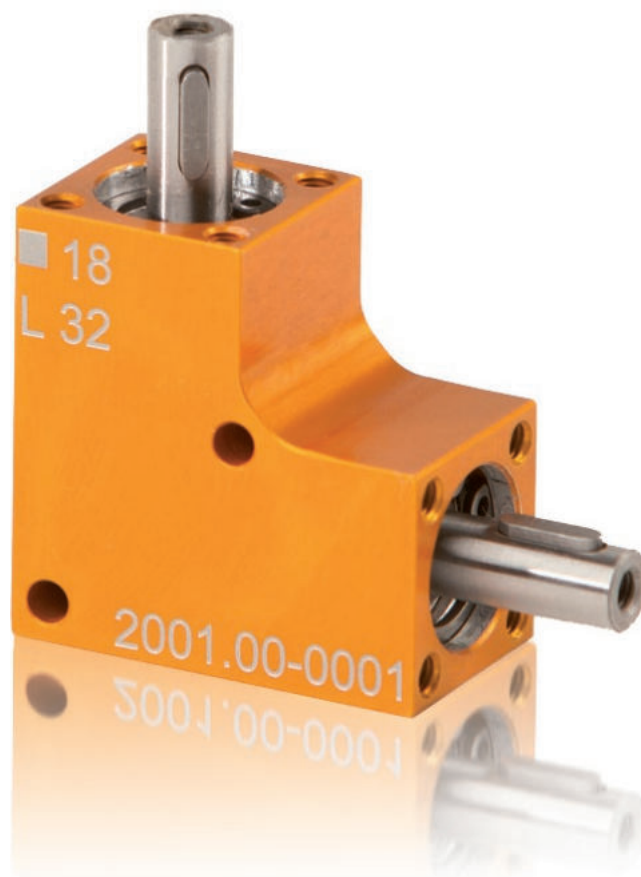


Bevel Gearboxes

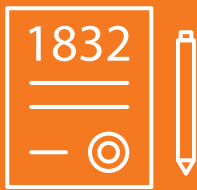


WE GET IDEAS MOVING

The spirit of innovation and a sense of ideas beyond the familiar has made us into a pioneering company over more than 185 years.

For a quarter of a century, we have been offering customized drive solutions for office and workplace workstations, as well as for shading systems and building technology.

Through our tradition of innovation, we have succeeded in establishing ourselves as a specialist and problem-solver in numerous areas.



Over 185 years'
experience



More than 60 standard
solutions for four different
market segments



100%
Made in Black Forest

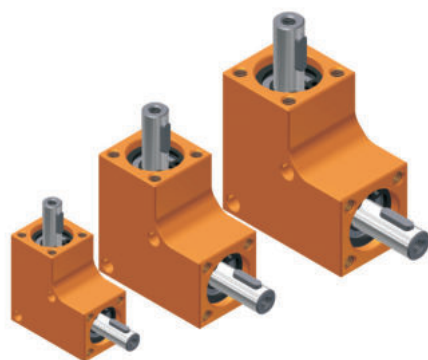


THE RIGHT PRODUCT FOR EACH APPLICATION

Bevel Gears

| | |
|---------|---|
| Page 04 | 200X L-Gearbox Angular gear Ket-Bee |
| Page 08 | 200X T-Gearbox Angular gear Ket-Bee |
| Page 10 | 3014 Deflection gearbox |
| Page 12 | 3039 Deflection gearbox |
| Page 14 | 3045 Deflection gearbox |
| Page 16 | 3056 Bevel gearbox |
| Page 18 | 3057 Bevel gearbox |
| Page 20 | 3058 Bevel gearbox |
| Page 22 | 3869/3870/3871/3872 Bevel gearbox |
| Page 24 | 3874 Bevel gearbox |
| Page 26 | 3875 Bevel gearbox |
| Page 28 | 3900/3901 Bevel gearbox with throughgoing spindle |

Angular gear Ket-Bee 200X L-Gearbox

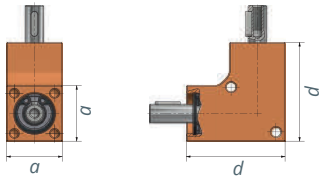



A bevel gearbox family consisting of 8 sizes for versatile use as an angular gearbox.

The gearbox is characterised by a compact design with maximum torque, sturdiness and smooth power transmission. The uncomplicated mounting is made possible by a simple screw fixing.

Special features

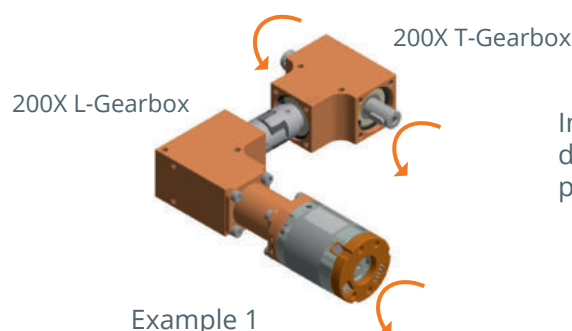
- Maintenance-free and silent running
- Steel bevel wheels, case-hardened
- Aluminium housing, anodized (orange or silver)
- Ratio 1:1
- Permitted operating temp. -20°C to +60°C
- Backlash at drive shaft $3^\circ \pm 1^\circ$
- Duty cycle 20 % at 5 min (1 min ON, 4 min OFF)
- Lifetime of 1000 hours with:
 - full load and
 - input speed of 500 rpm and
 - duty cycle 20% with 5 min

| Ket-Bee | | L-Gearbox 90° | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------------|---------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|----|----|----------|----------|----------|----------|----------|----|----|
| 2000.00- 2001.00- 2002.00- 2003.00- 2004.00- 2005.00- 2006.00- 2007.00- | Max. torque (Speed-dependent) | |  | | | | | | | | | | | | | | | | | | | |
| | 4 bis 28 | Ncm | □ 15 mm | 26 mm | | | | | | | | | | | | | | | | | | |
| | 5 bis 35 | Ncm | □ 18 mm | 32 mm | | | | | | | | | | | | | | | | | | |
| | 15 bis 75 | Ncm | □ 20 mm | 35 mm | | | | | | | | | | | | | | | | | | |
| | 50 bis 250 | Ncm | □ 24 mm | 42 mm | | | | | | | | | | | | | | | | | | |
| | 75 bis 400 | Ncm | □ 26 mm | 46 mm | | | | | | | | | | | | | | | | | | |
| | 100 bis 500 | Ncm | □ 30 mm | 53 mm | | | | | | | | | | | | | | | | | | |
| | 150 bis 800 | Ncm | □ 32 mm | 56 mm | | | | | | | | | | | | | | | | | | |
| | 200 bis 1000 | Ncm | □ 35 mm | 60 mm | | | | | | | | | | | | | | | | | | |
| Gearboxtype | | | | | | | | | | | | | | | | | | | | | | |
| L L-Gearbox: Angular gearbox 90° | | | | | | | | | | | | | | | | | | | | | | |
| Housing: Material & Optics | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>0 Alu, orange anodized (standard)</div><div>1 Alu, silver anodized</div><div>X_i Alu, Color according to customer requirements</div></div>  | | | | | | | | | | | | | | | | | | | | | | |
| Configuration of shaft | | | | | | | | | | | | | | | | | | | | | | |
| A All as solid shaft with feather key <i>(at 2000 gearbox no feather key possible)</i> | | | | | | | | | | | | | | | | | | | | | | |
| Shaft Ø in mm per gearbox-type (m) | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>XX Shafts-Ø = m (Table) (e.g.: „06“ for 2001.00)</div><table><tr><th>m: for 2000</th><th>m: for 2001</th><th>m: for 2002</th><th>m: for 2003</th><th>m: for 2004</th><th>m: for 2005</th><th>m: for 2006</th><th>m: for 2007</th><th></th></tr><tr><td>04</td><td>06</td><td>06 08</td><td>08 10</td><td>08 12</td><td>08 12</td><td>10 12</td><td>12</td><td>mm</td></tr></table></div> | | | | | m: for 2000 | m: for 2001 | m: for 2002 | m: for 2003 | m: for 2004 | m: for 2005 | m: for 2006 | m: for 2007 | | 04 | 06 | 06 08 | 08 10 | 08 12 | 08 12 | 10 12 | 12 | mm |
| m: for 2000 | m: for 2001 | m: for 2002 | m: for 2003 | m: for 2004 | m: for 2005 | m: for 2006 | m: for 2007 | | | | | | | | | | | | | | | |
| 04 | 06 | 06 08 | 08 10 | 08 12 | 08 12 | 10 12 | 12 | mm | | | | | | | | | | | | | | |
| Ratio R | | | | | | | | | | | | | | | | | | | | | | |
| R1 i = 1:1 | | | | | | | | | | | | | | | | | | | | | | |
| 2002.00- | L | 0 | A | 06 R1 | | | | | | | | | | | | | | | | | | |
| Example: 2002.00-L0A06R1 | | | | | | | | | | | | | | | | | | | | | | |

| Item.-Nr. | Speed n in rpm | Max. torque M in Ncm | Radial and axial load* F_R in N F_A in N | | Part weight in kg |
|-----------------|---------------------|---------------------------|---|-----|----------------------|
| 2000.00-LXAXXR1 | 100/500/1000 | 28/8/4 | 48 | 48 | 0.029 |
| 2001.00-LXAXXR1 | 100/500/1000 | 35/10/5 | 60 | 60 | 0.052 |
| 2002.00-LXAXXR1 | 100/500/1000 | 75/30/15 | 100 | 100 | 0.073 |
| 2003.00-LXAXXR1 | 100/500/1000 | 250/100/50 | 120 | 120 | 0.142 |
| 2004.00-LXAXXR1 | 100/500/1000 | 400/150/75 | 140 | 140 | 0.189 |
| 2005.00-LXAXXR1 | 100/500/1000 | 500/200/100 | 240 | 240 | 0.268 |
| 2006.00-LXAXXR1 | 100/500/1000 | 800/300/150 | 550 | 550 | 0.330 |
| 2007.00-LXAXXR1 | 100/500/1000 | 1000/400/200 | 550 | 550 | 0.395 |

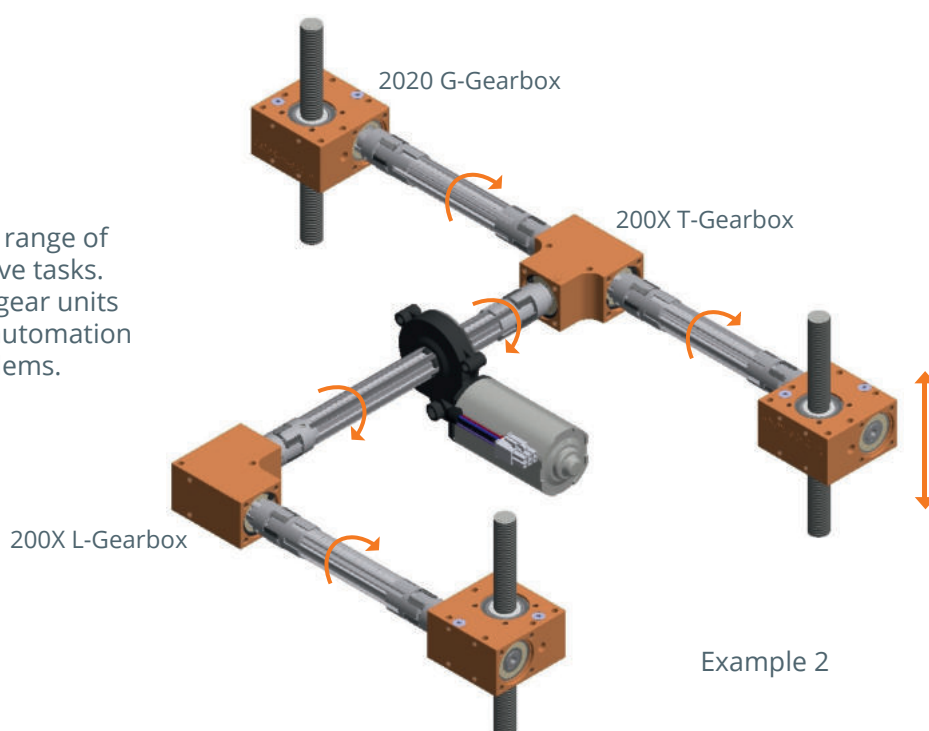
* The values of F_R apply only when $F_A = 0$ N
The values of F_A apply only when $F_R = 0$ N

Application example

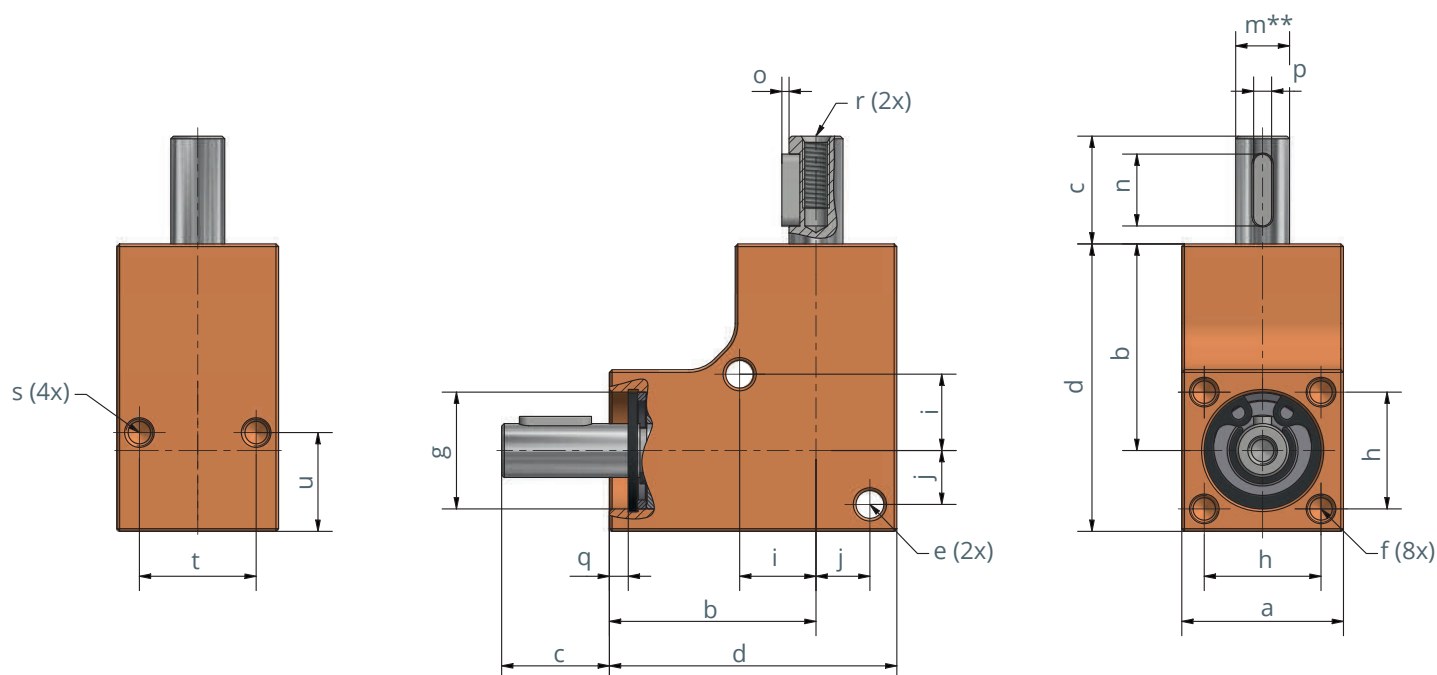


In our Ket-Bee family we offer gearboxes for a simple 90° deflection (200x L-gearbox) as well as for a splitting of the power transmission to two drives (200x T-gearbox)

Our standard components offer a wide range of options for efficiently implementing drive tasks. Thanks to numerous variants of worm gear units from the Ket-Motion series, almost all automation tasks can be handled without any problems.

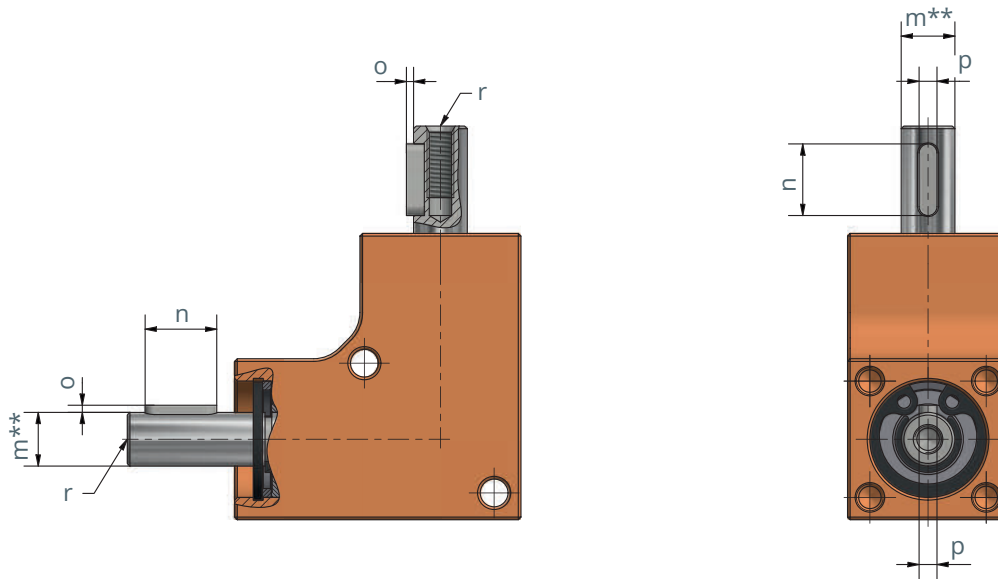


Dimensioning general



| Gearbox-type | Dimensions in mm | | | | | | | | | | | | |
|--------------|------------------|------|----|------|--------|-----|-----|------|------|------|--------|-----|----|
| | a | b | d | e | f | g | h | i | j | q | s | t | u |
| 2000 | 15 | 18.5 | 26 | ø2.6 | M2.5x5 | ø11 | 11 | 8 | 4.5 | 1.1 | M2.5x5 | 11 | 9 |
| 2001 | 18 | 23 | 32 | ø3.1 | M3x10 | ø13 | 6.5 | 8.5 | 6 | 2.1 | M3x6 | 6.5 | 11 |
| 2002 | 20 | 25 | 35 | ø3.1 | M3x10 | ø16 | 7.5 | 10 | 7 | 2.05 | M3x6 | 7.5 | 10 |
| 2003 | 24 | 30 | 42 | ø4.1 | M4x10 | ø19 | 9 | 12 | 8 | 2 | M4x8 | 9 | 16 |
| 2004 | 26 | 33 | 46 | ø4.1 | M4x10 | ø21 | 10 | 13 | 9 | 2 | M4x8 | 10 | 16 |
| 2005 | 30 | 38 | 53 | ø4.1 | M4x10 | ø24 | 11 | 15 | 11 | 2.1 | M4x8 | 11 | 16 |
| 2006 | 32 | 40 | 56 | ø4.1 | M4x10 | ø28 | 12 | 17 | 12 | 2.1 | M4x8 | 12 | 16 |
| 2007 | 35 | 42.5 | 60 | ø4.1 | M4x10 | ø30 | 13 | 17.5 | 13.5 | 2.1 | M4x8 | 13 | 16 |

Dimensioning shaft

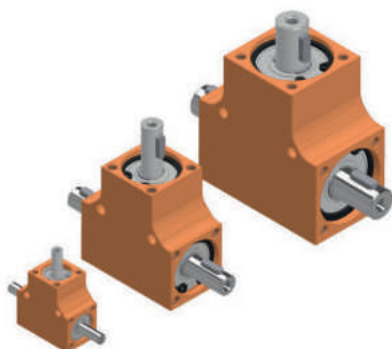


** Measured with the three point measuring screw

| Gearboxtype | Ø Shaft | Shaft-length c | Dimensions featherkey | | | Threaded hole inside | Item- Nr. |
|-------------|---------|-------------------|-----------------------|-----|---|-------------------------|-----------------|
| | m** | | n | o | p | r | |
| 2000 | Ø4j5 | 10 | 0 | 0 | 0 | M2.5x5 | 2000.00-LXA04R1 |
| 2001 | Ø6j6 | 12 | 8 | 0.8 | 2 | M3x8 | 2001.00-LXA06R1 |
| 2002 | Ø6j6 | 12 | 8 | 0.8 | 2 | M3x6 | 2002.00-LXA06R1 |
| | Ø8j6 | 12 | 8 | 0.8 | 2 | M3x8 | 2002.00-LXA08R1 |
| 2003 | Ø8j6 | 16 | 10 | 1.2 | 3 | M4x8 | 2003.00-LXA08R1 |
| | Ø10j6 | 16 | 12 | 1.5 | 4 | M4x8 | 2003.00-LXA10R1 |
| 2004 | Ø8j6 | 16 | 10 | 1.2 | 3 | M4x8 | 2004.00-LXA08R1 |
| | Ø12j6 | 16 | 12 | 1.5 | 4 | M5x8 | 2004.00-LXA12R1 |
| 2005 | Ø8j6 | 16 | 10 | 1.2 | 3 | M4x8 | 2005.00-LXA08R1 |
| | Ø12j6 | 16 | 12 | 1.5 | 4 | M5x8 | 2005.00-LXA12R1 |
| 2006 | Ø10j6 | 16 | 10 | 1.2 | 3 | M4x8 | 2006.00-LXA10R1 |
| | Ø12j6 | 16 | 12 | 1.5 | 4 | M5x8 | 2006.00-LXA12R1 |
| 2007 | Ø12j6 | 16 | 12 | 1.5 | 4 | M5x8 | 2007.00-LXA12R1 |

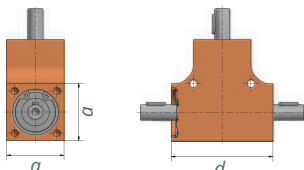

Angular gear Ket-Bee 200X T-Gearbox

A bevel gearbox family with through shaft consisting of 8 sizes for versatile use as an angular gearbox. The gearbox is characterised by a compact design with maximum torque, sturdiness and smooth power transmission. The uncomplicated mounting is made possible by a simple screw fixing.



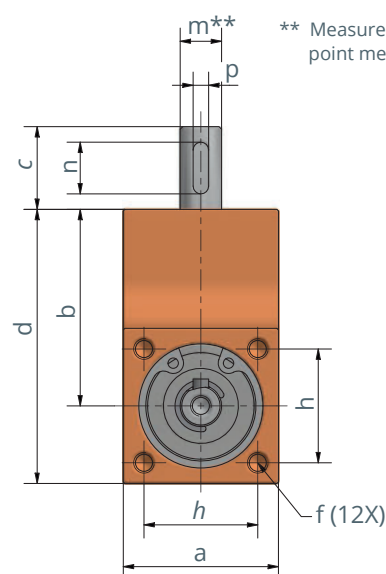
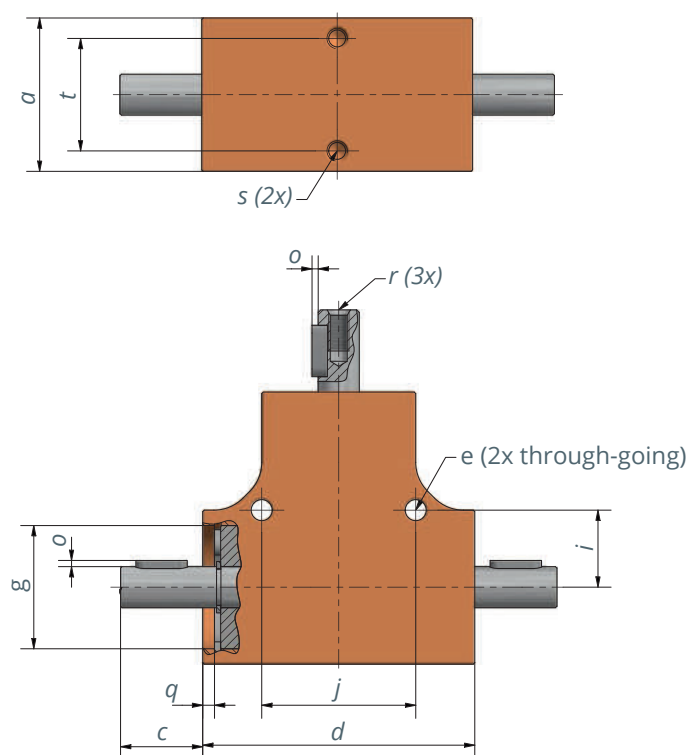
Special features

- Maintenance-free and silent running
- Steel bevel wheels, case-hardened
- Aluminium housing, anodized
- Ratio 1:1
- Permitted operating temp. -20°C to +60°C
- Backlash at drive shaft $3^\circ \pm 1^\circ$
- Duty cycle 20 % at 5 min (1 min ON, 4 min OFF)
- Lifetime of 1000 hours with:
 - full load and
 - input speed of 500 rpm and
 - duty cycle 20% with 5 min

| Ket-Bee | | T-Gearbox 90° | | | | | | | | | | | | | | | | | | | | | |
|---|----------------------------------|---------------|---|-------------|-------------|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----|----|----|----|----|----|----|----|----|--|
| 2000.00- 2001.00- 2002.00- 2003.00- 2004.00- 2005.00- 2006.00- 2007.00- | Max. torque (Speed-dependent) | |  | | | | | | | | | | | | | | | | | | | | |
| | 4 to 28 | Ncm | □ 15 mm | 26 mm | | | | | | | | | | | | | | | | | | | |
| | 5 to 35 | Ncm | □ 18 mm | 32 mm | | | | | | | | | | | | | | | | | | | |
| | 15 to 75 | Ncm | □ 20 mm | 35 mm | | | | | | | | | | | | | | | | | | | |
| | 50 to 250 | Ncm | □ 24 mm | 42 mm | | | | | | | | | | | | | | | | | | | |
| | 75 to 400 | Ncm | □ 26 mm | 46 mm | | | | | | | | | | | | | | | | | | | |
| | 100 to 500 | Ncm | □ 30 mm | 53 mm | | | | | | | | | | | | | | | | | | | |
| | 150 to 800 | Ncm | □ 32 mm | 56 mm | | | | | | | | | | | | | | | | | | | |
| | 200 to 1000 | Ncm | □ 35 mm | 60 mm | | | | | | | | | | | | | | | | | | | |
| Gearboxtype | | | | | | | | | | | | | | | | | | | | | | | |
| T T-gearbox: Through shaft, synchronization | | | | | | | | | | | | | | | | | | | | | | | |
| Housing: Material & Optics | | | | | | | | | | | | | | | | | | | | | | | |
| 0 Alu, orange anodized (standard) | | | | | | | | | | | | | | | | | | | | | | | |
| 1 Alu, silber anodized | | | | | | | | | | | | | | | | | | | | | | | |
| Xi Alu, Color according to customer requirements | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | |
| Configuration of shaft | | | | | | | | | | | | | | | | | | | | | | | |
| A All as solid shaft with feather key (at 2000 gearbox no feather key possible) | | | | | | | | | | | | | | | | | | | | | | | |
| Shaft Ø in mm per gearbox-type (m) | | | | | | | | | | | | | | | | | | | | | | | |
| XX Shafts-Ø = m (Table) (e.g.: „06“ for 2001.00) | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><td>m: for 2000</td><td>m: for 2001</td><td>m: for 2002</td><td>m: for 2003</td><td>m: for 2004</td><td>m: for 2005</td><td>m: for 2006</td><td>m: bei 2007</td><td>mm</td></tr><tr><td>04</td><td>06</td><td>06</td><td>08</td><td>08</td><td>08</td><td>10</td><td>12</td><td></td></tr></table> | | | | | | m: for 2000 | m: for 2001 | m: for 2002 | m: for 2003 | m: for 2004 | m: for 2005 | m: for 2006 | m: bei 2007 | mm | 04 | 06 | 06 | 08 | 08 | 08 | 10 | 12 | |
| m: for 2000 | m: for 2001 | m: for 2002 | m: for 2003 | m: for 2004 | m: for 2005 | m: for 2006 | m: bei 2007 | mm | | | | | | | | | | | | | | | |
| 04 | 06 | 06 | 08 | 08 | 08 | 10 | 12 | | | | | | | | | | | | | | | | |
| Ratio R | | | | | | | | | | | | | | | | | | | | | | | |
| R1 i = 1:1 | | | | | | | | | | | | | | | | | | | | | | | |
| 2002.00- | T | 0 | A | 06 | R1 | Example: 2002.00-T0A06R1 | | | | | | | | | | | | | | | | | |

| Item.-Nr. | Speed <i>n</i> in rpm | Max. torque <i>M</i> in Ncm | Radial and axial load* <i>F_R</i> in N <i>F_A</i> in N | | Part weight in kg |
|-----------------|--------------------------|--------------------------------|---|-----|----------------------|
| 2000.00-T0A04R1 | 100/500/1000 | 28/8/4 | 48 | 48 | 0.03 |
| 2001.00-T0A06R1 | 100/500/1000 | 35/10/5 | 60 | 60 | 0.06 |
| 2002.00-T0A06R1 | 100/500/1000 | 75/30/15 | 100 | 100 | 0.07 |
| 2003.00-T0A08R1 | 100/500/1000 | 250/100/50 | 120 | 120 | 0.13 |
| 2004.00-T0A08R1 | 100/500/1000 | 400/150/75 | 140 | 140 | 0.17 |
| 2005.00-T0A08R1 | 100/500/1000 | 500/200/100 | 240 | 240 | 0.19 |
| 2006.00-T0A10R1 | 100/500/1000 | 800/300/150 | 550 | 550 | 0.24 |
| 2007.00-T0A12R1 | 100/500/1000 | 1000/400/200 | 550 | 550 | 0.40 |

* The values of F_R apply only when $F_A = 0$ N
The values of F_A apply only when $F_R = 0$ N



** Measured with the three point measuring screw

| Gearbox-type | Dimensions in mm | | | | | | | | | | | | | | | | | |
|--------------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|----------------|----------|----------|----------|----------|----------|----------|
| | <i>a</i> | <i>b</i> | <i>c</i> | <i>d</i> | <i>e</i> | <i>f</i> | <i>g</i> | <i>h</i> | <i>i</i> | <i>j</i> | <i>m</i> ** | <i>n</i> | <i>o</i> | <i>p</i> | <i>q</i> | <i>r</i> | <i>s</i> | <i>t</i> |
| 2000 | 15 | 18.5 | 10 | 26 | ø2.6 | M2.5x4 | ø11 | 11 | 8 | 16 | ø4j5 | No feather key | 1.1 | M2.5x5 | M2.5x4 | 11 | | |
| 2001 | 18 | 23 | 12 | 32 | ø3.1 | M3x4 | ø13 | 13 | 8.5 | 17 | ø6j6 | 8 | 0.8 | 2 | 3.1 | M3x6 | M3x4 | 13 |
| 2002 | 20 | 25 | 12 | 35 | ø3.1 | M3x6 | ø16 | 15 | 10 | 20 | ø6j6 | 8 | 0.8 | 2 | 2.25 | M3x6 | M3x6 | 15 |
| 2003 | 24 | 30 | 16 | 42 | ø4.1 | M4x6 | ø19 | 18 | 12 | 24 | ø8j6 | 10 | 1.2 | 3 | 2 | M4x8 | M4x6 | 18 |
| 2004 | 26 | 46 | 16 | 46 | ø4.1 | M4x8 | ø22 | 20 | 14 | 26 | ø8j6 | 10 | 1.2 | 3 | 2 | M4x8 | M4x8 | 20 |
| 2005 | 30 | 38 | 16 | 53 | ø4.1 | M4x8 | ø24 | 22 | 15 | 30 | ø8j6 | 10 | 1.2 | 3 | 2.3 | M4x8 | M4x8 | 22 |
| 2006 | 32 | 40 | 16 | 56 | ø4.1 | M4x10 | ø28 | 24 | 17 | 34 | ø10j6 | 10 | 1.2 | 3 | 2.8 | M4x8 | M4x8 | 24 |
| 2007 | 35 | 42.5 | 16 | 60 | ø4.1 | M4x10 | ø30 | 26 | 17.5 | 35 | ø12j6 | 12 | 1.5 | 4 | 3.2 | M5x8 | M4x8 | 26 |

Deflection gearbox 3014



Description

Bevel gearbox family for use as a deflection gearbox in up to three directions.

Deflection of rotational movement possible at angles of 90°, 120°, 135°.

Upon request the number of drive wheels can be varied.

Simple screw mounting on the adaptor facilitates uncomplicated assembly.

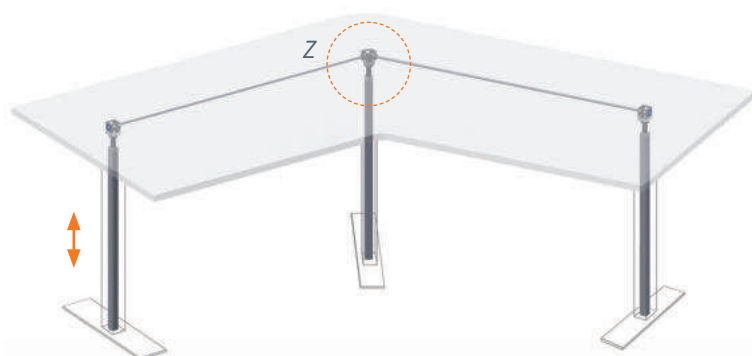
Special features

- Maintenance-free
- Case hardened steel bevel wheels
- Housing made of reinforced glass-fibre or aluminium at an angle of 90°/120°/135°
- Downward ratio 1.3:1, ratio in direction of deflection 1:1
- Designed for the manual operation

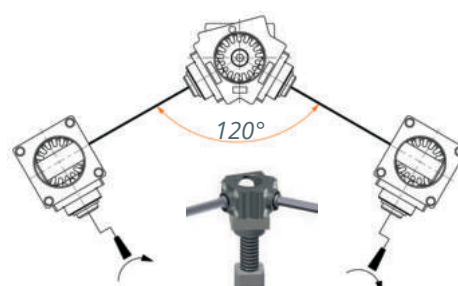
Technical data

| Model | 3014.00-0069 | 3014.00-0070 | 3014.00-0071 | 3014.00-0082 |
|----------------------------------|--------------|--------------|--------------|--------------|
| Ratio in direction of deflection | 1:1 | 1:1 | 1:1 | 1:1 |
| 90° downward ratio | 1.3:1 | 1.3:1 | 1.3:1 | 1.3:1 |
| Input/Output | hex 6 mm | hex 6 mm | hex 6 mm | hex 6 mm |
| Number of bevel wheels | 4 | 4 | 3 | 3 |
| Max. drive torque | 3 Nm | 3 Nm | 3 Nm | 3 Nm |
| Housing/angle | 3 x 120° | 2 x 135° | 120° | 135° |
| Material | Aluminium | Aluminium | Plastic | Plastic |

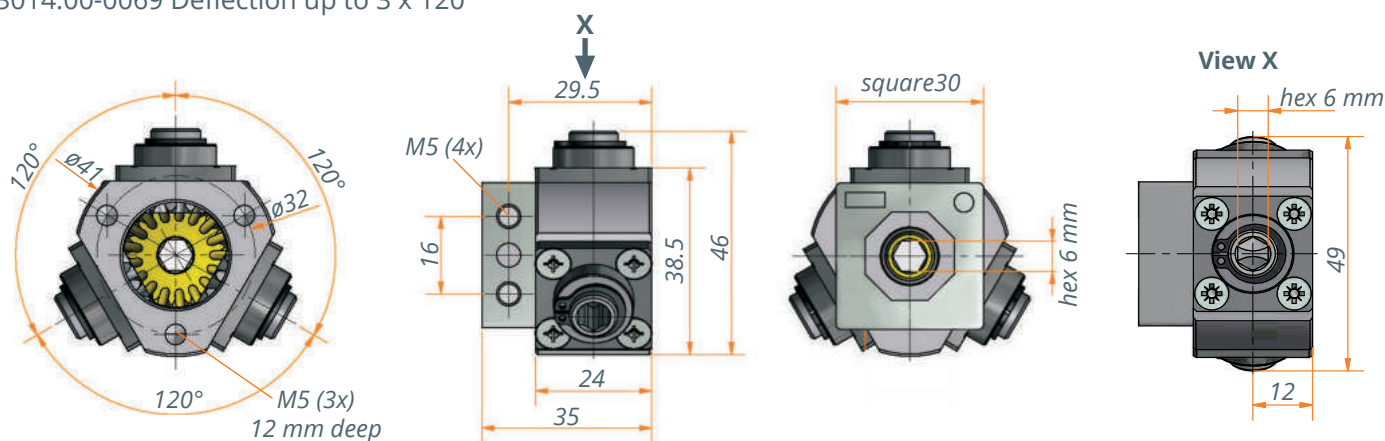
Application example



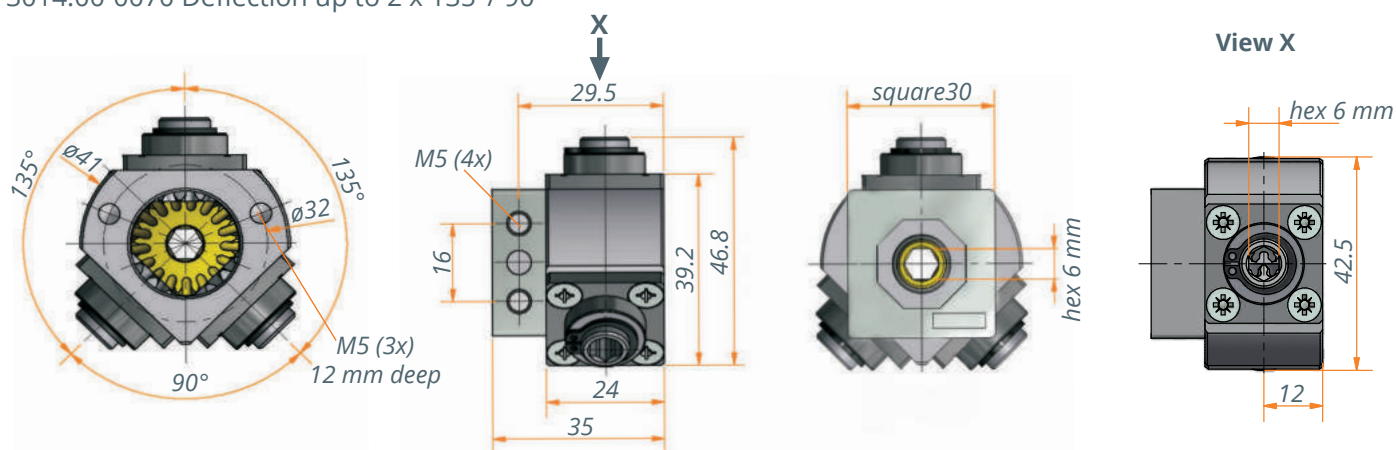
View Z



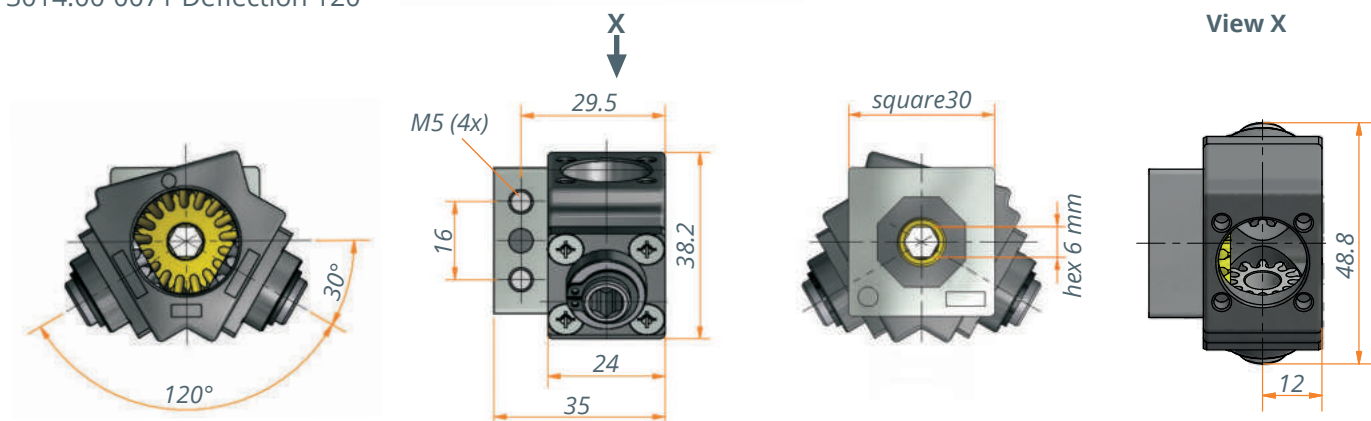
3014.00-0069 Deflection up to $3 \times 120^\circ$



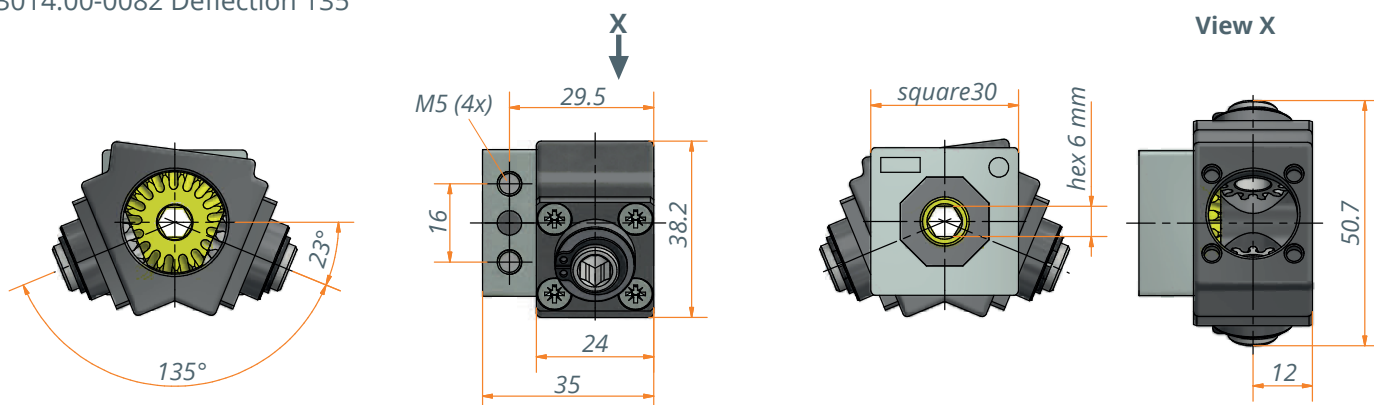
3014.00-0070 Deflection up to $2 \times 135^\circ / 90^\circ$



3014.00-0071 Deflection 120°



3014.00-0082 Deflection 135°

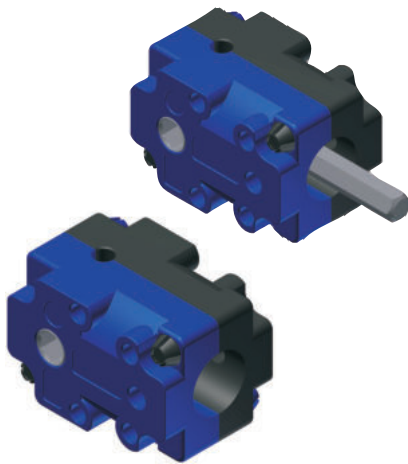


Deflection gearbox 3039

Description

Bevel gearbox for the deflection of a rotary movement at an angle of 90°
The gearbox can be supplied both with a hexagonal axle with a specific length or without an axle.

Simple mounting is made possible by a flexible screw fixing.



Special features

- Maintenance-free
- Case-hardened steel bevel wheels
- Syntetic gear housing
- Ratio 1:1
- Suitable for both manual and electric motor drives

Variant key

3039.00 V03 A XXX

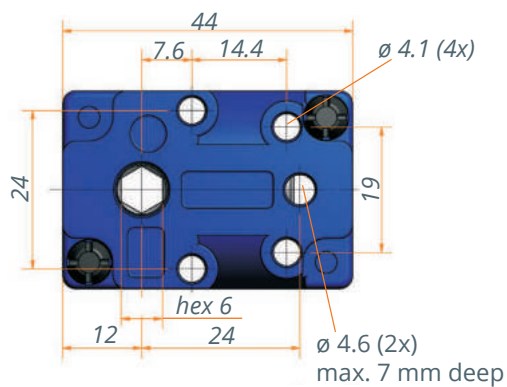
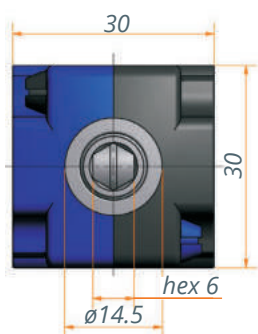
Length of axis: XXX in mm
Variant with hexagonal-axis



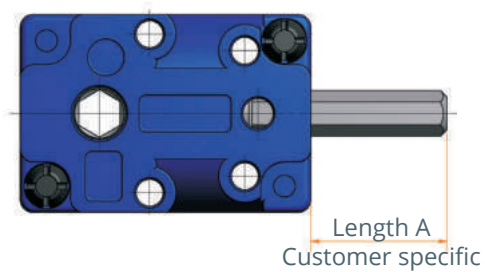
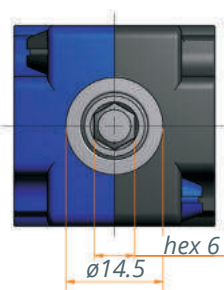
Technical data

| Model | 3039.00-0002 | 3039.00-V03AXXX |
|------------------------|--------------|-------------------|
| Ratio | 1:1 | 1:1 |
| Input/Output | hex 6 mm | hex 6 mm |
| Number of bevel wheels | 2 | 2 |
| Max. drive torque | 4 Nm | 4 Nm |
| Length A | - | Customer specific |
| Housing | Synthetic | Synthetic |

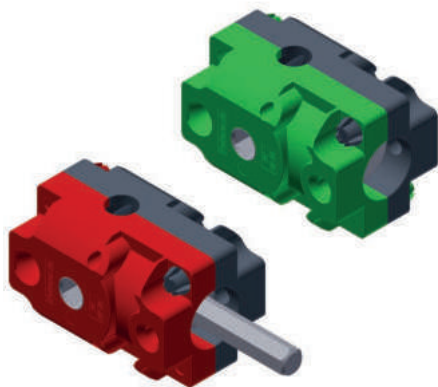
3039.00-0001



3039.00-V03AXXX



Deflection gearbox 3045



Description

Bevel gearbox for the deflection of a rotary movement at an angle of 90°. The gearbox can be supplied both with a hexagonal axle with a specific length or without an axle.

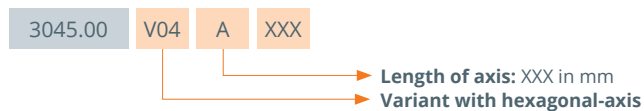
Simple mounting is made possible by a flexible screw fixing.

Special features

- Maintenance-free
- Case-hardened steel bevel wheels
- Synthetic gear housing
- Ratio 1 : 1 (red-black) and 2 : 1 (green-black)
- Suitable for both manual and electric motor drives



Variant key

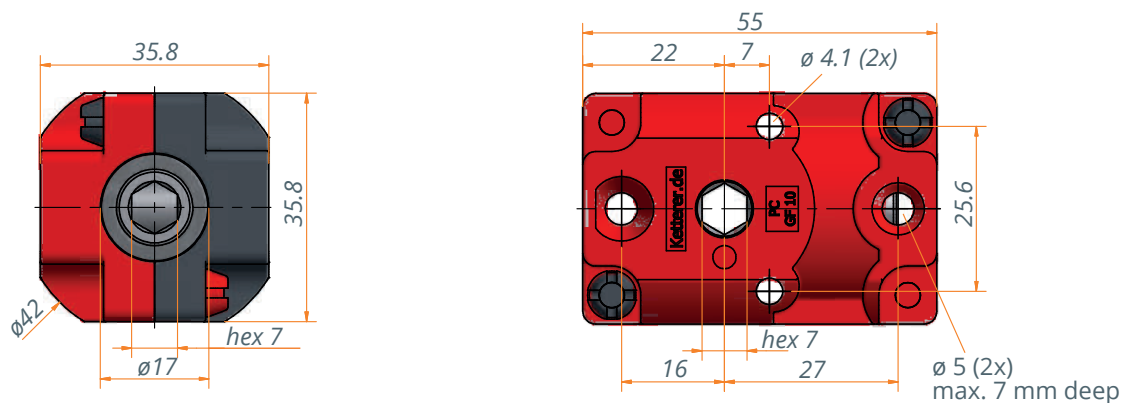


Technical data

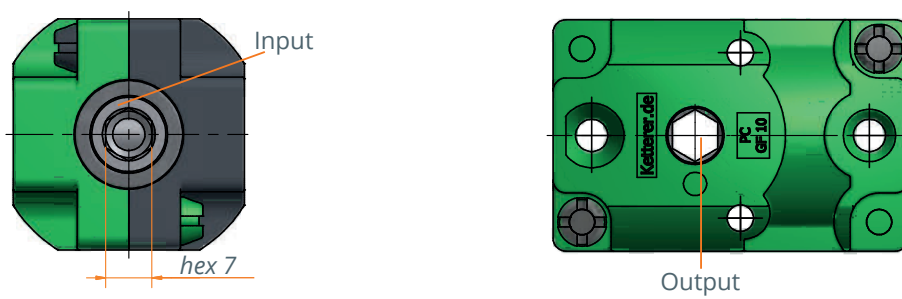
| Model | 3045.00-3001 | 3045.00-3002 | 3045.00-V04AXXX |
|------------------------|--------------|--------------|-------------------|
| Ratio | 1:1 | 2:1* | 1:1 |
| Input/Output | hex 7 mm | hex 7 mm | hex 7 mm |
| Number of bevel wheels | 2 | 2 | 2 |
| Max. drive torque | 5,5 Nm | 5,5 Nm | 5,5 Nm |
| Length A | - | - | Customer specific |
| Housing material | Synthetic | Synthetic | Synthetic |

* Input to output

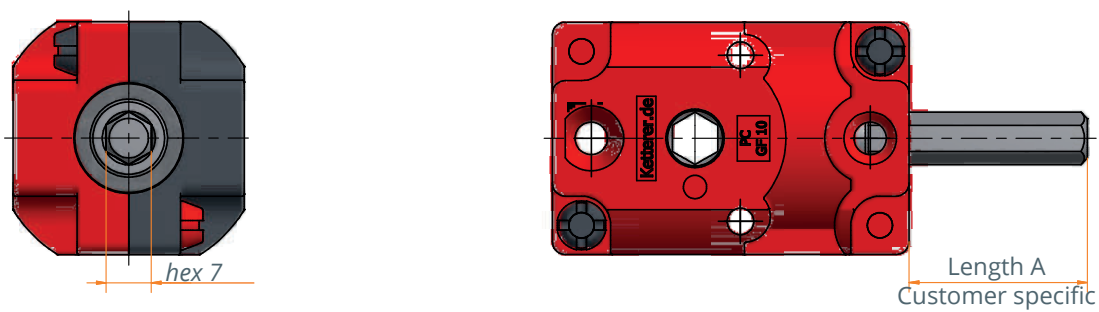
3045.00-3001 - Ratio 1:1



3045.00-3002 - Ratio 2:1 (Input : Output)



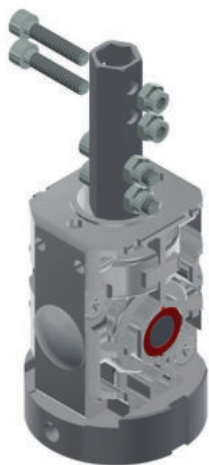
3045.00-V04AXXX - Ratio 1:1



Bevel gearbox 3056

Description

Compact bevel gearbox for the deflection of a rotary movement at an angle of 90°. Ideally suited for the adjustment of large parasols. Special bevel gear toothing ensures smooth running of the gearbox. Drive and output can be modified for custom applications. The gearbox can be combined with any spindle.



Special features

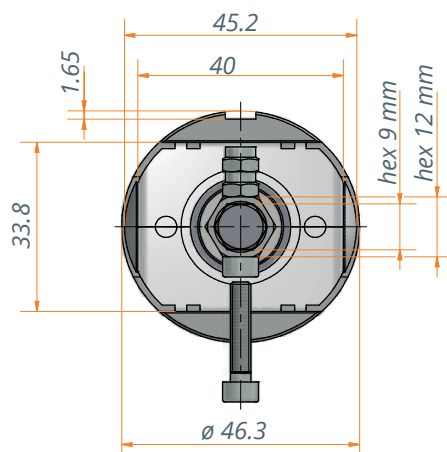
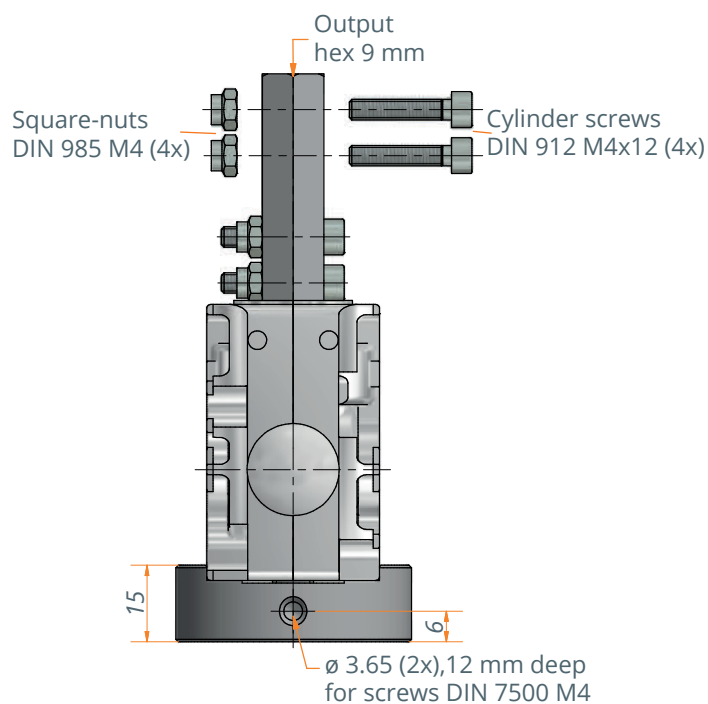
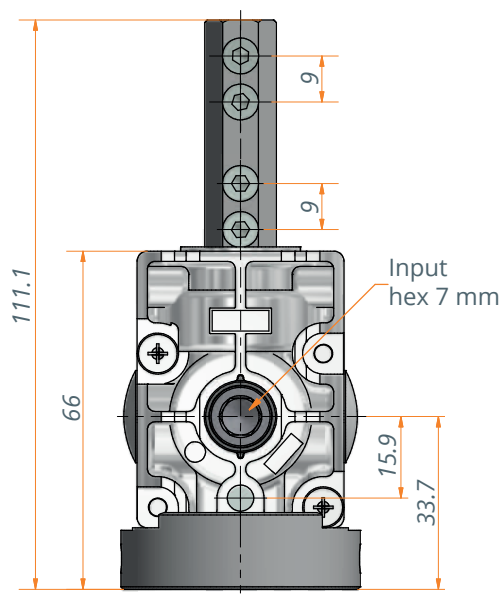
- Maintenance-free
- Case-hardened bevel wheels
- Housing made of zinc die-casting
- Ratio 1:2, on request also 1:1 possible
- Designed for the manual operation



Technical data

| Model | 3056.00-2000 |
|---------------------------------------|------------------|
| Ratio | 1:2 |
| Input | hex 6 mm |
| Output | hex 9 mm |
| Number of bevel wheels | 2 |
| Housing material | Zinc die-casting |
| Max. drive torque | 6 Nm |
| Max. traction load static short term* | 8,000 N |
| Max. pressure load static short term* | 5,000 Nm |

* Peak load, e.g. caused by gusts of wind



Technical notes

- Attention: Spindle is not in scope of delivery, can be produced to customer requirements
- Depending of the spindle pitch the self-locking of the system must be checked

Application example



Bevel gearbox 3057

Description



Compact bevel gearbox for the deflection of a rotary movement at an angle of 90°. Ideally suited for the adjustment of large parasols. Special bevel gear toothing ensures smooth running of the gearbox. Drive and output can be modified for custom applications. The gearbox can be combined with any spindle.

Special features

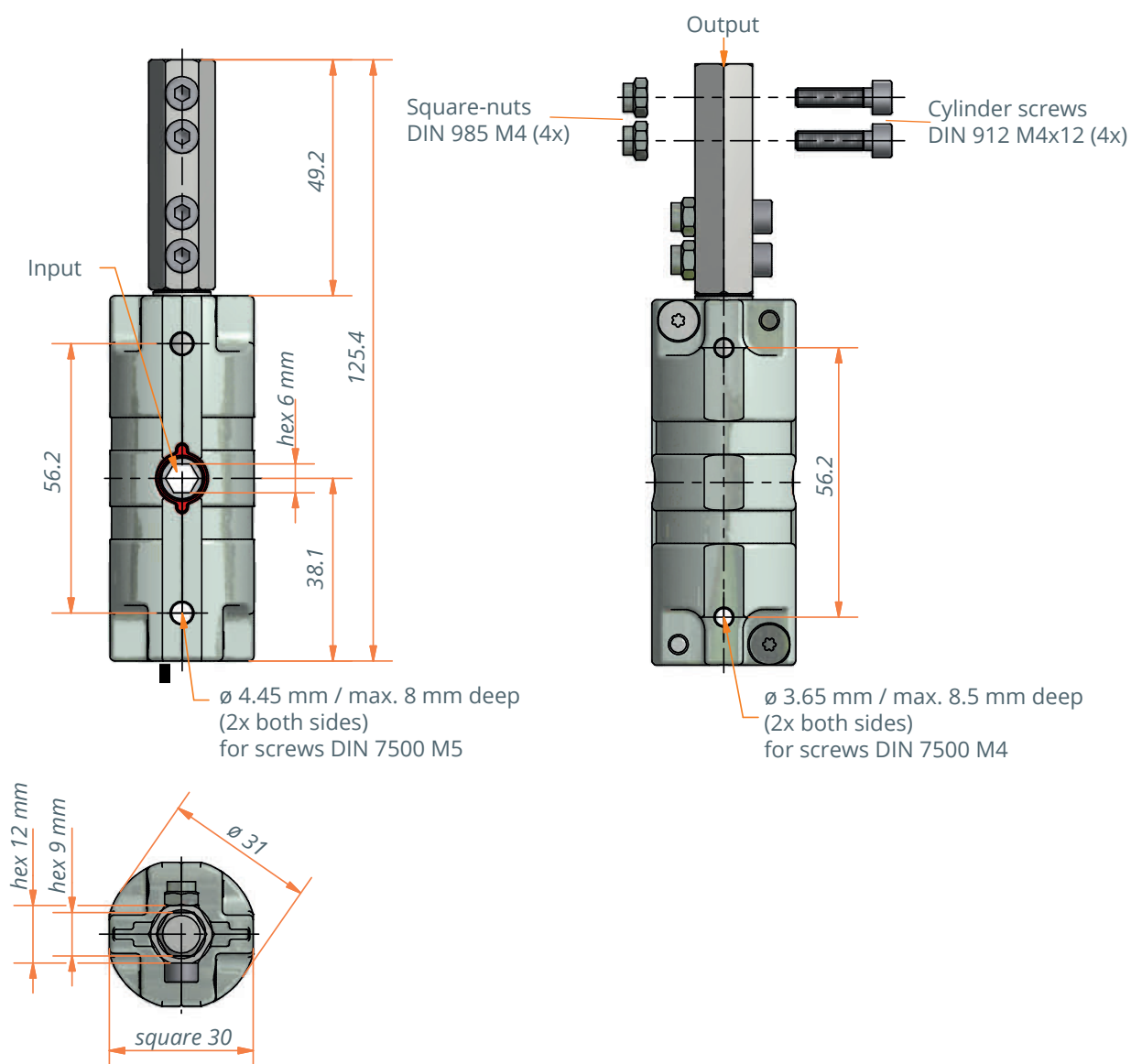
- Maintenance-free
- Case-hardened bevel wheels
- Housing made of zinc die-casting
- Ratio 1 : 2
- Designed for the manual operation



Technical data

| Model | 3057.00-0010 |
|---------------------------------------|------------------|
| Ratio | 1:2 |
| Input | hex 6 mm |
| Output | hex 6 mm |
| Number of bevel wheels | 2 |
| Housing material | Zinc die-casting |
| Max. drive torque | 2,5 Nm |
| Max. traction load static short term* | 8,000 N |
| Max. pressure load static short term* | 5,000 Nm |

* Peak load, e.g. caused by gusts of wind



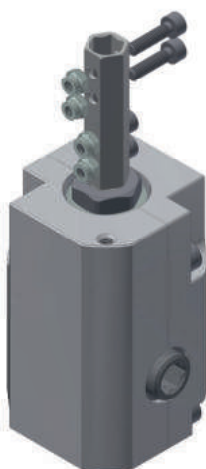
Technical notes

- Attention: Spindle is not in scope of delivery, can be produced to customer requirements
- Depending of the spindle pitch the self-locking of the system must be checked

Application example



Bevel gearbox 3058



Description

Compact bevel gearbox for the deflection of a rotary movement at an angle of 90°. Ideally suited for the adjustment of large parasols. Special bevel gear toothing ensures smooth running of the gearbox. Drive and output can be modified for custom applications. The gearbox can be combined with any spindle.

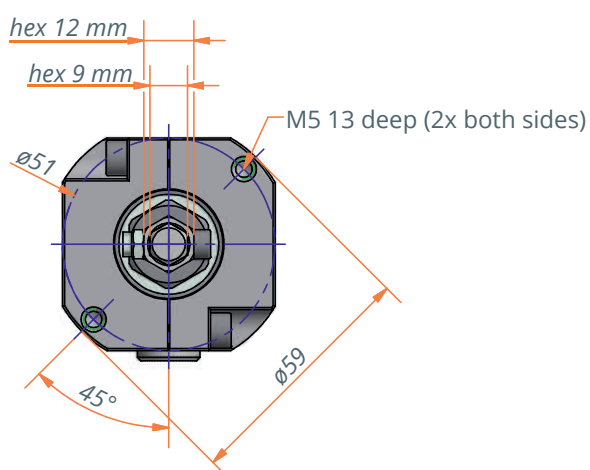
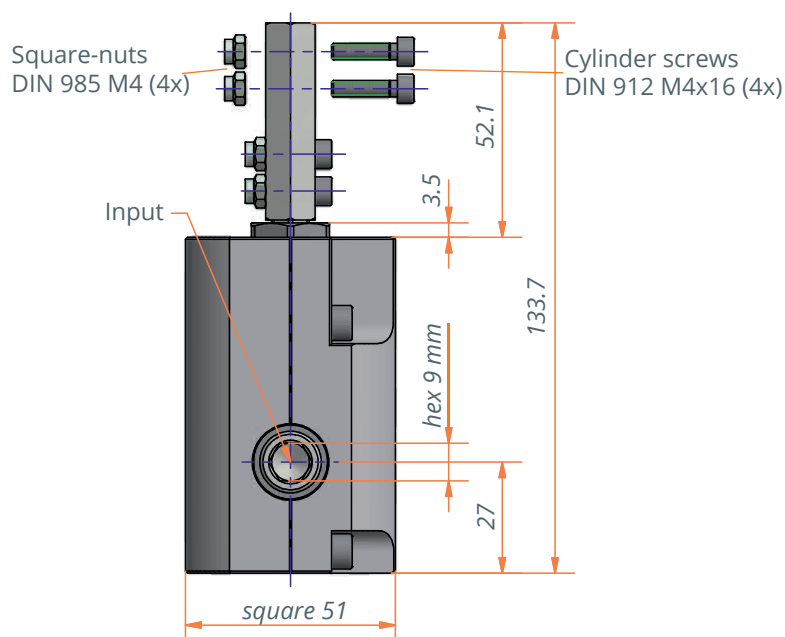
Special features

- Optimized corrosions properties
- Maintenance-free
- Case-hardened bevel wheels with optimized corrosion protection
- Housing made of zinc die-casting
- Ratio 1:4
- Designed for the manual operation

Technical data

| Model | 3058.00-0005 |
|---------------------------------------|--------------|
| Ratio | 1:4 |
| Input | hex 9 mm |
| Output | hex 9 mm |
| Number of bevel wheels | 2 |
| Housing material | Aluminium |
| Max. drive torque | 10 Nm |
| Max. traction load static short term* | 10,000 N |
| Max. pressure load static short term* | 12,000 N |

* Peak load, e.g. caused by gusts of wind



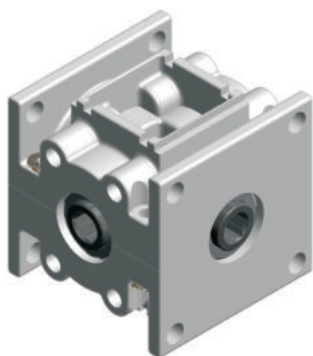
Technical notes

- Attention: Spindle is not in scope of delivery, can be produced to customer requirements
- Depending of the spindle pitch the self-locking of the system must be checked

Application example



Bevel gearbox 3869/3870/3871/3872



Description

Bevel gearboxes for the deflection of a rotary movement. Ideal for use as a transfer gearbox or ancillary gearbox for electric motors, e.g. for blinds or actuators in special mechanical engineering. Special bevel gear toothing ensures smooth running of the gearbox.

The gearbox can be combined with any spindle. The modular structure of the gearbox allows special customer requests to be met even with small numbers of items.

Special features

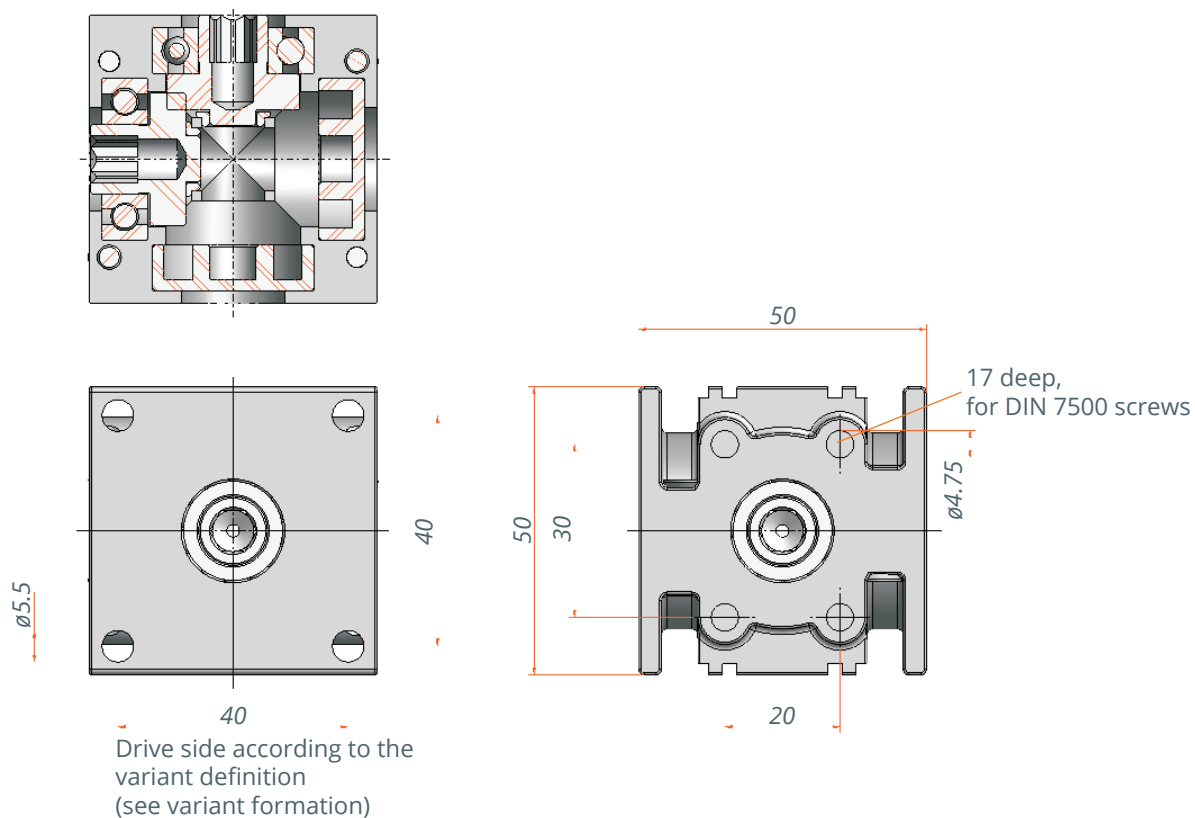
- Maintenance-free
- Hardened, bearing seated steel gear cogs
- Housing made of zinc die-casting
- Ratio 1:1
- Up to four inputs are possible
- On require hex 6 mm, blind hole or through hole possible
- Lifetime 20,000 load changes: bei 10 Nm, 110 U/min, with the duty cycle 30 s ON 240 s OFF and at + 25 °C

Variant key

| | |
|---|-------|
| one output 3870.00-1000 | input |
| two opposite outputs 3871.00-1000 | input |
| two outputs 90° 3869.00-1000 | input |
| three outputs 3872.00-1000 | input |

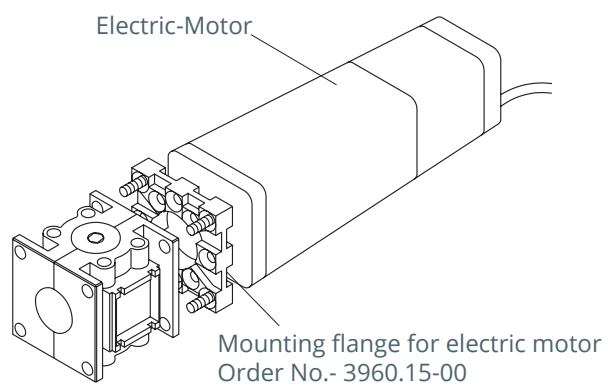
Technical data

| Model | 3869.00-1000 | 3870.00-1000 | 3871.00-1000 | 3872.00-1000 |
|-----------------------|------------------|------------------|------------------|------------------|
| Ratio | 1:1 | 1:1 | 1:1 | 1:1 |
| Input | hex 7 mm | hex 7 mm | hex 7 mm | hex 7 mm |
| Output | hex 7 mm | hex 7 mm | hex 7 mm | hex 7 mm |
| Number of bevel gears | 3 | 2 | 3 | 4 |
| Max. drive torque | 10 Nm | 10 Nm | 10 Nm | 10 Nm |
| Housing material | Zinc die-casting | Zinc die-casting | Zinc die-casting | Zinc die-casting |

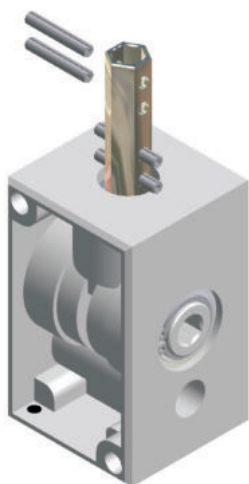


Technical notes

- The drive side can be selected arbitrarily
- Higher torques are possible at reduced speeds



Bevel gearbox 3874



Description

Compact bevel gearbox for the deflection of a rotary movement at an angle of 90°. Ideally suited for the adjustment of large parasols. Special bevel gear toothing ensures smooth running of the gearbox. Drive and output can be modified for custom applications. The gearbox can be combined with any spindle

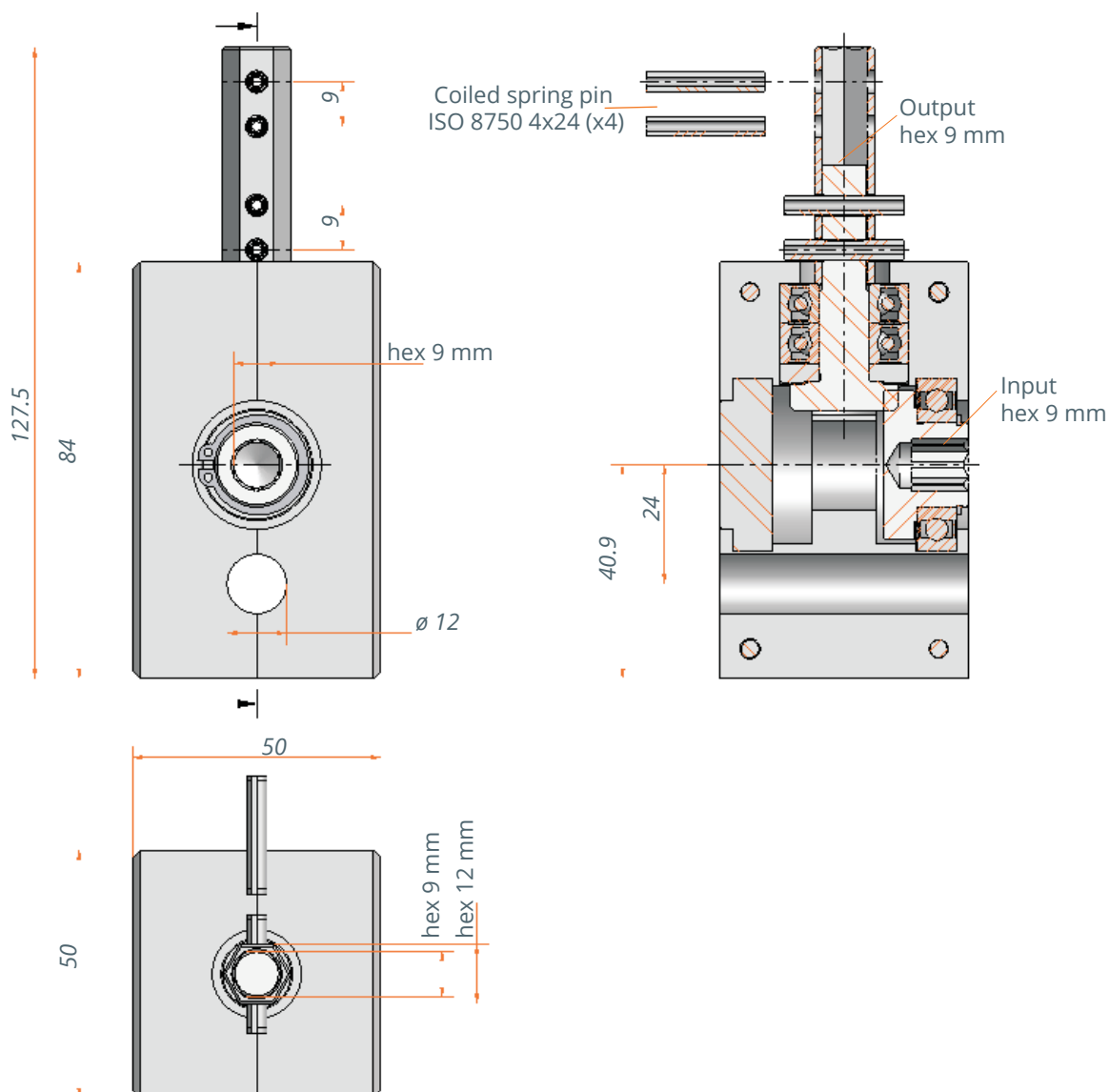
Special features

- Maintenance-free
- Case-hardened bevel wheels
- Housing made of zinc die-casting
- Construction size 50 x 50 x 84 mm
- Ratio 1:1.5
- Max. output torque 4 Nm
- Designed for the manual operation

Technical data

| Model | 3874 |
|---------------------------------------|------------------|
| Ratio | 1:1.5 |
| Input | hex 9 mm |
| Output | hex 9 mm |
| Number of bevel wheels | 2 |
| Housing material | Zinc die-casting |
| Max. drive torque | 4 Nm |
| Max. tensile load static short term* | 7,000 N |
| Max. pressure load static short term* | 9,000 N |

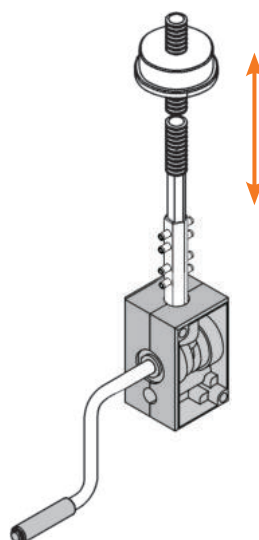
* Peak load, e.g. caused by gusts of wind



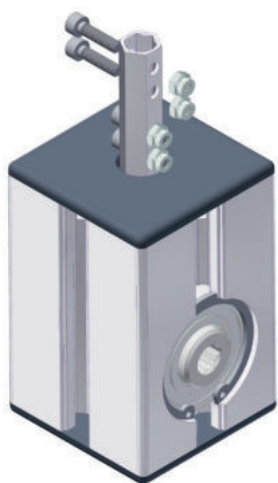
Technical notes

- Attention: Spindle is not in scope of delivery, can be produced to customer requirements
- Depending of the spindle pitch the self-locking of the system must be checked

Application example



Bevel gearbox 3875



Description

Bevel gearbox for the deflection of a rotary movement at an angle of 90°. Ideally suited for the adjustment of large parasols. Special bevel gear toothing ensures smooth running of the gearbox. Drive and output can be modified for custom applications. The gearbox can be combined with any spindle.

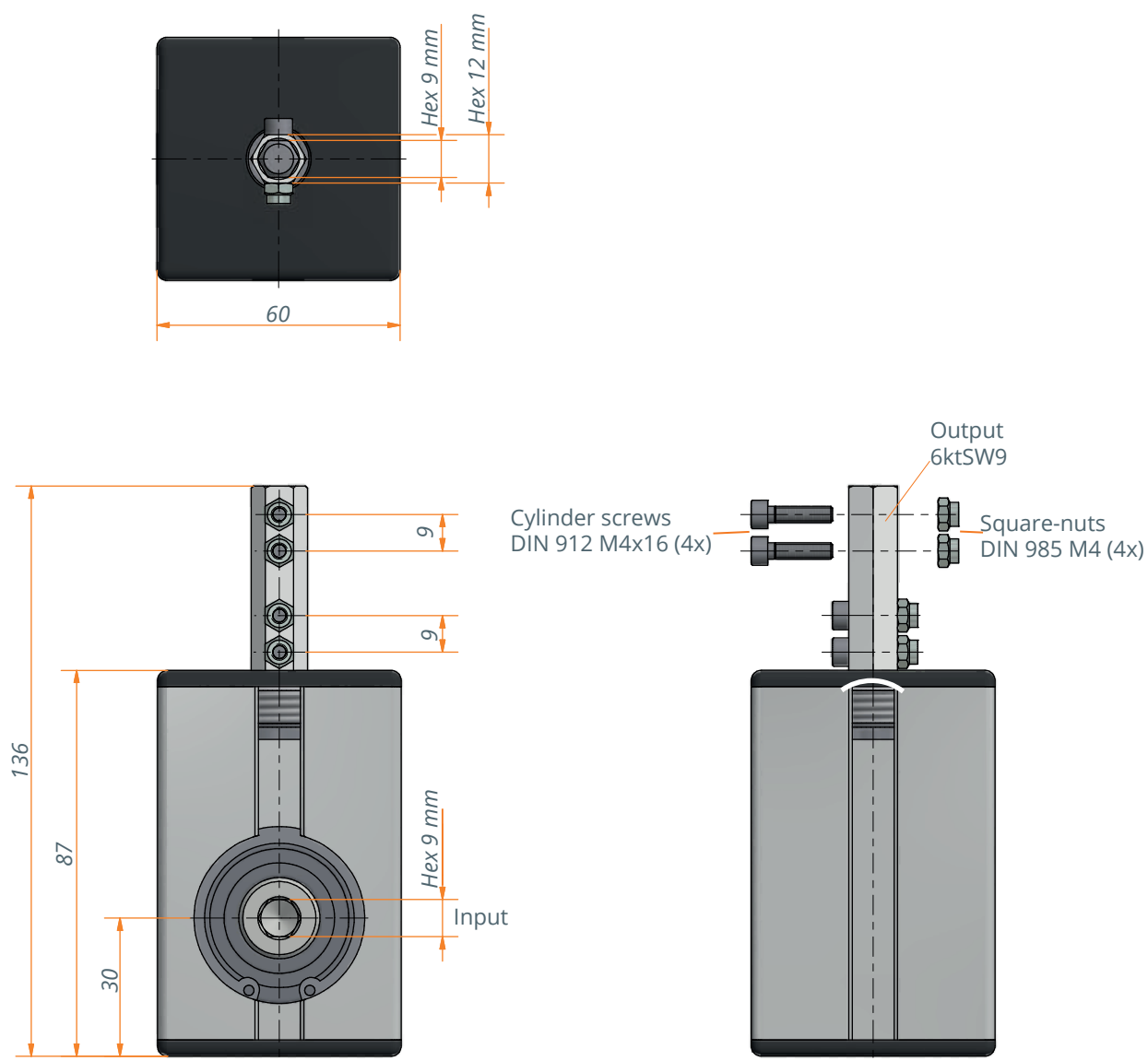
Special features

- Maintenance-free
- Case-hardened bevel wheels
- Housing made of aluminium profile
- Construction size 60 x 60 mm
- Ratio 1:1.5
- Max. drive torque 8 Nm
- Designed for the manual operation

Technical data

| Model | 3875 |
|---------------------------------------|------------------|
| Ratio | 1:1.5 |
| Input | Hex 9 mm |
| Output | Hex 9 mm |
| Number of cog wheels | 2 |
| Housing material | Aluminium profil |
| Max. drive torque | 8 Nm |
| Max. tensile load static short term* | 7,500 N |
| Max. pressure load static short term* | 9,000 N |

* Peak load, e.g. caused by gusts of wind



Technical notes

- Depending of the spindle pitch the self-locking of the system must be checked

Bevel gearbox with throughgoing spindle 3900/3901

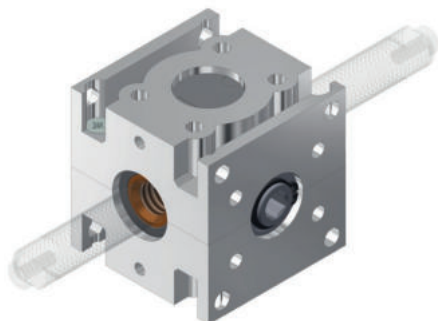
Description

Bevel gearbox for continuous non-rotating spindles, for thrust and pull movements.

The gearbox is particularly suitable for use as a lifting system for skylights, winter gardens and greenhouses as well as for special machine engineering. A special bevel gearing ensures quiet operation of the gear.

The gearbox can be supplied with different thread types.

Spindles can be custom manufactured to customer specifications.



Special features

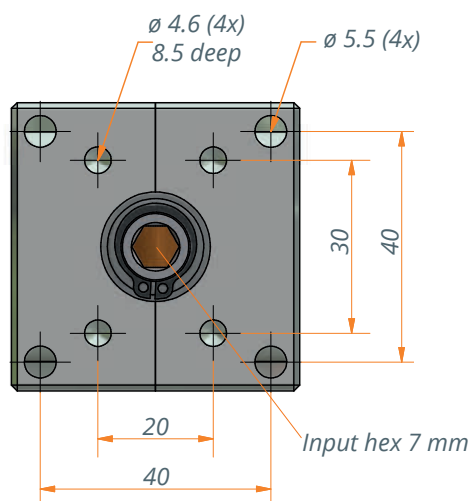
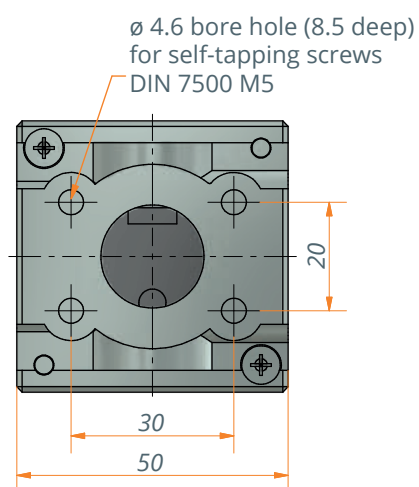
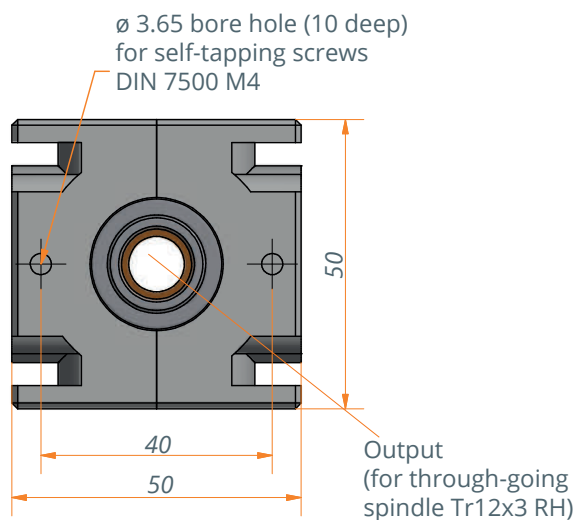
- Maintenance-free
- Case-hardened bevel wheels
- Housing made of zinc die-casting
- Ratio 1,44:1 or 1,5:1
- Designed for electromotive drive, but also ideal for manual drive



Technical data

| Model | 3900 | 3901 |
|--------------------|-----------|-----------|
| Ratio | 1.44:1 | 1.5:1 |
| Input | hex 7 mm | hex 7 mm |
| Type of thread* | Tr12x3 RH | Tr12x3 RH |
| Max. lifting force | 800 N | 800 N |

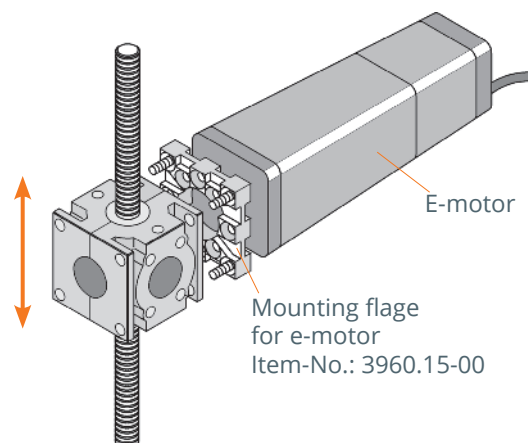
* Spindle has to be ordered separately



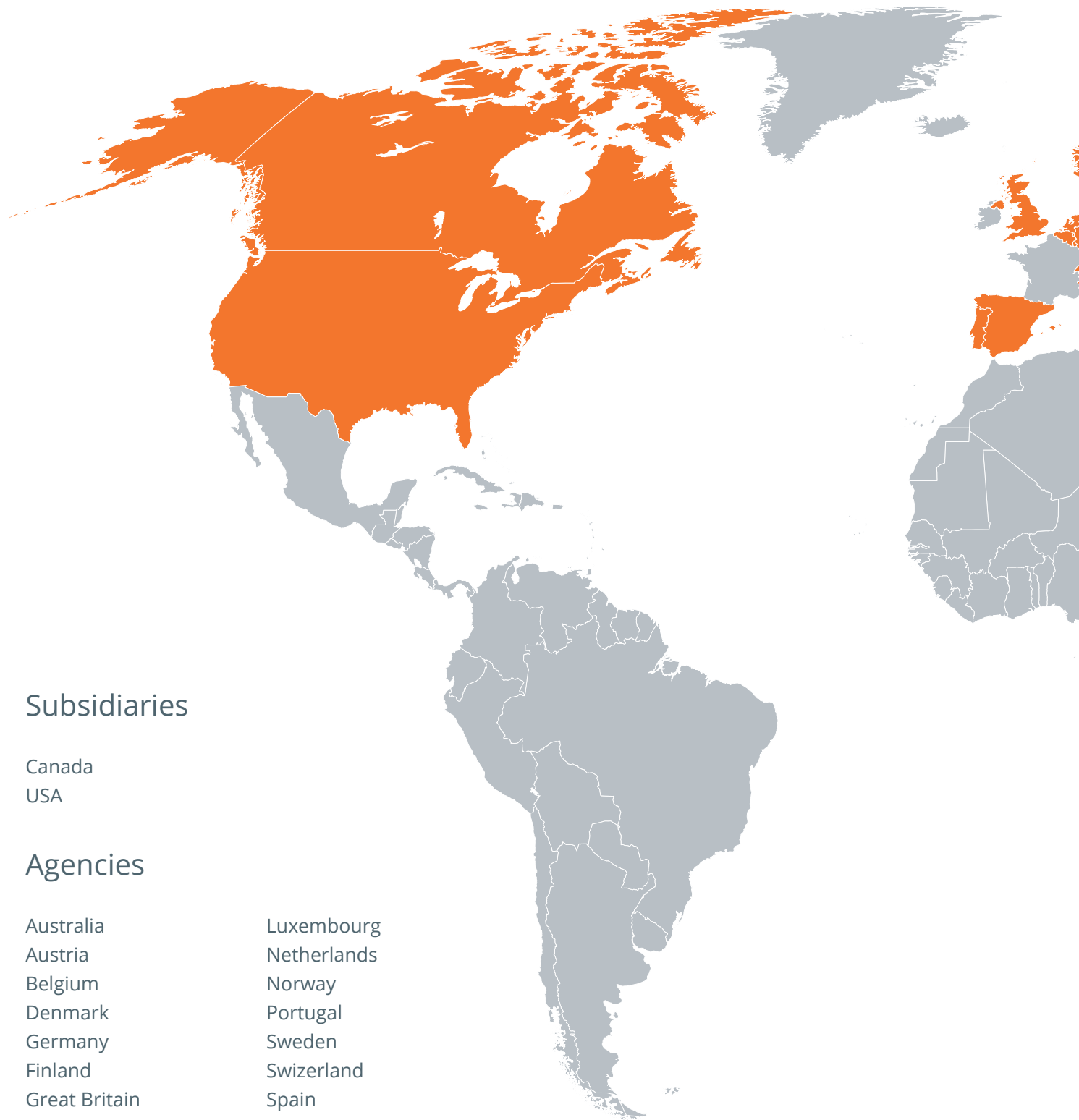
Technical notes

- Attention: Spindle is not in scope of delivery, can be produced to customer requirements
- The drive side can be selected as required
- Depending of the spindle pitch the self-locking of the system must be checked

Application example



USED AROUND THE WORLD



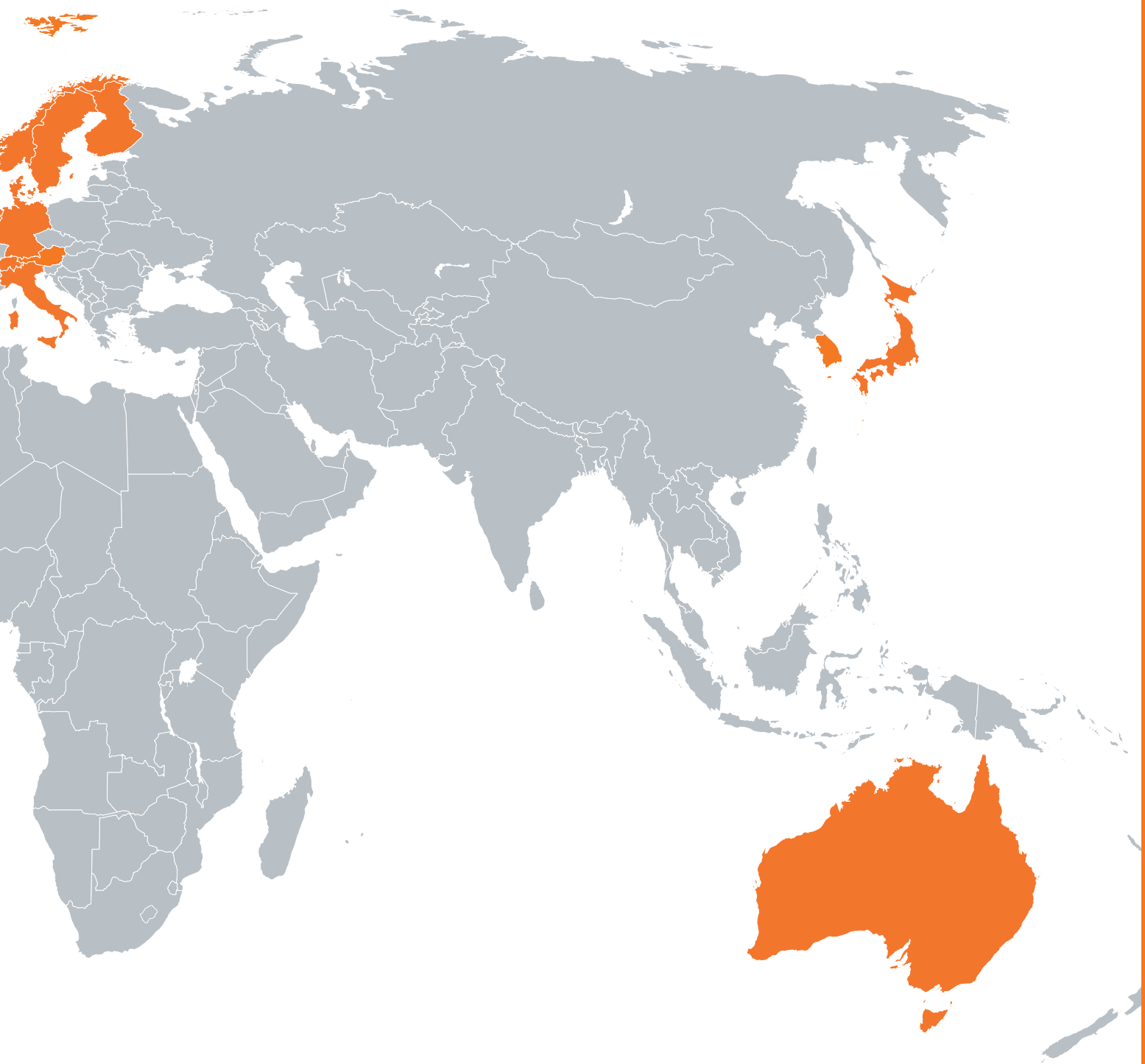
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