

FORMOSA®

WORLD STANDARD
AC INDUCTION MOTORS

POWERFUL !

DURABLE !

SMOOTH & QUIET !



General List		Output Power	Mounting Size	1-Phase 100V 50/60Hz	1-Phase 110/115V ,50/60Hz	1-Phase 200V 50/60Hz	1-Phase 220 60Hz/ 230V/50/60Hz	3-Phase 200V 50/60Hz. 220/230V	Parallel Shaft type Gearheads	Right Angle type Gearheads
Motor Type										
Power Motors	Induction Motors	6W	□60mm	●	●	●	●	—	●	—
		15W	□70mm	●	●	●	●	—	●	—
		25W	□80mm	●	●	●	●	●	●	—
		40W	□90mm	●	●	●	●	●	●	●
		60W	□90mm	●	●	●	●	●	●	●
		90W	□90mm	●	●	●	●	—	●	●
	Reversible Motors	6W	□60mm	●	●	●	●	—	●	—
		15W	□70mm	●	●	●	●	—	●	—
		25W	□80mm	●	●	●	●	—	●	—
		40W	□90mm	●	●	●	●	—	●	●
		60W	□90mm	●	●	●	●	—	●	●
		90W	□90mm	●	●	●	●	—	●	●
Brake Motors	Electromagnetic Brake Motors	6W	□60mm	●	●	●	●	—	●	—
		15W	□70mm	●	●	—	—	—	●	—
		25W	□80mm	●	●	●	●	●	●	—
		40W	□90mm	●	●	●	●	●	●	●
		60W	□90mm	●	●	●	●	●	●	●
		90W	□90mm	●	●	●	●	—	●	●
Speed Control Motors	Unit Type FUS Series Induction Motor Type	6W	□60mm	—	●	—	—	—	●	—
		15W	□70mm	—	●	—	—	—	●	—
		25W	□80mm	—	●	—	—	—	●	—
		40W	□90mm	—	●	—	—	—	●	●
		60W	□90mm	—	●	—	—	—	●	●
		90W	□90mm	—	●	—	—	—	●	●
	Component Package Type FSC Series Induction Motor Type Reversible Motor Type	6W	□60mm	●	●	—	—	—	●	—
		15W	□70mm	●	●	—	—	—	●	—
		25W	□80mm	●	●	—	—	—	●	—
		40W	□90mm	●	●	—	—	—	●	●
	60W	□90mm	●	●	—	—	—	●	●	

■ A complete line of gearhead is also available for use with the motors to reduce speed and/or increase torque. Pls find the World Standard Gearhead at "[World Standard Gearhead for industrial usage](#)" section for more detailed spec. data.

■ Features



Induction Motors

- Induction motors are the most commonly used AC motor.
- Capacitor-run single-phase and three phase motors are available.

Reversible Motors

- These are capacitor-run single-phase Motors. While they are inductions in basic operating principle, they have a built-in friction brake to improve instantaneous reversing characteristics. These motors are suited for applications where the motor must switch frequently from one direction to another.

TYPICAL MOTOR SPECIFICATIONS

	MODEL	Rated						Capacitor (µF)	Protection	Rating
		Output (W)	Voltage (V)	Frequency (Hz)	Current (A)	Rated Torque (gf-cm)	Rated Speed (r/min)			
	Round Shaft Type									
Induction motors	F2IK6A-AWJ	6	SP100VAC	50/60	0.22/0.23	490/410	1200/1450	3.5	ZP	Cont.
	F2IK6A-CWJ	6	SP200VAC	50/60	0.10/0.10	490/410	1200/1450	0.8	ZP	Cont.
	F2IK6A-CWE	6	SP230VAC	50/60	0.11/0.10	490/410	1200/1450	0.6	ZP	Cont.
	F3IK15A-AWJ	15	SP100VAC	50/60	0.36/0.37	1250/1050	1200/1450	5.5	TP	Cont.
	F3IK15A-CWJ	15	SP200VAC	50/60	0.18/0.19	1250/1050	1200/1450	1.5	TP	Cont.
	F3IK15A-CWE	15	SP230VAC	50/60	0.19/0.16	1250/1050	1200/1450	1.0	TP	Cont.
	F4IK25A-AWJ	25	SP100VAC	50/60	0.51/0.52	2050/1700	1200/1450	8	TP	Cont.
	F4IK25A-CWJ	25	SP200VAC	50/60	0.24/0.24	2050/1700	1200/1450	1.8	TP	Cont.
	F4IK25A-CWE	25	SP230VAC	50/60	0.24/0.22	2050/1700	1200/1450	1.5	TP	Cont.
	F4IK25A-SW	25	TP230VAC	60	0.22	1600	1600	—	TP	Cont.
	F5IK40A-AWJ	40	SP100VAC	50/60	0.76/0.74	3150/2600	1250/1500	11	TP	Cont.
	F5IK40A-CWJ	40	SP200VAC	50/60	0.39/0.40	3150/2600	1250/1500	3	TP	Cont.
	F5IK40A-CWE	40	SP230VAC	50/60	0.39/0.34	3000/2600	1300/1550	2.3	TP	Cont.
	F5IK40A-SW	40	TP230VAC	60	0.31	2600	1600	—	TP	Cont.
	F5IK60A-AWJ	60	SP100VAC	50/60	1.20/1.19	4900/4050	1200/1450	20	TP	Cont.
	F5IK60A-CWJ	60	SP200VAC	50/60	0.57/0.65	4900/4050	1200/1450	5	TP	Cont.
	F5IK60A-CWE	60	SP230VAC	50/60	0.57/0.54	4900/4050	1200/1450	4	TP	Cont.
	F5IK60A-SW	60	TP230VAC	60	0.46	3800	1600	—	TP	Cont.
F5IK90A-AWJ	90	SP100VAC	50/60	1.64/1.67	7000/5850	1250/1500	28	TP	Cont.	
F5IK90A-CWJ	90	SP200VAC	50/60	0.80/0.93	7300/6050	1200/1450	7	TP	Cont.	
F5IK90A-CWE	90	SP230VAC	50/60	0.76/0.81	7300/6050	1200/1450	6	TP	Cont.	
Reversible motors	F2RK6A-AWJ	6	SP100VAC	50/60	0.25/0.30	490/410	1200/1450	4.5	ZP	Cont.
	F2RK6A-CWJ	6	SP200VAC	50/60	0.12/0.14	490/410	1200/1450	1.0	ZP	Cont.
	F2RK6A-CWE	6	SP230VAC	50/60	0.12/0.12	490/410	1200/1450	0.8	ZP	Cont.
	F3RK15A-AWJ	15	SP100VAC	50/60	0.40/0.50	1250/1050	1200/1450	7.5	TP	Cont.
	F3RK15A-CWJ	15	SP200VAC	50/60	0.20/0.24	1250/1050	1200/1450	1.8	TP	Cont.
	F3RK15A-CWE	15	SP230VAC	50/60	0.20/0.21	1250/1050	1200/1450	1.5	TP	Cont.
	F4RK25A-AWJ	25	SP100VAC	50/60	0.55/0.64	2050/1700	1200/1450	10	TP	Cont.
	F4RK25A-CWJ	25	SP200VAC	50/60	0.28/0.34	2050/1700	1200/1450	2.5	TP	Cont.
	F4RK25A-CWE	25	SP230VAC	50/60	0.26/0.28	2050/1700	1200/1450	2.0	TP	Cont.
	F5RK40A-AWJ	40	SP100VAC	50/60	0.85/1.04	3150/2700	1250/1450	16	TP	Cont.
	F5RK40A-CWJ	40	SP200VAC	50/60	0.42/0.52	3150/2700	1250/1500	4.0	TP	Cont.
	F5RK40A-CWE	40	SP230VAC	50/60	0.40/0.46	3000/2700	1250/1500	3.5	TP	Cont.
	F5RK60A-AWJ	60	SP100VAC	50/60	1.30/1.50	4900/4050	1200/1450	25	TP	Cont.
	F5RK60A-CWJ	60	SP200VAC	50/60	0.64/0.80	4900/4050	1200/1450	6	TP	Cont.
	F5RK60A-CWE	60	SP230VAC	50/60	0.61/0.67	4900/4050	1200/1450	5	TP	Cont.
F5RK90A-AWJ	90	SP100VAC	50/60	1.78/2.10	7000/5850	1250/1500	35	TP	Cont.	
F5RK90A-CWJ	90	SP200VAC	50/60	0.88/1.08	7300/6050	1200/1450	8	TP	Cont.	
F5RK90A-CWE	90	SP230VAC	50/60	0.82/0.96	7300/6050	1200/1450	7	TP	Cont.	

■ Speed Control Unit and Component Package are available.

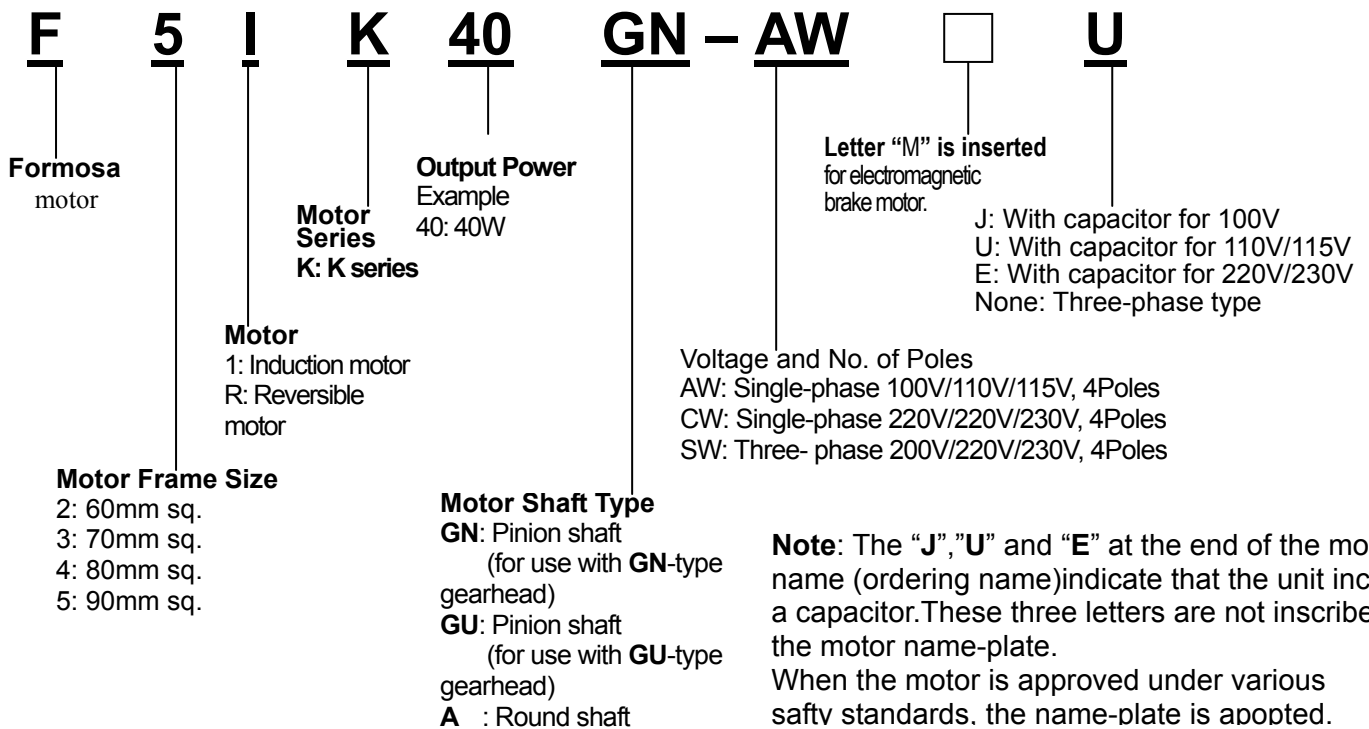
■ World Standard Spur Gearhead □60mm ~ □110mm , Ratio 1/3 ~1/180 are all available.

■ Planetary Gearhead and Worm Gearhead are all available.

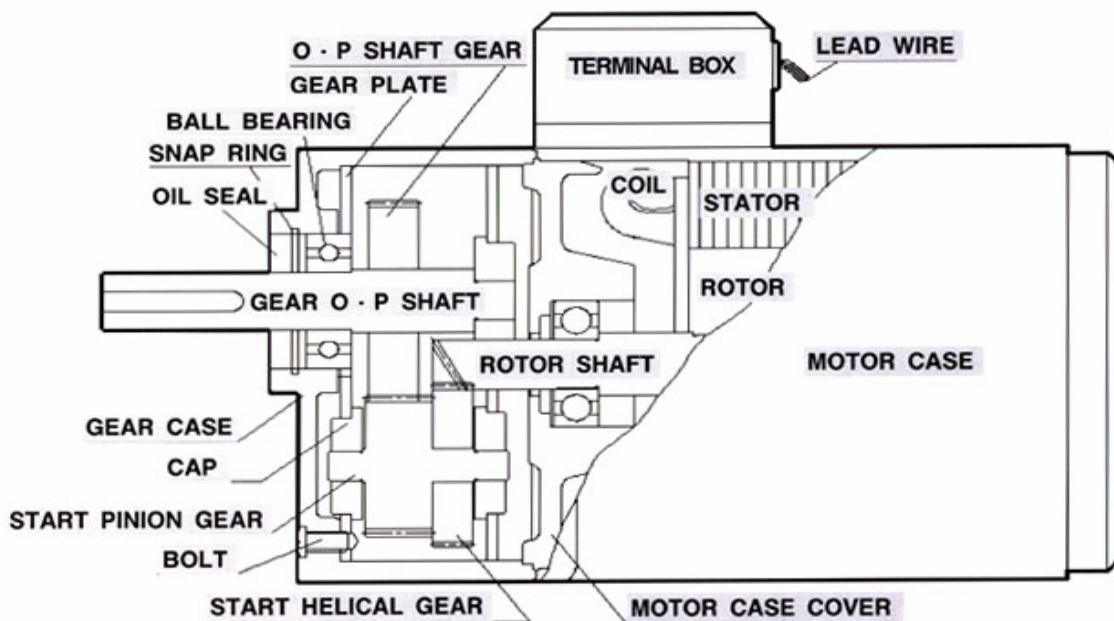
■ "SP100VAC" means Single Phase AC 100V Power , "TP230VAC" means Three Phase AC 100V Power

■ "ZP" means Motors are impedance protected , "TP" means Motors contain a built-in thermal protector.

TYPICAL MOTOR CODING SYSTEM



MAIN STRUCTURE ILLUSTRATION OF SMALL AC INDUCTION GEARED MOTOR



■ A complete line of gearhead is also available for use with the motors to reduce speed and/or increase torque. Pls find the World Standard Gearhead at "[World Standard Gearhead for industrial usage](#)" section
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■ Features (Fail-Safe type)

- The fail-safe, electromagnetic brake coupled to induction motors (three-phase type) and reversible motors provides output of 6W~90W. These motors are best suited for applications in which loads must be held.
- These motors incorporate AC electromagnetic brakes which are activated when the power is shut off. Holding brake force is 0.3 kg-cm~5kg-cm.
- When the power supply is turned off the motor stops and holds the load. These units are excellent as emergency safety brakes.

ELECTROMAGNETIC BRAKE MOTORS TYPICAL SPECS./SINGLE PHASE

MODEL	Single Phase type 30-minutes Rating						Starting Torque (g-cm)	Protection	Capacitor (μF)
	Output (W)	Voltage (VAC)	Frequency (Hz)	Rated Speed (r/min)	Rated Torque (g-cm)	Current (A)			
Round Shaft									
F2RK6A-AWMU	6	SP110	60	1450	410	0.25	450	ZP	3.5
		SP115	60	1450	410	0.26	450	ZP	3.5
F2RK6A-CWME	6	SP220	60	1450	410	0.11	450	ZP	0.8
		SP230	50	1200	490	0.12	500	ZP	0.8
		SP230	60	1450	410	0.12	450	ZP	0.8
F3RK15A-AWMU	15	SP110	60	1450	1050	0.42	1000	TP	6
		SP115	60	1450	1050	0.41	1000	TP	6
F4RK25A-AWMU	25	SP100	60	1450	1700	0.54	1400	TP	8
		SP100	60	1450	1700	0.54	1400	TP	8
F4RK25A-CWME	25	SP220	60	1450	1700	0.28	1400	TP	2
		SP230	50	1200	2050	0.26	1600	TP	2
		SP230	60	1450	1700	0.28	1400	TP	2
F5RK40A-AWMU	40	SP110	60	1450	2700	0.81	2600	TP	12
		SP115	60	1450	2700	0.81	2600	TP	12
F5RK40A-CWME	40	SP220	60	1450	2600	0.46	2600	TP	3.5
		SP230	50	1200	3150	0.40	2700	TP	3.5
		SP230	60	1450	2600	0.46	2600	TP	3.5
F5RK60A-AWMU	60	SP110	60	1450	4050	1.24	3800	TP	20
		SP115	60	1450	4050	1.24	3800	TP	20
F5RK60A-CWME	60	SP220	60	1450	4050	0.67	3800	TP	5
		SP230	50	1200	4900	0.61	4700	TP	5
		SP230	60	1450	4050	0.67	3800	TP	5
F5RK60A-AWMU	90	SP110	60	1500	5850	1.81	5900	TP	30
		SP115	60	1500	5850	1.81	5900	TP	30
F5RK60A-CWME	90	SP220	60	1450	6050	0.96	5900	TP	7
		SP230	50	1200	7300	0.82	6000	TP	7
		SP230	60	1450	6050	0.96	5900	TP	7

■ Speed Control Unit and Component Package are available.

■ World Standard Spur Gearhead □60mm ~ □110mm , Ratio 1/3 ~1/180 are all available.

■ Planetary Gearhead and Worm Gearhead are all available.

■ "SP100VAC" means Single Phase AC 100V Power , "TP230VAC" means Three Phase AC 100V Power

■ "ZP" means Motors are impedance protected , "TP" means Motors contain a built-in thermal protector.

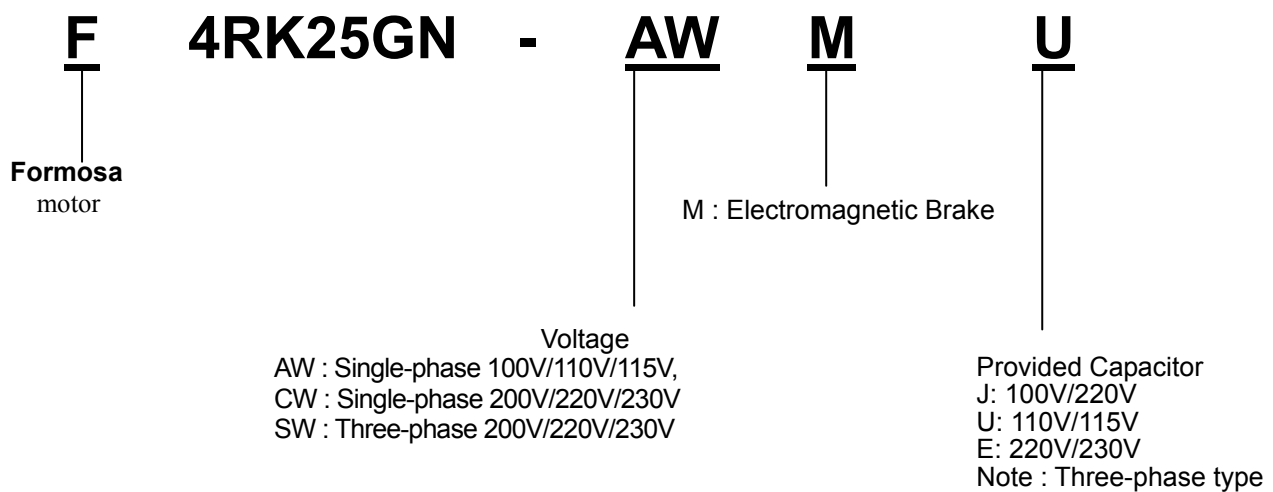
ELECTROMAGNETIC BRAKE MOTORS MOTOR TYPICAL SPECS./THREE PHASE

MODEL	Three-phase type Continuous Rating						Starting Torque (g-cm)	Protetion
	Output (W)	Voltage (VAC)	Frequency (Hz)	Rated Speed (r/min)	Rated Torque (g-cm)	Current (A)		
Round Shaft								
F4IK25A-SWM	25	TP200	50	1300	1900	0.23	2400	TP
		TP200	60	1550	1600	0.21	1600	TP
		TP220	60	1600	1600	0.21	1600	TP
		TP230	60	1600	1600	0.22	1600	TP
F5IK40A-SWM	40	TP200	50	1300	3000	0.32	4000	TP
		TP200	60	1550	2600	0.30	2600	TP
		TP220	60	1600	2600	0.30	2600	TP
		TP230	60	1600	2600	0.31	2600	TP
F5IK60A-SWM	60	TP200	50	1300	4500	0.50	6000	TP
		TP200	60	1550	3800	0.43	5000	TP
		TP220	60	1600	3800	0.45	5000	TP
		TP230	60	1600	3800	0.46	5000	TP

■ "SP100VAC" means Single Phase AC 100V Power , "TP230VAC" means Three Phase AC 100V Power

■ "ZP" means Motors are impedance protected , "TP" means Motors contain a built-in thermal protector.

ELECTROMAGNETIC BRAKE MOTORS CODING SYSTEM



- Speed Control Unit and Component Package are available.
- World Standard Spur Gearhead □60mm ~ □110mm , Ratio 1/3 ~1/180 are all available.
- Planetary Gearhead and Worm Gearhead are all available.

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■ Features

FUS Series

- Control units combine the control pack, potentiometer and the capacitor in one device. Connection between motor and control unit is made easy by a special connector. Designed for applications where remote control of the motor speed and easy hook-up required.
- Use of the optional extension cable allows for remote control of the motor from a distance of up to 4.75m.
- Variable speed range is 90r/min~1600r/min

FUS TYPE SPEED CONTROL MOTOR TYPICAL SPECIFICATIONS

MODEL	Rated						Starting Torque (g-cm)	Protection	Current (A)	Power Consumption (W)
	Output (W)	Voltage (VAC)	Frequency (Hz)	Speed Range r/min	Permissible Torque					
					g-cm 1200r/min	g-cm 90r/min				
FUS206-401U	6	110	60	90~1600	600	300	350	ZP	0.24	25
		115	60	90~1600	650	300	350	ZP	0.25	28
FUS315-401U	15	110	60	90~1600	1400	450	550	TP	0.47	53
		115	60	90~1600	1400	450	550	TP	0.50	59
FUS425-401U	25	110	60	90~1600	2000	500	1050	TP	0.74	83
		115	60	90~1600	2000	500	1050	TP	0.74	88
FUS540-401U	40	110	60	90~1600	2600	700	1800	TP	1.1	120
		115	60	90~1600	2600	700	1800	TP	1.1	130
FUS560-401U	60	110	60	90~1600	5600	2000	2850	TP	2.0	220
		115	60	90~1600	5600	2000	2850	TP	2.1	240
FUS590-401U	90	110	60	90~1600	8000	2000	4050	ZP	2.6	280
		115	60	90~1600	8000	2000	4050	ZP	2.6	280

■ The **FUS206** type is impedance protected. The other types contain a built-in thermal protector. When a motor overheats for any reason, the thermal protector is opened and the motor stops. When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn off the power before inspecting.

■ The speed ranges shown are under no load condition.

■ World Standard Spur Gearhead □60mm ~ □110mm , Ratio 1/3 ~1/180 are all available.

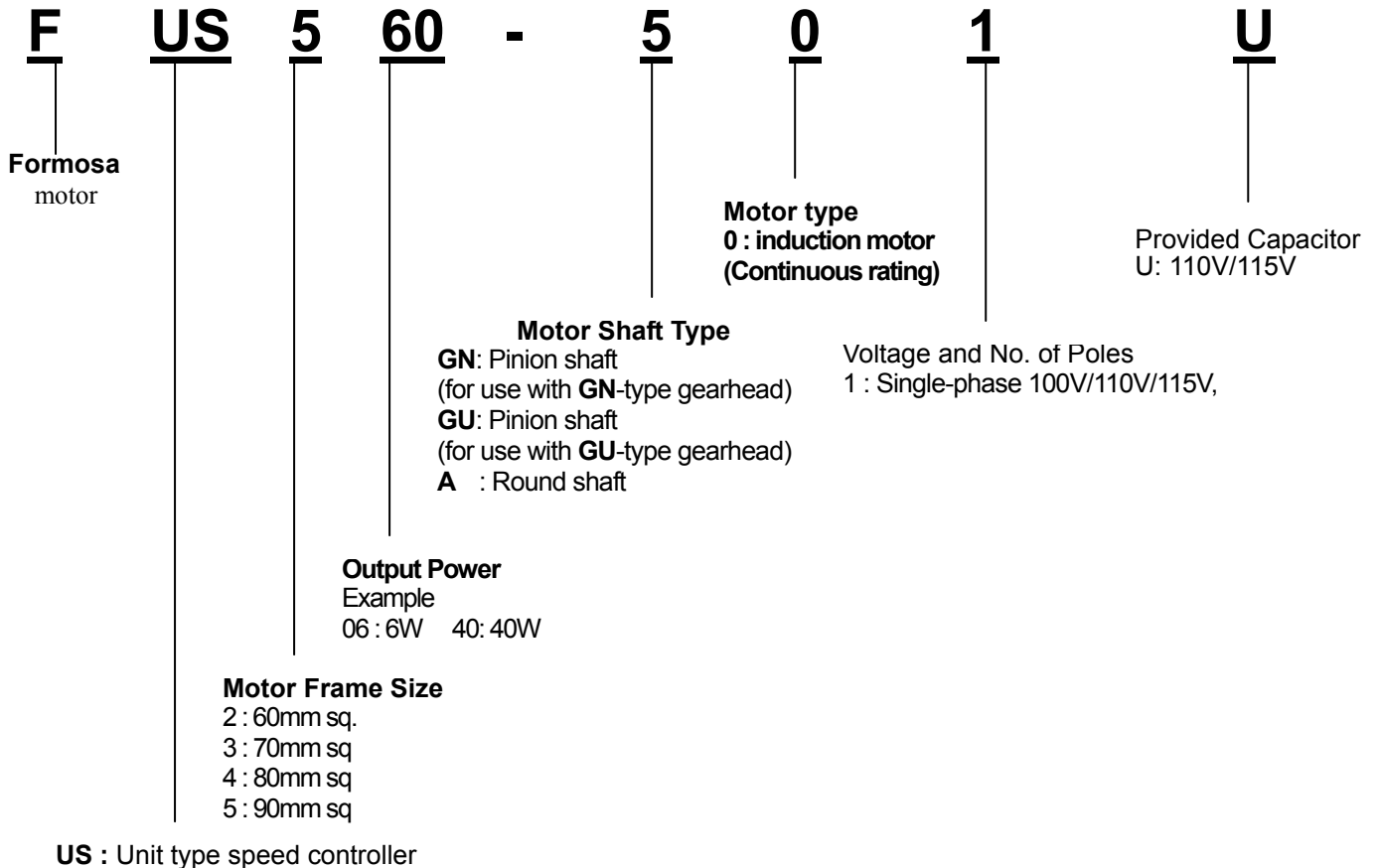
■ Planetary Gearhead and Worm Gearhead are all available.

■ "SP100VAC" means Single Phase AC 100V Power , "TP230VAC" means Three Phase AC 100V Power

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FUS TYPE SPEED CONTROL MOTOR CODING SYSTEM



Note: When the motor and the control pack are approved under various safety standards, the each name-plate is adopted.

- Electromagnetic Brake Motors , Speed Control Motors and Torque Motors are all available.
- Speed Control Unit and Component Package are available.
- World Standard Spur Gearhead □60mm ~ □110mm , Ratio 1/3 ~1/180 are all available.
- Planetary Gearhead and Worm Gearhead are all available.
- “SP100VAC” means Single Phase AC 100V Power , “TP230VAC” means Three Phase AC 100V Power
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■ Features

FSC Series

- Speed Range : 90~1600 r/min.
- Connection is simplified by a compact plug-in construction (11 pins).
- The control packs have acceleration/deceleration function that enable smooth starts and stops. Setting and adjustment are easy since they have built-in timing potentiometer for acceleration time and deceleration time.
- Multiple motors can be operated by a single speed potentiometer.

FSC TYPE SPEED CONTROL MOTOR TYPICAL SPECS./Induction motors

MODEL	Continous Rating						Starting Torque (g-cm)	Protection	Current (A)	Power Consumption (W)
	Output (W)	Voltage (VAC)	Frequency (Hz)	Speed Range r/min	Permissible Torque					
					g-cm 1200 r/min	g-cm 90 r/min				
Round Shaft										
FSC206-001WU	6	110	60	90~1600	400	250	350	ZP	0.22	21
		115	60	90~1600	400	250	350	ZP	0.22	23
FSC315-001WU	15	110	60	90~1600	900	300	550	TP	0.40	39
		115	60	90~1600	900	300	650	TP	0.41	42
FSC425-001WU	25	110	60	90~1600	1500	500	900	TP	0.56	55
		115	60	90~1600	1500	500	1000	TP	0.55	56
FSC540-001WU	40	110	60	90~1600	1800	550	1600	TP	0.83	88
		115	60	90~1600	1800	550	1700	TP	0.87	90
FSC560-001WU	60	110	60	90~1600	3900	950	3300	TP	1.60	160
		115	60	90~1600	3900	950	3500	TP	1.60	160
FUS590-401U	90	110	60	90~1600	8000	2000	4050	ZP	2.6	280
		115	60	90~1600	8000	2000	4050	ZP	2.6	280
MODEL	30 Minutes Rating						Starting Torque (g-cm)	Protection	Current (A)	Power Consumption (W)
	Output (W)	Voltage (VAC)	Frequency (Hz)	Speed Range r/min	Permissible Torque					
					g-cm 1200 r/min	g-cm 90 r/min				
Round Shaft										
FSC206-011WU	6	110	60	90~1600	400	250	300	ZP	0.28	28
		115	60	90~1600	400	250	300	ZP	0.29	30
FSC315-011WU	15	110	60	90~1600	1100	450	750	TP	0.50	49
		115	60	90~1600	1100	450	850	TP	0.51	52
FSC425-011WU	25	110	60	90~1600	1700	700	1000	TP	0.68	66
		115	60	90~1600	1700	700	1100	TP	0.69	70
FSC540-011WU	40	110	60	90~1600	2600	700	2000	TP	0.95	91
		115	60	90~1600	2600	700	2100	TP	0.99	99
FSC560-011WU	60	110	60	90~1600	4000	1200	3200	TP	1.70	160
		115	60	90~1600	4000	1200	3600	TP	1.70	170

■ World Standard Spur Gearhead □ 60mm ~ □ 110mm , Ratio 1/3 ~ 1/180 are all available.

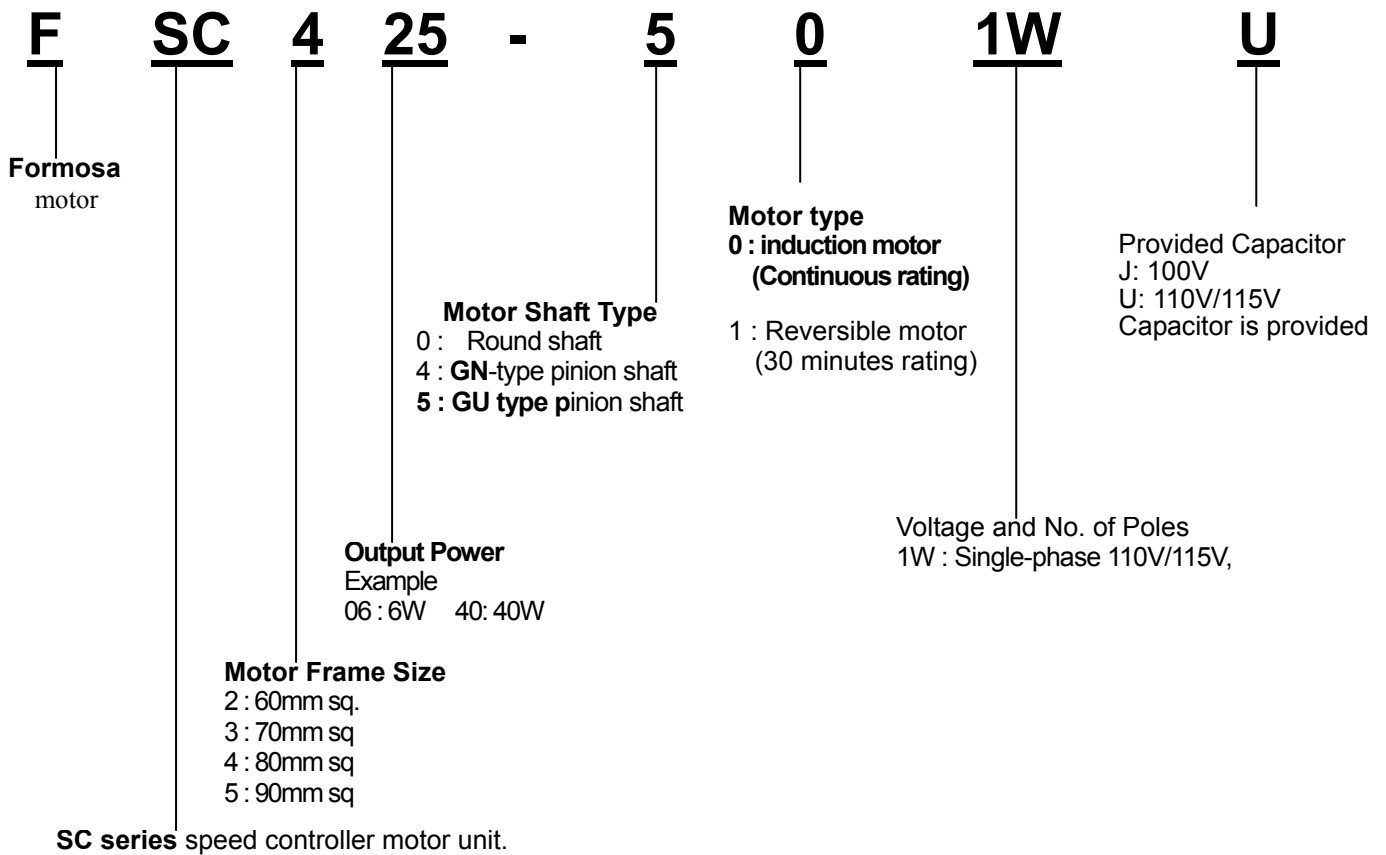
■ Planetary Gearhead and Worm Gearhead are all available.

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FUS TYPE SPEED CONTROL MOTOR CODING SYSTEM



Note: When the motor and the control pack are approved under various safety standards, the each name-plate is adopted.

- World Standard Spur Gearhead □60mm ~ □110mm , Ratio 1/3 ~1/180 are all available.
- Planetary Gearhead and Worm Gearhead are all available.

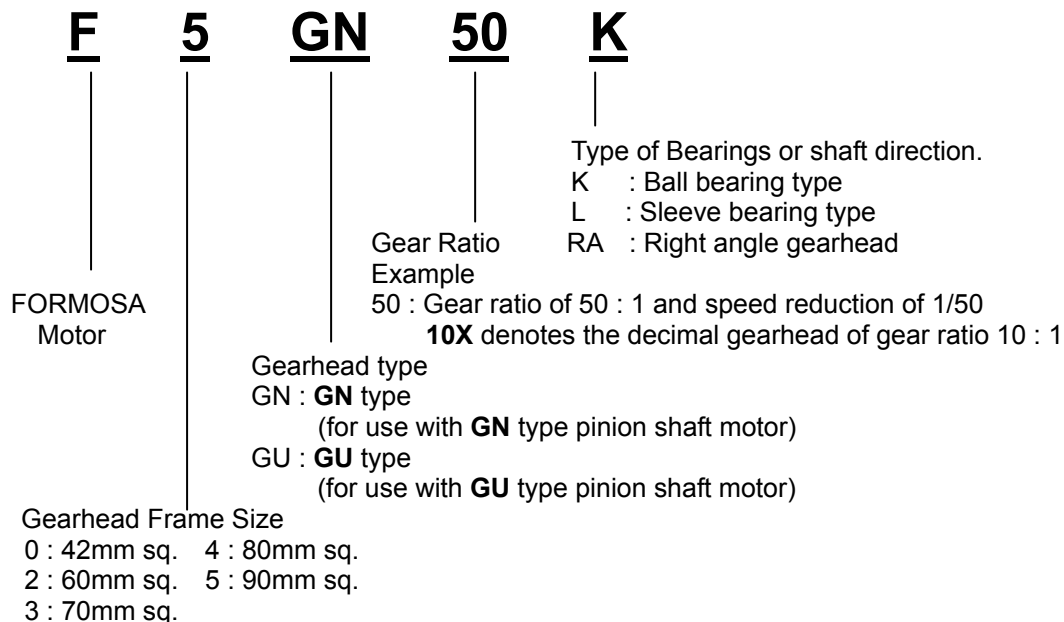
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Spur Gearheads



WORLD STANDARD SPUR GEARHEAD CODING SYSTEM



Note: The **GU** type includes two types of models : box-shaped models with a “**B**” at the end of their names and models with mounting flanges with nothing at the end of their names. All other series consist of box-shaped models only and have nothing at the end of their names.

Typical Specifications

Gearhead Model	Gear Ratio	Maximum Permissible Torque lb-in (N · m)	Permissible Overhung Load lb (N.m)		Permissible Thrust Load lb (N.m)
			0.4" from shaft end	0.8" from shaft end	
0GK□, 0GK□ K	3~180	8.6 (1.0)	1.73 (0.2)	—	1.30 (0.15)
2GN□ K, 2GN□ L	3~18 25~180	26.0 (3.0)	4.3 (0.5) 10.4 (1.2)	7.0 (0.8) 15.6 (1.5)	2.6 (0.3)
3GN□ K, 3GN□ L	3~18 25~180	43.4 (5.0)	7.0 (0.8) 13 (1.5)	10.4 (1.2) 21.7(2.5)	3.5 (0.4)
4GN□ K, 4GN□ L	3~18 25~180	69.4 (8.0)	8.7 (1.0) 17.4 (2.0)	13 (1.3) 26.1 (3.0)	4.3 (0.5)
5GU□ K, 5GU□ KB	3~18 25~180	173.6 (20.0)	35 (4.0) 43.4 (5.0)	43.4 (5.0) 60.7 (7.0)	13.0 (1.5)
5GU□ KBH	50~180	260.4 (30.0)	35 (4.0)	52.0 (6.0)	13.0 (1.5)
6GD□ K	5~15 20~200	260.4 (30.0)	26.1 (3.0) 35 (4.0)	43.4 (5.0) 52.0 (6.0)	13.0 (1.5)

*Overhung load values for hollowshaft models are distances from the flange mounting surface.

● Enter the gear ratio in the box(□) within the model name.

- Caution: Unlike most worm gear mechanisms, the right-angle gear does not have self-locking capabilities.

Speed and Direction of Rotation

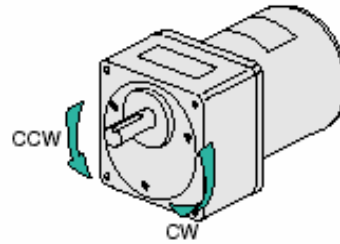
The speed when a gearhead is directly coupled to motor is calculated according to the following formula:

$$N_G = \frac{N_M}{i}$$

N_G : Speed of Gearhead [r/mim]

N_M : Speed of motor [r/mim]

i : Gear ratio of gearhead



Same direction as the motor shaft

Opposite direction as the motor shaft

The direction of gearhead shaft rotation may differ from motor shaft rotation depending on the reduction ratio of the gearhead

Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360	
Gearhead Model																								
2GN□KA, 3GN□KA 4GN□KA, 5GN□KA																								
2GB□KA, 4GB□KA																								
0GN□KA, 5GU□KA																								

Connection of a decimal gearhead reduces the speed by 10:1 but does not affect the direction of rotation.

Gear Ratio	5	10	15	20	30	50	100	200
Gearhead Model								
FBL575□W-□, FBL5120□W-□ FHBL560N-□, FHBL5100N-□								

Output Torque of Gearmotor

The output torque when a gearhead is directly connected is calculated as follows:

$$T_G = T_M \times i \times \eta$$

T_G : Output Torque at Gear Shaft [oz-in]

T_M : Motor Torque [oz-in]

i : Gear Ratio of Gearhead

η : Gearhead Efficiency



•Gearhead Efficiency

Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360	
Gearhead Model																								
F2GN□KA, 3GN□KA, F4GN□KA, 5GN□KA																								
F2GB□KA, 4GB□KA																								
FOGN□KA, 5GU□KA																								
FBHI62F-□, BHI62□T-□																								

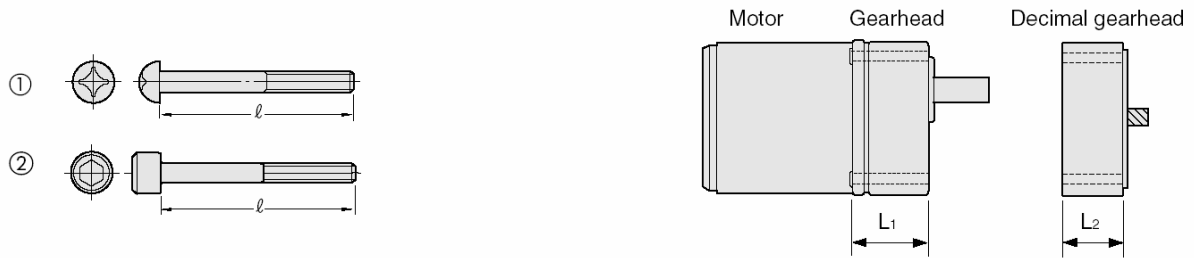
Gearhead efficiency of all the decimal gearheads is 81%

Gear Ratio	5	10	15	20	30	50	100	200
Gearhead Model								
FBL575□W-□, FBL5120□W-□ FHBL560N-□, FHBL5100N-□								

Screw Dimensions

GN type, GU type, GB type, GC type, BH Series, FBLII Series, HBL Series, FPW Series, Gearheads

The following screws are provided with the gearhead and decimal gearhead.



Model	Gearhead				Screws			Drawing
	L		L1 + L2		ℓ			
	Inch	mm	inch	mm	inch	mm		
FOGN3KA ~ 180KA	1.22	31	—	—	1.57	40	No.4~40UNC	
F2GN3KA ~ 18KA	1.46	37	—	—	1.97	50	No.8~32UNC	
F2GN25KA ~ 180KA	1.85	47	—	—	2.36	60		
F3GN3KA ~ 18KA	1.54	39	—	—	1.97	50	No.10~24UNC	①
F3GN25KA ~ 180KA	1.93	49	—	—	2.56	65		
F4GN3KA ~ 18KA	1.54	39	—	—	1.97	50		
F4GN25KA ~ 180KA	1.95	49.5	—	—	2.56	65	1 / 4~20UNC	
F5GN3KA ~ 18KA	1.95	49.5	—	—	2.76	70		
F5GN25KA ~ 180KA	2.66	67.5	—	—	3.27	83		
F5GU3KA ~ 180KA	2.85	72.5	—	—	3.74	95	M8P1.25	②
FBH162□-3.6 ~ 180, FBH162□T-3.6 ~ 180	3.27	83	—	—	3.94	100		
F2GN10XK (Decimal Gearhead)	—	—	2.87	73	3.35	85	M4P0.7	
F3GN10XK (Decimal Gearhead)	—	—	3.11	79	3.54	90	M5P0.8	①
F4GN10XK (Decimal Gearhead)	—	—	3.21	81.5	3.74	95		
F5GN10XK (Decimal Gearhead)	—	—	4.11	104.5	4.72	120	M6P1.0	②
F5GU10XKB (Decimal Gearhead)	—	—	4.43	112.5	5.51	140		
F2GB3KA ~ 18K	1.30	33	—	—	1.77	45	M4P0.7	①
F2GB25KA ~ 360KA	1.65	42	—	—	1.97	50		
F4GB3KA ~ 18KA	1.54	39	—	—	1.97	50	M5P0.8	①
F4GB25KA ~ 360KA	1.95	49.5	—	—	2.56	65		
F2GB10XK (Decimal Gearhead)	—	—	2.68	68	3.35	85	M4P0.7	
F4GB10XK (Decimal Gearhead)	—	—	3.21	81.5	3.74	95	M5P0.8	
FBL575□W-5~20, FBL5120□W-5~20,(Combination type)	2.17	55	—	—	2.95	75	M8P1.25	②
FBL575□W-30~100, FBL5120□W-30~100,(Combination type)	2.68	68	—	—	3.54	90		
FBL575□W-200, FBL5120□W-200,(Combination type)	2.91	74	—	—	3.74	95		
FHBL560N-5~20, FHBL5100N-5~20 (Combination type)	2.17	55	—	—	2.95	75	M5P0.8	②
FHBL560N-30~100, FHBL5100N-30~100 (Combination type)	2.68	68	—	—	3.54	90		
FHBL560N-200, FHBL5100N-200 (Combination type)	2.91	74	—	—	3.74	95		
FHBL425□-□	2.32	59	—	—	3.15	80	M5P0.8	
FHBL540□-□	2.85	72.5	—	—	3.54	90	M6P1.0	
FHBL560□-□	2.93	74.5	—	—	3.54	90		
FHBL690□-□	3.25	82.5	—	—	3.94	100	M8P1.25	

- The figure of L1+L2 refer to sizes when a decimal gearhead with gear reduction of 25:1 or gearhead are connected
- 4 washers and 4 hexagonal nuts are provide with the screws.
- Stainless steel screws are provided with the **FPW** series washdown motors.

Right Angle Gearhead

To assemble the motor and gearhead, use the screws provided with the gearhead. To mount an additional decimal gearhead. To attach the gearhead to other devices, obtain the screws separately.

Gearhead	Screws		
	4 washers and 4 hexangonal nuts are provided		
Model	ℓ inch(mm)	Size of Screws	Shape of Screws
F4GN□RAA•RH	0.59(15)	M5P0.8	②
F5GN(U)□RAA•RH	0.79(20)	M6P1.0	②



General Specifications

Item	Specifications
Insulation Resistance	100MΩ or more when 500V DC is applied between the windings and the frame after Rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5kV at 50Hz and 60Hz applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity
Temperature Rise	144°F(80°C) or less measured by the resistance change method after rated operation of motor with connecting a gearhead or equivalent heat radiation plate.
Overheating Protection Device	FUS206 type is impedance protected. All others have built-in thermal protector (Automatic return type) Operating temperature, open: 266°F±9°F(130°C±5°C) Close: 179.6°F±27°F(82°C±15°C)
Insulation Class	Class B (266°F / 130°C)
Ambient Temperature Range	14°F ~ 104°F (-10°C ~ + 40°C)
Ambient Humidity	85% maximum (non condensing)
Degree of protection	FUS206, FUS315, FUS425, FUS540 type: IP20 FUS560, FUS590 type: IP40

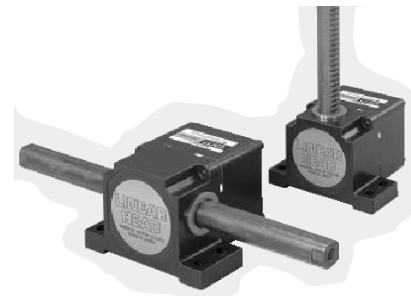
TYPICAL SPECIFICATIONS

●Single-Phase 110V/115V

Output HP	Power W	Packages Model	Motor Model	Control Unit Model
1/124	6	FUS206-401U	FUSM206-401W	FUSP206-1U
		FUS206-002U	FUSM206-001W	
1/50	15	FUS315-401W	FUSM315-401W	FUSP315-1U
		FUS315-001U	FUSM315-001W	
1/30	25	FUS425-401U	FUSM425-401W	FUSP425-1U
		FUS425-001U	FUSM425-001W	
1/18.5	40	FUS540-401U	FUSM540-401W	FUSP540-1U
		FUS540-001U	FUSM540-001W	
1/12.5	60	FUS560-501U	FUSM560-501W	FUSP560-1U
		FUS560-001U	FUSM560-001W	
1/8	90	FUS590-501U	FUSM590-501W	FUSP590-1U
		FUS590-001U	FUSM590-001W	

●Single-Phase 220V/230V

Output HP	Power W	Packages Model	Motor Model	Control Unit Model
1/124	6	FUS206-402E	FUSM206-402W	FUSP206-2E
		FUS206-002E	FUSM206-002W	
1/50	15	FUS315-402E	FUSM315-402W	FUSP315-2E
		FUS315-002E	FUSM315-002W	
1/30	25	FUS425-402E	FUSM425-402W	FUSP425-2E
		FUS425-002E	FUSM425-002W	
1/18.5	40	FUS540-402E	FUSM540-402W	FUSP540-2E
		FUS540-002E	FUSM540-002W	
1/12.5	60	FUS560-502E	FUSM560-502W	FUSP560-2E
		FUS560-002E	FUSM560-002W	
1/8	90	FUS590-502E	FUSM590-502W	FUSP590-2E
		FUS590-002E	FUSM590-002W	



PLS FIND MORE DETAILED SPEC. OF FORMOSA FULL RANGES OF WORLD STANDARD GEARHEAD AT “ [WORLD STANDARD GEARHEAD FOR INDUSTRIAL USAGE](#)” SECTION FOR YOUR REFERENCE..

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