

## Planetary Gearmotor DSMP420

This planetary gearmotor is a high quality motor-gear combination with the following features:

- Brush DC-Motor
- Gears in steel manufactured by milling process
- Sun wheel from extra hard bakelite for noise reduction
- Ball bearing and electrical noise suppression filter
- Backlash at no load  $\leq 3^\circ$
- Radial load 10mm from flange  $\leq 80N$
- Axial load  $\leq 30N$
- Radial play  $\leq 0,04mm$
- Axial play  $\leq 0,3mm$
- Operating temperature  $-10^\circ C$  to  $+60^\circ C$

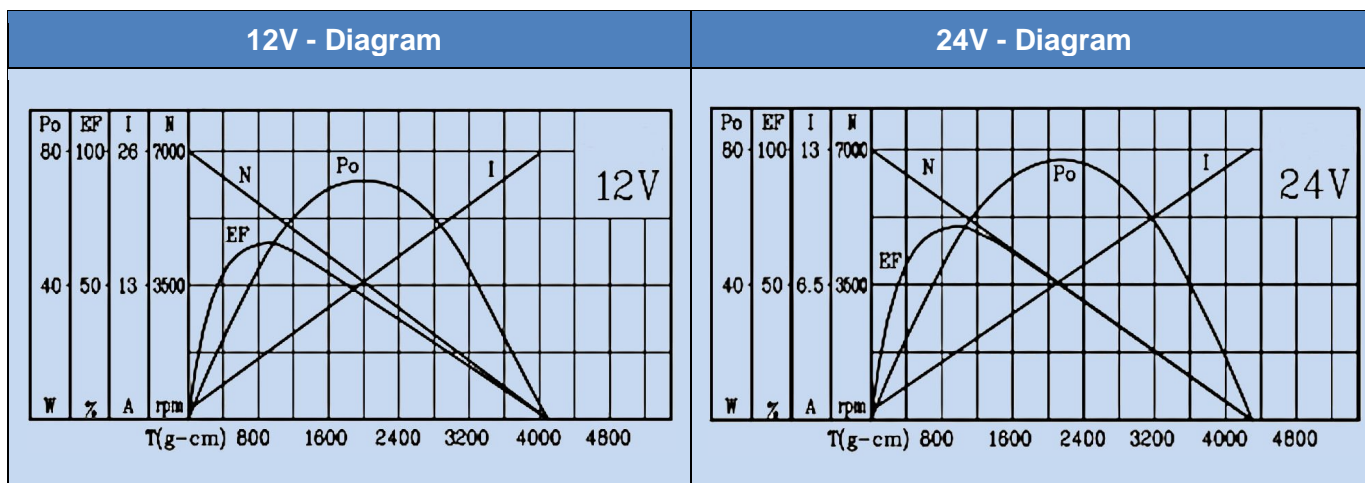


Encoder version available.

### Model code

<b>DSMP420</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>10</b>	<b>-</b>	<b>B</b>	<b>-</b>	<b>F</b>	<b>-</b>	<b>E</b>	<b>-</b>	<b>C</b>
typ		voltage		gear reduction		Bearing		Filter		Sensor		C: cover
		12V		24		Ball bearing				E: Encoder		
		24V		61								
				104								
				212								
				504								

### Diagram



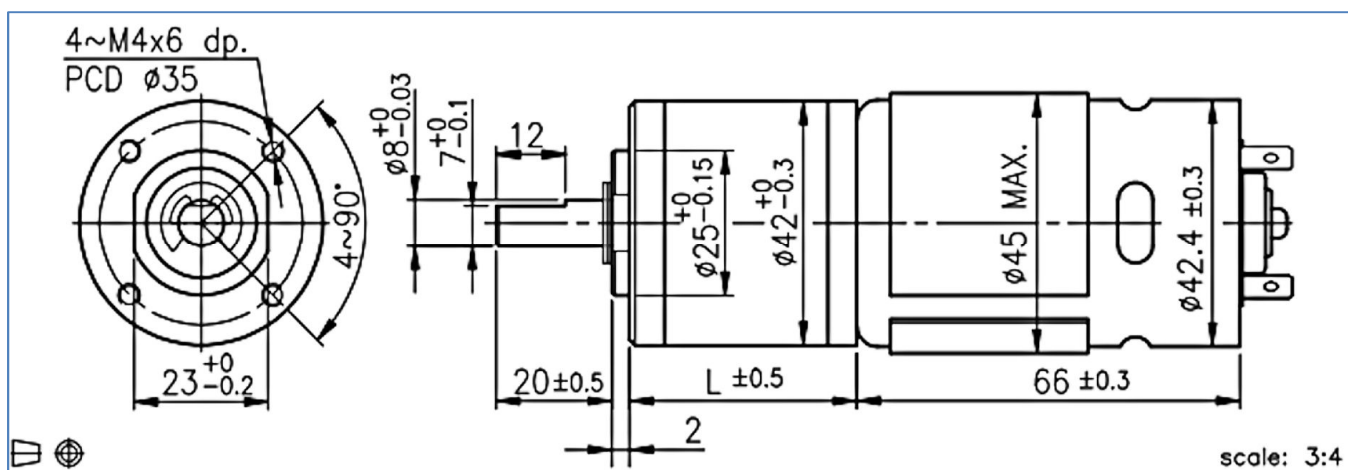
### Additional technical data

Rated Voltage In V	Rated torque in gcm (Ncm)	Rated speed In rpm	Rated current in A	No load speed In rpm	No load current A	Rated output in W
12	700 (7,0)	5700	$\leq 5,5$	7000	$\leq 0,9$	41,3
24	570 (5.7)	5900	$\leq 2,1$	7000	$\leq 0,5$	34,7

## Planetary gearmotor – technical data

	Gear steps	2	3		4	
	Gear reduction	24:1	61:1	104:1	212:1	504:1
	Gear length L in mm	39,2	45,9		52,6	
12V	Rated torque in Nm	1,0	1,8	2,0	2,5	3,0
	Rated speed in rpm	248	98	63	31	13,5
24V	Rated torque in Nm	0,95	1,8	2,0	2,5	3,0
	Rated speed in rpm	240	102	63	31	13,5

## Dimensions



## Option encoder:

Magnetic encoders (hall sensors) are available as an option. They have two channels with  $90^\circ$  phase shift. The gearmotor's total length would thereby be increased by 16mm.

Additional technical data:

Number of poles	19	<p>Output Circuit :</p> <p>Extra Varistor(1k<math>\Omega</math>) needed</p>	<p>pin connections:</p> <ul style="list-style-type: none"> <li>red : + motor</li> <li>black : - motor</li> <li>brown : encoder Vcc</li> <li>green : encoder GND</li> <li>blue : encoder A</li> <li>purple : encoder B</li> </ul>
countable pulses per turn	38		
Voltage	3,5 – 20VDC		
Output current per channel	5 mA		



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