

NEW

DC-Gearmotor

3 Nm

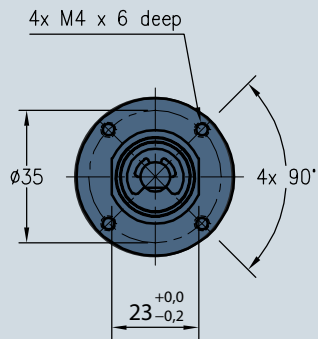
Series M42P

	M42P...		Y.GT1	Y.GT2	
Nominal voltage	U_N		12	24	Volt
Winding resistance	R	±20%	0,46	1,85	Ω
Output power	$P_2 \text{ max.}$		75,3	67,4	W
No-load speed (motor)	n_o	±15%	7 000	7 000	rpm
Speed constant	k_n		595	313	rpm/V
Back-EMF constant	k_E		1,68	3,19	mV/rpm
Torque constant	k_M		16,1	30,5	mNm/A
Current constant	k_I		0,062	0,033	A/mNm
Slope of n-M curve	$\Delta n/\Delta M$		17	18	rpm/mNm
Rotor inductance	L		0,2	1,5	mH
Rotor inertia	J		120	120	gcm ²
Bearings on output shaft		sintered sleeve bearings		ball bearings	
Housing material		powdered metal		powdered metal	
Geartrain material		metal		metal	
Backlash, at no-load		≤ 3°		≤ 3°	
Shaft load max.:					
– radial at (10 mm from bearing)		≤ 49 N		≤ 74,5 N	
– axial		≤ 29,4 N		≤ 29,4 N	
Shaft press fit force, max.		≤ 147 N		≤ 147 N	
Shaft play:					
– radial (on bearing output)		≤ 0,05 mm		≤ 0,04 mm	
– axial		≤ 0,30 mm		≤ 0,30 mm	
Operating temperature range		– 10 to + 60 °C		– 10 to + 60 °C	

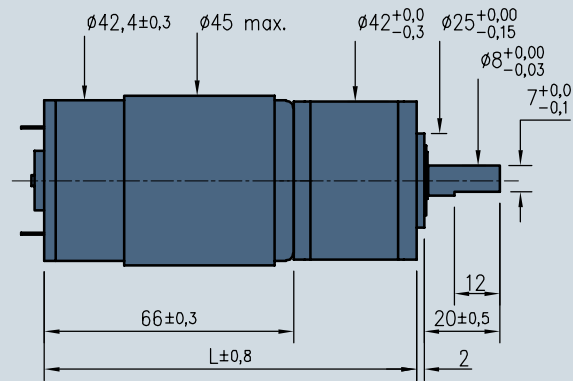
reduction ratio (nominal)	12 Volt output speed up to n_{max} rpm	24 volt output speed up to n_{max} rpm	weight with sleeve bearing g	weight with ball bearing g	length L mm	output torque		direction of rotation (reversible)	efficiency %
						continuous operation M max. Nm	intermittent operation M max. Nm		
4:1	1 400	1 445	501	499	98,5	0,2	0,6	=	90
14:1	405	420	553	551	105,2	0,6	1,9	=	80
17:1	325	340	553	551	105,2	0,8	2,4	=	80
24:1	248	240	553	551	105,2	1,0	2,9	=	80
49:1	120	122	593	591	111,9	1,6	4,7	=	70
61:1	98	102	593	591	111,9	1,8	5,3	=	70
84:1	76	77,5	593	591	111,9	1,8	5,3	=	70
104:1	63	63	593	591	111,9	2,0	5,9	=	70
144:1	45	47	593	591	111,9	2,0	5,9	=	70
212:1	31	31	643	591	118,6	2,5	7,4	=	60
294:1	24	23,8	643	641	118,6	2,5	7,4	=	60
504:1	13,5	13,5	643	641	118,6	2,9	8,8	=	60
624:1	10,9	10,9	643	641	118,6	2,9	8,8	=	60
720:1	9,5	9,5	643	641	118,6	2,9	8,8	=	60
864:1	8,0	8,0	643	641	118,6	2,9	8,8	=	60
1 062:1	6,5	6,5	688	686	125,6	2,9	8,8	=	50
1 470:1	4,6	4,6	688	686	125,6	2,9	8,8	=	50
2 500:1	2,7	2,7	688	686	125,6	2,9	8,8	=	50
3 000:1	2,3	2,3	688	686	125,6	2,9	8,8	=	50
3 600:1	1,9	1,9	688	686	125,6	2,9	8,8	=	50

Series M42P

M42P Gearmotor



Front View



M42P

How to order a M42P

Part number	Ratio	Voltage	Gearhead bearing	Stocked item
M42P0004YSGT1	4:1	12	sleeve	
M42P0014YSGT1	14:1	12	sleeve	
M42P0017YSGT1	17:1	12	sleeve	
M42P0024YSGT1	24:1	12	sleeve	
M42P0049YSGT1	49:1	12	sleeve	
M42P0061YSGT1	61:1	12	sleeve	
M42P0084YSGT1	84:1	12	sleeve	
M42P0104YSGT1	104:1	12	sleeve	
M42P0144YSGT1	144:1	12	sleeve	
M42P0212YSGT1	212:1	12	sleeve	
M42P0294YSGT1	294:1	12	sleeve	
M42P0504YSGT1	504:1	12	sleeve	
M42P0624YSGT1	624:1	12	sleeve	
M42P0720YSGT1	720:1	12	sleeve	
M42P0864YSGT1	864:1	12	sleeve	
M42P1062YSGT1	1 062:1	12	sleeve	
M42P1470YSGT1	1 470:1	12	sleeve	
M42P2500YSGT1	2 500:1	12	sleeve	
M42P3000YSGT1	3 000:1	12	sleeve	
M42P3600YSGT1	3 600:1	12	sleeve	

M42P0004YBGT1	4:1	12	ball	X
M42P0014YBGT1	14:1	12	ball	X
M42P0017YBGT1	17:1	12	ball	X
M42P0024YBGT1	24:1	12	ball	X
M42P0049YBGT1	49:1	12	ball	X
M42P0061YBGT1	61:1	12	ball	X
M42P0084YBGT1	84:1	12	ball	X
M42P0104YBGT1	104:1	12	ball	X
M42P0144YBGT1	144:1	12	ball	X
M42P0212YBGT1	212:1	12	ball	X
M42P0294YBGT1	294:1	12	ball	X
M42P0504YBGT1	504:1	12	ball	X
M42P0624YBGT1	624:1	12	ball	X
M42P0720YBGT1	720:1	12	ball	X
M42P0864YBGT1	864:1	12	ball	X
M42P1062YBGT1	1 062:1	12	ball	X
M42P1470YBGT1	1 470:1	12	ball	X
M42P2500YBGT1	2 500:1	12	ball	X
M42P3000YBGT1	3 000:1	12	ball	X
M42P3600YBGT1	3 600:1	12	ball	X

M42P0004YSGT2	4:1	24	sleeve	
M42P0014YSGT2	14:1	24	sleeve	
M42P0017YSGT2	17:1	24	sleeve	
M42P0024YSGT2	24:1	24	sleeve	
M42P0049YSGT2	49:1	24	sleeve	
M42P0061YSGT2	61:1	24	sleeve	
M42P0084YSGT2	84:1	24	sleeve	
M42P0104YSGT2	104:1	24	sleeve	
M42P0144YSGT2	144:1	24	sleeve	
M42P0212YSGT2	212:1	24	sleeve	
M42P0294YSGT2	294:1	24	sleeve	
M42P0504YSGT2	504:1	24	sleeve	
M42P0624YSGT2	624:1	24	sleeve	
M42P0720YSGT2	720:1	24	sleeve	
M42P0864YSGT2	864:1	24	sleeve	
M42P1062YSGT2	1 062:1	24	sleeve	
M42P1470YSGT2	1 470:1	24	sleeve	
M42P2500YSGT2	2 500:1	24	sleeve	
M42P3000YSGT2	3 000:1	24	sleeve	
M42P3600YSGT2	3 600:1	24	sleeve	

How to order a M42P

Part number	Ratio	Voltage	Gearhead bearing	Stocked items
M42P0004YBGT2	4:1	24	ball	X
M42P0014YBGT2	14:1	24	ball	X
M42P0017YBGT2	17:1	24	ball	X
M42P0024YBGT2	24:1	24	ball	X
M42P0049YBGT2	49:1	24	ball	X
M42P0061YBGT2	61:1	24	ball	X
M42P0084YBGT2	84:1	24	ball	X
M42P0104YBGT2	104:1	24	ball	X
M42P0144YBGT2	144:1	24	ball	X
M42P0212YBGT2	212:1	24	ball	X
M42P0294YBGT2	294:1	24	ball	X
M42P0504YBGT2	504:1	24	ball	X
M42P0624YBGT2	624:1	24	ball	X
M42P0720YBGT2	720:1	24	ball	X
M42P0864YBGT2	864:1	24	ball	X
M42P1062YBGT2	1 062:1	24	ball	X
M42P1470YBGT2	1 470:1	24	ball	X
M42P2500YBGT2	2 500:1	24	ball	X
M42P3000YBGT2	3 000:1	24	ball	X
M42P3600YBGT2	3 600:1	24	ball	X