

G240 Series

Features and Benefits

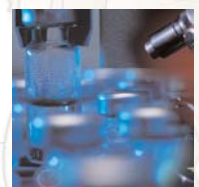
- Dynamically balanced armatures insure smooth performance at any speed
- Rugged TENV construction for long life and reliability
- Non-contact sealed ball bearings for improved efficiency and smooth operation
- Replaceable brushes extend product life cycle
- 2 Pole construction to support high speed applications
- Low ripple tachometer options for speed regulation

ElectroCraft G240 Series

The 240 series offers reliable performance in a small package for your low voltage, lower torque range applications. This series utilizes mechanically aligned electromagnetics to provide consistent speed in either rotation. The 240 series is one of ElectroCrafts most widely used products worldwide.

Typical Applications

- Printers
- Tape Drives
- Semiconductor Processing
- Robotics
- X-ray Equipment
- Medical Pumps
- Light Industrial



A Rockwell Automation Business

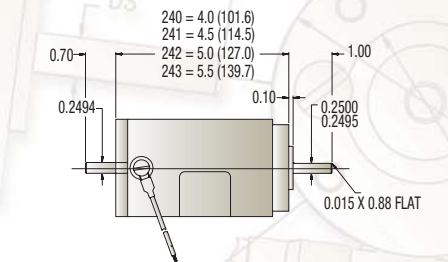
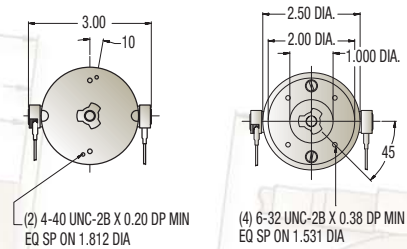
G240 Series Performance Specifications

Motor Ratings	240	241	242	243
Continuous Stall Torque (Ncm)	20.5	26.8	35.3	38.8
Continuous Stall Torque (oz-in)	29	38	50	55
Peak Torque (Ncm)	169.5	197.7	247.2	282.5
Peak Torque (oz-in)	240	280	350	400
Maximum Terminal Voltage (V)	60	60	60	60
Maximum Operating Speed (rpm)	5000	5000	5000	5000

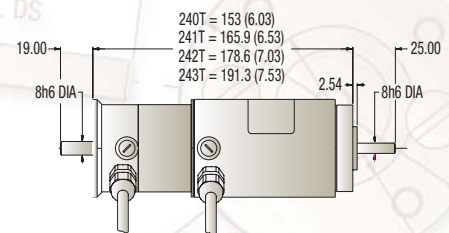
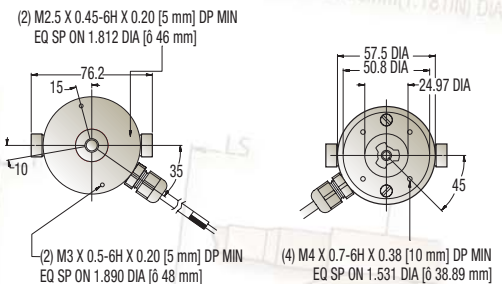
Mechanical Data				
Rotor Inertia (kg cm ²)	0.268	0.353	0.438	0.565
Rotor Inertia (oz-in-sec ²)	0.0038	0.0050	0.0062	0.0080
Damping Constant (Ncm/krpm)	0.071	0.106	0.141	0.212
Damping Constant (oz-in/krpm)	0.10	0.15	0.20	0.30
Thermal Resistance (C/watt)	5.0	4.6	4.2	4.0
Maximum Armature Temperature (°C)	155	155	155	155
Maximum Friction Torque (Ncm)	2.1	2.1	2.1	2.1
Maximum Friction Torque (oz-in)	3	3	3	3
Maximum Radial Load (25mm from bearing) (Kg)	4.5	4.5	4.5	4.5
Maximum Radial Load (25mm from bearing) (lbs)	10	10	10	10
Weight (Kg)	1.0	1.0	1.0	1.0
Weight (lbs)	2.1	2.1	2.1	2.1

Electrical Data	A	B	C	A	B	C	A	B	C	A	B	C
Kt Torque Constant $\pm 10\%$ (Ncm/amp)	5.4	6.8	13.5	6.6	8.3	10.5	8.3	10.4	13.3	9.7	12.5	15.3
Kt Torque Constant $\pm 10\%$ (oz-in/amp)	7.7	9.6	19.2	9.3	11.7	14.9	11.7	14.7	18.8	13.8	17.7	21.6
Ke Voltage Constant $\pm 10\%$ (V/Krpm)	5.7	7.1	14.2	6.9	8.7	11.0	8.7	10.9	13.9	10.2	13.1	16.0
Terminal Resistance (ohms)	1.2	1.6	5.4	1.3	1.8	2.7	1.4	2	3	1.6	2.9	3.4
Maximum Continuous Current (A)	3.8	3.0	1.9	4.1	3.2	2.6	4.2	3.4	2.7	4.0	3.1	2.3
Maximum Peak Current (A)	31	24	13.9	30	24	19	31	24	19	34	26	21
Armature Inductance (mH)	1.9	3.0	8.2	2.6	4.1	6.5	3.3	5.2	8.3	4.1	6.8	10.3

Tachometer Electrical Data - (optional)				
Tachometer Specifications	T1	T2	T3	T4
Ke Voltage Constant $\pm 10\%$ (V/Krpm)	3	7	14	21
Terminal Resistance (ohms)	550	600	720	950
Ripple Peak-to-Peak at 1000 rpm (%)	5	5	5	5
Increase Motor Inertia by: (kg cm ²)	0.099	0.099	0.099	0.099
Increase Motor Inertia by: (oz-in-sec ²)	0.0014	0.0014	0.0014	0.0014

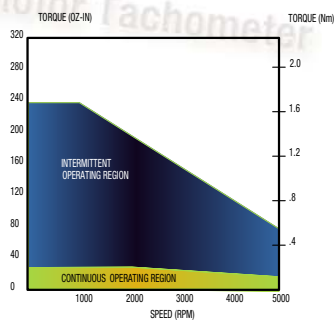


MOTOR ONLY OPTIONS SHOWN: ENGLISH MOUNTING, FLYING LEADS (19" STD)

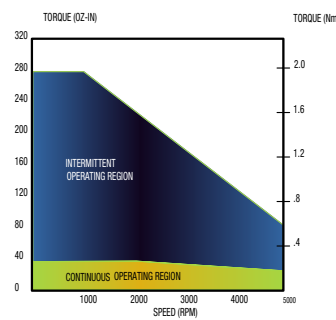


MOTOR TACHOMETER OPTIONS SHOWN: METRIC MOUNTING, PG GLAND LEAD LENGTH (701 (27.5") STD)

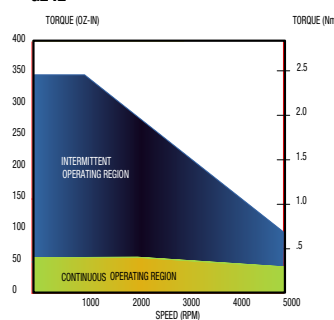
G240



G241



G242



G243

