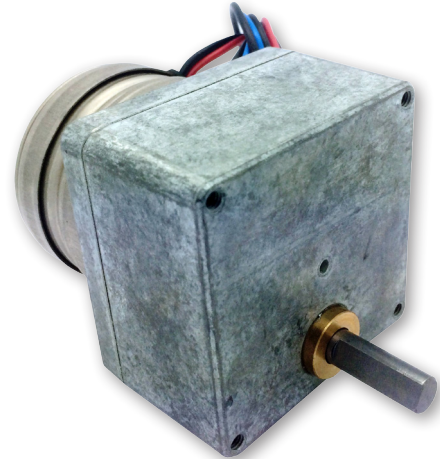


MRIG-60/57 series - Geared Stepper Motor

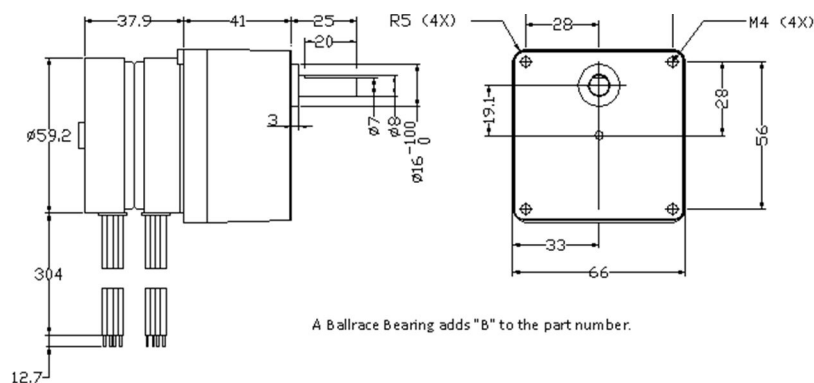
MRIG geared permanent magnet stepper motor provides an excellent combination of reliable operation and economical prices. The choice of gear ratios enables the design engineer to choose a resolution ideally suited to the application requirements.

- High performance permanent magnet stepper motor.
- Both Uni-polar and bipolar motor types.
- Precision gear head incorporating metal gears for optimum torque transmission.
- Wide range of standard gear ratio options available from stock for increased resolution and torque.
- Choice of Standard or Ball Race bearings available on request.
- A number of matched drives and controllers available.

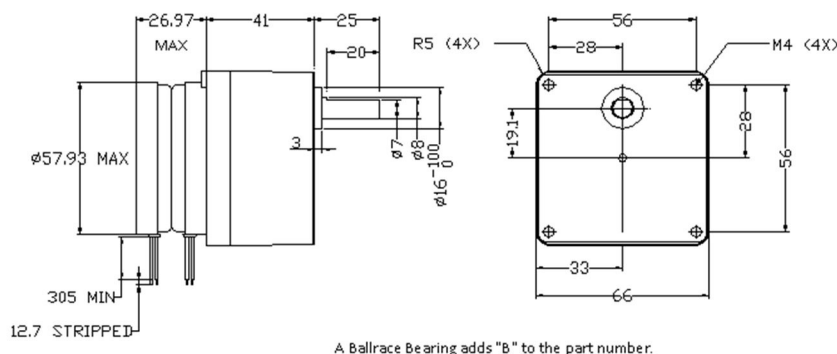


Outline dimensions (mm)

MRIG-60 series



MRIG-57 Series



MRIG-60L24 Uni-Polar Geared Stepper Motor

60L24 Uni-Polar motor specifications

Standard motor versions		60L024B-1U	60L024B-2U	Step rate @ typical working torque L/R : 100 Hz L/4R: 225 Hz
Number of phases	Ohm	4	4	
Rated voltage (L/R Drive)	V	5	12	
Current per phase	mA	1086	458	
Resistance per phase	Ohm	4.6	26.2	
Inductance per phase	mH	6	32	

MRIG-60L24 Uni-Polar geared stepper motor specification and part numbers

Geared Stepper Motor	Ratio	Steps per rev at Output	Holding Torque Ncm	Typical Working Torque Ncm	Maximum Continuous Torque	Efficiency
MRIG02	5:1	120	65	21.6	200	72
G06	25:2	300	162	54	200	72
G11	25:1	600	325	97	300	65
G17	50:1	1200	650	195	300	65
G22	100:1	2400	1300	348	300	58
G23	125:1	3000	1625	435	300	58
G27	250:1	6000	3250	780	300	52
G34	500:1	12000	6500	1560	400	52
G39	1000:1	24000	13000	3120	400	52

MRIG-60L24 Bi-Polar Geared Stepper Motor

60L24 Bi-Polar motor specifications

Standard motor versions		60L024B-1B	60L024B-2B	Step rate @ typical working torque L/R : 100 Hz L/4R: 225 Hz
Number of phases	Ohm	4	4	
Rated voltage (L/R Drive)	V	5	12	
Current per phase	mA	1086	458	
Resistance per phase	Ohm	4.6	26.2	
Inductance per phase	mH	11.5	65	

MRIG-60L24 Bi-Polar geared stepper motor specification and part numbers

Geared Stepper Motor	Ratio	Steps per rev at Output	Holding Torque Ncm	Typical Working Torque Ncm	Maximum Continuous Torque	Efficiency
MRIG02	5:1	120	84	28.8	200	72
G06	25:2	300	211	72	200	72
G11	25:1	600	422	130	300	65
G17	50:1	1200	845	260	300	65
G22	100:1	2400	1690	464	300	58
G23	125:1	3000	2112	580	300	58
G27	250:1	6000	4225	1040	300	52
G34	500:1	12000	8450	2080	400	52
G39	1000:1	24000	16900	4160	400	52

MRIG-60L48 Uni-Polar Geared Stepper Motor

60L48 Uni-Polar motor specifications

Standard motor versions		60L048B-1U	60L048B-2U	Step rate @ typical working torque L/R : 100 Hz L/4R: 225 Hz
Number of phases	Ohm	4	4	
Rated voltage (L/R Drive)	V	5	12	
Current per phase	mA	1086	458	
Resistance per phase	Ohm	4.6	26.2	
Inductance per phase	mH	6.4	33	

MRIG-60L48 Uni-Polar geared stepper motor specification and part numbers

Geared Stepper Motor	Ratio	Steps per rev at Output	Holding Torque Ncm	Typical Working Torque Ncm	Maximum Continuous Torque	Efficiency
MRIG02	5:1	120	91	3	200	72
G06	25:2	300	228	81	200	72
G11	25:1	600	457	146	300	65
G17	50:1	1200	915	292	300	65
G22	100:1	2400	1830	522	300	58
G23	125:1	3000	2287	652	300	58
G27	250:1	6000	4575	1170	300	52
G34	500:1	12000	9150	2340	400	52
G39	1000:1	24000	18300	4680	400	52

MRIG-60L48 Bi-Polar Geared Stepper Motor

60L48 Bi-Polar motor specifications

Standard motor versions		60L048B-1B	60L048B-2B	Step rate @ typical working torque L/R : 100 Hz L/4R: 225 Hz
Number of phases	Ohm	4	4	
Rated voltage (L/R Drive)	V	5	12	
Current per phase	mA	1086	458	
Resistance per phase	Ohm	4.6	26.2	
Inductance per phase	mH	12	68.6	

MRIG-60L48 Bi-Polar geared stepper motor specification and part numbers

Geared Stepper Motor	Ratio	Steps per rev at Output	Holding Torque Ncm	Typical Working Torque Ncm	Maximum Continuous Torque	Efficiency
MRIG02	5:1	120	107	36	200	72
G06	25:2	300	267.5	90	200	72
G11	25:1	600	535	162.5	300	65
G17	50:1	1200	1070	325	300	65
G22	100:1	2400	2140	580	300	58
G23	125:1	3000	2675	725	300	58
G27	250:1	6000	5350	1300	300	52
G34	500:1	12000	10700	2600	400	52
G39	1000:1	24000	21400	5200	400	52

MRIG-57L48 Uni-Polar Geared Stepper Motor

57L48 Uni-Polar motor specifications

Standard motor versions		57L048B-1U	57L048B-2U	Step rate @ typical working torque L/R : 100 Hz L/4R: 225 Hz
Number of phases	Ohm	4	4	
Rated voltage (L/R Drive)	V	5	12	
Current per phase	mA	793	333	
Resistance per phase	Ohm	6.3	36	
Inductance per phase	mH	7.0	36.8	

MRIG-57L48 Uni-Polar geared stepper motor specification and part numbers

Geared Stepper Motor	Ratio	Steps per rev at Output	Holding Torque Ncm	Typical Working Torque Ncm	Maximum Continuous Torque	Efficiency
MRIG02	5:1	120	49	19.8	200	72
G06	25:2	300	122.5	49.5	200	72
G11	25:1	600	245	89.375	300	65
G17	50:1	1200	490	178.75	300	65
G22	100:1	2400	980	319	300	58
G23	125:1	3000	1225	398.75	300	58
G27	250:1	6000	2450	715	300	52
G34	500:1	12000	4900	1430	400	52
G39	1000:1	24000	9800	2860	400	52

MRIG-57L48 Bi-Polar Geared Stepper Motor

57L48 Bi-Polar motor specifications

Standard motor versions		57L048B-1B	57L048B-2B	Step rate @ typical working torque L/R : 100 Hz L/4R: 225 Hz
Number of phases	Ohm	4	4	
Rated voltage (L/R Drive)	V	5	12	
Current per phase	mA	793	333	
Resistance per phase	Ohm	6.3	36	
Inductance per phase	mH	14	78.5	

MRIG-57L48 Bi-Polar geared stepper motor specification and part numbers

Geared Stepper Motor	Ratio	Steps per rev at Output	Holding Torque Ncm	Typical Working Torque Ncm	Maximum Continuous Torque	Efficiency
MRIG02	5:1	120	55	18	200	72
G06	25:2	300	137.5	45	200	72
G11	25:1	600	450	81.25	300	65
G17	50:1	1200	450	162.5	300	65
G22	100:1	2400	450	290	300	58
G23	125:1	3000	450	362.5	300	58
G27	250:1	6000	600	650	300	52
G34	500:1	12000	600	1300	400	52
G39	1000:1	24000	600	2600	400	52