


Induction Hardened Rack Gears - Ground, Hole Position Configurable

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

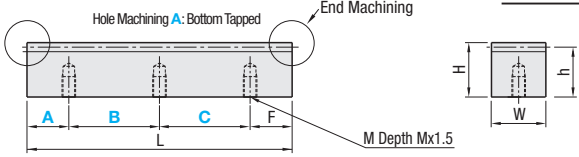
Type	Material	Surface Treatment	Hardness
RGEAHL	S45C Equivalent	Black Oxide	Tooth Induction Hardened 45-55HRC

Teeth and Hole Machined surfaces have no surface treatment.

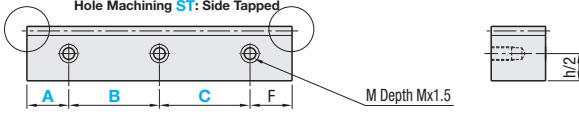
Accuracy: Accumulated Pitch Error (µm)

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

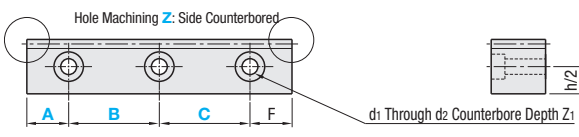
Hole Machining A: Bottom Tapped



Hole Machining ST: Side Tapped

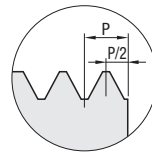


Hole Machining Z: Side Counterbored



A+B+C ≤ L-5 F=L-A-B-C

Enlarged View of End Face



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

Part Number Type	Module	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
RGEAHL	1.0	300	A (Bottom Tapped)	5-293	95	298.45	3.142	10	12	11	M3	3.5	6.5	3.5
		500		5-494	159	499.51								
	1.5	300	ST (Side Tapped)	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	Z (Side Counterbored)	6-490	79	496.37	6.283	20	25	23	M5	5.5	9.5	5.5
				2.5	6-488	63								
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

Part Number Type	Module	Nominal	Body Price 1 ~ 4 pc(s).	Hole Machining Charge (+ Body Price)	
				Tapped Hole (A, ST)	Counterbored Hole (Z)
RGEAHL	1.0	300			
		500			
	1.5	300			
		500			
	2.0	500			
2.5	500				
3.0	500				

Unit Price = Body Price + Hole Machining Charge (Calculation Example)
RGEAHL1.0-500-ST-A50-B100-C200

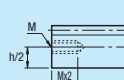
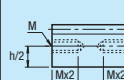
$$\text{Body Price} + \frac{\text{Hole Machining Charge}}{\text{Hole Machining Unit Price} \times \text{Number of Holes}} = \text{Unit Price}$$

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

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 Code	One End Tapped		Both Ends Tapped													
	MC		WMC													
Spec.	 <p>Ordering Code MC5</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Module</th> <th>M Selection</th> </tr> </thead> <tbody> <tr> <td>1.0</td> <td>3 4</td> </tr> <tr> <td>1.5-3.0</td> <td>4 5 6</td> </tr> </tbody> </table> <p>A ≥ 30, F ≥ 30</p>		Module	M Selection	1.0	3 4	1.5-3.0	4 5 6	 <p>Ordering Code WMC5</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Module</th> <th>M Selection</th> </tr> </thead> <tbody> <tr> <td>1.0</td> <td>3 4</td> </tr> <tr> <td>1.5-3.0</td> <td>4 5 6</td> </tr> </tbody> </table> <p>A ≥ 30, F=L-A-B-C ≥ 30</p>		Module	M Selection	1.0	3 4	1.5-3.0	4 5 6
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