

# KNC-SRV-SMC80S-0075 Servo Motor



## FEATURES

- 220 VAC
- 750 W Power Rating
- Rated Torque of 338 oz-in
- Maximum Speed of 5500 RPM
- 2500 PPR Incremental Encoder
- IP65 for Body, IP54 Shaft Seal
- 80mm Frame Size
- CE Certified

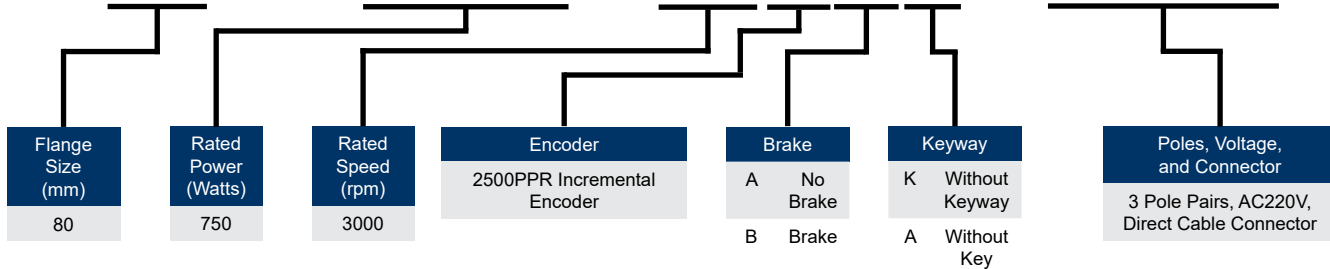


## DESCRIPTION

The KNC-SRV-SMC80S-0075 Series Servo Motor offers a solution to servo applications requiring position and speed control. This servo motor series comes standard with a 2,500 Pulses per Revolution (PPR) Incremental 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 338 oz-in with a 750 Watt power rating. This servo motor series enables industrial motion control applications to attain a great combination of position and speed functionality.

## ORDERING INFORMATION

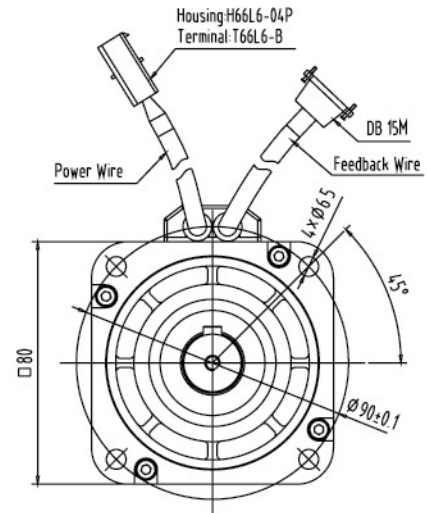
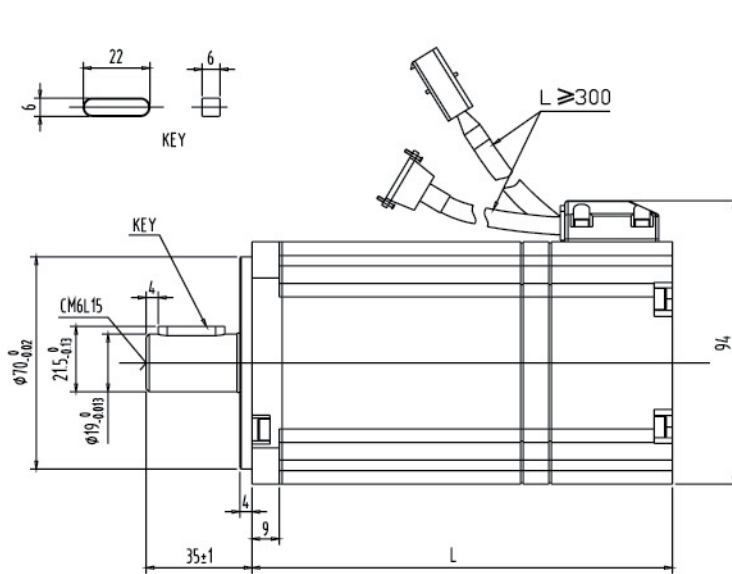
# SMC80S - 0075 - 30AAK - 3LKH



L011652

Model	KNC-SRV-SMC80S-0075-30AAK-3LKH KNC-SRV-SMC80S-0075-30ABK-3LKH
Compatible Driver	KNC-SRV-FD422S-CA-000 KNC-SRV-FD422S-AA-000 KNC-SRV-FD422S-LA-000
DC Link Voltage (VDC)	300
Rated Power (W)	750
Rated Torque (oz-in)	338
Rated Speed (RPM)	3000
Max Speed (RPM)	5500
Rated Current (A)	3.8
Maximum Torque (oz-in)	1015
Maximum Current (A)	11.4
Rated Standstill Torque (oz-in)	372
Rated Standstill Current (A)	4.2
Resistance Line-Line ( $\Omega$ )	2.1
Inductance Line-Line (mH)	10.5
Electrical Time Constant (ms)	5
Mechanical Time Constant (ms)	0.9
Torque Constant Kt (oz-in/A)	93
Rotor Moment of Inertia Jm (oz-in-s <sup>2</sup> )	0.01539 0.01556 (with brake)
Pole Pair Number	3
Maximum Voltage Rising du/dt (KV/ $\mu$ s)	8
Insulation Class	F
Maximum Radial Force F (N)	335
Maximum Axial Force F (N)	167.5
Weight (lbs)	6.17 7.49 (with brake)

KNC-SRV-SMC80S-0075-30AAK-3LKH

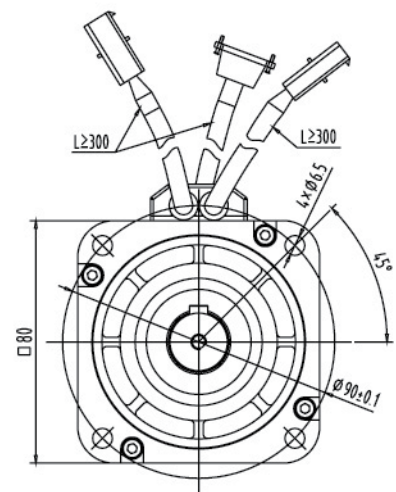
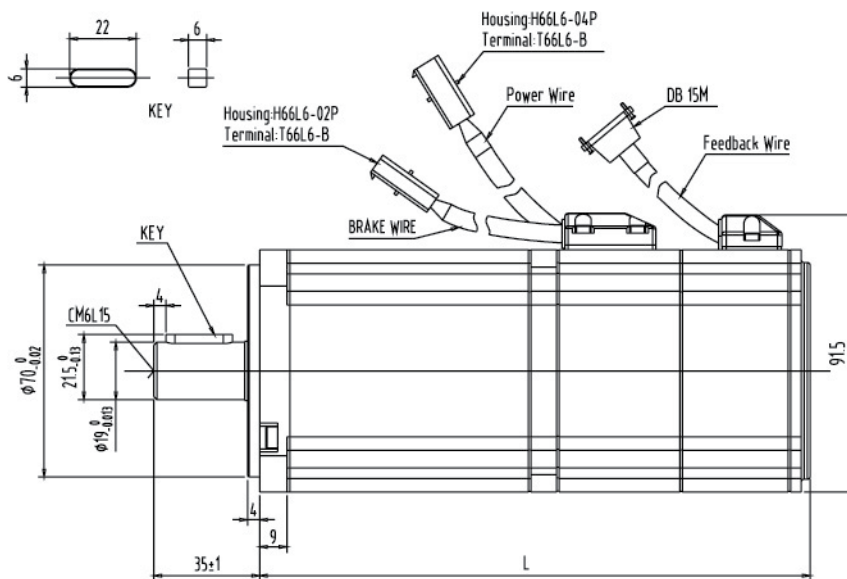


Model	KNC-SRV-SMC80S-0075-30AAK-3LKH KNC-SRV-SMC80S-0075-30ABK-3LKH
Length of Motor L (mm)	139 ± 1.5 182 ± 1.5 (with brake)

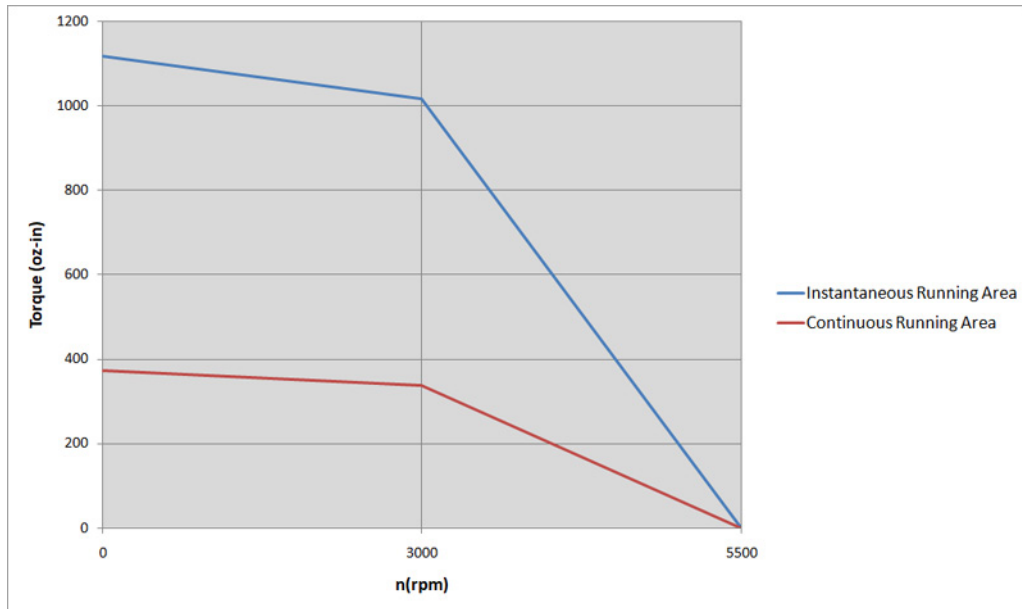
Dimensions are in mm

DIMENSIONS

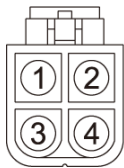
KNC-SRV-SMC80S-0075-30ABK-3LKH



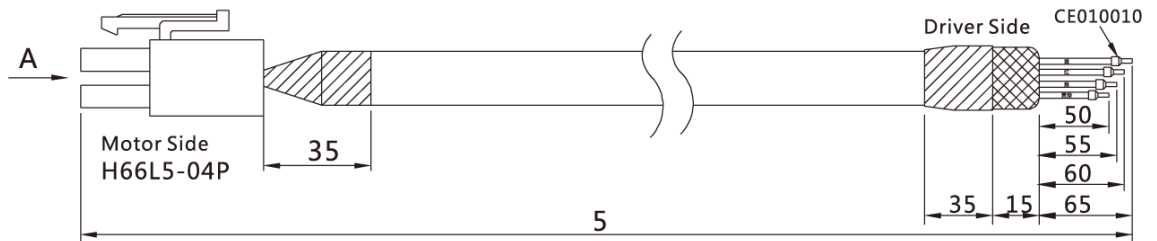
TORQUE CURVE



Motor Cable: KNC-SRV-MOT-005-05-KL for KNC-SRV-SMC80S-0075-30AAK-3LKH and KNC-SRV-SMC80S-0075-30ABK-3LKH

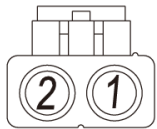


A  
4PIN

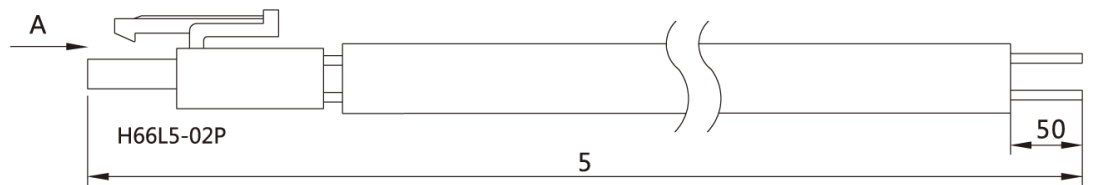


KNC-SRV-MOT-005-05-KL		
Cable Color	Signal	PIN #
Yellow	U	PIN 1
Red	V	PIN 2
Black	W	PIN 3
Yellow-green	PE	PIN 4

Brake Cable: KNC-SRV-BRA-05-KL for KNC-SRV-SMC80S-0075-30ABK-3LKH



A  
2PIN

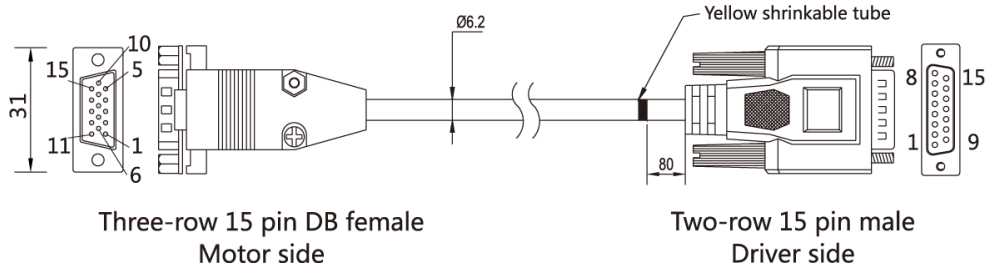


KNC-SRV-BRA-05-KL		
Cable Color	Signal	PIN #
Red	Break +	PIN 1
Blue	Break -	PIN 2

WIRING PINOUTS



Encoder Cable: KNC-SRV-ENCCF-05-FH for KNC-SRV-SMC80S-0075-30AAK-3LKH  
and KNC-SRV-SMC80S-0075-30ABK-3LKH



Three-row 15 pin DB female  
Motor side

Two-row 15 pin male  
Driver side

KNC-SRV-ENCCF-05-FH				
Three-Row Motor Side 15 PIN DB	Two-Row Driver Side 15 PIN DB	Signal	External Wire Color	Motor Wire Color
PIN 1	PIN 1	+5V	Red (thick)	Red
PIN 8	PIN 2	A	Brown	Blue-Black
PIN 7	PIN 3	B	Yellow	Green
PIN 6	PIN 4	Z	Green	Yellow
PIN 2	PIN 9	GND	Black (thick)	Black
PIN 13	PIN 10	/A	Brown-white	Blue
PIN 12	PIN 11	/B	Yellow-white	Green-black
PIN 11	PIN 12	/Z	Green-white	Yellow-black
Other PINs empty	Other PINs empty	n/a	n/a	n/a
Shell	Shell	Shield	Shield	Shield

WIRING PINOUTS

SPECIFICATIONS

Model	Motor Cable	Encoder Cable	Brake Cable
KNC-SRV-SMC80S-0075-30AAK-3LKH	KNC-SRV-MOT-005-05-KL	KNC-SRV-ENCCF-05-FH	-
KNC-SRV-SMC80S-0075-30ABK-3LKH			KNC-SRV-BRA-005-05-KL

Model	KNC-SRV-SMC80S-0075-30AAK-3LKH KNC-SRV-SMC80S-0075-30ABK-3LKH	
Length of Motor	L(mm)	139 ± 1.5 182 ± 1.5 (with brake)
Cooling Method	Totally Enclosed, Non-Ventilated	
Protection Level	IP65 for Body, Shaft Sealing IP54	
Environmental Conditions of Operation	Temperature	-20°C~40°C (Non-freezing)
	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