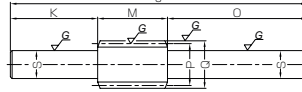




| Specifications | |
|---------------------------|---|
| Precision grade | KHK W 001 grade 2 |
| Reference section of gear | Axial |
| Gear teeth | Standard full depth |
| Normal pressure angle | 20° |
| Material | SCM440 |
| Heat treatment | Thermal refined, tooth surface induction hardened |
| Tooth hardness | 50 ~ 60HRC |



W5

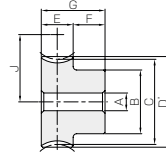
| Catalog No. | Axial module | Number of starts | Lead angle | Hand thread | Shape | Total length | | Shaft length (L) | | Neck length (L) | | Face width | | Neck length (R) | | Shaft length (R) | | Pitch dia. |
|-------------|--------------|------------------|------------|-------------|-------|--------------|----|------------------|----|-----------------|---|------------|----|-----------------|---|------------------|---|------------|
| | | | | | | J | K | L | M | N | O | P | | | | | | |
| KWG0.5-R1 | m0.5 | 1 | 3°11' | R | W5 | 65 | 19 | — | 12 | — | — | — | 34 | 9 | — | — | — | 9 |
| KWG0.5-R2 | | 2 | 6°20' | R | W5 | 65 | 19 | — | 12 | — | — | — | 34 | 9 | — | — | — | 9 |
| KWG0.8-R1 | m0.8 | 1 | 3°49' | R | W5 | 85 | 25 | — | 20 | — | — | — | 40 | 12 | — | — | — | 12 |
| KWG0.8-R2 | | 2 | 7°36' | R | W5 | 85 | 25 | — | 20 | — | — | — | 40 | 12 | — | — | — | 12 |

[Caution on Product Characteristics] ① These worms produce axial thrust forces. See Page 344 for more details.

* For products not categorized in our KHK Stock Gear series, custom gear production services with **short lead times** is available. For details see Page 8.



| Specifications | |
|---------------------------|------------------------------|
| Precision grade | KHK W 002 grade 2 |
| Reference section of gear | Rotating plane |
| Gear teeth | Standard full depth |
| Normal pressure angle | 20° |
| Material | CAC702 (formerly JIS A2/BC2) |
| Heat treatment | — |
| Tooth hardness | — |



HA

| Catalog No. | Reduction ratio | Transverse module | No. of teeth | Number of starts | Helix angle | Hand thread | Shape | Bore | | Pitch dia. | Throat dia. | Outside dia. | Face width |
|-------------|-----------------|-------------------|--------------|------------------|-------------|-------------|-------|-----------------|----|------------|-------------|--------------|------------|
| | | | | | | | | A _{H7} | B | | | | |
| AG0.5-20R1 | 20 | m0.5 | 20 | 1 | 3°11' | R | HA | 4 | 9 | 10 | — | 11 | 5 |
| AG0.5-20R2 | 10 | | 20 | 2 | 6°20' | R | HA | 4 | 9 | 10 | — | 11 | 5 |
| AG0.5-30R1 | 30 | | 30 | 1 | 3°11' | R | HA | 4 | 12 | 15 | — | 16 | 5 |
| AG0.5-30R2 | 15 | | 30 | 2 | 6°20' | R | HA | 4 | 12 | 15 | — | 16 | 5 |
| AG0.5-40R1 | 40 | | 40 | 1 | 3°11' | R | HA | 5 | 15 | 20 | — | 21 | 5 |
| AG0.5-50R1 | 50 | m0.5 | 50 | 1 | 3°11' | R | HA | 5 | 20 | 25 | — | 26 | 5 |
| AG0.5-60R1 | 60 | | 60 | 1 | 3°11' | R | HA | 5 | 25 | 30 | — | 31 | 5 |
| AG0.8-20R1 | 20 | m0.8 | 20 | 1 | 3°49' | R | HA | 5 | 12 | 16 | — | 17.6 | 8 |
| AG0.8-20R2 | 10 | | 20 | 2 | 7°36' | R | HA | 5 | 12 | 16 | — | 17.6 | 8 |
| AG0.8-30R1 | 30 | | 30 | 1 | 3°49' | R | HA | 5 | 18 | 24 | — | 25.6 | 8 |
| AG0.8-30R2 | 15 | | 30 | 2 | 7°36' | R | HA | 5 | 18 | 24 | — | 25.6 | 8 |
| AG0.8-40R1 | 40 | | 40 | 1 | 3°49' | R | HA | 6 | 20 | 32 | — | 33.6 | 8 |
| AG0.8-50R1 | 50 | m0.8 | 50 | 1 | 3°49' | R | HA | 8 | 25 | 40 | — | 41.6 | 8 |
| AG0.8-60R1 | 60 | | 60 | 1 | 3°49' | R | HA | 8 | 25 | 48 | — | 49.6 | 8 |

[Caution on Product Characteristics] ① The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see Page 342 for more details.

| Outside dia. | Neck dia. | Shaft dia. | Weight (kg) | Catalog No. |
|--------------|-----------|-----------------|-------------|-------------|
| Q | R | S _{H7} | | |
| 10 | — | 6 | 0.018 | KWG0.5-R1 |
| 10 | — | 6 | 0.018 | KWG0.5-R2 |
| 13.6 | — | 8 | 0.043 | KWG0.8-R1 |
| 13.6 | — | 8 | 0.043 | KWG0.8-R2 |

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 344) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
② Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 to 3 mm). Use carbide tools for the modification of the shaft area near the bottom land.



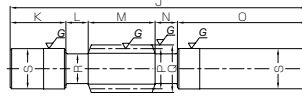
NOTE 1: Allowable torque for worm revolution (rpm)

| Hub width | Total length | Web thickness (H) | Web O.D. (I) | Mounting distance J | Allowable torque (N·m) NOTE 1 | | | | | | | | Backlash (mm) | Weight (kg) | Catalog No. |
|-----------|--------------|-------------------|--------------|---------------------|-------------------------------|---------|---------|---------|---------|----------|----------|-----------|---------------|-------------|-------------|
| | | | | | 30 rpm | 100 rpm | 300 rpm | 600 rpm | 900 rpm | 1200 rpm | 1800 rpm | | | | |
| 7 | 12 | — | — | 9.5 | 0.52 | 0.44 | 0.36 | 0.30 | 0.26 | 0.24 | 0.21 | 0.02~0.14 | 0.0056 | AG0.5-20R1 | |
| 7 | 12 | — | — | 9.5 | 0.51 | 0.42 | 0.33 | 0.27 | 0.24 | 0.22 | 0.19 | 0.02~0.14 | 0.0056 | AG0.5-20R2 | |
| 7 | 12 | — | — | 12 | 1.09 | 0.94 | 0.77 | 0.65 | 0.58 | 0.53 | 0.48 | 0.02~0.14 | 0.012 | AG0.5-30R1 | |
| 7 | 12 | — | — | 12 | 1.09 | 0.92 | 0.73 | 0.60 | 0.54 | 0.49 | 0.43 | 0.02~0.14 | 0.012 | AG0.5-30R2 | |
| 7 | 12 | — | — | 14.5 | 1.86 | 1.60 | 1.34 | 1.15 | 1.02 | 0.94 | 0.84 | 0.02~0.14 | 0.020 | AG0.5-40R1 | |
| 7 | 12 | — | — | 17 | 2.82 | 2.42 | 2.05 | 1.77 | 1.58 | 1.46 | 1.30 | 0.02~0.14 | 0.035 | AG0.5-50R1 | |
| 7 | 12 | — | — | 19.5 | 3.94 | 3.41 | 2.89 | 2.50 | 2.26 | 2.08 | 1.87 | 0.02~0.14 | 0.053 | AG0.5-60R1 | |
| 8 | 16 | — | — | 14 | 1.78 | 1.50 | 1.21 | 1.00 | 0.88 | 0.82 | 0.71 | 0.06~0.17 | 0.018 | AG0.8-20R1 | |
| 8 | 16 | — | — | 14 | 1.76 | 1.44 | 1.11 | 0.91 | 0.80 | 0.74 | 0.63 | 0.06~0.17 | 0.018 | AG0.8-20R2 | |
| 8 | 16 | — | — | 18 | 3.77 | 3.21 | 2.62 | 2.20 | 1.96 | 1.81 | 1.61 | 0.06~0.17 | 0.043 | AG0.8-30R1 | |
| 8 | 16 | — | — | 18 | 3.75 | 3.14 | 2.46 | 2.02 | 1.80 | 1.65 | 1.45 | 0.06~0.17 | 0.043 | AG0.8-30R2 | |
| 8 | 16 | — | — | 22 | 6.45 | 5.49 | 4.55 | 3.87 | 3.46 | 3.19 | 2.83 | 0.06~0.17 | 0.068 | AG0.8-40R1 | |
| 8 | 16 | — | — | 26 | 9.75 | 8.31 | 6.94 | 5.94 | 5.34 | 4.96 | 4.38 | 0.06~0.17 | 0.10 | AG0.8-50R1 | |
| 8 | 16 | — | — | 30 | 13.6 | 11.7 | 9.77 | 8.39 | 7.63 | 7.05 | 6.27 | 0.06~0.17 | 0.14 | AG0.8-60R1 | |

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 344) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.



| Specifications | |
|---------------------------|---|
| Precision grade | KHK W 001 grade 2 |
| Reference section of gear | Axial |
| Gear teeth | Standard full depth |
| Normal pressure angle | 20° |
| Material | SCM440 |
| Heat treatment | Thermal refined, tooth surface induction hardened |
| Tooth hardness | 50 ~ 60HRC |



W6

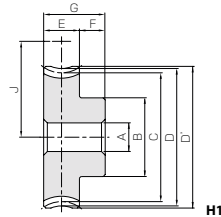
| Catalog No. | Axial module | Number of starts | Lead angle | Hand thread | Shape | Total length | | Shaft length (L) | | Neck length (L) | | Face width | | Neck length (R) | | Shaft length (P) | | Pitch dia. | |
|-------------|--------------|------------------|------------|-------------|-------|--------------|----|------------------|----|-----------------|----|------------|--|-----------------|--|------------------|--|------------|--|
| | | | | | | J | K | L | M | N | O | P | | | | | | | |
| KWG1-R1 | m1 | 1 | 3°35' | R | W6 | 140 | 35 | 10 | 30 | 10 | 55 | 16 | | | | | | | |
| KWG1-R2 | | 2 | 7°08' | R | W6 | 140 | 35 | 10 | 30 | 10 | 55 | 16 | | | | | | | |
| KWG1.5-R1 | m1.5 | 1 | 3°26' | R | W6 | 190 | 50 | 15 | 40 | 15 | 70 | 25 | | | | | | | |
| KWG1.5-R2 | | 2 | 6°51' | R | W6 | 190 | 50 | 15 | 40 | 15 | 70 | 25 | | | | | | | |

[Caution on Product Characteristics] ① These worms produce axial thrust forces. See Page 344 for more details.



| Specifications | |
|---------------------------|-----------------------------|
| Precision grade | KHK W 002 grade 2 |
| Reference section of gear | Rotating plane |
| Gear teeth | Standard full depth |
| Normal pressure angle | 20° |
| Material | CAC702 (formerly JIS AIBC2) |
| Heat treatment | — |
| Tooth hardness | — |
| Module | m1 m1.5 |
| Face width (E) | 10 14 |
| Hub width (F) | 10 10 |
| Total length (G) | 20 24 |
| Screw offset (L) | 5 5 |

| | |
|-----------------|-------------------|
| A _{H7} | Bore |
| B | Hub dia. |
| C | Pitch dia. |
| D | Throat dia. |
| D' | Outside dia. |
| (H) | Web thickness |
| (I) | Web O.D. |
| J | Mounting distance |



H1

* The precision grade of J Series products is equivalent to the value shown in the table.

NOTE 1: Allowable torque for worm revolution (rpm)

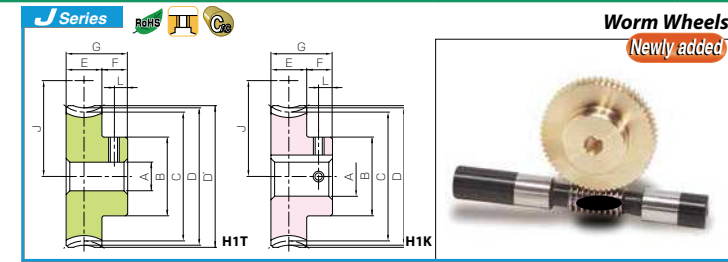
| Catalog No. | Reduction ratio | No. of teeth | Number of starts | Helix angle | Hand thread | Shape | A _{H7} | B | C | D | D' | (H) | (I) | J | Allowable torque (N·m) NOTE 1 | | | | | | Backlash (mm) | Weight (kg) | |
|-------------|-----------------|--------------|------------------|-------------|-------------|-------|-----------------|----|----|----|------|-----|-----|------|-------------------------------|---------|---------|---------|---------|----------|---------------|-------------|----------|
| | | | | | | | | | | | | | | | 30 rpm | 100 rpm | 300 rpm | 600 rpm | 900 rpm | 1200 rpm | | | 1800 rpm |
| AG1-20R1 | 20 | 20 | 1 | 3°35' | R | H1 | 6 | 16 | 20 | 22 | 23 | — | — | 18 | 3.35 | 2.79 | 2.23 | 1.83 | 1.63 | 1.50 | 1.30 | 0.08~0.19 | 0.038 |
| AG1-20R2 | 10 | 20 | 2 | 7°08' | R | H1 | 6 | 16 | 20 | 22 | 23 | — | — | 18 | 3.31 | 2.69 | 2.06 | 1.68 | 1.48 | 1.35 | 1.15 | 0.08~0.19 | 0.038 |
| AG1-30R1 | 30 | 30 | 1 | 3°35' | R | H1 | 6 | 20 | 30 | 32 | 33 | — | — | 23 | 7.08 | 5.98 | 4.84 | 4.05 | 3.63 | 3.31 | 2.92 | 0.08~0.19 | 0.078 |
| AG1-30R2 | 15 | 30 | 2 | 7°08' | R | H1 | 6 | 20 | 30 | 32 | 33 | — | — | 23 | 7.03 | 5.84 | 4.56 | 3.72 | 3.33 | 3.03 | 2.63 | 0.08~0.19 | 0.078 |
| AG1-40R1 | 40 | 40 | 1 | 3°35' | R | H1 | 8 | 26 | 40 | 42 | 43 | — | — | 28 | 12.1 | 10.2 | 8.43 | 7.12 | 6.38 | 5.86 | 5.13 | 0.08~0.19 | 0.13 |
| AG1-50R1 | 50 | 50 | 1 | 3°35' | R | H1 | 8 | 30 | 50 | 52 | 53 | — | — | 33 | 18.3 | 15.5 | 12.9 | 10.9 | 9.87 | 9.09 | 7.95 | 0.08~0.19 | 0.20 |
| AG1-60R1 | 60 | 60 | 1 | 3°35' | R | H1 | 10 | 35 | 60 | 62 | 63 | — | — | 38 | 25.6 | 21.8 | 18.1 | 15.4 | 14.1 | 12.9 | 11.4 | 0.08~0.19 | 0.29 |
| AG1.5-20R1 | 20 | 20 | 1 | 3°26' | R | H1 | 8 | 22 | 30 | 33 | 34.5 | — | — | 27.5 | 9.84 | 8.18 | 6.40 | 5.30 | 4.68 | 4.25 | 3.68 | 0.10~0.21 | 0.10 |
| AG1.5-20R2 | 10 | 20 | 2 | 6°51' | R | H1 | 8 | 22 | 30 | 33 | 34.5 | — | — | 27.5 | 9.72 | 7.87 | 5.92 | 4.87 | 4.25 | 3.83 | 3.27 | 0.10~0.21 | 0.10 |
| AG1.5-30R1 | 30 | 30 | 1 | 3°26' | R | H1 | 10 | 30 | 45 | 48 | 49.5 | — | — | 35 | 20.8 | 17.5 | 13.9 | 11.7 | 10.4 | 9.40 | 8.28 | 0.10~0.21 | 0.22 |
| AG1.5-30R2 | 15 | 30 | 2 | 6°51' | R | H1 | 10 | 30 | 45 | 48 | 49.5 | — | — | 35 | 20.7 | 17.1 | 13.1 | 10.8 | 9.56 | 8.58 | 7.46 | 0.10~0.21 | 0.22 |
| AG1.5-40R1 | 40 | 40 | 1 | 3°26' | R | H1 | 12 | 35 | 60 | 63 | 64.5 | — | — | 42.5 | 35.6 | 30.0 | 24.2 | 20.6 | 18.3 | 16.6 | 14.6 | 0.10~0.21 | 0.37 |
| AG1.5-50R1 | 50 | 50 | 1 | 3°26' | R | H1 | 12 | 45 | 75 | 78 | 79.5 | — | — | 50 | 53.8 | 45.4 | 36.9 | 31.6 | 28.3 | 25.8 | 22.6 | 0.10~0.21 | 0.59 |
| AG1.5-60R1 | 60 | 60 | 1 | 3°26' | R | H1 | 12 | 50 | 90 | 93 | 94.5 | — | — | 57.5 | 75.3 | 63.8 | 51.9 | 44.7 | 40.4 | 36.7 | 32.4 | 0.10~0.21 | 0.83 |

[Caution on Product Characteristics] ① The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see Page 342 for more details.

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 344) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.

| Outside dia. | Neck dia. | Shaft dia. | Weight (kg) | Catalog No. |
|--------------|-----------|------------|-------------|-------------|
| 18 | 13 | 18.2 | 0.25 | KWG1-R1 |
| 18 | 13 | 18.2 | 0.25 | KWG1-R2 |
| 28 | 21 | 26.2 | 0.74 | KWG1.5-R1 |
| 28 | 21 | 26.2 | 0.74 | KWG1.5-R2 |

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 344) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
② Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 to 3 mm). Use carbide tools for the modification of the shaft area near the bottom land.



To order J Series products, please specify; Catalog No. + J + BORE

| Bore H7 | * The product shapes of J Series items are identified by background color. | | | | | | | | | | | | | | | |
|-------------------|--|----|----|---------|----|----|----|---------|----|----|----|---------|----|----|---------|--|
| Keyway Js9 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 25 | 28 | 30 | |
| Screw size | — | | | 4 x 1.8 | | | | 5 x 2.3 | | | | 6 x 2.8 | | | 8 x 3.3 | |
| Catalog No. | M4 | M5 | M4 | | | | M5 | | | | M6 | | | | | |
| AG1-20R1 J BORE | | | | | | | | | | | | | | | | |
| AG1-20R2 J BORE | | | | | | | | | | | | | | | | |
| AG1-30R1 J BORE | | | | | | | | | | | | | | | | |
| AG1-30R2 J BORE | | | | | | | | | | | | | | | | |
| AG1-40R1 J BORE | | | | | | | | | | | | | | | | |
| AG1-50R1 J BORE | | | | | | | | | | | | | | | | |
| AG1-60R1 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-20R1 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-20R2 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-30R1 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-30R2 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-40R1 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-50R1 J BORE | | | | | | | | | | | | | | | | |
| AG1.5-60R1 J BORE | | | | | | | | | | | | | | | | |

[Caution on J series] ① As available-on-request products, requires a lead-time for shipping within 2 working-days (excludes the day ordered), after placing an order. Please allow additional shipping time to get to your local distributor.
② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
③ Keyways are made according to JIS B1301 standards, Js9 tolerance.
④ Certain products which would otherwise have a very long tapped hole are counterbored to reduce the length of the tap.
⑤ For products having a tapped hole, a set screw is included.