

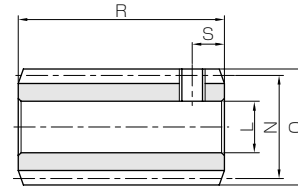


SUW Stainless Steel Worms

Module 0.5、0.8



Specifications	
Precision grade	KHK W 001 grade 4
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	SUS303
Heat treatment	—
Tooth hardness	less than 187HB



W2

Catalog No.	Normal module	Number of start	Lead angle	Hand of tread	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
						L _{H8}	M	N	O	P	Q	R
SUW0.5-R1	m0.5	1	2°36'	R	W2	5	—	11	12	—	—	18
SUW0.5-R2		2	5°13'	R	W2	5	—	11	12	—	—	18
SUW0.8-R1	m0.8	1	3°17'	R	W2	6	—	14	15.6	—	—	30
SUW0.8-R2		2	6°34'	R	W2	6	—	14	15.6	—	—	30

[Caution on Product Characteristics]

- ① For W2-shaped products, a set screw is included. When setting up the mating wheel, make sure no friction occurs within the set screw.
- ② These worms produce axial thrust forces. See page 512 for more details.

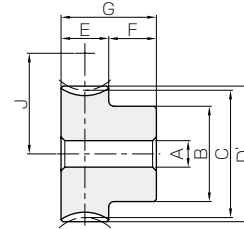


DG Plastic Worm Wheels

Module 0.5、0.8



Specifications	
Precision grade	KHK W 002 grade 5
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	Polyacetal
Heat treatment	—
Tooth hardness	—



HA

Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of start	Helix angle	Hand of tread	Shape	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width
								A $\begin{matrix} -0.05 \\ -0.10 \end{matrix}$	B	C	D	D'	E
DG0.5-20R1	20	m0.5	20	1	2°36'	R	HA	4	9	10.01	—	11	5
DG0.5-20R2	10		20	2	5°13'	R	HA	4	9	10.04	—	11	5
DG0.5-30R1	30		30	1	2°36'	R	HA	4	12	15.02	—	16	5
DG0.5-30R2	15		30	2	5°13'	R	HA	4	12	15.06	—	16	5
DG0.5-40R1	40		40	1	2°36'	R	HA	5	15	20.02	—	21	5
DG0.5-50R1	50	m0.5	50	1	2°36'	R	HA	5	20	25.03	—	26	5
DG0.5-60R1	60		60	1	2°36'	R	HA	5	25	30.03	—	31	5
DG0.8-20R1	20	m0.8	20	1	3°17'	R	HA	5	12	16.03	—	17.6	9
DG0.8-20R2	10		20	2	6°34'	R	HA	5	12	16.11	—	17.6	9
DG0.8-30R1	30		30	1	3°17'	R	HA	5	18	24.04	—	25.6	9
DG0.8-30R2	15		30	2	6°34'	R	HA	5	18	24.16	—	25.6	9
DG0.8-40R1	40		40	1	3°17'	R	HA	6	20	32.05	—	33.6	9
DG0.8-50R1	50	m0.8	50	1	3°17'	R	HA	8	25	40.07	—	41.6	9
DG0.8-60R1	60		60	1	3°17'	R	HA	8	25	48.08	—	49.6	9

[Caution on Product Characteristics]

- ① Worm Wheels are profile shifted to create the proper center distance.
- ② The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 510 for more details.
- ③ Since the bore is finished with a minus tolerance, you can use a shaft with a force fit.

Set Screw		Weight (kg)	Catalog No.
Size	S		
M3	3	0.010	SUW0.5-R1
M3	3	0.010	SUW0.5-R2
M4	5	0.029	SUW0.8-R1
M4	5	0.029	SUW0.8-R2

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 512) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK's system for quick modification of KHK stock gears is also available.

Spur
GearsHelical
GearsInternal
Gears

Racks

CP Racks
& Pinions

DG

Plastic Worm Wheels

Miter
GearsBevel
GearsScrew
Gears

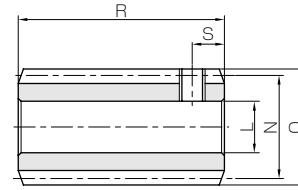
Hub width	Total length	Mounting distance	Allowable torque (N·m)	Allowable torque (kgf·m)	Backlash	Weight	Catalog No.
F	G	J	Surface durability	Surface durability	(mm)	(kg)	
7	12	10.5	0.067	0.0068	0~0.16	1.01	DG0.5-20R1
7	12	10.5	0.067	0.0069	0~0.16	1.01	DG0.5-20R2
7	12	13	0.11	0.011	0~0.16	2.21	DG0.5-30R1
7	12	13	0.11	0.011	0~0.16	2.21	DG0.5-30R2
7	12	15.5	0.16	0.016	0~0.16	3.72	DG0.5-40R1
7	12	18	0.21	0.022	0~0.16	6.36	DG0.5-50R1
7	12	20.5	0.26	0.027	0~0.16	9.67	DG0.5-60R1
9	18	15	0.31	0.031	0.04~0.22	3.73	DG0.8-20R1
9	18	15	0.31	0.032	0.04~0.22	3.73	DG0.8-20R2
9	18	19	0.52	0.053	0.04~0.22	8.84	DG0.8-30R1
9	18	19	0.52	0.053	0.04~0.22	8.84	DG0.8-30R2
9	18	23	0.74	0.076	0.04~0.22	14.0	DG0.8-40R1
9	18	27	0.98	0.10	0.04~0.22	21.6	DG0.8-50R1
9	18	31	1.21	0.12	0.04~0.22	28.8	DG0.8-60R1

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 512) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK's system for quick modification of KHK stock gears is also available.

Worm
Gear PairBevel
GearboxesOther
Products



Specifications	
Precision grade	KHK W 001 grade 4 *
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	SUS303
Heat treatment	—
Tooth hardness	less than 187HB



W2

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

Catalog No. ● : J Series (Available-on-request)	Normal module	Number of start	Lead angle	Hand of tread	Shape	Bore		Pitch dia.	Outside dia.	Face width	Hub width	Total length
						LH7	M					
SUW1-R1 SUW1-R2	m1	1	3°35'	R	W2	6	—	16	18	—	—	32
		2	7°11'	R	W2	6	—	16	18	—	—	32
SUW1.5-R1 ● SUW1.5-R1J8 ● SUW1.5-R1J10	m1.5	1	3°26'	R	W1 W1T W1K	8 8 10	20	25	28	30	10	40
SUW1.5-R2 ● SUW1.5-R2J8 ● SUW1.5-R2J10		2	6°54'	R	W1 W1T W1K	8 8 10	20	25	28	30	10	40

[Caution on Product Characteristics]

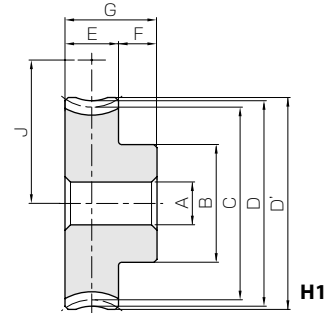
- For W2-shaped products, a set screw is included. When setting up the mating wheel, make sure no friction occurs within the set screw.
- These worms produce axial thrust forces. See page 512 for more details.
- If bore size is less than $\phi 4$, the tolerance is H8. If bore size is $\phi 5$ or $\phi 6$, and the hole length exceeds 3 times the diameter, the tolerance is also H8.



PG Plastic Worm Wheels



Specifications	
Precision grade	KHK W 002 grade 5 *
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	MC901 Nylon
Heat treatment	—
Tooth hardness	—

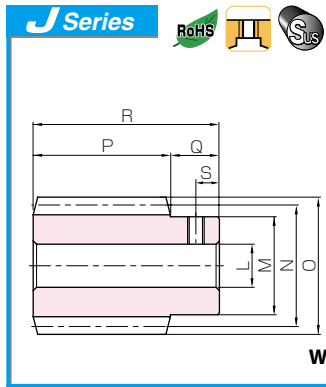


* The precision grade of this product is equivalent to the value shown in the table.

Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of start	Helix angle	Hand of tread	Shape	Bore		Pitch dia.	Throat dia.	Outside dia.	Face width
								A	B				
PG1-20R1	20	m1	20	1	3°35'	R	H1	6	16	20.04	22	23	10
PG1-20R2	10		20	2	7°11'	R	H1	6	16	20.16	22	23	10
PG1-30R1	30		30	1	3°35'	R	H1	6	20	30.06	32	33	10
PG1-40R1	40		40	1	3°35'	R	H1	8	26	40.08	42	43	10
PG1-50R1	50		50	1	3°35'	R	H1	8	30	50.1	52	53	10
PG1.5-20R1	20	m1.5	20	1	3°26'	R	H1	8	22	30.05	33	34.5	12
PG1.5-20R2	10		20	2	6°54'	R	H1	8	22	30.22	33	34.5	12

[Caution on Product Characteristics]

- Worm Wheels are profile shifted to create the proper center distance.
- Significant variations in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon gears), for bore size (H8 when produced), teeth diameter, and backlash. Please see the section "Design of Plastic Gears" in the technical reference (Page 693).
- The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 510 for more details.



Stainless Steel Worms

Newly added



Keyway Width×Depth	Set screw		Weight (kg)	Catalog No. ● : J Series (Available-on-request)
	Size	S		
—	M4	5	0.042	SUW1-R1
—	M4	5	0.042	SUW1-R2
—	—	—	0.12	SUW1.5-R1
—	M5	5	0.12	● SUW1.5-R1J8
4 x 1.8	M4	5	0.11	● SUW1.5-R1J10
—	—	—	0.12	SUW1.5-R2
—	M5	5	0.12	● SUW1.5-R2J8
4 x 1.8	M4	5	0.11	● SUW1.5-R2J10

[Caution on J series]

- ① As available-on-request products, requires a lead-time for shipping within **3 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, Js 9 tolerance.
- ④ For products having a tapped hole, a set screw is included.

[Caution on Secondary Operations]

- ① Please read “Caution on Performing Secondary Operations” (Page 512) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK’s system for quick modification of KHK stock gears is also available.

Spur Gears

Helical Gears

Internal Gears

Racks

CP Racks & Pinions

PG

Plastic Worm Wheels



Hub width F	Total length G	Mounting distance J	Allowable torque (N·m)		Backlash (mm)	Weight (kg)	Catalog No.
			Surface durability	Surface durability			
10	20	18	0.62	0.060	0~0.28	0.0058	PG1-20R1
10	20	18	0.62	0.060	0~0.28	0.0058	PG1-20R2
10	20	23	1.03	0.10	0~0.28	0.012	PG1-30R1
10	20	28	1.49	0.15	0~0.28	0.021	PG1-40R1
10	20	33	1.96	0.20	0~0.28	0.031	PG1-50R1
10	22	27.5	1.66	0.17	0~0.30	0.014	PG1.5-20R1
10	22	27.5	1.68	0.17	0~0.30	0.014	PG1.5-20R2

[Caution on Secondary Operations]

- ① Please read “Caution on Performing Secondary Operations” (Page 512) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK’s system for quick modification of KHK stock gears is also available.
- ② Plastic gears are susceptible to the effects of temperature and moisture. Dimensional changes may occur while performing secondary operations and during post-machining operations.

Miter Gears

Bevel Gears

Screw Gears

Worm Gear Pair

Bevel Gearboxes

Other Products

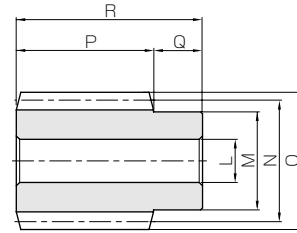


SUW Stainless Steel Worms

Module 2, 2.5, 3



Specifications	
Precision grade	KHK W 001 grade 4 *
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	14° 30' *
Material	SUS303
Heat treatment	—
Tooth hardness	less than 187HB



W1

* The precision grade of J Series products is equivalent to the value shown in the table.
* The pressure angle is at 20 degrees for module 2.5.

Catalog No. ● : J Series (Available-on-request)	Normal module	Number of start	Lead angle	Hand of tread	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
						LH7	M	N	O	P	Q	R
SUW2-R1 ● SUW2-R1J12 ● SUW2-R1J14	m2	1	3°42'	R	W1	12	25	31	35	32	14	46
W1K					12	14						
SUW2-R2 ● SUW2-R2J12 ● SUW2-R2J14	m2	2	7°25'	R	W1	12	25	31	35	32	14	46
W1K					12	14						
SUW2.5-R1 ● SUW2.5-R1J15 ● SUW2.5-R1J16	m2.5	1	3°52'	R	W1	15	30	37	42	45	18	63
W1K					15	16						
SUW2.5-R2 ● SUW2.5-R2J15 ● SUW2.5-R2J16	m2.5	2	7°46'	R	W1	15	30	37	42	45	18	63
W1K					15	16						
SUW3-R1 ● SUW3-R1J18 ● SUW3-R1J19 ● SUW3-R1J20	m3	1	3°55'	R	W1	16	35	44	50	50	20	70
W1K					18							
W1K					19							
W1K					20							
SUW3-R2 ● SUW3-R2J18 ● SUW3-R2J19 ● SUW3-R2J20	m3	2	7°50'	R	W1	16	35	44	50	50	20	70
W1K					18							
W1K					19							
W1K					20							

[Caution on Product Characteristics] ① These worms produce axial thrust forces. See page 512 for more details.

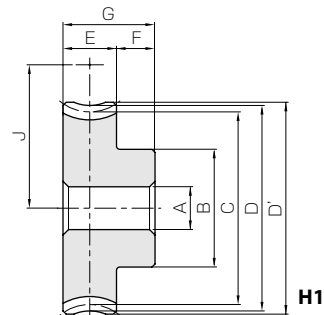


PG Plastic Worm Wheels

Module 2, 2.5, 3



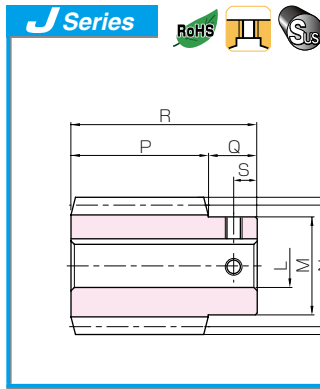
Specifications	
Precision grade	KHK W 002 grade 5
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	14° 30' *
Material	MC901 Nylon
Heat treatment	—
Tooth hardness	—



* The pressure angle is at 20 degrees for module 2.5.

Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of start	Helix angle	Hand of tread	Shape	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width
								A	B	C	D	D'	E
PG2-20R1	20	m2	20	1	3°42'	R	H1	10	33	40.08	44	46	22
PG2-20R2	10		20	2	7°25'	R	H1	10	33	40.34	44	46	22
PG2.5-20R1	20	m2.5	20	1	3°52'	R	H1	12	35	50.11	55	57.5	22
PG2.5-20R2	10		20	2	7°46'	R	H1	12	35	50.46	55	57.5	22
PG3-20R1	20	m3	20	1	3°55'	R	H1	15	50	60.14	66	69	28
PG3-20R2	10		20	2	7°50'	R	H1	15	50	60.57	66	69	28

[Caution on Product Characteristics] ① Worm Wheels are profile shifted to create the proper center distance.
② Significant variations in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon gears), for bore size (H8 when produced), teeth diameter, and backlash. Please see the section "Design of Plastic Gears" in the technical reference (Page 693).
③ The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Usage above the value in brackets will exceed the maximum allowable sliding speed, if no lubrication is applied. So, lubrication is required. Please see page 510 for more details.



Stainless Steel Worms

Newly added



W1K

Keyway Width×Depth	Set screw		Weight (kg)	Catalog No. ● : J Series (Available-on-request)
	Size	S		
—	—	—	0.20	SUW2-R1
4 x 1.8	M4	7	0.20	● SUW2-R1J12
5 x 2.3	M4	7	0.18	● SUW2-R1J14
—	—	—	0.20	SUW2-R2
4 x 1.8	M4	7	0.20	● SUW2-R2J12
5 x 2.3	M4	7	0.18	● SUW2-R2J14
—	—	—	0.39	SUW2.5-R1
5 x 2.3	M4	9	0.38	● SUW2.5-R1J15
5 x 2.3	M4	9	0.37	● SUW2.5-R1J16
—	—	—	0.39	SUW2.5-R2
5 x 2.3	M4	9	0.38	● SUW2.5-R2J15
5 x 2.3	M4	9	0.37	● SUW2.5-R2J16
—	—	—	0.63	SUW3-R1
6 x 2.8	M5	10	0.59	● SUW3-R1J18
6 x 2.8	M5	10	0.58	● SUW3-R1J19
6 x 2.8	M5	10	0.56	● SUW3-R1J20
—	—	—	0.63	SUW3-R2
6 x 2.8	M5	10	0.59	● SUW3-R2J18
6 x 2.8	M5	10	0.58	● SUW3-R2J19
6 x 2.8	M5	10	0.56	● SUW3-R2J20

[Caution on J series]

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- ③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.
- ④ For products having a tapped hole, a set screw is included.

[Caution on Secondary Operations]

- ① Please read "Caution on Performing Secondary Operations" (Page 512) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK's system for quick modification of KHK stock gears is also available.

- Spur Gears
- Helical Gears
- Internal Gears
- Racks
- CP Racks & Pinions
- Miter Gears
- Bevel Gears
- Screw Gears
- Worm Gear Pair
- Bevel Gearboxes
- Other Products

PG

Plastic Worm Wheels



Hub width F	Total length G	Mounting distance J	Allowable torque (N·m)	Allowable torque (kgf·m)	Backlash (mm)	Weight (kg)	Catalog No.
			Surface durability	Surface durability			
13	35	35.5	4.78	0.49	0~0.33	0.046	PG2-20R1
13	35	35.5	4.82	0.49	0~0.33	0.046	PG2-20R2
14	36	43.5	(8.46)	0.86	0~0.36	0.066	PG2.5-20R1
14	36	43.5	(8.54)	0.87	0~0.36	0.066	PG2.5-20R2
15	43	52	(13.7)	1.40	0~0.38	0.13	PG3-20R1
15	43	52	(13.8)	1.41	0~0.38	0.13	PG3-20R2

[Caution on Secondary Operations]

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- ② Plastic gears are susceptible to the effects of temperature and moisture. Dimensional changes may occur while performing secondary operations and during post-machining operations.