Mounting brackets, selection guide, installation for BMF 305

**Advantages**

- Can be inserted in slot from above. Anytime! Even later! Fast! Saves time!
- Switchpoint can be adjusted in seconds! Turn screw one revolution, adjust position, tighten.
- Switchpoint cannot be lost. Even when you replace the sensor, the adjusted switchpoint is determined by the mounting bracket, not by the sensor.

**Ordering code**

<table>
<thead>
<tr>
<th>BMF 305-HW-17</th>
<th>BMF 305-HW-20</th>
<th>BMF 305-HW-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-slot</td>
<td>T-slot</td>
<td>T-slot</td>
</tr>
<tr>
<td>e.g. Festo, SMC</td>
<td>e.g. Festo, SMC</td>
<td>e.g. Festo, Bosch</td>
</tr>
</tbody>
</table>

**Cylinder type**

- T-slot e.g. Festo, SMC
- T-slot e.g. Festo, SMC
- T-slot e.g. Festo, Bosch
- without slot

**Mounting bracket**

- round cylinder with piston Ø < 8...80 mm

**Tube cuffs for BMF 305-HW-24**

<table>
<thead>
<tr>
<th>Piston Ø</th>
<th>Tube cuff size</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 8</td>
<td>0</td>
</tr>
<tr>
<td>8...16</td>
<td>1</td>
</tr>
<tr>
<td>20, 25</td>
<td>2</td>
</tr>
<tr>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>63</td>
<td>6</td>
</tr>
<tr>
<td>80</td>
<td>7</td>
</tr>
</tbody>
</table>

Tube cuff size, please order separately.
### Advantages

Sensor disappears in the slot!

Switchpoint is adjusted in seconds! Turn screw one revolution, adjust position, tighten.

Switchpoint cannot be lost. Even if you replace the sensor the adjusted switchpoint is determined by the mounting bracket, not the sensor.

### Ordering code

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Location for T-slot A</th>
<th>Location for T-slot B</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMF 303-HW-28</td>
<td>C-slot e.g. SMC</td>
<td><img src="image1" alt="C-slot diagram" /></td>
<td><img src="image2" alt="C-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-30</td>
<td>C-slot e.g. Festo slot-10</td>
<td><img src="image3" alt="C-slot diagram" /></td>
<td><img src="image4" alt="C-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-33</td>
<td>T-slot e.g. Festo slot-8, Bosch, SMC</td>
<td><img src="image5" alt="T-slot diagram" /></td>
<td><img src="image6" alt="T-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-40</td>
<td>T-slot e.g. Festo slot-8, Bosch, SMC</td>
<td><img src="image7" alt="T-slot diagram" /></td>
<td><img src="image8" alt="T-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-44</td>
<td>Trapezoidal slot 60°/90°</td>
<td><img src="image9" alt="T-slot diagram" /></td>
<td><img src="image10" alt="T-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-51</td>
<td>T-slot A</td>
<td><img src="image11" alt="T-slot diagram" /></td>
<td><img src="image12" alt="T-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-59</td>
<td>Location for T-slot A</td>
<td><img src="image13" alt="T-slot diagram" /></td>
<td><img src="image14" alt="T-slot diagram" /></td>
</tr>
<tr>
<td>BMF 303-HW-61</td>
<td>without slot round cylinder Ø 8…80 mm with hose clamp</td>
<td><img src="image15" alt="T-slot diagram" /></td>
<td><img src="image16" alt="T-slot diagram" /></td>
</tr>
</tbody>
</table>

### Tube cuffs

For BMF 303-HW-59/61

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>8…10</td>
<td>1</td>
</tr>
<tr>
<td>12…25</td>
<td>2</td>
</tr>
<tr>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>63</td>
<td>6</td>
</tr>
<tr>
<td>80</td>
<td>7</td>
</tr>
</tbody>
</table>

Tube cuff size please order separately

www.balluff.de
Installation

1. Insert mounting bracket into slot from head end
2. Insert sensor from above and tighten
3. Position sensor, tighten mounting bracket

Included

Set screw DIN 916 M3×5-A2
Screw DIN 7984 M3×10-A2
Mounting bracket

Setscrew DIN 916 M3×4-A2
Screw ISO 1207 M3×6-A2
Mounting bracket
also:
Screw DIN 7984 M3×6-A2

Screw DIN 912 M3×4-A2
Screw DIN 7984 M3×8-A2
Mounting bracket
also:
Screw ISO 1207 M3×4-A2
Screw ISO 1207 M3×8-A2

Screw DIN 7984-KL M3×10-A2
Mounting bracket
also:
Screw ISO 1207-KL M3×10-A2

Screw DIN 7984 M3×8-A2
Mounting bracket

Tube cuff size _ please order separately (see table at left)
### Advantages

- Can be installed in the slot from above. Anytime! Even later! Fast! Saves time!

- Switchpoint adjusted in seconds! Turn screw one revolution, adjust position, tighten.

- Switchpoint cannot be lost. Even if you replace the sensor the adjusted switchpoint is determined by the mounting bracket, not the sensor.

### Ordering code

<table>
<thead>
<tr>
<th>Ordering code</th>
<th>Advantages</th>
<th>Cylinder type</th>
<th>Mounting bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMF 305-HW-25</td>
<td></td>
<td>Trapezoidal slot 60°/90°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e.g. Festo, Bosch, Numatics, Hoerbiger-Origa, Norgren-Martonair</td>
<td></td>
</tr>
<tr>
<td>BMF 305-HW-26</td>
<td></td>
<td>T-slot A</td>
<td>Location for T-slot A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e.g. SMC</td>
<td></td>
</tr>
<tr>
<td>BMF 305-HW-27</td>
<td></td>
<td>Trapezoidal guide</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e.g. Bosch</td>
<td></td>
</tr>
<tr>
<td>BMF 305-HW-32</td>
<td></td>
<td>C-slot</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e.g. Norgren</td>
<td></td>
</tr>
<tr>
<td>BMF 305-HW-64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e.g. Bosch</td>
<td></td>
</tr>
<tr>
<td>BMF 305-HW-21 and BMF 21-HW-8</td>
<td></td>
<td></td>
<td>for tie rod cylinders</td>
</tr>
<tr>
<td>BMF 305-HW-21 and BMF 21-HW-10</td>
<td></td>
<td></td>
<td>for tie rod cylinders (profile shape)</td>
</tr>
</tbody>
</table>
### Included

- Setscrew DIN 916 M3×4-A2
- Screw DIN 7984 M3×6-A2
- Mounting bracket

### Included

- Cheese head screw ISO 1207 M3×5 A2
- Cheese head screw ISO 1207 M3×14 A2
- Mounting bracket

### Included

- Screw DIN 912 M3×4-A2
- Screw DIN 7984 M3×10-A2
- Mounting bracket

### Included

- Screws DIN 7984 M3×5-A2
- Mounting bracket

### Included

- Cheese head screw DIN 7984 M3×5-A2
- Threaded stud DIN 914 M3×4-A2
- Angled screwdriver 1.5 mm blade
- Angled screwdriver 2.0 mm blade

### Installation

1. Insert mounting bracket from above and rotate 90°
2. Insert sensor, position, tighten mounting bracket
3. Tighten down sensor with mounting bracket

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T-slot A: insert mounting bracket, insert sensor from above, position and tighten both screws.

T-slot B: insert mounting bracket from above and rotate 90°. Insert sensor from above, position and tighten both screws.

---

1. Insert mounting bracket from above
2. Insert sensor from above and tighten
3. Position sensor, tighten mounting bracket

---

1. Insert mounting bracket from above and rotate 90°
2. Insert sensor, position, tighten mounting bracket
3. Tighten down sensor with mounting bracket

---

1. Mounting bracket in slot from above
2. Insert sensor from above, position and tighten mounting bracket
3. Tighten down sensor with mounting bracket

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BMF 305-HW-21 used with BMF 21-HW-8 for attaching to a tie rod cylinder

BMF 305-HW-21 used with BMF 21-HW-10 for attaching to a profile cylinder

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PT-Screw KBL 30×8-A2
Mounting bracket BMF 305-HW-21 (Mounting bracket BMF 21-HW-8 please order separately)

PT-Screw KBL 30×8-A2
Mounting bracket BMF 305-HW-21 (Mounting bracket BMF 21-HW-10 please order separately)
BMF 21-HW-8
for pneumatic cylinders with tie rod; piston diameter any
Tie rod diameter up to 6.5 mm
Pneumatic cylinders with DUO rail (Festo), any piston diameter

BMF 21-HW-10/BMF 21-HW-10-E
for pneumatic cylinders with tie rod; piston diameter any Tie rod diameter to 17 mm for pneumatic cylinders with integrated tie rod (Profile)
Any piston diameter
Profile width up to 17 mm
BMF 21-HW-10-E:
Stainless steel 1.4305

BMF 21-HW-11
for pneumatic cylinders without tie rod/rail
Piston diameter 8...80 mm
Mounting bracket only usable with tube cuffs.

<table>
<thead>
<tr>
<th>Piston Ø</th>
<th>Tube cuff size</th>
</tr>
</thead>
<tbody>
<tr>
<td>8, 10</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>16, 20</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>32</td>
<td>3</td>
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<tr>
<td>50, 63</td>
<td>5</td>
</tr>
<tr>
<td>80</td>
<td>7</td>
</tr>
</tbody>
</table>

Tube cuff size _please order separately_
BMF 32-HW-12
for pneumatic cylinders with trapezoidal rail (Rexroth-Mecman)
any piston diameter

BMF 32-HW-13
for pneumatic cylinders with tie rod,
any piston diameter
tie rod diameter max. 11 mm

BMF 32-HW-14
for pneumatic cylinders with trapezoidal rail (Bosch) Typ: 0 822 350/351/352/353/354/355
any piston diameter

BMF 32-HW-15
for pneumatic cylinders with tie rod,
any piston diameter
tie rod diameter up to 17 mm
for pneumatic cylinders with tie rod integrated in housing
any piston diameter
profile width up to 17 mm

BMF 32-HW-16
for pneumatic cylinders with tie rod,
any piston diameter
tie rod diameter up to 6.5 mm
pneumatic cylinders with DUO rail (Festo), any piston diameter

BMF 32-HW-18
for pneumatic cylinders with trapezoidal rail Bosch Rexroth Series 2700

BMF tube cuff size 1...8
Stainless steel for pneumatic cylinders without tie rod/rail Piston diameter 8...80 mm
Piston Ø | Tube cuff size
--- | ---
8, 10 | 1
12, 16, 20 | 2
25, 32 | 3
40 | 4
50 | 5
63 | 8
80 | 7

Tube cuff size _ please order separately