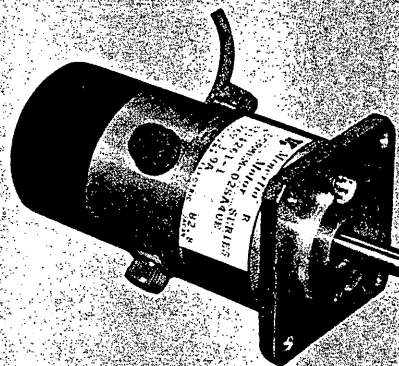




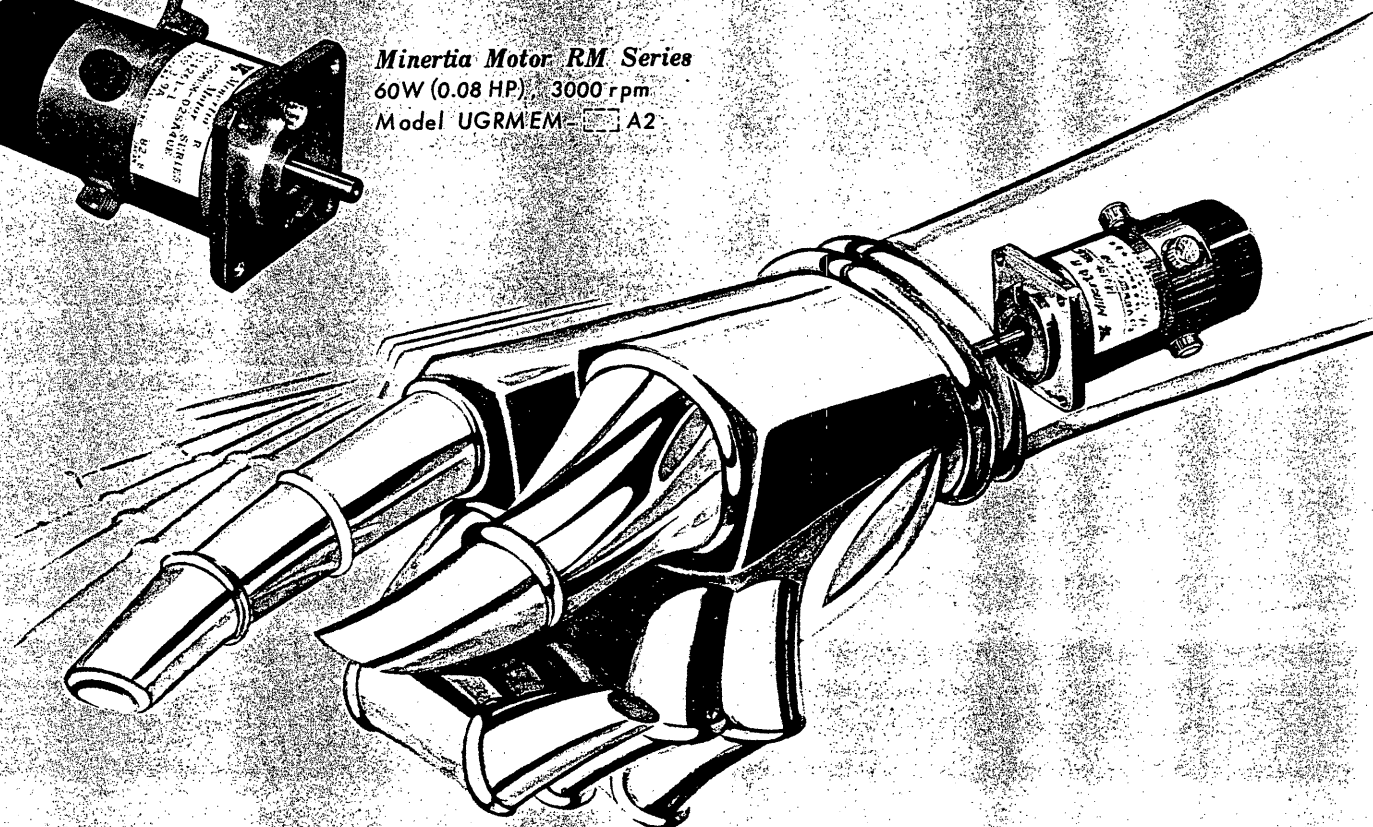
Excellent Performance/Size Ratio in a Small Package

Minertia MotorsTM RM Series

for Industrial Robot Drives



Minertia Motor RM Series
60W (0.08 HP), 3000 rpm
Model UGRMEM-□□A2



Minertia motor is Yaskawa's trademark for minimum inertia DC servomotors. RM series is a new line introduced for integration into robots as an articulate power drive. The RM series features small size, light weight, yet excellent torque/weight and torque/volume rating, in addition to ideal performance characteristics for servodrive applications.

FEATURES

- 50% Less Weight for the Output Equal to Motors Previously Available

Even with built-in feedback unit such as DC tachometer generator and encoder, the unit size is 219 mm (8.63 inches) in total length, 120 mm (4.73 inches) diameter and 2.6 kg (5.7 lb.) in weight for a 300W (0.4 HP) motor. The weight is a half of that of a conventional motor having the same output.

- Rare Earth Magnet for Quality Performance

Rare earth magnets and iron core in a TENV motors assures high efficiency and superb control performance where weight and volume are at a premium.

RATINGS AND SPECIFICATIONS

- Time Rating: Continuous
- Ambient Temperature: -10 to +40°C

Items	Minertia Motor Model	UGRMEM				
		02SA2	02MA2	04SA2	04MA2	08SA2
Rated Output (W) (HP)		60 (0.08)	100 (0.13)	120 (0.16)	200 (0.27)	300 (0.40)
Rated Torque (kg-cm) (lb.-in.)		1.95 (30)	3.25 (50)	3.9 (60)	6.5 (100)	9.74 (150)
Rated Speed (rpm)		3000	3000	3000	3000	3000
Rated Voltage (V)		25	32	32	42	49.6
Rated Current (A)		3.9	4.5	5.3	6.2	7.5
Power Rate (kW/sec)		2.86	4.45	1.87	2.97	2.20
Momentary Peak Torque (kg-cm) (lb.-in.)		11.2 (150)	18.4 (250)	22.5 (300)	37.1 (500)	54 (750)
Momentary Peak Current (A)		19.5	22.5	26.5	31	37.5
Momentary Max. Speed (rpm)		4000	4000	4000	4000	4000
Armature Inertia (J) (lb.-in.-sq./10 ³)		0.16 (2.22)	0.285 (3.96)	0.98 (13.6)	1.71 (23.7)	5.2 (72.2)

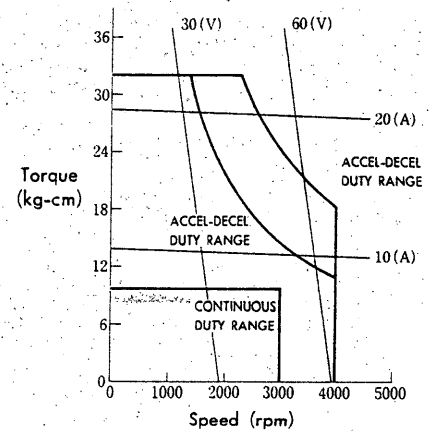
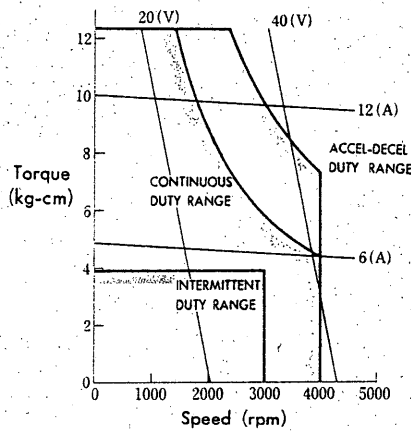
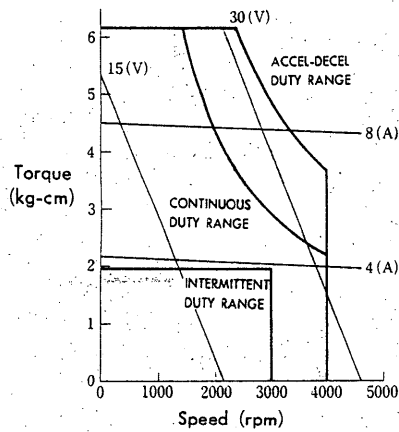
Dimension 10 (3)
Dimension 11 (3)
0.2MA2
0.5MA2

TORQUE-SPEED CHARACTERISTICS

UGRMEM-02SA2

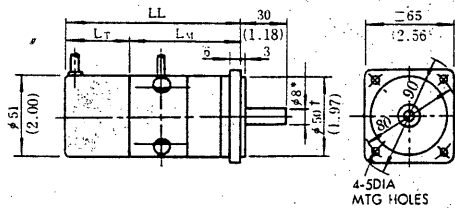
• Type UGRMEM-04SA2

• Type UGRMEM-08SA2

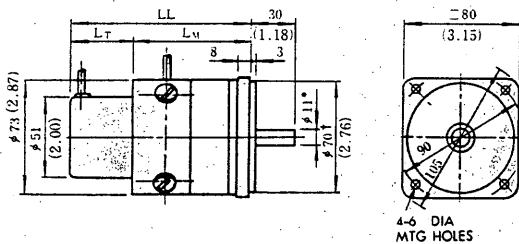


DIMENSIONS in mm (inches)

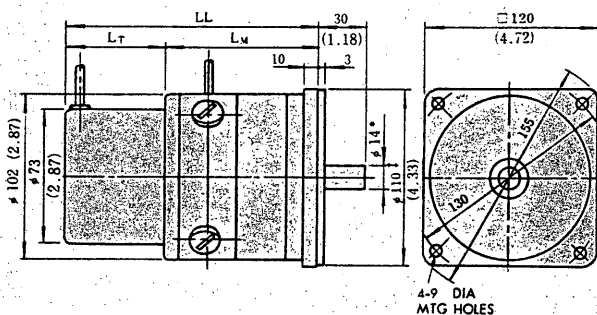
• Type UGRMEM-02



• Type UGRMEM-04



• Type UGRMEM-08



Notes :

1. ϕ Denotes diameter, and \square , square dimensions.
2. Tolerance on shaft and flange rabbet in mm.

$$* \begin{matrix} 0 \\ -0.015 \end{matrix} \quad \dagger \begin{matrix} 0 \\ -0.030 \end{matrix} \quad \ddagger \begin{matrix} 0 \\ -0.035 \end{matrix}$$

Motor Type UGRMEM-	Detector Combined	Dimensions mm (inches)		
		LL	L _M	L _T
02SA20E	Encoder	115 (4.52)	76	39
02SA207	DC Generator	128 (5.04)	76	52
02MA20E	Encoder	143 (5.63)	104	39
02MA207	DC Generator	156 (6.14)	104	52
04SA20E	Encoder	120 (4.72)	81	39
04SA207	DC Generator	133 (5.24)	81	52
04MA20E	Encoder	146 (5.51)	107	41
04MA207	DC Generator	159 (6.26)	107	52
08SA20E	Encoder	174 (6.85)	93	81
08SA207	DC Generator	190 (7.48)	93	97



A Better Tomorrow for Industry through Automation

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Due to ongoing product modification / improvement, data subject to change without notice.