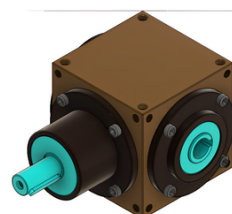
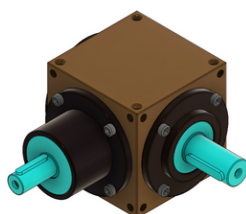
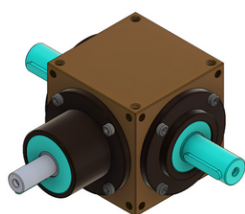




# CY Bevel Gearbox Catalogue



# CY Bevel Gearbox

## Nominal Performances - Torque and Power



SIZE		CY85		CY110		CY135	
$n_1$ rpm	$n_2$ rpm	$P_{1max}$ (kW)	$T_{2max}$ (Nm)	$P_{1max}$ (kW)	$T_{2max}$ (Nm)	$P_{1max}$ (kW)	$T_{2max}$ (Nm)
Ratio R 1							
50	50	0.32	60	0.97	180	1.62	300
250	250	0.94	35	3.78	140	7.85	291
500	500	1.62	30	6.21	115	13.0	241
1000	1000	2.7	25	10.3	95	21.1	196
1500	1500	3.24	20	13.0	80	28.1	173
2000	2000	3.89	18	16.2	75	34.3	159
3000	3000	5.18	16	22.7	70	45.6	141
Ratio R 1.5							
50	33	0.23	65	0.49	135	0.81	225
250	167	0.72	40	2.25	125	3.95	220
500	333	1.08	30	4.32	120	7.75	215
1000	667	1.80	26	6.84	95	14.7	204
1500	1000	2.48	23	9.18	85	20.6	191
2000	1333	2.88	20	11.5	80	25.2	175
3000	2000	3.89	18	15.1	70	33.4	155
Ratio R 2							
50	25	0.15	55	0.31	115	0.51	190
250	125	0.54	40	1.42	105	2.44	181
500	250	0.94	35	2.70	100	4.71	175
1000	500	1.62	30	5.13	95	9.02	167
1500	750	2.02	25	7.29	90	13.0	160
2000	1000	2.38	22	9.18	85	16.7	155
3000	1500	3.24	20	12.1	75	23.4	144
Ratio R 3							
50	17	0.06	35	0.14	80	0.23	126
250	83	0.29	32	0.63	70	1.07	119
500	167	0.54	30	1.17	65	2.04	113
1000	333	1.01	28	2.19	61	3.91	109
1500	500	1.40	26	3.16	59	5.66	105
2000	667	1.58	22	4.07	57	7.30	101
3000	1000	2.16	20	5.94	55	10.3	95
Ratio R 4							
50	12.5	0.04	30	0.09	65	0.14	104
250	62.5	0.18	26	0.37	55	0.59	84
500	125	0.34	25	0.67	50	1.11	82
1000	250	0.65	24	1.21	45	2.12	79
1500	375	0.93	23	1.75	43	3.08	76
2000	500	1.19	22	2.26	42	3.98	74
3000	750	1.62	20	3.24	40	5.63	70
Thermal Power Limit (kW)		3.4		5.5		8	

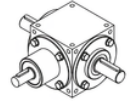
$P_{1max}$

The torque and power values stated in the Nominal performances tables refer to a minimum service life of 10000 hours at following operating conditions:

- Applied load: uniform and without variations
- Driving unit: electric motor
- Rotation direction: one-way
- 1 (one) start-up per hour
- Operating hours per day 8
- Ambient temperature: 20C
- Thermal power limit value calculated considering a continuous operating time over 3 hours at nominal performances.

# CY Bevel Gearbox

## Nominal Performances - Torque and Power



SIZE		CY165		CY200		CY250	
$n_3$ rpm	$n_4$ rpm	$P_{1max}$ (kW)	$T_{2max}$ (Nm)	$P_{1max}$ (kW)	$T_{2max}$ (Nm)	$P_{1max}$ (kW)	$T_{2max}$ (Nm)
Ratio R 2							
50	50	3.02	560	5.24	970	10.7	1980
250	250	11.4	420	22.1	820	37.2	1380
500	500	18.4	340	36.2	670	60.5	1120
1000	1000	30.2	280	59.4	550	98.2	910
1500	1500	40.5	250	77.7	480	131	810
2000	2000	50.0	230	95.0	440	160	740
3000	3000	64.8	200	126	390	214	660
Ratio R 1.5							
50	33	1.51	420	2.63	730	5.33	1480
250	167	7.38	410	13.0	720	26.1	1450
500	333	13.3	370	24.8	690	45.3	1260
1000	667	21.6	300	43.2	600	73.4	1020
1500	1000	29.2	270	57.2	530	98.2	910
2000	1333	36.0	250	70.5	490	119	830
3000	2000	47.5	220	92.8	430	160	740
Ratio R 2							
50	25	0.97	360	1.67	620	2.35	1280
250	125	4.72	350	8.23	610	17.0	1260
500	250	9.18	340	16.2	600	33.2	1230
1000	500	17.3	320	30.8	570	57.8	1070
1500	750	22.7	280	44.5	550	76.9	950
2000	1000	28.1	260	55.1	510	93.9	870
3000	1500	37.3	230	72.9	450	125	770
Ratio R 3							
50	17	0.43	240	0.76	420	1.53	850
250	83	2.07	230	3.60	400	7.42	825
500	167	3.96	220	7.02	390	14.6	810
1000	333	7.56	210	13.3	370	28.1	780
1500	500	10.8	200	19.4	360	40.5	750
2000	667	14.0	195	25.2	350	52.5	730
3000	1000	20.0	185	35.6	330	74.5	690
Ratio R 4							
50	12.5	0.27	200	0.46	340	0.94	700
250	62.5	1.15	170	1.96	290	4.18	620
500	125	2.16	160	3.78	280	8.10	600
1000	250	4.18	155	7.29	270	15.7	580
1500	375	6.07	150	10.5	260	22.7	560
2000	500	7.83	145	13.5	250	29.1	540
3000	750	11.4	140	19.4	240	42.1	520
Thermal Power Limit (kW)		12.2		17.9		26.5	

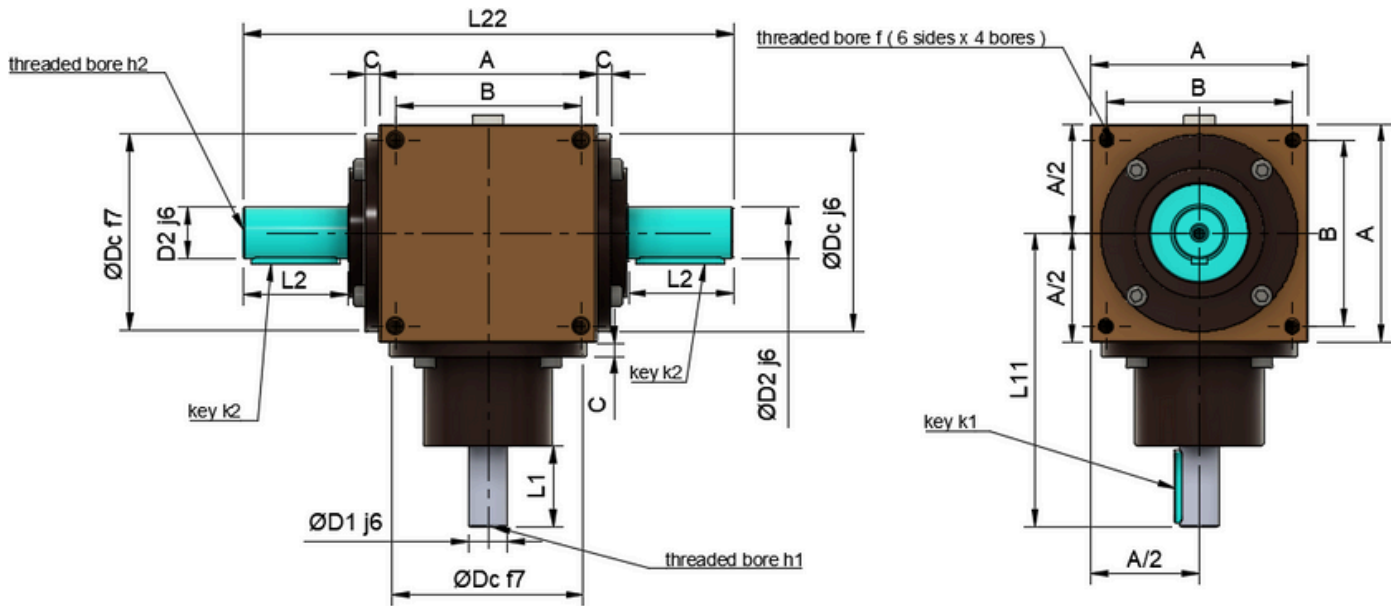
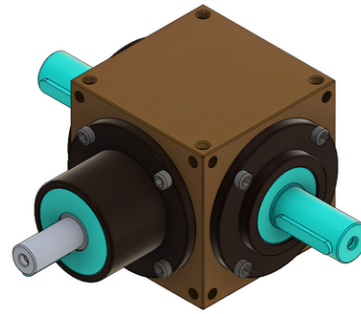
- $n_1$ : input shaft speed
- $n_2$ : output shaft speed
- $P_{1max}$ : max. input power
- $P_{2max}$ : max. output torque

# CY Bevel Gearbox - MMC Type

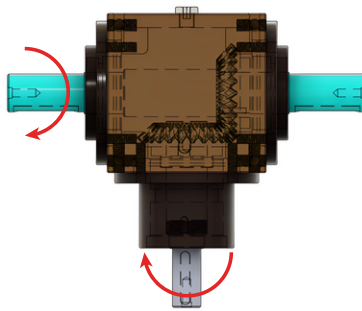


**Input:** Solid shaft

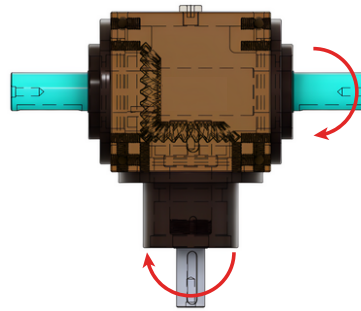
**Output:** Solid shaft on both sides



**Design: 10**



**Design: 20**



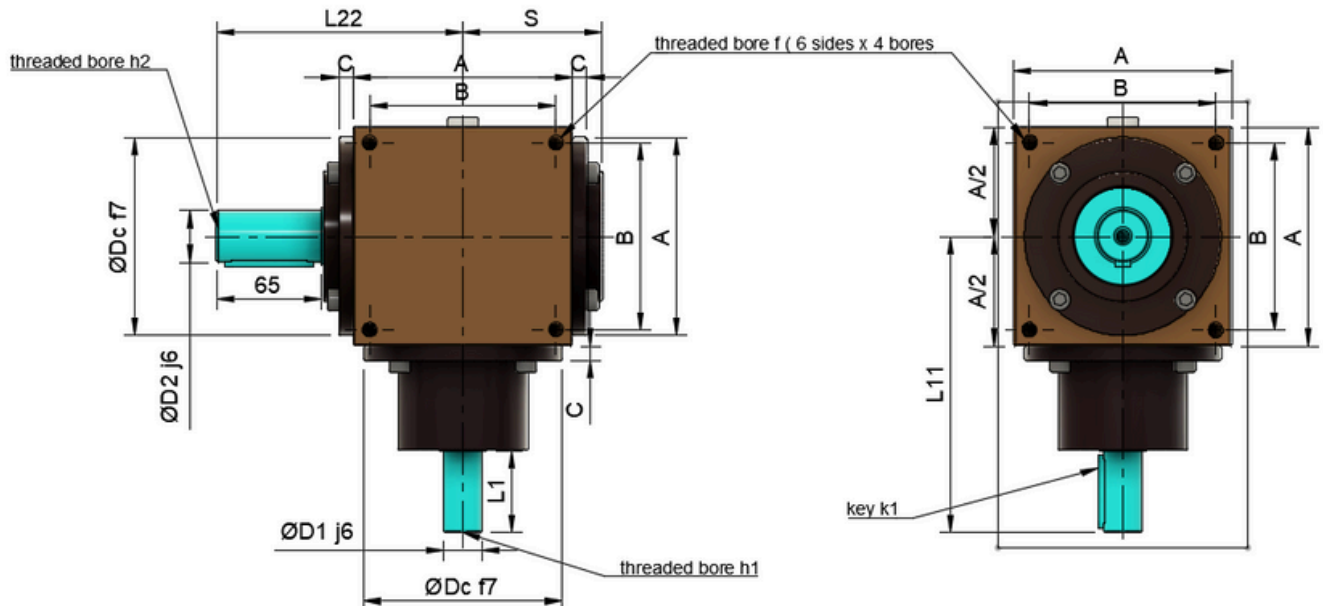
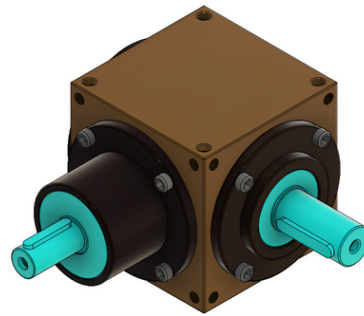
SIZE	CY85	CY110	CY135	CY165	CY200	CY250
cube A	85x85x85	110x110x110	135x135x135	165x165x165	200x200x200	250x250x250
Ø D1	16	20	24	32	42	55
Ø D2	24	25	32	45	55	70
Ø Dc	84	100	122	156	185	230
B	70x70	90x90	115x115	144x144	175x175	215x215
L1	30	40	50	65	85	100
L11	116	150	182	217	267	318
L2	50	55	65	90	110	140
L22	220	254	304	392	470	580
C	10	8	9	11	11	11
f	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 30	M14, depth 35	M16, depth 40
h1	M6, depth 12	M8, depth 20	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 25
h2	M6, depth 12	M8, depth 20	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 25
k1	5x5x25	6x6x35	8x7x45	10x8x60	12x8x80	116x10x90
k2	8x7x40	8x7x45	10x8x55	14x9x80	16x10x100	20x12x120

# CY Bevel Gearbox - MM Type



**Input:** Solid shaft

**Output:** Solid shaft on one side

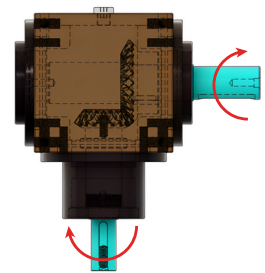
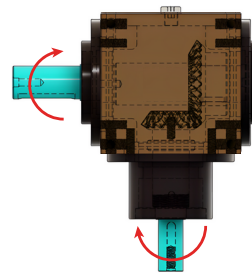
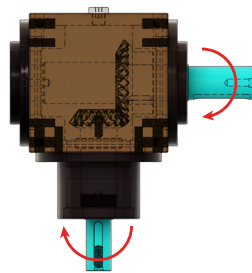
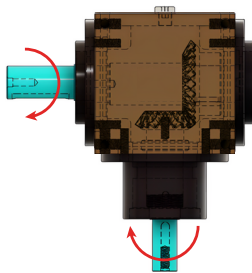


**Design: 30**

**Design: 40**

**Design: 50**

**Design: 60**



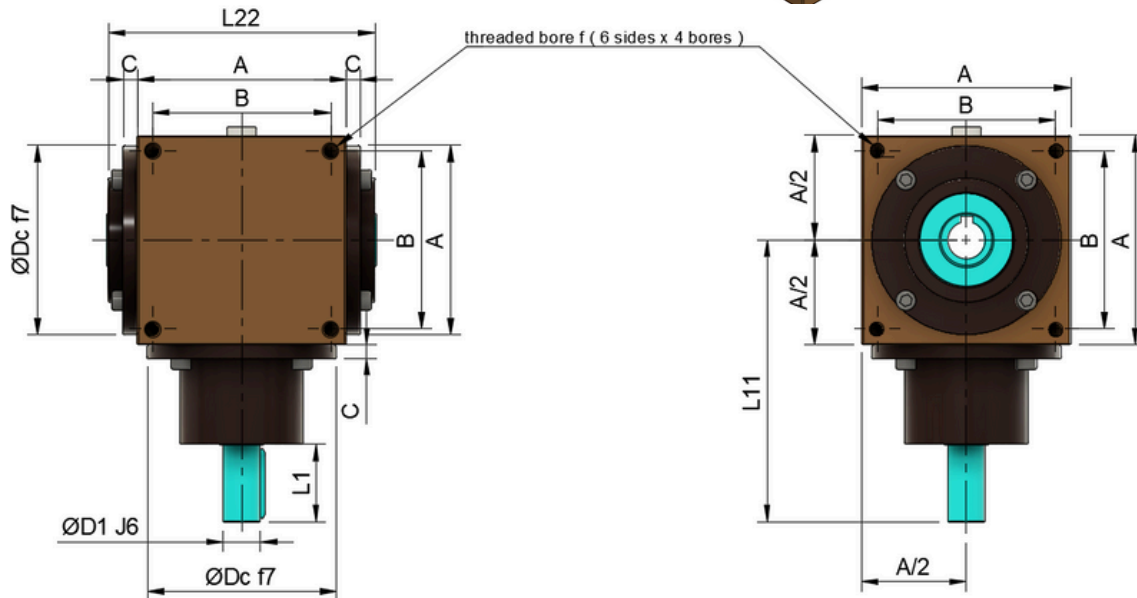
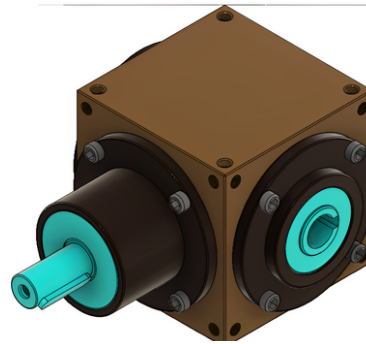
SIZE	CY85	CY110	CY135	CY165	CY200	CY250
cube A	85x85x85	110x110x110	135x135x135	165x165x165	200x200x200	250x250x250
S	58	70	86	104	123	145
Ø D1	16	20	24	32	42	55
Ø D2	24	26	32	45	55	70
Ø Dc	84	100	122	156	185	230
B	70x70	90x90	114x114	144x144	175x175	215x215
L1	30	40	50	65	85	100
L11	116	150	182	217	267	318
L2	50	55	65	90	110	140
L22	110	127	152	196	235	290
C	10	8	9	11	11	11
f	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 30	M14, depth 35	M16, depth 40
h1	M6, depth 12	M8, depth 20	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 25
h2	M6, depth 12	M8, depth 20	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 25
k1	5x5x25	6x6x35	8x7x45	10x8x60	12x8x80	116x10x90
k2	8x7x40	8x7x45	10x8x55	14x9x80	16x10x100	20x12x120

# CY Bevel Gearbox - MD Type

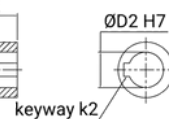
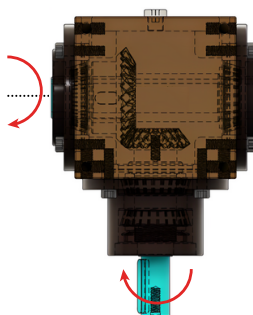


**Input:** Solid shaft

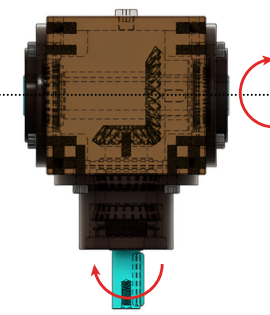
**Output:** Hollow shaft



**Design: 10**



**Design: 20**



SIZE	CY85	CY110	CY135	CY165	CY200	CY250
cube A	85x85x85	110x110x110	135x135x135	165x165x165	200x200x200	250x250x250
Ø D1	16	20	24	32	42	55
Ø D2	16	20	24	32	42	55
Ø Dc	84	100	122	156	185	230
B	70x70	90x90	114x114	144x144	175x175	215x215
L1	30	40	50	65	85	100
L11	116	150	182	217	267	318
L2	30	30	35	45	50	55
L22	120	144	174	212	250	300
C	10	8	9	11	11	11
f	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 30	M14, depth 35	M16, depth 40
h1	M6, depth 12	M8, depth 20	M8, depth 20	M10, depth 25	M10, depth 25	M12, depth 25
k1	5x5x25	6x6x35	8x7x45	10x8x60	12x8x80	12x8x80
k2	5x5	6x6	8x7	10x8	12x8	16x10

