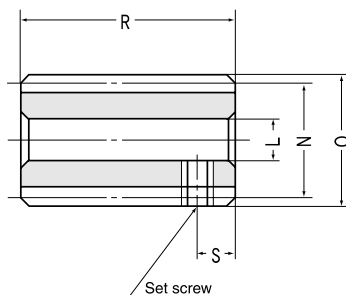


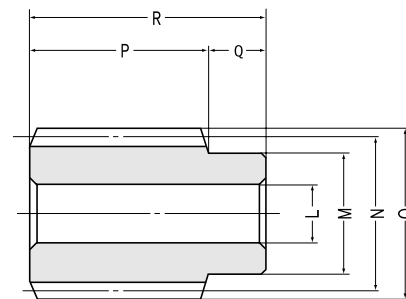


SUW Worms, PG Plastic Worm Wheels

Normal Modules 1 ~ 1.5



W2 Shape



W1 Shape

Module 1 Worms

Catalog No.	Normal module <i>m</i>	Number of starts	Lead angle	Hand of thread	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
					LH7	M	N	O	P	Q	Q'	R
SUW1-R1	1	1	3°35'	R	6	—	16	18	—	—	—	32
SUW1-R2	1	2	7°11'	R	6	—	16	18	—	—	—	32

Module 1 Worm Wheels

Catalog No.	Normal module <i>m</i>	Reduction ratio	No. of teeth	Coefficient of profile shift <small>NOTE 1</small>	Number of starts	Hand of thread	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width	Hub length	Total length	Mounting distance
							A _{H8}	B	C	D	D'	E	F	F'	G
PG1-20R1	1	1/20	20	-0.02	1	R	6	16	20.04	22	23	10	10	—	20
PG1-20R2	1	1/10	20	-0.079	2	R	6	16	20.16	22	23	10	10	—	20
PG1-30R1	1	1/30	30	-0.029	1	R	6	20	30.06	32	33	10	10	—	20
PG1-40R1	1	1/40	40	-0.039	1	R	8	26	40.08	42	43	10	10	—	20
PG1-50R1	1	1/50	50	-0.049	1	R	8	30	50.1	52	53	10	10	—	20

Module 1.5 Worms

Catalog No.	Normal module <i>m</i>	Number of starts	Lead angle	Hand of thread	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
					LH7	M	N	O	P	Q	Q'	R
SUW1.5-R1	1.5	1	3°26'	R	8	20	25	28	30	10	0	40
SUW1.5-R2	1.5	2	6°54'	R	8	20	25	28	30	10	0	40

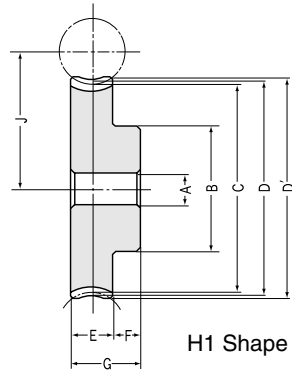
Module 1.5 Worm Wheels

Catalog No.	Normal module <i>m</i>	Reduction ratio	No. of teeth	Coefficient of profile shift <small>NOTE 1</small>	Number of starts	Hand of thread	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
							A _{H8}	B	C	D	D'	E	F	F'	G
PG1.5-20R1	1.5	1/20	20	-0.018	1	R	8	22	30.05	33	34.5	12	10	—	22
PG1.5-20R2	1.5	1/10	20	-0.021	2	R	8	22	30.22	33	34.5	12	10	—	22

CAUTION: Before assembling or performing any secondary operations, please carefully read the "Application Hints" on page 296.

CAUTION: SW worms may also be used to mate with PG worm wheels.

NOTE 1: These worm wheels are profile shifted to create the proper center distance.



H1 Shape

Specifications

Catalog No.	SUW	PG
Precision grade	KHK W 001 grade 4	KHK W 002 grade 5
Reference section of gear	Normal plane	Normal plane
Gear teeth	JIS 3 type Standard full depth	Standard full depth
Normal pressure angle	20°	20°
Material	SUS303	MC901
Heat treatment	—	—
Tooth hardness	Less than 187HB	—
Surface treatment	—	—
Tooth surface finish	Cut	Cut
Datum reference surface for gear cutting	Bore	Bore
Secondary Operations	Possible	Possible

*Available on special order: Same gears made from SUS304.

Screw <small>NOTE 2</small>		Shape	Weight (kgf)	Catalog No.
Size	S			
M4	5	W2	0.04	SUW1-R1
M4	5	W2	0.04	SUW1-R2

NOTE 2: The W2 shape worms are supplied with a set screw.

Web thickness	Web O.D.	Mounting distance	Shape	Allowable torque (N·m)	Allowable torque (Kgf·m)	Backlash (mm)	Weight (kgf)	Catalog No.
				<small>NOTE 3</small>				
H	I	J		Surface durability	Surface durability			
—	—	18	H1	0.62	(0.06)	0.1 ~ 0.2	0.006	PG1-20R1
—	—	18	H1	0.62	(0.06)	0.1 ~ 0.2	0.006	PG1-20R2
—	—	23	H1	1.03	(0.1)	0.1 ~ 0.2	0.01	PG1-30R1
—	—	28	H1	1.49	(0.15)	0.1 ~ 0.2	0.02	PG1-40R1
—	—	33	H1	1.96	(0.2)	0.1 ~ 0.2	0.03	PG1-50R1

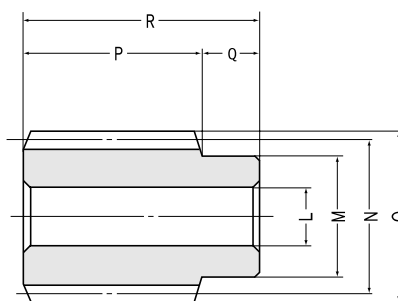
Screw		Shape	Weight (kgf)	Catalog No.
Size	S			
—	—	W1	0.12	SUW1.5-R1
—	—	W1	0.12	SUW1.5-R2

Web thickness	Web O.D.	Mounting distance	Shape	Allowable torque (N·m)	Allowable torque (Kgf·m)	Backlash (mm)	Weight (kgf)	Catalog No.
				<small>NOTE 3</small>				
H	I	J		Surface durability	Surface durability			
—	—	27.5	H1	1.66	(0.17)	0.12 ~ 0.22	0.015	PG1.5-20R1
—	—	27.5	H1	1.68	(0.17)	0.12 ~ 0.22	0.015	PG1.5-20R2

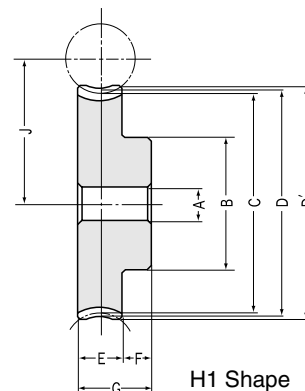
NOTE 3: The allowable torques shown in the table are calculated using the Lewis formula.



SUW Worms, PG Plastic Worm Wheels Normal Modules 2~3



W1 Shape



H1 Shape

Module 2 Worms

Pressure Angle 14°30'

Catalog No.	Normal module <i>m</i>	Number of starts	Lead angle	Hand of thread	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
					LH7	M	N	O	P	Q	Q'	R
SUW2-R1	2	1	3°42'	R	12	25	31	35	32	14	—	46
SUW2-R2	2	2	7°25'	R	12	25	31	35	32	14	—	46

Module 2 Worm Wheels

Catalog No.	Normal module <i>m</i>	Reduction ratio	No. of teeth	Coefficient of profile shift <small>NOTE 1</small>	Number of starts	Hand of thread	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
							A _{H8}	B	C	D	D'	E	F	F'	G
PG2-20R1	2	1/20	20	-0.021	1	R	10	33	40.08	44	46	22	13	—	35
PG2-20R2	2	1/10	20	-0.084	2	R	10	33	40.34	44	46	22	13	—	35

Module 2.5 Worms

Pressure Angle 20°

Catalog No.	Normal module <i>m</i>	Number of starts	Lead angle	Hand of thread	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
					LH7	M	N	O	P	Q	Q	R
SUW2.5-R1	2.5	1	3°52'	R	15	30	37	42	45	18	—	63
SUW2.5-R2	2.5	2	7°46'	R	15	30	37	42	45	18	—	63

Module 2.5 Worm Wheels

Catalog No.	Normal module <i>m</i>	Reduction ratio	No. of teeth	Coefficient of profile shift <small>NOTE 1</small>	Number of starts	Hand of thread	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
							A _{H8}	B	C	D	D'	E	F	F	G
PG2.5-20R1	2.5	1/20	20	-0.023	1	R	12	35	50.11	55	57.5	22	14	—	36
PG2.5-20R2	2.5	1/10	20	-0.093	2	R	12	35	50.46	55	57.5	22	14	—	36

Module 3 Worms

Pressure Angle 14°30'

Catalog No.	Normal module <i>m</i>	Number of starts	Lead angle	Hand of thread	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
					LH7	M	N	O	P	Q	Q	R
SUW3-R1	3	1	3°55'	R	16	35	44	50	50	20	—	70
SUW3-R2	3	2	7°50'	R	16	35	44	50	50	20	—	70

Module 3 Worm Wheels

Catalog No.	Normal module <i>m</i>	Reduction ratio	No. of teeth	Coefficient of profile shift <small>NOTE 1</small>	Number of starts	Hand of thread	Bore	Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width	Hub length (R)	Hub length (L)	Total length
							A _{H8}	B	C	D	D'	E	F	F'	G
PG3-20R1	3	1/20	20	-0.023	1	R	15	50	60.14	66	69	28	15	—	43
PG3-20R2	3	1/10	20	-0.094	2	R	15	50	60.57	66	69	28	15	—	43

CAUTION: Before assembling or performing any secondary operations, please carefully read the "Application Hints" on page 296.

CAUTION: SW worms may also be used to mate with PG worm wheels.

NOTE 1: These worm wheels are profile shifted to create the proper center distance.



Worms, Plastic Worm Wheels

Specifications

Catalog No.	SUW	PG
Precision grade	KHK W 001 grade 4	KHK W 002 grade 5
Reference section of gear	Normal plane	Normal plane
Gear teeth	JIS 3 type Standard full depth	Standard full depth
Normal pressure angle	20° or 14° 30'	20° or 14° 30'
Material	SUS303	MC901
Heat treatment	—	—
Tooth hardness	Less than 187HB	—
Surface treatment	—	—
Tooth surface finish	Cut	Cut
Datum reference surface for gear cutting	Bore	Bore
Secondary Operations	Possible	Possible

*Available on special order: Same gears made from SUS304.

Screw		Shape	Weight (kgf)	Catalog No.
Size	S			
—	—	W1	0.2	SUW2-R1 SUW2-R2
—	—	W1	0.2	

Web thickness	Web O.D.	Mounting distance	Shape	Allowable torque (N·m)	Allowable torque (Kg·m)	Backlash (mm)	Weight (kgf)	Catalog No.
				NOTE 2				
H	I	J		Surface durability	Surface durability			
—	—	35.5	H1	4.78	(0.49)	0.14 ~ 0.24	0.04	PG2-20R1 PG2-20R2
—	—	35.5	H1	4.82	(0.49)	0.14 ~ 0.24	0.04	

Screw		Shape	Weight (kgf)	Catalog No.
Size	S			
—	—	W1	0.4	SUW2.5-R1 SUW2.5-R2
—	—	W1	0.4	

Web thickness	Web O.D.	Mounting distance	Shape	Allowable torque (N·m)	Allowable torque (Kg·m)	Backlash (mm)	Weight (kgf)	Catalog No.
				NOTE 2				
H	I	J		Surface durability	Surface durability			
—	—	43.5	H1	8.46	(0.86)	0.17 ~ 0.27	0.06	PG2.5-20R1 PG2.5-20R2
—	—	43.5	H1	8.54	(0.87)	0.17 ~ 0.27	0.06	

Screw		Shape	Weight (kgf)	Catalog No.
Size	S			
—	—	W1	0.6	SUW3-R1 SUW3-R2
—	—	W1	0.6	

Web thickness	Web O.D.	Mounting distance	Shape	Allowable torque (N·m)	Allowable torque (Kg·m)	Backlash (mm)	Weight (kgf)	Catalog No.
				NOTE 2				
H	I	J		Surface durability	Surface durability			
—	—	52	H1	13.68	(1.4)	0.19 ~ 0.29	0.12	PG3-20R1 PG3-20R2
—	—	52	H1	13.81	(1.41)	0.19 ~ 0.29	0.12	

NOTE 2: The allowable torques shown in the table are calculated using the Lewis formula.