

MRIG series geared permanent magnet stepper motors

MRIG geared permanent magnet stepper motors provide an excellent combination of low cost and reliable operation. The choice of gear ratios enables the design engineer to choose a resolution ideally suited to the application requirements. As well as providing increased resolution and torque, the use of a gearhead increases the motor's capability to handle high inertia loads, since the load inertia reflected at the motor shaft is reduced by the square of the gear ratio.



Geared Stepper Motor	Ratio	Steps per rev. at output	Holding Torque (Ncm)	Max Working Torque (Ncm)	Typical Working Torque (Ncm)
MRIG02....	5:1	240	31	23	16
-G06	25:2	600	77	59	41
-G11	25:1	1,200	138	106	73
-G17 using ID35	50:1	2,400	276	211	146
-G22 stepper motor	100:1	4,800	493	377	261
-G23	125:1	6,000	616	400	326
-G27	250:1	12,000	700	600	500
-G34	500:1	24,000	700	700	700

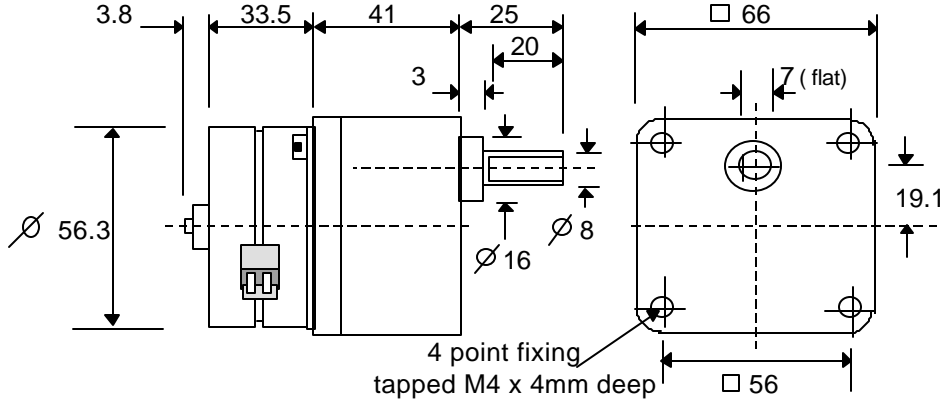
Motor Options:	ID35-014	ID35-114
Number of phases	4	4
Current per phase (Amps)	0.24	0.6
Resistance per phase (Ohms)	47	7.7
Inductance per phase (m H)	400	63
Rotor Inertia (Kgcm ²)	0.045	0.045
Step rate @ typical torque steps/sec	60	600
using Supply rail voltage (Vdc)	12	24
Driver type	Uni-polar(L/R)	Uni-polar(L/4R)
Driver model number	SAA1027	EM162

Geared Stepper Motor	Ratio	Steps per rev. at output	Holding Torque (Ncm)	Max Working Torque (Ncm)	Typical Working Torque (Ncm)
MRIG02....	5:1	240	71	36	29
-G06	25:2	600	178	90	72
-G11	25:1	1,200	322	163	130
-G17 using MV82	50:1	2,400	400	325	260
-G22 stepper motor	100:1	4,800	500	500	400
-G23	125:1	6,000	700	700	500
-G27	250:1	12,000	700	700	600
-G34	500:1	24,000	700	700	700

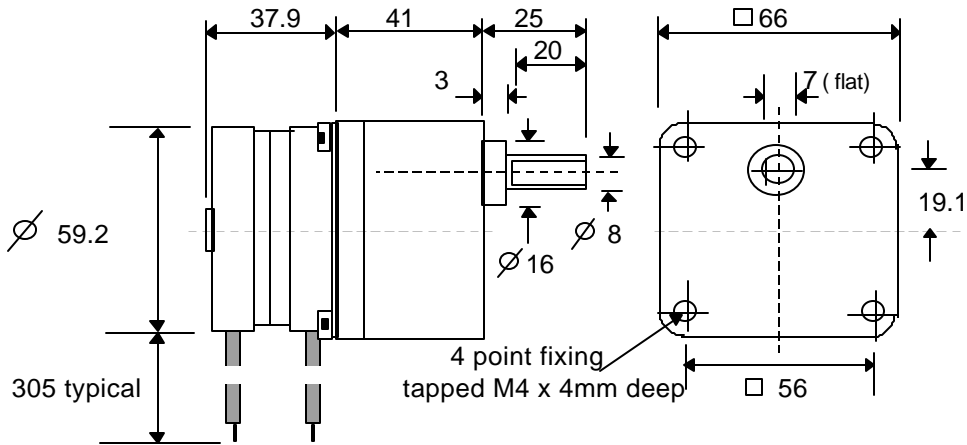
Motor Options:	MV82801-P2	MV82801-P1
Number of phases	4	4
Current per phase (Amps)	0.46	1
Resistance per phase (Ohms)	26	4.6
Inductance per phase (m H)	33	6
Rotor Inertia (Kgcm ²)	0.095	0.095
Step rate @ typical torque steps/sec	200	500
using Supply rail voltage (Vdc)	24	24
Driver type	Uni-polar(L/2R)	Uni-polar Chopped constant current drive
Driver model number	EM162	TM162C

Geared permanent magnet stepper motors

MRIG-ID35 series

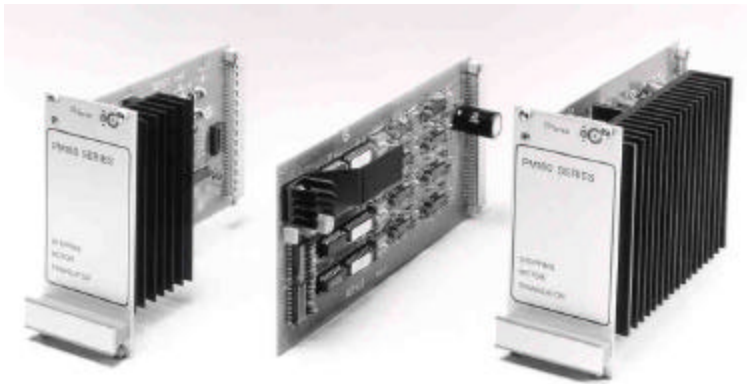


MRIG-MV82 series



Stepper motor drive modules

M series



Version without front panel Version with front panel	MSE 422 PM 422	EM 162 PM 162	TM 162C PM 162C	TM 164C PM 164C
Number of motors per drive	4	1	1	1
Type of drive	Bi-polar	Uni-polar	Uni-polar	Uni-polar
Current forcing technique	Chopped	L / 4R	Chopped	Chopped
Maximum Motor supply (Vdc)	30	30	30	50
Max. Current per phase (Amps)	0.6	2	2	4.5
Eurocard dimensions: height (mm)	100	100	100	100
length (mm)	220	160	160	220
External clock / direction signals	TTL / CMOS	TTL / CMOS	TTL / CMOS	TTL / CMOS
Optional internal clock	no	add EM210	add EM210	type TM165C