 339        | ADVC-100-25-I-P                  |                |

## Short-stroke cylinders ADVC

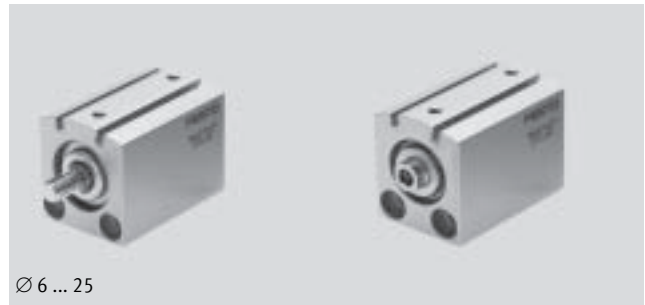
Technical data, double-acting – with position sensing

FESTO

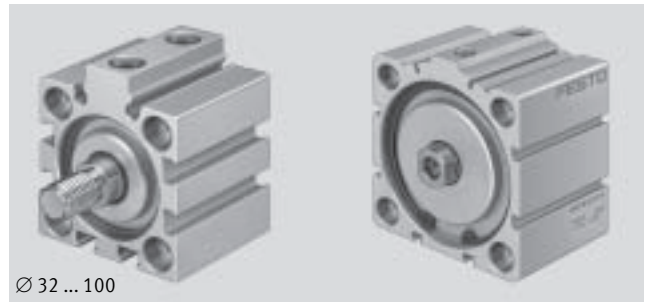


Ø - Diameter  
6 ... 100 mm

l - Stroke length  
5 ... 25 mm



Ø 6 ... 25



Ø 32 ... 100

| General technical data        |                                                     |    |    |    |    |    |                   |                 |                 |                 |                 |                 |
|-------------------------------|-----------------------------------------------------|----|----|----|----|----|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Piston Ø                      | 6                                                   | 10 | 12 | 16 | 20 | 25 | 32                | 40              | 50              | 63              | 80              | 100             |
| Pneumatic connection          | M3                                                  | M5 | M5 | M5 | M5 | M5 | G $\frac{1}{8}$   | G $\frac{1}{8}$ | G $\frac{1}{8}$ | G $\frac{1}{8}$ | G $\frac{1}{8}$ | G $\frac{1}{4}$ |
| Piston rod with female thread | –                                                   | –  | ■  | ■  | ■  | ■  | ■                 | ■               | ■               | ■               | ■               | ■               |
| Piston rod with male thread   | ■                                                   | ■  | ■  | ■  | ■  | ■  | ■                 | ■               | ■               | ■               | ■               | ■               |
| Piston rod without thread     | ■                                                   | ■  | ■  | –  | –  | –  | –                 | –               | –               | –               | –               | –               |
| Operating medium              | Filtered compressed air, lubricated or unlubricated |    |    |    |    |    |                   |                 |                 |                 |                 |                 |
| Constructional design         | Piston                                              |    |    |    |    |    |                   |                 |                 |                 |                 |                 |
|                               | Piston rod                                          |    |    |    |    |    |                   |                 |                 |                 |                 |                 |
| Cushioning                    | Non-adjustable at either end                        |    |    |    |    |    |                   |                 |                 |                 |                 |                 |
| Position sensing              | With proximity sensor                               |    |    |    |    |    |                   |                 |                 |                 |                 |                 |
| Type of mounting              | Via through-holes                                   |    |    |    |    |    | Via through-holes |                 |                 |                 |                 |                 |
|                               | –                                                   |    |    |    |    |    | Via accessories   |                 |                 |                 |                 |                 |
| Mounting position             | Any                                                 |    |    |    |    |    |                   |                 |                 |                 |                 |                 |

| Operating conditions                         |                                                         |         |          |    |    |    |            |    |    |    |    |     |
|----------------------------------------------|---------------------------------------------------------|---------|----------|----|----|----|------------|----|----|----|----|-----|
| Piston Ø                                     | 6                                                       | 10      | 12       | 16 | 20 | 25 | 32         | 40 | 50 | 63 | 80 | 100 |
| Operating pressure [bar]                     | 1.5 ... 8                                               | 1 ... 8 | 1 ... 10 |    |    |    | 0.6 ... 10 |    |    |    |    |     |
| Ambient temperature [°C]                     | –20 ... +80 (note operating range of proximity sensors) |         |          |    |    |    |            |    |    |    |    |     |
| Corrosion resistance class CRC <sup>1)</sup> | 1                                                       |         |          |    |    |    |            |    |    |    |    |     |

1) Corrosion resistance class 1 according to Festo standard 940 070  
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

# Short-stroke cylinders ADVC

Technical data, double-acting – with position sensing



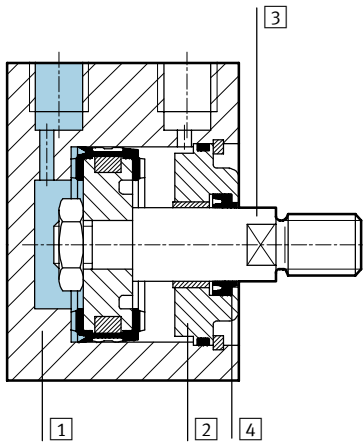
| Forces [N] and impact energy [J]      |       |      |      |      |      |      |      |      |       |       |       |       |
|---------------------------------------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Piston Ø                              | 6     | 10   | 12   | 16   | 20   | 25   | 32   | 40   | 50    | 63    | 80    | 100   |
| Theoretical force at 6 bar, advancing | 17    | 47   | 68   | 121  | 189  | 295  | 483  | 754  | 1,178 | 1,870 | 3,016 | 4,712 |
| Theoretical force at 6 bar, returning | 13    | 40   | 51   | 91   | 141  | 247  | 415  | 686  | 1,056 | 1,750 | 2,847 | 4,418 |
| Max. impact energy at end positions   | 0.005 | 0.03 | 0.06 | 0.10 | 0.14 | 0.18 | 0.26 | 0.36 | 0.60  | 0.64  | 0.90  | 1.20  |

| Product weight [g] |          |    |    |     |     |     |     |     |     |     |       |       |
|--------------------|----------|----|----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| Stroke [mm]        | Piston Ø |    |    |     |     |     |     |     |     |     |       |       |
|                    | 6        | 10 | 12 | 16  | 20  | 25  | 32  | 40  | 50  | 63  | 80    | 100   |
| 5                  | 20       | 37 | 70 | 98  | 162 | 195 | 320 | 460 | –   | –   | –     | –     |
| 10                 | 23       | 45 | 79 | 106 | 174 | 210 | 340 | 490 | 630 | 710 | 1,940 | 2,970 |
| 15                 | –        | –  | –  | 114 | 186 | 225 | 360 | 520 | 665 | 760 | 2,025 | 3,060 |
| 20                 | –        | –  | –  | 122 | 198 | 240 | 380 | 550 | 700 | 810 | 2,110 | 3,150 |
| 25                 | –        | –  | –  | 130 | 210 | 255 | 400 | 580 | 735 | 860 | 2,195 | 3,240 |

| Moving load [g] |          |     |     |    |    |    |    |    |     |     |     |     |
|-----------------|----------|-----|-----|----|----|----|----|----|-----|-----|-----|-----|
| Stroke [mm]     | Piston Ø |     |     |    |    |    |    |    |     |     |     |     |
|                 | 6        | 10  | 12  | 16 | 20 | 25 | 32 | 40 | 50  | 63  | 80  | 100 |
| 5               | 1.7      | 3.2 | 8.5 | 15 | 26 | 32 | 50 | 66 | –   | –   | –   | –   |
| 10              | 2        | 3.7 | 9.6 | 17 | 29 | 35 | 55 | 71 | 116 | 158 | 289 | 555 |
| 15              | –        | –   | –   | 19 | 32 | 38 | 60 | 76 | 124 | 166 | 301 | 575 |
| 20              | –        | –   | –   | 21 | 35 | 41 | 65 | 81 | 132 | 174 | 313 | 595 |
| 25              | –        | –   | –   | 23 | 38 | 44 | 70 | 86 | 140 | 182 | 325 | 615 |

## Materials

Sectional view



| Piston Ø         | 6 ... 100       |                                   |
|------------------|-----------------|-----------------------------------|
| 1                | Cylinder barrel | Anodised aluminium                |
| 2                | Cover cap       | Anodised aluminium                |
| 3                | Piston rod      | High-alloy steel                  |
| 4                | Rod seal        | Polyurethane                      |
| Note on material |                 | Free of copper, PTFE and silicone |

# Short-stroke cylinders ADVC

Technical data, double-acting – with position sensing

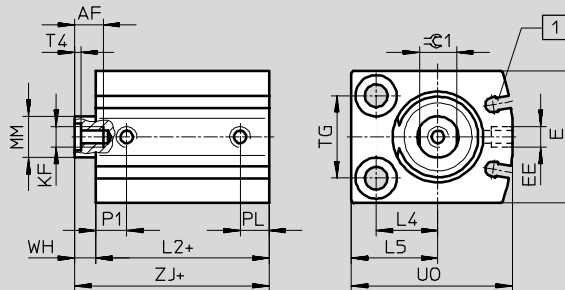


Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 6 ... 25 mm

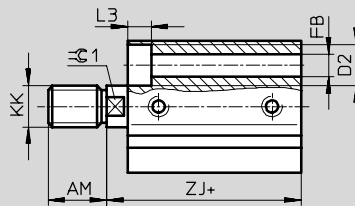
ADVC-...-I-P-A

Piston rod with female thread



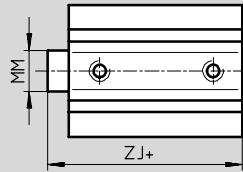
ADVC-...-A-P-A

Piston rod with male thread



ADVC-...-P-A

Piston rod without thread



+ = plus stroke length

1 Slot for proximity sensor  
SME/SMT-10

| ∅    | AF   | AM   | D2       | E    | EE | FB  | KF | KK | L2   | L3  |
|------|------|------|----------|------|----|-----|----|----|------|-----|
| [mm] | min. | -0.5 | ∅        | max. |    | ∅   |    |    | +0.2 |     |
| 6    | -    | 6    | 5 +0.1   | 16   | M3 | 2.9 | -  | M3 | 20.5 | 2.9 |
| 10   | -    | 8    | 5.8 +0.1 | 21   | M5 | 3.4 | -  | M4 | 22   | 3.4 |
| 12   | 8    | 8    | 6 H13    | 24   | M5 | 3.4 | M3 | M5 | 31   | 3.4 |
| 16   | 10   | 12   | 8 H13    | 28   | M5 | 4.5 | M4 | M6 | 30   | 4.6 |
| 20   | 12   | 12   | 10 H13   | 32   | M5 | 5.5 | M5 | M8 | 32   | 5.7 |
| 25   | 12   | 12   | 10 H13   | 38   | M5 | 5.5 | M5 | M8 | 32   | 5.7 |

| ∅    | L4   | L5   | MM | P1  | PL | T4  | TG   | U0   | WH  | ZJ   | ∅1 |
|------|------|------|----|-----|----|-----|------|------|-----|------|----|
| [mm] |      |      | ∅  |     |    |     | ±0.1 | max. |     | ±0.8 |    |
| 6    | 5    | 8    | 3  | 5.2 | 3  | -   | 10   | 16   | 1   | 21.5 | -  |
| 10   | 7    | 10.5 | 4  | 6   | 6  | -   | 14   | 22   | 1.5 | 23.5 | -  |
| 12   | 8    | 12   | 6  | 7   | 6  | 1.5 | 16   | 26   | 4   | 35   | 5  |
| 16   | 12   | 17   | 8  | 8   | 6  | 2   | 18   | 32   | 4   | 34   | 7  |
| 20   | 15   | 21   | 10 | 7.5 | 7  | 2   | 20   | 39   | 5   | 37   | 9  |
| 25   | 15.5 | 21.5 | 10 | 10  | 6  | 2   | 26   | 42   | 5   | 37   | 9  |



# Short-stroke cylinders ADVC

Technical data, double-acting – with position sensing

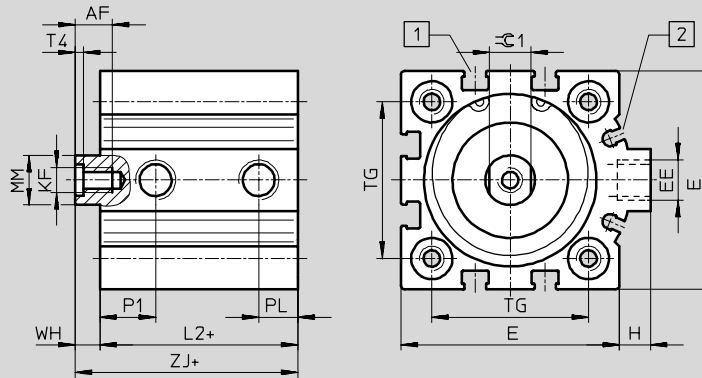


Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 32 ... 100 mm

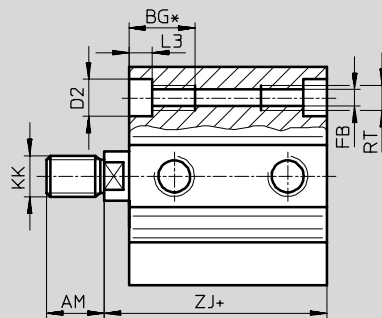
ADVC-...-I-P-A

Piston rod with female thread



ADVC-...-A-P-A\*\*

Piston rod with male thread



+ = plus stroke length

1 Slot for proximity sensor SME/SMT-8

2 Slot for proximity sensor SME/SMT-10

| ∅    | AF   | AM   | BG*  | D2      | E    | EE   | FB  | H   | KF  | KK       |
|------|------|------|------|---------|------|------|-----|-----|-----|----------|
| [mm] | min. | -0.5 | min. | ∅<br>F9 | max. |      | ∅   |     |     |          |
| 32   | 12   | 14   | 21.7 | 9       | 45   | G1/8 | 5.2 | 7   | M6  | M10x1.25 |
| 40   | 12   | 14   | 21.7 | 9       | 53.5 | G1/8 | 5.2 | 7   | M6  | M10x1.25 |
| 50   | 16   | 16   | 22.8 | 11      | 63.5 | G1/8 | 6.8 | 7   | M8  | M12x1.25 |
| 63   | 16   | 16   | 22.8 | 11      | 75   | G3/8 | 6.8 | 7.5 | M8  | M12x1.25 |
| 80   | 20   | 22   | 25   | 14      | 93   | G3/8 | 8.5 | 7   | M10 | M16x1.5  |
| 100  | 24   | 28   | 25   | 14      | 113  | G3/4 | 8.5 | 13  | M12 | M20x1.5  |

| ∅    | L2   | L3  | MM | P1   | PL   | RT  | T4  | TG   | WH | ZJ   | ∅C1 |
|------|------|-----|----|------|------|-----|-----|------|----|------|-----|
| [mm] | +0.2 |     | ∅  |      |      |     |     | ±0.1 |    | ±0.8 |     |
| 32   | 33   | 5.7 | 12 | 9    | 8.5  | M6  | 2.6 | 32.5 | 6  | 39   | 10  |
| 40   | 38   | 5.7 | 12 | 13.5 | 9.5  | M6  | 2.6 | 38   | 6  | 44   | 10  |
| 50   | 38   | 6.8 | 16 | 11.3 | 9.5  | M8  | 3.3 | 46.5 | 8  | 46   | 13  |
| 63   | 41   | 6.8 | 16 | 12.5 | 10.5 | M8  | 3.3 | 56.5 | 8  | 49   | 13  |
| 80   | 49   | 9   | 20 | 15   | 8.5  | M10 | 4.7 | 72   | 8  | 57   | 17  |
| 100  | 58   | 9   | 25 | 16.5 | 10.5 | M10 | 6.1 | 89   | 10 | 68   | 22  |


\* Continuous thread with short overall length


\*\* Nut for piston rod thread included in scope of delivery

# Short-stroke cylinders ADVC

Technical data, double-acting – with position sensing




| Ordering data                                                                     |                  |                |                                |                  |                                  |                  |                              |                |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|------------------|----------------------------------|------------------|------------------------------|----------------|
| Type                                                                              | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                  | Piston rod<br>with female thread |                  | Piston rod<br>without thread |                |
|                                                                                   |                  |                | Part No.                       | Type             | Part No.                         | Type             | Part No.                     | Type           |
|  | 6                | 5              | 188 064                        | ADVC-6-5-A-P-A   | -                                | -                | 526 901                      | ADVC-6-5-P-A   |
|                                                                                   |                  | 10             | 188 065                        | ADVC-6-10-A-P-A  | -                                | -                | 526 902                      | ADVC-6-10-P-A  |
|                                                                                   | 10               | 5              | 188 076                        | ADVC-10-5-A-P-A  | -                                | -                | 526 905                      | ADVC-10-5-P-A  |
|                                                                                   |                  | 10             | 188 077                        | ADVC-10-10-A-P-A | -                                | -                | 526 906                      | ADVC-10-10-P-A |
|                                                                                   | 12               | 5              | 188 092                        | ADVC-12-5-A-P-A  | 188 088                          | ADVC-12-5-I-P-A  | 530 572                      | ADVC-12-5-P-A  |
|                                                                                   |                  | 10             | 188 093                        | ADVC-12-10-A-P-A | 188 089                          | ADVC-12-10-I-P-A | 530 573                      | ADVC-12-10-P-A |
|                                                                                   | 16               | 5              | 188 118                        | ADVC-16-5-A-P-A  | 188 108                          | ADVC-16-5-I-P-A  | -                            | -              |
|                                                                                   |                  | 10             | 188 119                        | ADVC-16-10-A-P-A | 188 109                          | ADVC-16-10-I-P-A | -                            | -              |
|                                                                                   |                  | 15             | 188 120                        | ADVC-16-15-A-P-A | 188 110                          | ADVC-16-15-I-P-A | -                            | -              |
|                                                                                   |                  | 20             | 188 121                        | ADVC-16-20-A-P-A | 188 111                          | ADVC-16-20-I-P-A | -                            | -              |
|                                                                                   |                  | 25             | 188 122                        | ADVC-16-25-A-P-A | 188 112                          | ADVC-16-25-I-P-A | -                            | -              |
|                                                                                   | 20               | 5              | 188 150                        | ADVC-20-5-A-P-A  | 188 140                          | ADVC-20-5-I-P-A  | -                            | -              |
|                                                                                   |                  | 10             | 188 151                        | ADVC-20-10-A-P-A | 188 141                          | ADVC-20-10-I-P-A | -                            | -              |
|                                                                                   |                  | 15             | 188 152                        | ADVC-20-15-A-P-A | 188 142                          | ADVC-20-15-I-P-A | -                            | -              |
|                                                                                   |                  | 20             | 188 153                        | ADVC-20-20-A-P-A | 188 143                          | ADVC-20-20-I-P-A | -                            | -              |
|                                                                                   |                  | 25             | 188 154                        | ADVC-20-25-A-P-A | 188 144                          | ADVC-20-25-I-P-A | -                            | -              |
|                                                                                   | 25               | 5              | 188 182                        | ADVC-25-5-A-P-A  | 188 172                          | ADVC-25-5-I-P-A  | -                            | -              |
|                                                                                   |                  | 10             | 188 183                        | ADVC-25-10-A-P-A | 188 173                          | ADVC-25-10-I-P-A | -                            | -              |
|                                                                                   |                  | 15             | 188 184                        | ADVC-25-15-A-P-A | 188 174                          | ADVC-25-15-I-P-A | -                            | -              |
|                                                                                   |                  | 20             | 188 185                        | ADVC-25-20-A-P-A | 188 175                          | ADVC-25-20-I-P-A | -                            | -              |
| 25                                                                                |                  | 188 186        | ADVC-25-25-A-P-A               | 188 176          | ADVC-25-25-I-P-A                 | -                | -                            |                |

 Core Range

# Short-stroke cylinders ADVC

Technical data, double-acting – with position sensing



| Ordering data                                                                     |                  |                |                                |                  |                                  |                  |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|------------------|----------------------------------|------------------|
| Type                                                                              | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                  | Piston rod<br>with female thread |                  |
|                                                                                   |                  |                | Part No.                       | Type             | Part No.                         | Type             |
|  | 32               | 5              | <b>188 214</b>                 | ADVC-32-5-A-P-A  | <b>188 204</b>                   | ADVC-32-5-I-P-A  |
|                                                                                   |                  | 10             | <b>188 215</b>                 | ADVC-32-10-A-P-A | <b>188 205</b>                   | ADVC-32-10-I-P-A |
|                                                                                   |                  | 15             | <b>188 216</b>                 | ADVC-32-15-A-P-A | <b>188 206</b>                   | ADVC-32-15-I-P-A |
|                                                                                   |                  | 20             | <b>188 217</b>                 | ADVC-32-20-A-P-A | <b>188 207</b>                   | ADVC-32-20-I-P-A |
|                                                                                   |                  | 25             | <b>188 218</b>                 | ADVC-32-25-A-P-A | <b>188 208</b>                   | ADVC-32-25-I-P-A |
|                                                                                   | 40               | 5              | <b>188 242</b>                 | ADVC-40-5-A-P-A  | <b>188 232</b>                   | ADVC-40-5-I-P-A  |
|                                                                                   |                  | 10             | <b>188 243</b>                 | ADVC-40-10-A-P-A | <b>188 233</b>                   | ADVC-40-10-I-P-A |
|                                                                                   |                  | 15             | <b>188 244</b>                 | ADVC-40-15-A-P-A | <b>188 234</b>                   | ADVC-40-15-I-P-A |
|                                                                                   |                  | 20             | <b>188 245</b>                 | ADVC-40-20-A-P-A | <b>188 235</b>                   | ADVC-40-20-I-P-A |
|                                                                                   |                  | 25             | <b>188 246</b>                 | ADVC-40-25-A-P-A | <b>188 236</b>                   | ADVC-40-25-I-P-A |
|                                                                                   | 50               | 10             | <b>188 268</b>                 | ADVC-50-10-A-P-A | <b>188 260</b>                   | ADVC-50-10-I-P-A |
|                                                                                   |                  | 15             | <b>188 269</b>                 | ADVC-50-15-A-P-A | <b>188 261</b>                   | ADVC-50-15-I-P-A |
|                                                                                   |                  | 20             | <b>188 270</b>                 | ADVC-50-20-A-P-A | <b>188 262</b>                   | ADVC-50-20-I-P-A |
|                                                                                   |                  | 25             | <b>188 271</b>                 | ADVC-50-25-A-P-A | <b>188 263</b>                   | ADVC-50-25-I-P-A |
|                                                                                   | 63               | 10             | <b>188 292</b>                 | ADVC-63-10-A-P-A | <b>188 284</b>                   | ADVC-63-10-I-P-A |
|                                                                                   |                  | 15             | <b>188 293</b>                 | ADVC-63-15-A-P-A | <b>188 285</b>                   | ADVC-63-15-I-P-A |
|                                                                                   |                  | 20             | <b>188 294</b>                 | ADVC-63-20-A-P-A | <b>188 286</b>                   | ADVC-63-20-I-P-A |
|                                                                                   |                  | 25             | <b>188 295</b>                 | ADVC-63-25-A-P-A | <b>188 287</b>                   | ADVC-63-25-I-P-A |
|                                                                                   | 80               | 10             | <b>188 316</b>                 | ADVC-80-10-A-P-A | <b>188 308</b>                   | ADVC-80-10-I-P-A |
|                                                                                   |                  | 15             | <b>188 317</b>                 | ADVC-80-15-A-P-A | <b>188 309</b>                   | ADVC-80-15-I-P-A |
| 20                                                                                |                  | <b>188 318</b> | ADVC-80-20-A-P-A               | <b>188 310</b>   | ADVC-80-20-I-P-A                 |                  |
| 25                                                                                |                  | <b>188 319</b> | ADVC-80-25-A-P-A               | <b>188 311</b>   | ADVC-80-25-I-P-A                 |                  |
| 100                                                                               | 10               | <b>188 340</b> | ADVC-100-10-A-P-A              | <b>188 332</b>   | ADVC-100-10-I-P-A                |                  |
|                                                                                   | 15               | <b>188 341</b> | ADVC-100-15-A-P-A              | <b>188 333</b>   | ADVC-100-15-I-P-A                |                  |
|                                                                                   | 20               | <b>188 342</b> | ADVC-100-20-A-P-A              | <b>188 334</b>   | ADVC-100-20-I-P-A                |                  |
|                                                                                   | 25               | <b>188 343</b> | ADVC-100-25-A-P-A              | <b>188 335</b>   | ADVC-100-25-I-P-A                |                  |

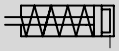
Cylinders with piston rods  
Short-stroke cylinders

## 2.2

 Core Range

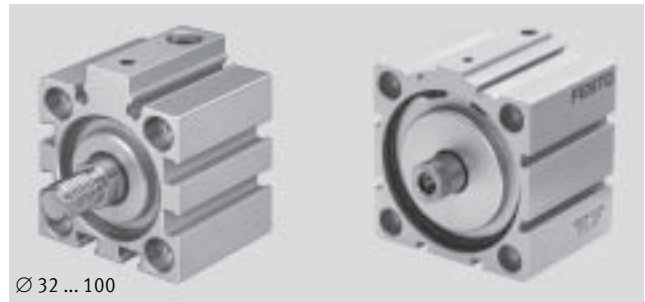
# Short-stroke cylinders AEVC

Technical data, single-acting – without position sensing



∅ - Diameter  
4 ... 100 mm

l - Stroke length  
2.5 ... 25 mm



| General technical data        |                                                     |    |    |    |    |    |    |                   |      |      |      |      |      |
|-------------------------------|-----------------------------------------------------|----|----|----|----|----|----|-------------------|------|------|------|------|------|
| Piston ∅                      | 4                                                   | 6  | 10 | 12 | 16 | 20 | 25 | 32                | 40   | 50   | 63   | 80   | 100  |
| Pneumatic connection          | M3                                                  | M3 | M5 | M5 | M5 | M5 | M5 | G1/8              | G1/8 | G1/8 | G1/8 | G1/8 | G1/4 |
| Piston rod with female thread | -                                                   | -  | -  | ■  | ■  | ■  | ■  | ■                 | ■    | ■    | ■    | ■    | ■    |
| Piston rod with male thread   | ■                                                   | ■  | ■  | ■  | ■  | ■  | ■  | ■                 | ■    | ■    | ■    | ■    | ■    |
| Piston rod without thread     | ■                                                   | ■  | ■  | ■  | -  | -  | -  | -                 | -    | -    | -    | -    | -    |
| Operating medium              | Filtered compressed air, lubricated or unlubricated |    |    |    |    |    |    |                   |      |      |      |      |      |
| Constructional design         | Piston                                              |    |    |    |    |    |    |                   |      |      |      |      |      |
|                               | Piston rod                                          |    |    |    |    |    |    |                   |      |      |      |      |      |
| Cushioning                    | Non-adjustable at either end                        |    |    |    |    |    |    |                   |      |      |      |      |      |
| Type of mounting              | Via through-holes                                   |    |    |    |    |    |    | Via through-holes |      |      |      |      |      |
|                               | -                                                   |    |    |    |    |    |    | Via accessories   |      |      |      |      |      |
| Mounting position             | Any                                                 |    |    |    |    |    |    |                   |      |      |      |      |      |

| Operating conditions                         |             |         |           |            |          |    |    |    |    |    |    |    |     |
|----------------------------------------------|-------------|---------|-----------|------------|----------|----|----|----|----|----|----|----|-----|
| Piston ∅                                     | 4           | 6       | 10        | 12         | 16       | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
| Operating pressure [bar]                     | 2.5 ... 8   | 2 ... 8 | 1.5 ... 8 | 1.5 ... 10 | 1 ... 10 |    |    |    |    |    |    |    |     |
| Ambient temperature [°C]                     | -20 ... +80 |         |           |            |          |    |    |    |    |    |    |    |     |
| Corrosion resistance class CRC <sup>1)</sup> | 1           |         |           |            |          |    |    |    |    |    |    |    |     |


1) Corrosion resistance class 1 according to Festo standard 940 070  
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

# Short-stroke cylinders AEVC

Technical data, single-acting – without position sensing

| Forces [N] and impact energy [J]      |       |       |      |      |      |                  |      |      |      |       |       |       |       |
|---------------------------------------|-------|-------|------|------|------|------------------|------|------|------|-------|-------|-------|-------|
| Piston Ø                              | 4     | 6     | 10   | 12   | 16   | 20               | 25   | 32   | 40   | 50    | 63    | 80    | 100   |
| Theoretical force at 6 bar, advancing | 5     | 11    | 41   | 59   | 105  | 170              | 270  | 450  | 700  | 1,120 | 1,800 | 2,900 | 4,500 |
| Theoretical force at 6 bar, returning | 1     | 3     | 3    | 4    | 5    | 10 <sup>1)</sup> | 15   | 22   | 28   | 40    | 50    | 85    | 140   |
| Max. impact energy at end positions   | 0.003 | 0.005 | 0.03 | 0.06 | 0.10 | 0.14             | 0.18 | 0.26 | 0.36 | 0.60  | 0.64  | 0.90  | 1.20  |

1) AEVC-20-5-... = 5 N

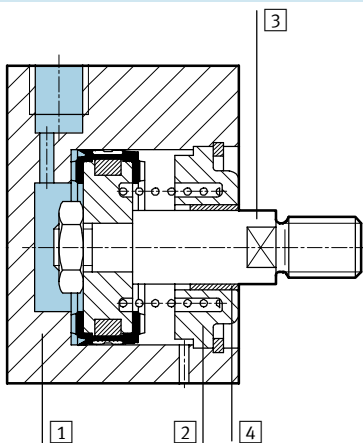
 Note The degree of friction depends upon the mounting position, and the type of load involved. Single-acting cylinders should as far as possible be operated without lateral forces.

| Product weight [g] |          |    |    |    |     |     |     |     |     |     |     |       |       |
|--------------------|----------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| Stroke [mm]        | Piston Ø |    |    |    |     |     |     |     |     |     |     |       |       |
|                    | 4        | 6  | 10 | 12 | 16  | 20  | 25  | 32  | 40  | 50  | 63  | 80    | 100   |
| 2.5                | 3.7      | –  | –  | –  | –   | –   | –   | –   | –   | –   | –   | –     | –     |
| 5                  | 4.5      | 12 | 17 | 24 | 60  | 85  | 130 | 220 | –   | –   | –   | –     | –     |
| 10                 | –        | 18 | 24 | 40 | 80  | 130 | 160 | 290 | 370 | 410 | 490 | 1,900 | 2,850 |
| 25                 | –        | –  | –  | –  | 150 | 200 | 250 | 400 | 560 | 680 | 770 | 2,400 | 3,500 |

| Moving load [g] |          |     |     |     |    |    |    |    |    |     |     |     |     |
|-----------------|----------|-----|-----|-----|----|----|----|----|----|-----|-----|-----|-----|
| Stroke [mm]     | Piston Ø |     |     |     |    |    |    |    |    |     |     |     |     |
|                 | 4        | 6   | 10  | 12  | 16 | 20 | 25 | 32 | 40 | 50  | 63  | 80  | 100 |
| 2.5             | 0.15     | –   | –   | –   | –  | –  | –  | –  | –  | –   | –   | –   | –   |
| 5               | 0.2      | 1   | 2   | 4.4 | 8  | 14 | 22 | 40 | –  | –   | –   | –   | –   |
| 10              | –        | 1.4 | 2.6 | 6.9 | 11 | 21 | 25 | 48 | 65 | 105 | 157 | 327 | 678 |
| 25              | –        | –   | –   | –   | 19 | 32 | 37 | 62 | 83 | 140 | 191 | 365 | 739 |

## Materials

Sectional view



| Piston Ø          | 4                                 | 6 ... 100                         |
|-------------------|-----------------------------------|-----------------------------------|
| 1 Cylinder barrel | Anodised aluminium                | Anodised aluminium                |
| 2 Cover cap       | Anodised aluminium                | Anodised aluminium                |
| 3 Piston rod      | Anodised aluminium                | High-alloy steel                  |
| 4 Rod seal        | Hydrated nitrile rubber           | Polyurethane                      |
| Note on material  | Free of copper, PTFE and silicone | Free of copper, PTFE and silicone |

# Short-stroke cylinders AEVC

Technical data, single-acting – without position sensing

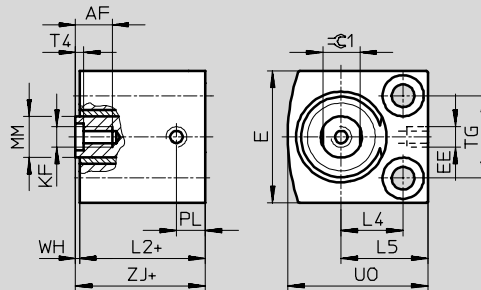


Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 4 ... 25 mm

AEVC-...-I-P

Piston rod with female thread



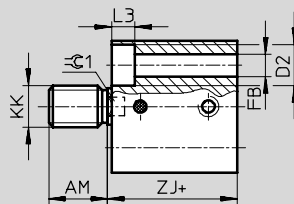
- Note

**AEVC-4**

Do not exceed maximum screw-in depth of 3 mm and maximum tightening torque of 0.7 Nm.

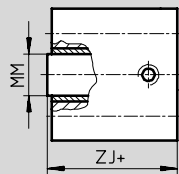
AEVC-...-A-P

Piston rod with male thread



AEVC-...-P

Piston rod without thread



+ = plus stroke length

| ∅    | Stroke | AF   | AM   | D2      | E    | EE | FB  | KF | KK | L2   | L3  | L4   | L5   | MM | PL  | T4  | TG   | UO   | WH | ZJ   | ∅1 |
|------|--------|------|------|---------|------|----|-----|----|----|------|-----|------|------|----|-----|-----|------|------|----|------|----|
| [mm] | [mm]   | min. | -0.5 | ∅       | max. |    | ∅   |    |    | +0.2 |     |      |      | ∅  |     |     | ±0.1 | max. |    | ±0.8 |    |
| 4    | 2.5    | -    | 6    | 3.3+0.1 | 10   | M3 | 1.8 | -  | M2 | 10.5 | 1.8 | 4    | 6.5  | 2  | 3.2 | -   | 5.8  | 10   | 1  | 11.5 | -  |
|      | 5      | -    | 6    | 3.3+0.1 | 10   | M3 | 1.8 | -  | M2 | 10.5 | 1.8 | 4    | 6.5  | 2  | 3.2 | -   | 5.8  | 10   | 1  | 11.5 | -  |
| 6    | 5      | -    | 6    | 5+0.1   | 13   | M3 | 2.9 | -  | M3 | 11   | 2.9 | 6    | 9    | 3  | 3   | -   | 7    | 14   | 1  | 12   | -  |
|      | 10     | -    | 6    | 5+0.1   | 13   | M3 | 2.9 | -  | M3 | 13.4 | 2.9 | 6    | 9    | 3  | 3   | -   | 7    | 14   | 1  | 14.4 | -  |
| 10   | 5      | -    | 8    | 5.8+0.1 | 18   | M5 | 3.4 | -  | M4 | 11   | 3.4 | 8    | 11.5 | 4  | 5.5 | -   | 11   | 19   | 1  | 12   | -  |
|      | 10     | -    | 8    | 5.8+0.1 | 18   | M5 | 3.4 | -  | M4 | 13   | 3.4 | 8    | 11.5 | 4  | 5.5 | -   | 11   | 19   | 1  | 14   | -  |
| 12   | 5      | 8    | 8    | 6 H13   | 20   | M5 | 3.4 | M3 | M5 | 11   | 3.4 | 9    | 13   | 6  | 6   | 1.5 | 13   | 22   | 1  | 12   | -  |
|      | 10     | 8    | 8    | 6 H13   | 20   | M5 | 3.4 | M3 | M5 | 17.5 | 3.4 | 9    | 13   | 6  | 6   | 1.5 | 13   | 22   | 1  | 18.5 | -  |
| 16   | 5      | 10   | 12   | 8 H13   | 25   | M5 | 4.5 | M4 | M6 | 15   | 4.6 | 11.5 | 16.5 | 8  | 6   | 2   | 15   | 27   | 1  | 16   | 7  |
|      | 10     | 10   | 12   | 8 H13   | 25   | M5 | 4.5 | M4 | M6 | 17.5 | 4.6 | 11.5 | 16.5 | 8  | 6   | 2   | 15   | 27   | 1  | 18.5 | 7  |
|      | 25     | 10   | 12   | 8 H13   | 25   | M5 | 4.5 | M4 | M6 | 22   | 4.6 | 11.5 | 16.5 | 8  | 6   | 2   | 15   | 27   | 1  | 23   | 7  |
| 20   | 5      | 8    | 12   | 10 H13  | 32   | M5 | 5.5 | M5 | M8 | 15   | 5.7 | 15   | 21   | 10 | 7   | 2   | 20   | 34   | 1  | 16   | 9  |
|      | 10     | 12   | 12   | 10 H13  | 32   | M5 | 5.5 | M5 | M8 | 20.5 | 5.7 | 15   | 21   | 10 | 7   | 2   | 20   | 34   | 1  | 21.5 | 9  |
|      | 25     | 12   | 12   | 10 H13  | 32   | M5 | 5.5 | M5 | M8 | 23.5 | 5.7 | 15   | 21   | 10 | 7   | 2   | 20   | 34   | 1  | 24.5 | 9  |
| 25   | 5      | 12   | 12   | 10 H13  | 38   | M5 | 5.5 | M5 | M8 | 21.1 | 5.7 | 15.5 | 21.5 | 10 | 6.5 | 2   | 26   | 37   | 1  | 22.1 | 9  |
|      | 10     | 12   | 12   | 10 H13  | 38   | M5 | 5.5 | M5 | M8 | 25.2 | 5.7 | 15.5 | 21.5 | 10 | 6.5 | 2   | 26   | 37   | 1  | 26.2 | 9  |
|      | 25     | 12   | 12   | 10 H13  | 38   | M5 | 5.5 | M5 | M8 | 25.2 | 5.7 | 15.5 | 21.5 | 10 | 6.5 | 2   | 26   | 37   | 1  | 26.2 | 9  |

# Short-stroke cylinders AEVC

Technical data, single-acting – without position sensing

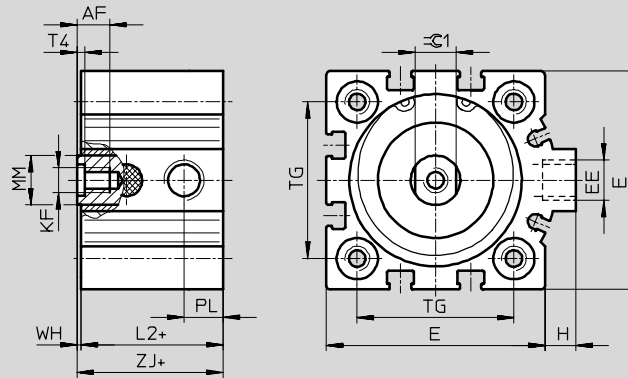


Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 32 ... 100 mm

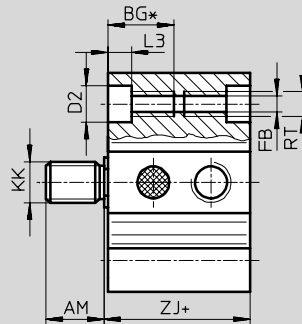
AEVC-...-I-P

Piston rod with female thread



AEVC-...-A-P\*\*

Piston rod with male thread



+ = plus stroke length

| ∅    | Stroke | AF   | AM   | BG*  | D2   | E    | EE              | FB  | H   | KF  | KK       | L2   | L3  | MM | PL   | RT  | T4  | TG   | WH  | ZJ   | ∅1 |
|------|--------|------|------|------|------|------|-----------------|-----|-----|-----|----------|------|-----|----|------|-----|-----|------|-----|------|----|
| [mm] | [mm]   | min. | -0.5 | min. | ∅ F9 | max. |                 | ∅   |     |     |          | +0.2 |     | ∅  |      |     |     | ±0.1 |     | ±0.8 |    |
| 32   | 5      |      |      |      |      |      |                 |     |     |     |          | 21   |     |    |      |     |     |      |     | 22   |    |
|      | 10     | 12   | 14   | 21.7 | 9    | 45   | G $\frac{1}{8}$ | 5.2 | 7   | M6  | M10x1.25 |      | 5.7 | 12 | 9.5  | M6  | 2.6 | 32.5 | 1   | 26   | 10 |
|      | 25     |      |      |      |      |      |                 |     |     |     |          | 25   |     |    |      |     |     |      |     |      |    |
| 40   | 10     | 12   | 14   | 21.7 | 9    | 53.5 | G $\frac{1}{8}$ | 5.2 | 7   | M6  | M10x1.25 | 24.5 | 5.7 | 12 | 9.5  | M6  | 2.6 | 38   | 1   | 25.5 | 10 |
|      | 25     |      |      |      |      |      |                 |     |     |     |          | 29.5 |     |    |      |     |     |      |     | 30.5 |    |
| 50   | 10     | 16   | 16   | 22.8 | 11   | 63.5 | G $\frac{1}{8}$ | 6.8 | 7   | M8  | M12x1.25 | 20.6 | 6.8 | 16 | 9.5  | M8  | 3.3 | 46.5 | 0.5 | 21.1 | 13 |
|      | 25     |      |      |      |      |      |                 |     |     |     |          | 28   |     |    |      |     |     |      |     | 28.5 |    |
| 63   | 10     | 16   | 16   | 22.8 | 11   | 75   | G $\frac{1}{8}$ | 6.8 | 7.5 | M8  | M12x1.25 | 25   | 6.8 | 16 | 11.5 | M8  | 3.3 | 56.5 | 1   | 26   | 13 |
|      | 25     |      |      |      |      |      |                 |     |     |     |          | 32   |     |    |      |     |     |      |     | 33   |    |
| 80   | 10     | 20   | 22   | 25   | 14   | 93   | G $\frac{1}{8}$ | 8.5 | 7   | M10 | M16x1.5  | 42   | 9   | 20 | 15   | M10 | 4.7 | 72   | 1   | 43   | 17 |
|      | 25     |      |      |      |      |      |                 |     |     |     |          |      |     |    |      |     |     |      |     |      |    |
| 100  | 10     | 24   | 28   | 25   | 14   | 113  | G $\frac{1}{4}$ | 8.5 | 13  | M12 | M20x1.5  | 49   | 9   | 25 | 19   | M10 | 6.1 | 89   | 1   | 50   | 22 |
|      | 25     |      |      |      |      |      |                 |     |     |     |          |      |     |    |      |     |     |      |     |      |    |


\* Continuous thread with short overall length


\*\* Nut for piston rod thread included in scope of delivery

# Short-stroke cylinders AEVC

Technical data, single-acting – without position sensing



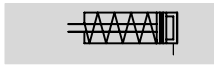
| Ordering data                                                                     |                  |                |                                |                |                                  |                |                              |              |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|----------------|----------------------------------|----------------|------------------------------|--------------|
| Type                                                                              | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                | Piston rod<br>with female thread |                | Piston rod<br>without thread |              |
|                                                                                   |                  |                | Part No.                       | Type           | Part No.                         | Type           | Part No.                     | Type         |
|  | 4                | 2.5            | 188 052                        | AEVC-4-2,5-A-P | -                                | -              | 188 050                      | AEVC-4-2,5-P |
|                                                                                   |                  | 5              | 188 053                        | AEVC-4-5-A-P   |                                  |                | 188 051                      | AEVC-4-5-P   |
|                                                                                   | 6                | 5              | 188 062                        | AEVC-6-5-A-P   | -                                | -              | 188 058                      | AEVC-6-5-P   |
|                                                                                   |                  | 10             | 188 063                        | AEVC-6-10-A-P  |                                  |                | 188 059                      | AEVC-6-10-P  |
|                                                                                   | 10               | 5              | 188 074                        | AEVC-10-5-A-P  | -                                | -              | 188 070                      | AEVC-10-5-P  |
|                                                                                   |                  | 10             | 188 075                        | AEVC-10-10-A-P |                                  |                | 188 071                      | AEVC-10-10-P |
|                                                                                   | 12               | 5              | 188 086                        | AEVC-12-5-A-P  | 188 082                          | AEVC-12-5-I-P  | 530 566                      | AEVC-12-5-P  |
|                                                                                   |                  | 10             | 188 087                        | AEVC-12-10-A-P | 188 083                          | AEVC-12-10-I-P | 530 567                      | AEVC-12-10-P |
|                                                                                   | 16               | 5              | 188 105                        | AEVC-16-5-A-P  | 188 099                          | AEVC-16-5-I-P  | -                            | -            |
|                                                                                   |                  | 10             | 188 106                        | AEVC-16-10-A-P | 188 100                          | AEVC-16-10-I-P |                              |              |
|                                                                                   |                  | 25             | 188 107                        | AEVC-16-25-A-P | 188 101                          | AEVC-16-25-I-P |                              |              |
|                                                                                   | 20               | 5              | 188 137                        | AEVC-20-5-A-P  | 188 131                          | AEVC-20-5-I-P  | -                            | -            |
|                                                                                   |                  | 10             | 188 138                        | AEVC-20-10-A-P | 188 132                          | AEVC-20-10-I-P |                              |              |
|                                                                                   |                  | 25             | 188 139                        | AEVC-20-25-A-P | 188 133                          | AEVC-20-25-I-P |                              |              |
|                                                                                   | 25               | 5              | 188 169                        | AEVC-25-5-A-P  | 188 163                          | AEVC-25-5-I-P  | -                            | -            |
|                                                                                   |                  | 10             | 188 170                        | AEVC-25-10-A-P | 188 164                          | AEVC-25-10-I-P |                              |              |
|                                                                                   |                  | 25             | 188 171                        | AEVC-25-25-A-P | 188 165                          | AEVC-25-25-I-P |                              |              |

| Ordering data                                                                       |                  |                |                                |                 |                                  |                 |  |  |
|-------------------------------------------------------------------------------------|------------------|----------------|--------------------------------|-----------------|----------------------------------|-----------------|--|--|
| Type                                                                                | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                 | Piston rod<br>with female thread |                 |  |  |
|                                                                                     |                  |                | Part No.                       | Type            | Part No.                         | Type            |  |  |
|  | 32               | 5              | 188 201                        | AEVC-32-5-A-P   | 188 195                          | AEVC-32-5-I-P   |  |  |
|                                                                                     |                  | 10             | 188 202                        | AEVC-32-10-A-P  | 188 196                          | AEVC-32-10-I-P  |  |  |
|                                                                                     |                  | 25             | 188 203                        | AEVC-32-25-A-P  | 188 197                          | AEVC-32-25-I-P  |  |  |
|                                                                                     | 40               | 10             | 188 230                        | AEVC-40-10-A-P  | 188 226                          | AEVC-40-10-I-P  |  |  |
|                                                                                     |                  | 25             | 188 231                        | AEVC-40-25-A-P  | 188 227                          | AEVC-40-25-I-P  |  |  |
|                                                                                     | 50               | 10             | 188 258                        | AEVC-50-10-A-P  | 188 254                          | AEVC-50-10-I-P  |  |  |
|                                                                                     |                  | 25             | 188 259                        | AEVC-50-25-A-P  | 188 255                          | AEVC-50-25-I-P  |  |  |
|                                                                                     | 63               | 10             | 188 282                        | AEVC-63-10-A-P  | 188 278                          | AEVC-63-10-I-P  |  |  |
|                                                                                     |                  | 25             | 188 283                        | AEVC-63-25-A-P  | 188 279                          | AEVC-63-25-I-P  |  |  |
|                                                                                     | 80               | 10             | 188 306                        | AEVC-80-10-A-P  | 188 302                          | AEVC-80-10-I-P  |  |  |
|                                                                                     |                  | 25             | 188 307                        | AEVC-80-25-A-P  | 188 303                          | AEVC-80-25-I-P  |  |  |
|                                                                                     | 100              | 10             | 188 330                        | AEVC-100-10-A-P | 188 326                          | AEVC-100-10-I-P |  |  |
|                                                                                     |                  | 25             | 188 331                        | AEVC-100-25-A-P | 188 327                          | AEVC-100-25-I-P |  |  |



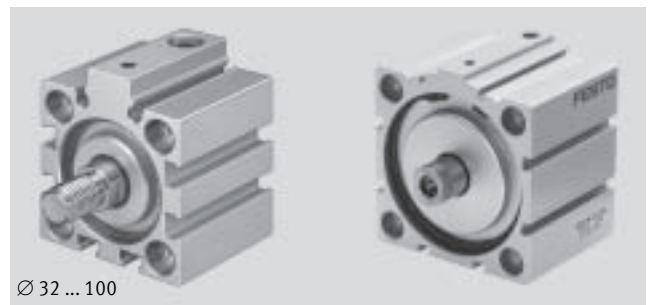
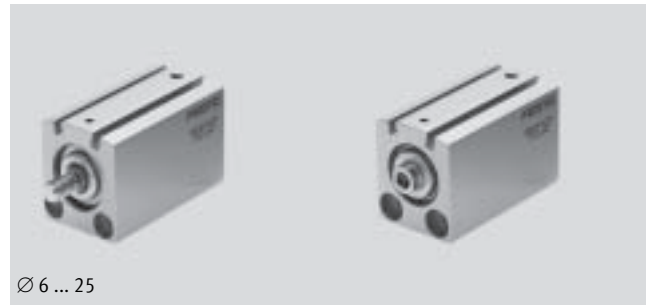
# Short-stroke cylinders AEVC

Technical data, single-acting – with position sensing



Ø - Diameter  
6 ... 100 mm

l - Stroke length  
5 ... 25 mm



Cylinders with piston rods  
Short-stroke cylinders

2.2

| General technical data        |                                                     |    |    |    |    |    |                   |      |      |      |      |      |
|-------------------------------|-----------------------------------------------------|----|----|----|----|----|-------------------|------|------|------|------|------|
| Piston Ø                      | 6                                                   | 10 | 12 | 16 | 20 | 25 | 32                | 40   | 50   | 63   | 80   | 100  |
| Pneumatic connection          | M3                                                  | M5 | M5 | M5 | M5 | M5 | G1/8              | G1/8 | G1/8 | G1/8 | G1/8 | G1/4 |
| Piston rod with female thread | –                                                   | –  | ■  | ■  | ■  | ■  | ■                 | ■    | ■    | ■    | ■    | ■    |
| Piston rod with male thread   | ■                                                   | ■  | ■  | ■  | ■  | ■  | ■                 | ■    | ■    | ■    | ■    | ■    |
| Piston rod without thread     | ■                                                   | ■  | ■  | –  | –  | –  | –                 | –    | –    | –    | –    | –    |
| Operating medium              | Filtered compressed air, lubricated or unlubricated |    |    |    |    |    |                   |      |      |      |      |      |
| Constructional design         | Piston                                              |    |    |    |    |    |                   |      |      |      |      |      |
|                               | Piston rod                                          |    |    |    |    |    |                   |      |      |      |      |      |
| Cushioning                    | Non-adjustable at either end                        |    |    |    |    |    |                   |      |      |      |      |      |
| Position sensing              | With proximity sensor                               |    |    |    |    |    |                   |      |      |      |      |      |
| Type of mounting              | Via through-holes                                   |    |    |    |    |    | Via through-holes |      |      |      |      |      |
|                               | –                                                   |    |    |    |    |    | Via accessories   |      |      |      |      |      |
| Mounting position             | Any                                                 |    |    |    |    |    |                   |      |      |      |      |      |

| Operating conditions                         |                                                         |           |            |    |    |    |          |    |    |    |    |     |
|----------------------------------------------|---------------------------------------------------------|-----------|------------|----|----|----|----------|----|----|----|----|-----|
| Piston Ø                                     | 6                                                       | 10        | 12         | 16 | 20 | 25 | 32       | 40 | 50 | 63 | 80 | 100 |
| Operating pressure [bar]                     | 2 ... 8                                                 | 1.5 ... 8 | 1.5 ... 10 |    |    |    | 1 ... 10 |    |    |    |    |     |
| Ambient temperature [°C]                     | –20 ... +80 (note operating range of proximity sensors) |           |            |    |    |    |          |    |    |    |    |     |
| Corrosion resistance class CRC <sup>1)</sup> | 1                                                       |           |            |    |    |    |          |    |    |    |    |     |

1) Corrosion resistance class 1 according to Festo standard 940 070  
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

# Short-stroke cylinders AEVC

Technical data, single-acting – with position sensing



| Forces [N] and impact energy [J]      |       |      |      |      |                  |      |      |      |       |       |       |       |
|---------------------------------------|-------|------|------|------|------------------|------|------|------|-------|-------|-------|-------|
| Piston Ø                              | 6     | 10   | 12   | 16   | 20               | 25   | 32   | 40   | 50    | 63    | 80    | 100   |
| Theoretical force at 6 bar, advancing | 11    | 41   | 59   | 105  | 170              | 270  | 450  | 700  | 1,120 | 1,800 | 2,900 | 4,500 |
| Theoretical force at 6 bar, returning | 3     | 3    | 4    | 5    | 10 <sup>1)</sup> | 15   | 22   | 28   | 40    | 50    | 85    | 140   |
| Max. impact energy at end positions   | 0.005 | 0.03 | 0.06 | 0.10 | 0.14             | 0.18 | 0.26 | 0.36 | 0.60  | 0.64  | 0.90  | 1.20  |

1) AEVC-20-5-... = 5 N

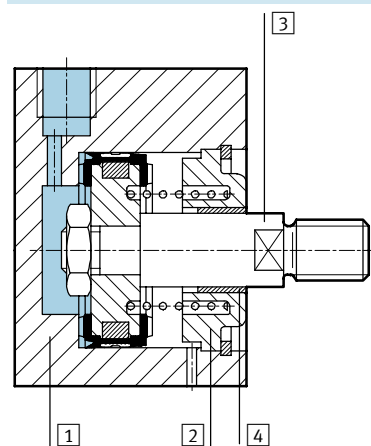
- - Note  
The degree of friction depends upon the mounting position, and the type of load involved. Single-acting cylinders should as far as possible be operated without lateral forces.

| Product weight [g] |          |    |    |     |     |     |     |     |     |     |       |       |
|--------------------|----------|----|----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| Stroke [mm]        | Piston Ø |    |    |     |     |     |     |     |     |     |       |       |
|                    | 6        | 10 | 12 | 16  | 20  | 25  | 32  | 40  | 50  | 63  | 80    | 100   |
| 5                  | 19       | 37 | 70 | 95  | 160 | 195 | 320 | –   | –   | –   | –     | –     |
| 10                 | 23       | 44 | 79 | 105 | 170 | 205 | 340 | 490 | 630 | 720 | 1,940 | 2,970 |
| 25                 | –        | –  | –  | 130 | 200 | 250 | 390 | 580 | 730 | 870 | 3,290 | 3,220 |

| Moving load [g] |          |     |     |    |    |    |    |    |     |     |     |     |
|-----------------|----------|-----|-----|----|----|----|----|----|-----|-----|-----|-----|
| Stroke [mm]     | Piston Ø |     |     |    |    |    |    |    |     |     |     |     |
|                 | 6        | 10  | 12  | 16 | 20 | 25 | 32 | 40 | 50  | 63  | 80  | 100 |
| 5               | 1.5      | 3   | 8.5 | 15 | 26 | 32 | 49 | –  | –   | –   | –   | –   |
| 10              | 1.8      | 3.5 | 9.5 | 17 | 29 | 35 | 54 | 70 | 116 | 155 | 284 | 546 |
| 25              | –        | –   | –   | 26 | 40 | 47 | 67 | 83 | 140 | 179 | 321 | 604 |

## Materials

Sectional view



| Piston Ø                                              | 6 ... 100                             |
|-------------------------------------------------------|---------------------------------------|
| 1                                                     | Cylinder barrel<br>Anodised aluminium |
| 2                                                     | Cover cap<br>Anodised aluminium       |
| 3                                                     | Piston rod<br>High-alloy steel        |
| 4                                                     | Rod seal<br>Polyurethane              |
| Note on material<br>Free of copper, PTFE and silicone |                                       |

Cylinders with piston rods  
Short-stroke cylinders

2.2

# Short-stroke cylinders AEVC

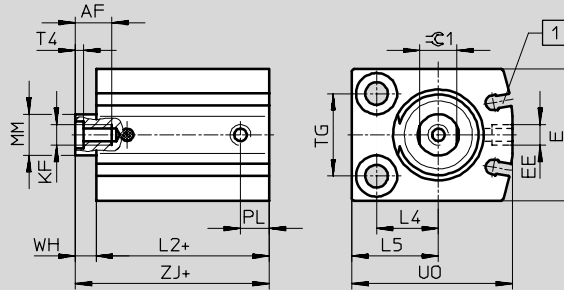
Technical data, single-acting – with position sensing



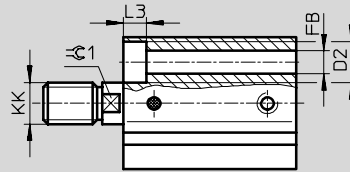
Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 6 ... 25 mm

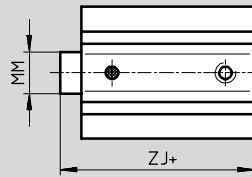
AEVC-...-I-P-A  
Piston rod with female thread



AEVC-...-A-P-A  
Piston rod with male thread



AEVC-...-P-A  
Piston rod without thread



+ = plus stroke length

1 Slot for proximity sensor  
SME/SMT-10

| ∅    | Stroke | AF   | AM | D2       | E    | EE | FB  | KF | KK | L2   | L3  | L4   | L5   | MM | PL | T4  | TG   | UO   | WH  | ZJ   | ∅1 |
|------|--------|------|----|----------|------|----|-----|----|----|------|-----|------|------|----|----|-----|------|------|-----|------|----|
| [mm] | [mm]   | min. |    | ∅        | max. |    | ∅   |    |    | +0.2 |     |      |      | ∅  |    |     | ±0.1 | max. |     | ±0.8 |    |
| 6    | 5      | -    | 6  | 5 +0.1   | 16   | M3 | 2.9 | -  | M3 | 20.5 | 2.9 | 5    | 8    | 3  | 3  | -   | 10   | 16   | 1   | 21.5 | -  |
|      | 10     | -    | 8  | 5.8 +0.1 | 21   | M5 | 3.4 | -  | M4 | 22   | 3.4 | 7    | 10.5 | 4  | 6  | -   | 14   | 22   | 1.5 | 23.5 | -  |
| 12   | 5      | 8    | 8  | 6 H13    | 24   | M5 | 3.4 | M3 | M5 | 31   | 3.4 | 8    | 12   | 6  | 6  | 1.5 | 16   | 26   | 4   | 35   | 5  |
|      | 10     |      |    |          |      |    |     |    |    |      |     |      |      |    |    |     |      |      |     |      |    |
| 16   | 5      | 10   | 12 | 8 H13    | 28   | M5 | 4.5 | M4 | M6 | 30   | 4.6 | 12   | 17   | 8  | 6  | 2   | 18   | 32   | 4   | 34   | 7  |
|      | 10     |      |    |          |      |    |     |    |    | 34.5 |     |      |      |    |    |     |      |      |     | 38.5 |    |
|      | 25     |      |    |          |      |    |     |    |    |      |     |      |      |    |    |     |      |      |     |      |    |
| 20   | 5      | 12   | 12 | 10 H13   | 32   | M5 | 5.5 | M5 | M8 | 32   | 5.7 | 15   | 21   | 10 | 7  | 2   | 20   | 39   | 5   | 37   | 9  |
|      | 10     |      |    |          |      |    |     |    |    | 35   |     |      |      |    |    |     |      |      |     | 40   |    |
|      | 25     |      |    |          |      |    |     |    |    |      |     |      |      |    |    |     |      |      |     |      |    |
| 25   | 5      | 12   | 12 | 10 H13   | 38   | M5 | 5.5 | M5 | M8 | 32   | 5.7 | 15.5 | 21.5 | 10 | 6  | 2   | 26   | 42   | 5   | 37   | 9  |
|      | 10     |      |    |          |      |    |     |    |    | 36.1 |     |      |      |    |    |     |      |      |     | 41.1 |    |
|      | 25     |      |    |          |      |    |     |    |    |      |     |      |      |    |    |     |      |      |     |      |    |

# Short-stroke cylinders AEVC

Technical data, single-acting – with position sensing



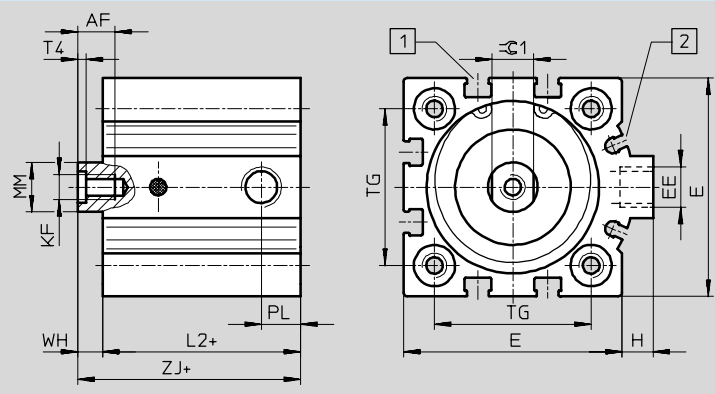
Cylinders with piston rods  
Short-stroke cylinders

2.2

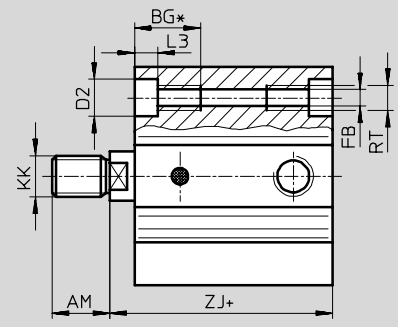
**Dimensions** Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

∅ 32 ... 100 mm

AEVC-...-I-P-A  
Piston rod with female thread



AEVC-...-A-P-A\*\*  
Piston rod with male thread



- + = plus stroke length
- 1 Slot for proximity sensor SME/SMT-8
- 2 Slot for proximity sensor SME/SMT-10

| ∅   | AF   | AM   | BG*  | D2      | E    | EE   | FB  | H   | KF  | KK       |
|-----|------|------|------|---------|------|------|-----|-----|-----|----------|
|     | min. | -0.5 | min. | ∅<br>F9 | max. |      | ∅   |     |     |          |
| 32  | 12   | 14   | 21.7 | 9       | 45   | G1/8 | 5.2 | 7   | M6  | M10x1.25 |
| 40  | 12   | 14   | 21.7 | 9       | 53.5 | G1/8 | 5.2 | 7   | M6  | M10x1.25 |
| 50  | 16   | 16   | 22.8 | 11      | 63.5 | G1/8 | 6.8 | 7   | M8  | M12x1.25 |
| 63  | 16   | 16   | 22.8 | 11      | 75   | G1/8 | 6.8 | 7.5 | M8  | M12x1.25 |
| 80  | 20   | 22   | 25   | 14      | 93   | G1/8 | 8.5 | 7   | M10 | M16x1.5  |
| 100 | 24   | 28   | 25   | 14      | 113  | G1/4 | 8.5 | 13  | M12 | M20x1.5  |


| ∅   | L2   | L3  | MM | PL   | RT  | T4  | TG   | WH | ZJ   | ≈C1 |
|-----|------|-----|----|------|-----|-----|------|----|------|-----|
|     | +0.2 |     | ∅  |      |     |     | ±0.1 |    | ±0.8 |     |
| 32  | 33   | 5.7 | 12 | 8.5  | M6  | 2.6 | 32.5 | 6  | 39   | 10  |
| 40  | 38   | 5.7 | 12 | 9.5  | M6  | 2.6 | 38   | 6  | 44   | 10  |
| 50  | 38   | 6.8 | 16 | 9.5  | M8  | 3.3 | 46.5 | 8  | 48   | 13  |
| 63  | 41   | 6.8 | 16 | 10.5 | M8  | 3.3 | 56.5 | 8  | 49   | 13  |
| 80  | 49   | 9   | 20 | 8.5  | M10 | 4.7 | 72   | 8  | 57   | 17  |
| 100 | 58   | 9   | 25 | 10.5 | M10 | 6.1 | 89   | 10 | 68   | 22  |


\* Continuous thread with short overall length  
\*\* Nut for piston rod thread included in scope of delivery

# Short-stroke cylinders AEVC

Technical data, single-acting – with position sensing



| Ordering data                                                                     |                  |                |                                |                  |                                  |                  |                              |                |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|------------------|----------------------------------|------------------|------------------------------|----------------|
| Type                                                                              | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                  | Piston rod<br>with female thread |                  | Piston rod<br>without thread |                |
|                                                                                   |                  |                | Part No.                       | Type             | Part No.                         | Type             | Part No.                     | Type           |
|  | 6                | 5              | 188 060                        | AEVC-6-5-A-P-A   | –                                | –                | 188 056                      | AEVC-6-5-P-A   |
|                                                                                   |                  | 10             | 188 061                        | AEVC-6-10-A-P-A  |                                  |                  | 188 057                      | AEVC-6-10-P-A  |
|                                                                                   | 10               | 5              | 188 072                        | AEVC-10-5-A-P-A  | –                                | –                | 188 068                      | AEVC-10-5-P-A  |
|                                                                                   |                  | 10             | 188 073                        | AEVC-10-10-A-P-A |                                  |                  | 188 069                      | AEVC-10-10-P-A |
|                                                                                   | 12               | 5              | 188 084                        | AEVC-12-5-A-P-A  | 188 080                          | AEVC-12-5-I-P-A  | 530 570                      | AEVC-12-5-P-A  |
|                                                                                   |                  | 10             | 188 085                        | AEVC-12-10-A-P-A | 188 081                          | AEVC-12-10-I-P-A | 530 571                      | AEVC-12-10-P-A |
|                                                                                   | 16               | 5              | 188 102                        | AEVC-16-5-A-P-A  | 188 096                          | AEVC-16-5-I-P-A  | –                            | –              |
|                                                                                   |                  | 10             | 188 103                        | AEVC-16-10-A-P-A | 188 097                          | AEVC-16-10-I-P-A |                              |                |
|                                                                                   |                  | 25             | 188 104                        | AEVC-16-25-A-P-A | 188 098                          | AEVC-16-25-I-P-A |                              |                |
|                                                                                   | 20               | 5              | 188 134                        | AEVC-20-5-A-P-A  | 188 128                          | AEVC-20-5-I-P-A  | –                            | –              |
|                                                                                   |                  | 10             | 188 135                        | AEVC-20-10-A-P-A | 188 129                          | AEVC-20-10-I-P-A |                              |                |
|                                                                                   |                  | 25             | 188 136                        | AEVC-20-25-A-P-A | 188 130                          | AEVC-20-25-I-P-A |                              |                |
|                                                                                   | 25               | 5              | 188 166                        | AEVC-25-5-A-P-A  | 188 160                          | AEVC-25-5-I-P-A  | –                            | –              |
|                                                                                   |                  | 10             | 188 167                        | AEVC-25-10-A-P-A | 188 161                          | AEVC-25-10-I-P-A |                              |                |
|                                                                                   |                  | 25             | 188 168                        | AEVC-25-25-A-P-A | 188 162                          | AEVC-25-25-I-P-A |                              |                |

| Ordering data                                                                       |                  |                |                                |                   |                                  |                   |  |  |
|-------------------------------------------------------------------------------------|------------------|----------------|--------------------------------|-------------------|----------------------------------|-------------------|--|--|
| Type                                                                                | Piston Ø<br>[mm] | Stroke<br>[mm] | Piston rod<br>with male thread |                   | Piston rod<br>with female thread |                   |  |  |
|                                                                                     |                  |                | Part No.                       | Type              | Part No.                         | Type              |  |  |
|  | 32               | 5              | 188 198                        | AEVC-32-5-A-P-A   | 188 192                          | AEVC-32-5-I-P-A   |  |  |
|                                                                                     |                  | 10             | 188 199                        | AEVC-32-10-A-P-A  | 188 193                          | AEVC-32-10-I-P-A  |  |  |
|                                                                                     |                  | 25             | 188 200                        | AEVC-32-25-A-P-A  | 188 194                          | AEVC-32-25-I-P-A  |  |  |
|                                                                                     | 40               | 10             | 188 228                        | AEVC-40-10-A-P-A  | 188 224                          | AEVC-40-10-I-P-A  |  |  |
|                                                                                     |                  | 25             | 188 229                        | AEVC-40-25-A-P-A  | 188 225                          | AEVC-40-25-I-P-A  |  |  |
|                                                                                     | 50               | 10             | 188 256                        | AEVC-50-10-A-P-A  | 188 252                          | AEVC-50-10-I-P-A  |  |  |
|                                                                                     |                  | 25             | 188 257                        | AEVC-50-25-A-P-A  | 188 253                          | AEVC-50-25-I-P-A  |  |  |
|                                                                                     | 63               | 10             | 188 280                        | AEVC-63-10-A-P-A  | 188 276                          | AEVC-63-10-I-P-A  |  |  |
|                                                                                     |                  | 25             | 188 281                        | AEVC-63-25-A-P-A  | 188 277                          | AEVC-63-25-I-P-A  |  |  |
|                                                                                     | 80               | 10             | 188 304                        | AEVC-80-10-A-P-A  | 188 300                          | AEVC-80-10-I-P-A  |  |  |
|                                                                                     |                  | 25             | 188 305                        | AEVC-80-25-A-P-A  | 188 301                          | AEVC-80-25-I-P-A  |  |  |
|                                                                                     | 100              | 10             | 188 328                        | AEVC-100-10-A-P-A | 188 324                          | AEVC-100-10-I-P-A |  |  |
|                                                                                     |                  | 25             | 188 329                        | AEVC-100-25-A-P-A | 188 325                          | AEVC-100-25-I-P-A |  |  |

Cylinders with piston rods  
Short-stroke cylinders

2.2

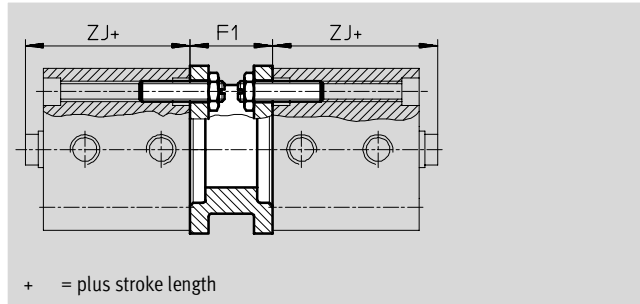
# Short-stroke cylinders ADVC/AEVC

Accessories



## Adapter kit DPNC

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



| Dimensions and ordering data |                |    |                          |      |                       |      |               |          |          |
|------------------------------|----------------|----|--------------------------|------|-----------------------|------|---------------|----------|----------|
| For $\varnothing$<br>[mm]    | Stroke<br>[mm] | F1 | ZJ                       |      |                       |      | Weight<br>[g] | Part No. | Type     |
|                              |                |    | without position sensing |      | with position sensing |      |               |          |          |
|                              |                |    | ADVC                     | AEVC | ADVC                  | AEVC |               |          |          |
| 32                           | 5              | 27 | 35                       | 22   | 39                    | 39   | 85            | 174 418  | DPNC-32  |
|                              | 10, 15, 20, 25 |    |                          | 26   |                       |      |               |          |          |
| 40                           | 5, 10          | 27 | 35.5                     | 25.5 | 44                    | 44   | 115           | 174 419  | DPNC-40  |
|                              | 15, 20, 25     |    |                          | 30.5 |                       |      |               |          |          |
| 50                           | 10             | 32 | 36                       | 21.1 | 46                    | 48   | 210           | 174 420  | DPNC-50  |
|                              | 15, 20, 25     |    |                          | 28.5 |                       |      |               |          |          |
| 63                           | 10             | 28 | 43                       | 26   | 49                    | 49   | 360           | 174 421  | DPNC-63  |
|                              | 15, 20, 25     |    |                          | 33   |                       |      |               |          |          |
| 80                           | 10, 15, 20, 25 | 38 | 48                       | 43   | 57                    | 57   | 620           | 174 422  | DPNC-80  |
| 100                          | 10, 15, 20, 25 | 38 | 59                       | 50   | 68                    | 68   | 1,190         | 174 423  | DPNC-100 |

### Connecting two cylinders with identical piston $\varnothing$ as a 3 or 4-position cylinder

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

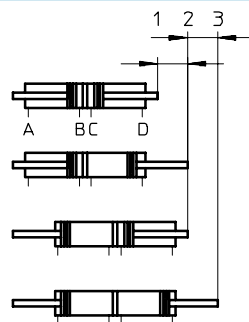
This means that depending upon actuation and stroke pattern, this type of cylinder can assume up to four

positions. In each case the cylinder is driven precisely against a stop. Note that when one end of the piston rod is

fixed, the cylinder barrel executes the movement. The cylinder must be connected with flexible line connections.

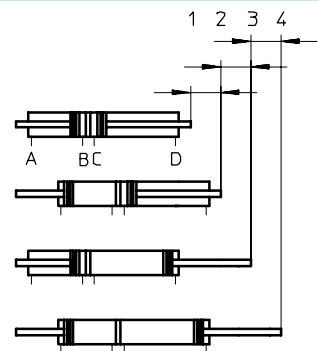
#### To achieve 3 positions

Two cylinders with identical stroke length must be connected together.



#### To achieve 4 positions

Two cylinders with different stroke lengths must be connected together.



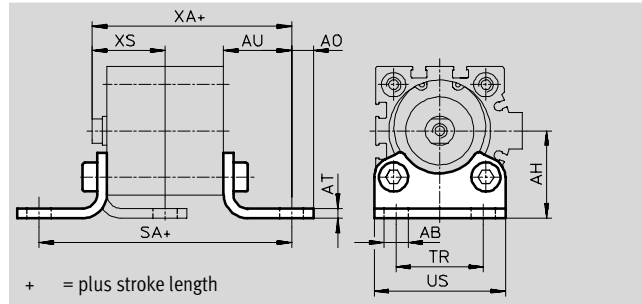
# Short-stroke cylinders ADVC/AEVC



Accessories

## Foot mounting HNC


Material:  
Galvanised steel  
Free of copper, PTFE and silicone



| Dimensions and ordering data |                |         |    |      |    |    |                          |      |                       |      |    |     |
|------------------------------|----------------|---------|----|------|----|----|--------------------------|------|-----------------------|------|----|-----|
| For Ø<br>[mm]                | Stroke<br>[mm] | AB<br>Ø | AH | AO   | AT | AU | SA                       |      |                       |      | TR | US  |
|                              |                |         |    |      |    |    | without position sensing |      | with position sensing |      |    |     |
|                              |                |         |    |      |    |    | ADVC                     | AEVC | ADVC                  | AEVC |    |     |
| 32                           | 5              | 7       | 32 | 6.5  | 4  | 24 | 77                       | 69   | 81                    | 81   | 32 | 45  |
|                              | 10, 15, 20, 25 |         |    |      |    |    |                          | 73   |                       |      |    |     |
| 40                           | 5, 10          | 10      | 36 | 9    | 4  | 28 | 85.5                     | 80.5 | 94                    | 94   | 36 | 54  |
|                              | 15, 20, 25     |         |    |      |    |    |                          | 85.5 |                       |      |    |     |
| 50                           | 10             | 10      | 45 | 9.5  | 5  | 32 | 92                       | 84.6 | 102                   | 104  | 45 | 64  |
|                              | 15, 20, 25     |         |    |      |    |    |                          | 92   |                       |      |    |     |
| 63                           | 10             | 10      | 50 | 12.5 | 5  | 32 | 99                       | 89   | 105                   | 105  | 50 | 75  |
|                              | 15, 20, 25     |         |    |      |    |    |                          | 96   |                       |      |    |     |
| 80                           | 10, 15, 20, 25 | 12      | 63 | 15   | 6  | 41 | 122                      | 124  | 131                   | 131  | 63 | 93  |
| 100                          | 10, 15, 20, 25 | 14.5    | 71 | 17.5 | 6  | 41 | 131                      | 131  | 140                   | 140  | 75 | 110 |

| For Ø<br>[mm] | Stroke<br>[mm] | XA                       |      |                       |      | XS                       |      |                       |      | CRC <sup>1)</sup> | Weight<br>[g] | Part No. | Type    |
|---------------|----------------|--------------------------|------|-----------------------|------|--------------------------|------|-----------------------|------|-------------------|---------------|----------|---------|
|               |                | without position sensing |      | with position sensing |      | without position sensing |      | with position sensing |      |                   |               |          |         |
|               |                | ADVC                     | AEVC | ADVC                  | AEVC | ADVC                     | AEVC | ADVC                  | AEVC |                   |               |          |         |
| 32            | 5              | 59                       | 46   | 63                    | 63   | 26                       | 21   | 26                    | 26   | 2                 | 135           | 174 369  | HNC-32  |
|               | 10, 15, 20, 25 |                          | 50   |                       |      |                          |      |                       |      |                   |               |          |         |
| 40            | 5, 10          | 63.5                     | 53.5 | 72                    | 72   | 30                       | 25   | 30                    | 30   | 2                 | 180           | 174 370  | HNC-40  |
|               | 15, 20, 25     |                          | 58.5 |                       |      |                          |      |                       |      |                   |               |          |         |
| 50            | 10             | 68                       | 53.1 | 78                    | 80   | 35                       | 27.5 | 35                    | 35   | 2                 | 325           | 174 371  | HNC-50  |
|               | 15, 20, 25     |                          | 60.5 |                       |      |                          |      |                       |      |                   |               |          |         |
| 63            | 10             | 75                       | 58   | 81                    | 81   | 35                       | 28   | 35                    | 35   | 2                 | 405           | 174 372  | HNC-63  |
|               | 15, 20, 25     |                          | 65   |                       |      |                          |      |                       |      |                   |               |          |         |
| 80            | 10, 15, 20, 25 | 89                       | 84   | 98                    | 98   | 43                       | 36   | 43                    | 43   | 2                 | 820           | 174 373  | HNC-80  |
| 100           | 10, 15, 20, 25 | 100                      | 91   | 109                   | 109  | 45                       | 36   | 45                    | 45   | 2                 | 1,000         | 174 374  | HNC-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

-  - Note  
Screws with special lengths are required to fit the sizes Ø 80 mm and Ø 100 mm. → 1 / 2.2-39

 Core Range

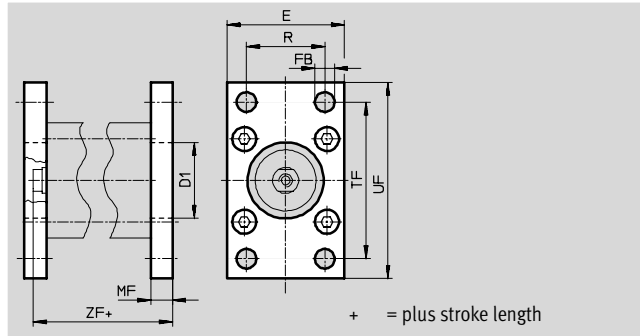
# Short-stroke cylinders ADVC/AEVC

Accessories



## Flange mounting FNC

Material:  
Galvanised steel  
Free of copper, PTFE and silicone



| Dimensions and ordering data |                |                            |     |                            |    |    |     |     |
|------------------------------|----------------|----------------------------|-----|----------------------------|----|----|-----|-----|
| For $\varnothing$<br>[mm]    | Stroke<br>[mm] | D1<br>$\varnothing$<br>H11 | E   | FB<br>$\varnothing$<br>H13 | MF | R  | TF  | UF  |
| 32                           | 5              | 30                         | 45  | 7                          | 10 | 32 | 64  | 80  |
|                              | 10, 15, 20, 25 |                            |     |                            |    |    |     |     |
| 40                           | 5, 10          | 35                         | 54  | 9                          | 10 | 36 | 72  | 90  |
|                              | 15, 20, 25     |                            |     |                            |    |    |     |     |
| 50                           | 10             | 40                         | 65  | 9                          | 12 | 45 | 90  | 110 |
|                              | 15, 20, 25     |                            |     |                            |    |    |     |     |
| 63                           | 10             | 45                         | 75  | 9                          | 12 | 50 | 100 | 120 |
|                              | 15, 20, 25     |                            |     |                            |    |    |     |     |
| 80                           | 10, 15, 20, 25 | 45                         | 93  | 12                         | 16 | 63 | 126 | 150 |
| 100                          | 10, 15, 20, 25 | 55                         | 110 | 14                         | 16 | 75 | 150 | 175 |

| For $\varnothing$<br>[mm] | Stroke<br>[mm] | ZF                       |      |                       |      | CRC <sup>1)</sup> | Weight<br>[g] | Part No. | Type    |
|---------------------------|----------------|--------------------------|------|-----------------------|------|-------------------|---------------|----------|---------|
|                           |                | without position sensing |      | with position sensing |      |                   |               |          |         |
|                           |                | ADVC                     | AEVC | ADVC                  | AEVC |                   |               |          |         |
| 32                        | 5              | 45                       | 32   | 49                    | 49   | 2                 | 240           | 174 376  | FNC-32  |
|                           | 10, 15, 20, 25 |                          | 36   |                       |      |                   |               |          |         |
| 40                        | 5, 10          | 45.5                     | 35.5 | 54                    | 54   | 2                 | 280           | 174 377  | FNC-40  |
|                           | 15, 20, 25     |                          | 40.5 |                       |      |                   |               |          |         |
| 50                        | 10             | 48                       | 33.5 | 58                    | 60   | 2                 | 520           | 174 378  | FNC-50  |
|                           | 15, 20, 25     |                          | 40.5 |                       |      |                   |               |          |         |
| 63                        | 10             | 55                       | 38   | 61                    | 61   | 2                 | 690           | 174 379  | FNC-63  |
|                           | 15, 20, 25     |                          | 45   |                       |      |                   |               |          |         |
| 80                        | 10, 15, 20, 25 | 64                       | 59   | 73                    | 73   | 2                 | 1,650         | 174 380  | FNC-80  |
| 100                       | 10, 15, 20, 25 | 75                       | 66   | 84                    | 84   | 2                 | 2,400         | 174 381  | FNC-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- - Note  
Screws with special lengths are required to fit the sizes  $\varnothing$  80 mm and  $\varnothing$  100 mm. → 1 / 2.2-39

Core Range



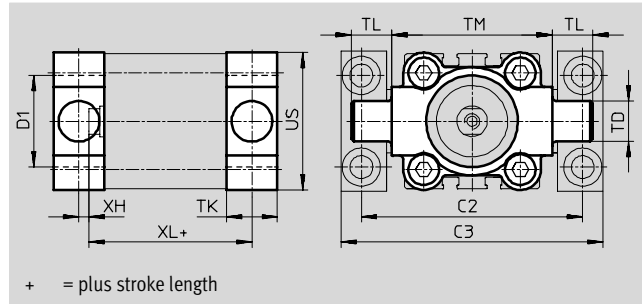
# Short-stroke cylinders ADVC/AEVC



Accessories

## Trunnion flange ZNCF

Material:  
Special steel casting  
Free of copper, PTFE and silicone



| Dimensions and ordering data |                |     |     |          |         |    |    |     |     |    |
|------------------------------|----------------|-----|-----|----------|---------|----|----|-----|-----|----|
| For Ø                        | Stroke         | C2  | C3  | D1       | TD      | TK | TL | TM  | US  | XH |
| [mm]                         | [mm]           |     |     | Ø<br>H11 | Ø<br>e9 |    |    |     |     |    |
| 32                           | 5              | 71  | 86  | 30       | 12      | 16 | 12 | 50  | 45  | 2  |
|                              | 10, 15, 20, 25 |     |     |          |         |    |    |     |     |    |
| 40                           | 5, 10          | 87  | 105 | 35       | 16      | 20 | 16 | 63  | 54  | 4  |
|                              | 15, 20, 25     |     |     |          |         |    |    |     |     |    |
| 50                           | 10             | 99  | 117 | 40       | 16      | 24 | 16 | 75  | 64  | 4  |
|                              | 15, 20, 25     |     |     |          |         |    |    |     |     |    |
| 63                           | 10             | 116 | 136 | 45       | 20      | 24 | 20 | 90  | 75  | 4  |
|                              | 15, 20, 25     |     |     |          |         |    |    |     |     |    |
| 80                           | 10, 15, 20, 25 | 136 | 156 | 45       | 20      | 28 | 20 | 110 | 93  | 6  |
| 100                          | 10, 15, 20, 25 | 164 | 189 | 55       | 25      | 38 | 25 | 132 | 110 | 9  |

| For Ø | Stroke         | XL                       |      |                       |      | CRC <sup>1)</sup> | Weight | Part No. | Type     |
|-------|----------------|--------------------------|------|-----------------------|------|-------------------|--------|----------|----------|
|       |                | without position sensing |      | with position sensing |      |                   |        |          |          |
| [mm]  | [mm]           | ADVC                     | AEVC | ADVC                  | AEVC |                   | [g]    |          |          |
| 32    | 5              | 43                       | 30   | 47                    | 47   | 2                 | 130    | 174 411  | ZNCF-32  |
|       | 10, 15, 20, 25 |                          | 34   |                       |      |                   |        |          |          |
| 40    | 5, 10          | 45.5                     | 35.5 | 54                    | 54   | 2                 | 240    | 174 412  | ZNCF-40  |
|       | 15, 20, 25     |                          | 40.5 |                       |      |                   |        |          |          |
| 50    | 10             | 48                       | 33.1 | 58                    | 60   | 2                 | 390    | 174 413  | ZNCF-50  |
|       | 15, 20, 25     |                          | 40.5 |                       |      |                   |        |          |          |
| 63    | 10             | 55                       | 38   | 61                    | 61   | 2                 | 600    | 174 414  | ZNCF-63  |
|       | 15, 20, 25     |                          | 45   |                       |      |                   |        |          |          |
| 80    | 10, 15, 20, 25 | 62                       | 57   | 71                    | 71   | 2                 | 1,150  | 174 415  | ZNCF-80  |
| 100   | 10, 15, 20, 25 | 78                       | 69   | 87                    | 87   | 2                 | 2,030  | 174 416  | ZNCF-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- - Note  
Screws with special lengths are required to fit the sizes Ø 80 mm and Ø 100 mm. → 1 / 2.2-39

Cylinders with piston rods  
Short-stroke cylinders  
**2.2**

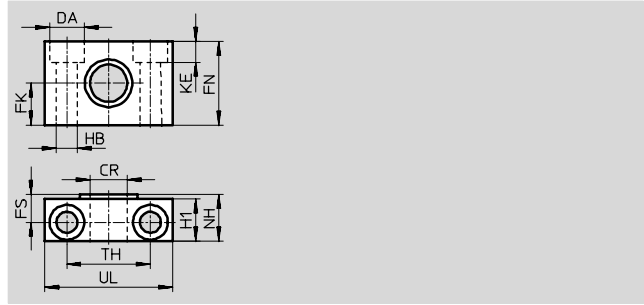
# Short-stroke cylinders ADVC/AEVC

Accessories



## Trunnion support LN2G

Material:  
Galvanised steel  
Free of copper, PTFE and silicone



| Dimensions and ordering data |                   |                   |                         |    |      |      |                   |     |      |           |    |                   |        |          |              |
|------------------------------|-------------------|-------------------|-------------------------|----|------|------|-------------------|-----|------|-----------|----|-------------------|--------|----------|--------------|
| For $\varnothing$            | CR                | DA                | FK                      | FN | FS   | H1   | HB                | KE  | NH   | TH        | UL | CRC <sup>1)</sup> | Weight | Part No. | Type         |
| [mm]                         | $\varnothing$ D11 | $\varnothing$ H13 | $\varnothing$ $\pm 0.1$ |    |      |      | $\varnothing$ H13 |     |      | $\pm 0.2$ |    |                   | [g]    |          |              |
| 32                           | 12                | 11                | 15                      | 30 | 10.5 | 15   | 6.6               | 6.8 | 18   | 32        | 46 | 2                 | 125    | 32 959   | LN2G-32      |
| 40, 50                       | 16                | 15                | 18                      | 36 | 12   | 18   | 9                 | 9   | 21   | 36        | 55 | 2                 | 400    | 32 960   | LN2G-40/50   |
| 63, 80                       | 20                | 18                | 20                      | 40 | 13   | 20   | 11                | 11  | 23   | 42        | 65 | 2                 | 480    | 32 961   | LN2G-63/80   |
| 100                          | 25                | 20                | 25                      | 50 | 16   | 24.5 | 14                | 13  | 28.5 | 50        | 75 | 2                 | 960    | 32 962   | LN2G-100/125 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

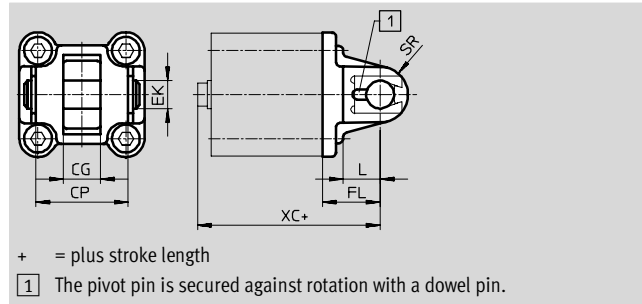
# Short-stroke cylinders ADVC/AEVC



Accessories

## Swivel flange SNC

Material:  
Wrought aluminium alloy



| Dimensions and ordering data |                |     |     |    |      |    |    |
|------------------------------|----------------|-----|-----|----|------|----|----|
| For Ø                        | Stroke         | CG  | CP  | EK | FL   | L  | SR |
| [mm]                         | [mm]           | H14 | d12 | Ø  | ±0.2 |    |    |
| 32                           | 5              | 14  | 34  | 10 | 22   | 13 | 10 |
|                              | 10, 15, 20, 25 |     |     |    |      |    |    |
| 40                           | 5, 10          | 16  | 40  | 12 | 25   | 16 | 12 |
|                              | 15, 20, 25     |     |     |    |      |    |    |
| 50                           | 10             | 21  | 45  | 16 | 27   | 16 | 16 |
|                              | 15, 20, 25     |     |     |    |      |    |    |
| 63                           | 10             | 21  | 51  | 16 | 32   | 21 | 16 |
|                              | 15, 20, 25     |     |     |    |      |    |    |
| 80                           | 10, 15, 20, 25 | 25  | 65  | 20 | 36   | 22 | 20 |
| 100                          | 10, 15, 20, 25 | 25  | 75  | 20 | 41   | 27 | 20 |

| For Ø | Stroke         | XC                       |      |                       |      | CRC <sup>1)</sup> | Weight | Part No. | Type    |
|-------|----------------|--------------------------|------|-----------------------|------|-------------------|--------|----------|---------|
|       |                | without position sensing |      | with position sensing |      |                   |        |          |         |
| [mm]  | [mm]           | ADVC                     | AEVC | ADVC                  | AEVC |                   | [g]    |          |         |
| 32    | 5              | 57                       | 44   | 61                    | 61   | 2                 | 90     | 174 383  | SNC-32  |
|       | 10, 15, 20, 25 |                          | 48   |                       |      |                   |        |          |         |
| 40    | 5, 10          | 60.5                     | 50.5 | 69                    | 69   | 2                 | 120    | 174 384  | SNC-40  |
|       | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |         |
| 50    | 10             | 63                       | 48.1 | 73                    | 75   | 2                 | 240    | 174 385  | SNC-50  |
|       | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |         |
| 63    | 10             | 75                       | 58   | 81                    | 81   | 2                 | 320    | 174 386  | SNC-63  |
|       | 15, 20, 25     |                          | 65   |                       |      |                   |        |          |         |
| 80    | 10, 15, 20, 25 | 84                       | 79   | 93                    | 93   | 2                 | 625    | 174 387  | SNC-80  |
| 100   | 10, 15, 20, 25 | 100                      | 91   | 109                   | 109  | 2                 | 830    | 174 388  | SNC-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- - Note  
Screws with special lengths are required to fit the sizes Ø 80 mm and Ø 100 mm. → 1 / 2.2-39

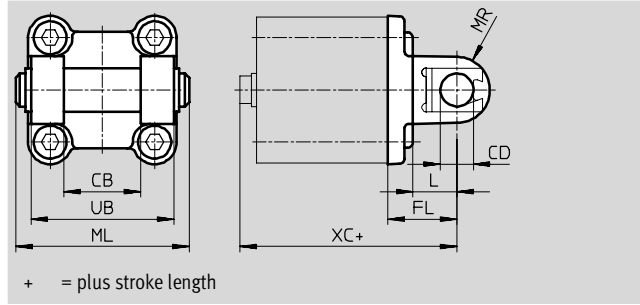
# Short-stroke cylinders ADVC/AEVC

Accessories



## Swivel flange SNCB

Material:  
Wrought aluminium alloy  
Free of copper, PTFE and silicone



| Dimensions and ordering data |                |     |      |      |    |     |    |     |
|------------------------------|----------------|-----|------|------|----|-----|----|-----|
| For Ø                        | Stroke         | CB  | CD   | FL   | L  | ML  | MR | UB  |
| [mm]                         | [mm]           | H14 | Ø e8 | ±0.2 |    |     |    | h14 |
| 32                           | 5              | 26  | 10   | 22   | 13 | 55  | 10 | 45  |
|                              | 10, 15, 20, 25 |     |      |      |    |     |    |     |
| 40                           | 5, 10          | 28  | 12   | 25   | 16 | 63  | 12 | 52  |
|                              | 15, 20, 25     |     |      |      |    |     |    |     |
| 50                           | 10             | 32  | 12   | 27   | 16 | 71  | 12 | 60  |
|                              | 15, 20, 25     |     |      |      |    |     |    |     |
| 63                           | 10             | 40  | 16   | 32   | 21 | 83  | 16 | 70  |
|                              | 15, 20, 25     |     |      |      |    |     |    |     |
| 80                           | 10, 15, 20, 25 | 50  | 16   | 36   | 22 | 103 | 16 | 90  |
| 100                          | 10, 15, 20, 25 | 60  | 20   | 41   | 27 | 127 | 20 | 110 |

| For Ø | Stroke         | XC                       |      |                       |      | CRC <sup>1)</sup> | Weight | Part No. | Type     |
|-------|----------------|--------------------------|------|-----------------------|------|-------------------|--------|----------|----------|
|       |                | without position sensing |      | with position sensing |      |                   |        |          |          |
| [mm]  | [mm]           | ADVC                     | AEVC | ADVC                  | AEVC |                   | [g]    |          |          |
| 32    | 5              | 57                       | 44   | 61                    | 61   | 2                 | 100    | 174 390  | SNCB-32  |
|       | 10, 15, 20, 25 |                          | 48   |                       |      |                   |        |          |          |
| 40    | 5, 10          | 60.5                     | 50.5 | 69                    | 69   | 2                 | 150    | 174 391  | SNCB-40  |
|       | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |          |
| 50    | 10             | 63                       | 48.1 | 73                    | 75   | 2                 | 225    | 174 392  | SNCB-50  |
|       | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |          |
| 63    | 10             | 75                       | 58   | 81                    | 81   | 2                 | 365    | 174 393  | SNCB-63  |
|       | 15, 20, 25     |                          | 65   |                       |      |                   |        |          |          |
| 80    | 10, 15, 20, 25 | 84                       | 79   | 93                    | 93   | 2                 | 610    | 174 394  | SNCB-80  |
| 100   | 10, 15, 20, 25 | 100                      | 91   | 109                   | 109  | 2                 | 925    | 174 395  | SNCB-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- - Note  
Screws with special lengths are required to fit the sizes Ø 80 mm and Ø 100 mm. → 1 / 2.2-39

Core Range

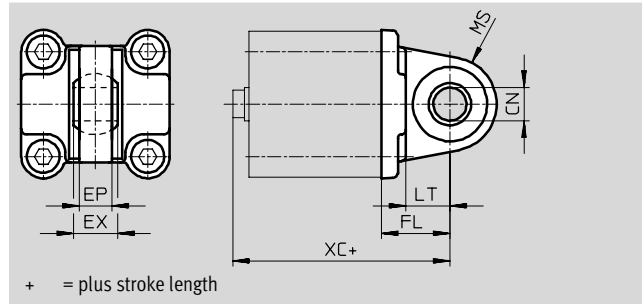
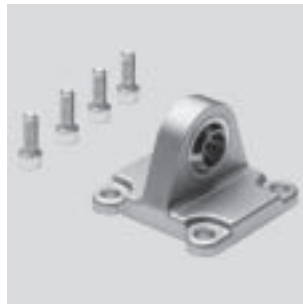
# Short-stroke cylinders ADVC/AEVC



Accessories

## Swivel flange SNCS

Material:  
Wrought aluminium alloy



| Dimensions and ordering data |                |         |      |    |      |    |    |
|------------------------------|----------------|---------|------|----|------|----|----|
| For Ø                        | Stroke         | CN<br>Ø | EP   | EX | FL   | LT | MS |
| [mm]                         | [mm]           |         | -0.2 |    | ±0.2 |    |    |
| 32                           | 5              | 10      | 10.5 | 14 | 22   | 13 | 15 |
|                              | 10, 15, 20, 25 |         |      |    |      |    |    |
| 40                           | 5, 10          | 12      | 12   | 16 | 25   | 16 | 17 |
|                              | 15, 20, 25     |         |      |    |      |    |    |
| 50                           | 10             | 16      | 15   | 21 | 27   | 18 | 20 |
|                              | 15, 20, 25     |         |      |    |      |    |    |
| 63                           | 10             | 16      | 15   | 21 | 32   | 21 | 22 |
|                              | 15, 20, 25     |         |      |    |      |    |    |
| 80                           | 10, 15, 20, 25 | 20      | 18   | 25 | 36   | 22 | 27 |
| 100                          | 10, 15, 20, 25 | 20      | 18   | 25 | 41   | 27 | 29 |

| For Ø | Stroke         | XC                       |      |                       |      | CRC <sup>1)</sup> | Weight | Part No. | Type     |
|-------|----------------|--------------------------|------|-----------------------|------|-------------------|--------|----------|----------|
|       |                | without position sensing |      | with position sensing |      |                   |        |          |          |
| [mm]  | [mm]           | ADVC                     | AEVC | ADVC                  | AEVC |                   | [g]    |          |          |
| 32    | 5              | 57                       | 44   | 61                    | 61   | 2                 | 85     | 174 397  | SNCS-32  |
|       | 10, 15, 20, 25 |                          | 48   |                       |      |                   |        |          |          |
| 40    | 5, 10          | 60.5                     | 50.5 | 69                    | 69   | 2                 | 125    | 174 398  | SNCS-40  |
|       | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |          |
| 50    | 10             | 63                       | 48.1 | 73                    | 75   | 2                 | 210    | 174 399  | SNCS-50  |
|       | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |          |
| 63    | 10             | 75                       | 58   | 81                    | 81   | 2                 | 280    | 174 400  | SNCS-63  |
|       | 15, 20, 25     |                          | 65   |                       |      |                   |        |          |          |
| 80    | 10, 15, 20, 25 | 84                       | 79   | 93                    | 93   | 2                 | 540    | 174 401  | SNCS-80  |
| 100   | 10, 15, 20, 25 | 100                      | 91   | 109                   | 109  | 2                 | 700    | 174 402  | SNCS-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- - Note  
Screws with special lengths are required to fit the sizes Ø 80 mm and Ø 100 mm. → 1 / 2.2-39

Cylinders with piston rods  
Short-stroke cylinders  
**2.2**

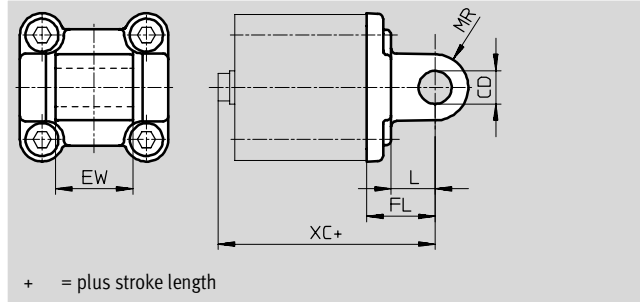
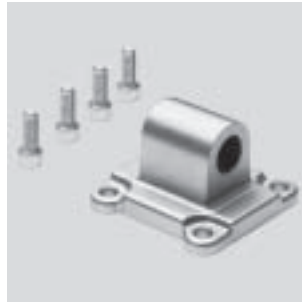
# Short-stroke cylinders ADVC/AEVC

Accessories



## Swivel flange SNCL

Material:  
Wrought aluminium alloy  
Free of copper, PTFE and silicone



| Dimensions and ordering data |                |               |     |           |    |    |
|------------------------------|----------------|---------------|-----|-----------|----|----|
| For $\varnothing$            | Stroke         | CD            | EW  | FL        | L  | MR |
| [mm]                         | [mm]           | $\varnothing$ | h14 | $\pm 0.2$ |    |    |
| 32                           | 5              | 10            | 26  | 22        | 13 | 10 |
|                              | 10, 15, 20, 25 |               |     |           |    |    |
| 40                           | 5, 10          | 12            | 28  | 25        | 16 | 12 |
|                              | 15, 20, 25     |               |     |           |    |    |
| 50                           | 10             | 12            | 32  | 27        | 16 | 12 |
|                              | 15, 20, 25     |               |     |           |    |    |
| 63                           | 10             | 16            | 40  | 32        | 21 | 16 |
|                              | 15, 20, 25     |               |     |           |    |    |
| 80                           | 10, 15, 20, 25 | 16            | 50  | 36        | 22 | 16 |
| 100                          | 10, 15, 20, 25 | 20            | 60  | 41        | 27 | 20 |

| For $\varnothing$ | Stroke         | XC                       |      |                       |      | CRC <sup>1)</sup> | Weight | Part No. | Type     |
|-------------------|----------------|--------------------------|------|-----------------------|------|-------------------|--------|----------|----------|
|                   |                | without position sensing |      | with position sensing |      |                   |        |          |          |
| [mm]              | [mm]           | ADVC                     | AEVC | ADVC                  | AEVC | [g]               |        |          |          |
| 32                | 5              | 57                       | 44   | 61                    | 61   | 2                 | 75     | 174 404  | SNCL-32  |
|                   | 10, 15, 20, 25 |                          | 48   |                       |      |                   |        |          |          |
| 40                | 5, 10          | 60.5                     | 50.5 | 69                    | 69   | 2                 | 100    | 174 405  | SNCL-40  |
|                   | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |          |
| 50                | 10             | 63                       | 48.1 | 73                    | 75   | 2                 | 160    | 174 406  | SNCL-50  |
|                   | 15, 20, 25     |                          | 55.5 |                       |      |                   |        |          |          |
| 63                | 10             | 75                       | 58   | 81                    | 81   | 2                 | 250    | 174 407  | SNCL-63  |
|                   | 15, 20, 25     |                          | 65   |                       |      |                   |        |          |          |
| 80                | 10, 15, 20, 25 | 84                       | 79   | 93                    | 93   | 2                 | 405    | 174 408  | SNCL-80  |
| 100               | 10, 15, 20, 25 | 100                      | 91   | 109                   | 109  | 2                 | 655    | 174 409  | SNCL-100 |

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

- - Note  
Screws with special lengths are required to fit the sizes  $\varnothing$  80 mm and  $\varnothing$  100 mm. → 1 / 2.2-39

Cylinders with piston rods  
Short-stroke cylinders

## 2.2

# Short-stroke cylinders ADVC/AEVC

Accessories



| Ordering data – Mounting attachments         |        |               |                 | Technical data → 1 / 10.1-2               |        |               |                  |  |
|----------------------------------------------|--------|---------------|-----------------|-------------------------------------------|--------|---------------|------------------|--|
| Designation                                  | For Ø  | Part No.      | Type            | Designation                               | For Ø  | Part No.      | Type             |  |
| <b>Clevis foot mounting LNG</b>              |        |               |                 | <b>Clevis foot mounting LSN</b>           |        |               |                  |  |
|                                              | 32     | <b>33 890</b> | <b>LNG-32</b>   |                                           | 32     | <b>5 561</b>  | <b>LSN-32</b>    |  |
|                                              | 40     | <b>33 891</b> | <b>LNG-40</b>   |                                           | 40     | <b>5 562</b>  | <b>LSN-40</b>    |  |
|                                              | 50     | <b>33 892</b> | <b>LNG-50</b>   |                                           | 50     | <b>5 563</b>  | <b>LSN-50</b>    |  |
|                                              | 63     | <b>33 893</b> | <b>LNG-63</b>   |                                           | 63     | <b>5 564</b>  | <b>LSN-63</b>    |  |
|                                              | 80     | <b>33 894</b> | <b>LNG-80</b>   |                                           | 80     | <b>5 565</b>  | <b>LSN-80</b>    |  |
|                                              | 100    | <b>33 895</b> | <b>LNG-100</b>  |                                           | 100    | <b>5 566</b>  | <b>LSN-100</b>   |  |
| <b>Clevis foot mounting LSNG</b>             |        |               |                 | <b>Weld-on clevis foot mounting LSNSG</b> |        |               |                  |  |
|                                              | 32     | <b>31 740</b> | <b>LSNG-32</b>  |                                           | 32     | <b>31 747</b> | <b>LSNSG-32</b>  |  |
|                                              | 40     | <b>31 741</b> | <b>LSNG-40</b>  |                                           | 40     | <b>31 748</b> | <b>LSNSG-40</b>  |  |
|                                              | 50     | <b>31 742</b> | <b>LSNG-50</b>  |                                           | 50     | <b>31 749</b> | <b>LSNSG-50</b>  |  |
|                                              | 63     | <b>31 743</b> | <b>LSNG-63</b>  |                                           | 63     | <b>31 750</b> | <b>LSNSG-63</b>  |  |
|                                              | 80     | <b>31 744</b> | <b>LSNG-80</b>  |                                           | 80     | <b>31 751</b> | <b>LSNSG-80</b>  |  |
|                                              | 100    | <b>31 745</b> | <b>LSNG-100</b> |                                           | 100    | <b>31 752</b> | <b>LSNSG-100</b> |  |
| <b>Clevis foot LBG on swivel flange SNCS</b> |        |               |                 | <b>Clevis foot LBG on rod eye SGS</b>     |        |               |                  |  |
|                                              | 32     | <b>31 761</b> | <b>LBG-32</b>   |                                           | 32, 40 | <b>31 761</b> | <b>LBG-32</b>    |  |
|                                              | 40     | <b>31 762</b> | <b>LBG-40</b>   |                                           | 50, 63 | <b>31 762</b> | <b>LBG-40</b>    |  |
|                                              | 50     | <b>31 763</b> | <b>LBG-50</b>   |                                           | 80     | <b>31 763</b> | <b>LBG-50</b>    |  |
|                                              | 63     | <b>31 764</b> | <b>LBG-63</b>   |                                           |        | <b>31 764</b> | <b>LBG-63</b>    |  |
|                                              | 80     | <b>31 765</b> | <b>LBG-80</b>   |                                           | 100    | <b>31 765</b> | <b>LBG-80</b>    |  |
|                                              | 100    | <b>31 766</b> | <b>LBG-100</b>  |                                           |        | <b>31 766</b> | <b>LBG-100</b>   |  |
| <b>Clevis foot, right-angled LQG</b>         |        |               |                 |                                           |        |               |                  |  |
|                                              | 32, 40 | <b>31 768</b> | <b>LQG-32</b>   |                                           |        |               |                  |  |
|                                              | 50, 63 | <b>31 769</b> | <b>LQG-40</b>   |                                           |        |               |                  |  |
|                                              | 80     |               | <b>31 770</b>   | <b>LQG-50</b>                             |        |               |                  |  |
|                                              |        |               | <b>31 771</b>   | <b>LQG-63</b>                             |        |               |                  |  |
|                                              | 100    |               | <b>31 772</b>   | <b>LQG-80</b>                             |        |               |                  |  |
|                                              |        | <b>31 773</b> | <b>LQG-100</b>  |                                           |        |               |                  |  |

| Ordering data |         |                                       |                       |                  |
|---------------|---------|---------------------------------------|-----------------------|------------------|
| Special screw | For Ø   | For accessory                         | Part No.              | PU <sup>1)</sup> |
|               | 80, 100 | HNC, FNC,<br>SNC, SNCS,<br>SNCL, SNCB | <b>238 600</b> M10x30 | 1                |
|               | 80      | ZNCF                                  | <b>204 138</b> M10x40 |                  |
|               | 100     | ZNCF                                  | <b>370 524</b> M10x50 |                  |

1) Packaging unit quantity.

Core Range





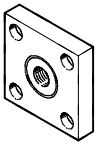
# Short-stroke cylinders ADVC/AEVC

Accessories



Cylinders with piston rods  
Short-stroke cylinders

2.2

| Ordering data – Piston rod attachments                                              |       |            |              | Technical data → 1 / 10.3-2                                                       |            |              |              |
|-------------------------------------------------------------------------------------|-------|------------|--------------|-----------------------------------------------------------------------------------|------------|--------------|--------------|
| Designation                                                                         | For Ø | Part No.   | Type         | Designation                                                                       | For Ø      | Part No.     | Type         |
| <b>Rod eye SGS</b>                                                                  |       |            |              | <b>Rod clevis SGA</b>                                                             |            |              |              |
|    | 10    | 9 253      | SGS-M4       |  | 32         | –            | –            |
|                                                                                     | 16    | 9 254      | SGS-M6       |                                                                                   | 40         | –            | –            |
|                                                                                     | 20    | 9 255      | SGS-M8       |                                                                                   | 50         | –            | –            |
|                                                                                     | 25    | –          | –            |                                                                                   | 63         | –            | –            |
|                                                                                     | 32    | 9 261      | SGS-M10x1,25 |                                                                                   | 32         | 32 954       | SGA-M10x1,25 |
|                                                                                     | 40    | –          | –            | 40                                                                                | –          | –            |              |
|                                                                                     | 50    | 9 262      | SGS-M12x1,25 | 50                                                                                | 10 767     | SGA-M12x1,25 |              |
|                                                                                     | 63    | –          | –            | 63                                                                                | –          | –            |              |
|                                                                                     | 80    | 9 263      | SGS-M16x1,5  | 80                                                                                | 10 768     | SGA-M16x1,5  |              |
|                                                                                     | 100   | 9 264      | SGS-M20x1,5  | 100                                                                               | 10 769     | SGA-M20x1,5  |              |
| <b>Rod clevis SG</b>                                                                |       |            |              | <b>Self-aligning rod coupler FK</b>                                               |            |              |              |
|    | 10    | 6 532      | SG-M4        |  | 10         | 6 528        | FK-M4        |
|                                                                                     | 12    | –          | –            |                                                                                   | 12         | 30 984       | FK-M5        |
|                                                                                     | 16    | 3 110      | SG-M6        |                                                                                   | 16         | 2 061        | FK-M6        |
|                                                                                     | 20    | 3 111      | SG-M8        |                                                                                   | 20         | 2 062        | FK-M8        |
|                                                                                     | 25    | –          | –            |                                                                                   | 25         | –            | –            |
|                                                                                     | 32    | 6 144      | SG-M10x1,25  |                                                                                   | 32         | 6 140        | FK-M10x1,25  |
|                                                                                     | 40    | –          | –            |                                                                                   | 40         | –            | –            |
|                                                                                     | 50    | 6 145      | SG-M12x1,25  |                                                                                   | 50         | 6 141        | FK-M12x1,25  |
|                                                                                     | 63    | –          | –            |                                                                                   | 63         | –            | –            |
|                                                                                     | 80    | 6 146      | SG-M16x1,5   |                                                                                   | 80         | 6 142        | FK-M16x1,5   |
| 100                                                                                 | 6 147 | SG-M20x1,5 | 100          | 6 143                                                                             | FK-M20x1,5 |              |              |
| <b>Coupling piece KSG</b>                                                           |       |            |              |                                                                                   |            |              |              |
|  | 32    | 32 963     | KSG-M10x1,25 |                                                                                   |            |              |              |
|                                                                                     | 40    | –          | –            |                                                                                   |            |              |              |
|                                                                                     | 50    | 32 964     | KSG-M12x1,25 |                                                                                   |            |              |              |
|                                                                                     | 63    | –          | –            |                                                                                   |            |              |              |
|                                                                                     | 80    | 32 965     | KSG-M16x1,5  |                                                                                   |            |              |              |
|                                                                                     | 100   | 32 966     | KSG-M20x1,5  |                                                                                   |            |              |              |

 Core Range






# Short-stroke cylinders ADVC/AEVC




Accessories





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Cylinders with piston rods  
Short-stroke cylinders

2.2

| Ordering data – Proximity sensor for slot type 8, magneto-resistive               |                                                      |               |                       |         |          |                  | Technical data → 1 / 10.2-13 |                        |         |
|-----------------------------------------------------------------------------------|------------------------------------------------------|---------------|-----------------------|---------|----------|------------------|------------------------------|------------------------|---------|
|                                                                                   | Mounting                                             | Switch output | Electrical connection |         |          | Cable length [m] | Part No.                     | Type                   |         |
|                                                                                   |                                                      |               | Cable                 | M8 plug | M12 plug |                  |                              |                        |         |
| <b>NO contact</b>                                                                 |                                                      |               |                       |         |          |                  |                              |                        |         |
|  | Insertable from above                                | PNP           | 3-wire                | –       | –        | 2.5              | 525 898                      | SMT-8F-PS-24V-K2,5-OE  | ☉       |
|                                                                                   |                                                      | NPN           |                       | –       | –        |                  | 525 909                      | SMT-8F-NS-24V-K2,5-OE  | ☉       |
|                                                                                   |                                                      | –             | 2-wire                | –       | –        | 2.5              | 525 908                      | SMT-8F-ZS-24V-K2,5-OE  | ☉       |
|                                                                                   |                                                      | PNP           | –                     | 3-pin   | –        | 0.3              | 525 899                      | SMT-8F-PS-24V-K0,3-M8D | ☉       |
|                                                                                   |                                                      | NPN           |                       |         | 525 910  |                  | SMT-8F-NS-24V-K0,3-M8D       | ☉                      |         |
|                                                                                   |                                                      | PNP           |                       |         | –        |                  | 3-pin                        | 0.3                    | 525 900 |
|  | Insertable from end, flush with the cylinder profile | PNP           | 3-wire                | –       | –        | 2.5              | 175 436                      | SMT-8-PS-K-LED-24-B    |         |
|                                                                                   |                                                      | –             | 3-pin                 | –       | –        | 0.3              | 175 484                      | SMT-8-PS-S-LED-24-B    |         |
| <b>NC contact</b>                                                                 |                                                      |               |                       |         |          |                  |                              |                        |         |
|  | Insertable from above                                | PNP           | 3-wire                | –       | –        | 7.5              | 525 911                      | SMT-8F-PO-24V-K7,5-OE  | ☉       |

| Ordering data – Proximity sensor for slot type 8, magnetic reed                     |                                                      |                       |         |                  |          | Technical data → 1 / 10.2-16 |   |
|-------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------|---------|------------------|----------|------------------------------|---|
|                                                                                     | Mounting                                             | Electrical connection |         | Cable length [m] | Part No. | Type                         |   |
|                                                                                     |                                                      | Cable                 | M8 plug |                  |          |                              |   |
| <b>NO contact</b>                                                                   |                                                      |                       |         |                  |          |                              |   |
|  | Insertable from above                                | 3-wire                | –       | 2.5              | 525 895  | SME-8F-DS-24V-K2,5-OE        | ☉ |
|                                                                                     |                                                      |                       | –       | 5.0              | 525 897  | SME-8F-DS-24V-K5,0-OE        | ☉ |
|                                                                                     |                                                      | 2-wire                | –       | 2.5              | 525 907  | SME-8F-ZS-24V-K2,5-OE        | ☉ |
|                                                                                     |                                                      | –                     | 3-pin   | 0.3              | 525 896  | SME-8F-DS-24V-K0,3-M8D       | ☉ |
|  | Insertable from end, flush with the cylinder profile | 3-wire                | –       | 2.5              | 150 855  | SME-8-K-LED-24               |   |
|                                                                                     |                                                      | –                     | 3-pin   | 0.3              | 150 857  | SME-8-S-LED-24               |   |
| <b>NC contact</b>                                                                   |                                                      |                       |         |                  |          |                              |   |
|  | Insertable from above                                | 3-wire                | –       | 7.5              | 525 906  | SME-8F-DO-24V-K7,5-OE        | ☉ |

| Ordering data – Plug sockets                                                        |               |               |     |            |                  | Technical data → 1 / 10.2-100 |                    |
|-------------------------------------------------------------------------------------|---------------|---------------|-----|------------|------------------|-------------------------------|--------------------|
|                                                                                     | Mounting      | Switch output |     | Connection | Cable length [m] | Part No.                      | Type               |
|                                                                                     |               | PNP           | NPN |            |                  |                               |                    |
| <b>Straight plug socket</b>                                                         |               |               |     |            |                  |                               |                    |
|  | Union nut M8  | ■             | ■   | 3-pin      | 2.5              | 159 420                       | SIM-M8-3GD-2,5-PU  |
|                                                                                     |               |               |     |            | 5                | 159 421                       | SIM-M8-3GD-5-PU    |
|  | Union nut M12 | ■             | ■   | 3-pin      | 2.5              | 159 428                       | SIM-M12-3GD-2,5-PU |
|                                                                                     |               |               |     |            | 5                | 159 429                       | SIM-M12-3GD-5-PU   |
| <b>Angled plug socket</b>                                                           |               |               |     |            |                  |                               |                    |
|  | Union nut M8  | ■             | ■   | 3-pin      | 2.5              | 159 422                       | SIM-M8-3WD-2,5-PU  |
|                                                                                     |               |               |     |            | 5                | 159 423                       | SIM-M8-3WD-5-PU    |
|  | Union nut M12 | ■             | ■   | 3-pin      | 2.5              | 159 430                       | SIM-M12-3WD-2,5-PU |
|                                                                                     |               |               |     |            | 5                | 159 431                       | SIM-M12-3WD-5-PU   |

| Ordering data – Slot cover for slot type 8                                          |                       |            |                 |
|-------------------------------------------------------------------------------------|-----------------------|------------|-----------------|
|                                                                                     | Mounting              | Length [m] | Part No. Type   |
|  | Insertable from above | 2x 0.5     | 151 680 ABP-5-S |

Core Range

# Short-stroke cylinders ADVC/AEVC

Accessories



Cylinders with piston rods  
Short-stroke cylinders

2.2

| Ordering data – Proximity sensor for slot type 10, magneto-resistive |                     |               |                       |         |                     |                      | Technical data → 1 / 10.2-47 |                     |
|----------------------------------------------------------------------|---------------------|---------------|-----------------------|---------|---------------------|----------------------|------------------------------|---------------------|
|                                                                      | Mounting            | Switch output | Electrical connection |         | Cable length<br>[m] | Connection direction | Part No.                     | Type                |
|                                                                      |                     |               | Cable                 | M8 plug |                     |                      |                              |                     |
| NO contact                                                           |                     |               |                       |         |                     |                      |                              |                     |
|                                                                      | Insertable from end | PNP           | –                     | 3-pin   | 0.3                 | In-line              | 173 220                      | SMT-10-PS-SL-LED-24 |
|                                                                      |                     |               | 3-wire                | –       | 2.5                 |                      | 173 218                      | SMT-10-PS-KL-LED-24 |

| Ordering data – Proximity sensor for slot type 10, magnetic reed |                     |                       |         |                     |                      |          | Technical data → 1 / 10.2-50 |  |
|------------------------------------------------------------------|---------------------|-----------------------|---------|---------------------|----------------------|----------|------------------------------|--|
|                                                                  | Mounting            | Electrical connection |         | Cable length<br>[m] | Connection direction | Part No. | Type                         |  |
|                                                                  |                     | Cable                 | M8 plug |                     |                      |          |                              |  |
| NO contact                                                       |                     |                       |         |                     |                      |          |                              |  |
|                                                                  | Insertable from end | 3-wire                | –       | 0.3                 | In-line              | 173 212  | SME-10-SL-LED-24             |  |
|                                                                  |                     | –                     | 3-pin   | 2.5                 |                      | 173 210  | SME-10-KL-LED-24             |  |

| Ordering data – Plug sockets |              |               |     |            |                     |          | Technical data → 1 / 10.2-100 |  |
|------------------------------|--------------|---------------|-----|------------|---------------------|----------|-------------------------------|--|
|                              | Mounting     | Switch output |     | Connection | Cable length<br>[m] | Part No. | Type                          |  |
|                              |              | PNP           | NPN |            |                     |          |                               |  |
| Straight plug socket         |              |               |     |            |                     |          |                               |  |
|                              | Union nut M8 | ■             | ■   | 3-pin      | 2.5                 | 159 420  | SIM-M8-3GD-2,5-PU             |  |
|                              |              |               |     |            | 5                   | 159 421  | SIM-M8-3GD-5-PU               |  |
| Angled plug socket           |              |               |     |            |                     |          |                               |  |
|                              | Union nut M8 | ■             | ■   | 3-pin      | 2.5                 | 159 422  | SIM-M8-3WD-2,5-PU             |  |
|                              |              |               |     |            | 5                   | 159 423  | SIM-M8-3WD-5-PU               |  |

| Ordering data – One-way flow control valves |                 |                 |              |                             | Technical data → Volume 2    |                |              |
|---------------------------------------------|-----------------|-----------------|--------------|-----------------------------|------------------------------|----------------|--------------|
|                                             | Connection      |                 | Material     | Part No.                    | Type                         |                |              |
|                                             | Thread          | For tubing O.D. |              |                             |                              |                |              |
| For exhaust air                             |                 |                 |              |                             |                              |                |              |
|                                             | M3              | 3               | Metal design | 175 041                     | GRLA-M3-QS-3                 |                |              |
|                                             |                 | M5              |              | 3                           | 193 137                      | GRLA-M5-QS-3-D |              |
|                                             |                 |                 |              | 4                           | 193 138                      | GRLA-M5-QS-4-D |              |
|                                             |                 |                 |              | 6                           | 193 139                      | GRLA-M5-QS-6-D |              |
|                                             | G $\frac{1}{8}$ | 3               |              | 193 142                     | GRLA- $\frac{1}{8}$ -QS-3-D  |                |              |
|                                             |                 | 4               |              | 193 143                     | GRLA- $\frac{1}{8}$ -QS-4-D  |                |              |
|                                             |                 | 6               |              | 193 144                     | GRLA- $\frac{1}{8}$ -QS-6-D  |                |              |
|                                             |                 | 8               |              | 193 145                     | GRLA- $\frac{1}{8}$ -QS-8-D  |                |              |
|                                             | G $\frac{1}{4}$ | 6               |              | 193 146                     | GRLA- $\frac{1}{4}$ -QS-6-D  |                |              |
|                                             |                 | 8               |              | 193 147                     | GRLA- $\frac{1}{4}$ -QS-8-D  |                |              |
|                                             |                 | 10              |              | 193 148                     | GRLA- $\frac{1}{4}$ -QS-10-D |                |              |
|                                             |                 | For supply air  |              |                             |                              |                |              |
|                                             |                 | M3              |              | 3                           | Metal design                 | 175 043        | GRLZ-M3-QS-3 |
| M5                                          |                 |                 | 3            | 193 153                     |                              | GRLZ-M5-QS-3-D |              |
|                                             |                 |                 | 4            | 193 154                     |                              | GRLZ-M5-QS-4-D |              |
|                                             |                 |                 | 6            | 193 155                     |                              | GRLZ-M5-QS-6-D |              |
| G $\frac{1}{8}$                             |                 | 3               | 193 156      | GRLZ- $\frac{1}{8}$ -QS-3-D |                              |                |              |
|                                             |                 | 4               | 193 157      | GRLZ- $\frac{1}{8}$ -QS-4-D |                              |                |              |
|                                             |                 | 6               | 193 158      | GRLZ- $\frac{1}{8}$ -QS-6-D |                              |                |              |
|                                             |                 | 8               | 193 159      | GRLZ- $\frac{1}{8}$ -QS-8-D |                              |                |              |

Core Range