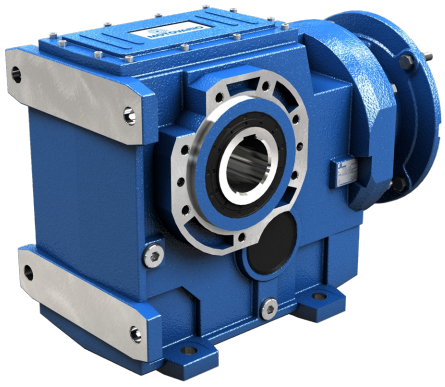
PRODUCT DATASHEET

B SERIES



HELICAL**BEVEL**GEAR **REDUCER**

DATE 11.06.2025

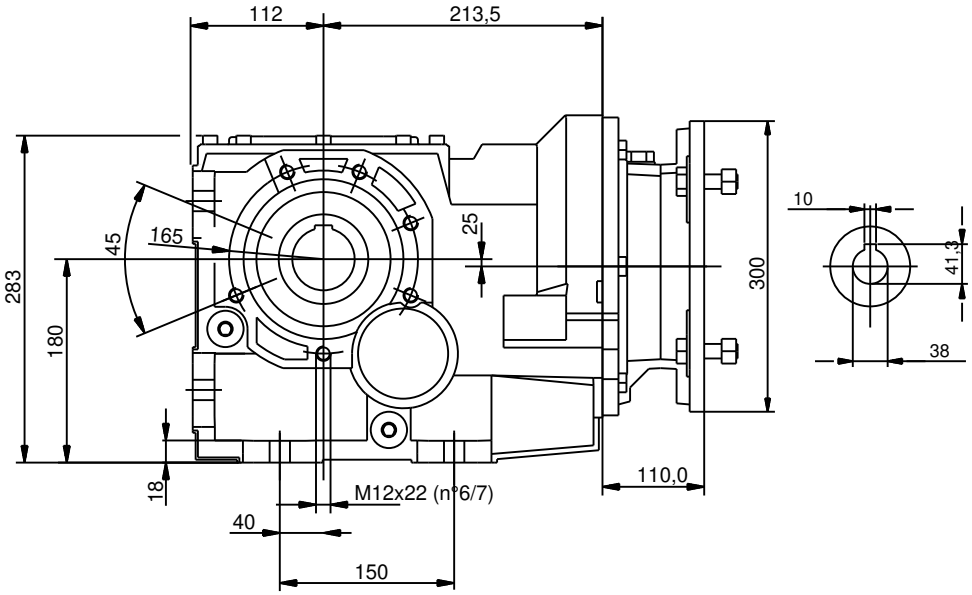
MOTOVARIO®
HEART OF MOTION
a TECO Group company

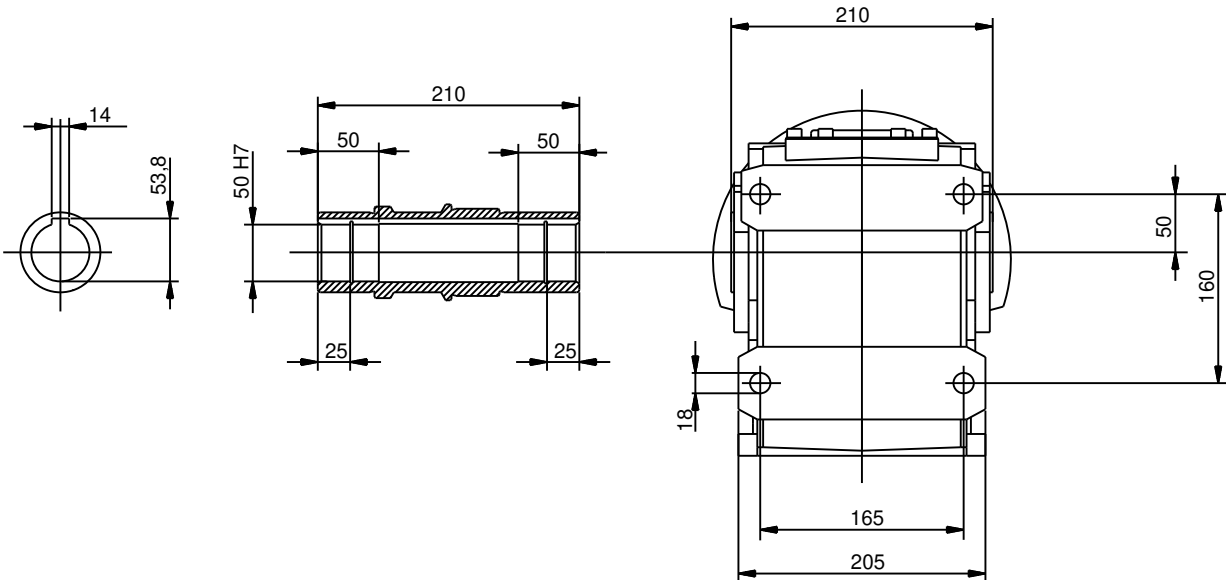
CONFIGURATION

CHARACTERISTIC	VALUE
Regulations	No
Bevel Helical	PAM B
Size	103
Housing Version	U-Universal
Output Shaft Version	C-Hollow Shaft
Ratio (i)	30,55
Input Dim.	Ø300x38 (IEC132 B5)
Output Shaft Dim.	Ø50
Rotation Direction	Standard
ON-Oil Plugs	Breather-Drain-Level(Stand.)
Mounting Position	B3
ON-Output Oil Seal	NBR-Nitrile
ON-Input Oil Seal	NBR-Nitrile
ON-Output Bearings	Taper Roller Bearings
ON-Lubrication	Mineral ISO VG220
Paint	Ral 5010 Blue

DRAWINGS

Values expressed in [mm]





DRAWINGS

The values reported in the tables are referred to the weight of the gearbox with lubricant included.
*Weight without motor

* B-PB	063	071	080-090	100-112	132	160-180	200	225	250	280	
A42	4,8	4,9	5,1	/	/	/	/	/	/	/	~ kg
A52	5,4	5,5	5,7	/	/	/	/	/	/	/	
A53	7,0	7,1	8,5	/	/	/	/	/	/	/	
A72	/	/	15,3	15,5	/	/	/	/	/	/	
A73	14.2	14,3	15,7	/	/	/	/	/	/	/	
063	20,6	21	21,6	25,9	/	/	/	/	/	/	
083	/	/	29,3	31,3	33,8	/	/	/	/	/	
103	/	/	54,8	56,8	59,5	66,2	/	/	/	/	
123	/	/	76,6	79	81,7	87,7	/	/	/	/	
143	/	/	/	124	127	133	148	/	/	/	
153	/	/	/	/	199	206,5	221	223	/	/	
163	/	/	/	/	/	385,3	449,8	457,1	473,5	473,5	

IB	~ kg
A42	4,8
A52	5,4
A53	8,2
A72	15,4
A73	15,4
063	23,7
083	33,1
103	58,8
123	86,5
143	132
153	213
163	455,6

	TH			
CB	63	71	80	
A42	8,08	10,376	15	~ kg
A52	8,88	11,276	15,9	
A53	10,38	12,776	17,4	
A72	/	/	23,3	
A73	17,58	19,976	24,6	
063	24,78	26,076	31,4	
083	/	/	37,4	
103	/	/	63,1	

	TBH			
CB	63	71	80	
A42	9,5	12,4	18,1	~ kg
A52	10,3	13,2	19	
A53	11,8	14,7	20,5	
A72	/	/	27,3	
A73	19,1	22	28,6	
063	26,3	28,3	34,9	
083	/	/	40,9	
103	/	/	66,5	

	TP							
CB	80	090S	090L	100	112	132S	132M	
A42	16,6	/	/	/	/	/	/	~ kg
A52	17,5	21,9	24	/	/	/	/	
A53	19	23,4	25,5	/	/	/	/	
A72	24,9	29,4	31,5	39,9	55,8	/	/	
A73	26,2	30,7	32,8	/	/	/	/	
063	33	39,4	41	46,4	66,8	/	/	
083	39	43,9	45	50	70,3	89,4	93,7	
103	64,7	69,6	70,7	75,7	96	115,1	119,4	
123	/	91,5	92,1	98	116,9	137	138,7	
143	/	/	/	143,3	162,2	182,3	184	

	TBP							
CB	80	090S	090L	100	112	132S	132M	
A42	19,7	/	/	/	/	/	/	~ kg
A52	20,6	26,7	18,9	/	/	/	/	
A53	22,1	28,2	30,4	/	/	/	/	
A72	28,9	32,9	37	48,3	68,5	/	/	
A73	30,2	34,7	38,3	/	/	/	/	
063	36,5	44,9	46,5	53,3	79,2	/	/	
083	42,5	49,4	50,5	56,9	82,7	103,3	107,6	
103	68,1	75,1	76,2	82,5	108,4	129,1	133,4	
123	/	97	97,6	104,9	129,3	151	152,7	
143	/	/	/	150,2	174,9	196	198,3	

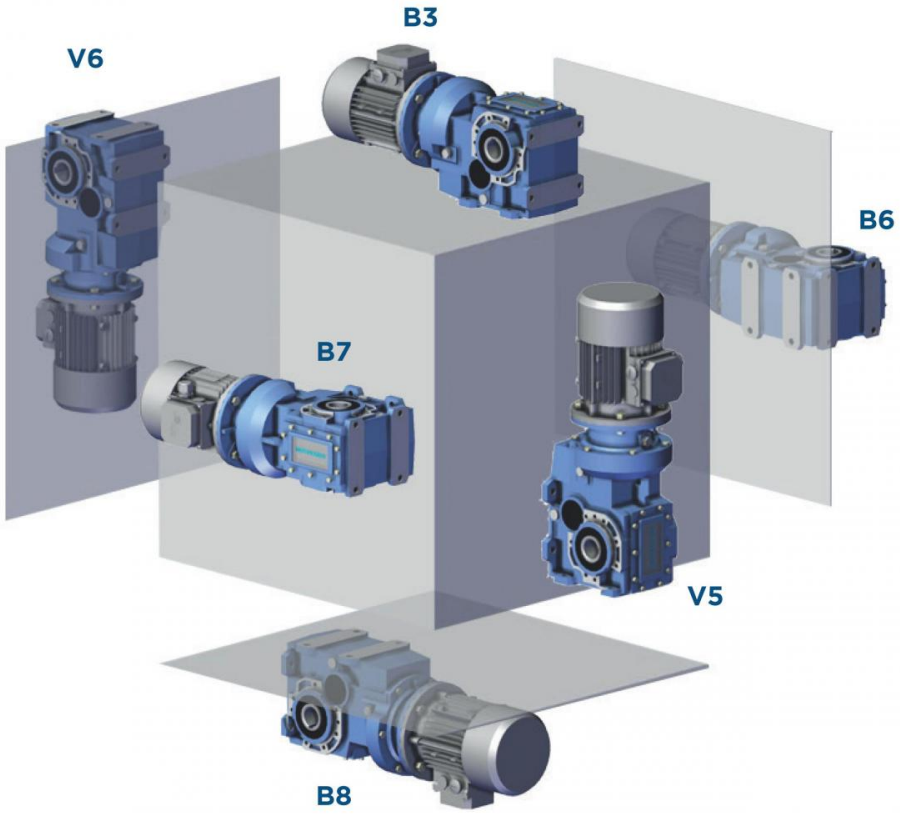
PERFORMANCES

IB103

n_1 [rpm]	Mn_2 [Nm]	i	Pn_1 [kW]	n_2 [rpm]	Fr_1 [N]	Fr_2 D-S-P [N]	Fr_2 C [N]
500	1720	30,55	3,21	16,4	1893	22000	9254
700	1700	30,55	4,46	22,9	1905	22000	8149
900	1680	30,55	5,70	29,5	1918	22000	7406
1140	1640	30,55	7,05	37,3	1943	22000	6779
1400	1600	30,55	8,53	45,8	1969	21978	6279
1750	1504	30,55	10,02	57,3	2029	20367	5819

MOUNTING POSITIONS

The mounting position of the gear unit identifies its space orientation. B3 mounting position, as from a technical point of view, ensures lower oil splash, better lubrication and less heating.



LUBRICANT

- For the reduction units B series it is always necessary to specify the mounting position.
- The reduction units BA.. series with 2, 3 stages and B060, are supplied complete with lubricant, have no oil plugs and need no maintenance.
- The gear reducer B series sizes 080, 100 are supplied complete with lubricant and are fitted with oil plugs to suit any mounting position included in the catalogue.
- The gear reducer B series sizes 140, 150, 160 have no lubricant and are fitted with oil plugs to suit any mounting position included in the catalogue. The oil filling can be done on request, in this case it is recommended, after installation, to replace the closed plug used for transportation with the supplied breather plug. When the reduction unit is supplied without lubricant, it is provided with a label to be filled.

It is recommended, after installation, to replace the closed plug used for transportation with the supplied breather plug. Oil quantity in the table (litres ~) are indicative; for a proper use you will have to refer to the level plug or the dipstick. Any level difference could depend on construction tolerances, but also by the placement of the unit or by the mounting surface at the customer's premises. It is appropriate to check and, if necessary, restores the level when the units are installed.

B	A42	A52	A53	A72	A73
B3	0,33	0,42	0,63	1	1,21
B8					
B6/B7					
V5					
V6					

CB	A42	A52	A53	A72	A73
B3	0,33	0,42	0,55	1	1,13
B8					
B6/B7					
V5					
V6					

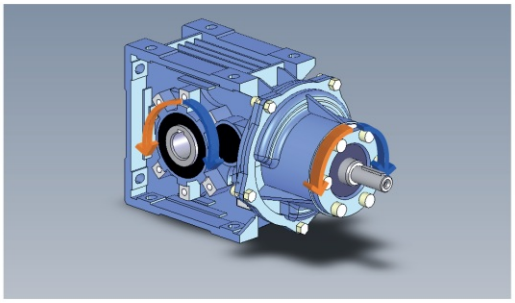
B-CB	063	083	103	123	143	153	163
B3	1,2	2,5	3,7	5,7	11,1	19	33
B8	1,5	2,8	4,2	7,9	13	17,5	42,8
B6	1,5	3,5	6	8,5	14,5	26	43
B7	1,5	2,8	3,9	7,3	11,8	19	30
V5	2,1	3,7	7	9,9	18,5	32,5	54,5
V6	1,3	2,6	4,5	6,7	10,8	16,5	37,3

DIRECTION OF ROTATION

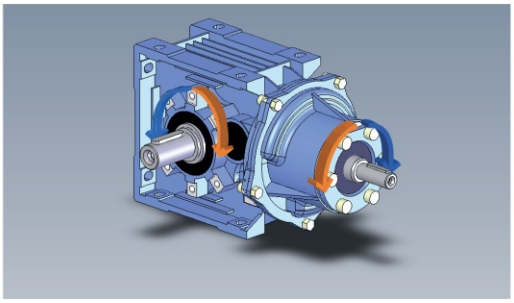
Helical bevel reduction units are supplied as “standard” with rotation as shown in the diagram. On request, the direction of rotation of low speed shaft can be reversed; in this case, it is necessary to specify “opposite rotation to catalogue” when ordering. The “opposite rotation to catalogue” is not possible for sizes BA42 - BA52 - BA53.

DIRECTION OF ROTATION - HIGH SPEED SHAFT

B-CB-IB A42-A52-A72

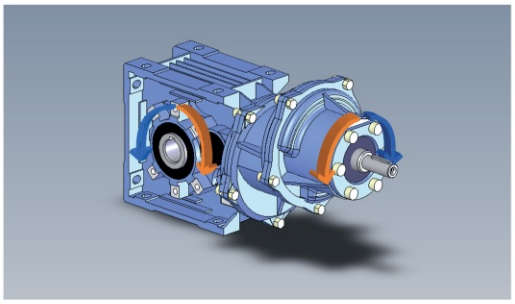


VERSIONS **C-D-P-L**

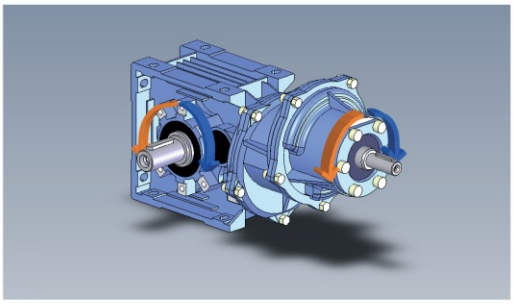


VERSION **S**

B-CB-IB A53-A73

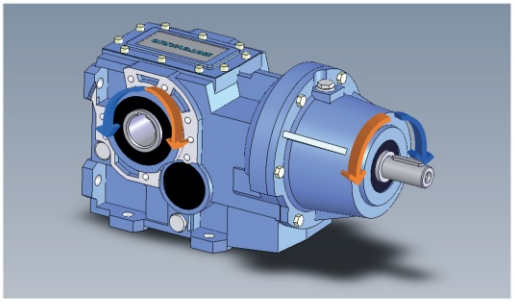


VERSIONS **C-D-P-L**

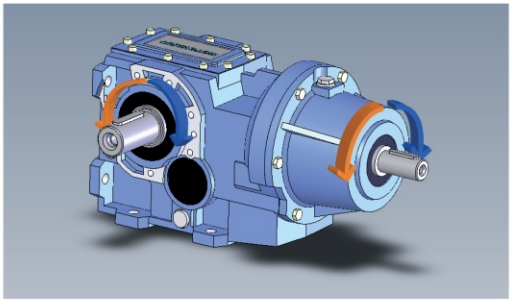


VERSION **S**

B-PB-CB-IB 063-163



VERSIONS **C-D-P-L**



VERSION **S-M**