

Metric Racks

Actual Tooth Sizes Pictured



Module 0.5
Pitch 1.57



Module 1.0
Pitch 3.1416



Module 1.5
Pitch 4.7124



Module 2.0
Pitch 6.2832



Module 2.5
Pitch 7.8540



Module 3.0
Pitch 9.4248



Module 4.0
Pitch 12.5664



Module 5.0
Pitch 15.7080

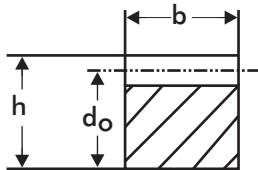
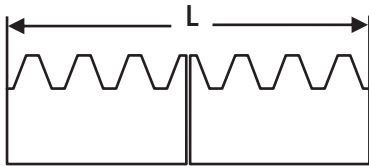
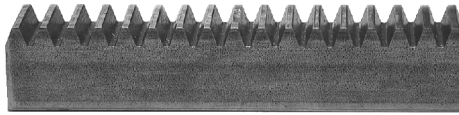


Module 6.0
Pitch 18.8496

Metric Racks Pitch & Diagrams of actual size see page 14



Modules 1-8 Pressure Angle 20° Material: Steel - unhardened CK45 - AS1443-1994-1045 C40 - AS1443-AISI1040

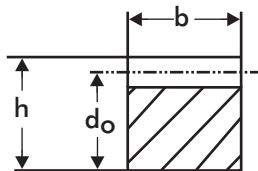
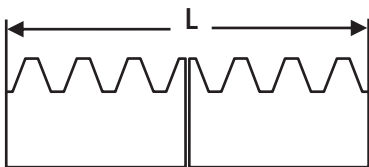


Module	Dimensions in mm				Approx. Weight per mtr. kg (lbs)	Part No.
	Face Width b _{h11}	Height		Length ¹⁰ L (mm)		
		h _{h11}	d _o (tolerance)			
1	15	15	14 (0-0.2)	500	1.6 (3.6)	BZ 10/500
	15	15	14	1000		BZ 10/1000
	15	15	14	2000		BZ 10/2000
1.5	17	17	15.5(0-0.25)	500	2.1 (4.6)	BZ 15/500
	17	17	15.5	1000		BZ 15/1000
	17	17	15.5	2000		BZ 15/2000
2	20	20	18 (0-0.25)	500	2.8 (6.2)	BZ 20/500
	20	20	18	1000		BZ 20/1000
	20	20	18	2000		BZ 20/2000
2.5	25	25	22.5	500	4.4 (9.7)	BZ 25/500
	25	25	22.5	1000		BZ 25/1000
	25	25	22.5	2000		BZ 25/2000
3	30	30	27 (0-0.3)	500	6.3 (13.9)	BZ 30/500
	30	30	27	1000		BZ 30/1000
	30	30	27	2000		BZ 30/2000
4	40	40	36 (0-0.3)	500	11.2 (24.7)	BZ 40/500
	40	40	36	1000		BZ 40/1000
	40	40	36	2000		BZ 40/2000
5	50	50	45 (0-0.35)	500	15.9 (35.1)	BZ 50/500
	50	50	45	1000		BZ 50/1000
	50	50	45	2000		BZ 50/2000
6	60	60	54 (0-0.4)	1000	24.3 (53.6)	BZ 60/1000
	60	60	54	2000		BZ 60/2000
8	80	80	72 (0-0.5)	1000	42.7 (94.2)	BZ 80/1000
	80	80	72	2000		BZ 80/2000

Notes:

3 mtr. lengths available on request.
 Machined ends for continuous mounting available.
 Pitch error ±0.1mm/mtr
 5mm cutting wastage - please state exact length required.
 All dimensions are subject to change without notice.

Modules 1-3 Pressure Angle 20° Material: Stainless Steel Milled AS2837-1986-303 AISI 303



Module	Dimensions in mm				Old Part No.	New P/N 500mm	New P/N 1000mm
	Face Width b _{h11}	Height		Old P/N Length L (mm)			
		h _{h11}	d _o				
1	8	8	7	1000	ZE 10/1000	130506	130507
1.5	12	12	10.5	1000	ZE 15/1000	130516	130517
2	16	16	14	1000	ZE 20/1000	130526	130527
2.5	20	20	17.5	1000	ZE 25/1000	130536	130537
3	24	24	21	1000	ZE 30/1000	130546	130547
4	30	30	26			130556	130557
5	40	40	35			130566	130567

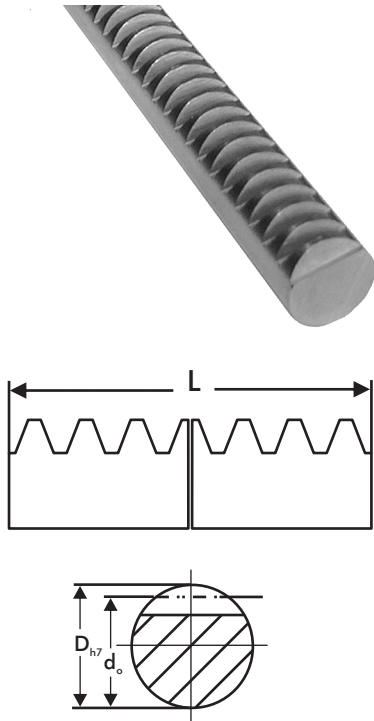
Notes:

Dimensions the same as above Steel Rack available on request.
 Longer lengths available on request.
 Cumulative pitch error 0.15 / 1000mm
 Module 4 & 5 rack in stainless steel also available on request.
 All dimensions are subject to change without notice.

Metric Racks - Round Profile



Modules 1-6 Pressure Angle 20° Material: Steel C40h7 AS1443-1040



Module	Dimensions in mm			Approx. Weight per mtr. kg (lbs).	Part No.
	D _{h7}	d _o	Length L (mm) ⁺¹⁰ ₀		
1	10	9	500	0.55 (1.21)	RZ 10/500
	10	9	1000		RZ 10/1000
	10	9	2000		RZ 10/2000
1.5	15	13.5	500	1.33 (2.94)	RZ 15/500
	15	13.5	1000		RZ 15/1000
	15	13.5	2000		RZ 15/2000
2	20	18	500	2.3 (5.07)	RZ 20/500
	20	18	1000		RZ 20/1000
	20	18	2000		RZ 20/2000
2.5	25	22.5	500	3.38 (7.46)	RZ 25/500
	25	22.5	1000		RZ 25/1000
	25	22.5	2000		RZ 25/2000
3	30	27	500	5.12 (11.29)	RZ 30/500
	30	27	1000		RZ 30/1000
	30	27	2000		RZ 30/2000
4	40	36	500	9.09 (20.04)	RZ 40/500
	40	36	1000		RZ 40/1000
	40	36	2000		RZ 40/2000
5	50	45	500	13.54 (29.85)	RZ 50/500
	50	45	1000		RZ 50/1000
	50	45	2000		RZ 50/2000
6	50	44	1000	RZ 60/1000	
	50	44	2000	RZ 60/2000	

Pitch error $\leq \pm 0.005\text{mm}$.

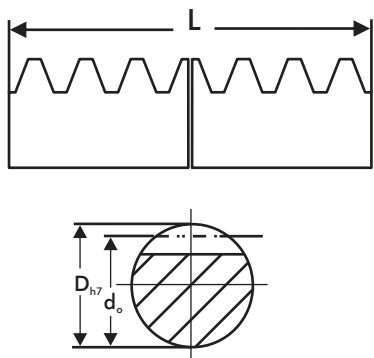
Added up errors $\leq \pm 0.1\text{mm}$ on 1000mm

5mm cutting wastage, please state exact length required.

Round rack is also available in 3 mtr lengths on request.

All dimensions are subject to change without notice.

Modules 1-3 Pressure Angle 20° Material: Stainless Steel AS2837-1986-303-4305 AISI 303



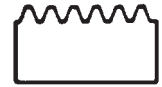
Module	Dimensions in mm			Part No.
	D _{h6}	d _o	Length L (mm)	
1	10	9	1000	RZE 10/1000
1.5	15	13.5	1000	RZE 15/1000
2	20	18	1000	RZE 20/1000
2.5	25	22.5	1000	RZE 25/1000
3	30	27	1000	RZE 30/1000

All dimensions are subject to change without notice.

Also available up to 2 mtr lengths.

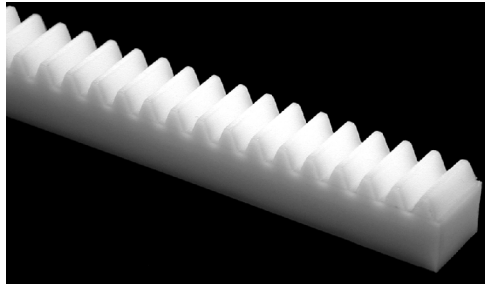
Also available in Module 4 & 5.

Metric Racks



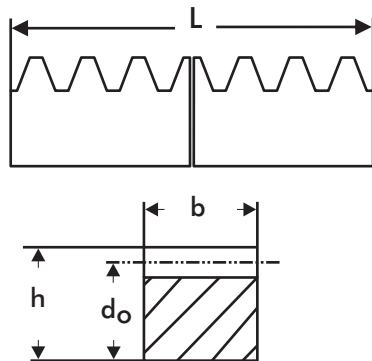
Modules 0.5 - 3

Pressure Angle 20° Material: Plastic Hostaform C
Acetal copolymer (POM)



Module	Dimensions in mm				Part No.
	b_{h11}	h_{h11}	d_o	L (mm)	
0.5	4	4.5	4	250	ZH 0525
1	9	9	8	250	ZH 1025
1.5	12	12	10.5	250	ZH 1525
2	15.4	11	9	250	ZH 2025
3	19.4	15	12	250	ZH 3025

Material: Plastic Machined Polyamide



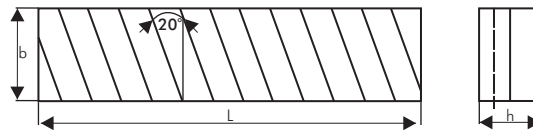
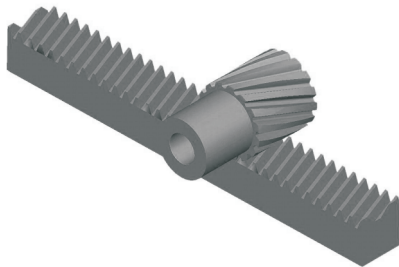
Module	Dimensions in mm				Part No.
	b_{h11}	h_{h11}	d_o	L (mm)	
1	15	15	14	1000	ZP 10/15
1.5	17	17	15.5	1000	ZP 15/17
2	20	20	18	1000	ZP 20/20
2.5	25	25	22.5	1000	ZP 25/25
3	30	30	27	1000	ZP 30/30
4	40	40	36	1000	ZP 40/40
5	50	50	45	1000	ZP 50/50

Adjacent pitch error (mm) 0.008.
Cumulative pitch error (1000mm) 0.15.
All dimensions are subject to change without notice.

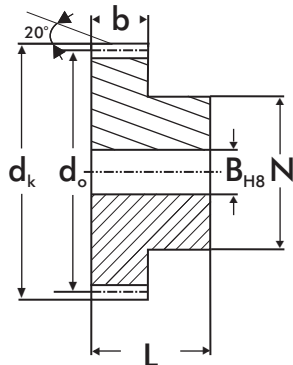
Metric Helical Racks & Gears

Modules 0.3 & 0.5

Pressure Angle 20° Material: Brass



Module	Helical Rack Dimensions in mm			
	b	h	L	Part No.
0.3	5	3	250	SN 03/250 MS
0.5	10	4	250	SN 05/250 MS



Module	Helical Gear Dimensions in mm							
	No. of Teeth	Hole. B_{H7}	Hub Diam. N	Outside Diam. D_k	Pitch Diam d_o	L	Face Width b	Part No.
0.3	12	2	3	4.4	3.8	9	5	SN0312MS
	15	2	4	5.3	4.7	9	5	SN0315MS
	18	3	5	6.3	5.7	9	5	SN0318MS
	20	3	6	6.9	6.3	9	5	SN0320MS
	24	3	7	8.2	7.6	9	5	SN0324MS
0.5	30	3	9	10.1	9.5	10	5	SN0330MS
	18	5	8	10.5	9.5	16	10	SN0518MS
	22	6	10	12.7	11.7	16	10	SN0522MS
	25	6	12	14.2	13.2	16	10	SN0525MS
	30	8	14	16.9	15.9	16	10	SN0530MS
	34	8	16	19.0	18.0	16	10	SN0534MS

All dimensions are in mm unless otherwise stated.
All dimensions are subject to change without notice.



Your partner in quality engineering products since 1986

Thank you for viewing product information on TEA's range of engineering components.

Now please contact us at the nearest office to you for any further information, prices and availability:



AUSTRALIA & New Zealand
T.E.A. Transmissions Pty Ltd
Tahiti Road
Tiaro Qld 4650
Australia

Ph: 61-(0)7 4129 2533
Fax: 61-(0)7 4129 2437
Email: sales@tea.net.au
www.tea.net.au



USA, South America & Canada
T.E.A. Machine Components Inc.
2281-F Dabney Road
Richmond Virginia 23230
USA

Ph: 1-804-342-0004
Fax: 1-804-342-0006
Email: sales@teausa.net
www.teausa.net

You are assured of prompt and efficient service at all time.