7 Mounting Positions and Important Order Information

7.1 General information on mounting positions

Mounting position designation

SEW-EURODRIVE differentiates between six mounting positions M1 ... M6 for gear units. The following figure shows the position of the gear unit in mounting positions M1 ... M6.

Figure 31: Depiction of mounting positions M1 ... M6
7.2 Important order information

The following order information is required for R, F, K and S gear units in addition to the mounting position to exactly determine the design of the drive.

**Direction of rotation of the drive with a backstop**

If the drive has a backstop, it will be necessary to indicate the required direction of rotation for the output shaft/output side. The direction of rotation is given looking onto the output shaft/output side of the gear unit. For drives with shaft ends at sides A and B, the direction of rotation must be specified as looking onto side A.

\[
\begin{align*}
&\text{CW} = \text{Rotating clockwise} \\
&\text{CCW} = \text{Rotating counterclockwise}
\end{align*}
\]

**Position of the output shaft and the output flange**

In right-angle gear units, it is also necessary to indicate the position of the output shaft and the output flange:

- A or B

\[
\begin{align*}
&\text{CW} = \text{Rotating clockwise} \\
&\text{CCW} = \text{Rotating counterclockwise}
\end{align*}
\]
Position of the output end in right-angle gear units

In shaft mounted right-angle gear units with a shrink disc, it is also necessary to indicate whether the A or B end is the output end. In Figure 34, the A end is the output end. The shrink disc is located opposite the output end.

Figure 34: Position of the output end in right-angle gear units

You will find the permitted mounting surfaces (= hatched area) in the mounting position sheets (page 75 and the following pages).

Example: Only the mounting surface at the bottom is possible with helical-bevel gear units K167/K187 in mounting positions M5 and M6.

Sample order

<table>
<thead>
<tr>
<th>Type (examples)</th>
<th>Mounting position</th>
<th>Shaft position</th>
<th>Flange position</th>
<th>Output end</th>
<th>Position of shrink disc</th>
<th>Direction of rotation of output</th>
</tr>
</thead>
<tbody>
<tr>
<td>K47../RS</td>
<td>M2</td>
<td>A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>CW</td>
</tr>
<tr>
<td>SF77</td>
<td>M6</td>
<td>AB</td>
<td>AB</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>KA97</td>
<td>M4</td>
<td>-</td>
<td>-</td>
<td>B</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>KH107</td>
<td>M1</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>B</td>
<td>-</td>
</tr>
</tbody>
</table>
### 7.3 Key to the mounting position sheets

#### Symbols used

The following table shows the symbols used in the mounting position sheets and what they mean:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Breather valve</td>
</tr>
<tr>
<td></td>
<td>Oil level plug</td>
</tr>
<tr>
<td></td>
<td>Oil drain plug</td>
</tr>
</tbody>
</table>

#### Churning losses

Increased churning losses may arise in some mounting positions. Contact SEW-EURODRIVE in case of the following combinations:

<table>
<thead>
<tr>
<th>Mounting position</th>
<th>Gear unit type</th>
<th>Gear unit size</th>
<th>Input speed [1/min]</th>
</tr>
</thead>
<tbody>
<tr>
<td>M2, M4</td>
<td>R</td>
<td>97 ... 107</td>
<td>&gt; 2500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 107</td>
<td>&gt; 1500</td>
</tr>
<tr>
<td>M2, M3, M4, M5, M6</td>
<td>F</td>
<td>97 ... 107</td>
<td>&gt; 2500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 107</td>
<td>&gt; 1500</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>77 ... 107</td>
<td>&gt; 2500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 107</td>
<td>&gt; 1500</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>77 ... 97</td>
<td>&gt; 2500</td>
</tr>
</tbody>
</table>
7.4 Mounting positions for helical gearmotors

RX57-RX107

* → page 74
Mounting Positions and Important Order Information
Mounting positions for helical gearmotors

RXF57-RXF107

Page 74
Mounting Positions and Important Order Information

Mounting positions for helical gearmotors

M1 ... M6

R07-R167

0° (R)  270° (T)

180° (L)  90° (B)

M1

M2 *

M4 *

R07, R17

M3

M5

M6

R07

M1, M2, M3, M5, M6

R17, R27

M1, M3, M5, M6

R07, R17, R27

R47, R57

M5

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Mounting Positions and Important Order Information

Mounting positions for helical gearmotors

RF07-RF167

M1 ... M6

04 041 02 00

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Mounting Positions and Important Order Information

Mounting positions for helical gearmotors

M1 ... M6

R07F-R87F

Important: See the information in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads"
Mounting Positions and Important Order Information

Mounting positions for parallel shaft helical gearmotors

7.5 Mounting positions for parallel shaft helical gearmotors

F/FA..B/FH27B-157B, FV27B-107B

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Mounting Positions and Important Order Information
Mounting positions for parallel shaft helical gearmotors

FF/FAF/FHF/FAZ/FHZ27-157, FVF/FVZ27-107

M1, M3, M5, M6
F..27

M1 - M6
F..27

M1, M3, M5, M6
F..27

→ page 74
Mounting Positions and Important Order Information

Mounting positions for parallel shaft helical gearmotors

FA/FH27-157, FV27-107, FT37-97

* → page 74

M1 ... M6
7.6 Mounting positions for helical-bevel gearmotors

K/KA..B/KH37B-157B, KV37B-107B

Important: See the information in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads."
Mounting Positions and Important Order Information
Mounting positions for helical-bevel gearmotors

K167-187, KH167B-187B

M1 ... M6

Important: See the information in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads."
Mounting Positions and Important Order Information
Mounting positions for helical-bevel gearmotors

KF/KAF/KHF/KAZ/KHZ37-157, KVF/KVZ37-107

34 027 02 00

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Mounting Positions and Important Order Information
Mounting positions for helical-bevel gearmotors

KA/KH37-157, KV37-107, KT37-97

M1 … M6

M1

M2 *

M3 *

M4 *

M5 *

M6 *

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39 025 02 00
Mounting Positions and Important Order Information
Mounting positions for helical-bevel gearmotors

KH167-187

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7.7  *Mounting positions for helical-worm gearmotors*

**S37**

*Important:* See the information in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads."
Mounting Positions and Important Order Information
Mounting positions for helical-worm gearmotors

S47-S97

Important: See the information in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads."
Mounting Positions and Important Order Information
Mounting positions for helical-worm gearmotors

SF/SAF/SHF37

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Mounting Positions and Important Order Information
Mounting positions for helical-worm gearmotors

SF/SAF/SHF/SAZ/SHZ47-97

M1

M2 *

M3

M4 *

M5 *

M6 *

0° (R) 180° (L) 90° (B)

270° (T)

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Mounting Positions and Important Order Information
Mounting positions for helical-worm gearmotors

SA/SH/ST37

M1

M4

M2

M3

M5

M6

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Mounting Positions and Important Order Information
Mounting positions for helical-worm gearmotors

SA/SH/ST47-97

28 021 02 00

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