

## Product Discontinuation Notices

March 2, 2009

Servomotors/Servo Drivers

No.2009091E

### Discontinuation Notice of AC Servomotors/drivers. OMNUC U series

#### Product Discontinuation



AC Servo Motor  
**R88M-U[]**

AC Servo Driver  
**R88D-U[]**



#### Recommended Replacement

AC Servo Motor  
**R88M-G[]**

AC Servo Driver  
**R88D-G[]**

**Discontinuation date : The end of March ,2010**

#### Caution on recommended replacement

- When using the recommended replacement products, all of the motor, driver and cables need to be changed.
- Some of the recommended replacement products are different in external and mounting dimensions.
- When using the recommended replacement products, parameter settings are required.

#### Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
R88M-G	--	*	--	*	*	*	-
R88D-G[]	*	--	--	--	*	*	--

\*\* : Fully compatible

\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

### Product Discontinuation and recommended replacement (Typical model)

Product discontinuation	Recommended replacement
R88M-U10030HA	R88M-G□(50w to 750w)
R88D-UP04HA	R88D-GT□
R88M-U1K530H	R88M-G1K530T
R88D-UT40H	R88D-GT15H

### Body color

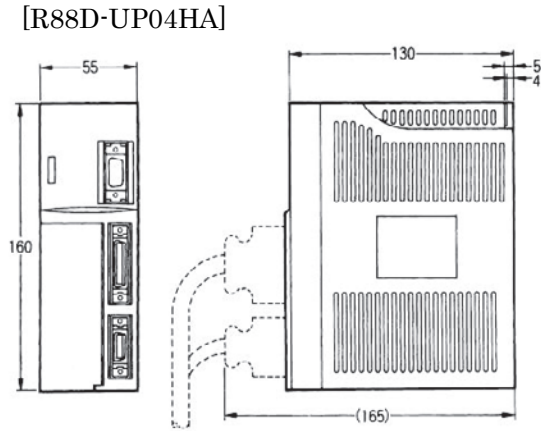
Product discontinuation	Recommendable replacement
R88M-U□ : Black	R88M-G□(50w to 750w) : Metallic
R88D-U□ : Ivory white	R88M-G□(1.0kw min) : Black
	R88D-GT□ : Ivory white

### Dimensions (Typical model)

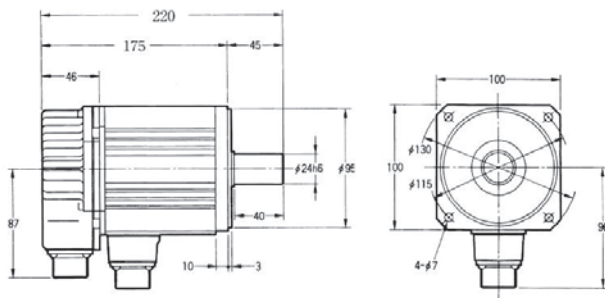
Product discontinuation R88D-U□ / R88M-U□	Recommendable replacement R88D-GT□ / R88M-G□
<p>[R88M-U10030HA]</p>	<p>[R88M-G10030H]</p>

**Dimensions (Typical model)**

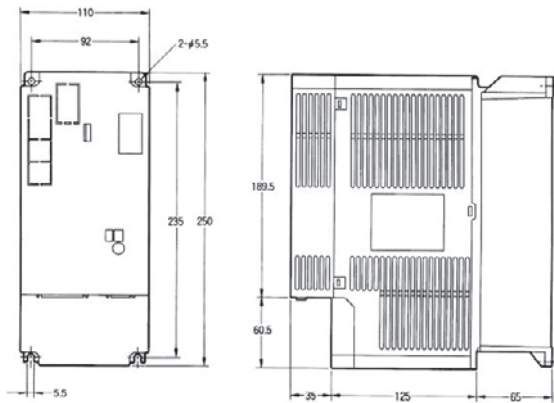
**Product discontinuation  
R88D-U[] / R88M-U[]**



[R88M-U1K530H]

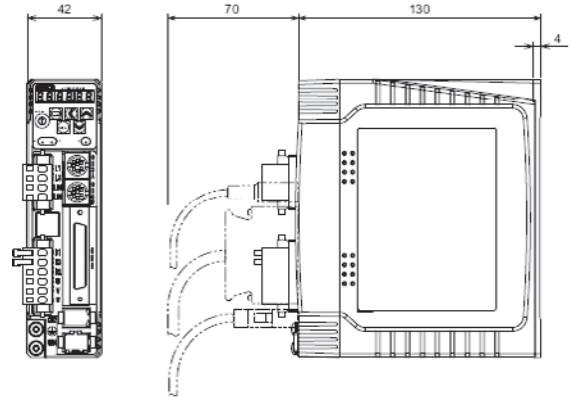


[R88D-UT40H]

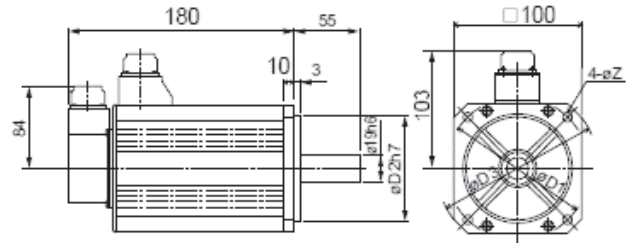


**Recommendable replacement  
R88D-GT[] / R88M-G[]**

[R88D-GT01H]

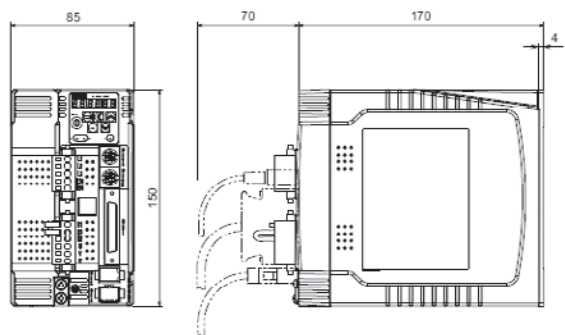


[R88M-G1K530T]

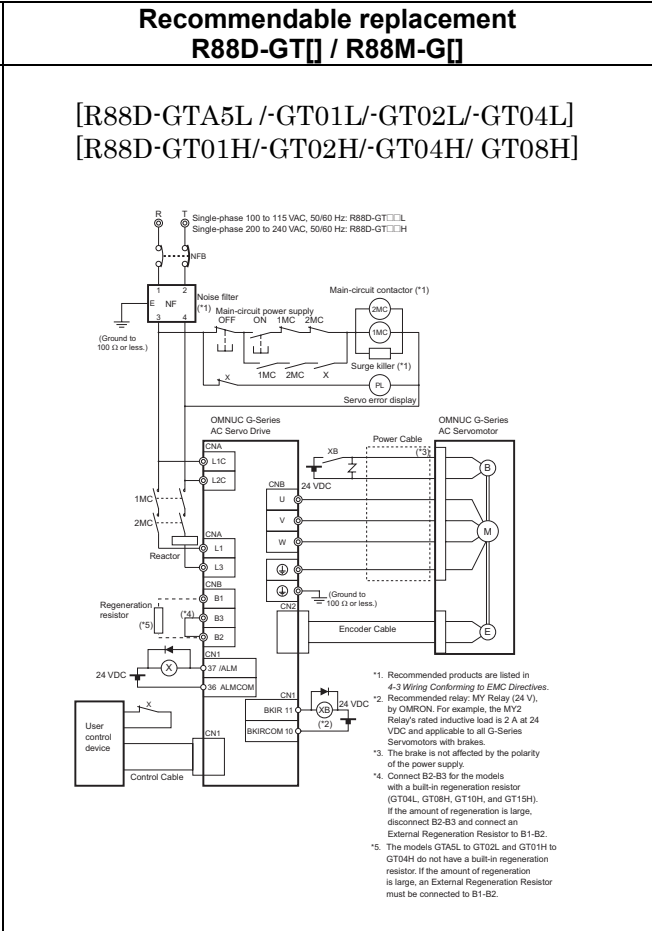
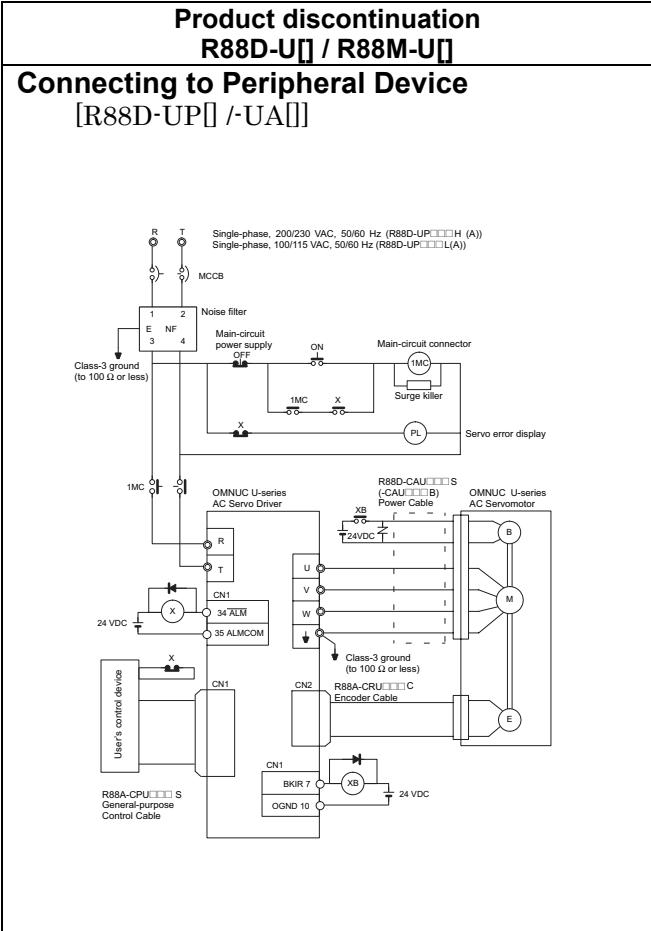


	D1	D2	D3	Z
Dimensions(mm)	115	95	135	9

[R88D-GT15H]



# Wire Connection



- \*1. Recommended products are listed in 4-3 Wiring Conforming to EMC Directives.
- \*2. Recommended relay, MY Relay (24 V), by OMRON. For example, the MY2 Relay's rated inductive load is 2 A at 24 VDC and applicable to all G-Series Servomotors with brakes.
- \*3. The brake is not affected by the polarity of the power supply.
- \*4. Connect B2-B3 for the models with a built-in regeneration resistor (GT04L, GT08H, GT10H, and GT15H). If the amount of regeneration is large, disconnect B2-B3 and connect an External Regeneration Resistor to B1-B2.
- \*5. The models GTASL to GT02L and GT01H to GT04H do not have a built-in regeneration resistor. If the amount of regeneration is large, an External Regeneration Resistor must be connected to B1-B2.

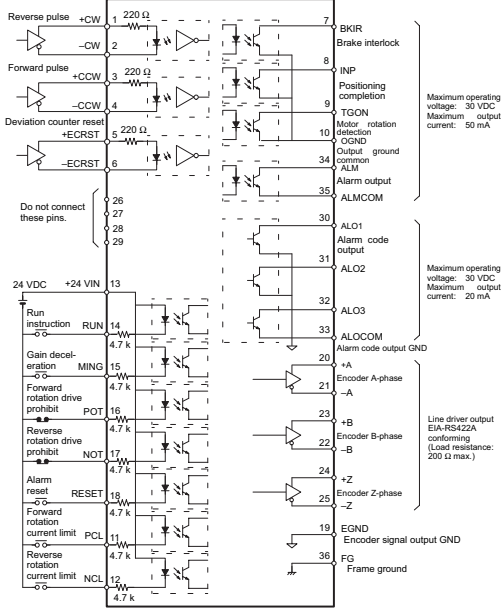


# Wire Connection

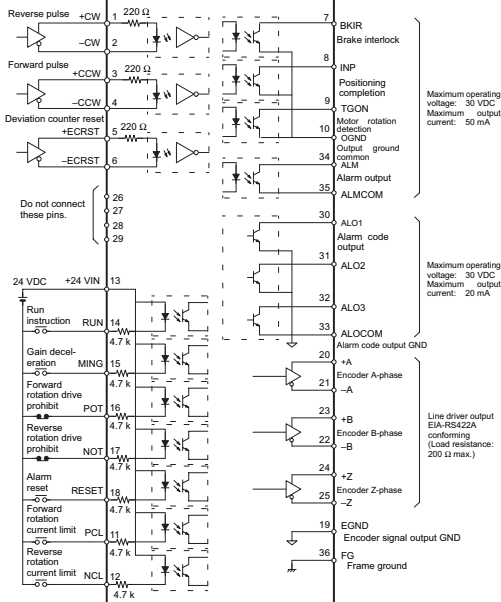
## Product discontinuation R88D-U[]

### Control I/O Signal Connections and External Signal Processing.

#### [R88D-UP[]]



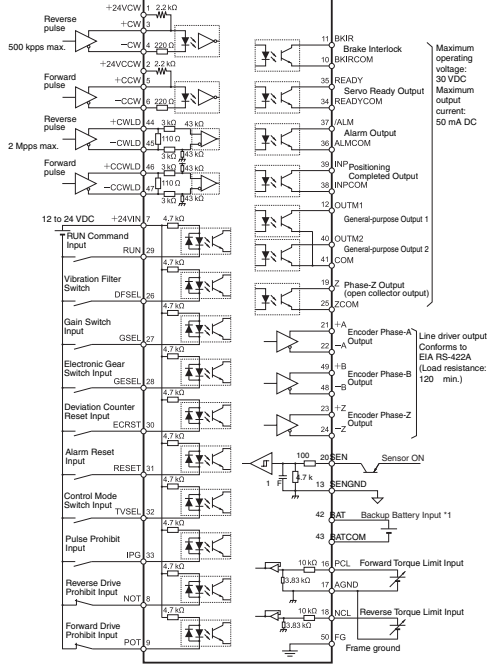
#### [R88D-UT[] (Position Control)]



## Recommendable replacement R88D-GT[]

### Control I/O Signal Connections and External Signal Processing for Position Control.

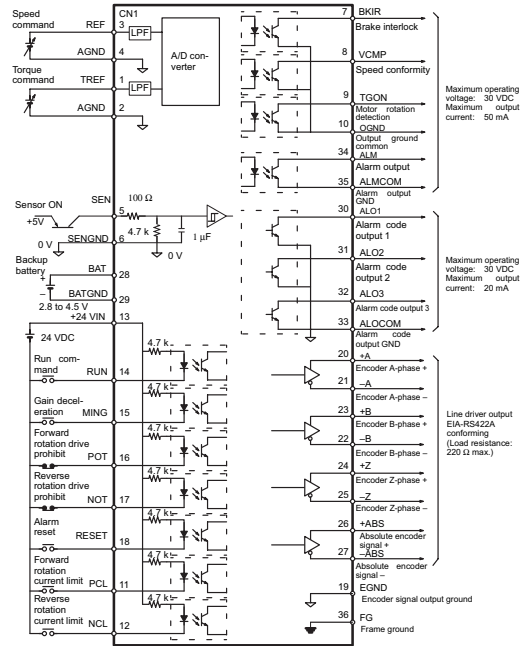
#### [R88D-GT[]]



# Wire Connection

## Product discontinuation R88D-U[] Control I/O Signal Connections and External Signal Processing.

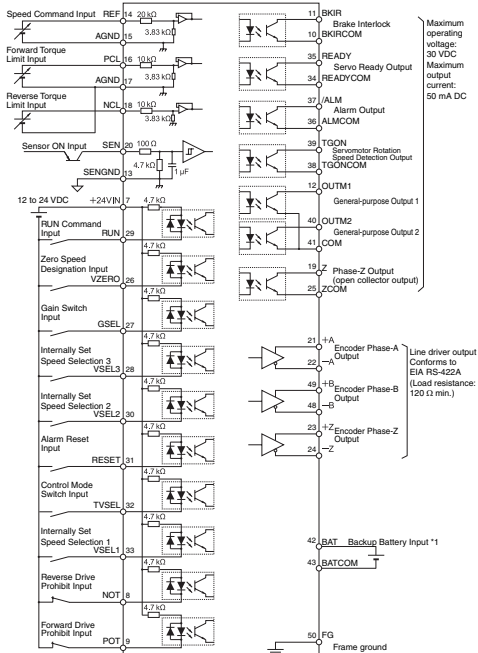
### [R88D-UA[]]



- Note 1. Pins 5, 6, 26, 27, 28, and 29 are used with an absolute encoder.
- Note 2. Pin 36 is not used with models conforming to EC Directives.

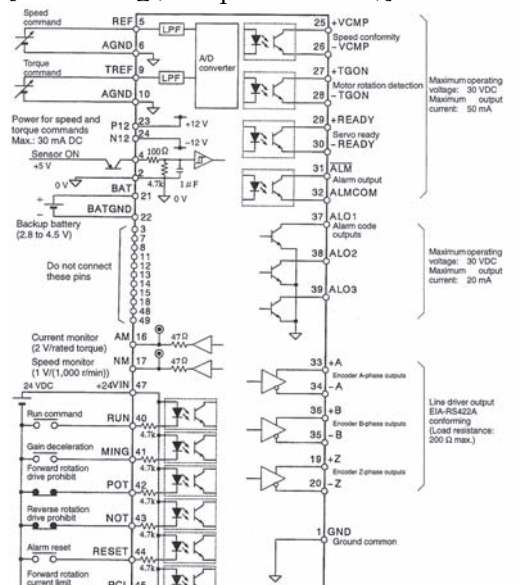
## Recommendable replacement R88D-GT[] Control I/O Signal Connections and External Signal Processing for Speed Control.

### [R88D-GT[]]



\*1 If a backup battery is connected, a cable with a battery is not required.

### [R88D-UT[]](for Speed Control)



- Note 1. Pins 2, 4, 21, and 22 are for use with an absolute encoder.
- Note 2. Pin No. 50 is open for models conforming to the EC Directives. Connect this cable shield to the connector case and ground it directly using a clamp.





## Characteristics

Product discontinuation R88D-U[]	Recommendable replacement R88D-GT[]
<b>Dielectric strength</b> [R88D-U[]HA/-U[]LA] Between power line terminals and case :1,000 VAC for 1min(20mA max)at 50/60 Hz  [R88D-UT[]/-U[]V/-U[]W] Between power line terminals and case :1,500 VAC for 1min(20mA max)at 50/60 Hz	Between power line terminals and case :1,500 VAC for 1min(20mA max)at 50/60 Hz
<b>Speed control range</b> 1 : 5,000	1 : 5,000
<b>Load fluctuation rate</b> [R88D-UA[]/-UP[]] 0.1% at 0% to 100%(at rated rotation inertia)  [R88D-UT[]] 0.01% at 0% to 100%(at rated rotation inertia)	0.01% at 0% to 100%(at rated rotation inertia)
<b>Voltage fluctuation rate</b> [R88D-U[]HA/-U[]V/-UT[]] 0% at input voltage of 170 to 253 VAC  [R88D-U[]LA/-U[]W] 0% at input voltage of 85 to 125 VAC	[R88D-GT[]H] 0% at input voltage of 170 to 253 VAC  [R88D-GT[]L] 0% at input voltage of 85 to 125 VAC
<b>Temperature fluctuation rate</b> [R88D-UA[]/-UP[]] ±0.2% max. at 0 to 50°C  [R88D-UT[]] ±0.1% max. at 0 to 50°C	±0.2% max. at 0 to 50°C

## Characteristics

Product discontinuation R88M-U□	Recommendable replacement R88M-G□
<b>Operating ambient temperature</b> 0°C to 40°C	0°C to 40°C
<b>Operating ambient humidity</b> 20% to 80% RH(with no condensation)	20% to 80% RH(with no condensation)
<b>Storage ambient temperature</b> [30w to 750w] -10°C to 75°C  [1.0kw min] -20°C to 60°C	[50w to 750w] -20°C to 65°C  [1.0kw min] -20°C to 80°C
<b>Storage ambient humidity</b> [30w to 750w] 20% to 85%RH(with no condensation)  [1.0kw min] 20% to 80% RH(with no condensation)	[50w to 750w] 85% RH max (with no condensation)  [1.0kw min] 80% RH max (with no condensation)
<b>Insulation grade</b> [30w to 750w] Models not conforming to standard : IP-42 Models conforming to EC Directives : IP-44  [1.0kw min] Models not conforming to standard : IP-65 Models conforming to EC Directives : IP-55 (excluding the output shaft rotating section and lead wire ends)	IP65 (excluding the output shaft rotating section and lead wire ends)
<b>Encoder method</b> [30w to 750w] Optical incremental encoder A, B phase: 2,048 pulses/revolution Optical absolute encoder A, B phase: 1,024 pulses/revolution  [1.0kw min] Optical incremental encoder A, B phase: 4,096 pulses/revolution Optical absolute encoder A, B phase: 8,192 pulses/revolution	[50w to 750w] Optical incremental encoder A, B phase: 2,500 pulses/revolution Optical absolute encoder A, B phase: 32,768 pulses/revolution  [1.0kw min] Optical absolute encoder A, B phase: 32,768 pulses/revolution

Product discontinuation	Recommended replacement	Applicable load Inertia (kg·m <sup>2</sup> )		Rated torque (N·m)		Momentary maximum torque (N·m)	
		R88M-U□	R88M-G□	R88M-U□	R88M-G□	R88M-U□	R88M-G□
R88M-U03030HA	R88M-G05030H	6.30E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030HA	R88M-G05030H	7.80E-05	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030HA	R88M-G10030H	1.20E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030HA	R88M-G20030H	3.69E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U40030HA	R88M-G40030H	3.82E-04	7.80E-04	1.27	1.3	3.82	3.67
R88M-U75030HA	R88M-G75030H	1.34E-03	1.74E-03	2.39	2.4	7.1	7.05
R88M-U1K030H	R88M-G1K030T	1.74E-03	2.53E-03	3.18	3.18	9.54	9.1
R88M-U1K530H	R88M-G1K530T	2.47E-03	3.88E-03	4.77	4.77	14.3	12.8
R88M-U2K030H	R88M-G2K030T	3.19E-03	5.19E-03	6.36	6.36	19.1	18.4
R88M-U3K030H	R88M-G3K030T	7.00E-03	1.01E-02	9.55	9.54	27.4	27.0
R88M-U4K030H	R88M-G4K030T	9.60E-03	1.90E-02	12.6	12.6	36.8	36.3
R88M-U5K030H	R88M-G5K030T	1.23E-02	2.67E-02	15.8	15.8	44.4	45.1
R88M-U03030LA	R88M-G05030H	6.30E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030LA	R88M-G05030H	7.80E-05	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030LA	R88M-G10030L	1.20E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030LA	R88M-G20030L	3.69E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U30030LA	R88M-G40030L	3.82E-04	7.80E-04	0.954	1.3	3.72	3.67
R88M-U03030TA	R88M-G05030T	9.20E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030TA	R88M-G05030T	1.02E-04	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030TA	R88M-G10030T	1.30E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030TA	R88M-G20030T	3.70E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U40030TA	R88M-G40030T	4.32E-04	7.80E-04	1.27	1.3	3.82	3.67
R88M-U75030TA	R88M-G75030T	1.25E-03	1.74E-03	2.39	2.4	7.1	7.05
R88M-U1K030T	R88M-G1K030T	1.74E-03	2.53E-03	3.18	3.18	9.54	9.1
R88M-U1K530T	R88M-G1K530T	2.47E-03	3.88E-03	4.77	4.77	14.3	12.8
R88M-U2K030T	R88M-G2K030T	3.19E-03	5.19E-03	6.36	6.36	19.1	18.4
R88M-U3K030T	R88M-G3K030T	7.00E-03	1.01E-02	9.55	9.54	27.4	27.0
R88M-U4K030T	R88M-G4K030T	9.60E-03	1.90E-02	12.6	12.6	36.8	36.3
R88M-U5K030T	R88M-G5K030T	1.23E-02	2.67E-02	15.8	15.8	44.4	45.1
R88M-U03030SA	R88M-G05030T	9.20E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030SA	R88M-G05030T	1.02E-04	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030SA	R88M-G10030S	1.30E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030SA	R88M-G20030S	3.70E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U30030SA	R88M-G40030S	4.32E-04	7.80E-04	0.954	1.3	3.72	3.67

Product discontinuation	Recommended replacement	Applicable load Inertia (kg·m <sup>2</sup> )		Rated torque (N·m)		Momentary maximum torque (N·m)	
		R88M-U□	R88M-G□	R88M-U□	R88M-G□	R88M-U□	R88M-G□
R88M-U03030VA-S1	R88M-G05030H-S2	6.30E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030VA-S1	R88M-G05030H-S2	7.80E-05	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030VA-S1	R88M-G10030H-S2	1.20E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030VA-S1	R88M-G20030H-S2	3.69E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U40030VA-S1	R88M-G40030H-S2	3.82E-04	7.80E-04	1.27	1.3	3.82	3.67
R88M-U75030VA-S1	R88M-G75030H-S2	1.34E-03	1.74E-03	2.39	2.4	7.1	7.05
R88M-U1K030V-S1	R88M-G1K030T-S2	1.74E-03	2.53E-03	3.18	3.18	9.54	9.1
R88M-U1K530V-S1	R88M-G1K530T-S2	2.47E-03	3.88E-03	4.77	4.77	14.3	12.8
R88M-U2K030V-S1	R88M-G2K030T-S2	3.19E-03	5.19E-03	6.36	6.36	19.1	18.4
R88M-U3K030V-S1	R88M-G3K030T-S2	7.00E-03	1.01E-02	9.55	9.54	27.4	27.0
R88M-U4K030V-S1	R88M-G4K030T-S2	9.60E-03	1.90E-02	12.6	12.6	36.8	36.3
R88M-U5K030V-S1	R88M-G5K030T-S2	1.23E-02	2.67E-02	15.8	15.8	44.4	45.1
R88M-U03030WA-S1	R88M-G05030H-S2	6.30E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030WA-S1	R88M-G05030H-S2	7.80E-05	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030WA-S1	R88M-G10030L-S2	1.20E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030WA-S1	R88M-G20030L-S2	3.69E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U30030WA-S1	R88M-G40030L-S2	3.82E-04	7.80E-04	0.954	1.3	3.72	3.67
R88M-U03030XA-S1	R88M-G05030T-S2	9.20E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030XA-S1	R88M-G05030T-S2	1.02E-04	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030XA-S1	R88M-G10030T-S2	1.30E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030XA-S1	R88M-G20030T-S2	3.70E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U40030XA-S1	R88M-G40030T-S2	4.32E-04	7.80E-04	1.27	1.3	3.82	3.67
R88M-U75030XA-S1	R88M-G75030T-S2	1.25E-03	1.74E-03	2.39	2.4	7.1	7.05
R88M-U1K030X-S1	R88M-G1K030T-S2	1.74E-03	2.53E-03	3.18	3.18	9.54	9.1
R88M-U1K530X-S1	R88M-G1K530T-S2	2.47E-03	3.88E-03	4.77	4.77	14.3	12.8
R88M-U2K030X-S1	R88M-G2K030T-S2	3.19E-03	5.19E-03	6.36	6.36	19.1	18.4
R88M-U3K030X-S1	R88M-G3K030T-S2	7.00E-03	1.01E-02	9.55	9.54	27.4	27.0
R88M-U4K030X-S1	R88M-G4K030T-S2	9.60E-03	1.90E-02	12.6	12.6	36.8	36.3
R88M-U5K030X-S1	R88M-G5K030T-S2	1.23E-02	2.67E-02	15.8	15.8	44.4	45.1
R88M-U03030YA-S1	R88M-G05030T-S2	9.20E-05	7.50E-05	0.095	0.16	0.29	0.45
R88M-U05030YA-S1	R88M-G05030T-S2	1.02E-04	7.50E-05	0.159	0.16	0.48	0.45
R88M-U10030YA-S1	R88M-G10030S-S2	1.30E-04	1.53E-04	0.318	0.32	0.96	0.90
R88M-U20030YA-S1	R88M-G20030S-S2	3.70E-04	4.20E-04	0.637	0.64	1.91	1.78
R88M-U30030YA-S1	R88M-G40030S-S2	4.32E-04	7.80E-04	0.954	1.3	3.72	3.67