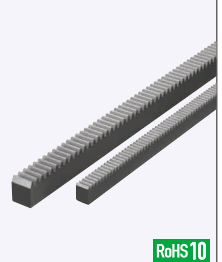


Induction Hardened Rack Gears - Ground

Pressure Angle 20° Module 1.0 / 1.5 / 2.0 / 2.5 / 3.0

Feature: Rack gears with hardened teeth which provides excellent strength, abrasion resistance and high precision.



RoHS 10

Enlarged View of End Face

Teeth and Hole Machined surfaces have no surface treatment.

Type	Material	Surface Treatment	Hardness
RGEAH	1045 Carbon Steel	Black Oxide	Tooth Induction Hardened 45~55HRC

Module	Accuracy: Accumulated Pitch Error (μm)	
	Nominal	300
1.0~1.5	32	35
2.0~3.0	-	39

Hole Machining **N**: No Hole Machining

Hole Machining **ST**: Side Tapped

Hole Machining **A**: Bottom Tapped

Hole Machining **Z**: Side Counterbored

End Machining

M Depth Mx1.5

d1 Through d2 Counterbore Depth Z1

Formula: $F = \frac{L - B \times (K-1)}{2}$

Module	P Tolerance
1.0~2.0	-0.1 -0.3
2.5, 3.0	-0.1 -0.4

Part Number	Nominal	Hole Machining	Number of Effective Teeth	L	P (Pitch)	W	H	h	B (Hole Pitch)	M (Coarse)	d1	d2	Z1	K (Number of Holes)
RGEAH	1.0	300	N (No Hole Machining)	95	298.45	3.142	10	12	11	180	M3	3.5	6.5	3.5
				159	499.51									3
	1.5	300	A (Bottom Tapped)	63	296.85	4.712	15	20	18.5	180	M4	4.5	8	4.5
				106	499.51									3
	2.0	500	ST (Side Tapped)	79	496.37	6.283	20	25	23	180	M5	5.5	9.5	5.5
				63	494.8	7.854	25	30	27.5	180	M5	5.5	9.5	5.5
	2.5	500	Z (Side Counterbored)	63	494.8	7.854	25	30	27.5	180	M5	5.5	9.5	5.5
				53	499.51	9.424	30	35	32	180	M5	5.5	9.5	5.5
	3.0	500												3

Ordering Example: Part Number - Nominal - Hole Machining
RGEAH1.0 - 500 - A

Days to Ship: Configure Online

Price: Configure Online

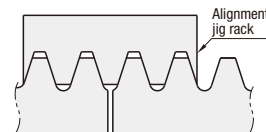
Part Number		Nominal	Unit Price 1~4 pc(s).			
Type	Module		Hole Machining N	Hole Machining A	Hole Machining ST	Hole Machining Z
RGEAH	1.0	300				
		500				
	1.5	300				
		500				
	2.0	500				
		500				
2.5	500					
	500					
3.0	500					
	500					

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

Alterations: Part Number - Nominal - Hole Machining - (MC, WMC)
RGEAH1.0 - 500 - A - MC4

Alterations	One End Tapped	Both Ends Tapped
Code	MC	WMC
Spec.	Ordering Code: MC5 Module: 1.0, 1.5~3.0 M Selection: 3, 4, 5, 6	Ordering Code: WMC5 Module: 1.0, 1.5~3.0 M Selection: 3, 4, 5, 6
Price Adder		

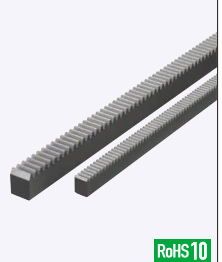
How to Connect Rack Gears
MISUMI Induction Hardened Rack Gears are end machined with negative pitch tolerance in length. When connecting the racks, use a piece of rack (rack gear in the same module) as a spacer jig as shown below to properly adjust the pitch.



Induction Hardened Rack Gears - Ground, Hole Position Configurable

Pressure Angle 20° Module 1.0 / 1.5 / 2.0 / 2.5 / 3.0

Feature: Rack gears with hardened teeth which provides excellent strength, abrasion resistance and high precision.



RoHS 10

Enlarged View of End Face

Teeth and Hole Machined surfaces have no surface treatment.

Type	Material	Surface Treatment	Hardness
RGEAHL	1045 Carbon Steel	Black Oxide	Tooth Induction Hardened 45~55HRC

Module	Accuracy: Accumulated Pitch Error (μm)	
	Nominal	300
1.0~1.5	32	35
2.0~3.0	-	39

Hole Machining **A**: Bottom Tapped

Hole Machining **ST**: Side Tapped

Hole Machining **Z**: Side Counterbored

End Machining

M Depth Mx1.5

d1 Through d2 Counterbore Depth Z1

Formula: $F = L - A - B - C$

Formula: $F = A + B + C \leq L - 5$

Module	P Tolerance
1.0~2.0	-0.1 -0.3
2.5, 3.0	-0.1 -0.4

Part Number		Nominal	Hole Machining	Hole Position ABC 1mm Increment	Number of Effective Teeth	Overall Length L	P (Pitch)	W	H	h	M (Coarse)	d1	d2	Z1
Type	Module													
RGEAHL	1.0	300	A (Bottom Tapped) ST (Side Tapped) Z (Side Counterbored)	5~293	95	298.45	3.142	10	12	11	M3	3.5	6.5	3.5
		5~494		159	499.51									
	1.5	300		5~291	63	296.88	4.712	15	20	18.5	M4	4.5	8	4.5
		500		5~493	106	499.51								
	2.0	500		6~490	79	496.37	6.283	20	25	23	M5	5.5	9.5	5.5
	2.5	500		6~488	63	494.8	7.854	25	30	27.5	M5	5.5	9.5	5.5
	3.0	500		6~492	53	499.51	9.424	30	35	32	M5	5.5	9.5	5.5

Ordering Example: Part Number - Nominal - Hole Machining - Hole Position (First) - Hole Position (Second) - Hole Position (Third)
RGEAHL1.0 - 500 - ST - A50 - B100 - C200
RGEAHL2.0 - 500 - Z - A200

Days to Ship: Configure Online

Price: Configure Online

Part Number	Nominal	Body Price 1~4 pc(s).	Hole Machining Charge (+Body Price)
Type	Module	Tapped Hole (A, ST)	Counterbored Hole (Z)
RGEAHL	1.0	300	
		500	
	1.5	300	
		500	
	2.0	500	
		500	

Unit Price = Body Price + Hole Machining Charge

Alterations: Part Number - Nominal - Hole Machining - Hole Position (First) - Hole Position (Second) - Hole Position (Third) - (MC, WMC)
RGEAHL1.0 - 500 - ST - A50 - B100 - C200 - WMC3

Alterations	One End Tapped	Both Ends Tapped
Code	MC	WMC
Spec.	Ordering Code: MC5 Module: 1.0, 1.5~3.0 M Selection: 3, 4, 5, 6	Ordering Code: WMC5 Module: 1.0, 1.5~3.0 M Selection: 3, 4, 5, 6
Price Adder		