SMS60S-0020 Servo Motor

Kinco

FEATURES

- ***220 VAC***
- ***200 Watt Power Rating***
- ***Rated Torque of 0.64 Nm***
- ***Maximum Speed of 6000 RPM***
- ***Single Coil 20-Bit Communication Encoder or Multi-Turn 16-Bit Communication Absolute Encoder***
- ***IP65 for Body, IP54 Shaft Seal***
- ***Brake Option Available***
- ***CE Certified***



DESCRIPTION

The SMS60S-0020 Series Servo Motor offers a solution to servo applications requiring position and speed control. This servo motor series comes standard with a Single Coil 20-Bit Communication Encoder or a Multi-Turn 16-Bit Communication Absolute Encoder, runs at a rated speed of 3000 RPM, provides peak values up to 300% of the rated torque and current values, and has a rated torque of 0.64 Nm with a 200 Watt power rating. This Servo Motor series enables industrial motion control applications to attain a great combination of position and speed functionality.

CUSTOM ORDER LAYOUT

Model	SMS60S-0020-30JAK-3LKU SMS60S-0020-30JBK-3LKU SMS60S-0020-30KAK-3LKU SMS60S-0020-30KBK-3LKU
Compatible Driver	FD413
DC Link Voltage (VDC)	300
Rated Power (W)	200
Rated Torque (Nm)	0.64
Rated Speed (RPM)	3000
Max Speed (RPM)	6000
Rated Current (A)	1.4
Maximum Torque (Nm)	1.92
Maximum Current (A)	4.2
Standstill Torque (Nm)	0.7
Standstill Current (A)	1.5
Resistance Line-Line (Ω)	11.2
Inductance Line-Line (mH)	20.9
Electrical Time Constant (ms)	1.87
Mechanical Time Constant (ms)	1.8
Reverse Voltage Constant Ke (V/krpm)	29
Torque Constant Kt (Nm/A)	0.48
Rotor Moment of Inertia Jm (Kg-cm^2)	0.214 (0.218 with Brake)
Pole Pair Number	3
Maximum Voltage Rising du/dt (KV/μs)	8
Insulation Class	F
Maximum Radical Force F (N)	180
Maximum Axial Force F (N)	90
Weight (Kg)	1.1 (1.6 with Brake)

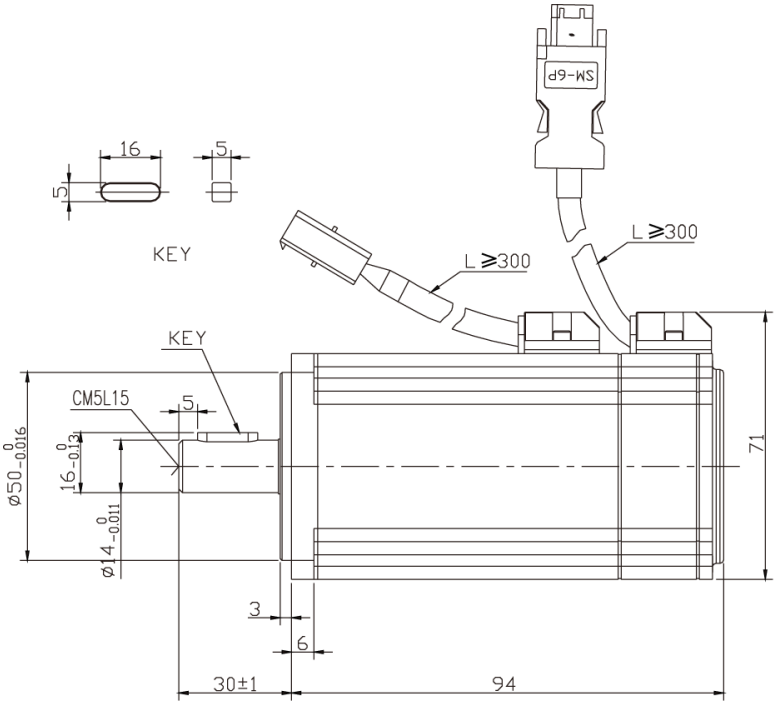
*Note: Part Numbers with -30JBK and -30KBK are equipped with a Brake

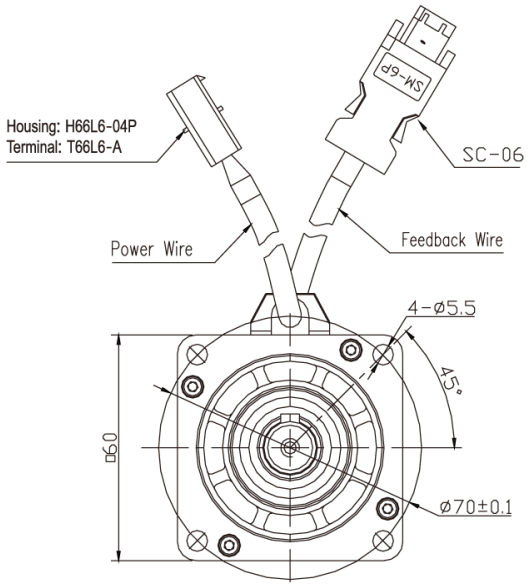
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DIMENSIONS

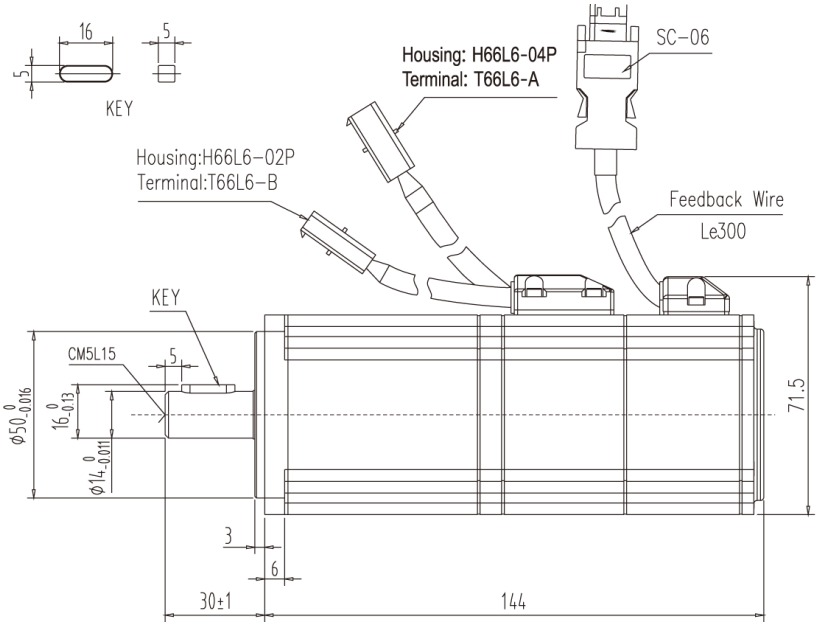
SMS60S-0020-30JAK-3LKU and SMS60S-0020-30KAK-3LKU

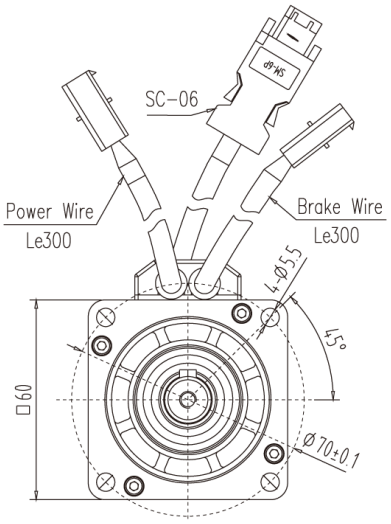




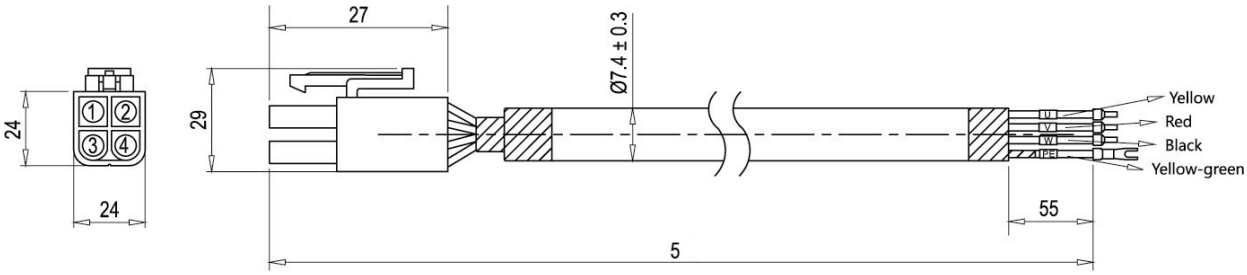
Dimensions are in mm

SMS60S-0020-30JBK-3LKU and SMS60S-0020-30KBK-3LKU





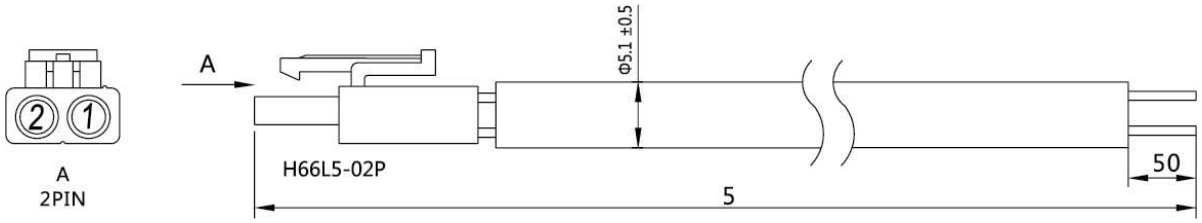
Motor Cable: MOT-005-05-KL-Y for SMS60S-0020-30JAK-3LKU, SMS60S-0020-30JBK-3LKU, SMS60S-0020-30KAK-3LKU, and SMS60S-0020-30KBK-3LKU



MOT-005-05-KL-Y		
Cable Color	Signal	PIN #
Yellow	U	PIN 1
Red	V	PIN 2
Black	W	PIN 3
Yellow-green	PE	PIN 4

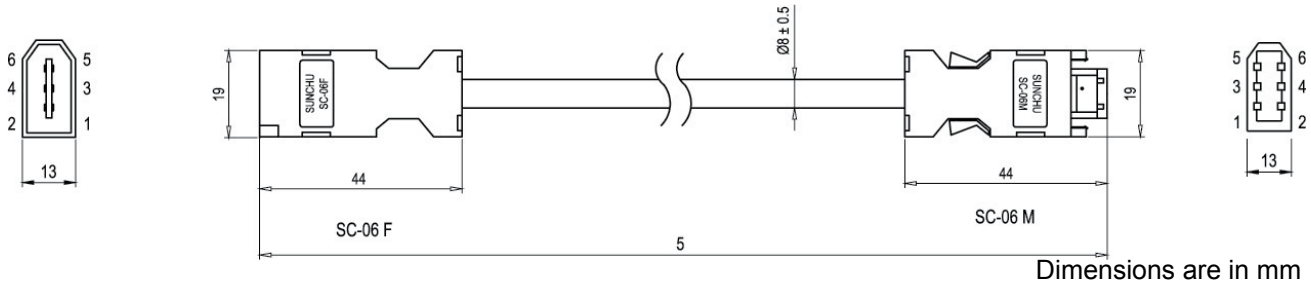
Dimensions are in mm

Brake Cable: BRA-05-KL for SMS60S-0020-30JBK-3LKU and SMS60S-0020-30KBK-3LKU



BRA-05-KL		
Cable Color	Signal	PIN #
Red	Brake+	PIN 1
Blue	Brake-	PIN 2

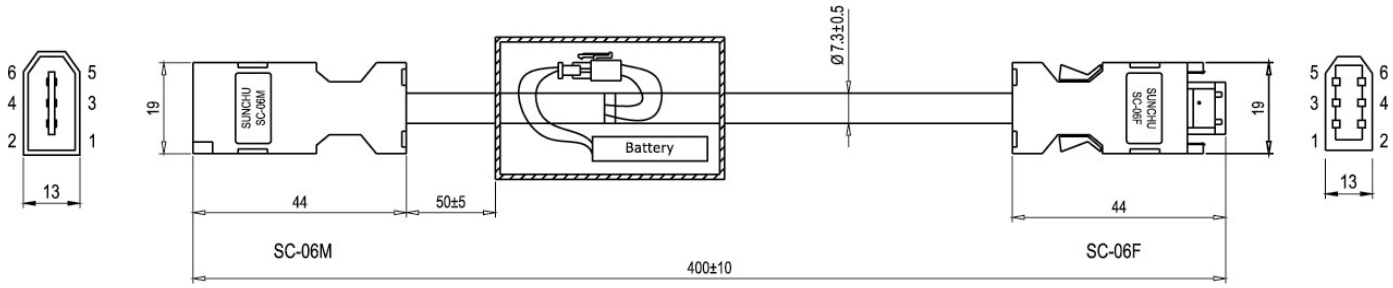
Encoder Cable: ENCDG-05-GU for SMS60S-0020-30JAK-3LKU, SMS60S-0020-30JBK-3LKU, SMS60S-0020-30KAK-3LKU, and SMS60S-0020-30KBK-3LKU



Dimensions are in mm

ENCDG-05-GU		
Cable Color	Signal	PIN #
Red	+5V	PIN 1
Black	GND	PIN 2
Brown	BAT+	PIN 3
Blue	BAT-	PIN 4
Yellow	SD	PIN 5
Green	/SD	PIN 6
Shield	Shield	Shell

Encoder Cable with Battery: ENCDG-(4)-GU-BT for SMS60S-0020-30KAK-3LKU and SMS60S-0020-30KBK-3LKU



ENCDG-(4)-GU-BT		
PIN #	Cable Color	Signal
PIN 1	Red	+5V
PIN 2	Black	GND
PIN 3	Brown	BAT+
PIN 4	Blue	BAT-
PIN 5	Yellow	SD
PIN 6	Green	/SD
Shell	Shield	Shield

SPECIFICATIONS

Model	Motor Cable	Encoder Cable	Brake Cable	Battery Cable
SMS60S-0020-30JAK-3LKU	MOT-005-05-KL-Y	ENCDG-05-GU	n/a	n/a
SMS60S-0020-30JBK-3LKU	MOT-005-05-KL-Y	ENCDG-05-GU	BRA-05-KL	n/a
SMS60S-0020-30KAK-3LKU	MOT-005-05-KL-Y	ENCDG-05-GU	n/a	ENCDG-(4)-GU-BT
SMS60S-0020-30KBK-3LKU	MOT-005-05-KL-Y	ENCDG-05-GU	BRA-05-KL	ENCDG-(4)-GU-BT

Model		SMS60S-0020-30JAK-3LKU SMS60S-0020-30JBK-3LKU SMS60S-0020-30KAK-3LKU SMS60S-0020-30KBK-3LKU
Position Feedback Device		(JAK/JBK) Single Coil 20-Bit Communication Encoder or (KAK/KBK) Multi-Turn 16-Bit Communication Absolute Encoder
Cooling Method		Totally Enclosed, Non-Ventilated
Protection Level		IP65 for Body, Shaft Sealing IP54
Environmental Conditions of Operation	Temperature	-20˚C ~ 40˚C
	Humidity	Below 90% RH (Non Condensing)
	Ambient Environment	Away from active gas, combustible gas, oil drops and dust
	Altitude	Maximum Altitude 4000m, Rated Power at 1000m or Below, Above 1000m: Decreasing 1.5% per 100m Rise