



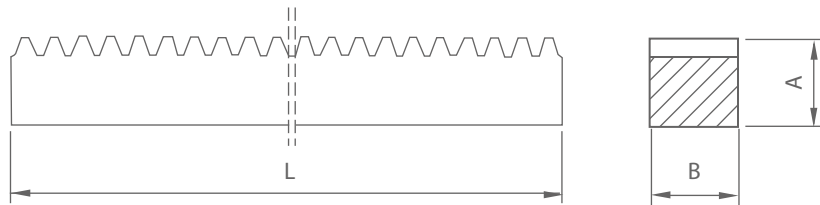
# Gears & Racks



### Special Note

The racks produced by Hawkvine are of the following characters of high precision:

- In the whole length of 2000mm,unstraight degree is within 0.20mm,no matter the measurement is taken at any place of the rack.
- Unverticality of each vetical plane of the rack is less than 0.20mm.
- Smooth finish of each side is 0.8 and over.
- Error added up to circumferential pitch of any teeth is less than 0.20mm.



$a=20^\circ$

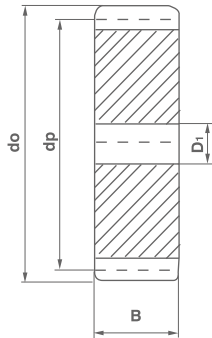
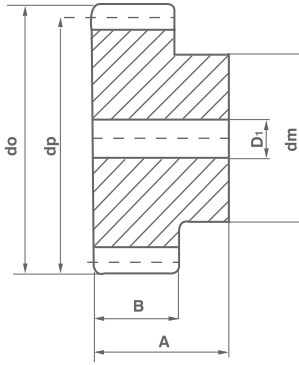
C45

Mod	L=250	L=500	L=1000	L=2000
	AXB	AXB	AXB	AXB
1	*15X15	15X15	15X15	15X15
1.5	*17X17	17X17	17X17	17X17
2	*20X20	20X20	20X20	20X20
2.5	*25X25	25X25	25X25	25X25
3	*30X30	30X30	30X30	30X30
4	-	-	*22X22	*22X22
4	-	-	25X25	25X25
4	-	*30X30	30X30	30X30
4	*40X40	40X40	40X40	40X40
5	*50X50	50X50	50X50	50X50
6	-	*60X60	60X60	60X60
8	-	-	*80X80	*80X80



# Gears & Racks

Standard Spur Gear  
Pressure Angle 20°



Tooth Width «B»

- Modulo 1 =15mm.
  - Modulo 1.5 =17mm.
  - Modulo 2 =20mm.
  - Modulo 2.5 =25mm.
  - Modulo 3 =30mm.
  - Modulo 4 =40mm.
  - Modulo 5 =50mm.
  - Modulo 6 =60mm.
- Total Thickness «A»
- Modulo 1 =25mm.
  - Modulo 1.5 =30mm.
  - Modulo 2 =35mm.
  - Modulo 2.5 =45mm.
  - Modulo 3 =50mm.
  - Modulo 4 =60mm.
  - Modulo 5 =75mm.
  - Modulo 6 =80mm.

Z	Mod.1				Mod.1,5				Mod.2				Mod.2,5			
	de	dp	dm	D1	de	dp	dm	D1	de	dp	dm	D1	de	dp	dm	D1
12	14	12	9	6	21.0	18.0	14	8	28	24	18	10	35.0	30.0	22	10
13	15	13	10	6	22.5	19.5	15	8	30	26	20	10	37.5	32.5	25	10
14	16	14	11	6	24.0	21.0	17	8	32	28	22	10	40.0	35.0	28	10
15	17	15	12	6	25.5	22.5	18	8	34	30	24	10	42.5	37.5	30	10
16	18	16	13	6	27.0	24.0	19	8	36	32	25	10	45.0	40.0	32	12
17	19	17	14	6	28.5	25.5	20	8	38	34	25	10	47.5	42.5	35	12
18	20	18	15	8	30.0	27.0	20	8	40	36	25	10	50.0	45.0	35	12
19	21	19	15	8	31.5	28.5	20	8	42	38	25	10	52.5	47.5	35	12
20	22	20	16	8	33.0	30.0	25	8	44	40	30	10	55.0	50.0	40	12
21	23	21	16	8	34.5	31.5	25	10	46	42	30	12	57.5	52.5	40	14
22	24	22	16	8	36.0	33.0	25	10	48	44	30	12	60.0	55.0	45	14
23	25	23	18	8	37.5	34.5	25	10	50	46	30	12	62.5	57.5	45	14
24	26	24	20	10	39.0	36.0	25	10	52	48	35	12	65.0	60.0	45	14
25	27	25	20	10	40.5	37.5	25	10	54	50	35	12	67.5	62.5	50	14
26	28	26	20	10	42.0	39.0	30	12	56	52	40	12	70.0	65.0	50	14
27	29	27	20	10	43.5	40.5	30	12	58	54	40	12	72.5	67.5	50	14
28	30	28	20	10	45.0	42.0	30	12	60	56	40	12	75.0	70.0	50	14
29	31	29	20	10	46.5	43.5	30	12	62	58	40	14	77.5	72.5	50	14
30	32	30	20	10	48.0	45.0	30	12	64	60	40	14	80.0	75.0	55	14
31	33	31	25	10	49.5	46.5	35	12	66	62	45	14	82.5	77.5	55	16
32	34	32	25	10	51.0	48.0	35	12	68	64	45	14	85.0	80.0	55	16
33	35	33	25	10	52.5	49.5	35	12	70	66	45	14	87.5	82.5	55	16
34	36	34	25	10	54.0	51.0	35	12	72	68	45	14	90.0	85.0	55	16
35	37	35	25	10	55.5	52.5	35	12	74	70	45	14	92.5	87.5	60	16
36	38	36	25	10	57.0	54.0	35	12	76	72	45	14	95.0	90.0	60	16
37	39	37	25	10	58.5	55.5	40	12	78	74	50	14	97.5	92.5	60	16
38	40	38	25	10	60.0	57.0	40	12	80	76	50	14	100.0	95.0	60	16
39	41	39	25	10	61.5	58.5	40	12	82	78	50	14	102.5	97.5	60	16
40	42	40	25	10	63.0	60.0	40	12	84	80	50	14	105.0	100.0	70	16
41	43	41	30	10	64.5	61.5	40	12	86	82	55	16	107.5	102.5	70	16
42	44	42	30	10	66.0	63.0	50	12	88	84	55	16	110.0	105.0	70	16
43	45	43	30	10	67.5	64.5	50	12	90	86	55	16	112.5	107.5	70	16
44	46	44	30	10	69.0	66.0	50	12	92	88	60	16	115.0	110.0	70	16
45	47	45	30	10	70.5	67.5	50	12	94	90	60	16	117.5	112.5	70	16
46	48	46	30	10	72.0	69.0	50	14	96	92	60	16	120.0	115.0	70	20
47	49	47	30	10	73.5	70.5	50	14	98	94	70	16	122.5	117.5	80	20
48	50	48	30	10	75.0	72.0	50	14	100	96	70	16	125.0	120.0	80	20
49	51	49	30	10	76.5	73.5	50	14	102	98	70	16	127.5	122.5	80	20
50	52	50	30	12	78.0	75.0	50	14	104	100	70	16	130.0	125.0	80	20
51	53	51	40	12	79.5	76.5	60	14	106	102	70	16	132.5	127.5	80	20
52	54	52	40	12	81.0	78.0	60	14	108	104	70	16	135.0	130.0	90	20
53	55	53	40	12	82.5	79.5	60	14	110	106	70	16	137.5	132.5	90	20
54	56	54	40	12	84.0	81.0	60	14	112	108	70	16	140.0	135.0	90	20
55	57	55	40	12	85.5	82.5	60	14	114	110	70	16	142.5	137.5	90	20
56	58	56	40	12	87.0	84.0	60	16	116	112	70	16	145.0	140.0	100	20
57	59	57	40	12	88.5	85.5	60	16	118	114	70	16	147.5	142.5	100	20
58	60	58	40	12	90.0	87.0	60	16	120	116	70	16	150.0	145.0	100	20
59	61	59	40	12	91.5	88.5	60	16	122	118	70	16	152.5	147.5	100	20
60	62	60	40	12	93.0	90.0	60	16	124	120	70	16	155.0	150.0	100	20
61	63	61	50	12	94.5	91.5	70	16	126	122	80	16				
62	64	62	50	12	96.0	93.0	70	16	128	124	80	16				
63	65	63	50	12	97.5	94.5	70	16	130	126	80	16				
64	66	64	50	12	99.0	96.0	70	16	132	128	80	16	167.5	162.5		20
65	67	65	50	12	100.5	97.5	70	16	134	130	80	16				
66	68	66	50	12	102.0	99.0	70	16	136	132	80	16				
67	69	67	50	12	103.5	100.5	70	16	138	134	80	16				
68	70	68	50	12	105.0	102.0	70	16	140	136	80	16				
69	71	69	50	12	106.5	103.5	70	16	142	138	80	16				
70	72	70	50	12	108.0	105.0	70	16	144	140	80	16	180.0	175.0		20
72	74	72		12	111.0	108.0		16	148	144		16	185.0	180.0		20
75	77	75		12	115.5	112.5		16	154	150		20	192.5	187.5		20
76	78	76		12	117.0	114.0		16	156	152		20	195.0	190.0		20
80	82	80		12	123.0	120.0		16	164	160		20	205.0	200.0		25
85	87	85		12	130.5	127.5		16	174	170		20	217.5	212.5		25
90	92	90		12	138.0	135.0		16	184	180		20	230.0	225.0		25

