

KNC-SRV-SMS60S-0040 Servo Motor



FEATURES

- 220 VAC
- 400 Watt Power Rating
- Rated Torque of 179 oz-in
- 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

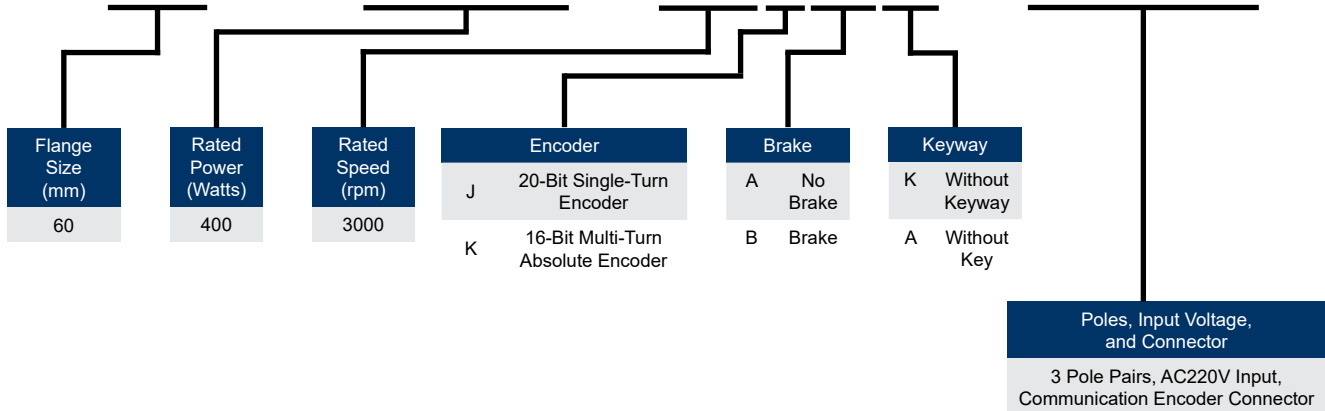


DESCRIPTION

The KNC-SRV-SMS60S-0040 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 179 oz-in with a 400 Watt power rating. This servo motor series enables industrial motion control applications to attain a great combination of position and speed functionality.

ORDERING INFORMATION

SMS60S - 0040 - 30JAK - 3LKU

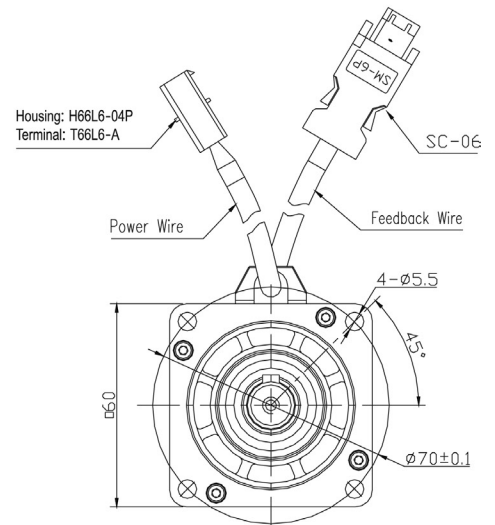
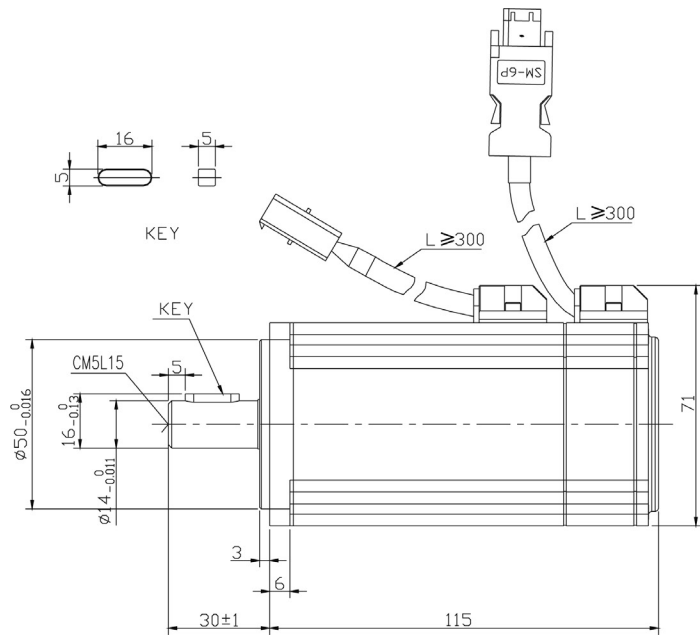


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Model	KNC-SRV-SMS60S-0040-30JAK-3LKU KNC-SRV-SMS60S-0040-30JBK-3LKU KNC-SRV-SMS60S-0040-30KAK-3LKU KNC-SRV-SMS60S-0040-30KBK-3LKU	
Compatible Driver	KNC-SRV-FD423-(EA/CA/LA)-000 KNC-SRV-FD422S-(CA/LA/AA)-000	
DC Link Voltage (VDC)	300	
Rated Power (W)	400	
Rated Torque (oz-in)	179	
Rated Speed (RPM)	3000	
Max Speed (RPM)	6000	
Rated Current (A)	2.4	
Maximum Torque (oz-in)	539	
Maximum Current (A)	7.2	
Standstill Torque (oz-in)	198	
Standstill Current (A)	2.6	
Resistance Line-Line (Ω)	5.8	
Inductance Line-Line (mH)	11.5	
Electrical Time Constant (ms)	1.98	
Mechanical Time Constant (ms)	1.29	
Reverse Voltage Constant K_e (V/krpm)	34	
Torque Constant K_t (oz-in/A)	79	
Rotor Moment of Inertia J_m (oz-in-s ²)	0.00573 (0.00579 with Brake)	
Pole Pair Number	3	
Maximum Voltage Rising du/dt (KV/ μ s)	8	
Insulation Class	F	
Maximum Radical Force F (N)	180	
Maximum Axial Force F (N)	90	

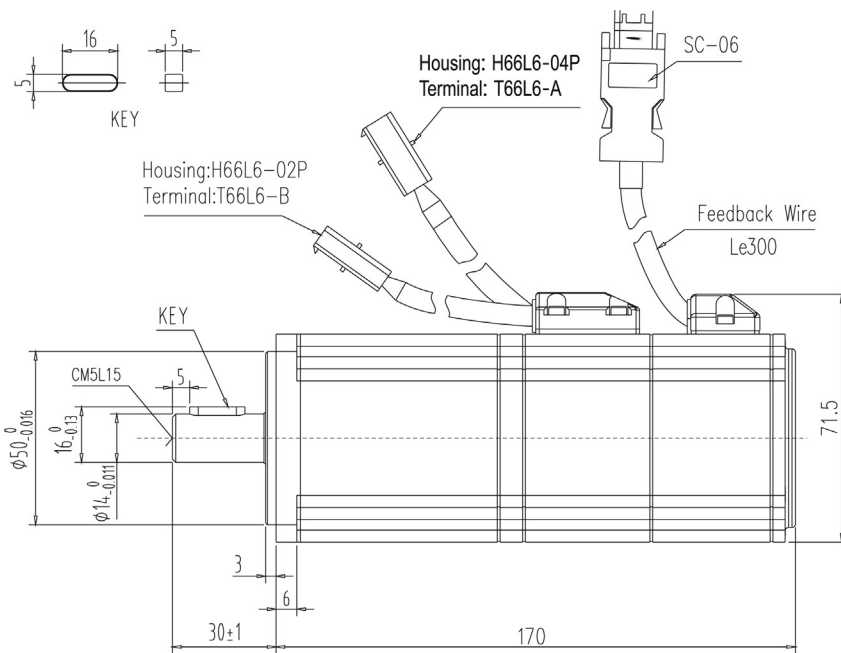
***Note: Part Numbers with -30JBK and -30KBK are equipped with a Brake**

KNC-SRV-SMS60S-0040-30JAK-3LKU and KNC-SRV-SMS60S-0040-30KAK-3LKU

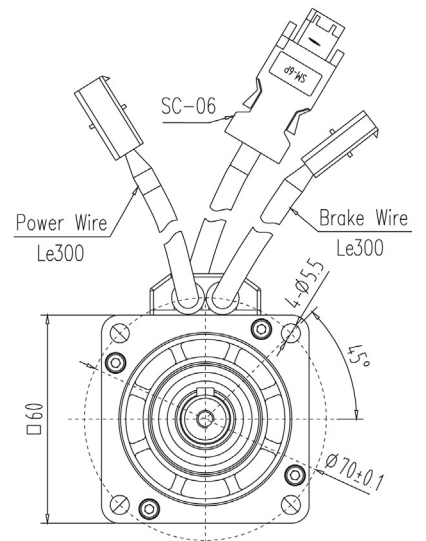


DIMENSIONS

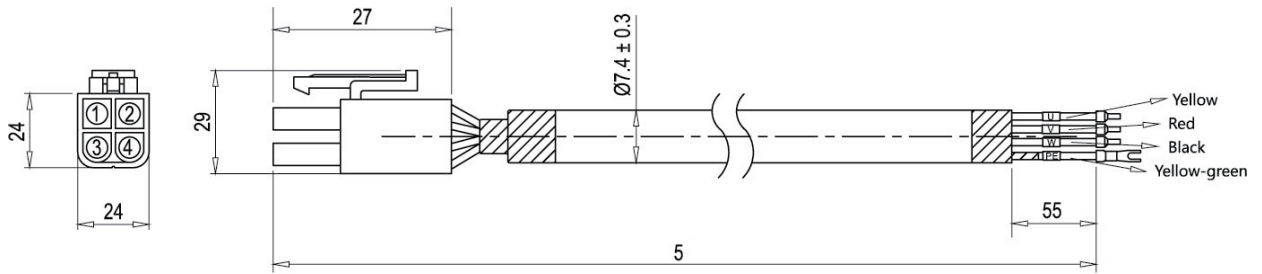
KNC-SRV-SMS60S-0040-30JBK-3LKU and KNC-SRV-SMS60S-0040-30KBK-3LKU



Dimensions are in mm



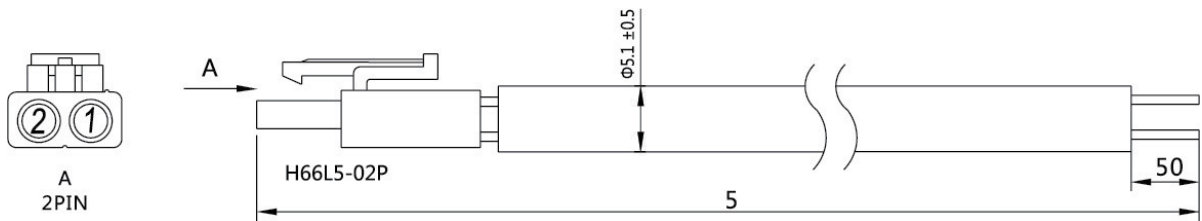
Motor Cable: KNC-SRV-MOT-005-05-KL-Y for KNC-SRV-SMS60S-0040-30JAK-3LKU, KNC-SRV-SMS60S-0040-30JBK-3LKU, KNC-SRV-SMS60S-0040-30KAK-3LKU, and KNC-SRV-SMS60S-0040-KBK-3LKU



KNC-SRV-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

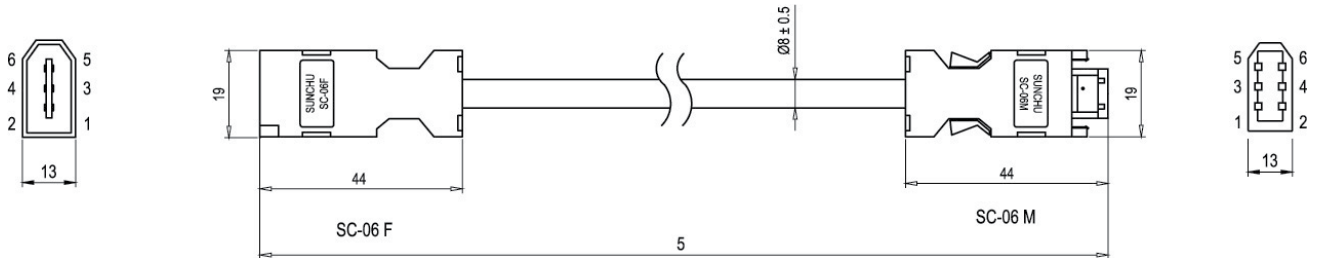
Dimensions are in mm

Brake Cable: KNC-SRV-BRA-05-KL for KNC-SRV-SMS60S-0040-30JBK-3LKU and KNC-SRV-SMS60S-0040-30KBK-3LKU



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

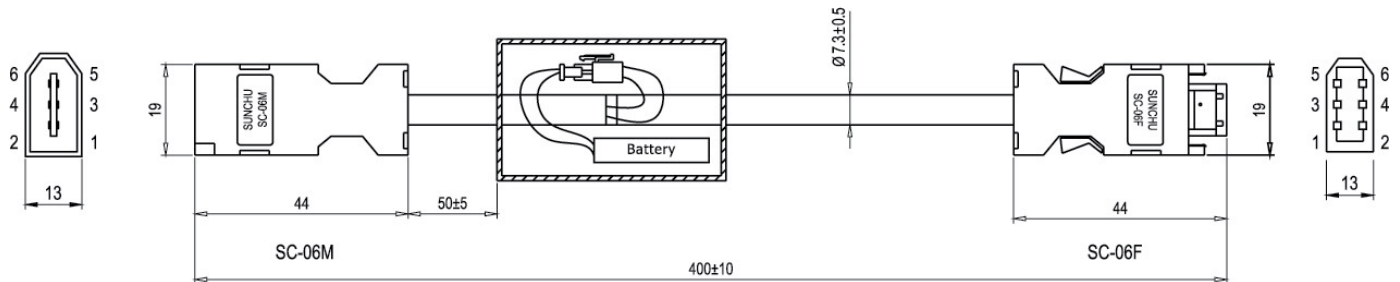
Encoder Cable: KNC-SRV-ENCDG-05-GU for KNC-SRV-SMS60S-0040-30JAK-3LKU, KNC-SRV-SMS60S-0040-30JBK-3LKU, KNC-SRV-SMS60S-0040-30KAK-3LKU, KNC-SRV-SMS60S-0040-30KBK-3LKU



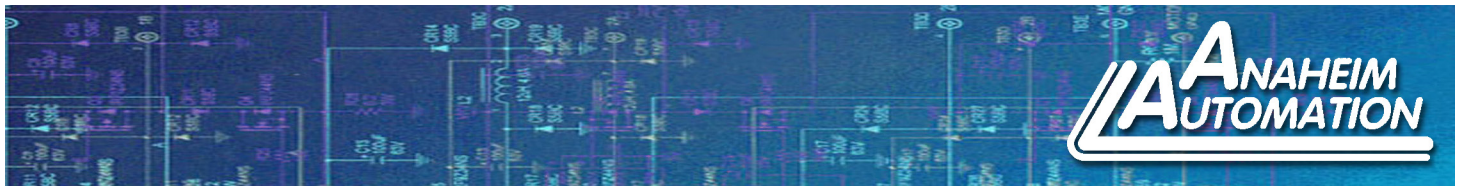
KNC-SRV-ENCDG-05-GU		
Cable Color	Signal	PIN #
Red	+5V	PIN 1
Black	GND	PIN 2
Brown	BAT+	PIN 3
Blue	BAT-	PIN 4
Yellow	SD	PIN 5
Green	/SD	PIN 6
Shield	Shield	Shell

Dimensions are in mm

Encoder Cable with Battery: KNC-SRV-ENCDG-(4)-GU-BT for KNC-SRV-SMS60S-0040-30KAK-3LKU and KNC-SRV-SMS60S-0040-30KBK-3LKU



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



SPECIFICATIONS

Model	Motor Cable	Encoder Cable	Brake Cable	Battery Cable
KNC-SRV-SMS60S-0040-30JAK-3LKU	KNC-SRV-MOT-005-05-KL-Y	KNC-SRV-ENCDG-05-GU	n/a	n/a
KNC-SRV-SMS60S-0040-30JBK-3LKU	KNC-SRV-MOT-005-05-KL-Y	KNC-SRV-ENCDG-05-GU	KNC-SRV-BRA-05-KL	n/a
KNC-SRV-SMS60S-0040-30KAK-3LKU	KNC-SRV-MOT-005-05-KL-Y	KNC-SRV-ENCDG-05-GU	n/a	KNC-SRV-ENCDG-(4)-GU-BT
KNC-SRV-SMS60S-0040-30KBK-3LKU	KNC-SRV-MOT-005-05-KL-Y	KNC-SRV-ENCDG-05-GU	KNC-SRV-BRA-05-KL	KNC-SRV-ENCDG-(4)-GU-BT

Model	KNC-SRV-SMS60S-0040-30JAK-3LKU KNC-SRV-SMS60S-0040-30JBK-3LKU KNC-SRV-SMS60S-0040-30KAK-3LKU KNC-SRV-SMS60S-0040-30KBK-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