

Planetary Gearmotor DSMP320

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

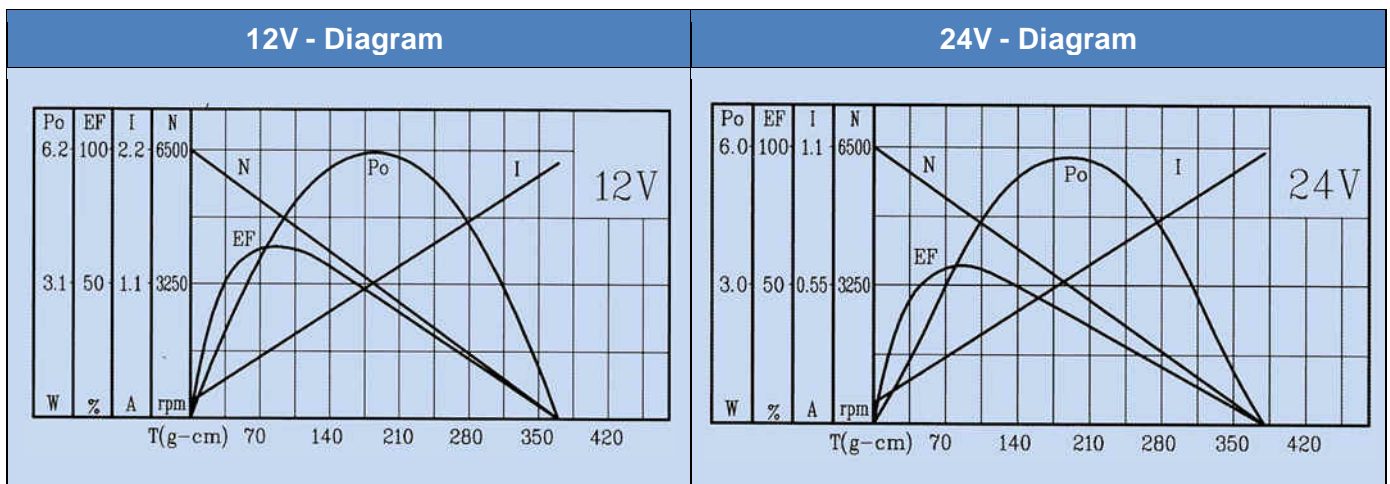
- Brush DC-Motor
- Gears in steel manufactured by milling process
- Sun wheel from extra hard bakelite for noise reduction
- Ball bearing and electrical noise suppression filter
- Backlash at no load $\leq 2,5^\circ$
- Radial load 10mm from flange $\leq 35N$
- Axial load $\leq 25N$
- Radial play $\leq 0,04mm$
- Axial play $\leq 0,3mm$
- Operating temperature $-10^\circ C$ to $+60^\circ C$



Model code

DSMP420	-	12	-	0005	-	B	F	E
typ		voltage 12V 24V		gear reduction 5 939		Bearing Ball bearing	Filter	Sensor - optionally E: Encoder

Diagram



Additional technical data

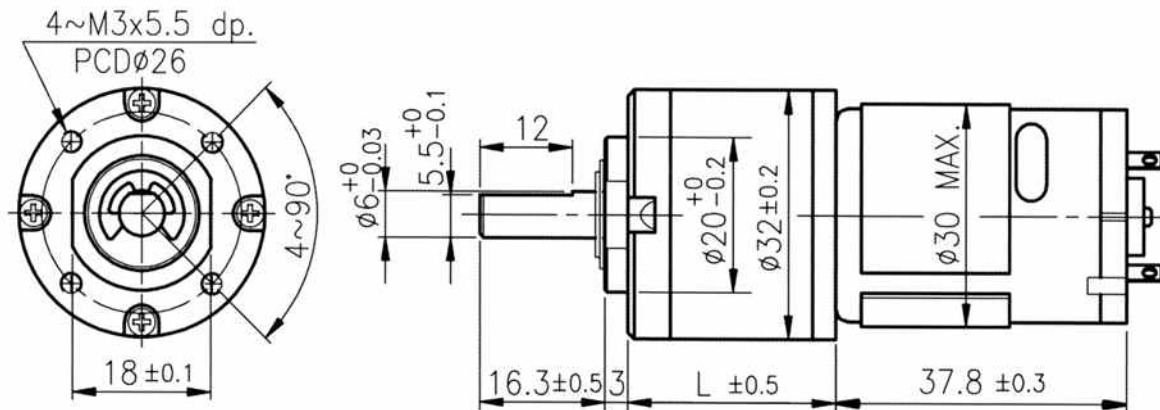
Rated Voltage In V	Rated torque in gcm (Ncm)	Rated speed In rpm	Rated current in mA	No load speed In rpm	No load current mA	Rated output in W
12	78 (0,78)	5290	≤ 530	6500	≤ 150	4.22
24	74 (0,74)	5250	≤ 250	6500	≤ 85	3.97

Planetary gearmotor – technical data

	Gear steps	1					2					3					4				
	Gear reduction	5	14	19	27	35	51	71	100	139	189	264	516	721	939						
	Gear length L in mm	20,6					27,0					33,4					39,8				
12V	Rated torque in Nm	0,03	0,08	0,10	0,14	0,19	0,23	0,33	0,46	0,65	0,73	1,00	1,20	1,20	1,20						
	Rated speed in rpm	995	373	270	195	150	104	74	53	38	28	20	11,2	8,3	6,3						
24V	Rated torque in Nm	0,03	0,07	0,10	0,14	0,18	0,22	0,31	0,44	0,61	0,69	0,97	1,20	1,20	1,20						
	Rated speed in rpm	990	370	265	191	150	103	74	53	38	28	20	11,2	8,3	6,3						

Attention: The gear reductions are from- or in round numbers. By interest please request the accurate values.

Dimensions



scale: 1:1

Option encoder:

Magnetic encoders (hall sensors) are available as an option. They have two channels with 90° phase shift. The diameter amounts to 32mm. The gearmotor's total length would thereby be increased by 15mm.

Additional technical data:

countable pulses per turn (2 edges)	2 x 7 pulses		JST PHR-6 P=2.0-6P 	pin connections: 1 red : + motor 2 black : - motor 3 brown : encoder Vcc 4 green : encoder GND 5 blue : encoder A 6 purple : encoder B
Voltage	3,5 – 20VDC			
Output current per channel	5 mA			
		cable-length: 100mm		

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