

Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

Round Rack Gears / Worm / Worm Wheel

L Fixed and Configurable, Pressure Angle 20°

Round Rack Gear

RoHS 10

Type		Material	Surface Treatment
L Fixed	L Configurable		
RGMA	RGMAL	S45C Equivalent	Black Oxide
RGMAS	RGMASL	SUS303	-

Enlarged View of End Face End Machining End Machining

⚠ For the L configurable type, this can be positioned as desired at one end

Accuracy: Accumulated Pitch Error (μm)

Module	Nominal, Overall Length L		
	-100	101-300	301-500
0.5-1.5	54 (76)	65 (92)	72 (101)
2.0-3.0	62 (86)	73 (102)	80 (112)

⚠ Values in () are for RGMAS and RGMASL.

L Fixed

Part Number Type	Module	Nominal	Effective Number of Teeth (Z)	D (h9)	(L)	h	Unit Price
RGMA (S45C)	0.5	300	192	8	301.59	7.5	
	0.8	300	120	8	301.59	7.2	
	1.0	300	95	10	298.45	9	
		500	159	10	499.51	9	
	1.5	300	63	15	296.88	13.5	
		500	106	15	499.51	13.5	
	2.0	300	47	20	295.31	18	
		500	79	20	496.37	18	
	2.5	300	38	25	298.45	22.5	
		500	63	25	494.80	22.5	
	3.0	300	31	30	292.17	27	
		500	53	30	499.51	27	
RGMAS (SUS303)	0.5	300	192	8	301.59	7.5	
	0.8	300	120	8	301.59	7.2	
	1.0	300	95	10	298.45	9	
		500	159	10	499.51	9	
	1.5	300	63	15	296.88	13.5	
		500	106	15	499.51	13.5	
	2.0	300	47	20	295.31	18	
		500	79	20	496.37	18	
	2.5	300	38	25	298.45	22.5	
		500	63	25	494.80	22.5	
	3.0	300	31	30	292.17	27	
		500	53	30	499.51	27	

L Configurable

Part Number Type	Module	Overall Length L 1mm Increment	D (h9)	h	Unit Price		
					L50-99	L100-199	L200-300
RGMAL (S45C)	0.5	50-300	8	7.5			
	0.8			7.2			
	1.0	50-500	10	9			
				15	13.5		
				20	18		
				25	22.5		
2.0	50-500	20	18				
			25	22.5			
3.0	50-500	30	27				
			30	27			
RGMASL (SUS303)	0.5	50-300	8	7.5			
	0.8			7.2			
	1.0	50-500	10	9			
				15	13.5		
				20	18		
				25	22.5		
2.0	50-500	20	18				
			25	22.5			
3.0	50-500	30	27				
			30	27			

Ordering Example

Part Number - Nominal Length L

RGMA1.0 - 500

RGMAL0.8 - 205

Alterations Code	One End Tapped	Both Ends Tapped																				
	MC	WMC																				
Spec.	<p>Ordering Code MC5</p> <table border="1"> <tr><th>Module</th><th>M Selection</th></tr> <tr><td>0.5</td><td>3 4 5</td></tr> <tr><td>0.8</td><td>3</td></tr> <tr><td>1.0</td><td>4 5</td></tr> <tr><td>1.5-3.0</td><td>4 5 6</td></tr> </table>	Module	M Selection	0.5	3 4 5	0.8	3	1.0	4 5	1.5-3.0	4 5 6	<p>Ordering Code WMC5</p> <table border="1"> <tr><th>Module</th><th>M Selection</th></tr> <tr><td>0.5</td><td>3 4 5</td></tr> <tr><td>0.8</td><td>3</td></tr> <tr><td>1.0</td><td>4 5</td></tr> <tr><td>1.5-3.0</td><td>4 5 6</td></tr> </table>	Module	M Selection	0.5	3 4 5	0.8	3	1.0	4 5	1.5-3.0	4 5 6
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Alterations

Part Number - Nominal Length L - (MC, WMC)

RGMA1.0 - 500 - MC5

Worm

WGEAU

RoHS 10

M Material: S45C Equivalent **S** Surface Treatment: Black Oxide
H Tooth Surface Hardness: 12HRC or less **A** Accessory: Set Screw M4
 Accuracy Grade: JIS B 1702 Class 4 Equivalent (Tooth Surface Finish: Rolled)

Worm Wheel

WGEAH

RoHS 10

M Material: Phosphor Bronze (CAC502)
 Accuracy Grade: JIS B 1702 Class 4 Equivalent (Tooth Surface Finish: Machined)

Worm

Part Number Type	Module	Number of Starts	Shaft Bore Dia. P ₁ Straight Bore + Tap	Twisting Direction	Advance Angle	d	D	L	ℓ	Unit Price 1 - 5 pc(s).
WGEAU	0.8	1	6	R (Right)	3°17'	14	15.6	30	5	
		2	6		6°34'					
	1.0	1	6		3°35'	16	18	32	5	
		2	6		7°11'					

Datum Section of Gears: Normal to tooth / Datum Plane for Gear Cutting; Bore

Cautions

- As high thrust load is applied to worm, be sure to fix it tightly when attaching to shaft.
- Avoid using with the worm gear pushed against the wheel or axially offset condition.

Worm Wheel

⚠ For orders larger than indicated quantity, please request a quotation.

Part Number Type	Module	Number of Teeth	Number of Starts	Shaft Bore Dia. P ₁ Straight Bore	Twisting Direction	d	D	B	H	L	ℓ	F Engagement Center Distance	Allowable Torque (N·m) Tooth Surface Strength	Backlash (mm)	Reduction Ratio	Unit Price 1 - 5 pc(s).
WGEAH	0.8	20	2	5	R (Right)	16.11	17.6	12	18	9	9	15	0.86	0.04-022	1/10	
		30	1	5		24.04	25.6	18	18	18	19	1.89	1/30			
		40	1	6		24.16	25.6	18	18	18	19	1.87	1/15			
		50	1	8		32.05	33.6	20	20	20	23	3.24	1/40			
		20	1	6		40.06	41.6	25	25	25	27	4.90	1/50			
		30	1	6		20.05	23	16	16	16	18	1.58	1/20			
	1.0	20	1	6		20.16	23	16	16	16	18	1.54	1/10			
		30	1	6		30.07	33	20	20	20	23	3.38	1/30			
		40	1	8		30.24	33	20	20	20	23	3.35	1/15			
		50	1	8		40.08	43	26	26	26	28	5.79	1/40			
		20	1	8		50.10	53	30	30	30	33	8.76	1/50			

⚠ As worm wheels are modified according to F (engagement center distance), spiral bevel gears from different manufacturers may not mesh correctly.

Ordering Example

Part Number - Number of Teeth - Number of Starts - Shaft Bore Dia. P₁ - Twisting Direction

WGEAU1.0 - 1 - 6 - R

WGEAH1.0 - 20 - 2 - 6 - R

⚠ For orders larger than indicated quantity, please request a quotation.