

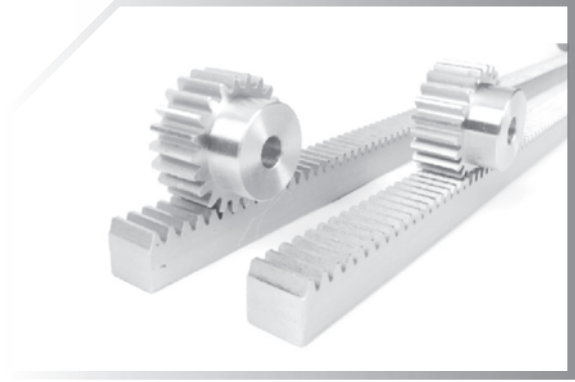
Kremayer

Kremayer

1 mt Kremayer

2 mt Kremayer

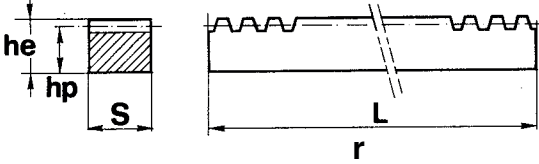
3 mt Kremayer



Modül Dişliler

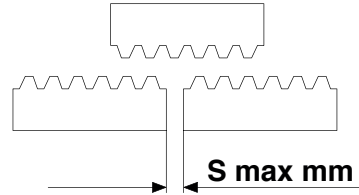


Kremayer



Kremayerlerin Özellikleri:

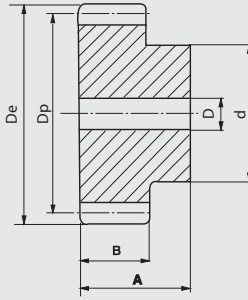
- Bir diş toleransı $\pm 20 \mu\text{m}$,
- 500mm'deki genel (toplam) diş toleransı $\pm 30 \mu\text{m}$ 'dur.
- Kremayer dişlilerin standart kalitesi 8 ve 9 olup,
- DIN 3962/63/67 normuna uygundur.
- Kremayerlerimiz düz diş olarak imal edilmiş olup, basınç açıları 20° dir.
- Kremayerlerimiz CK 45 malzemeden imal edilmiştir.



Mod.	Passo / Pitch Teilung/Pas Paso	S	hp	hex S	1000			L 2000			3000		Kg
					Z	L	Kg	Z	L	Kg	Z	L	
1	3,1416	0,5	14	15x15	319	1002,17	1,500	637	2001,20	3,100	955	3000,23	4,900
1,5	4,7124	0,6	15,5	17x17	213	1003,74	2,000	425	2002,77	4,000	637	3001,80	6,100
2	6,2832	0,6	18	20x20	160	1005,31	2,700	319	2004,34	5,400	478	3003,37	8,400
2,5	7,8540	0,7	22,5	25x25	128	1005,31	4,300	255	2002,77	8,600	382	3000,23	11,900
3	9,4248	0,8	27	30x30	107	1008,45	6,300	213	2007,48	12,500	319	3006,51	18,600
4	12,5664	0,8	36	40x40	80	1005,31	11,100	160	2010,62	22,000	239	3003,37	31,300
5	15,7080	1,0	45	50x50	64	1005,31	17,500	128	2010,62	34,600	191	3000,23	45,300
6	18,8496	1,0	54	60x60	54	1017,88	25,000	107	2016,91	51,000			
8	25,1328	1,0	72	80x80	40	1005,31	45,000	80	2010,62	90,000			

Modül Dişli

Malzeme : 1040
Basma Açısı : 20°



	Toplam Boy (A)	Diş Kalınlık (B)
M1	= 25 mm	15 mm
M1,5	= 30 mm	17 mm
M2	= 35 mm	20 mm
M2,5	= 45 mm	25 mm
M3	= 50 mm	30 mm
M4	= 60 mm	40 mm
M5	= 75 mm	50 mm
M6	= 80 mm	60 mm
M8	= 100 mm	80 mm

Çap Hesabı

$D_p = M \times z$
 $D_e = (M \times z) + 2 \times M$
 $D_p = \text{Etken Çap}$
 $D_e = \text{Diş Çap}$
 $M = \text{Modül}$
 $z = \text{Diş sayısı}$

Modül 1

Diş Sayısı Z	De	Dp	d	D
12	14	12	9	5
13	15	13	10	5
14	16	14	10	5
15	17	15	12	6
16	18	16	13	6
17	19	17	14	8
18	20	18	15	8
19	21	19	15	8
20	22	20	16	8
21	23	21	16	8
22	24	22	18	8
23	25	23	18	8
24	26	24	20	8
25	27	25	20	8
26	28	26	20	8
27	29	27	20	8
28	30	28	20	8
29	31	29	20	8
30	32	30	20	8
31	33	31	25	10
32	34	32	25	10
33	35	33	25	10
34	36	34	25	10
35	37	35	25	10
36	38	36	25	10
37	39	37	25	10
38	40	38	25	10
39	41	39	25	10
40	42	40	25	10
41	43	41	30	10
42	44	42	30	10
43	45	43	30	10
44	46	44	30	10
45	47	45	30	10
46	48	46	30	10
47	49	47	30	10
48	50	48	30	10
49	51	49	30	10
50	52	50	30	12
51	53	51	40	12
52	54	52	40	12
53	55	53	40	12
54	56	54	40	12
55	57	55	40	12
56	58	56	40	12
57	59	57	40	12
58	60	58	40	12
59	61	59	40	12
60	62	60	40	12
61	63	61	50	12
62	64	62	50	12
63	65	63	50	12
64	66	64	50	12
65	67	65	50	12
66	68	66	50	12
67	69	67	50	12
68	70	68	50	12
69	71	69	50	12
70	72	70	50	12
72	74	72	50	12

Modül 1,5

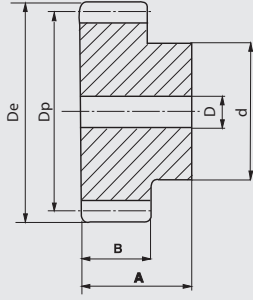
Diş Sayısı Z	De	Dp	d	D
12	21,0	18,0	14	8
13	22,5	19,5	14	8
14	24,0	21,0	18	8
15	25,5	22,5	18	8
16	27,0	24,0	20	8
17	28,5	25,5	20	8
18	30,0	27,0	20	8
19	31,5	28,5	20	8
20	33,0	30,0	25	8
21	34,5	31,5	25	10
22	36,0	33,0	25	10
23	37,5	34,5	25	10
24	39,0	36,0	25	10
25	40,5	37,5	25	10
26	42,0	39,0	30	12
27	43,5	40,5	30	12
28	45,0	42,0	30	12
29	46,5	43,5	30	12
30	48,0	45,0	30	12
31	49,5	46,5	35	12
32	51,0	48,0	35	12
33	52,5	49,5	35	12
34	54,0	51,0	35	12
35	55,5	52,5	35	12
36	57,0	54,0	35	12
37	58,5	55,5	40	12
38	60,0	57,0	40	12
39	61,5	58,5	40	12
40	63,0	60,0	40	12
41	64,5	61,5	50	14
42	66,0	63,0	50	14
43	67,5	64,5	50	14
44	69,0	66,0	50	14
45	70,5	67,5	50	14
46	72,0	69,0	50	14
47	73,5	70,5	50	14
48	75,0	72,0	50	14
49	76,5	73,5	50	14
50	78,0	75,0	50	14
51	79,5	76,5	60	15
52	81,0	78,0	60	15
53	82,5	79,5	60	15
54	84,0	81,0	60	15
55	85,5	82,5	60	15
56	87,0	84,0	60	15
57	88,5	85,5	60	15
58	90,0	87,0	60	15
59	91,5	88,5	60	15
60	93,0	90,0	60	15
61	94,5	91,5	70	20
62	96,0	93,0	70	20
63	97,5	94,5	70	20
64	99,0	96,0	70	20
65	100,5	97,5	70	20
66	102,0	99,0	70	20
67	103,5	100,5	70	20
68	105,0	102,0	70	20
69	106,5	103,5	70	20
70	108,0	105,0	70	20
72	111,0	144,0	80	20

Modül 2

Diş Sayısı Z	De	Dp	d	D
12	28	24	18	10
13	30	26	19	10
14	32	28	20	10
15	34	30	22	10
16	36	32	24	10
17	38	34	25	10
18	40	36	25	10
19	42	38	25	10
20	44	40	30	10
21	46	42	30	12
22	48	44	30	12
23	50	46	30	12
24	52	48	35	12
25	54	50	35	12
26	56	52	40	12
27	58	54	40	12
28	60	56	40	12
29	62	58	40	14
30	64	60	40	14
31	66	62	45	14
32	68	64	45	14
33	70	66	45	14
34	72	68	45	14
35	74	70	45	14
36	76	72	45	14
37	78	74	50	14
38	80	76	50	14
39	82	78	50	14
40	84	80	50	14
41	86	82	60	16
42	88	84	60	16
43	90	86	60	16
44	92	88	60	16
45	94	90	60	16
46	96	92	60	16
47	98	94	60	16
48	100	96	70	16
49	102	98	70	16
50	104	100	70	16
51	106	102	70	20
52	108	104	70	20
53	110	106	70	20
54	112	108	70	20
55	114	110	70	20
56	116	112	70	20
57	118	114	70	20
58	120	116	70	20
59	122	118	70	20
60	124	120	70	20
61	126	122	80	20
62	128	124	80	20
63	130	126	80	20
64	132	128	80	20
65	134	130	80	20
66	136	132	80	20
67	138	134	80	20
68	140	136	80	20
69	142	138	80	20
70	144	140	80	20
72	148	144	80	20

Modül Dişli

Malzeme : 1040
Basma Açısı : 20°



	Toplam Boy (A)	Diş Kalınlık (B)
M1	= 25 mm	15 mm
M1,5	= 30 mm	17 mm
M2	= 35 mm	20 mm
M2,5	= 45 mm	25 mm
M3	= 50 mm	30 mm
M4	= 60 mm	40 mm
M5	= 75 mm	50 mm
M6	= 80 mm	60 mm
M8	= 100 mm	80 mm

Çap Hesabı

$D_p = M \times z$
 $D_e = (M \times z) + 2 \times M$
 $D_p = \text{Etken Çap}$
 $D_e = \text{Diş Çap}$
 $M = \text{Modül}$
 $z = \text{Diş sayısı}$

Modül 2,5

Diş Sayısı Z	De	Dp	d	D
12	35,0	30,0	22	10
13	37,5	32,5	25	10
14	40,0	35,0	28	10
15	42,5	37,5	30	10
16	45,0	40,0	32	12
17	47,5	42,5	35	12
18	50,0	45,0	35	12
19	52,5	47,5	35	12
20	55,0	50,0	40	14
21	57,5	52,5	40	14
22	60,0	55,0	45	14
23	62,5	57,5	45	14
24	65,0	60,0	45	14
25	67,5	62,5	50	14
26	70,0	65,0	50	14
27	72,5	67,5	50	14
28	75,0	70,0	50	14
29	77,5	72,5	50	14
30	80,0	75,0	55	16
31	82,5	77,5	55	16
32	85,0	80,0	55	16
33	87,5	82,5	55	16
34	90,0	85,0	55	16
35	92,5	87,5	60	16
36	95,0	90,0	60	16
37	97,5	92,5	60	16
38	100,0	95,0	60	16
39	102,5	97,5	60	16
40	105,0	100,0	70	20
41	107,5	102,5	70	20
42	110,0	105,0	70	20
43	112,5	107,5	70	20
44	115,0	110,0	70	20
45	117,5	112,5	70	20
46	120,0	115,0	70	20
47	122,5	117,5	80	20
48	125,0	120,0	80	20
49	127,5	122,5	80	20
50	130,0	125,0	80	20
51	132,5	127,5	90	20
52	135,0	130,0	90	20
53	137,5	132,5	90	20
54	140,0	135,0	90	20
55	142,5	137,5	90	20
56	145,0	140,0	100	20
57	147,5	142,5	100	20
58	150,0	145,0	100	20
59	152,5	147,5	100	20
60	155,0	150,0	100	20
62	160,0	155,0	100	20
63	162,5	157,5	100	20
65	167,5	162,5	100	20
67	172,5	167,5	100	20
70	180,0	175,0	100	20

Modül 3

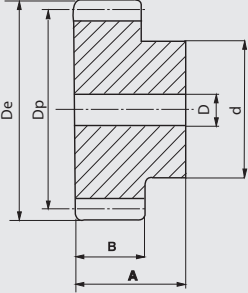
Diş Sayısı Z	De	Dp	d	D
12	42	36	25	12
13	45	39	25	12
14	48	42	30	12
15	51	45	35	12
16	54	48	38	15
17	57	51	42	15
18	60	54	45	15
19	63	57	45	15
20	66	60	45	15
21	69	63	45	15
22	72	66	50	15
23	75	69	50	15
24	78	72	50	16
25	81	75	60	16
26	84	78	60	16
27	87	81	60	16
28	90	84	60	16
29	93	87	60	16
30	96	90	60	16
31	99	93	70	20
32	102	96	70	20
33	105	99	70	20
34	108	102	70	20
35	111	105	70	20
36	114	108	70	20
37	117	111	80	20
38	120	114	80	20
39	123	117	80	20
40	126	120	80	20
41	129	123	90	20
42	132	126	90	20
43	135	129	90	20
44	138	132	90	20
45	141	135	90	20
46	144	138	90	20
47	147	141	90	20
48	150	144	100	20
49	153	147	100	20
50	156	150	100	20
51	159	153	100	20
52	162	156	100	20
53	165	159	100	20
54	168	162	100	20
55	171	165	100	20
56	174	168	100	20
57	177	171	100	20
58	180	174	100	20
59	183	177	100	20
60	186	180	100	20
62	192	186	100	20
63	195	189	100	20
65	201	195	100	20
67	207	201	100	20
70	216	210	100	20

Modül 4

Diş Sayısı Z	De	Dp	d	D
12	56	48	35	14
13	60	52	40	14
14	64	56	45	14
15	68	60	45	14
16	72	64	50	15
17	76	68	50	15
18	80	72	50	15
19	84	76	60	15
20	88	80	60	15
21	92	84	70	20
22	96	88	70	20
23	100	92	75	20
24	104	96	75	20
25	108	100	75	20
26	112	104	75	20
27	116	108	75	20
28	120	112	75	20
29	124	116	75	20
30	128	120	75	20
31	132	124	80	20
32	136	128	80	20
33	140	132	80	20
34	144	136	80	20
35	148	140	80	20
36	152	144	80	20
37	156	148	80	20
38	160	152	80	25
39	164	156	80	25
40	168	160	80	25
41	172	164	80	20
42	176	168	80	25
43	180	172	80	25
44	184	176	80	25
45	188	180	80	20
46	192	184	80	25
47	196	188	80	25
48	200	192	80	25
49	204	196	80	20
50	208	200	80	25
51	212	204	80	25
52	216	208	80	25
53	220	212	80	20
54	224	216	80	25
55	228	220	80	25
56	232	224	80	25
57	236	228	80	25
58	240	232	80	25
59	244	236	80	25
60	248	240	100	25
62	256	248	100	25
63	260	252	100	25
65	268	260	100	25
67	276	268	100	25
70	288	280	100	25

Modül Dişli

Malzeme : 1040
Basma Açısı : 20°



	Toplam Boy (A)	Diş Kalınlık (B)
M1	= 25 mm	15 mm
M1,5	= 30 mm	17 mm
M2	= 35 mm	20 mm
M2,5	= 45 mm	25 mm
M3	= 50 mm	30 mm
M4	= 60 mm	40 mm
M5	= 75 mm	50 mm
M6	= 80 mm	60 mm
M8	= 100 mm	80 mm

Çap Hesabı
 $D_p = M \times z$
 $D_e = (M \times z) + 2 \times M$
 $D_p = \text{Etken Çap}$
 $D_e = \text{Diş Çap}$
 $M = \text{Modül}$
 $z = \text{Diş sayısı}$

Modül 5

Diş Sayısı Z	De	Dp	d	D
12	70	60	45	16
13	75	65	50	16
14	80	70	55	20
15	85	75	60	20
16	90	80	65	20
17	95	85	70	20
18	100	90	70	20
19	105	95	70	20
20	110	100	80	20
21	115	105	80	20
22	120	110	80	25
23	125	115	90	25
24	130	120	90	25
25	135	125	90	25
26	140	130	100	25
27	145	135	100	25
28	150	140	100	25
29	155	145	100	25
30	160	150	100	25
32	170	160	110	25
36	190	180	110	25
38	200	190	110	30
40	210	200	110	30
42	220	210	120	25
55	285	275	120	30
60	310	300	120	30

Modül 6

Diş Sayısı Z	De	Dp	d	D
12	84	72	54	20
13	90	78	60	20
14	96	84	65	20
15	102	90	70	20
16	108	96	75	20
17	114	102	75	20
18	120	108	80	20
19	126	114	80	20
20	132	120	90	20
21	138	126	100	20
22	144	132	100	20
23	150	138	110	25
24	156	144	110	25
25	162	150	110	25
26	168	156	110	25
27	174	162	110	25
28	180	168	110	25
29	186	174	110	25
30	192	180	110	25
32	204	192	110	25
36	228	216	110	25
38	240	228	110	25
40	252	240	120	25
42	264	252	120	25
55	342	330	120	25
60	372	360	120	25

Ara Diş Sayıları, 5 ve 6 Modül Dişliler Özel İmalat Yapılır.



RULMAN ve MEKATRONİK

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