

# MRIG Series geared dc servo motors

MRIG geared dc servo motors are ideally suited to light industrial applications where a combination of high strength and accurate control is required.

The motors utilise a skew wound ironless rotor construction and high strength magnets to provide smooth low speed operation with the consequential benefits of low running noise and long life.

A wide range of options, particularly on the more powerful M66 series enable the design engineer to select the optimum feedback device such as a dc tachogenerator for analogue control or an incremental encoder when digital control of speed or position is required.



## MRIG Gearbox with 40 mm diameter motors

### Using 9904 120 16 series

Gearhead	Ratio	Rated Speed (rpm)	Rated Torque (Ncm)	Peak Torque (Ncm)
MRIG02....	5:1	450	7	23
06	25:2	180	18	59
11	25:1	90	33	106
17	50:1	45	65	211
22	100:1	23	116	377
23	125:1	18	145	471
27	250:1	9	260	600
34	500:1	5	520	700

### Using 9904 120 15 series

Rated Speed (rpm)	Rated Torque (Ncm)	Peak Torque (Ncm)	Torque Factor (Kf)
800	9	48	3.6
300	23	120	9
150	40	210	16
80	84	400	32
40	150	500	58
30	180	500	72.5
15	300	600	130
8	600	700	260

### Standard Voltage Options:

dc servo motor	9904 120 16111	12Vdc
dc servo motor	9904 120 16113*	12Vdc
dc servo motor	9904 120 16206	24Vdc
dc servo motor	9904 120 15211	24Vdc

\*Note: May be operated @ 15Vdc when a 25% increase in speed and torque is obtained.

### Torque Constant

3.5 x Kf ( Ncm / A )
3.5 x Kf ( Ncm / A ) Version with rear shaft
7.0 x Kf ( Ncm / A )
4.6 x Kf ( Ncm / A )

## MRIG Gearbox with 66 mm diameter motors

### Using M66 C series

Geared dc servo motor	Ratio	Rated Speed (rpm)	Rated Torque (Ncm)	Peak Torque (Ncm)	Torque Factor (Kf)
MRIG02....	5:1	320	43	97	3.6
06	25:2	128	108	243	9
11	25:1	64	195	400	16
17	50:1	32	390	500	32
22	100:1	16	400	600	58
23	125:1	13	500	650	72.5
27	250:1	6	600	700	130
34	500:1	3	700	700	260

### Standard Voltage Options:

dc servo motor	M66CE-12	12Vdc
dc servo motor	M66CE-24	24Vdc
	M66DB	Version with parking brake
	M66C12-T or C24-T	Version with integral dc tachogenerator
	M66CI 100T or CI 500T	Version with dual track incremental encoder (TTL signals)
	M66CI 500L	Version with dual track encoder + index (5V differential signals)

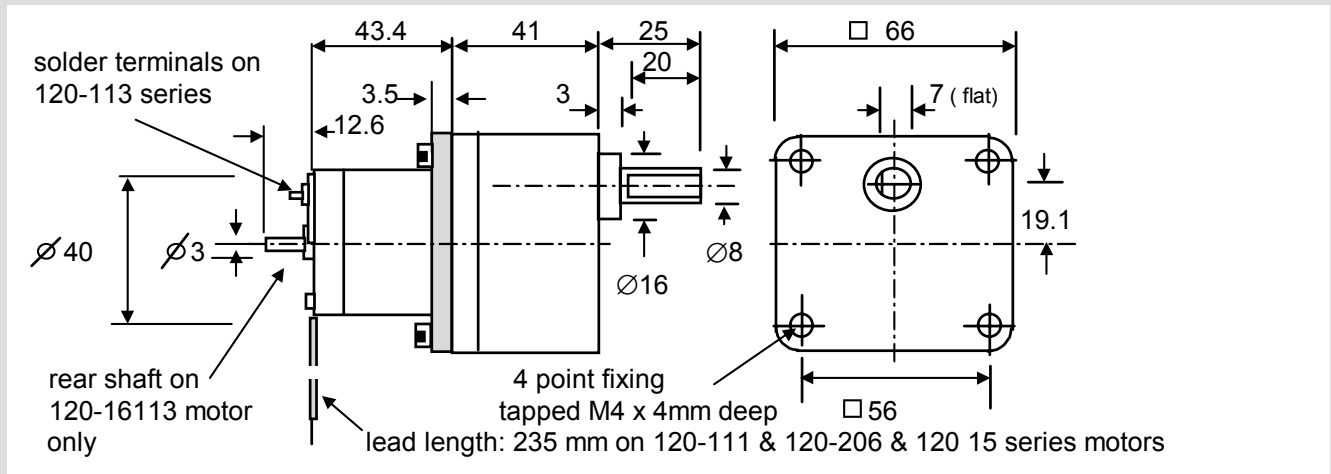
↑  
Insert line: 100 or 500ppr depending on type

### Torque Constant

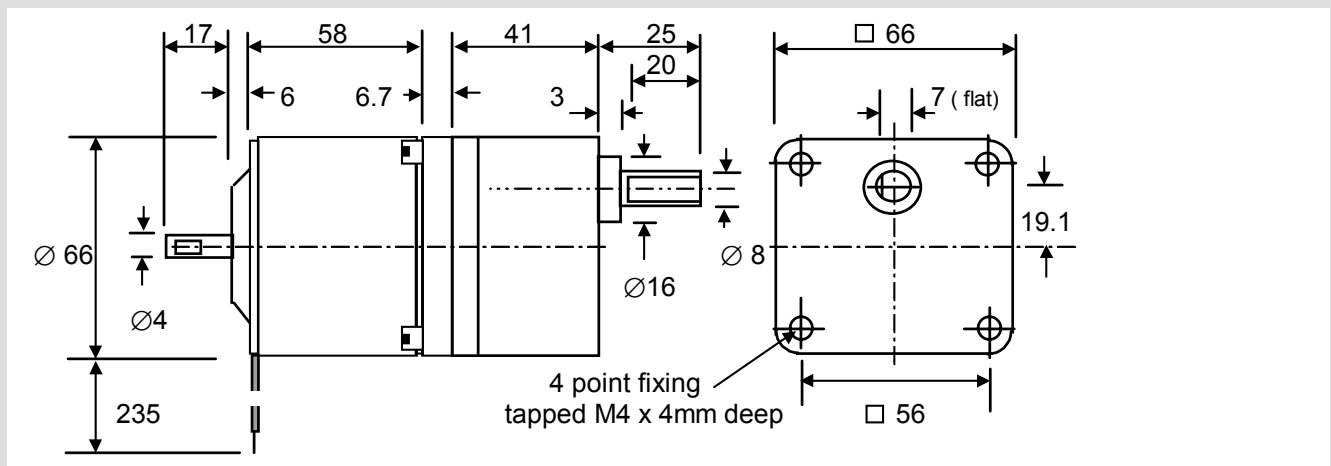
4.1 x Kf ( Ncm / A ) Version with rear shaft
9.8 x Kf ( Ncm / A ) Version with rear shaft

## Dimensions of MRIG series geared dc servo motors: mm

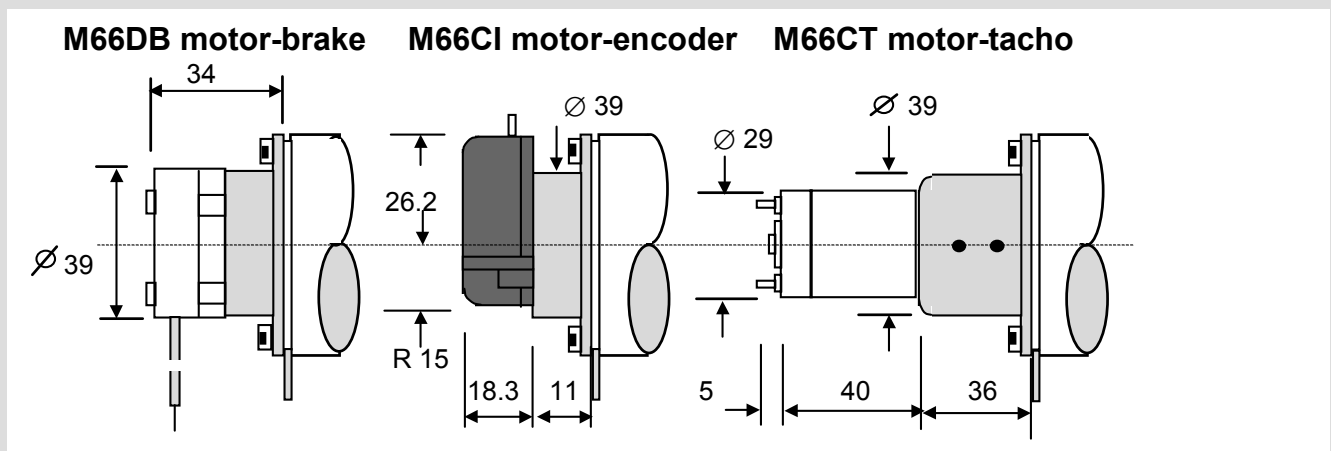
### MRIG + 40 mm dia motors- 120 16 & 120 15 series geared dc servo motor



### MRIG + 66 mm dia. motor- M66 Series geared dc servo motor



### Additional options for 66 mm diameter motor:



**Parking Brake :**  
Off when energised  
Voltage Options: 12 or 24 Vdc

**Encoder**  
Choice of 100 or 500 ppr.

**dc tachogenerator**  
3.25 V/ 1000 rpm :type: T3  
6.5 V/ 100 rpm : type: T6