

# Accessories for rotary encoders *GEL20x, 21x, 23x, 26x, 29x*

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*Technical information*

Version 2024-06-03

## **General**

- Mounting accessories for magnetic-incremental and magnetic absolute rotary encoders featuring different flange shapes and dimensions
- Comprehensive range of connectors matched to our rotary encoders for trouble-free connections and highly precise transmissions

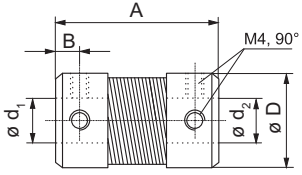
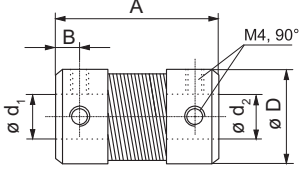
## **Advantages**

- Easy assembly due to perfectly matched and pre-assembled components from a single source
- Adaptation to customised and individual installation situations
- Optimised electrical connection due to connector assembly

*Right to technical changes and errors reserved.*

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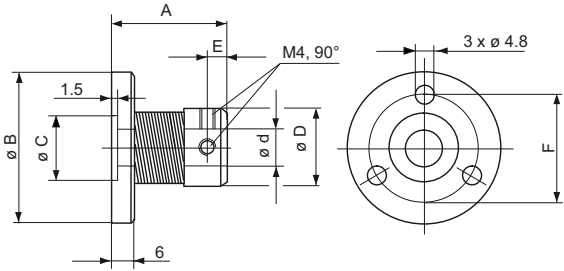
# Connection of drive shaft and rotary encoder shaft

Item no.	Description	Dimensional drawing	Suitable for																																													
<b>MK 8</b>	<p><b>Metal coupling</b> made of stainless steel Universal connection between drive shaft and rotary encoder shaft to compensate for misalignments and angular errors Material: X12CrNi18-8 (V2-A)</p> <ul style="list-style-type: none"> <li>Permissible misalignment of nominal shaft diameter: 3° or 3%</li> <li>Available with different diameters <math>d_1</math> and <math>d_2</math> available</li> </ul>	 <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>D</th> <th><math>d_1^{(1)}</math></th> <th><math>d_2^{(1)}</math></th> <th><math>d_1 / d_2</math></th> </tr> </thead> <tbody> <tr> <td>35</td> <td>5</td> <td>21</td> <td>5 to 12</td> <td>5 to 12</td> <td>6/6; 8/8; 10/10; 12/12</td> </tr> </tbody> </table> <p><math>d_1 / d_2</math> Standard version</p> <p><b>Standard versions MK 8</b></p> <table border="1"> <thead> <tr> <th><math>d_1 / d_2</math></th> <th>Item no.</th> <th>Designation</th> </tr> </thead> <tbody> <tr><td>6 / 6</td><td>VK1002</td><td>MK08.06-06</td></tr> <tr><td>6 / 8</td><td>VK1003</td><td>MK08.06-08</td></tr> <tr><td>6 / 10</td><td>VK1004</td><td>MK08.06-10</td></tr> <tr><td>6 / 12</td><td>VK1005</td><td>MK08.06-12</td></tr> <tr><td>8 / 8</td><td>VK1006</td><td>MK08.08-08</td></tr> <tr><td>8 / 10</td><td>VK1007</td><td>MK08.08-10</td></tr> <tr><td>8 / 12</td><td>VK1008</td><td>MK08.08-12</td></tr> <tr><td>10 / 10</td><td>VK1009</td><td>MK08.10-10</td></tr> <tr><td>10 / 12</td><td>VK1010</td><td>MK08.10-12</td></tr> <tr><td>12 / 12</td><td>VK1011</td><td>MK08.12-12</td></tr> </tbody> </table>	A	B	D	$d_1^{(1)}$	$d_2^{(1)}$	$d_1 / d_2$	35	5	21	5 to 12	5 to 12	6/6; 8/8; 10/10; 12/12	$d_1 / d_2$	Item no.	Designation	6 / 6	VK1002	MK08.06-06	6 / 8	VK1003	MK08.06-08	6 / 10	VK1004	MK08.06-10	6 / 12	VK1005	MK08.06-12	8 / 8	VK1006	MK08.08-08	8 / 10	VK1007	MK08.08-10	8 / 12	VK1008	MK08.08-12	10 / 10	VK1009	MK08.10-10	10 / 12	VK1010	MK08.10-12	12 / 12	VK1011	MK08.12-12	<p>GEL 207 GEL 208 GEL 260 GEL 2010 GEL 2037</p>
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<b>MK 12</b>	<p><b>Metal coupling</b> Universal connection between drive shaft and rotary encoder shaft to compensate for misalignments and angular errors Material: Steel</p> <ul style="list-style-type: none"> <li>Permissible misalignment of nominal shaft diameter: 3° or 3%</li> <li>Available with different diameters <math>d_1</math> and <math>d_2</math> available</li> </ul>	 <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>D</th> <th><math>d_1^{(1)}</math></th> <th><math>d_2^{(1)}</math></th> <th><math>d_1 / d_2</math></th> </tr> </thead> <tbody> <tr> <td>50</td> <td>7</td> <td>26<sup>(2)</sup></td> <td>6 to 15</td> <td>6 to 15</td> <td>12/12</td> </tr> </tbody> </table> <p><math>d_1 / d_2</math> Standard version</p> <p><b>Standard versions MK 12</b></p> <table border="1"> <thead> <tr> <th><math>d_1 / d_2</math></th> <th>Item no.</th> <th>Designation</th> </tr> </thead> <tbody> <tr><td>6 / 10</td><td>VK1039</td><td>MK12.06-10</td></tr> <tr><td>6 / 12</td><td>VK1037</td><td>MK12.06-12</td></tr> <tr><td>8 / 8</td><td>VK1031</td><td>MK12.08-08</td></tr> <tr><td>8 / 10</td><td>VK1032</td><td>MK12.08-10</td></tr> <tr><td>8 / 12</td><td>VK1033</td><td>MK12.08-12</td></tr> <tr><td>10 / 10</td><td>VK1034</td><td>MK12.10-10</td></tr> <tr><td>10 / 12</td><td>VK1035</td><td>MK12.10-12</td></tr> <tr><td>12 / 12</td><td>VK1036</td><td>MK12.12-12</td></tr> </tbody> </table>	A	B	D	$d_1^{(1)}$	$d_2^{(1)}$	$d_1 / d_2$	50	7	26 <sup>(2)</sup>	6 to 15	6 to 15	12/12	$d_1 / d_2$	Item no.	Designation	6 / 10	VK1039	MK12.06-10	6 / 12	VK1037	MK12.06-12	8 / 8	VK1031	MK12.08-08	8 / 10	VK1032	MK12.08-10	8 / 12	VK1033	MK12.08-12	10 / 10	VK1034	MK12.10-10	10 / 12	VK1035	MK12.10-12	12 / 12	VK1036	MK12.12-12	<p>GEL 207 GEL 208 GEL 260 GEL 2010 GEL 2037</p>						
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(1) Tolerance H7

(2) Available with Woodruff key slot

# Connection of drive shaft and rotary encoder shaft

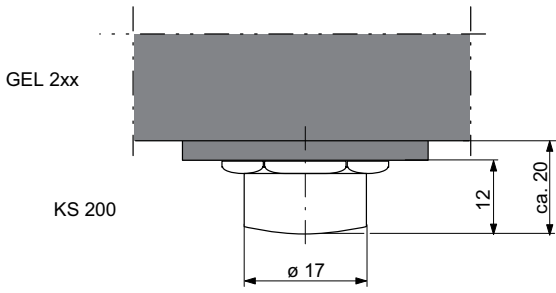
Item no.	Description	Dimensional drawing	Suitable for																																																						
<b>MKF 8</b> <b>MKF 12</b>	<p><b>Flange coupling</b> Flexible flange connection between drive shaft and rotary encoder shaft for the compensation of misalignments and angular errors MKF 8 42 mm flange diameter MKF 12 48 mm flange diameter</p> <ul style="list-style-type: none"> <li>Permissible misalignment of nominal shaft diameter: 3° or 3%</li> <li>Mount coupling preloaded to 1 mm</li> </ul>	 <table border="1" data-bbox="742 604 1308 772"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C<sup>(1)</sup></th> <th>D</th> <th>E</th> <th>F</th> <th>d<sup>(1)</sup></th> <th>d*</th> </tr> </thead> <tbody> <tr> <td>MKF 8</td> <td>30</td> <td>42</td> <td>18</td> <td>21</td> <td>5</td> <td>30</td> <td>6 to 10</td> <td>6; 8; 10</td> </tr> <tr> <td>MKF 12</td> <td>40</td> <td>48</td> <td>22</td> <td>26<sup>(2)</sup></td> <td>7</td> <td>37</td> <td>8 to 15</td> <td>12</td> </tr> </tbody> </table> <p>d* Standard version</p> <p><b>Standard versions MKF 8</b></p> <table border="1" data-bbox="742 817 1308 1030"> <thead> <tr> <th>d1</th> <th>Item no.</th> <th>Designation</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>VK1024</td> <td>MKF08.06</td> </tr> <tr> <td>8</td> <td>VK1021</td> <td>MKF08.08</td> </tr> <tr> <td>10</td> <td>VK1022</td> <td>MKF08.10</td> </tr> <tr> <td>12</td> <td>VK1023</td> <td>MKF08.12</td> </tr> </tbody> </table> <p><b>Standard versions MKF 12</b></p> <table border="1" data-bbox="742 1075 1308 1243"> <thead> <tr> <th>d1</th> <th>Item no.</th> <th>Designation</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>VK1043</td> <td>MKF12.08</td> </tr> <tr> <td>10</td> <td>VK1041</td> <td>MKF12.10</td> </tr> <tr> <td>12</td> <td>VK1042</td> <td>MKF12.12</td> </tr> </tbody> </table>		A	B	C <sup>(1)</sup>	D	E	F	d <sup>(1)</sup>	d*	MKF 8	30	42	18	21	5	30	6 to 10	6; 8; 10	MKF 12	40	48	22	26 <sup>(2)</sup>	7	37	8 to 15	12	d1	Item no.	Designation	6	VK1024	MKF08.06	8	VK1021	MKF08.08	10	VK1022	MKF08.10	12	VK1023	MKF08.12	d1	Item no.	Designation	8	VK1043	MKF12.08	10	VK1041	MKF12.10	12	VK1042	MKF12.12	<p>GEL 207 GEL 208 GEL 260 GEL 2010 GEL 2037</p>
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# Special accessories

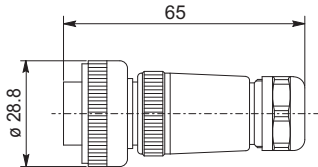
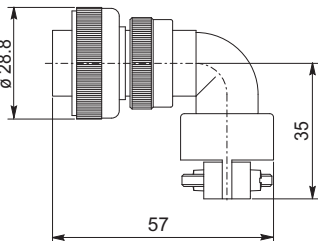
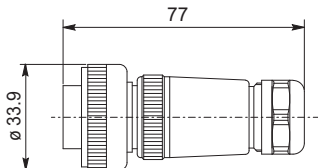
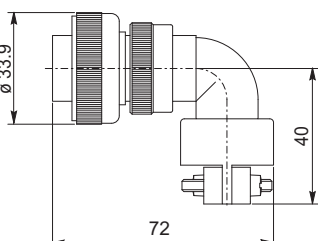
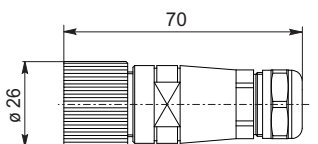
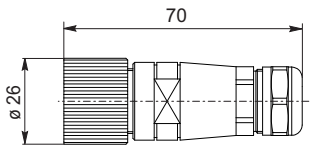
## Protective measures

Item no.	Description	Dimensional drawing	Suitable for
LZ1057	<p><b>Condensed water outlet KS 200</b>            For axial or radial mounting on the rotary encoder housing            Reduction of the degree of protection of the encoder to IP 64            State position with the order for the rotary encoder.            Ensure that condensed water outlet is pointing down when installing the encoder.</p>	 <p>The drawing shows a cross-section of the assembly. The top part is a grey rectangular block labeled 'GEL 2xx'. Below it is a cylindrical component labeled 'KS 200'. Dimension lines indicate the diameter of the KS 200 is <math>\varnothing 17</math> mm, its height is 12 mm, and the total height of the assembly is approximately 20 mm (ca. 20).</p>	<p>GEL 207            GEL 208            GEL 209            GEL 260</p>

# Electrical connection accessories

Various mating connectors are available for the electrical connection of the rotary encoder. Customer-specific adaptation of all components is in principle possible.

## Connection accessories for rotary encoders with analogue or SSI output

Item no.	Description	Dimensional drawing	Suitable for
BS1111	Mating connector GG 66 6-pin, straight, IP 65		GEL 207 GEL 208 GEL 209 GEL 260
BS1113	Mating connector GW 66 6-pin, angled, IP 65		GEL 207 GEL 208 GEL 209 GEL 260
BS1112	Mating connector GG 106, 10-pin, straight, IP 65		GEL 292 GEL 293
FS1132	Mating connector GW 106, 10-pin, angled, IP 65		GEL 292 GEL 293
FS1139	Mating connector GG 126 M23, 12-pin, straight, female, A-coded		GEL 207 GEL 208 GEL 260 GEL 2037
FS11311	Mating connector M23, 17-pin, straight		GEL 2037

## Notes:

**Notes:**



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