

SKS/SKM36

Safe speed measurement with HIPERFACE® for standard servo applications







Technical data overview

Tooliilloal data ovolviov		
Туре	For integration / Stand-alone (depending on type)	
Model	Absolute Singleturn / Absolute Multiturn (depending on type)	
Communication interface	HIPERFACE [®]	
Sine/cosine periods per revolution	128	
Safety system	- / ✔ (depending on type)	
Mechanical interface	Tapered shaft, Spring mounting plate, 5 mm Solid shaft, Servo-/face mount flange, 9.5 mm	
Connection type	Male connector, 8-pin, radial Male connector, M12, 8-pin, radial Cable, 8-wire, 1.5 m	
Available memory area	1,792 Byte E ² PROM 2048	
Measurement principle	Optical	

Product description

The SKS36/SKM36 Encoder is the first of a new generation of optical motor feedback systems. With 128 sine/cosine signals per revolution, this family represents the standard solution among the MFB systems with HIPERFACE® interface. Special feature of this generation: A very small code disk of only 2 mm code track radius allows for holistic scanning. In this, the unavoidable eccentricity errors of the code disk, ball bearing and shaft that occur with conventional systems are compensated for by the system. High angular speeds are no longer limited by the code disk due to the arrangement of the code disk in the middle of the rotary axle. Absolute position indication with an increment number of 4,096 increments per revolution and a maximum of 4,096 revolutions. Storage of motor-specific data in the electronic type label and the programming are important features of this product family. The motor feedback systems certified to SIL2/PL d meet current requirements with regard to safety technology and make the certification process easier.

At a glance

- · Motor feedback systems for the standard performance range
- 128 sine/cosine periods per revolution
- Absolute position with a resolution of 4,096 increments per revolution and 4,096 revolutions with the multiturn system
- Programming of the position value and electronic type label
- HIPERFACE[®] interface
- Integrated version and stand-alone design
- Certified according to SIL2/PL d (only valid for SKS36S/SKM36S-H...)
- · Conforms to RoHs

Your benefits

- The small dimension allows manufacturers of low-power and minimal-power motors to considerably reduce the size of their motors
- The stand-alone version is ideally suited as a master and path encoders
- The SKS/SKM36 motor feedback systems have strongly penetrated the drive technology market
- The consistent mechanical components in SEK/SEL37 allow for a high degree of flexibility with various encoder systems

Ordering information

Other models and accessories → www.sick.com/SKS_SKM36

Communication interface: HIPERFACE[®]

• Model: Absolute Singleturn

• Type: for integration

• Sine/cosine periods per revolution: 128

• Mechanical design: tapered shaft, Spring mounting plate

• Connection type: male connector, 8-pin, radial • Operating temperature range: -20 °C ... +110 °C

Safety system	Туре	Part no.
✓	SKS36S-HFA0-K02	1036556
	SKS36S-HFA0-K02-40	1131703
-	SKS36-HFA0-K02	1034095
	SKS36-HFA0-K02-40	1131702

Communication interface: HIPERFACE[®]

• Model: Absolute Singleturn

• Type: Stand-alone

• Sine/cosine periods per revolution: 128

• Mechanical design: Solid shaft, Servo-/face mount flange

• Operating temperature range: –20 $^{\circ}\text{C} \dots$ +100 $^{\circ}\text{C}$

Safety system	Connection type	Туре	Part no.
✓	Male connector, M12, 8-pin, radial	SKS36S-HVA0-K02	1036557
-	Cable, 8-wire, 1.5 m	SKS36-HVV0-K02	1035604
	Male connector, M12, 8-pin, radial	SKS36-HVA0-K02	1035603

* Communication interface: HIPERFACE®

• Model: Absolute Multiturn

• Type: for integration

• Sine/cosine periods per revolution: 128

• Mechanical design: tapered shaft, Spring mounting plate

• Connection type: male connector, 8-pin, radial

- Operating temperature range: –20 $^{\circ}\text{C} \dots$ +110 $^{\circ}\text{C}$

Safety system	Specialty	Туре	Part no.
✓	-	SKM36S-HFA0-K02	1036558
		SKM36S-HFA0-K02-40	1131704
	Customized stator coupling	SKM36S-HFA0-S12	1125009
-	-	SKM36-HFA0-K02	1034094
		SKM36-HFA0-K02-40	1131701
	Firmware version: SKS_M.V11 23.01.24, Delayed command time (response time) by 1.6 ms, Command timing similar to FIRMWARE V09 25.05.09	SKM36-HFA0-S17	1144947

SKS/SKM36

 $^{\bullet}$ Communication interface: $\mathsf{HIPERFACE}^{\circledast}$

• Model: Absolute Multiturn

• Type: Stand-alone

• Sine/cosine periods per revolution: 128

Mechanical design: Solid shaft, Servo-/face mount flange
 Operating temperature range: -20 °C ... +100 °C

Safety system	Connection type	Туре	Part no.
1	Male connector, M12, 8-pin, radial	SKM36S-HVA0-K02	1036559
+	Cable, 8-wire, 1.5 m	SKM36-HVV0-K02	1035602
	Male connector, M12, 8-pin, radial	SKM36-HVA0-K02	1035601

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

Contacts and other locations -www.sick.com

