Swivel modules DSM/DSM-B
Swivel modules DSM/DSM-B

Key features

At a glance
- Double-acting swivel module with rotary vanes
- The swivel angle is infinitely adjustable over the entire swivel range
- High precision thanks to metal fixed stops
- Polyurethane ensures a long service life for the rotary vane and sealing system
- Easy precision adjustment of the end positions using the cushioning components
- The mechanical gearing between the stop element and the swivel module prevents movement of the stop system under load
- Torques of up to 80 Nm with tandem rotary vanes in combination with multi-tooth shaft

The technology in detail

Size 6 ... 10

Interface
- Choice of:
  - Spigot shaft
  - Flanged shaft

Wide range of mounting options

Cushioning with size 6 ... 10:
- Elastic cushioning components with metal fixed stop (P)

Cushioning with size 12 ... 63:
- Three cushioning types, with metal fixed stop:
  - Elastic cushioning components (P)
  - Adjustable, elastic cushioning components (P1)
  - Hydraulic shock absorbers (CC)

Position sensing
- With size 6 ... 10:
  - SME/SMT-10
- With size 12 ... 40:
  - SME/SMT-10 or SIEN
- With size 63:
  - SME/SMT-8

Precision end-position adjustment
- Very precise adjustment of the end positions is possible by moving the stops

Angle scale
- The required swivel angle can be easily preset using the scale

Cover cap
- The cover cap prevents unwanted interference in the swivel motion and reduces the risk of injury

Size 12 ... 63
Swivel modules DSM/DSM-B

Key features

<table>
<thead>
<tr>
<th>Wide choice of variants</th>
<th>DSM-T-...: Swivel module with tandem rotary vanes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The arrangement of two rotary vanes on the multi-tooth shaft enables torques of up to 80 Nm to be achieved. The functionality is the same as that of the DSM without tandem rotary vanes:</td>
</tr>
<tr>
<td></td>
<td>• Infinitely adjustable swivel angle</td>
</tr>
<tr>
<td></td>
<td>• Identical interfaces</td>
</tr>
<tr>
<td></td>
<td>• Identical accessories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DSM-...-HD: Swivel module with heavy-duty bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlash-free, preloaded, high-quality bearing elements allow very high load torques and very precise bearing with high running accuracy. The functionality corresponds to that of the DSM-B without heavy-duty bearing:</td>
</tr>
<tr>
<td>• Infinitely adjustable swivel angle</td>
</tr>
<tr>
<td>• Identical mounting interfaces</td>
</tr>
<tr>
<td>• Identical accessories</td>
</tr>
<tr>
<td>Choice of two cushioning types:</td>
</tr>
<tr>
<td>• Cushioning P1 and CC</td>
</tr>
</tbody>
</table>
## Characteristic values of the swivel modules

The specifications shown in the table are maximum values. The precise values for each of the sizes can be found in the relevant technical data in the catalogue.

<table>
<thead>
<tr>
<th>Version</th>
<th>Type</th>
<th>Size</th>
<th>Swivel angle [°]</th>
<th>Torque [Nm]</th>
<th>Axial force [N]</th>
<th>Radial force [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spigot shaft</strong></td>
<td>DSM-…</td>
<td>6, 8, 10</td>
<td>90, 180</td>
<td>0.85</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32, 40, 63</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32</td>
<td>246</td>
<td></td>
<td>40</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40, 63</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flanged shaft</strong></td>
<td>DSM-…-FW</td>
<td>6, 8, 10</td>
<td>90, 180</td>
<td>0.85</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32, 40, 63</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32</td>
<td>246</td>
<td></td>
<td>40</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40, 63</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tandem rotary vanes and spigot shaft</strong></td>
<td>DSM-T…</td>
<td>6, 8, 10</td>
<td>90, 180</td>
<td>1.7</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32, 40, 63</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32</td>
<td>246</td>
<td></td>
<td>80</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40, 63</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tandem rotary vanes and flanged shaft</strong></td>
<td>DSM-T…-FW</td>
<td>6, 8, 10</td>
<td>90, 180</td>
<td>1.7</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32, 40, 63</td>
<td>270</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32</td>
<td>246</td>
<td></td>
<td>80</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40, 63</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Heavy-duty bearing</strong></td>
<td>DSM-…-HD</td>
<td>12, 16, 25, 32, 40, 63</td>
<td>270</td>
<td></td>
<td>40</td>
<td>1300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12, 16, 25, 32</td>
<td>246</td>
<td></td>
<td></td>
<td>1800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40, 63</td>
<td></td>
<td>240</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Swivel modules DSM/DSM-B

Product range overview

**Characteristic values of the swivel modules**

The specifications shown in the table are maximum values. The precise values for each of the sizes can be found in the relevant technical data in the catalogue.

<table>
<thead>
<tr>
<th>Version</th>
<th>Cushioning</th>
<th>Adjustable swivel angle</th>
<th>Position sensing</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>P1</td>
<td>CC</td>
<td>A</td>
</tr>
<tr>
<td>Spigot shaft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flanged shaft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tandem rotary vanes and spigot shaft</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tandem rotary vanes and flanged shaft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy-duty bearing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) The cushioning type P1 can be ordered as an accessory (page 53).
2) The stop kit (adjustable swivel angle) can be ordered as an accessory (page 54).
3) The mounting kit (for position sensing) can be ordered as an accessory (page 54).
### Swivel modules DSM/DSM-B

#### Key features

**Mounting options**

<table>
<thead>
<tr>
<th>Size</th>
<th>Mounting Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size 6 ... 10</td>
<td>- Via threaded through-holes/through-holes</td>
</tr>
<tr>
<td></td>
<td>- Via through-holes, lateral</td>
</tr>
<tr>
<td></td>
<td>- Via threaded holes, lateral</td>
</tr>
</tbody>
</table>

**Size 12 ... 63**

<table>
<thead>
<tr>
<th>Size</th>
<th>Mounting Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Via threaded through-holes</td>
</tr>
<tr>
<td></td>
<td>- Via through-holes</td>
</tr>
<tr>
<td></td>
<td>- Via threaded holes, lateral</td>
</tr>
<tr>
<td></td>
<td>- Centring via centring collar</td>
</tr>
</tbody>
</table>

**Special mounting options for DSM—...-HD**

<table>
<thead>
<tr>
<th>Size</th>
<th>Mounting Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Via threaded holes, lateral</td>
</tr>
<tr>
<td></td>
<td>- Of attachments</td>
</tr>
</tbody>
</table>

Positive-locking connections possible through use of centring sleeves ZBH.
Swivel modules DSM/DSM-B

Key features:

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Push-on flange FWSR</th>
<th>Mounting plate HSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freewheel unit FLSM Size 6 ... 40</td>
<td>Push-on flange FWSR Size 6 ... 40</td>
<td>Mounting plate HSM Size 12 ... 40</td>
</tr>
</tbody>
</table>

Direction of rotation in combination with freewheel unit FLSM

The freewheel unit only allows movement in one of the two possible swivel directions of the swivel module DSM. The reverse direction is blocked.

Dimensions and ordering data ➔ page 49

FLSM-...-R, right-hand (clockwise) rotation

FLSM-...-L, left-hand (anti-clockwise) rotation

Position sensor SRBS

The position sensor is used for sensing the end positions of the swivel module DSM.

Sensing is performed magnetically and without contact. Two switching points are output.

Key features:

- Quick assembly without having to manually search for switching points
- Simple and reliable operation using one button
- Only one connecting cable required
- Long service life thanks to sturdy and non-contacting position sensing

Technical data:

- Possible sensing range: 0 ... 270°
- Repetition accuracy: ≤ 1°
- 2 switching outputs (24 V)
- Switching output: PNP or NPN programmable
- Switching element function: N/O contact or N/C contact programmable
## Swivel modules DSM

Type codes DSM-6 … 10

### DSM-...: Swivel module

<table>
<thead>
<tr>
<th>Type</th>
<th>Double-acting</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSM</td>
<td>Swivel module</td>
</tr>
</tbody>
</table>

| Size [mm]                     |

| Swivel angle [°]              |

<table>
<thead>
<tr>
<th>Cushioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position sensing</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
</tr>
<tr>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjustable swivel angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
</tr>
<tr>
<td>FF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
</tr>
<tr>
<td>FW</td>
</tr>
</tbody>
</table>

### DSM-T-...: Swivel module with tandem rotary vanes

<table>
<thead>
<tr>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double-acting</td>
</tr>
<tr>
<td>DSM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
</tr>
</tbody>
</table>

| Size [mm]                     |

| Swivel angle [°]              |

<table>
<thead>
<tr>
<th>Cushioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
</tr>
<tr>
<td>FW</td>
</tr>
<tr>
<td>Accessories</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>1 Stop kit</td>
</tr>
<tr>
<td>2 Mounting kit</td>
</tr>
<tr>
<td>3 Position sensor</td>
</tr>
<tr>
<td>4 Proximity sensor</td>
</tr>
<tr>
<td>5 Push-on flange</td>
</tr>
<tr>
<td>6 Freewheel unit</td>
</tr>
<tr>
<td>7 One-way flow control valve</td>
</tr>
<tr>
<td>8 Push-in fitting</td>
</tr>
<tr>
<td>9 Adapter kit</td>
</tr>
</tbody>
</table>
## Swivel modules DSM

Technical data DSM-6 … 10

### Function

- Size
  - 6 … 10

### General technical data

<table>
<thead>
<tr>
<th>Size</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumatic connection</td>
<td>M3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>Rotary vane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cushioning</td>
<td>Elastic cushioning rings/pads at both ends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of mounting</td>
<td>Via female thread</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting position</td>
<td>Any</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Swivel angle
  - DSM-… [°] 90 or 180, 90 or 180, 90, 180 or 240
  - DSM-…-FF [°] 0 – 180, 0 – 200
| Max. swivel frequency at 6 bar [Hz] | 3, 3 (at 240°: 2 Hz) |
| Cushioning angle [°] | 0.5 |
| Air consumption at swivel angle of 90° and 6 bar1) [cm³] |
  - DSM-… | 0.6 |
  - DSM-T-… | 1.2 |
| Air consumption at swivel angle of 90° and 6 bar1) [cm³] |
  - DSM-… | 0.7 |
  - DSM-T-… | 1.4 |
| 1) Theoretical values |

### Operating and environmental conditions

<table>
<thead>
<tr>
<th>Size</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating medium</td>
<td>Compressed air in accordance with ISO 8573-1:2010 [7-4-4]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Operating pressure
  - DSM-… [bar] 3.5 ... 8, 3.5 ... 8, 2.5 ... 8
  - DSM-T-… [bar] 4 ... 8, 4 ... 8, 3.5 ... 8 |
| Ambient temperature1) [°C] | 0 ... +60 |
| Storage temperature [°C] | 20 |
| ATEX Specified types | www.festo.com |
| 1) Note operating range of proximity sensors |

### Forces and torques

<table>
<thead>
<tr>
<th>Size</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
</table>
| Torque at 6 bar
  - DSM-… [Nm] 0.15 |
  - DSM-T-… [Nm] 0.63 |
| Max. permissible axial force on drive shaft [N] | 10 |
| Max. permissible radial force on drive shaft [N] | 15 |
| Max. perm. mass moment of inertia on drive shaft1) [kgm²] |
  - DSM-… | 0.00065 |
  - DSM-T-… | 0.0013 |
| 1) Maximum value, please see graphs ➚ page 12 |

---

1) Theoretical values

---

1) Note operating range of proximity sensors

---

1) Maximum value, please see graphs ➚ page 12

---

Internet: www.festo.com/catalog/...
## Swivel modules DSM

### Technical data DSM-6 ... 10

<table>
<thead>
<tr>
<th>Weight [g]</th>
<th>Size</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spigot shaft</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSM-...-P</td>
<td>45</td>
<td>78</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>DSM-...-P-A</td>
<td>50</td>
<td>85</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>DSM-...-P-F</td>
<td>70</td>
<td>140</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>DSM-...-P-A-F</td>
<td>85</td>
<td>155</td>
<td>255</td>
<td></td>
</tr>
</tbody>
</table>

| **Flanged shaft** |      |    |    |    |
| DSM-...-P-F | 51   | 85 | 150|
| DSM-...-P-A-F | 56   | 92 | 159|
| DSM-...-P-F-F | 76   | 147| 250|
| DSM-...-P-A-F-F | 91  | 162| 265|

| **Tandem rotary vanes and spigot shaft** |      |    |    |    |
| DSM-T-...-P | 60   | 110| 200|

| **Tandem rotary vanes and flanged shaft** |      |    |    |    |
| DSM-T-...-P-F | 65   | 117| 210|

### Materials

<table>
<thead>
<tr>
<th>Sectional view</th>
<th>With spigot shaft</th>
<th>With flanged shaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSM-...</td>
<td>DSM-T-...</td>
<td>DSM-...-FW</td>
</tr>
<tr>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Swivel module</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shaft</td>
<td>High-alloy stainless steel</td>
</tr>
<tr>
<td>2</td>
<td>Rotary vane</td>
<td>Glass fibre-reinforced plastic</td>
</tr>
<tr>
<td>3</td>
<td>Housing</td>
<td>Anodised aluminium</td>
</tr>
</tbody>
</table>
  -  | Screws         | Galvanised steel |
  -  | Seals          | Polyurethane |
|  | Note on materials | Free of copper and PTFE |
|  |                  | RoHS-compliant |

Note on materials: Free of copper and PTFE, RoHS-compliant
Swivel modules DSM

Technical data DSM-6 – 10

Mass moment of inertia $J$ as a function of swivel time $t$

<table>
<thead>
<tr>
<th>DSM-6</th>
<th>DSM-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>t [s]</td>
<td>J [kgm²x10⁻⁴]</td>
</tr>
<tr>
<td>90°</td>
<td>0.1</td>
</tr>
<tr>
<td>180°</td>
<td>0.2</td>
</tr>
<tr>
<td>240°</td>
<td>0.4</td>
</tr>
</tbody>
</table>

- - - - 90°
- - - - 180°
- - - - 240°
Swivel modules DSM
Technical data DSM-6 ... 10

Dimensions
DSM-... – With spigot shaft

For DSM-10
Shaft position

Note
For swivel angle tolerance table below. The supply ports are at the bottom in this drawing.

<table>
<thead>
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Swivel modules DSM

Technical data DSM-6 – 10

Dimensions

DSM-T_- – With spigot shaft and tandem rotary vanes

For DSM-T-10

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Note

For swivel angle tolerance → table below. The supply ports are at the bottom in this drawing.
Swivel modules DSM
Technical data DSM-6 … 10

Dimensions
DSM-… – With spigot shaft and position sensing
DSM-T-… – With spigot shaft, tandem rotary vanes and position sensing

1 Proximity sensor not included in the scope of delivery.
Observe fitting space for proximity sensor and cable

2 Magnet position

3 Max. tightening torque for sensor bracket screws
   ➔ table below

4 The flat or feather key on the shaft indicates the position of the rotary vane

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Download CAD data ➔ www.festo.com
Swivel modules DSM

Technical data DSM-6, DSM-T...

Dimensions

DSM-... – With spigot shaft and adjustable swivel angle
DSM-T-... – With spigot shaft, tandem rotary vanes and adjustable swivel angle

Without orifice and cover

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Swivel modules DSM

Technical data DSM-6 … 10

Dimensions

DSM-… – With spigot shaft, adjustable swivel angle and position sensing
DSM-T-… – With spigot shaft, tandem rotary vanes, adjustable swivel angle and position sensing

1 Sensor not included in the scope of delivery. Observe fitting space for proximity sensor and cable
2 Magnet position
3 Max. tightening torque for sensor bracket screw
   ➔ table below
4 The flat or feather key on the shaft indicates the position of the rotary vane

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1. Supply ports
2. Mark indicating rotary vane position
### Swivel modules DSM

Technical data DSM-6 ... 10

#### Dimensions

DSM-T... – With flanged shaft and tandem rotary vanes

![Diagram of DSM module](image)

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1. Supply ports
2. Mark indicating rotary vane position

Swivel angle tolerance

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Swivel modules DSM
Technical data DSM-6...10

Dimensions

DSM-... – With flanged shaft and position sensing
DSM-T-... – With flanged shaft, tandem rotary vanes and position sensing

Size

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DSM-... – With flanged shaft and adjustable swivel angle
DSM-T-... – With flanged shaft, tandem rotary vanes and adjustable swivel angle

Without orifice and cover

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DSM-... – With flanged shaft and adjustable swivel angle
DSM-T-... – With flanged shaft, tandem rotary vanes and adjustable swivel angle

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<th>L9</th>
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Swivel modules DSM

Technical data DSM-6 … 10

Dimensions

DSM-… – With flanged shaft, adjustable swivel angle and position sensing
DSM-T-… – With flanged shaft, tandem rotary vanes, adjustable swivel angle and position sensing

[Diagram]

1. Proximity sensor not included in the scope of delivery. Observe fitting space for proximity sensor and cable.
2. Magnet position

Max. tightening torque for sensor bracket screws

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<th>L1</th>
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Note

The swivel angle is infinitely adjustable over the entire swivel range. Size 6 mm can only be adjusted symmetrically around the centre position.
### Ordering data

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# Swivel modules DSM

## Technical data DSM-6 ... 10

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### DSM-...: Swivel module

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### DSM-T...: Swivel module with tandem rotary vanes

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<th>FW</th>
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<table>
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<table>
<thead>
<tr>
<th>Cushioning</th>
<th>P</th>
<th>Elastic cushioning at both ends</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>CC</td>
<td>Self-adjusting shock absorbers at both ends</td>
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<tr>
<th>Position sensing</th>
<th>A</th>
<th>Via proximity sensor</th>
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<table>
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<th>Variant</th>
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<td>B series</td>
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## Swivel modules DSM-B

Type codes DSM-12 ... 63

### DSM-...-HD: Swivel module with heavy-duty bearing

<table>
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<th>Type</th>
<th>Double-acting</th>
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<tbody>
<tr>
<td>DSM</td>
<td>Swivel module</td>
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### Size [mm]

| Max. swivel angle [°], adjustable |

<table>
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<tr>
<th>Cushioning</th>
<th>P1: Adjustable elastic cushioning components at both ends</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>CC: Self-adjusting shock absorbers at both ends</td>
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</tbody>
</table>

| Shaft          | HD: Heavy-duty bearing                                    |

| Position sensing | A: Via proximity sensor                                   |

| Variant        | B: B series                                              |

[Internet: www.festo.com/catalog/]
### General technical data

<table>
<thead>
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<th>Size</th>
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<th>25</th>
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<td>M5</td>
<td>G5/8</td>
<td>G1/2</td>
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<tr>
<td>Design</td>
<td>Swivel module with rotary vane</td>
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<tr>
<td>Cushioning</td>
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<tr>
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<td>°</td>
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<td>–3</td>
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<td>9</td>
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<td>Repetition accuracy</td>
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<tr>
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### Technical data – Swivel frequency [Hz]

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<tr>
<td>Swivel frequency (at max. swivel angle)</td>
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</tr>
<tr>
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<td>1.6</td>
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<td></td>
</tr>
<tr>
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<td>°</td>
<td>2</td>
<td>1.6</td>
<td></td>
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<td>0.6</td>
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</tr>
<tr>
<td>Swivel frequency (at smaller swivel angle)</td>
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</tr>
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<td>°</td>
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<td>1.5</td>
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</tr>
<tr>
<td>DSM-...-HD</td>
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<tr>
<td>Swivel frequency (at max. swivel angle)</td>
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<tr>
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---

1) Restricted swivel angle in combination with sensor bracket SL DSM-S-...-H-

\* Note: This product conforms to ISO 1179-1 and to ISO 228-1
### Swivel modules DSM-B

#### Technical data DSM-12 ... 63

#### Operating and environmental conditions

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<td>[bar]</td>
<td>2 ... 10</td>
<td>1.8 ... 10</td>
<td>1.5 ... 10</td>
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<td>[bar]</td>
<td>2.5 ... 10</td>
<td>2 ... 10</td>
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<td></td>
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<td>[bar]</td>
<td>3 ... 10</td>
<td>2 ... 10</td>
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<td>Ambient temperature (^1)</td>
<td>°C</td>
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\(^1\) Note operating range of proximity sensors

#### Weight [g]

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<td>410</td>
<td>620</td>
<td>1250</td>
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<td>480</td>
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<td>1460</td>
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<td>5150</td>
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<td>Flanged shaft</td>
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<td>1550</td>
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<td>735</td>
<td>1550</td>
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<td>5400</td>
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<td>DSM-T-...</td>
<td>330</td>
<td>590</td>
<td>890</td>
<td>1865</td>
<td>3570</td>
<td>6050</td>
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<td>970</td>
<td>2040</td>
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<td>2075</td>
<td>3970</td>
<td>6980</td>
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<td>Tandem rotary vanes and flanged shaft</td>
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<td>1940</td>
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<td>DSM-T-...-P-FW</td>
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<td>6980</td>
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Swivel modules DSM-B
Technical data DSM-12 — 63

Materials

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<th>Sectional view</th>
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<th>DSM-… HD</th>
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<td>Anodised aluminium</td>
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</tr>
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<td>2</td>
<td>Shaft</td>
<td>Nickel-plated steel</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rotary vane</td>
<td>Glass fibre-reinforced plastic</td>
<td></td>
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<tr>
<td>4</td>
<td>Stop lever</td>
<td>Anodised aluminium</td>
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</tr>
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<td>5</td>
<td>Rotating plate</td>
<td>Anodised aluminium</td>
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</tr>
<tr>
<td>Fixed stops</td>
<td>Stainless steel</td>
<td></td>
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<tr>
<td>Screws</td>
<td>Galvanised steel</td>
<td></td>
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<tr>
<td>Cover cap</td>
<td>Glass fibre-reinforced plastic</td>
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</tr>
<tr>
<td>Seals</td>
<td>Polyurethane</td>
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<tr>
<td>Note on materials</td>
<td>Free of copper and PTFE</td>
<td>RoHS-compliant</td>
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</tbody>
</table>

Swivel module

| Housing, flange | Anodised aluminium |        |
| Shaft           | Nickel-plated steel |        |
| Rotary vane     | Glass fibre-reinforced plastic |        |
| Stop lever      | Anodised aluminium |        |
| Rotating plate  | Anodised aluminium |        |
| Fixed stops     | Stainless steel    |        |
| Screws          | Galvanised steel   |        |
| Cover cap       | Glass fibre-reinforced plastic |        |
| Seals           | Polyurethane       |        |
| Note on materials | Free of copper and PTFE | RoHS-compliant |

Axial eccentricity and concentricity of DSM-…-HD

Axial eccentricity

Measured on the surface of the rotating plate at the plate edge, in new condition.

<table>
<thead>
<tr>
<th>Size</th>
<th>12</th>
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<th>25</th>
<th>32</th>
<th>40</th>
<th>63</th>
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<td>≤ 0.02</td>
<td>≤ 0.02</td>
<td>≤ 0.02</td>
<td>≤ 0.04</td>
<td>≤ 0.04</td>
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<td>≤ 0.02</td>
<td>≤ 0.02</td>
<td>≤ 0.04</td>
<td>≤ 0.04</td>
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Concentricity

Measured on the centre of the rotating plate, in new condition.
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<th>Size</th>
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<th>40</th>
<th>63</th>
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<td>10</td>
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<tr>
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<td>5</td>
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<td>20</td>
<td>40</td>
<td>80</td>
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<td>5</td>
<td>10</td>
<td>20</td>
<td>40</td>
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<td>Torque per bar</td>
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<td>3.33</td>
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*Note*

- If the swivel modules DSM-…-A-B are used without a stop system or the mass moment of inertia is exceeded, external stops must be used.
- A minimum radius relative to the drive shaft \( r_{\text{min}} \) must be observed. The stop force must not exceed the maximum force.
Swivel modules DSM-B

Technical data DSM-12 – 63

Permissible dynamic load for DSM-…-HD
Permissible axial force $F_x$ as a function of distance $l$

![Graph of $F_x$ vs. $l$ for DSM-12-…-HD, DSM-16-…-HD, DSM-25-…-HD, DSM-32-…-HD, DSM-40-…-HD, DSM-63-…-HD](image)

Permissible radial force $F_z$ as a function of distance $l$

![Graph of $F_z$ vs. $l$ for DSM-12-…-HD, DSM-16-…-HD, DSM-25-…-HD, DSM-32-…-HD, DSM-40-…-HD, DSM-63-…-HD](image)
Swivel modules DSM-B
Technical data DSM-12 ... 63

Mass moment of inertia \( J \) as a function of swivel time \( t \)
With elastic cushioning components (P)

- DSM-12-270-P
- DSM-16-270-P
- DSM-25-270-P
- DSM-32-270-P
- DSM-40-270-P
- DSM-63-270-P

90°
180°
270°

Note
Sizing software for calculating mass moment of inertia
→ www.festo.com
Swivel modules DSM-B

Technical data DSM-12 – 63

Mass moment of inertia J as a function of swivel time t
With adjustable, elastic cushioning components (P1)

DSM-12-270-P1

DSM-16-270-P1

DSM-25-270-P1

DSM-32-270-P1

DSM-40-270-P1

DSM-63-270-P1

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Swivel modules DSM-B
Technical data DSM-12 ... 63

Mass moment of inertia $J$ as a function of swivel time $t$
With hydraulic shock absorbers (CC)

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The graphs for the DSM-...-CC show the swivel time up to the point where the stop lever meets the shock absorber. The cushioning time of the shock absorber must be added in order to obtain the total swivel time.
Swivel modules DSM-B
Technical data DSM-12 – 63

Dimensions
DSM-… – With spigot shaft

1. Feather key position at 0°
2. Supply ports
3. Locking screw for clamping the stop
4. Manual override (internal hex). The position of the internal hex is not defined
5. End-position adjustment
6. Lock nut for end-position adjustment
7. Infinitely adjustable stops
8. Mounting thread for sensor bracket
9. Sensor bracket
10. End-position adjustment

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### Swivel modules DSM-B

**Technical data DSM-12 – 63**

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1) Included in the scope of delivery
2) Note: This product conforms to ISO 1179-1 and to ISO 228-1

---

2018/05 – Subject to change

[Internet: www.festo.com/catalog/]
Swivel modules DSM-B
Technical data DSM-12 – 63

Dimensions

DSM-...-FW – With flanged shaft

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DSM-...-CC-FW

DSM-...-P-FW

DSM-...-P1-FW

1 Flanged shaft with through hole
2 Supply ports
3 Locking screw for clamping the stop
4 Manual override (internal hex). The position of the internal hex is not defined
5 End-position adjustment
6 Lock nut for end-position adjustment
7 Infinitely adjustable stops
8 Mounting thread for sensor bracket
9 The position of the marking corresponds to the position of the stop
10 Sensor bracket
11 End-position adjustment
### Swivel modules DSM-B

#### Technical data DSM-12 – 63

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Note: This product conforms to ISO 1179-1 and to ISO 228-1
Swivel modules DSM-B
Technical data DSM-12 – 63

Dimensions
DSM-T-... – With spigot shaft and tandem rotary vanes

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DSM-T-... CC

DSM-T-... P

Dimensions

1 Feather key position at 0°
2 Supply ports
3 Locking screw for clamping the stop
4 Manual override (internal hex).
   The position of the internal hex is not defined
5 End-position adjustment
6 Lock nut for end-position adjustment
7 Infinitely adjustable stops
8 Mounting thread for sensor bracket
9 Sensor bracket

Internet: www.festo.com/catalog/...
### Swivel modules DSM-B

#### Technical data DSM-12 – 63

**Size** | **B1** (±0.5) | **B2** | **B3** | **B4** | **D1** | **D2** | **D3**
--- | --- | --- | --- | --- | --- | --- | ---
12 | 19.8 | 48±0.1 | 59±0.3 | 30±0.2 | 8 | 15±0.2 | 24
16 | 23.5 | 57±0.1 | 70±0.3 | 40±0.2 | 10 | 18±0.3 | 28
25 | 28 | 65±0.1 | 83±0.3 | 40±0.2 | 12 | 20±0.3 | 30
32 | 35.5 | 85±0.1 | 105±0.3 | 60±0.3 | 16 | 27±0.4 | 42
40 | 43.8 | 105±0.1 | 130±0.3 | 80±0.3 | 20 | 36±0.4 | 52
63 | 50.3 | 123±0.3 | 152±0.3 | 80±0.3 | 25 | 40±0.3 | 70

**Size** | **D4** | **D5** | **D6** | **D7** | **D8** | **D9** | **D10**
--- | --- | --- | --- | --- | --- | --- | ---
12 | M3 | M4 | M2 | 78±0.3 | M8x1 | M4 | M4
16 | M5 | M6 | M2 | 106±0.3 | M10x1 | M5 | M5
25 | M5 | M8 | M2 | 135±0.3 | M12x1 | M8 | M5
40 | M6 | M10 | M2 | 160±0.3 | M16x1 | M10 | M6
63 | M10 | M10 | M3 | 200±0.5 | M22x1.5 | M12 | M6

**Size** | **EE** | **H1** (±0.2) | **L1** | **L2** (±0.6) | **L3** | **L4** (±0.4) | **L5**
--- | --- | --- | --- | --- | --- | --- | ---
12 | M5 | 29.5 | 87.3±0.3 | 24.5 | 20±0.3 | 3 | 10.3±0.2/0.3
16 | M5 | 35 | 106.6±1 | 28 | 23±0.2 | 2.6 | 13±0.2/0.4
25 | M5 | 41.5 | 125±0.5 | 36.5 | 30±0.2 | 4 | 15.2±0.2/0.4
32 | G1/8 | 52.5 | 164±0.5 | 51 | 40±0.2 | 8 | 19.2±0.2/0.4
40 | G1/8 | 65 | 200±0.6 | 62 | 50±0.2 | 8 | 23.7±0.2/0.4
63 | G1/4 | 76 | 254±0.4/0.5 | 75.5 | 60±0.3 | 10.5 | 28.5±0.3/0.5

**Size** | **L6** | **L7** | **L8** | **L9** | **L10** | **L13** | **T1**
--- | --- | --- | --- | --- | --- | --- | ---
12 | 74.5±0.8 | 5±0.1 | 35.5 | 3 | 22.7 | 6.5 | 8.8
16 | 91±0.9 | 6.5±0.2 | 44.1 | 7.2 | 26.1 | 6.5 | 11.2
25 | 109±1 | 7.5±0.2 | 51.5 | 2.9 | 20.7 | 6.5 | 13.5
32 | 14±1.1 | 9.5±0.2 | 67.4 | 3.8 | 29.1 | 6.5 | 18
40 | 176±1.2 | 12±0.2 | 81 | 3.4 | 43.5 | 6.5 | 22.5
63 | 216.5±1.3 | 14±0.2 | 99 | 10 | 72.5 | 4.5 | 28

**Size** | **T2** (±0.2) | **T3** (±0.2) | =≥ 1 | =≥ 2 | =≥ 3 | =≥ 4 | Feather key to DIN 68851)
--- | --- | --- | --- | --- | --- | --- | ---
12 | 9 | 8 | 10 | 6 | 2.5 | 2.5 | A2x2x16
16 | 9 | 8 | 13 | 8 | 3 | 3 | A3x3x18
25 | 10 | 10 | 13 | 8 | 4 | 3 | A6x4x25
32 | 12.5 | 12 | 15 | 10 | 5 | 4 | A8x5x36
40 | 16 | 15 | 19 | 10 | 6 | 5 | A6x6x45
63 | 22 | 16 | 27 | 10 | 8 | 5 | A8x7x50

---

1) Included in the scope of delivery

Note: This product conforms to ISO 1179-1 and to ISO 228-1
Swivel modules DSM-B

Technical data DSM-B 63

**Dimensions**

DSM-T-...-FW – With flanged shaft and tandem rotary vanes

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Download CAD data → www.festo.com
### Swivel modules DSM-B

**Technical data DSM-12**

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Note: This product conforms to ISO 1179-1 and to ISO 228-1
Swivel modules DSM-B
Technical data DSM-12 ... 63

Dimensions
DSM-...-HD – With heavy-duty bearing

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| 1 | Supply ports |
| 2 | Locking screw for clamping the stop |
| 3 | Manual override (internal hex). The position of the internal hex is not defined |
| 4 | End-position adjustment |
| 5 | Lock nut for end-position adjustment |
| 6 | Mounting thread for sensor bracket |
| 7 | Infinitely adjustable stops |
| 8 | Flanged shaft with through hole |
| 9 | Hole for centring sleeve ZBH |
| 10 | Sensor bracket |

* Size 12 ... 25
** Size 32 ... 63
## Swivel modules DSM-B

### Technical data DSM-12 – 63

#### Size

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#### Technical data

- **Size:** B1, B2, B3, D1, D2, D3, D4, D5
- **Notes:**
  1. Thread for compressed air through-feed with size 12 – 25
  2. Thread for compressed air through-feed with size 32 – 63
  3. Note: This product conforms to ISO 1179-1 and to ISO 228-1

---

**Internet:** www.festo.com/catalog/...
### Ordering data – DSM-B, swivel module

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| | | | 32 | 547599 | DSM-32-270-FW-A-B |
| | | | 40 | 547600 | DSM-40-270-FW-A-B |
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| | **P** With elastic cushioning components | 270° | 12 | 547571 | DSM-12-270-P-FW-A-B |
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| | **P1** With adjustable, elastic cushioning components | 246° | 12 | 566204 | DSM-12-270-P1-FW-A-B |
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| | | | 240° | 40 | 566212 | DSM-40-270-P1-FW-A-B |
| | | | | 63 | 566214 | DSM-63-270-P1-FW-A-B |
| | **CC** Shock absorbers | 246° | 12 | 547573 | DSM-12-270-CC-FW-A-B |
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| | | | 240° | 40 | 547589 | DSM-40-270-CC-FW-A-B |
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## Swivel modules DSM-B

### Technical data DSM-T-...

#### Ordering data – DSM-T-..., swivel module with tandem rotary vanes

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## Swivel modules DSM-B

### Technical data DSM-12 – 63

#### Ordering data – DSM-…-HD, swivel module with heavy-duty guide

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Swivel modules DSM/DSM-B

Accessories

Freewheel unit FLSM
For size 6, 8

Material:
Housing: Anodised aluminium
Shaft, sleeve: Size 6, 8: Steel
Size 10: Hardened steel

Note
The minimum possible swivel angle is 3°. Switching accuracy is, however, dependent on speed and load.

Dimensions and ordering data

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1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
Swivel modules DSM/DSM-B

Accessories

Freewheel unit FLSM
For size 12 ... 40

Material:
Housing: Anodised aluminium
Shaft, sleeve: Hardened steel

Note
The minimum possible swivel angle is 3°. Switching accuracy is, however, dependent on speed and load.

Dimensions and ordering data

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1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
Swivel modules DSM/DSM-B

Accessories

Push-on flange FWSR

Material:
Anodised wrought aluminium alloy
Free of copper, PTFE and silicone

Dimensions and ordering data

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1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
Swivel modules DSM/DSM-B

Accessories

Mounting plate HSM

Material:
Aluminium

Dimensions and ordering data

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1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Cover cap AKM

Material:
Polyamide

Cannot be used in combination with inductive proximity sensor SIEN

Dimensions and ordering data

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## Swivel modules DSM/DSM-B

### Accessories

### Ordering data

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#### Cushioning kit

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#### Shock absorber

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#### Shock absorber

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### Ordering data – Position sensor

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### Technical data

- Internet: [www.festo.com/catalog/...](http://www.festo.com/catalog/...)
- Internet: dyef
- Internet: dysc
## Swivel modules DSM/DSM-B
### Accessories

#### Ordering data – Kits

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<td>8</td>
<td>For proximity sensors SME/SMT-10</td>
<td>173206</td>
<td>WSM-8-SME-10</td>
</tr>
<tr>
<td>10</td>
<td>For proximity sensors SME/SMT-10</td>
<td>173207</td>
<td>WSM-10-SME-10</td>
</tr>
</tbody>
</table>

#### Ordering data – Stop kit

<table>
<thead>
<tr>
<th>For size</th>
<th>Brief description</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>For adjusting the swivel angle, max. 180°</td>
<td>175833</td>
<td>KSM-6</td>
</tr>
<tr>
<td>8</td>
<td>For adjusting the swivel angle, max. 180°</td>
<td>175834</td>
<td>KSM-8</td>
</tr>
<tr>
<td>10</td>
<td>For adjusting the swivel angle, max. 200°</td>
<td>175835</td>
<td>KSM-10</td>
</tr>
</tbody>
</table>

#### Ordering data – Adapter kit

<table>
<thead>
<tr>
<th>For size</th>
<th>Description</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>For attaching mounting kit WSM to stop kit KSM</td>
<td>3617044</td>
<td>DADP-AK-Q1-6</td>
</tr>
<tr>
<td>8</td>
<td>For attaching mounting kit WSM to stop kit KSM</td>
<td>3617045</td>
<td>DADP-AK-Q1-8</td>
</tr>
<tr>
<td>10</td>
<td>For attaching mounting kit WSM to stop kit KSM</td>
<td>3617046</td>
<td>DADP-AK-Q1-10</td>
</tr>
</tbody>
</table>

#### Ordering data – Sensor bracket

<table>
<thead>
<tr>
<th>For size</th>
<th>Brief description</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>12, 16, 25, 32, 40</td>
<td>For proximity sensors SME-/SMT-10</td>
<td>550661</td>
<td>SL-DSM-B</td>
</tr>
<tr>
<td>63</td>
<td>For proximity sensors SME-/SMT-8</td>
<td>552088</td>
<td>SL-DSM-63-B</td>
</tr>
<tr>
<td>12, 16, 25, 32, 40</td>
<td>For inductive proximity sensors SIEN-M5</td>
<td>1130882</td>
<td>SL-DSM-S-M5-B</td>
</tr>
<tr>
<td>12, 16, 25, 32, 40</td>
<td>For inductive proximity sensors SIEN-M8</td>
<td>1132360</td>
<td>SL-DSM-S-M8-B</td>
</tr>
</tbody>
</table>

1) Packaging unit

### Proximity sensors for size 6, 8, 12, 25, 32, 40 (not suitable for size 10 and 16)

#### Ordering data – Proximity sensors for C-slot, magneto-resistive

<table>
<thead>
<tr>
<th>Type of mounting</th>
<th>Switching output</th>
<th>Electrical connection, connection direction</th>
<th>Cable length [m]</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/O contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For size 6, 8:</td>
<td>PNP</td>
<td>Cable, 3-wire, in-line</td>
<td>2.5</td>
<td>551373</td>
<td>SMT-10M-PS-24V-E-2,5-L-0E</td>
</tr>
<tr>
<td>Via mounting kit</td>
<td></td>
<td>Plug M8x1, 3-pin, in-line</td>
<td>0.3</td>
<td>551375</td>
<td>SMT-10M-PS-24V-E-0,3-L-M0D</td>
</tr>
</tbody>
</table>

Objects and parts with subject to change – 2018/05.
### Proximity sensors for size 6 → 40

**Ordering data – Proximity sensors for C-slot, magnetic reed**

<table>
<thead>
<tr>
<th>Type of mounting</th>
<th>Switching output</th>
<th>Electrical connection, connection direction</th>
<th>Cable length [m]</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/O contact</td>
<td>Contacting</td>
<td>Cable, 3-wire, in-line</td>
<td>2.5</td>
<td>173210</td>
<td>SME-10-KL-LED-24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plug M8x1, 3-pin, in-line</td>
<td>0.3</td>
<td>173212</td>
<td>SME-10-SL-LED-24</td>
</tr>
</tbody>
</table>

### Proximity sensors for size 12 → 40

**Ordering data – Proximity sensors for C-slot, magnetic reed**

<table>
<thead>
<tr>
<th>Type of mounting</th>
<th>Switching output</th>
<th>Electrical connection, connection direction</th>
<th>Cable length [m]</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/O contact</td>
<td>Contacting</td>
<td>Cable, 3-wire, in-line</td>
<td>2.5</td>
<td>551365</td>
<td>SME-10M-DS-24V-E-2,5-L-OE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plug M8x1, 3-pin, in-line</td>
<td>0.3</td>
<td>551367</td>
<td>SME-10M-DS-24V-E-0,3-L-M8D</td>
</tr>
</tbody>
</table>

### Proximity sensors for size 63

**Ordering data – Proximity sensors for T-slot, magneto-resistive**

<table>
<thead>
<tr>
<th>Type of mounting</th>
<th>Switching output</th>
<th>Electrical connection</th>
<th>Cable length [m]</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/O contact</td>
<td></td>
<td>Cable, 3-wire</td>
<td>2.5</td>
<td>574335</td>
<td>SMT-8M-A-PS-24V-E-2,5-OE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plug M8x1, 3-pin</td>
<td>0.3</td>
<td>574334</td>
<td>SMT-8M-A-PS-24V-E-0,3-M8D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plug M12x1, 3-pin</td>
<td>0.3</td>
<td>574337</td>
<td>SMT-8M-A-PS-24V-E-0,3-M12</td>
</tr>
<tr>
<td>N/C contact</td>
<td></td>
<td>Cable, 3-wire</td>
<td>7.5</td>
<td>574340</td>
<td>SMT-8M-A-PO-24V-E-7,5-OE</td>
</tr>
</tbody>
</table>

**Ordering data – Proximity sensors for T-slot, magnetic reed**

<table>
<thead>
<tr>
<th>Type of mounting</th>
<th>Switching output</th>
<th>Electrical connection</th>
<th>Cable length [m]</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/O contact</td>
<td>Contacting</td>
<td>Cable, 3-wire</td>
<td>2.5</td>
<td>543862</td>
<td>SME-8M-DS-24V-K-2,5-0E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cable, 2-wire</td>
<td>5.0</td>
<td>543863</td>
<td>SME-8M-DS-24V-K-5,0-0E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plug M8x1, 3-pin</td>
<td>2.5</td>
<td>543872</td>
<td>SME-8M-ZS-24V-K-2,5-0E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plug M8x1, 3-pin</td>
<td>0.3</td>
<td>543861</td>
<td>SME-8M-DS-24V-K-0,3-M8D</td>
</tr>
</tbody>
</table>
## Swivel modules DSM/DSM-B

### Accessories

### Inductive proximity sensors for size 12 – 40

<table>
<thead>
<tr>
<th>Thread</th>
<th>Connection</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>M5</td>
<td>N/O contact, Cable, 2.5 m</td>
<td>150370</td>
<td>SIE-N-M5B-PS-K-L</td>
</tr>
<tr>
<td></td>
<td>Plug</td>
<td>150371</td>
<td>SIE-N-M5B-PS-S-L</td>
</tr>
<tr>
<td>M8</td>
<td>N/O contact, Cable, 2.5 m</td>
<td>150386</td>
<td>SIE-N-M8B-PS-K-L</td>
</tr>
<tr>
<td></td>
<td>Plug</td>
<td>150387</td>
<td>SIE-N-M8B-PS-S-L</td>
</tr>
</tbody>
</table>

### Ordering data – Connecting cables

<table>
<thead>
<tr>
<th>Electrical connection, left</th>
<th>Electrical connection, right</th>
<th>Cable length [m]</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight socket, M8x1, 3-pin</td>
<td>Cable, open end, 3-wire</td>
<td>2.5</td>
<td>541333</td>
<td>NEBU-M8W3-K-2.5-LE3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>541334</td>
<td>NEBU-M8W3-K-5-LE3</td>
</tr>
<tr>
<td>Straight socket, M12x1, 5-pin</td>
<td>Cable, open end, 3-wire</td>
<td>2.5</td>
<td>541363</td>
<td>NEBU-M12W5-K-2.5-LE3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>541364</td>
<td>NEBU-M12W5-K-5-LE3</td>
</tr>
<tr>
<td>Angled socket, M8x1, 3-pin</td>
<td>Cable, open end, 3-wire</td>
<td>2.5</td>
<td>541338</td>
<td>NEBU-M8W3-K-2.5-LE3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>541341</td>
<td>NEBU-M8W3-K-5-LE3</td>
</tr>
<tr>
<td>Angled socket, M12x1, 5-pin</td>
<td>Cable, open end, 3-wire</td>
<td>2.5</td>
<td>541367</td>
<td>NEBU-M12W5-K-2.5-LE3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>541370</td>
<td>NEBU-M12W5-K-5-LE3</td>
</tr>
</tbody>
</table>

### Ordering data – One-way flow control valves

<table>
<thead>
<tr>
<th>For size</th>
<th>Connection</th>
<th>Material</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>12, 14, 25</td>
<td>M5</td>
<td>Metal design</td>
<td>193137</td>
<td>GRLA-M5-QS-3-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>193138</td>
<td>GRLA-M5-QS-4-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>193139</td>
<td>GRLA-M5-QS-6-D</td>
</tr>
<tr>
<td>32, 40</td>
<td>G1/8</td>
<td>3</td>
<td>193142</td>
<td>GRLA-1/8-QS-3-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>193143</td>
<td>GRLA-1/8-QS-4-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>193144</td>
<td>GRLA-1/8-QS-6-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>193145</td>
<td>GRLA-1/8-QS-8-D</td>
</tr>
<tr>
<td>63</td>
<td>G1/4</td>
<td>8</td>
<td>193147</td>
<td>GRLA-1/4-QS-8-D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>193148</td>
<td>GRLA-1/4-QS-10-D</td>
</tr>
</tbody>
</table>

### Ordering data – Centring sleeves for DSM—HD

<table>
<thead>
<tr>
<th>For size</th>
<th>Description</th>
<th>Part No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>12, 16</td>
<td>For centring the drive for lateral mounting</td>
<td>186717</td>
<td>ZBH-7</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>150927</td>
<td>ZBH-9</td>
</tr>
<tr>
<td>32 ... 63</td>
<td></td>
<td>189653</td>
<td>ZBH-12</td>
</tr>
<tr>
<td>12</td>
<td>For centring attachments on the rotating plate</td>
<td>189652</td>
<td>ZBH-5</td>
</tr>
<tr>
<td>16 ... 32</td>
<td></td>
<td>186717</td>
<td>ZBH-7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>189653</td>
<td>ZBH-12</td>
</tr>
<tr>
<td>40, 63</td>
<td>For centring attachments in the middle of the rotating plate</td>
<td>189653</td>
<td>ZBH-12</td>
</tr>
<tr>
<td>12, 16</td>
<td>For centring attachments in the middle of the rotating plate</td>
<td>191409</td>
<td>ZBH-15</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>8023856</td>
<td>ZBH-25</td>
</tr>
<tr>
<td>40, 63</td>
<td>For centring attachments in the middle of the rotating plate</td>
<td>150901</td>
<td>SLZZ-25/16</td>
</tr>
</tbody>
</table>

1) Packaging unit