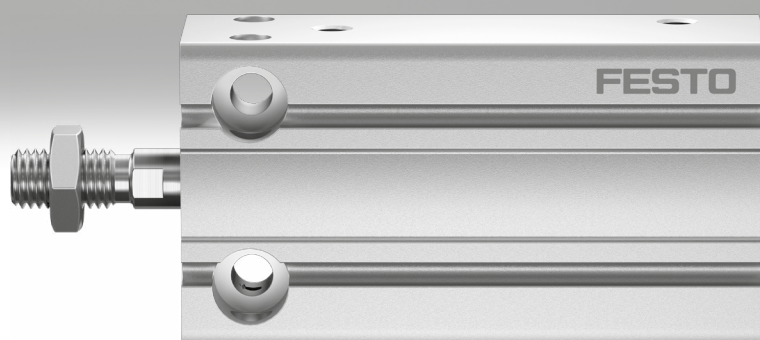


## Compact cylinder DPDM, multi-mount

**FESTO**



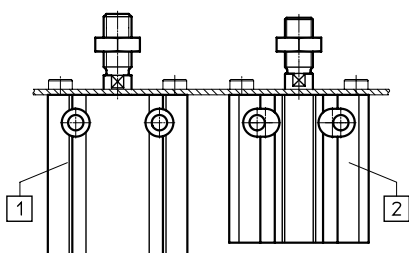
## Key features

### At a glance

- Double- and single-acting versions
- With and without protection against rotation
- Easy to interchange compared to compact cylinder DMM
- Simple to mount thanks to a wide range of mounting interfaces
- Optional: heat-resistant up to 120 °C

### Comparison of compact cylinder DMM and compact cylinder DPDM

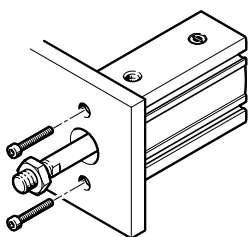
- All mounting interfaces of compact cylinder DPDM are compatible with those of compact cylinder DMM
- Compared to DMM, however, DPDM is noticeably shorter, giving a lower product weight for the same functionality



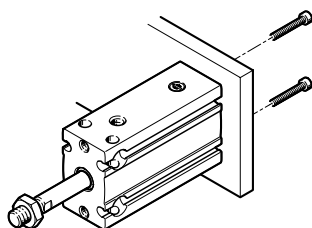
[1] Compact cylinders DMM  
[2] Compact cylinders DPDM

### Mounting options

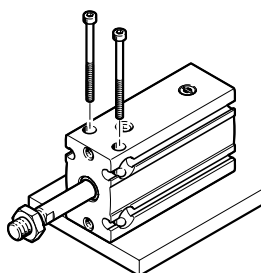
#### Mounting at the front



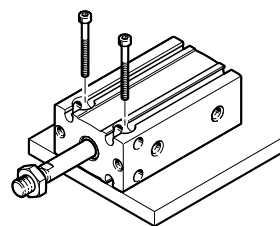
#### Mounting at the rear



#### Vertical mounting



#### Horizontal mounting



### For manufacturing lithium-ion batteries

#### DPDM-...-F1A

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

#### Accessories

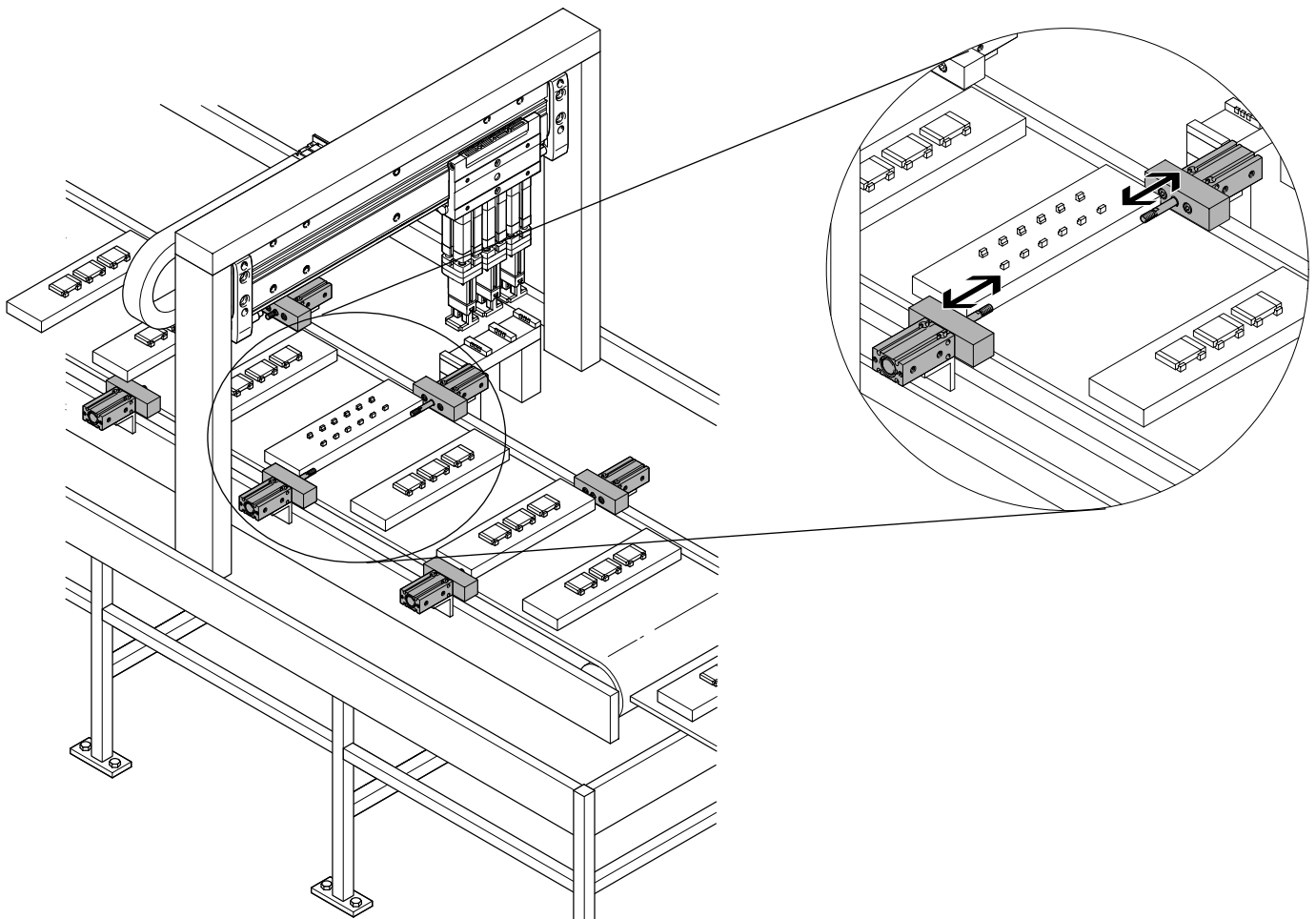
Please contact your Festo representative for information on which accessories are suitable for manufacturing lithium-ion batteries.

## Key features

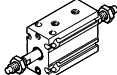
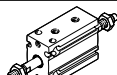
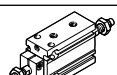
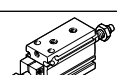
| Variants from the modular product system                                          |                                                                          |                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symbol                                                                            | Key features                                                             | Description                                                                                                                                                          |
|  | T Through piston rod                                                     | The piston rod can be used for attachment at both ends of the cylinder                                                                                               |
|  | H Through, hollow piston rod                                             | The piston rod can be used for attachment at both ends of the cylinder. The piston rod is hollow inside. This means it can be used to carry vacuum or compressed air |
|  | T1 Heat-resistant seals                                                  | Temperature range 0 ... +120 °C                                                                                                                                      |
|                                                                                   | F1A Recommended for production plants for manufacturing Li-ion batteries | Cylinders free of copper, zinc and nickel ( $\leq 1\%$ )                                                                                                             |

## Application example

Stopping small parts



## Product range overview

| Function      | Version                                                                             | Type                                            | Piston ø<br>[mm] | Stroke<br>[mm]                | Temperature range<br>[T1]<br>0 ... +120 °C | Battery manufacturing<br>[F1A] | → Page/<br>Internet |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------|------------------|-------------------------------|--------------------------------------------|--------------------------------|---------------------|
| Double-acting | Basic version                                                                       |                                                 |                  |                               |                                            |                                |                     |
|               |    | DPDM<br>Piston rod at one end                   | 6, 10            | 5, 10, 15, 20, 25, 30         | ■<br>From ø 10                             | ■<br>Not with T1               | 5                   |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15, 20, 25, 30, 40, 50 |                                            |                                |                     |
|               |    | DPDM-....-T<br>Through piston rod               | 6, 10            | 5, 10, 15, 20, 25, 30         | —                                          | ■<br>Not with T1               |                     |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15, 20, 25, 30, 40, 50 |                                            |                                |                     |
|               |    | DPDM-....-H<br>Through, hollow piston rod       | 16, 20, 25, 32   | 5, 10, 15, 20, 25, 30, 40, 50 | —                                          | ■<br>Not with T1               |                     |
|               | With protection against rotation                                                    |                                                 |                  |                               |                                            |                                |                     |
|               |    | DPDM-Q<br>Piston rod at one end                 | 6, 10            | 5, 10, 15, 20, 25, 30         | ■<br>From ø 10                             | ■<br>Not with T1               | 5                   |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15, 20, 25, 30, 40, 50 |                                            | ■<br>Not with T1               |                     |
|               |    | DPDM-Q-....-T<br>Through piston rod             | 6, 10            | 5, 10, 15, 20, 25, 30         | —                                          | ■<br>Not with T1               |                     |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15, 20, 25, 30, 40, 50 |                                            | ■<br>Not with T1               |                     |
|               |   | DPDM-Q-....-H<br>Through, hollow piston rod     | 16, 20, 25, 32   | 5, 10, 15, 20, 25, 30, 40, 50 | —                                          | ■<br>Not with T1               |                     |
| Single-acting | Basic version                                                                       |                                                 |                  |                               |                                            |                                |                     |
|               |  | DPDM-....-S<br>Piston rod at one end, pushing   | 6, 10            | 5, 10, 15                     | —                                          | —                              | 5                   |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15                     | —                                          | —                              |                     |
|               |  | DPDM-....-P<br>Piston rod at one end, pulling   | 6, 10            | 5, 10, 15                     | —                                          | —                              |                     |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15                     | —                                          | —                              |                     |
|               | With protection against rotation                                                    |                                                 |                  |                               |                                            |                                |                     |
|               |  | DPDM-Q-....-S<br>Piston rod at one end, pushing | 6, 10            | 5, 10, 15                     | —                                          | —                              | 5                   |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15                     | —                                          | —                              |                     |
|               |  | DPDM-Q-....-P<br>Piston rod at one end, pulling | 6, 10            | 5, 10, 15                     | —                                          | —                              |                     |
|               |                                                                                     |                                                 | 16, 20, 25, 32   | 5, 10, 15                     | —                                          | —                              |                     |

## Type codes

| 001  | Series               |
|------|----------------------|
| DPDM | Cylinder, multimount |

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

| 003 | Piston diameter [mm] |
|-----|----------------------|
| 6   | 6                    |
| 10  | 10                   |
| 16  | 16                   |
| 20  | 20                   |
| 25  | 25                   |
| 32  | 32                   |

| 004 | Stroke [mm] |
|-----|-------------|
| 5   | 5           |
| 10  | 10          |
| 15  | 15          |
| 20  | 20          |
| 25  | 25          |
| 30  | 30          |
| 40  | 40          |
| 50  | 50          |

| 005 | Function               |
|-----|------------------------|
|     | Double-acting          |
| P   | Single-acting, pulling |
| S   | Single-acting, pushing |

| 006 | Piston rod type |
|-----|-----------------|
|     | At one end      |

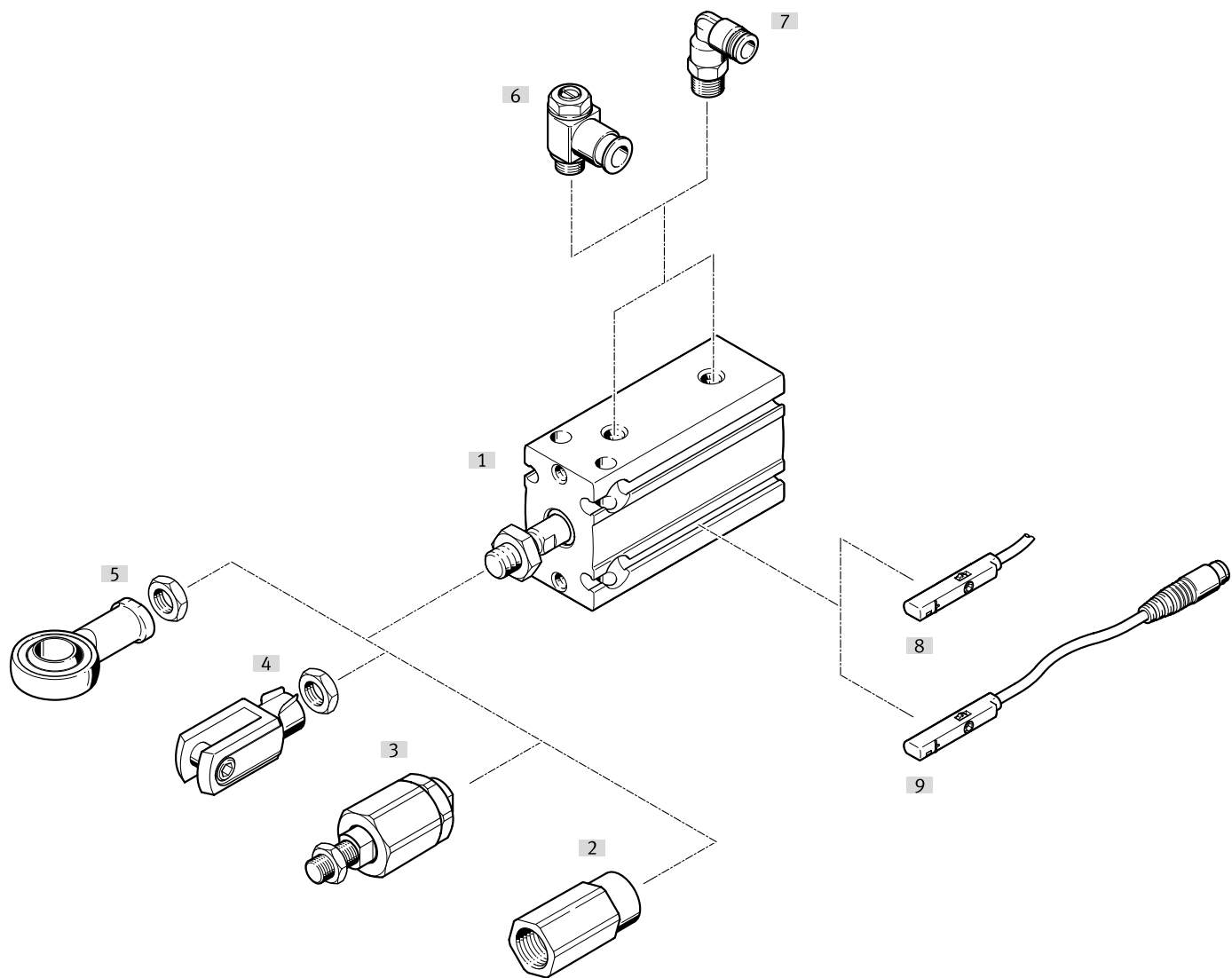
| 007 | Cushioning                                    |
|-----|-----------------------------------------------|
| P   | Elastic cushioning rings/plates on both sides |

| 008 | Position sensing     |
|-----|----------------------|
| A   | For proximity sensor |

| 009 | Temperature range               |
|-----|---------------------------------|
|     | Standard                        |
| T1  | Heat-resistant seals max. 120°C |

| 010 | Special material properties                                                        |
|-----|------------------------------------------------------------------------------------|
|     | None                                                                               |
| F1A | Recommended for production facilities for the manufacture of lithium-ion batteries |

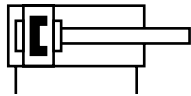
Peripherals overview



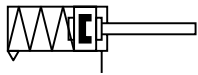
| Accessories |                                      | Description                                                | → Page/Internet |
|-------------|--------------------------------------|------------------------------------------------------------|-----------------|
| [1]         | Compact cylinder DPDM                | Double- and single-acting versions                         | 7               |
| [2]         | Adapter AD                           | For suction cup                                            | 16              |
| [3]         | Self-aligning rod coupler FK         | To compensate for radial and angular deviations            | 16              |
| [4]         | Rod clevis SG                        | Permits a swivelling movement of the cylinder in one plane | 16              |
| [5]         | Rod eye SGS                          | With spherical bearing                                     | 16              |
| [6]         | One-way flow control valve GRLA/VFOH | For regulating speed                                       | 10              |
| [7]         | Push-in fitting QS                   | For connecting tubing with standard O.D.                   | 16              |
| [8] [9]     | Proximity switch SME/SMT-8, SMT-10   | Can be integrated in the cylinder profile barrel           | 17              |

# Datasheet

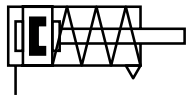
Function  
DPDM



DPDM-...-P



DPDM-...-S



-  $\varnothing$  - Diameter  
6 ... 32 mm  
-  $\text{I}$  - Stroke length  
5 ... 50 mm



| General technical data   |                                              |    |                               |    |          |          |
|--------------------------|----------------------------------------------|----|-------------------------------|----|----------|----------|
| Piston Ø                 | 6                                            | 10 | 16                            | 20 | 25       | 32       |
| Design                   | Piston                                       |    |                               |    |          |          |
|                          | Piston rod                                   |    |                               |    |          |          |
|                          | Profile tube                                 |    |                               |    |          |          |
| Operating mode           | Double- and single-acting                    |    |                               |    |          |          |
| Pneumatic connection     | M5                                           | M5 | M5                            | M5 | M5       | G1/8     |
| Piston rod thread        | M3                                           | M4 | M6                            | M8 | M10x1.25 | M10x1.25 |
| Stroke                   |                                              |    |                               |    |          |          |
| DPDM:...                 | 5, 10, 15, 20, 25, 30                        |    | 5, 10, 15, 20, 25, 30, 40, 50 |    |          |          |
| DPDM:...S/-P             | 5, 10, 15                                    |    |                               |    |          |          |
| Cushioning <sup>1)</sup> | Elastic cushioning rings/plates at both ends |    |                               |    |          |          |
| Position sensing         | Via proximity switch                         |    |                               |    |          |          |
| Type of mounting         | Via through-hole                             |    |                               |    |          |          |
|                          | With female thread                           |    |                               |    |          |          |
| Mounting position        | Any                                          |    |                               |    |          |          |

1) With piston diameter 6 in combination with the function "Single-acting, pushing", there is only cushioning at the bearing cap.

| Operating and environmental conditions       |                                        |                                                                                            |              |                                             |              |    |    |
|----------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------|--------------|---------------------------------------------|--------------|----|----|
| Piston Ø                                     |                                        | 6                                                                                          | 10           | 16                                          | 20           | 25 | 32 |
| Operating pressure                           |                                        |                                                                                            |              |                                             |              |    |    |
| DPDM-...                                     | [MPa]                                  | 0.18 ... 0.8                                                                               | 0.15 ... 0.8 |                                             | 0.1 ... 0.8  |    |    |
|                                              | [bar]                                  | 1.8 ... 8                                                                                  | 1.5 ... 8    |                                             | 1 ... 8      |    |    |
| DPDM-Q-...                                   | [MPa]                                  | 0.2 ... 0.8                                                                                | 0.15 ... 0.8 |                                             | 0.1 ... 0.8  |    |    |
|                                              | [bar]                                  | 2 ... 8                                                                                    | 1.5 ... 8    |                                             | 1 ... 8      |    |    |
| DPDM-...S/-P                                 | [MPa]                                  | 0.25 ... 0.8                                                                               | 0.2 ... 0.8  |                                             | 0.15 ... 0.8 |    |    |
|                                              | [bar]                                  | 2.5 ... 8                                                                                  | 2 ... 8      |                                             | 1.5 ... 8    |    |    |
| Operating medium                             |                                        | Compressed air to ISO 8573-1:2010 [7:4:4]                                                  |              |                                             |              |    |    |
| Note on the operating/pilot medium           |                                        | Lubricated operation possible (in which case lubricated operation will always be required) |              |                                             |              |    |    |
| Ambient temperature <sup>1)</sup>            |                                        |                                                                                            |              |                                             |              |    |    |
| DPDM-...                                     | [°C]                                   | -10 ... +80                                                                                |              |                                             |              |    |    |
| DPDM-...-T1                                  | [°C]                                   | -                                                                                          | 0 ... +120   |                                             |              |    |    |
| Corrosion resistance class CRC <sup>2)</sup> |                                        |                                                                                            |              |                                             |              |    |    |
| DPDM-...                                     | 1 - Low corrosion stress <sup>3)</sup> |                                                                                            |              |                                             |              |    |    |
|                                              | -                                      |                                                                                            |              | 2 - Moderate corrosion stress <sup>3)</sup> |              |    |    |
| DPDM-...-F1A                                 |                                        | 0 - no corrosion stress                                                                    |              |                                             |              |    |    |

1) Note operating range of proximity switches

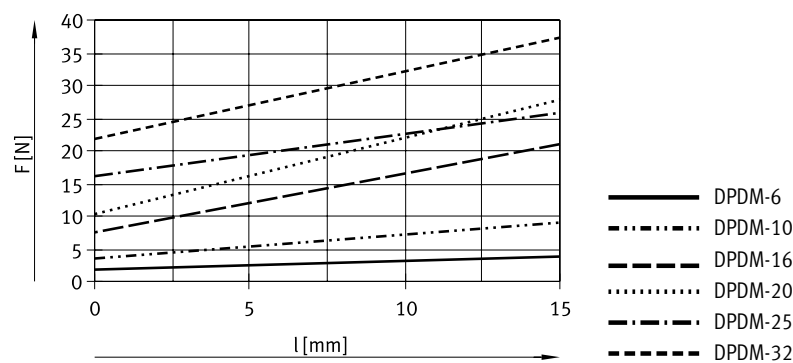
2) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

3) CRC1 or CRC2, depending on the respective configuration

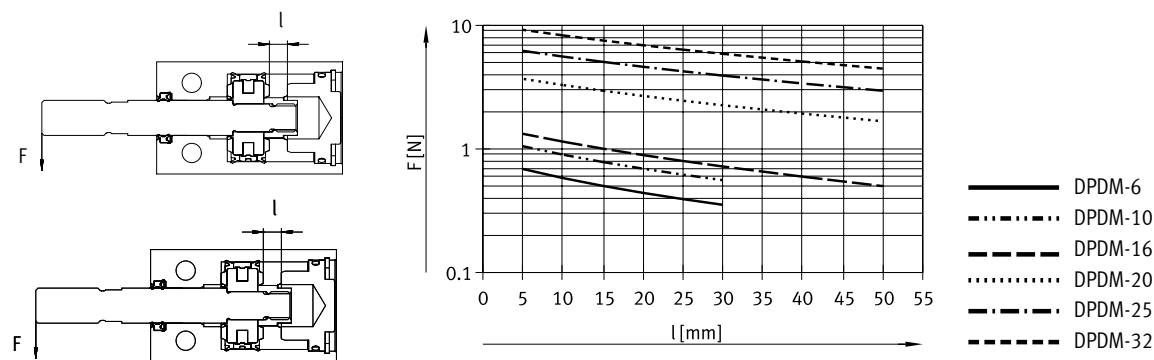
Datasheet

| Forces [N] and impact energy [J]                         |       |       |      |     |     |     |
|----------------------------------------------------------|-------|-------|------|-----|-----|-----|
| Piston Ø                                                 | 6     | 10    | 16   | 20  | 25  | 32  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advancing  |       |       |      |     |     |     |
| DPDM-...                                                 | 17    | 47    | 121  | 188 | 295 | 483 |
| DPDM-...-S                                               | 13    | 38    | 100  | 160 | 269 | 445 |
| DPDM-...-T/-H                                            | 13    | 40    | 104  | 158 | 247 | 415 |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting |       |       |      |     |     |     |
| DPDM-...                                                 | 13    | 40    | 104  | 158 | 247 | 415 |
| DPDM-...-P                                               | 9     | 31    | 93   | 130 | 221 | 377 |
| Max. impact energy in the end positions                  | 0.006 | 0.012 | 0.15 | 0.2 | 0.3 | 0.4 |

Theoretical spring force F as a function of stroke length l



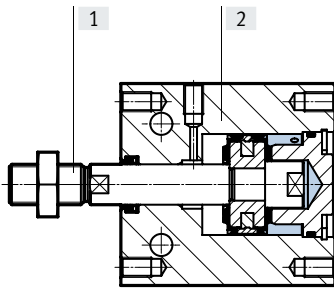
Max. lateral force F as a function of stroke length l



| Technical data – Protection against rotation     |        |       |      |      |       |      |
|--------------------------------------------------|--------|-------|------|------|-------|------|
| Piston Ø                                         | 6      | 10    | 16   | 20   | 25    | 32   |
| Max. torque at the piston rod <sup>1)</sup> [Nm] | 0.0015 | 0.005 | 0.01 | 0.01 | 0.015 | 0.02 |

1) The max. torque must not be exceeded even when attaching mounting components to the piston rod

## Datasheet



## Materials

## Sectional view

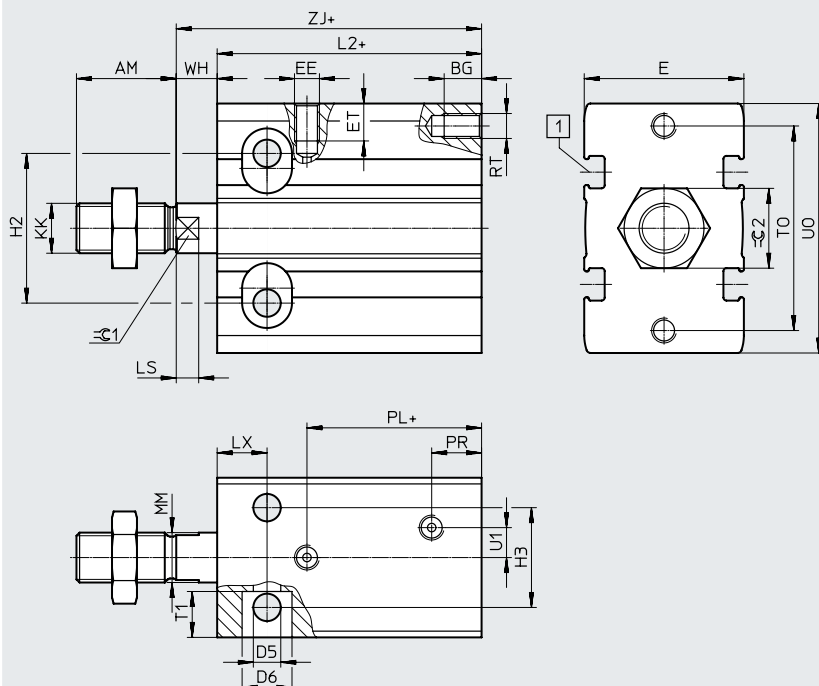
## Compact cylinder

|       |                        |                                                                                                                                                                                                                           |
|-------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [1]   | Housing                | Wrought aluminium alloy                                                                                                                                                                                                   |
| [2]   | Piston rod             | High-alloy stainless steel                                                                                                                                                                                                |
| Seals |                        |                                                                                                                                                                                                                           |
|       | DPDM-...               | NBR/TPE-U(PU)                                                                                                                                                                                                             |
|       | DPDM-...-T1            | HNBR/FKM                                                                                                                                                                                                                  |
|       | Note on materials      | RoHS-compliant                                                                                                                                                                                                            |
|       | Cleanroom class        | Class 6 to ISO 14644-1                                                                                                                                                                                                    |
|       | LABS (PWIS) conformity | VDMA24364-B2-L                                                                                                                                                                                                            |
|       | DPDM-...-F1A           | Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |

| Weight [g]                                                         |      |      |      |      |      |      |
|--------------------------------------------------------------------|------|------|------|------|------|------|
| Piston Ø                                                           | 6    | 10   | 16   | 20   | 25   | 32   |
| <b>Double-acting</b>                                               |      |      |      |      |      |      |
| <b>DPDM-...-PA</b>                                                 |      |      |      |      |      |      |
| Product weight with 0 mm stroke                                    | 20.7 | 30   | 66   | 128  | 205  | 307  |
| Additional weight per 10 mm stroke                                 | 6.3  | 7.5  | 13   | 22   | 33.5 | 51   |
| Moving mass with 0 mm stroke                                       | 2.8  | 6.3  | 18   | 34.5 | 58   | 85   |
| Moving mass per 10 mm stroke                                       | 0.6  | 1.0  | 2.3  | 4    | 6.5  | 9    |
| <b>DPDM-Q-...-PA – with protection against rotation</b>            |      |      |      |      |      |      |
| Product weight with 0 mm stroke                                    | 25.5 | 36.5 | 75   | 140  | 223  | 331  |
| Additional weight per 10 mm stroke                                 | 6.3  | 7.5  | 13.5 | 22.5 | 35   | 52.5 |
| Moving mass with 0 mm stroke                                       | 7.1  | 12.5 | 27   | 46   | 76   | 109  |
| Moving mass per 10 mm stroke                                       | 0.9  | 1.3  | 2.8  | 4.6  | 8    | 10.5 |
| <b>Single-acting</b>                                               |      |      |      |      |      |      |
| <b>DPDM-...-S-PA – pushing</b>                                     |      |      |      |      |      |      |
| Product weight with 0 mm stroke                                    | 21   | 30.5 | 66   | 117  | 192  | 310  |
| Additional weight per 10 mm stroke                                 | 6.3  | 7.5  | 13   | 22   | 33.5 | 51   |
| Moving mass with 0 mm stroke                                       | 3    | 6.8  | 18   | 34.5 | 58   | 85   |
| Moving mass per 10 mm stroke                                       | 0.6  | 1    | 2.3  | 4    | 6.5  | 9    |
| <b>DPDM-Q-...-S-PA – pushing, with protection against rotation</b> |      |      |      |      |      |      |
| Product weight with 0 mm stroke                                    | 25.5 | 37   | 75   | 129  | 210  | 334  |
| Additional weight per 10 mm stroke                                 | 6.3  | 7.5  | 13   | 22   | 35   | 52.5 |
| Moving mass with 0 mm stroke                                       | 7.5  | 13   | 27   | 46   | 76   | 109  |
| Moving mass per 10 mm stroke                                       | 0.9  | 1.3  | 2.8  | 4.6  | 8    | 10.5 |
| <b>DPDM-...-P-PA – pulling</b>                                     |      |      |      |      |      |      |
| Product weight with 0 mm stroke                                    | 21   | 30   | 66   | 128  | 208  | 310  |
| Additional weight per 10 mm stroke                                 | 6.3  | 7.5  | 13   | 22   | 33.5 | 51   |
| Moving mass with 0 mm stroke                                       | 3    | 7    | 18   | 34.5 | 58   | 85   |
| Moving mass per 10 mm stroke                                       | 0.6  | 1    | 2.3  | 4    | 6.5  | 9    |
| <b>DPDM-Q-...-P-PA – pulling, with protection against rotation</b> |      |      |      |      |      |      |
| Product weight with 0 mm stroke                                    | 25.5 | 36.5 | 75   | 140  | 226  | 334  |
| Additional weight per 10 mm stroke                                 | 6.3  | 7.5  | 13   | 22   | 35   | 52.5 |
| Moving mass with 0 mm stroke                                       | 7.5  | 13.5 | 27   | 46   | 76   | 109  |
| Moving mass per 10 mm stroke                                       | 0.9  | 1.3  | 2.8  | 4.6  | 8    | 10.5 |

## Datasheet

## Dimensions

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

[1] Sensor slot for proximity switch:  
 Ø 6 ... 20: SMT-10  
 Ø 25/32: SMT/SME-8

| Ø    | AM | BG  | D5<br>Ø | D6  | E<br>+0.3 | EE   | ET  | H2 |
|------|----|-----|---------|-----|-----------|------|-----|----|
| [mm] |    |     |         |     |           |      |     |    |
| 6    | 7  | 5   | 3.2     | 6   | 13        | M5   | 4   | 10 |
| 10   | 10 | 5   | 3.2     | 6   | 15        | M5   | 4.5 | 13 |
| 16   | 12 | 6   | 4.3     | 7.5 | 20        | M5   | 4.5 | 19 |
| 20   | 16 | 7.5 | 5.5     | 10  | 26        | M5   | 6   | 24 |
| 25   | 20 | 7.5 | 5.5     | 10  | 32        | M5   | 7.5 | 30 |
| 32   | 20 | 9   | 6.6     | 11  | 40        | G1/8 | 8.5 | 40 |

| Ø    | H3 | KK       | L2 | LS<br>-0.1 | LX | MM<br>Ø | PL   | PR  |
|------|----|----------|----|------------|----|---------|------|-----|
| [mm] |    |          |    |            |    |         |      |     |
| 6    | 7  | M3       | 33 | —          | 7  | 3       | 17.5 | 9.5 |
| 10   | 9  | M4       | 35 | —          | 7  | 4       | 19.5 | 9.5 |
| 16   | 13 | M6       | 40 | 3          | 7  | 6       | 24.1 | 11  |
| 20   | 16 | M8       | 46 | 4          | 9  | 8       | 26.5 | 11  |
| 25   | 20 | M10x1.25 | 48 | 4.5        | 10 | 10      | 30   | 10  |
| 32   | 24 | M10x1.25 | 48 | 4.5        | 11 | 12      | 27   | 11  |

| Ø    | RT | T1  | T0 | U1 | U0 | WH <sup>1)</sup> | ZJ | ⌀1<br>h13 | ⌀2  |
|------|----|-----|----|----|----|------------------|----|-----------|-----|
| [mm] |    |     |    |    |    |                  |    |           |     |
| 6    | M3 | 5   | 17 | —  | 22 | 2                | 35 | —         | 5.5 |
| 10   | M3 | 5   | 19 | —  | 24 | 2                | 37 | —         | 7   |
| 16   | M4 | 6   | 27 | —  | 32 | 5                | 45 | 5         | 10  |
| 20   | M5 | 8.2 | 33 | 6  | 40 | 6                | 52 | 7         | 13  |
| 25   | M5 | 9.2 | 41 | 6  | 50 | 7                | 55 | 9         | 17  |
| 32   | M6 | 12  | 52 | 9  | 62 | 8                | 56 | 10        | 17  |

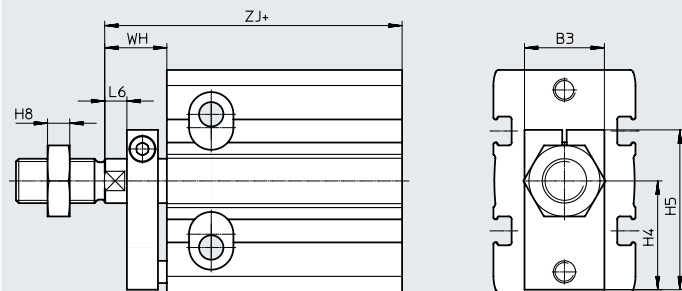
1) WH is measured when the piston rod is in the end position

## Datasheet

## Dimensions – Variants

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

Q – with protection against rotation

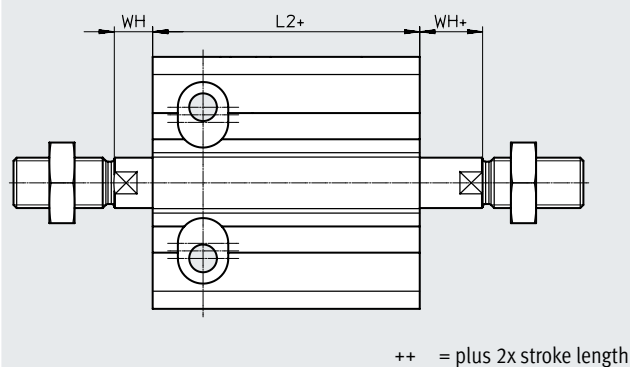


+ = plus stroke length

| ∅<br>[mm] | B3 | H4   | H5   | H8  | L6 | WH | ZJ |
|-----------|----|------|------|-----|----|----|----|
| 6         | 11 | 10.5 | 17.5 | 1.8 | –  | 9  | 42 |
| 10        | 14 | 11.5 | 19.5 | 2.2 | –  | 9  | 44 |
| 16        | 15 | 15.5 | 24   | 3.2 | 3  | 12 | 52 |
| 20        | 15 | 19.5 | 29   | 4   | 4  | 13 | 59 |
| 25        | 18 | 24.5 | 36   | 5   | 5  | 14 | 62 |
| 32        | 20 | 30.5 | 45   | 5   | 6  | 15 | 63 |

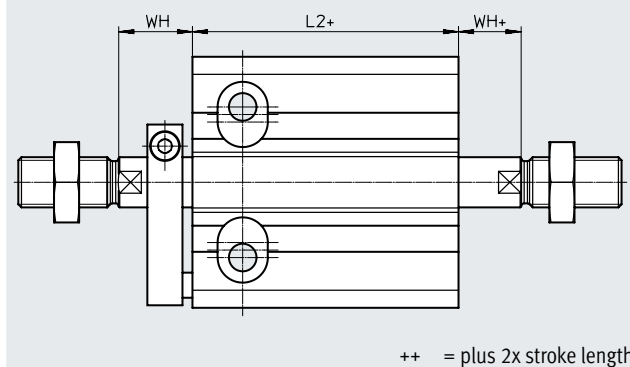
T – Through piston rod

DPDM- ... -T



++ = plus 2x stroke length

DPDM-Q- ... -T



++ = plus 2x stroke length

| ∅<br>[mm] | L2 | WH | WH+ |
|-----------|----|----|-----|
| 6         | 33 | 2  | 2   |
| 10        | 35 | 2  | 2   |
| 16        | 40 | 5  | 5   |
| 20        | 46 | 6  | 6   |
| 25        | 48 | 7  | 7   |
| 32        | 48 | 8  | 8   |

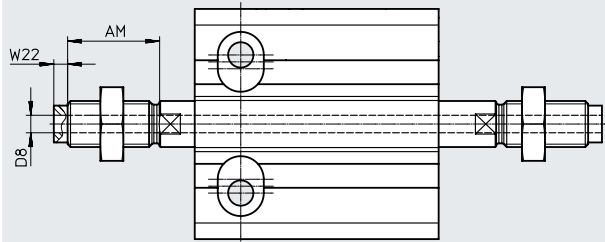
| ∅<br>[mm] | L2 | WH | WH+ |
|-----------|----|----|-----|
| 6         | 33 | 9  | 2   |
| 10        | 35 | 9  | 2   |
| 16        | 40 | 12 | 5   |
| 20        | 46 | 13 | 6   |
| 25        | 48 | 14 | 7   |
| 32        | 48 | 15 | 8   |

Datasheet

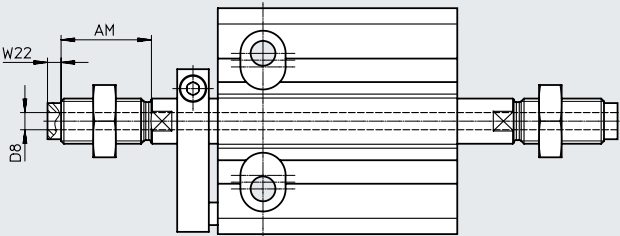
Dimensions – Variants

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

H – Through, hollow piston rod  
DPDM- ... -H



DPDM-Q- ... -H



++

= plus 2x stroke length

| ∅<br>[mm] | AM | D8<br>∅ | W22 |
|-----------|----|---------|-----|
| 16        | 12 | 2.3     | 3   |
| 20        | 16 | 3.2     | 2   |
| 25        | 20 | 3.8     | 3   |
| 32        | 20 | 4.5     | 3   |

## Datasheet

## Ordering data – Double-acting

| Type                                                                              | Piston ø<br>[mm] | Stroke<br>[mm] | Without protection against torsion |               | With protection against rotation |                 |
|-----------------------------------------------------------------------------------|------------------|----------------|------------------------------------|---------------|----------------------------------|-----------------|
|                                                                                   |                  |                | Part no.                           | Type          | Part no.                         | Type            |
|  | 6                | 5              | 4830900                            | DPDM-6-5-PA   | 4830961                          | DPDM-Q-6-5-PA   |
|                                                                                   |                  | 10             | 4830901                            | DPDM-6-10-PA  | 4830962                          | DPDM-Q-6-10-PA  |
|                                                                                   |                  | 15             | 4830902                            | DPDM-6-15-PA  | 4830963                          | DPDM-Q-6-15-PA  |
|                                                                                   |                  | 20             | 4830903                            | DPDM-6-20-PA  | 4830964                          | DPDM-Q-6-20-PA  |
|                                                                                   |                  | 25             | 4830904                            | DPDM-6-25-PA  | 4830965                          | DPDM-Q-6-25-PA  |
|                                                                                   |                  | 30             | 4830905                            | DPDM-6-30-PA  | 4830966                          | DPDM-Q-6-30-PA  |
|                                                                                   | 10               | 5              | 4831868                            | DPDM-10-5-PA  | 4832286                          | DPDM-Q-10-5-PA  |
|                                                                                   |                  | 10             | 4831869                            | DPDM-10-10-PA | 4832288                          | DPDM-Q-10-10-PA |
|                                                                                   |                  | 15             | 4831870                            | DPDM-10-15-PA | 4832290                          | DPDM-Q-10-15-PA |
|                                                                                   |                  | 20             | 4831872                            | DPDM-10-20-PA | 4832292                          | DPDM-Q-10-20-PA |
|                                                                                   |                  | 25             | 4831873                            | DPDM-10-25-PA | 4832294                          | DPDM-Q-10-25-PA |
|                                                                                   |                  | 30             | 4831874                            | DPDM-10-30-PA | 4832296                          | DPDM-Q-10-30-PA |
|                                                                                   | 16               | 5              | 4833185                            | DPDM-16-5-PA  | 4834260                          | DPDM-Q-16-5-PA  |
|                                                                                   |                  | 10             | 4833186                            | DPDM-16-10-PA | 4834261                          | DPDM-Q-16-10-PA |
|                                                                                   |                  | 15             | 4833187                            | DPDM-16-15-PA | 4834262                          | DPDM-Q-16-15-PA |
|                                                                                   |                  | 20             | 4833188                            | DPDM-16-20-PA | 4834263                          | DPDM-Q-16-20-PA |
|                                                                                   |                  | 25             | 4833189                            | DPDM-16-25-PA | 4834264                          | DPDM-Q-16-25-PA |
|                                                                                   |                  | 30             | 4833190                            | DPDM-16-30-PA | 4834265                          | DPDM-Q-16-30-PA |
|                                                                                   |                  | 40             | 4833191                            | DPDM-16-40-PA | 4834266                          | DPDM-Q-16-40-PA |
|                                                                                   |                  | 40             | 4833192                            | DPDM-16-50-PA | 4834267                          | DPDM-Q-16-50-PA |
|                                                                                   | 20               | 5              | 4840799                            | DPDM-20-5-PA  | 4840813                          | DPDM-Q-20-5-PA  |
|                                                                                   |                  | 10             | 4840800                            | DPDM-20-10-PA | 4840814                          | DPDM-Q-20-10-PA |
|                                                                                   |                  | 15             | 4840801                            | DPDM-20-15-PA | 4840815                          | DPDM-Q-20-15-PA |
|                                                                                   |                  | 20             | 4840802                            | DPDM-20-20-PA | 4840816                          | DPDM-Q-20-20-PA |
|                                                                                   |                  | 25             | 4840803                            | DPDM-20-25-PA | 4840817                          | DPDM-Q-20-25-PA |
|                                                                                   |                  | 30             | 4840804                            | DPDM-20-30-PA | 4840818                          | DPDM-Q-20-30-PA |
|                                                                                   |                  | 40             | 4840805                            | DPDM-20-40-PA | 4840819                          | DPDM-Q-20-40-PA |
|                                                                                   |                  | 50             | 4840806                            | DPDM-20-50-PA | 4840820                          | DPDM-Q-20-50-PA |
|                                                                                   | 25               | 5              | 4829570                            | DPDM-25-5-PA  | 4840824                          | DPDM-Q-25-5-PA  |
|                                                                                   |                  | 10             | 4829571                            | DPDM-25-10-PA | 4840825                          | DPDM-Q-25-10-PA |
|                                                                                   |                  | 15             | 4829572                            | DPDM-25-15-PA | 4840826                          | DPDM-Q-25-15-PA |
|                                                                                   |                  | 20             | 4829573                            | DPDM-25-20-PA | 4840827                          | DPDM-Q-25-20-PA |
|                                                                                   |                  | 25             | 4829574                            | DPDM-25-25-PA | 4840828                          | DPDM-Q-25-25-PA |
|                                                                                   |                  | 30             | 4829575                            | DPDM-25-30-PA | 4840829                          | DPDM-Q-25-30-PA |
|                                                                                   |                  | 40             | 4829576                            | DPDM-25-40-PA | 4840830                          | DPDM-Q-25-40-PA |
|                                                                                   |                  | 50             | 4829577                            | DPDM-25-50-PA | 4840831                          | DPDM-Q-25-50-PA |
|                                                                                   | 32               | 5              | 4828435                            | DPDM-32-5-PA  | 4828465                          | DPDM-Q-32-5-PA  |
|                                                                                   |                  | 10             | 4828436                            | DPDM-32-10-PA | 4828466                          | DPDM-Q-32-10-PA |
|                                                                                   |                  | 15             | 4828437                            | DPDM-32-15-PA | 4828467                          | DPDM-Q-32-15-PA |
|                                                                                   |                  | 20             | 4828438                            | DPDM-32-20-PA | 4828468                          | DPDM-Q-32-20-PA |
|                                                                                   |                  | 25             | 4828439                            | DPDM-32-25-PA | 4828469                          | DPDM-Q-32-25-PA |
|                                                                                   |                  | 30             | 4828440                            | DPDM-32-30-PA | 4828470                          | DPDM-Q-32-30-PA |
|                                                                                   |                  | 40             | 4828441                            | DPDM-32-40-PA | 4828471                          | DPDM-Q-32-40-PA |
|                                                                                   |                  | 50             | 4828442                            | DPDM-32-50-PA | 4828472                          | DPDM-Q-32-50-PA |

## Datasheet

| Ordering data – Single-acting – Pushing                                          |                  |                |                                    |                 |                                  |                   |
|----------------------------------------------------------------------------------|------------------|----------------|------------------------------------|-----------------|----------------------------------|-------------------|
| Type                                                                             | Piston ø<br>[mm] | Stroke<br>[mm] | Without protection against torsion |                 | With protection against rotation |                   |
|                                                                                  |                  |                | Part no.                           | Type            | Part no.                         | Type              |
|  | 6                | 5              | 4830909                            | DPDM-6-5-S-PA   | 4830970                          | DPDM-Q-6-5-S-PA   |
|                                                                                  |                  | 10             | 4830910                            | DPDM-6-10-S-PA  | 4830971                          | DPDM-Q-6-10-S-PA  |
|                                                                                  |                  | 15             | 4830911                            | DPDM-6-15-S-PA  | 4830972                          | DPDM-Q-6-15-S-PA  |
|                                                                                  | 10               | 5              | 4832116                            | DPDM-10-5-S-PA  | 4833119                          | DPDM-Q-10-5-S-PA  |
|                                                                                  |                  | 10             | 4832117                            | DPDM-10-10-S-PA | 4833120                          | DPDM-Q-10-10-S-PA |
|                                                                                  |                  | 15             | 4832118                            | DPDM-10-15-S-PA | 4833121                          | DPDM-Q-10-15-S-PA |
|                                                                                  | 16               | 5              | 4833272                            | DPDM-16-5-S-PA  | 4834367                          | DPDM-Q-16-5-S-PA  |
|                                                                                  |                  | 10             | 4833273                            | DPDM-16-10-S-PA | 4834368                          | DPDM-Q-16-10-S-PA |
|                                                                                  |                  | 15             | 4833274                            | DPDM-16-15-S-PA | 4834369                          | DPDM-Q-16-15-S-PA |
|                                                                                  | 20               | 5              | 4840807                            | DPDM-20-5-S-PA  | 4840821                          | DPDM-Q-20-5-S-PA  |
|                                                                                  |                  | 10             | 4840808                            | DPDM-20-10-S-PA | 4840822                          | DPDM-Q-20-10-S-PA |
|                                                                                  |                  | 15             | 4840809                            | DPDM-20-15-S-PA | 4840823                          | DPDM-Q-20-15-S-PA |
|                                                                                  | 25               | 5              | 4829799                            | DPDM-25-5-S-PA  | 4840835                          | DPDM-Q-25-5-S-PA  |
|                                                                                  |                  | 10             | 4829800                            | DPDM-25-10-S-PA | 4840836                          | DPDM-Q-25-10-S-PA |
|                                                                                  |                  | 15             | 4829801                            | DPDM-25-15-S-PA | 4840837                          | DPDM-Q-25-15-S-PA |
|                                                                                  | 32               | 5              | 4828428                            | DPDM-32-5-S-PA  | 4828490                          | DPDM-Q-32-5-S-PA  |
|                                                                                  |                  | 10             | 4828429                            | DPDM-32-10-S-PA | 4828491                          | DPDM-Q-32-10-S-PA |
|                                                                                  |                  | 15             | 4828430                            | DPDM-32-15-S-PA | 4828492                          | DPDM-Q-32-15-S-PA |

| Ordering data – Single-acting – Pulling                                            |                  |                |                                    |                 |                                  |                   |
|------------------------------------------------------------------------------------|------------------|----------------|------------------------------------|-----------------|----------------------------------|-------------------|
| Type                                                                               | Piston ø<br>[mm] | Stroke<br>[mm] | Without protection against torsion |                 | With protection against rotation |                   |
|                                                                                    |                  |                | Part no.                           | Type            | Part no.                         | Type              |
|  | 6                | 5              | 4830946                            | DPDM-6-5-P-PA   | 4830974                          | DPDM-Q-6-5-P-PA   |
|                                                                                    |                  | 10             | 4830947                            | DPDM-6-10-P-PA  | 4830975                          | DPDM-Q-6-10-P-PA  |
|                                                                                    |                  | 15             | 4830948                            | DPDM-6-15-P-PA  | 4830976                          | DPDM-Q-6-15-P-PA  |
|                                                                                    | 10               | 5              | 4832170                            | DPDM-10-5-P-PA  | 4833140                          | DPDM-Q-10-5-P-PA  |
|                                                                                    |                  | 10             | 4832171                            | DPDM-10-10-P-PA | 4833141                          | DPDM-Q-10-10-P-PA |
|                                                                                    |                  | 15             | 4832172                            | DPDM-10-15-P-PA | 4833142                          | DPDM-Q-10-15-P-PA |
|                                                                                    | 16               | 5              | 4833321                            | DPDM-16-5-P-PA  | 4834380                          | DPDM-Q-16-5-P-PA  |
|                                                                                    |                  | 10             | 4833322                            | DPDM-16-10-P-PA | 4834381                          | DPDM-Q-16-10-P-PA |
|                                                                                    |                  | 15             | 4833323                            | DPDM-16-15-P-PA | 4834382                          | DPDM-Q-16-15-P-PA |
|                                                                                    | 20               | 5              | 4840810                            | DPDM-20-5-P-PA  | 4840832                          | DPDM-Q-20-5-P-PA  |
|                                                                                    |                  | 10             | 4840811                            | DPDM-20-10-P-PA | 4840833                          | DPDM-Q-20-10-P-PA |
|                                                                                    |                  | 15             | 4840812                            | DPDM-20-15-P-PA | 4840834                          | DPDM-Q-20-15-P-PA |
|                                                                                    | 25               | 5              | 4829866                            | DPDM-25-5-P-PA  | 4840838                          | DPDM-Q-25-5-P-PA  |
|                                                                                    |                  | 10             | 4829867                            | DPDM-25-10-P-PA | 4840839                          | DPDM-Q-25-10-P-PA |
|                                                                                    |                  | 15             | 4829868                            | DPDM-25-15-P-PA | 4840840                          | DPDM-Q-25-15-P-PA |
|                                                                                    | 32               | 5              | 4829129                            | DPDM-32-5-P-PA  | 4828499                          | DPDM-Q-32-5-P-PA  |
|                                                                                    |                  | 10             | 4829130                            | DPDM-32-10-P-PA | 4828500                          | DPDM-Q-32-10-P-PA |
|                                                                                    |                  | 15             | 4829131                            | DPDM-32-15-P-PA | 4828501                          | DPDM-Q-32-15-P-PA |

## Ordering data – Modular product system

| Ordering data               |                                                                      | 6                                      | 10                    | 16                            | 20                            | 25                            | 32                            | Conditions | Code | Enter code |
|-----------------------------|----------------------------------------------------------------------|----------------------------------------|-----------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------|------|------------|
| Module no.                  |                                                                      | 4674228                                | 4693549               | 4186566                       | 4654766                       | 4328892                       | 4650681                       |            |      |            |
| Function                    | Compact cylinder                                                     |                                        |                       |                               |                               |                               |                               |            | DPDM | DPDM       |
| Protection against rotation | None                                                                 |                                        |                       |                               |                               |                               |                               |            |      |            |
|                             | With protection against rotation                                     |                                        |                       |                               |                               |                               |                               |            | -Q   |            |
| Piston Ø                    | [mm]                                                                 | 6                                      | 10                    | 16                            | 20                            | 25                            | 32                            |            | -... |            |
| Stroke                      | [mm]                                                                 | 5, 10, 15, 20, 25, 30                  | 5, 10, 15, 20, 25, 30 | 5, 10, 15, 20, 25, 30, 40, 50 | 5, 10, 15, 20, 25, 30, 40, 50 | 5, 10, 15, 20, 25, 30, 40, 50 | 5, 10, 15, 20, 25, 30, 40, 50 |            | -... |            |
| Function                    | Double-acting                                                        |                                        |                       |                               |                               |                               |                               |            |      |            |
|                             | Single-acting, pulling                                               |                                        |                       |                               |                               |                               |                               | [1]        | -P   |            |
|                             | Single-acting, pushing                                               |                                        |                       |                               |                               |                               |                               | [1]        | -S   |            |
| Piston rod type             | On one side                                                          |                                        |                       |                               |                               |                               |                               |            |      |            |
|                             | –                                                                    | Through, hollow piston rod             |                       |                               |                               |                               |                               | [2]        | H    |            |
|                             | Through piston rod                                                   |                                        |                       |                               |                               |                               |                               | [2]        | T    |            |
| Cushioning                  | Elastic cushioning rings/plates at both ends                         |                                        |                       |                               |                               |                               |                               |            | -P   | -P         |
| Position sensing            | Via proximity switch                                                 |                                        |                       |                               |                               |                               |                               |            | A    | A          |
| Temperature range           | Standard                                                             |                                        |                       |                               |                               |                               |                               |            |      |            |
|                             | –                                                                    | Heat-resistant seals up to max. 120 °C |                       |                               |                               |                               |                               | [2] [3]    | -T1  |            |
| Special material properties | None                                                                 |                                        |                       |                               |                               |                               |                               |            |      |            |
|                             | Recommended for production plants for manufacturing Li-ion batteries |                                        |                       |                               |                               |                               |                               | [4]        | F1A  |            |

[1] P, S Only with stroke 5, 10, 15 mm

[2] H, T, T1 Not with P, S

[3] T1 Not with H, T

[4] F1A Not with P, S, T1

## Accessories

| Ordering data – Piston rod attachments                                           |       |          |              | Datasheets → Internet: piston rod attachment                                      |       |          |                 |  |
|----------------------------------------------------------------------------------|-------|----------|--------------|-----------------------------------------------------------------------------------|-------|----------|-----------------|--|
| Designation                                                                      | For ø | Part no. | Type         | Designation                                                                       | For ø | Part no. | Type            |  |
| Rod eye SGS                                                                      |       |          |              | Self-aligning rod coupler FK                                                      |       |          |                 |  |
|  | 10    | 9253     | SGS-M4       |  | 10    | 6528     | FK-M4           |  |
|                                                                                  | 16    | 9254     | SGS-M6       |                                                                                   | 16    | 2061     | FK-M6           |  |
|                                                                                  | 20    | 9255     | SGS-M8       |                                                                                   | 20    | 2062     | FK-M8           |  |
|                                                                                  | 25    | 9261     | SGS-M10x1.25 |                                                                                   | 25    | 6140     | FK-M10x1.25     |  |
|                                                                                  | 32    |          |              |                                                                                   | 32    |          |                 |  |
| Rod clevis SG                                                                    |       |          |              | Adapter AD                                                                        |       |          |                 |  |
|  | 10    | 6532     | SG-M4        |  | 10    | –        | –               |  |
|                                                                                  | 16    | 3110     | SG-M6        |                                                                                   | 16    | 157328   | AD-M6-M5        |  |
|                                                                                  | 20    | 3111     | SG-M8        |                                                                                   |       | 157329   | AD-M6-1/8       |  |
|                                                                                  | 25    | 6144     | SG-M10x1.25  |                                                                                   | 20    | 157331   | AD-M8-1/8       |  |
|                                                                                  | 32    | 6144     | SG-M10x1.25  |                                                                                   |       | 157332   | AD-M8-1/4       |  |
|                                                                                  |       |          |              |                                                                                   | 25    | 157333   | AD-M10x1.25-1/8 |  |
|                                                                                  |       |          |              |                                                                                   |       | 157334   | AD-M10x1.25-1/4 |  |
|                                                                                  |       |          |              |                                                                                   | 32    | 157333   | AD-M10x1.25-1/8 |  |
|                                                                                  |       |          |              |                                                                                   |       | 157334   | AD-M10x1.25-1/4 |  |
|                                                                                  |       |          |              |                                                                                   |       |          |                 |  |

| Ordering data – One-way flow control valves                                       |                   |            |                 |               | Datasheets → Internet: grl |                    |
|-----------------------------------------------------------------------------------|-------------------|------------|-----------------|---------------|----------------------------|--------------------|
|                                                                                   | For Ø             | Connection |                 | Weight<br>[g] | Part no.                   | Type               |
|                                                                                   |                   | Thread     | For tubing O.D. |               |                            |                    |
| For exhaust air                                                                   |                   |            |                 |               |                            |                    |
|  | 6, 10, 16, 20, 25 | M5         | 4               | 13            | 193138                     | GRLA-M5-QS-4-D     |
|                                                                                   |                   |            | 6               | 13            | 193139                     | GRLA-M5-QS-6-D     |
|                                                                                   |                   |            | 4               | 14            | 197577                     | GRLA-M5-QS-4-RS-D  |
|                                                                                   |                   |            | 6               | 14            | 197578                     | GRLA-M5-QS-6-RS-D  |
|                                                                                   | 32                | G1/8       | 3               | 22            | 193144                     | GRLA-1/8-QS-6-D    |
|                                                                                   |                   |            | 4               | 22            | 193145                     | GRLA-1/8-QS-8-D    |
|                                                                                   |                   |            | 6               | 23            | 197581                     | GRLA-1/8-QS-6-RS-D |
|                                                                                   |                   |            | 8               | 24            | 534337                     | GRLA-1/8-QS-8-RS-D |

| Ordering data – Push-in fittings                                                   |                   |            |                 |               |                           |           |                  |
|------------------------------------------------------------------------------------|-------------------|------------|-----------------|---------------|---------------------------|-----------|------------------|
|                                                                                    | For Ø             | Connection |                 | Weight<br>[g] | Part no.                  | Type      | PU <sup>1)</sup> |
|                                                                                    |                   | Thread     | For tubing O.D. |               |                           |           |                  |
| Standard                                                                           |                   |            |                 |               | Datasheets → Internet: qs |           |                  |
|  | 6, 10, 16, 20, 25 | M5         | 3               | 3.4           | 153302                    | QSM-M5-3  | 10               |
|                                                                                    |                   |            | 4               | 3.2           | 153304                    | QSM-M5-4  |                  |
|                                                                                    |                   |            | 6               | 4.5           | 153306                    | QSM-M5-6  |                  |
|  | 6, 10, 16, 20, 25 | M5         | 4               | 3.4           | 153333                    | QSML-M5-4 |                  |
|                                                                                    |                   |            | 6               | 4.1           | 153335                    | QSML-M5-6 |                  |
|                                                                                    |                   |            |                 |               |                           |           |                  |
|  | 32                | G1/8       | 6               | 8.2           | 153002                    | QS-1/8-6  |                  |
|                                                                                    |                   |            | 8               | 14            | 153004                    | QS-1/8-8  |                  |
|                                                                                    |                   |            |                 |               |                           |           |                  |
|  | 32                | G1/8       | 6               | 11            | 153046                    | QSL-1/8-6 |                  |
|                                                                                    |                   |            | 8               | 14            | 153048                    | QSL-1/8-8 |                  |

## Accessories

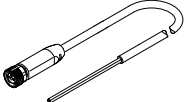
## Proximity switches for piston diameter 6 ... 20

| Ordering data – Proximity switch for C-slot, magneto-resistive                    |                                                                                |                  |                       |                  |          |                            | Datasheets → Internet: smt |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------|-----------------------|------------------|----------|----------------------------|----------------------------|
|                                                                                   | Type of mounting                                                               | Switching output | Electrical connection | Cable length [m] | Part no. | Type                       |                            |
| N/O                                                                               |                                                                                |                  |                       |                  |          |                            |                            |
|  | Inserted in the slot from above, flush with the cylinder profile, short design | PNP              | Cable, 3-core         | 2.5 m            | 551373   | SMT-10M-PS-24V-E-2.5-L-OE  |                            |
|                                                                                   |                                                                                | PNP              | 1x M8 plug, 3-pin     | 0.3 m            | 551375   | SMT-10M-PS-24V-E-0.3-L-M8D |                            |
|                                                                                   |                                                                                | NPN              | Cable, 3-core         | 2.5 m            | 551377   | SMT-10M-NS-24V-E-2.5-L-OE  |                            |
|                                                                                   |                                                                                | NPN              | 1x M8 plug, 3-pin     | 0.3 m            | 551379   | SMT-10M-NS-24V-E-0.3-L-M8D |                            |

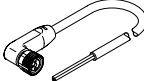
## Proximity switches for piston diameter 25/32

| Ordering data – Proximity switch for T-slot, magneto-resistive                    |                                                                                |                   |                       |                  |          | Datasheets → Internet: smt |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------|-----------------------|------------------|----------|----------------------------|
|                                                                                   | Type of mounting                                                               | Switching out-put | Electrical connection | Cable length [m] | Part no. | Type                       |
| N/O                                                                               |                                                                                |                   |                       |                  |          |                            |
|  | Inserted in the slot from above, flush with the cylinder profile, short design | PNP               | Cable, 3-core         | 2.5              | 574335   | SMT-8M-A-PS-24V-E-2.5-OE   |
|                                                                                   |                                                                                |                   | Plug M8x1, 3-pin      | 0.3              | 574334   | SMT-8M-A-PS-24V-E-0.3-M8D  |
|                                                                                   |                                                                                | NPN               | Cable, 3-core         | 2.5              | 574338   | SMT-8M-A-NS-24V-E-2.5-OE   |
|                                                                                   |                                                                                |                   | 1x M8 plug, 3-pin     | 0.3              | 574339   | SMT-8M-A-NS-24V-E-0.3-M8D  |
| N/C                                                                               |                                                                                |                   |                       |                  |          |                            |
|  | Inserted in the slot from above, flush with the cylinder profile, short design | PNP               | Cable, 3-core         | 7.5              | 574340   | SMT-8M-A-PO-24V-E-7.5-OE   |

## Connecting cables NEBA, straight, M8 connection

|                                                                                     | Electrical connection 1, connection technology | Electrical connection 2, connection technology | Electrical connection 2, number of pins/cores | Cable length | Part no. | Type                  |
|-------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------|-----------------------------------------------|--------------|----------|-----------------------|
|  | M8x1 A-coded to EN 61076-2-104                 | Open end                                       | 3                                             | 2.5 m        | 8078223  | NEBA-M8G3-U-2.5-N-LE3 |
|                                                                                     |                                                |                                                |                                               | 5 m          | 8078224  | NEBA-M8G3-U-5-N-LE3   |

## Connecting cables NEBA, angled, M8 connection

|                                                                                     | Electrical connection 1, connection technology | Electrical connection 2, connection technology | Electrical connection 2, number of pins/cores | Cable length | Part no. | Type                  |
|-------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------|-----------------------------------------------|--------------|----------|-----------------------|
|  | M8x1 A-coded to EN 61076-2-104                 | Open end                                       | 3                                             | 2.5 m        | 8078230  | NEBA-M8W3-U-2.5-N-LE3 |
|                                                                                     |                                                |                                                |                                               | 5 m          | 8078231  | NEBA-M8W3-U-5-N-LE3   |

## Accessories

For variant DPDM-...-T1, temperature range 0 ... +120 °C

## Ordering data – One-way flow control valves

Datasheets → Internet: vfoh

|                                                                                  | For Ø | Connection |                 | Weight<br>[g] | Part no. | Type             |
|----------------------------------------------------------------------------------|-------|------------|-----------------|---------------|----------|------------------|
|                                                                                  |       | Thread     | For tubing O.D. |               |          |                  |
|  | 32    | G1/8       | 4               | 23            | 578797   | VFOH-LE-A-G18-Q4 |
|                                                                                  |       |            | 6               | 23            | 578798   | VFOH-LE-A-G18-Q6 |

## Ordering data – Push-in fittings

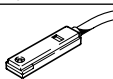
Datasheets → Internet: crqs

|                                                                                  | For ø             | Connection |                 | Weight<br>[g] | Part no. | Type                     |
|----------------------------------------------------------------------------------|-------------------|------------|-----------------|---------------|----------|--------------------------|
|                                                                                  |                   | Thread     | For tubing O.D. |               |          |                          |
| Stainless steel                                                                  |                   |            |                 |               |          |                          |
|  | 6, 10, 16, 20, 25 | M5         | 4               | 6.0           | 162860   | CRQS-M5-4 <sup>1)</sup>  |
|                                                                                  |                   |            | 6               | 8.4           | 162861   | CRQS-M5-6 <sup>1)</sup>  |
|  | 6, 10, 16, 20, 25 | M5         | 4               | 12            | 162870   | CRQSL-M5-4 <sup>1)</sup> |
|                                                                                  |                   |            | 6               | 18            | 162871   | CRQSL-M5-6 <sup>1)</sup> |
|  | 32                | R1/8       | 6               | 9.9           | 162862   | CRQS-1/8-6               |
|                                                                                  |                   |            | 8               | 12            | 162863   | CRQS-1/8-8               |
|  | 32                | R1/8       | 6               | 19            | 162872   | CRQSL-1/8-6              |
|                                                                                  |                   |            | 8               | 26            | 162873   | CRQSL-1/8-8              |

1) With sealing ring

## Ordering data – Proximity switch for T-slot, magnetic reed

Datasheets → Internet: sme

|                                                                                    | Type of mounting           | Switching output    | Electrical connection | Cable length<br>[m] | Part no. | Type          |
|------------------------------------------------------------------------------------|----------------------------|---------------------|-----------------------|---------------------|----------|---------------|
| <b>N/O</b>                                                                         |                            |                     |                       |                     |          |               |
|  | Heat resistant up to 120°C | Contacting, bipolar | Cable, 2-core         | 2.5                 | 161756   | SME-8-K-24-S6 |