

# Bevel Gears

## European Standard Series

### BEVEL GEARS

M	Z	De	Dp	A	F	Dn	D1	Dm	L	Lm
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	20	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

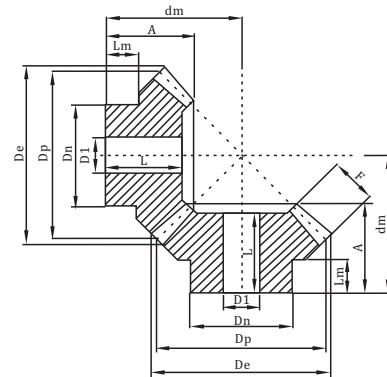
### BEVEL GEARS

Pressure angle 20°

Type A

Ratio 1:1

Material C45



M	Z	De	Dp	A	F	Dn	D1	Dm	L	Lm
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

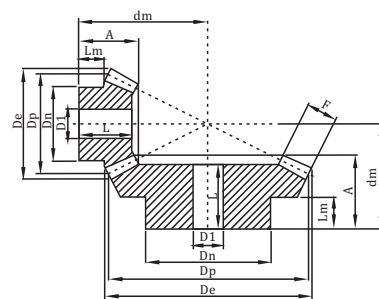
### BEVEL GEARS

Pressure angle 20°

Type A

Ratio 1:2

Material C45

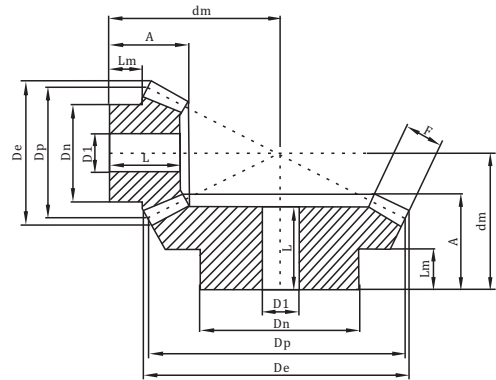


# Bevel Gears European Standard Series

## BEVEL GEARS

M	Z	De	Dp	A	F	Dn	D1	Dm	L	Lm
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	25.5	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	113.3	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

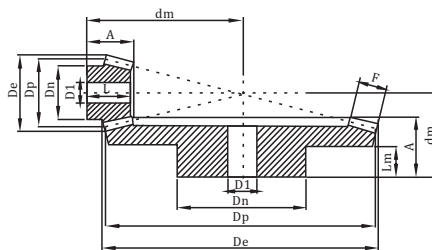
BEVEL GEARS  
Pressure angle 20°  
Type A  
Ratio 1:3



Material C45

M	Z	De	Dp	A	F	Dn	D1	Dm	L	Lm
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  
Pressure angle 20°  
Type A  
Ratio 1:4  
Material C45

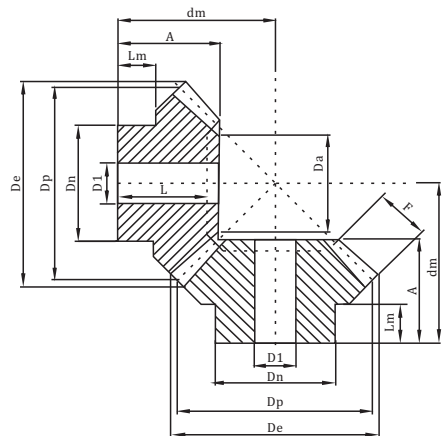


# Bevel Gears European Standard Series

## BEVEL GEARS

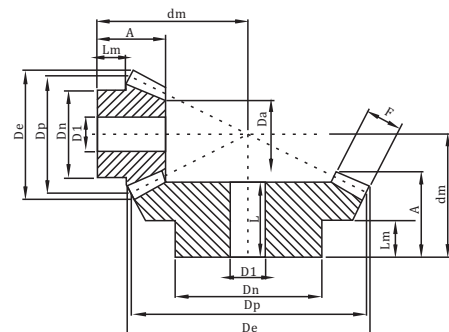
M	Z	De	Dp	A	F	Dn	D1	dm	Da	L	Dm
1	16	17.4	16.0	11.2	4	13.3	4	16	7	-	6.7
	19	20.4	19.0	11.8	4	15.3	4	18	11.5	-	6.6
	22	23.4	22.0	12.8	4.7	16.3	5	20	11.5	-	6.1
	26	27.4	26.0	13.3	5.5	20.3	5	22	14.5	-	7
	30	31.4	30.0	16.0	6.4	20.3	5	26	17.5	-	8
1.5	16	26.1	24.0	18.9	6	20.3	8	26	12	-	12.2
	19	30.6	28.5	21.3	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
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
6	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

BEVEL GEARS  
Pressure angle 20°  
Type B  
Ratio 1:1  
Material C45



M	Z	De	Dp	A	F	Dn	D1	dm	Da	L	Dm
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	55.3	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  
Pressure angle 20°  
Type B  
Ratio 1:2  
Material C45



# Bevel Gears

## European Standard Series

### BEVEL GEARS

M	Z	De	Dp	A	F	Dn	D1	dm	Da	L	Dm
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	-		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	-		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	-		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	-		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	-		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	-		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	-		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	-		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	-		40

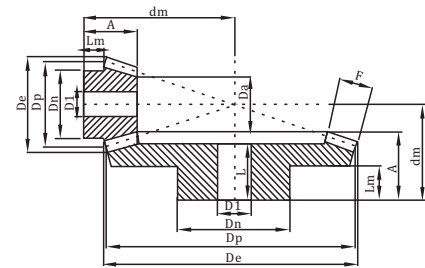
### BEVEL GEARS

Pressure angle 20°

Type B

Ratio 1:3

Material C45



M	Z	De	Dp	A	F	Dn	D1	dm	Da	L	Dm
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	-	14.4
	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

### BEVEL GEARS

Pressure angle 20°

Type B

Ratio 1:4

Material C45

