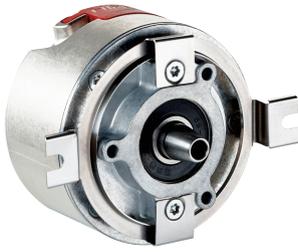


EFS/EFM50

High-resolution motor feedback system for dynamic servo drives

MOTOR FEEDBACK SYSTEMS ROTARY HIPERFACE DSL®

SICK
Sensor Intelligence.



Technical data overview

Type	For integration
Model	Absolute Singleturn / Absolute Multiturn (depending on type)
Communication interface	HIPERFACE DSL®
Resolution per revolution	21 bit / 23 bit (depending on type)
Safety system	- / ✓ (depending on type)
Mechanical interface	Tapered shaft
Connection type	Male connector, 4-pin
Available memory area	8,192 Byte
Measurement principle	Optical

Product description

The EFS/EFM50 motor feedback system features a compact and rugged design with a diameter of 50 mm. In combination with the absolute location indicator system of the motor feedback system, a resolution of up to 23 bits per revolution and a maximum of 4,096 revolutions, this design is unique in its class.

At a glance

- Motor feedback system with HIPERFACE DSL® interface
- Compact, rugged design with 50 mm diameter
- Up to 23-bit resolution per revolution and 4,096 revolutions measurable with the multiturn system
- Facility for connecting an external temperature sensor
- E²Prom with 8 KB of free memory space
- SIL2-certified (only valid for EFS/EFM50-2)
- 12-bit resolution of the safe position value
- Usage chart

Your benefits

- Thanks to data transmission exclusively in digital format, no analog components are necessary on the controller side
- The absence of a separate encoder cable considerably reduces costs. Data transmission is synchronized with the controller cycle.
- Minimum cabling thanks to integration of encoder communication into the motor cable
- Optimization of the controller circuit via automated synchronization with the controller cycle

Fields of application

- High-precision servo systems
- Printing machines
- Semiconductor industry

Ordering information

Other models and accessories → www.sick.com/EFS_EFM50

- **Communication interface:** HIPERFACE DSL®
- **Type:** for integration
- **Mechanical interface:** tapered shaft
- **Connection type:** male connector, 4-pin

Model	Resolution per revolution	Safety system	Type	Part no.
Absolute Multiturn	21 bit	✓	EFM50-2KF0A021A	1073488
			EFM50-2KF0A121A	1073496
		-	EFM50-0KF0A021A	1073486
			EFM50-0KF0A121A	1073494
	23 bit	✓	EFM50-2KF0A023A	1073504
			EFM50-2KF0A123A	1073512
		-	EFM50-0KF0A023A	1073502
			EFM50-0KF0A123A	1073510
Absolute Singleturn	21 bit	✓	EFS50-2KF0A021A	1073487
			EFS50-2KF0A121A	1073495
		-	EFS50-0KF0A021A	1073485
			EFS50-0KF0A121A	1073493
	23 bit	✓	EFS50-2KF0A023A	1073503
			EFS50-2KF0A123A	1073511
		-	EFS50-0KF0A023A	1073501
			EFS50-0KF0A123A	1073509

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