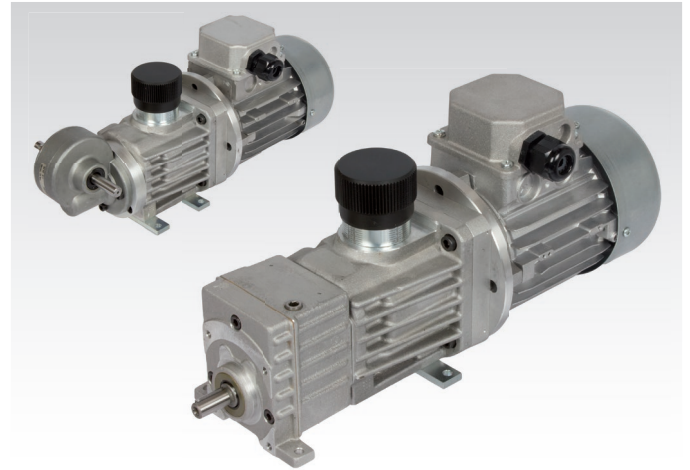


Continuously Variable Geared Motors MUN/I

- Motor 230/400 V, 50 Hz.
- Input power 0,18 kW.
- Output torque to 70 Nm.
- Output speed 0.17 to 4200 min⁻¹
- Adjustment range 1 : 9.
- Adjustable with motor stopped.
- Constant speed, smooth running, long life time and high efficiency.
- Lubricated for life, thus maintenance free.
- Can be mounted in any position (apart from Size 250 and 260).



Working Principle

Two axially-parallel hollow-cone disks are mounted, with pre-tension, around a steel ball. The ball rolls, at almost punctiform point of contact, over the hollow-cone disks and transfers the power from the input shaft - maintaining the sense of rotation - onto the output shaft. The system works at both rotational directions. A slidable ball track on the control device continuously changes the transmission ratio between input and output shaft. This allows a adjustment range from 3 : 1 to 1 : 3, i.e. a total value of $R = 9$. The adjustment of the speed is done with an adjustment screw. To pass through the entire adjustment range 10 full turns are required.

Attachments for the Input Side

Attached Motor

The input is done by a B14 standard motor. As standard, 4-pole, three-phase motors, three-phase explosion proof or one-phase AC motors are used. The motor dimensions stated in the dimensions tables refer to three-phase standard motors.

Attention

When three-phase explosion proof or one-phase AC motors are used, the overall dimensions change. Please ask for the respective dimensions tables!

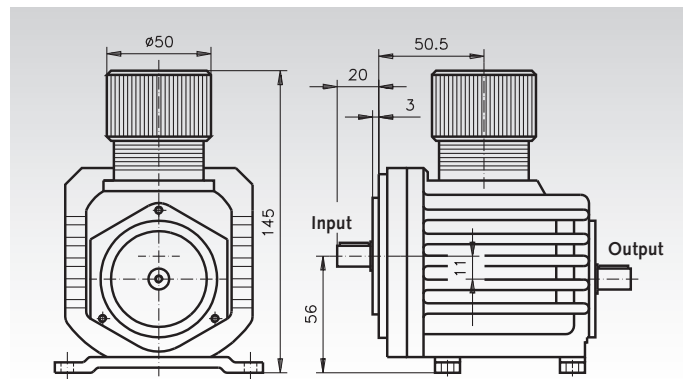
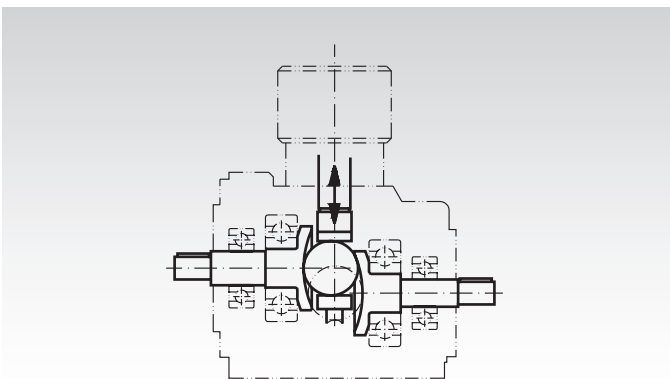
Attachments for the Output Side

To adjust the output speeds to the specific circumstances the following can be mounted:

- Helical gear unit, 1 to 7 stage.
- Helical and, on request, bevel gear units.
- Worm gear units.

Standard Adjustment Device

To pass through the entire adjustment range 10 full turns of the handwheel are required. The adjusting collar is marked with a linear scale of 1 - 10, which is however not directly connected to the output speed, as the adjustment graph shows an almost logarithmic curve progression.



Continuously Variable Geared Motors MUN/I with Helical Gears

Version B: Input Power 0,18 kW, Variable Range 1 : 9

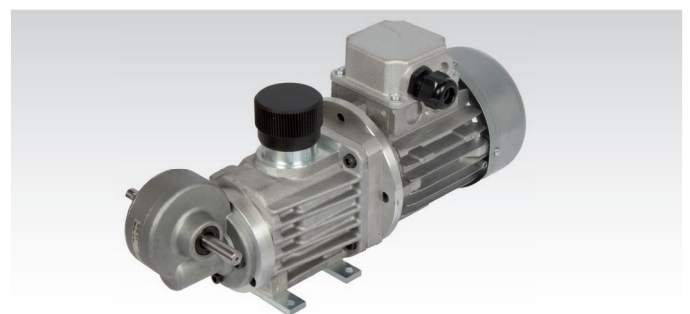


Ordering details: z. B.:
Type, Version, Output Speed, Product No.

Product No.	Output Speeds n_2 at $n_1 = 1400 \text{ min}^{-1}$ min^{-1}	Output Torque M_2 Nm	Size	Gear Ratio i	Dimensional Drawing	Weight kg
450 202 00	155 - 1400	2,5 - 0,75	21	3	2	6,8
450 202 01	92 - 824	4,3 - 1,3	21	5,1	2	6,8
450 202 02	71 - 640	5,6 - 1,7	21	6,6	2	6,8
450 203 00	58 - 522	6,6 - 2,0	22	8,0	3	7,3
450 203 01	34 - 306	11,2 - 3,3	22	13,7	3	7,3
450 203 02	26 - 234	14,6 - 4,3	22	17,8	3	7,3
450 206 00	22 - 194	17,2 - 5,1	239	21,6	4	7,8
450 205 00	16,5 - 149	*10 - 6,7	24	28	5	6,7
450 206 01	12,6 - 113	29 - 8,5	239	37	4	7,8
450 205 02	10,8 - 97	*10 - *10	24	43	5	6,7
450 206 02	9,7 - 87	*30 - 11,5	239	48	4	7,8
450 205 03	9 - 81	*10 - *10	24	51,3	5	6,7
450 207 01	4,7 - 42	*30 - 23	249	100	4	7,8
450 207 02	3,5 - 31	*30 - *30	249	130	4	7,8
450 209 00	3 - 27	*30 - *30	259	158	4	7,9
450 213 01	1,7 - 15	*70 - 64	250	272	6	9,5
450 213 02	1,3 - 12	*70 - *70	250	353	6	9,5
450 212 01	0,63 - 5,7	*70 - *70	260	735	6	9,7
450 214 00	0,48 - 4,3	*30 - *30	269	955	4	7,9
450 215 00	0,46 - 4,16	*10 - *10	27	1006	5	6,8
450 215 01	0,30 - 2,7	*10 - *10	27	1540	5	6,8
450 215 02	0,17 - 1,5	*10 - *10	27	2806	5	6,8

*Constructive speed limit of the transmission gearing. Dimensional drawings page 795.

Version E: Input Power 0,18 kW, Variable Range 1 : 9 with Worm Gear Units



Ordering details: z. B.:
Type, Version, Output Speed, Product No.

Product No.	Output Speeds n_2 at $n_1 = 1400 \text{ min}^{-1}$ min^{-1}	Output Torque M_2 Nm	Size	Gear Ratio i	Dimensional Drawing	Weight kg
450 501 00	92 - 830	2,9 - 0,87	2S1	5	9	6,7
450 501 01	67 - 600	4,1 - 1,2	2S1	7	9	6,7
450 501 02	47 - 420	5,4 - 1,6	2S1	10	9	6,7
450 501 04	31 - 280	8,1 - 2,4	2S1	15	9	6,7
450 501 05	26 - 233	8,1 - 2,4	2S1	18	9	6,7
450 501 06	19 - 174	*9,2 - 2,9	2S1	24	9	6,7
450 501 08	15 - 135	*10,3 - 3,2	2S1	30	9	6,7
450 501 09	12 - 108	*11,4 - 4,1	2S1	38	9	6,7
450 501 10	8,5 - 76	*10,4 - 4,5	2S1	55	9	6,7
450 501 12	6,2 - 56	*7,3 - 5,1	2S1	75	9	6,7

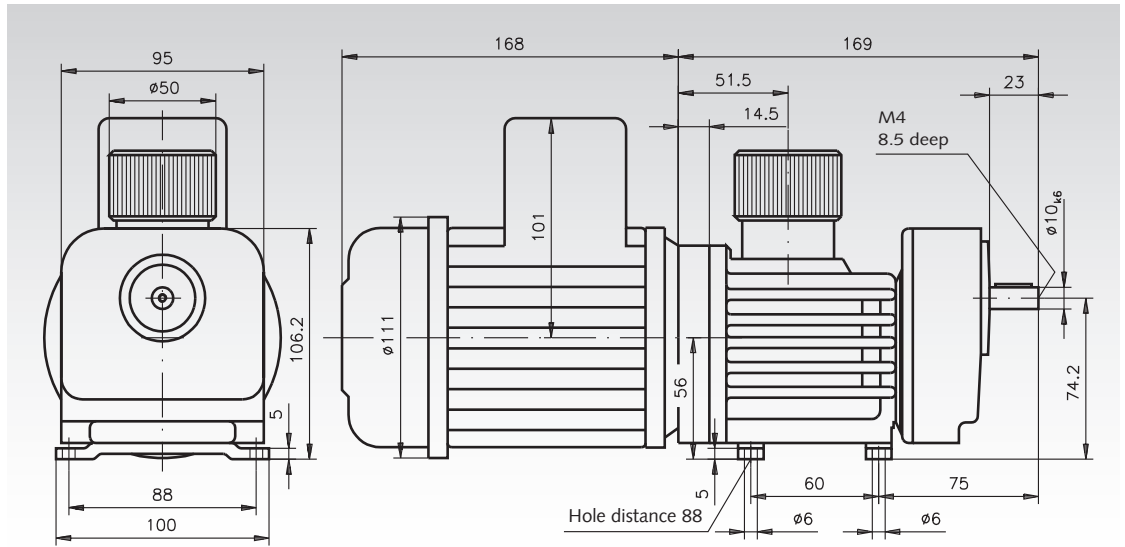
*Constructive speed limit of the transmission gearing. Dimensional drawings page 795.

Continuously Variable Geared Motors MUN/I (Version with Standard Three-Phase Motor)

Model B3, Feather Key according to DIN 6885/1 (all Dimensions in mm)

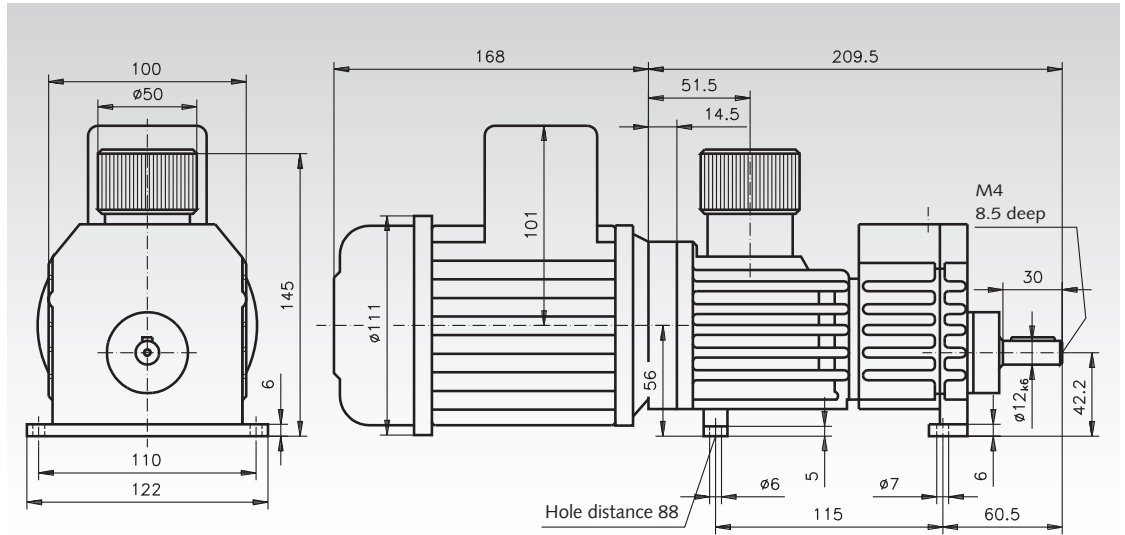
Dimens. No. 2

Size 21



Dimens. No. 3

Size 22



Dimens. No. 4

Size 239 - 269

