

## Series MD3644\_MD35C

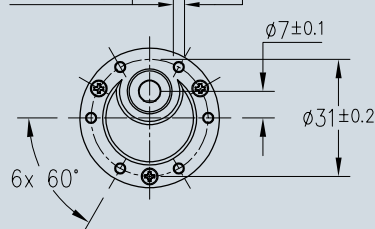
	MD3644A	012V	024V	
Nominal voltage	$U_N$	14	24	Volt
Winding resistance	$R$ ± 12%	2.30	7.50	$\Omega$
Output power	$P_2$ max.	14.67	17.67	W
No-load speed (motor)	$n_o$ ± 15%	5,400	6,800	rpm
Speed constant	$k_n$	465	295	rpm/V
Back-EMF constant	$k_E$	2.15	3.39	mV/rpm
Torque constant	$k_M$	20.54	32.33	mNm/A
Current constant	$k_I$	0.049	0.031	A/mNm
Slope of n-M curve	$\Delta n/\Delta M$	50	66	rpm/mNm
Rotor inductance	$L$	3,700	9,500	$\mu H$
Rotor inertia	$J$	44	31	$gcm^2$

Bearings on output shaft	sintered bronze sleeve
Housing material	zinc die cast
Geartrain material	metal & plastic
Backlash, at no-load	≤ 3°
Shaft load max.:	
– radial at (10 mm from bearing)	≤ 25 N
– axial	≤ 25 N
Shaft press fit force, max.	≤ 90 N
Shaft play:	
– radial (on bearing output)	≤ 0.1 mm
– axial	≤ 0.35 mm
Operating temperature range	– 10 ... + 60 °C

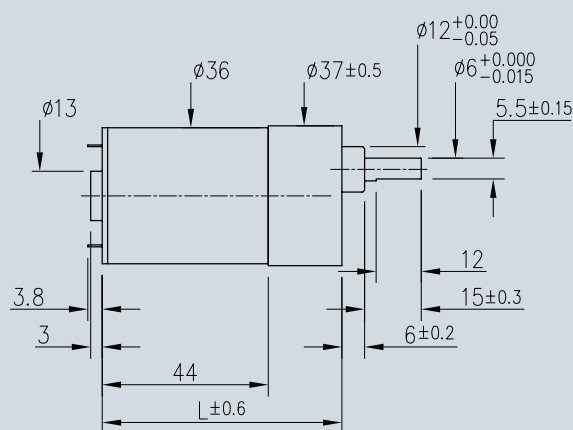
### MD35C

reduction ratio (nominal)	output speed up to $N_{max}$ RPM	number of gear stages	weight g	length L mm	output torque		direction of rotation (reversible)	efficiency %
					continuous operation M max. mNm	intermittent operation M max. mNm		
6:1	900	2	190.5	64.4	80	240	CW	81
29:1	190	3	195.4	66.9	192	576	CCW	73
35:1	150	4	202.4	69.4	192	576	CW	66
49:1	110	4	202.4	69.4	294	882	CW	66
59:1	90	4	202.4	69.4	294	882	CW	66
80:1	70	4	202.4	69.4	392	1,176	CW	66
102:1	50	5	207.5	71.9	588	1,764	CCW	59
115:1	45	5	207.5	71.9	588	1,764	CCW	59
129:1	40	5	207.5	71.9	588	1,764	CCW	59
150:1	35	5	207.5	71.9	588	1,176	CCW	59
181:1	30	5	207.5	71.9	588	1,764	CCW	59
200:1	25	5	207.5	71.9	588	1,764	CCW	59
241:1	22	5	207.5	71.9	588	1,764	CCW	59
302:1	18	6	214.6	74.4	588	1,764	CW	53
494:1	11	6	214.6	74.4	588	1,764	CW	53
684:1	8	6	214.6	74.4	588	1,764	CW	53

Orientation with respect to motor terminals not defined  
6x M3 4 deep



Front View



MD3644 + MD35C

## How to order a MD3644 MD35C

Part number	Ratio	Voltage	Gearhead bearing	Stocked items
MD3644A012V+MD35C	XX:1	12	Sintered bronze sleeve	no
MD3644A024V+MD35C	XX:1	24	Sintered bronze sleeve	no

XX = The Reduction Ratio Required can be 2 or 3 digits.