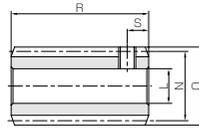


# SUW Stainless Steel Worms

Module 1, 1.5



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.	Norma module	Number of starts	Lead angle	Hand thread	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
						L <sub>H7</sub> (H8)	M	N	O	P	Q	R
SUW1-R1	m1	1	3°35'	R	W2	6	—	16	18	—	—	32
SUW1-R2		2	7°11'	R	W2	6	—	16	18	—	—	32
SUW1.5-R1	m1.5	1	3°26'	R	W1	8	—	—	—	—	—	—
SUW1.5-R1J8					W1T	8	20	25	28	30	10	40
SUW1.5-R1J10					W1K	10	—	—	—	—	—	—
SUW1.5-R2	m1.5	2	6°54'	R	W1	8	—	—	—	—	—	—
SUW1.5-R2J8					W1T	8	20	25	28	30	10	40
SUW1.5-R2J10					W1K	10	—	—	—	—	—	—

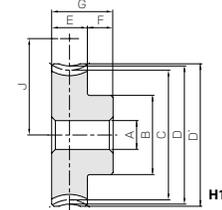
- [Caution on Product Characteristics]
- For W2-shaped products, a set screw is included. When setting up the mating wheel, make sure no friction occurs within the set screw.
  - These worms produce axial thrust forces. See Page 344 for more details.

# PG Plastic Worm Wheels

Module 1, 1.5



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	—
Module	<b>m1</b> <b>m1.5</b>
Face width (E)	10      12
Hub width (F)	10      10
Total length (G)	20      22
Screw offset (L)	5      5



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

Catalog No.	Reduction ratio	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	Bore		Pitch dia.	Throat dia	Outside dia.	Mounting distance	Allowable torque (N·m)	Allowable torque (kgf·m)	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	0-0.28	0.0058
PG1-20R2	10	20	2	7°11'	R	H1	6	16	20.16	22	23	18	0.62	0.060	0-0.28	0.0058
PG1-30R1	30	30	1	3°35'	R	H1	6	20	30.06	32	33	23	1.03	0.10	0-0.28	0.012
PG1-40R1	40	40	1	3°35'	R	H1	8	26	40.08	42	43	28	1.49	0.15	0-0.28	0.021
PG1-50R1	50	50	1	3°35'	R	H1	8	30	50.1	52	53	33	1.96	0.20	0-0.28	0.031
PG1.5-20R1	20	20	1	3°26'	R	H1	8	22	30.05	33	34.5	27.5	1.66	0.17	0-0.30	0.014
PG1.5-20R2	10	20	2	6°54'	R	H1	8	22	30.22	33	34.5	27.5	1.68	0.17	0-0.30	0.014

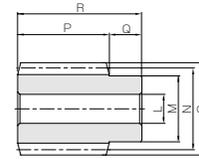
- [Caution on Product Characteristics]
- Worm Wheels are profile shifted to create the proper center distance.
  - Significant variations in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon gears), for bore size (H8 when produced), teeth diameter, and backlash. Please see the section "Design of Plastic Gears" in separate technical reference book (Page 101).
  - 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]
- 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.
  - Plastic gears are susceptible to the effects of temperature and moisture. Dimensional changes may occur while performing secondary operations and during post-machining operations.

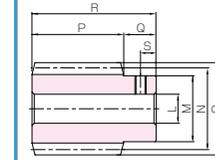
SUW

# Stainless Steel Worms

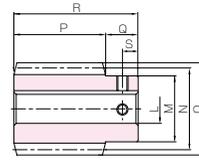
J Series



W1



W1T



W1K



Keyway	Set Screw		Weight (kg)	Catalog No.
	WidthxDepth	Size		
—	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

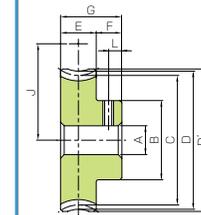
- [Caution on Secondary Operations]
- Please read "Caution on Performing Secondary Operations" (Page 344) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.

- [Caution on J series]
- 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.
  - 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.
  - Keyways are made according to JIS B1301 standards, J9 tolerance.
  - For products having a tapped hole, a set screw is included.

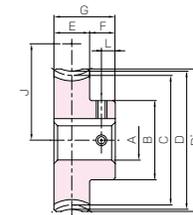
PG

# Plastic Worm Wheels

J Series



H1T



H1K



Newly added

Bore	* The product shapes of J Series items are identified by background color.							
Keyway J9	6	8	10	12	14	15	16	17
Screw size	—			4 x 1.8		5 x 2.3		
Catalog No.	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								
PG1.5-20R2 J BORE								

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

- [Caution on J series]
- 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.
  - 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.
  - Keyways are made according to JIS B1301 standards, J9 tolerance.
  - Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap.
  - For products having a tapped hole, a set screw is included.
  - The use of H1T shaped Set Screws for fastening gears to a shaft is a method only applicable to the usage for light loads. For secure fastening, please use dowel pins in combination.

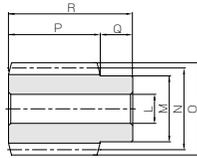
\* In regards to MC Nylon gears, other materials are available for plastic gears, including Ultra High Molecular Weight Polyethylene (UHMW-PE), which has excellent abrasion resistance. Poly Ether Ether Ketone (PEEK) also has quality properties. A single piece order is acceptable and will be produced as a custom-made gear. For details on quotations and orders please see Page 8.

# 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		
Material	SUS303		
Heat treatment	—		
Tooth hardness	(less than 187HB)		
Module	m2	m2.5	m3
Normal pressure angle	14° 30'	20°	14° 30'
Screw offset (S)	7	9	10



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.	Normal module	Number of starts	Lead angle	Hand thread	Shape	Bore				Hub width	Total length	Weight (kg)	
						Lr17	M	N	O				
SUW2-R1	m2	1	3°42'	R	W1	12	25	31	35	32	14	46	0.20
SUW2-R2		2	7°25'			12	25	31	35	32	14	46	0.20
SUW2.5-R1	m2.5	1	3°52'			15	30	37	42	45	18	63	0.39
SUW2.5-R2		2	7°46'			15	30	37	42	45	18	63	0.39
SUW3-R1	m3	1	3°55'			16	35	44	50	50	20	70	0.63
SUW3-R2		2	7°50'			16	35	44	50	50	20	70	0.63

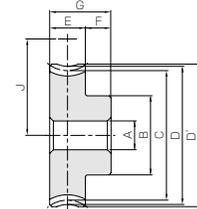
[Caution on Product Characteristics] ① These worms produce axial thrust forces. See Page 344 for more details.

# 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		
Material	MC901 Nylon		
Heat treatment	—		
Tooth hardness	—		
Module	m2	m2.5	m3
Normal pressure angle	14° 30'	20°	14° 30'
Face width (E)	22	22	28
Hub width (F)	13	14	15
Total length (G)	35	36	43
Screw offset (L)	6.5	7	7.5



H1

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

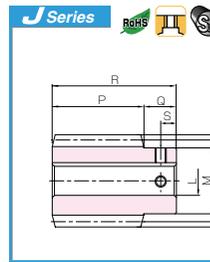
Catalog No.	Reduction ratio	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	Bore		Pitch dia.	Throat dia.	Outside dia.	Mounting distance	Allowable torque (N·m)		Backlash (mm)	Weight (kg)
							A	B					Bending strength	Bending strength		
PG2-20R1	20	10	1	3°42'	R	H1	10	33	40.08	44	46	35.5	4.78	0.49	0~0.33	0.046
PG2-20R2	10	2	7°25'	10			33	40.34	44	46	35.5	4.82	0.49			
PG2.5-20R1	20	10	1	3°52'			12	35	50.11	55	57.5	43.5	(8.46)	0.86	0~0.36	0.066
PG2.5-20R2	10	2	7°46'	12			35	50.46	55	57.5	43.5	(8.54)	0.87			
PG3-20R1	20	10	1	3°55'			15	50	60.14	66	69	52	(13.7)	1.40	0~0.38	0.13
PG3-20R2	10	2	7°50'	60.57					66	69	52	(13.8)	1.41			

[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 separate technical reference book (Page 101).  
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 342 for more details.

SUW

# Stainless Steel Worms

Newly added



W1K



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	12	14	15	16	17	18	19	20
Screw size	4 x 1.8			5 x 2.3			6 x 2.8	
Catalog No.	M4				M5			
SUW2-R1 BORE								
SUW2-R2 BORE								
SUW2.5-R1 BORE								
SUW2.5-R2 BORE								
SUW3-R1 BORE								
SUW3-R2 BORE								

[Caution on J series]

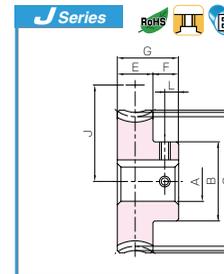
① As available-on-request products, requires a lead-time for shipping within 2 working-days (excludes the day ordered), after placing an order.  
Please allow additional shipping time to get to your local distributor.  
② Number of products we can process for one order is 1 to 20 units. For quantities 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 For products having a tapped hole, a set screw is included.

[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.

PG

# Plastic Worm Wheels

Newly added



H1K



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

Bore	* The product shapes of J Series items are identified by background color.												
Keyway Js9	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					M6		
PG2-20R1 J BORE													
PG2-20R2 J BORE													
PG2.5-20R1 J BORE													
PG2.5-20R2 J BORE													
PG3-20R1 J BORE													
PG3-20R2 J BORE													

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

[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 contoured to reduce the length of the tap.  
⑤ For products having a tapped hole, a set screw is included.