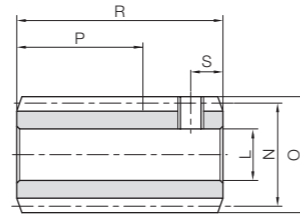




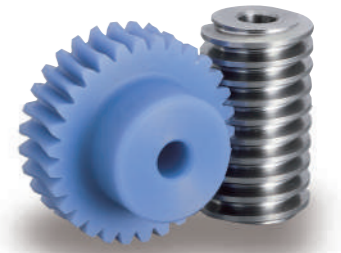
Specifications	
Precision grade	KHK W 001 grade 4
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	SUS303
Heat treatment	—
Tooth hardness	(less than 187HB)



W2

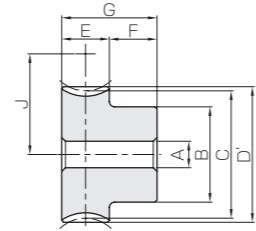
Catalog Number	Normal module	Number of Starts	Nominal lead angle	Direction of helix	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
						L _{H8}	M	N	O	P	Q	R
SUW0.5-R1	m0.5	1	2°36'	R	W2	5	—	11	12	(10)	—	18
SUW0.5-R2		2	5°13'									
SUW0.8-R1	m0.8	1	3°17'	R	W2	6	—	14	15.6	(18)	—	30
SUW0.8-R2		2	6°34'									

Socket head screw		Weight (kg)	Catalog Number
Size	S		
M3	3	0.011 0.010	SUW0.5-R1 SUW0.5-R2
M4	5	0.029	SUW0.8-R1 SUW0.8-R2



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
Heat treatment	—
Tooth hardness	—

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



HA

Catalog Number	Normal module	Reduction ratio	No. of teeth	No. of starts of mating worm	Lead angle helix direction	Shape	A	B	C	D	D'	E	
							-0.05 -0.10						
PG0.5-20R1	m0.5	20	20	1	2°36'	R	HA	4	9	10.01	—	11	5
PG0.5-20R2								4	9	10.04		11	
PG0.5-30R1								4	12	15.02		16	
PG0.5-30R2								4	12	15.06		16	
PG0.5-40R1								5	15	20.02		21	
PG0.5-50R1	m0.5	50	50	1	2°36'	R	HA	5	20	25.03	—	26	5
PG0.5-60R1								5	25	30.03		31	
PG0.8-20R1	m0.8	20	20	1	3°17'	R	HA	5	12	16.03	—	17.6	9
PG0.8-20R2								5	12	16.11		17.6	
PG0.8-30R1								5	18	24.04		25.6	
PG0.8-30R2								5	18	24.16		25.6	
PG0.8-40R1								6	20	32.05		33.6	
PG0.8-50R1	m0.8	50	50	1	3°17'	R	HA	8	25	40.07	—	41.6	9
PG0.8-60R1								8	25	48.08		49.6	

(Caution on Product Characteristics) ① The worm wheel is shifted to fit the mounting distance.

F	G	J	Allowable torque (N·m)	Allowable torque (kgf·m)	Backlash (mm)	Weight (kg)	Catalog Number
			Bending strength	Bending strength			
7	12	10.5	0.077	0.0078	0.09~0.17	0.83	PG0.5-20R1
		10.5	0.077	0.0078		0.83	PG0.5-20R2
		13	0.13	0.013		1.82	PG0.5-30R1
		13	0.13	0.013		1.82	PG0.5-30R2
		15.5	0.19	0.019		3.06	PG0.5-40R1
9	18	18	0.24	0.025	0.13~0.23	5.24	PG0.5-50R1
		20.5	0.31	0.031		7.96	PG0.5-60R1
		15	0.35	0.036		3.06	PG0.8-20R1
		15	0.36	0.036		3.06	PG0.8-20R2
		19	0.59	0.060		7.27	PG0.8-30R1
9	18	19	0.60	0.061	0.13~0.23	7.27	PG0.8-30R2
		23	0.86	0.087		11.51	PG0.8-40R1
		27	1.13	0.12		17.76	PG0.8-50R1
		31	1.41	0.14		23.67	PG0.8-60R1

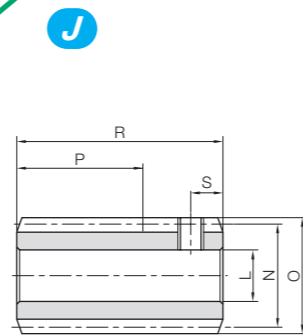


Stainless Steel Worms

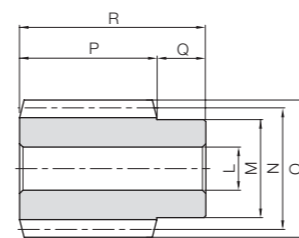


Specifications	
Precision grade	KHK W 001 grade 4*
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	SUS303
Heat treatment	—
Tooth hardness	(less than 187HB)

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

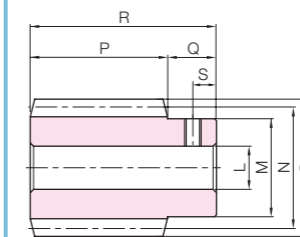


W2

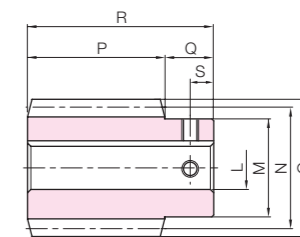


W1

J Series



W1T



W1K



Catalog Number ● : J Series (Available-on-request)	Normal module	Number of Starts	Nominal lead angle	Direction of helix	Shape	Bore		Hub dia.	Pitch dia.	Outside dia.	Face width		Hub width	Total length
						L _{H7(H8)}	M				N	O		
SUW1-R1 SUW1-R2	m1	1 2	3°35' 7°11'	R	W2 W2	6 ^{H8}	—	—	16	18	(20)	—	—	32
SUW1.5-R1 ● SUW1.5-R1J8 ● SUW1.5-R1J10	m1.5	1	3°26'	R	W1 W1T W1K	8	—	20	25	28	30	10	—	40
SUW1.5-R2 ● SUW1.5-R2J8 ● SUW1.5-R2J10		2	6°54'		W1 W1T W1K	8 8 10	—	—	—	—	—	—	—	—

[Caution on J series] ① Cancellation is not possible for made-to-order products. See page 42 for lead times and allowable order quantities. See page 44 for other precautions.

Keyway Width x Depth	Socket head screw Size	S	Weight (kg)	Catalog Number ● : J Series (Available-on-request)	
				Worm	Pinion
—	M4	5	0.043	SUW1-R1 SUW1-R2	—
—	—	—	0.13	SUW1.5-R1	—
—	M5	5	0.13	● SUW1.5-R1J8	—
4 x 1.8	M4	5	0.11	● SUW1.5-R1J10	—
—	—	—	0.13	SUW1.5-R2	—
—	M5	5	0.13	● SUW1.5-R2J8	—
4 x 1.8	M4	5	0.11	● SUW1.5-R2J10	—

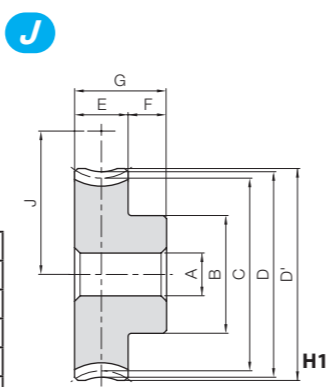


Worm Wheels



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
Heat treatment	—
Tooth hardness	—

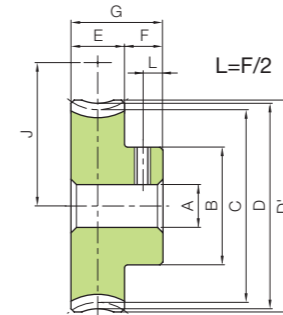
* The precision grade is equivalent to the value shown in the table.



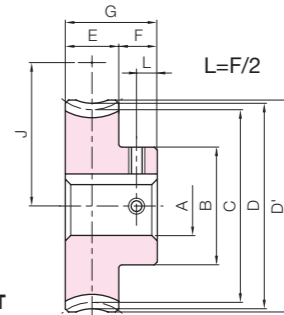
H1

A	Bore
B	Hub dia.
C	Pitch dia.
D	Throat dia.
D'	Outside dia.
E	Face width
F	Hub width
G	Total length
J	Mounting distance

J Series



H1T



H1K



Catalog Number	Reduction ratio	No. of teeth	No. of starts of mating worm	Lead angle helix direction	Shape	A-H _e		D	D'	E	F	G	J	Allowable torque (N·m) Bending strength	Allowable torque (kgf·m) Bending strength	Backlash (mm)	Weight (kg)	
						A	B											
PG1-20R1	20	20	1	3°35'	R	H1	6	16	20.04	22	23	—	—	18	0.62	0.060	0.0058	
PG1-20R2	10	20	2	7°11'			6	16	20.16	22	23	—	—	18	0.62	0.060	0.0058	
PG1-30R1	30	30	1	3°35'	6	20	30.06	32	33	10	10	20	23	1.03	0.10	0~0.28	0.012	
PG1-40R1	40	40	1	3°35'	8	26	40.08	42	43	—	—	—	28	1.49	0.15	—	0.021	
PG1-50R1	50	50	1	3°35'	8	30	50.1	52	53	—	—	—	33	1.96	0.20	—	0.031	
PG1.5-20R1	20	20	1	3°26'	R	H1	8	22	30.05	33	34.5	12	10	22	1.66	0.17	0~0.30	0.014
PG1.5-20R2	10	20	2	6°54'			8	22	30.22	33	34.5	12	10	22	27.5	1.68	—	—

[Caution on Product Characteristics] ① The worm wheel is shifted to fit the mounting distance.

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

Bore	* The product shapes of J Series items are identified by background color.							
	6	8	10	12	14	15	16	17
Keyway J _{S9}	—		4x1.8			5x2.3		—
Screw size	—		4x1.8			5x2.3		—
Catalog Number	M4	M5	M4					
PG1-20R1 J BORE								
PG1-20R2 J BORE								
PG1-30R1 J BORE								
PG1-40R1 J BORE								
PG1-50R1 J BORE								
PG1.5-20R1 J BORE								
PG1.5-20R1J BORE								
PG1.5-20R2J BORE								

[Caution on J series] ① Cancellation is not possible for made-to-order products. See page 42 for lead times and allowable order quantities. See page 44 for other precautions.

* In regard to MC Nylon gears, other materials are available for plastic gears, including Ultra High Molecular Weight Polyethylene (U-PE), which has excellent abrasion resistance Poly Ether Ether Ketone (PEEK) also has quality properties. A single piece order is acceptable and will be produced as a custom-made gear. Please see Page 26 for more details on quotations and orders.



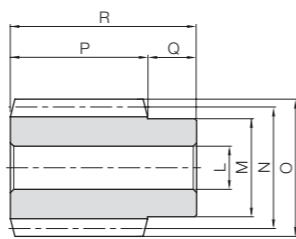


Stainless Steel Worms

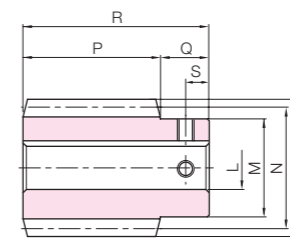


Specifications	
Precision grade	KHK W 001 grade 4*
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	14°30'
Material	SUS303
Heat treatment	—
Tooth hardness	(less than 187HB)

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



W1



W1K



Catalog Number ● : J Series (Available-on-request)	Normal module	Number of Starts	Nominal lead angle	Direction of helix	Shape	Bore		Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
						LH7	M						
SUW2-R1 ● SUW2-R1J12 ● SUW2-R1J14	m2	1	3°42'	R	W1	12	25	31	35	32	14	46	
W1K						14							
SUW2-R2 ● SUW2-R2J12 ● SUW2-R2J14	m2	2	7°25'	R	W1	12	35	44	50	50	20	70	
W1K						14							
SUW3-R1 ● SUW3-R1J17 ● SUW3-R1J18 ● SUW3-R1J19 ● SUW3-R1J20	m3	1	3°55'	R	W1	16	35	44	50	50	20	70	
W1K						17							
SUW3-R2 ● SUW3-R2J17 ● SUW3-R2J18 ● SUW3-R2J19 ● SUW3-R2J20	m3	2	7°50'	R	W1	16	35	44	50	50	20	70	
W1K						17							

Keyway Width x Depth	Socket head screw Size	S	Weight (kg)	Catalog Number ● : J Series (Available-on-request)	
				W	D
—	—	—	0.20	SUW2-R1	SUW2-R1J12
4 x 1.8	M4	7	0.20	● SUW2-R1J12	● SUW2-R1J14
5 x 2.3	M4	7	0.18	● SUW2-R1J14	
—	—	—	0.20	SUW2-R2	SUW2-R2J12
4 x 1.8	M4	7	0.20	● SUW2-R2J12	● SUW2-R2J14
5 x 2.3	M4	7	0.18	● SUW2-R2J14	
—	—	—	0.64	SUW3-R1	SUW3-R1J17
5 x 2.3	M4	10	0.62	● SUW3-R1J17	● SUW3-R1J18
6 x 2.8	M5	10	0.60	● SUW3-R1J18	● SUW3-R1J19
6 x 2.8	M5	10	0.59	● SUW3-R1J19	● SUW3-R1J20
6 x 2.8	M5	10	0.57	● SUW3-R1J20	
—	—	—	0.64	SUW3-R2	SUW3-R2J17
5 x 2.3	M4	10	0.62	● SUW3-R2J17	● SUW3-R2J18
6 x 2.8	M5	10	0.60	● SUW3-R2J18	● SUW3-R2J19
6 x 2.8	M5	10	0.59	● SUW3-R2J19	● SUW3-R2J20
6 x 2.8	M5	10	0.57	● SUW3-R2J20	

[Caution on J series] ① Cancellation is not possible for made-to-order products. See page 42 for lead times and allowable order quantities. See page 44 for other precautions.

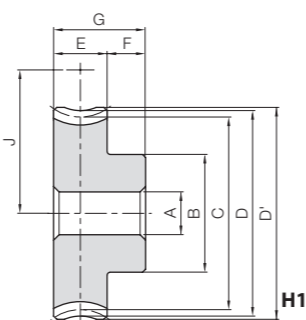


Worm Wheels

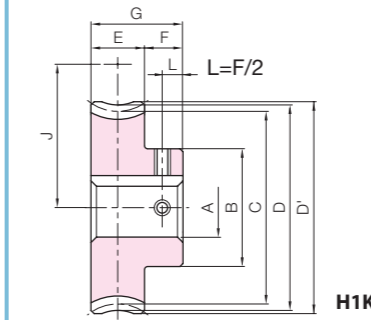


Specifications	
Precision grade	KHK W 002 grade 5*
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	14°30'
Material	MC901
Heat treatment	—
Tooth hardness	—

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



H1



H1K

Plastic Worm Wheels



Catalog Number	Reduction ratio	No. of teeth	No. of starts of mating worm	Lead angle helix direction	Shape	A±0.05	B	C	D	D'	E	F	G	J	Allowable torque (N·m) Bending strength	Allowable torque (kgf·m) Bending strength	Backlash (mm)	Weight (kg)
PG2-20R1	20	20	1	3°42'	R	10	33	40.08	44	46	22	13	35	35.5	4.78	0.49	0~0.33	0.046
PG2-20R2	10	20	2	7°25'	R	10	33	40.34	44	46	22	13	35	35.5	4.82	0.49	0~0.33	0.046
PG3-20R1	20	20	1	3°55'	R	15	50	60.14	66	69	28	15	43	52	(13.7)	1.40	0~0.38	0.13
PG3-20R2	10	20	2	7°50'	R	15	50	60.57	66	69	28	15	43	52	(13.8)	1.41	0~0.38	0.13

[Caution on Product Characteristics] ① The worm wheel is shifted to fit the mounting distance.

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

Bore	* The product shapes of J Series items are identified by background color.												
	10	12	14	15	16	17	18	19	20	22	25	28	30
Keyway JS9	4x1.8			5x2.3			6x2.8			8x3.3			
Screw size	M4			M5			M6						
Catalog Number	PG2-20R1 J BORE			PG2-20R2 J BORE			PG3-20R1 J BORE			PG3-20R2 J BORE			

[Caution on J series] ① Cancellation is not possible for made-to-order products. See page 42 for lead times and allowable order quantities. See page 44 for other precautions.

