

# DATA SHEET

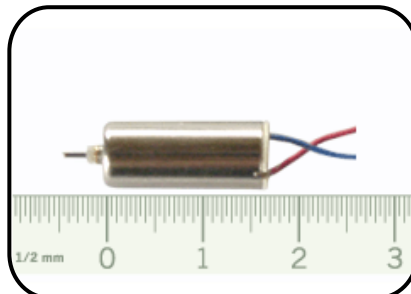
M700, Conrad No. 245064

## MICRO-MOTOR M700 / M705 / M710

Order No. **M700**Order No. **M705**Order No. **M710**

**Driving motor, dimensions: 7 x 16 mm**

This extremely powerful motor is a DC motor. It is well-suited for driving all models that require power, e.g. winches, HGVs, etc. A speed regulator or a servo mechanism is required for operating remote control systems. As an option, the motors are also available with worm gears, shafts or sprockets. You can find appropriate gearboxes under gearbox manufacturing kits.



TECHNICAL DATA	M700 / M705 / M710
Rated voltage (V)	2
Max. power output (W) at $U_{rated}$	0.4
Idle speed (rpm)	16000
Starting torque ( $\mu\text{Nm}$ )	350
Mean idle current (mA)	20
Weight (g)	2.5
Mass diameter/ length (mm)	7 x 16
Shaft diameter (mm)	0.8



available with shaft



available with worm gear



available with sprockets

### Max. recommended values (at least 10 hrs)

Max. steady current (mA)	300
Max. continuous torque ( $\mu\text{Nm}$ )	320
Max. voltage (V)	5

### Motor-specific parameters

Back emf (V/1000 rpm)	0.116
Torque constant (mNm/A)	1.108
Terminal resistance (Ohm)	6
Idle current at $n=0$ (mA)	10
Change in idle current (mA/rpm)	6.17E-04

### ORDER NUMBERS

Order no. (motor with shaft)	M700
Order no. (motor with M02 worm gear)	M705
Order no. (motor with M02 sprocket)	M710

### EQUATIONS

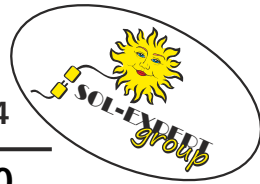
$$\text{Idle current } I_0 = I_{00} + n \cdot dI_0/n$$

$$\text{Current } I = I_0 + I_n \text{ with } I_n = \text{active current}$$

$$\text{Torque } M = I_n \cdot K_t$$

$$\text{Voltage } U = n/1000 \cdot \text{emf} + I \cdot R$$

$$\text{Power output } N_n = M \cdot \pi() \cdot n/30$$



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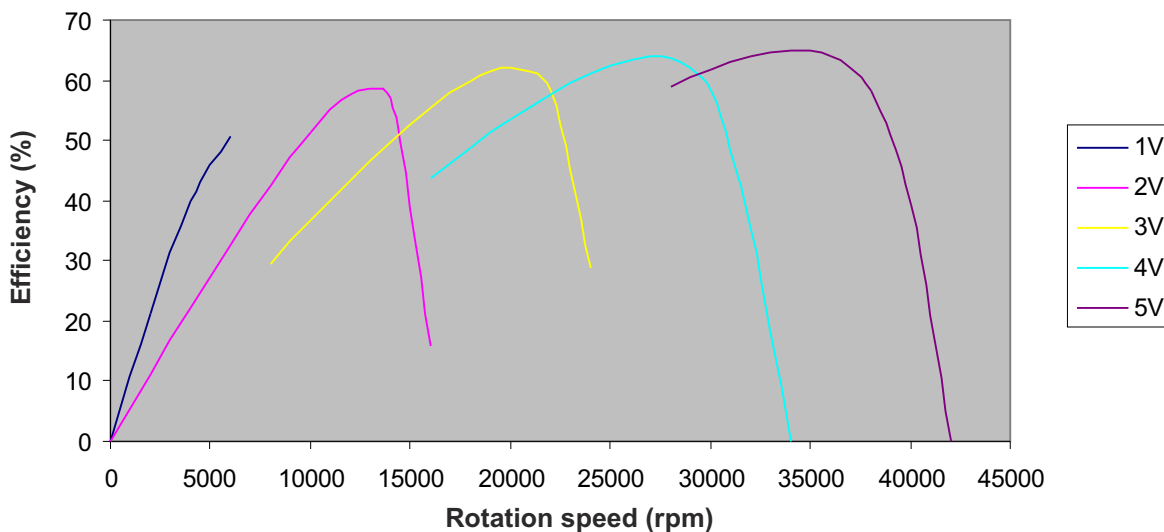
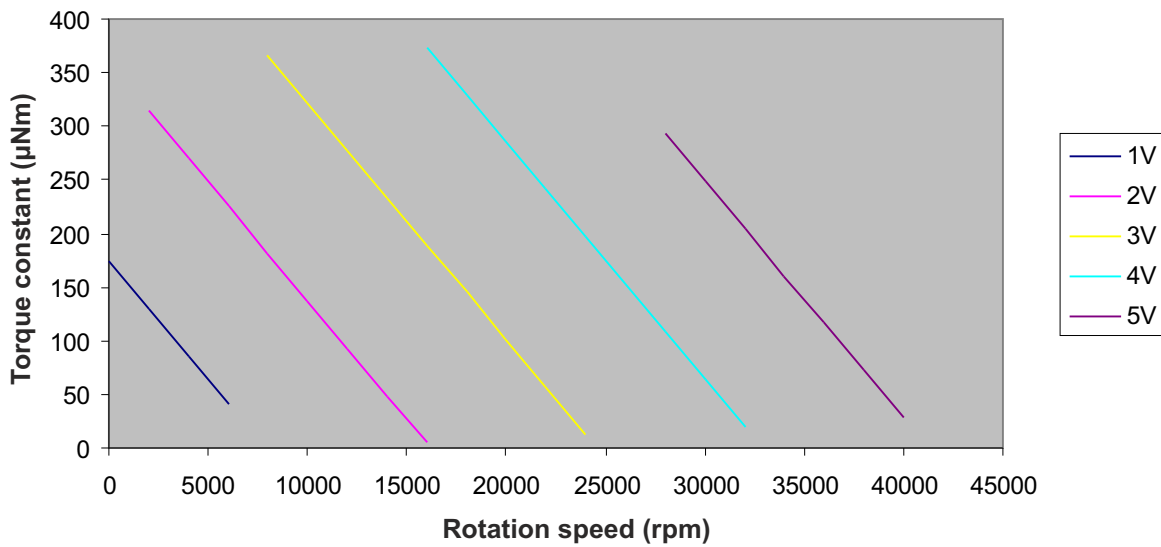
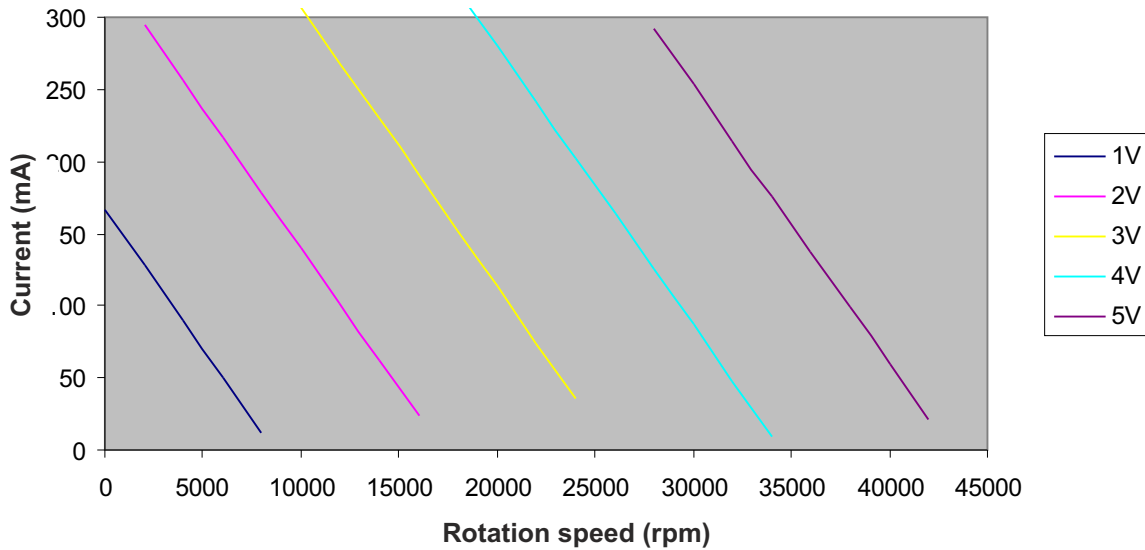
**MICRO-MOTOR M700 / M705 / M710**

Order No. **M700**

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Order No. **M710**

Driving motor, dimensions: 7 x 16 mm



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