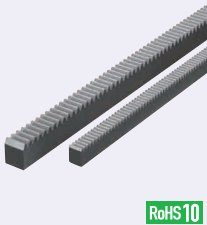


Induction Hardened Rack Gears - Ground

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

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



RoHS 10

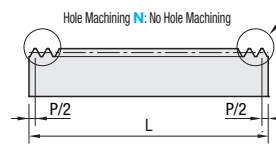
Type	Material	Surface Treatment	Hardness
RGEAH	S45C Equivalent	Black Oxide	Tooth Induction Hardened 45-55HRC

Teeth and Hole Machined surfaces have no surface treatment.

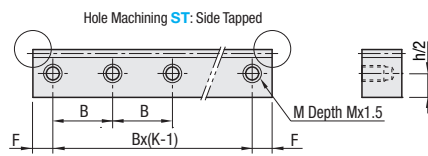
Accuracy: Accumulated Pitch Error (µm)

Module	Nominal	
	300	500
1.0~1.5	32	35
2.0~3.0	-	39

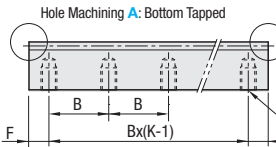
Hole Machining **N**: No Hole Machining



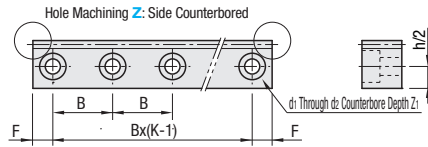
Hole Machining **ST**: Side Tapped



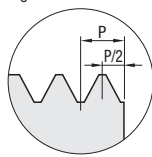
Hole Machining **A**: Bottom Tapped



Hole Machining **Z**: Side Counterbored



Enlarged View of End Face



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

$$F = \frac{L - Bx(K-1)}{2}$$

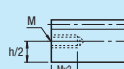
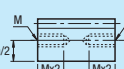
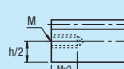
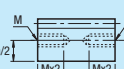
Part Number	Type	Module	Nominal	Hole Machining	Number of Effective Teeth	L	P (Pitch)	W	H	h	B (Hole Pitch)	M (Coarse)	d1	d2	Z1	K (Number of Holes)
RGEAH	1.0	300	300	N (No Hole Machining)	95	298.45	3.142	10	12	11	180	M3	3.5	6.5	3.5	2
					159	499.51										
	1.5	300	500	A (Bottom Tapped)	63	296.85	4.712	15	20	18.5	180	M4	4.5	8	4.5	2
					106	499.51										
	2.0	500	500	ST (Side Tapped)	79	496.37	6.283	20	25	23	180	M5	5.5	9.5	5.5	3
					63	494.8										
2.5	500	500	Z (Side Counterbored)	63	494.8	7.854	25	30	27.5	180	M5	5.5	9.5	5.5	3	
				53	499.51											3
3.0	500	500		53	499.51	9.424	30	35	32	180	M5	5.5	9.5	5.5	3	

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

Part Number	Type	Module	Nominal	Unit Price 1 ~ 4 pc(s).			
				Hole Machining N	Hole Machining A	Hole Machining ST	Hole Machining Z
RGEAH	1.0	300	300				
			500				
	1.5	300	300				
			500				
	2.0	500					
	2.5	500					
3.0	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			
	MC				WMC			
Spec.	Ordering Code MC5				Ordering Code WMC5			
								
	Module	M Selection	Module	M Selection	Module	M Selection	Module	M Selection
1.0	3 4	1.0	3 4	1.0	3 4	1.0	3 4	
1.5~3.0	4 5 6	1.5~3.0	4 5 6	1.5~3.0	4 5 6	1.5~3.0	4 5 6	

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 gear in the same module) as a spacer jig (as shown in the right side figure) to properly adjust the pitch.

