Product family overview

AFS/AFM60 Inox

Resistant, precise, programmable

ABSOLUTE ENCODERS

SICK
Sensor Intelligence.

Technical data overview

Encoder design	Singleturn / Multiturn (depending on type) (depending on type)
Shaft type	Solid shaft, Servo flange Solid shaft, face mount flange Solid shaft, Square flange Blind hollow shaft (depending on type)
Shaft diameter	
Solid shaft, Servo flange	6 mm
Solid shaft, face mount flange	10 mm
Solid shaft, Square flange	10 mm
Blind hollow shaft	8 mm 3/8" 10 mm 12 mm 1/2″ 14 mm 15 mm 5/8″ [1] (depending on type)
Connection type	Male connector, M12, 8-pin, radial Cable, 8-wire, radial Male connector, M12, 12-pin, radial Cable, 12-wire, radial (depending on type)
Communication interface	SSI
Communication Interface detail	SSI + incremental HTL TTL SSI + Sin/Cos (depending on type)
Number of steps per revolution (max. resolution)	262,144 (18 bit) 16,384 (14 bit) 36,000 (depending on type)
Max. resolution (number of steps per revolution x number of revolutions)	
SSI	18 bit x 12 bit (262,144 x 4,096) 12 bit x 12 bit (4,096 x 4,096) 10 bit x 12 bit (1,024 x 4,096) (depending on type)
SSI, SSI + incremental HTL	18 bit x 12 bit (262,144 x 4,096)
SSI, SSI + incremental TTL	18 bit x 12 bit (262,144 x 4,096)
SSI, SSI + incremental	18 bit x 12 bit (262,144 x 4,096)
SSI, SSI + Sin/Cos	18 bit x 12 bit (262,144 x 4,096) 12 bit x 12 bit (4,096 x 4,096) (depending on type)
Programmable/configurable	Over handheld programming tool

[1] 5/8" not available with multiturn.

Product description

With a high resolution of 18 bits (AFS60 Inox) or 30 bits (AFM60 Inox) and a large selection of programmable parameters, the AFS60 Inox absolute singleturn encoder and the AFM60 Inox absolute multiturn encoder set new standards when it comes to stainless-steel encoders.
The high resolution, the high IP enclosure rating, and the stainless-steel housing enable use in applications under harsh ambient conditions. The encoders are equipped with the SSI interface while the AFM60 Inox is also available with the SSI + Incremental and SSI + Sin/Cos combined interfaces. Both encoders can be programmed using the PC-based programming device PGT-08-S or the hand-held programming device PGT-10-Pro.

At a glance

- Housing, flange, and shaft made from stainless steel
- Face mount, servo, or square flange with solid shaft and blind hollow shaft
- Enclosure rating: IP67
- Resolution: up to 262,144 steps per revolution and 4,096 revolutions
- Electrical interfaces: SSI, SSI + Incremental, SSI + Sin/Cos
- Can be optionally programmed with PGT-08-S and PGT-10-Pro

Your benefits

- High resistance to environmental influences due to stainless-steel housing
-
- IP67 enclosure rating and shaft sealing ring for optimum tightness
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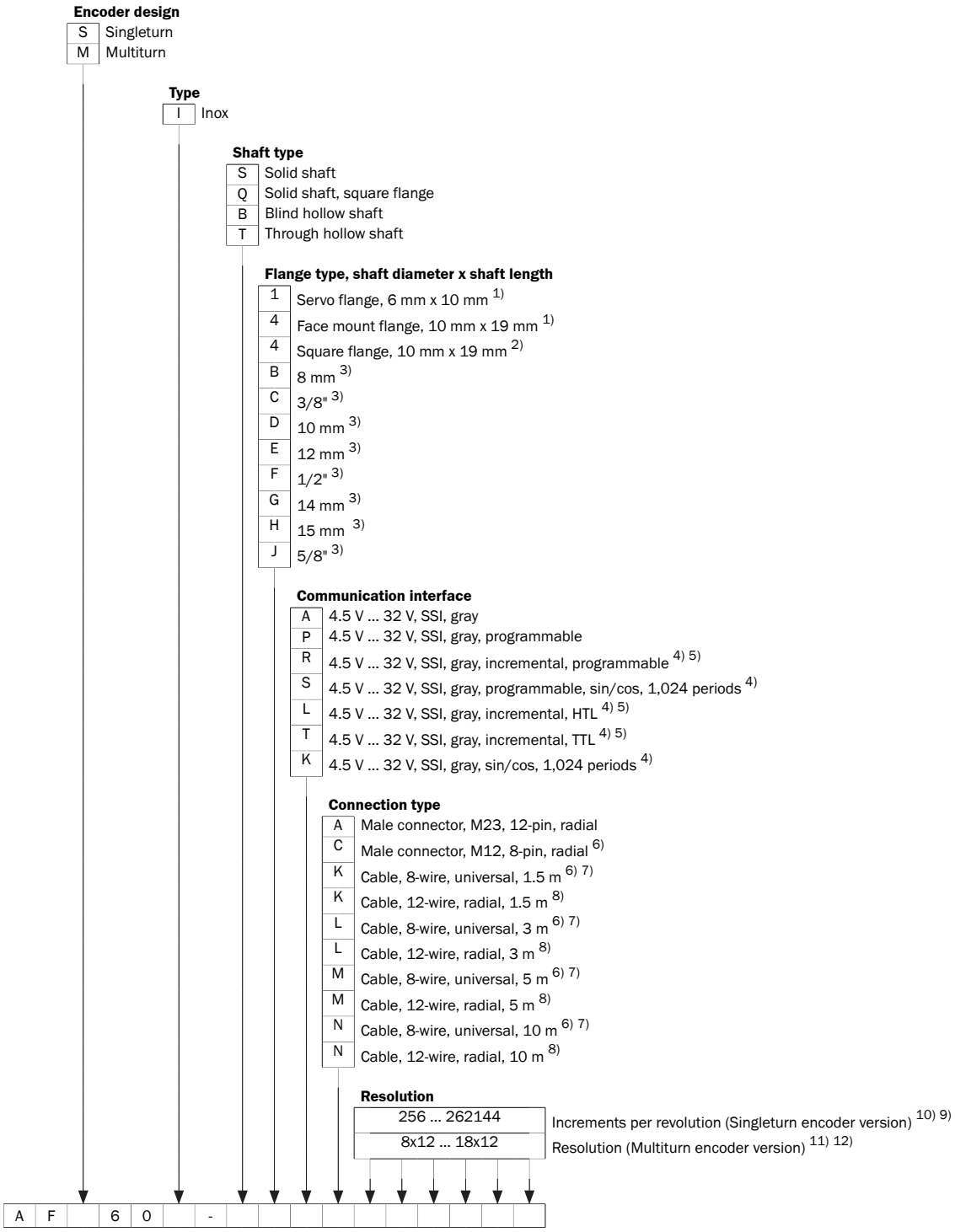
- High singleturn resolution up to 18 bits (AFS60 Inox) enables use in applications with demanding requirements for measurement accuracy
-
- The wide range of mechanical interfaces allows an optimal match between the encoder and the application-specific installation situation
-
- Simple mounting thanks to compact dimensions, even in confined spaces
-
- Reduces storage costs and downtimes since customers can program the encoder themselves with programming devices PGT-08-S and PGT-10-Pro

Fields of application

- Applications with high resistance requirements against aggressive substances such as cleaning agents or salt
- Particularly suitable for use in the food and drink industry, for packaging machines, in medical technology, and in outdoor applications in ports or offshore plants

Type code

Other models and accessories ➜ www.sick.com/AFS_AFM60_Inox



1) Only for solid shaft type.
2) Only for solid shaft type, square flange.
3) Only for blind hollow shaft or through hollow shaft type.
4) Only for Multiturn encoder versions.
5) Incremental number of lines is always 1/4 of the SSI/gray number of steps.

[6] Only for A and P communication interface.

[7] The universal cable outlet is positioned so that it is possible to lay it without bends in a radial or axial direction.

[8] Only for R, S, L, T and K communication interface.

[9] See “Number of steps per revolution” table. Programmable (P and R communication interface): Increments per revolution 256 ... 262,144, set to 262,144 at the factory.

[10] Other number of steps per revolution upon request.

[11] See “Resolution” table. Programmable (P and R communication interface): Resolution 8x12 ... 18x12, set to 18x12 at the factory.

[12] Other resolutions upon request.

Number of steps per revolution (more upon request)

	AFS60I / AFM60I
Non-programmable	00256
	00512
	01024
	02048
	04096
	08192
	16384
	32768
	65536
	131072
	262144
Programmable	00256 ... 262144

Resolution (available upon request)

	AFS60I / AFM60I
Non-programmable	08x12
	09x12
	10x12
	11x12
	12x12
	13x12
	14x12
	15x12
	16x12
	17x12
	18x12
Programmable	08x12 ... 18x12

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