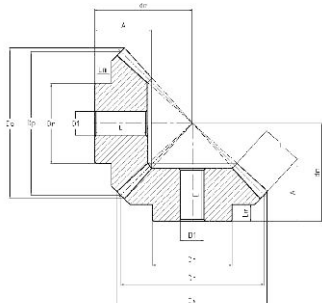


Bevel Gears

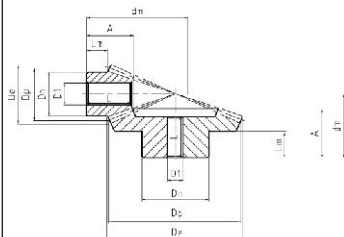
Type **A**
 Pressure angle **20°**
 Ratio **1:1**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.1	24.0	18	8	18	8	23.8	17	8.9
	20	32.1	30.0	20	8	22	10	28.7	18	9.8
	22	35.1	33.0	20	8	25	10	30.2	18	9.7
	25	39.6	37.5	23	8	28	10	35.4	21	12
	30	47.1	45.0	25	10	30	12	39.7	22.5	12
2	16	34.8	32.0	20	9	25	10	28.8	17	9.3
	20	42.8	40.0	25	12	32	10	35.7	22	12
	22	46.8	44.0	25	12	36	10	37.7	22	17.7
	25	52.8	50.0	28	14	40	12	42.3	25	12.3
	30	62.8	60.0	30	16	50	12	47.8	27	12.8
2.5	16	43.5	40.0	25.5	10	32	12	37.3	22	13.3
	20	53.5	50.0	30.5	12	40	12	45.9	27	16
	22	58.5	55.0	30.5	12	45	12	48.3	27	15.9
	25	66.0	62.5	33.5	15	50	15	53.0	30	16
	30	78.5	75.0	35.5	18	55	15	59.1	32	16
3	16	52.2	48.0	30	12	40	15	44.2	26	16.2
	20	64.2	60.0	35	18	45	15	51.1	31	13.6
	22	70.2	66.0	35	18	50	15	54.0	31	13
	25	79.2	75.0	38	20	55	15	60.1	34	16
	30	94.4	90.0	40	22	60	20	68.1	36	19
3.5	16	60.9	56.0	35.5	16	45	15	50.8	31	17.2
	20	74.9	70.0	40.5	22	55	15	58.6	36	19
	22	81.9	77.0	40.5	22	60	15	62.0	36	18
	25	92.4	87.5	43.5	26	65	20	67.5	39	18
	30	109.9	105.0	45.5	30	70	20	75.4	41	17
4	16	69.6	64.0	38	18	50	15	55.6	33	16.6
	20	85.6	80.0	43	25	60	18	63.8	38	18
	22	93.6	88.0	43	25	65	18	67.7	38	18
	25	105.6	100.0	45	28	70	20	73.5	40	18
	30	125.6	120.0	48	32	80	25	83.7	43	16
4.5	16	78.3	72.0	43	20	55	18	63.0	37	18.5
	20	96.3	90.0	48	28	65	20	71.5	42	18
	22	105.3	99.0	48	28	70	20	75.8	42	18
	25	118.8	112.5	50	32	75	20	81.8	44	18
	30	141.3	135.0	53	35	90	25	93.8	47	17
5	16	87.0	80.0	45.5	22	60	20	67.8	39	17.8
	20	107.1	100.0	50.5	30	70	20	77.3	44	18.5
	22	117.1	110.0	50.5	30	80	20	82.2	44	18.5
	25	132.1	125.0	54.5	35	90	20	90.2	48	18.5
	30	157.1	150.0	56.5	38	110	30	102.4	50	18

Type **A**
 Pressure angle **20°**
 Ratio **1:2**

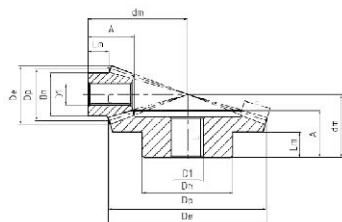


Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.7	24	18.5	8	21	10	34.9	17	10.3
	32	49.3	48	20	8	32	12	27.5	17.5	10
2	16	35.6	32	23	10	27	10	45.4	21	12.2
	32	65.8	64	25	10	40	12	35.2	22	10
2.5	16	44.4	40	27.5	12	34	12	56.0	25	14.4
	32	82.2	80	30	12	50	15	43.0	26.5	15
3	16	53.4	48	28	15	40	15	61.6	25	11.6
	32	98.7	96	35	15	60	15	50.4	30.5	15
3.5	16	62.3	56	33.5	18	48	15	72.3	30.5	14.4
	32	115.1	112	40	18	70	20	57.7	35	19
4	16	71.1	64	36	20	50	20	80.8	32	13.4
	32	131.6	128	45	20	80	20	65.5	39.5	23
4.5	16	80.1	72	39.5	22	60	20	90.4	35	15.4
	32	148.0	144	50	22	80	25	73.2	43.5	24
5	16	88.9	80	50	25	60	20	106.1	45	21.1
	32	164.5	160	55	25	85	25	80.6	48	27

Bevel Gears

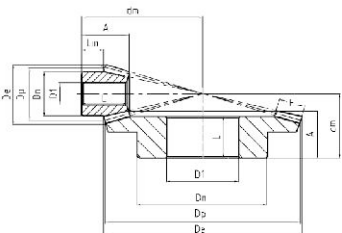
Type **A**
 Pressure angle **20°**
 Ratio **1:3**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.9	24	22	12	20	10	46.3	21	9.7
	48	72.9	72	22	12	42	15	29.2	19	12
2	16	35.8	32	26.5	15	25	12	58.9	24	9.4
	48	97.3	96	26	15	50	15	35.9	22	13
2.5	16	44.7	40	28	18	33	14	70.4	26	9.2
	48	121.6	120	32	18	60	20	44.6	27	16
3	16	53.7	48	30	18	42	15	84.2	28	11.2
	48	145.9	144	38	18	65	20	54.1	32	19
3.5	16	62.6	56	36.5	22	48	15	98.8	34	13.4
	48	170.2	168	44	22	75	20	62.5	37	23
4	16	71.6	64	42	25	55	20	113.5	39	15.7
	48	194.5	192	50	25	85	22	71.2	42	27
4.5	16	80.6	72	53	28	60	20	133.4	50	23.4
	48	218.8	216	58	28	90	25	81.9	49	27
5	16	89.5	80	60	35	60	20	145.7	57	22.5
	48	243.1	240	65	35	100	28	90.5	55	35

Type **A**
 Pressure angle **20°**
 Ratio **1:4**

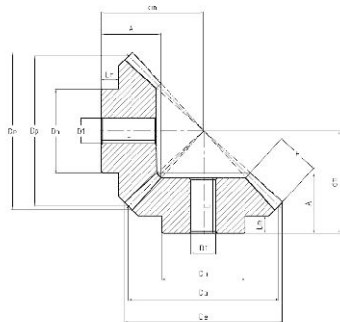


Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.9	24	25	12	18	10	61.1	24	12.2
	64	96.7	96	25	12	60	15	33	22	13
2	16	35.9	32	24	15	25	12	73.1	23	8.5
	64	129.0	128	28	15	70	20	38.9	24	14
2.5	16	44.9	40	30.5	18	34	15	92.6	29	11.7
	64	161.2	160	35	18	80	20	48.8	30	16
3	16	53.8	48	32	20	40	15	108	30	11.1
	64	193.5	192	42	20	90	20	58.8	36	22
3.5	16	62.8	56	40	25	45	15	127.1	38	14
	64	225.7	224	50	25	100	25	69.3	43	22
4	16	71.7	64	50	30	50	20	148.2	48	18.5
	64	257.9	256	60	30	110	28	81.8	52	30
4.5	16	80.7	72	55	32	60	20	167.1	53	21.6
	64	290.1	288	65	32	120	30	89.8	57	35
5	16	89.7	80	60	35	65	20	185.1	58	23.2
	64	322.4	320	70	35	120	30	97.7	61	42

Bevel Gears

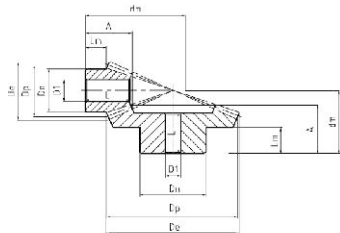
Type **B**
 Pressure angle **20°**
 Ratio **1:1**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	16	17.4	16.0	11.2	4	13.3	4	16	7	-	6.7
	19	20.4	19.0	11.8	4	15.3	4	18	11.5	-	6.6
	22	23.4	22.0	12.8	4.7	16.3	5	20	11.5	-	6.1
	26	27.4	26.0	13.3	5.5	20.3	5	22	14.5	-	7
	30	31.4	30.0	16.0	6.4	20.3	5	26	17.5	-	8
1.5	16	26.1	24.0	18.9	6	20.3	8	26	12	-	12.2
	19	30.6	28.5	21.3	7	20.3	8	30	14.5	-	11.6
	22	35.1	33.0	22.5	7.5	25.3	8	33	17	-	12.7
	26	41.1	39.0	23.2	8.5	28.3	8	36	22	-	12
	30	47.1	45.5	27.2	10	30.0	12	42	26	-	12.1
2	16	34.8	32.0	23.5	8	25.3	8	33	15.5	-	13.6
	19	40.8	38.0	24.2	9	25.3	8	36	19.5	-	12
	22	46.8	44.0	27.9	10	30.3	10	42	23.5	-	14
	26	54.8	52.0	31.4	12	35.3	12	48	29	-	13.7
	30	62.8	60.0	34.1	13	40.3	12	54	36	-	17
2.5	16	43.5	40.0	28.1	10	30.3	12	40	20	-	15.2
	19	51.0	47.5	27.1	11	35.3	12	42	25	-	13
	22	58.5	55.0	30.1	12	45.3	12	48	31.5	-	15.7
	26	68.5	65.0	33.2	15	45.3	15	54	36.5	-	16
	30	78.5	75.0	39.0	16	50.3	15	64	45.5	-	20
3	16	52.2	48.0	31.7	12	40.3	12	46	23	-	18.1
	19	61.2	57.0	36.0	13	40.3	14	54	30	-	17.1
	22	70.2	66.0	36.9	15	50.3	15	58	36.5	-	17.1
	26	82.2	78.0	38.4	17	50.3	15	64	45.5	-	18
	30	94.2	90.0	43.8	19	60.3	20	74	55	-	22
3.5	16	60.9	56.0	36.4	14	45.3	15	53	27.5	-	19.8
	19	71.4	66.5	36.9	15	50.3	15	58	35.3	-	18
	22	81.9	77.0	39.1	17	55.3	15	64	43.5	-	18
	26	95.9	91.0	42.2	20	60.3	20	72	52.3	-	20
	30	110.0	105.0	47.3	23	70.3	20	82	67	43	22
4	16	69.7	64.0	44.3	15	50.3	15	64	32	-	25.1
	19	81.7	76.0	44.4	18	55.3	18	68	40	-	22
	22	93.7	88.0	45.9	20	60.3	18	74	49	-	22
	26	109.7	104.0	48.0	23	70.3	20	82	65	43	22
	30	125.7	120.0	54.2	26	80.3	25	94	76	49	25
4.5	16	78.4	72.0	46.3	17.5	55.3	18	68	35.5	-	25
	19	91.8	85.5	47.3	20	60.3	20	74	44.6	-	25
	22	105.3	99.0	50.1	22	70.3	20	82	56	-	25
	26	123.3	117.0	53.2	25	75.3	20	92	68.1	45	25
	30	141.4	135.0	60.0	29	80.3	25	105	85	54	28
5	16	87.1	80.0	48.9	18	60.3	20	74	42	-	25
	19	102.1	95.0	52.2	22	60.3	20	82	50	-	25
	22	117.1	110.0	58.2	24	80.3	20	94	68	52	30
	26	137.1	130.0	62.7	29	80.3	20	105	82	57	30
	30	157.1	150.0	68.9	32	80.3	30	119	97	63	35

Type **B**
 Pressure angle **20°**
 Ratio **1:2**

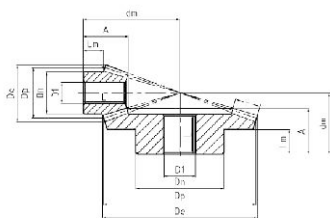


Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	15	17.4	15.0	11.9	5	13.3	4	22	8	-	6.6
	30	30.6	30.0	15.1	5	20.3	5	20	-	14	9
1.5	15	26.1	22.5	21.1	9	20.3	8	35	11.5	-	12
	30	45.9	45.0	25.2	9	32.3	8	32	-	23	16
2	15	34.8	30.0	26.0	11.5	25.3	8	45	16	-	13.8
	30	61.2	60.0	29.8	11.5	40.3	12	39	-	27	18
2.5	15	43.5	37.5	31.8	15	32.3	12	55	20	-	16.2
	30	76.5	75.0	33.7	15	45.3	15	45	-	30	20
3	15	52.2	45.0	37.3	17	40.3	12	66	25	-	19.8
	30	91.8	90.0	42.1	17	55.3	15	56	-	38	25
3.5	15	60.9	52.5	46.1	20.5	45.3	15	79	28.5	-	24.7
	30	107.1	105.0	45.0	20.5	60.3	20	61	-	40	25
4	15	69.6	60.0	48.6	22.5	50.3	20	87	34	-	24.6
	30	122.3	120.0	57.3	22.5	80.3	20	76	-	52	35
4.5	15	78.3	67.5	51.4	26	60.3	20	94	37.5	-	24.7
	30	137.6	135.0	60.3	26	80.3	25	81	-	53	35
5	15	87.0	75.0	57.6	30	60.3	20	104	40	-	25.3
	30	152.9	150.0	62.5	30	80.3	25	85	-	56	35

Bevel Gears

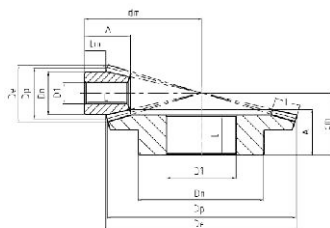
Type **B**
 Pressure angle **20°**
 Ratio **1:3**



Material: C45

M	Z	D _e	D _P	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	15	17.7	15.0	16.6	7.1	13.3	4	32	8	-	9.3
	45	45.3	45.0	17.1	7.1	25.3	8	22	-	15	10
1.5	15	26.5	22.5	22.6	10.5	19.3	8	46	14	-	11.7
	45	68.1	67.5	29.6	10.5	45.3	14	37	-	27	20
2	15	35.4	30.0	28.9	14	25.3	8	60	18	-	14.2
	45	90.8	90.0	32.1	14	45.3	15	42	-	29	20
2.5	15	44.2	37.5	34.6	18	32.3	12	73	22.5	-	15.9
	45	113.4	112.5	39.7	18	60.3	20	52	-	36	25
3	15	53	45.0	41.3	21	40.3	15	88	28.5	-	19.7
	45	136.1	135.0	47.2	21	60.3	20	62	-	42.5	30
3.5	15	61.9	52.5	49.6	23.5	45.3	15	105	33.5	-	25.1
	45	158.8	157.5	54.4	23.5	80.3	20	72	-	49	35
4	15	70.7	60.0	54.3	27.5	50.3	20	117	38	-	25.4
	45	181.5	180.0	57.0	27.5	80.3	22	77	-	51	35
4.5	15	79.5	67.5	55.2	28.5	55.3	20	128	44	-	24.8
	45	204.2	202.5	63.9	28.5	90.3	25	87	-	57	40
5	15	88.4	75	65.3	33	60.3	20	145	47	-	30
	45	226.9	225.0	66.7	33	90.3	28	92	-	59	40

Type **B**
 Pressure angle **20°**
 Ratio **1:4**



Material: C45

M	Z	D _e	D _P	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	15	17.8	15.0	17.2	9.3	13.3	4	38	8	-	7.7
	60	60.3	60.0	17.1	9.3	30.3	8	22	-	15	10
1.5	15	26.7	22.5	23.0	11	20.3	8	57	15	-	11.7
	60	90.4	90.0	34	11	50.3	15	42	-	31	25
2	15	35.6	30.0	31	16	25.3	8	75	20	-	14.2
	60	120.6	120.0	37.6	16	60.3	16	48	-	34	25
2.5	15	44.5	37.5	38.1	19	32.3	14	94	25	-	18.4
	60	150.7	150.0	44.8	19	60.3	20	58	-	40	30
3	15	53.3	45.0	48.1	23	40.3	15	115	30	-	24.5
	60	180.8	180.0	53.2	23	80.3	20	69	-	48	35
3.5	15	62.2	52.5	52.1	26	45.3	15	131	36	-	25.1
	60	211.0	210.0	60.4	26	90.3	25	79	-	54	40
4	15	71.1	60.0	55.1	30	50.3	20	145	37.5	-	23.8
	60	241.1	240.0	60.8	30	90.3	28	82	-	53	40
4.5	15	79.9	67.5	59.1	34	60.3	20	160	45.2	-	24.1
	60	271.2	270.0	68.2	34	100.3	30	92	-	61	40
5	15	88.8	75.0	68.1	38	70.3	20	180	50.1	-	29.4
	60	301.3	300.0	73.5	38	110.3	30	100	-	66	40