

# SFS/SFM60

High-resolution motor feedback system in hollow shaft design

MOTOR FEEDBACK SYSTEMS ROTARY HIPERFACE®

**SICK**Sensor Intelligence.





#### Technical data overview

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Туре	Stand-alone
Model	Absolute Singleturn / Absolute Multiturn (depending on type)
Communication interface	HIPERFACE <sup>®</sup>
Sine/cosine periods per revolution	1,024
Safety system	- / ✔ (depending on type)
Mechanical interface	Blind hollow shaft, 8 mm Blind hollow shaft, 3/8" Blind hollow shaft, 10 mm Blind hollow shaft, 12 mm Blind hollow shaft, 12" Blind hollow shaft, 14 mm Blind hollow shaft, 15 mm Through hollow shaft, 8 mm Through hollow shaft, 3/8" Through hollow shaft, 10 mm Through hollow shaft, 12 mm Through hollow shaft, 12 mm Through hollow shaft, 1/2" Through hollow shaft, 14 mm Through hollow shaft, 15 mm
Connection type	Male connector, M23, 12-pin, radial Male connector, M12, 8-pin, radial Cable, 8-wire, radial, 1.5 m
Available memory area	1,792 Byte E <sup>2</sup> PROM 2048
Measurement principle	Optical

#### **Product description**

SICK is rounding out its portfolio with the optical high-resolution SFS/SFM60 motor feedback systems in hollow shaft design. Especially with self- and force-ventilated synchronous motors, this mechanical component meets customer requirements, as do various hollow shafts and high protection classes (IP65). A wide variety of product variants fulfills nearly every requirement. The SFS/SFM60 motor feedback systems use a globally standardized interface. It provides maximum flexibility and reduces installation times - plug & play at its best. The rugged shaft bearing increases the service life and at the same time reduces the servicing and maintenance requirements. It also achieves optimum concentricity and a previously unattainable low level of vibration even at maximum operating speeds.

#### At a glance

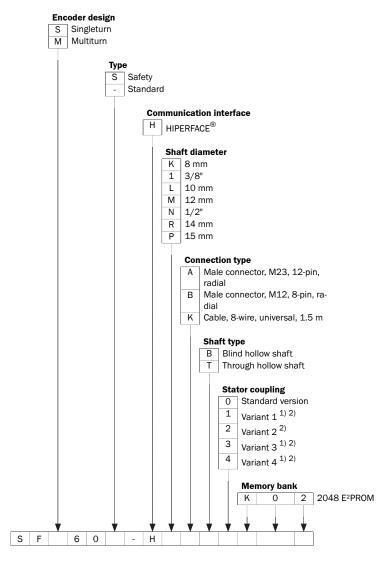
- HIPERFACE® motor feedback system in singleturn and multiturn design, compatible with the world's leading drive systems
- 1,024 sine/cosine periods per revolution
- Absolute position with a resolution of 32,768 increments per revolution and 4,096 revolutions with the multiturn system
- Mechanical flexibility through different blind hollow shaft and through hollow shaft diameters (8 to 15 mm diameter), available
  with various stator couplings
- IP65 protection class
- Certified according to SIL2/PL d (only valid for SFS60S/SFM60S...)

#### Your benefits

- · Convenient traceability and simple maintenance thanks to storage of motor-specific data in the electronic type label
- Large ball bearing distances reduce uneven wear and minimize vibration on the encoder housing, which increases the encoder's service life
- The nickel code disk offers a high degree of vibration resistance and an extended temperature range
- Shorter development times through standardized mechanical interface
- Platform for the future, since all electrical interfaces (TTL/HTL, 1Vpp, SSI, PROFIBUS, HIPERFACE DSL®) are or will be available in this mechanical component.

#### Type code

Other models and accessories → www.sick.com/SFS\_SFM60



 $<sup>^{1)}</sup>$  Only for standard type.

<sup>2)</sup> For variants 1 to 4, see accessories.

### 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

