Product family overview

DBS60 Inox

Rugged stainless steel incremental encoder for challenging applications

INCREMENTAL ENCODERS

SICK
Sensor Intelligence.

Technical data overview

Pulses per revolution	0 ... 5,000 [1]
Mechanical design	Solid shaft, face mount flange Solid shaft, Square flange Blind hollow shaft
Shaft diameter	10 mm 6 mm 8 mm 12 mm 14 mm 15 mm 3/8"
Connection type	Male connector, M12, 8-pin, radial Cable, 8-wire, radial
Communication interface	Incremental
Communication Interface detail	TTL / RS-422 HTL / Push pull TTL / HTL
Supply voltage	4.5 ... 5.5 V 10 ... 30 V 10 ... 27 V 4.5 ... 30 V
Enclosure rating	IP67 IP69K (depending on type)
Output frequency	≤ 300 kHz
Operating temperature range	–20 °C ... +85 °C –30 °C ... +100 °C –30 °C ... +85 °C

[1] Available pulses per revolution see type code.

Product description

The combination of a complete stainless steel design and a rugged shaft seal make the DBS60 Inox incremental encoder resistant to harsh environmental conditions. Its stainless steel housing is offered with standard IP67 or IP69K (DBS60I-W*) enclosure ratings and has a diameter of only 58 mm, thereby enabling it to be used in challenging applications with limited installation space. The IP69K DBS60I-W* variant with its patented deflector shield, which protects the shaft seal, is an ideal product for applications in washdown environments. With various mechanical and communication interfaces as well as a resolution of up to 5,000 pulses, the DBS60 Inox fulfills customer requirements from many different fields of industry.

At a glance

- Stainless steel design: 303/304 (V2A), 316L (V4A) for the IP69K variant
- Enclosure rating: IP67, IP69K (DBS60I-W*)
- Blind hollow shaft or solid shaft with face mount flange or square flange
- Up to 5,000 pulses per revolution
- Cable connection or M12 male connector
- Interfaces: TTL/HTL, TTL/RS-422, HTL/push-pull

Your benefits

- Stainless steel housing provides a high level of resistance to environmental influences
- Ideally suited for applications requiring high protection against aggressive media and cleaning agents
- IP67 and IP69K (DBS60I-W*) enclosure ratings for optimum ingress protection
- Bacterial growth prevention through clean design (IP69K variant)
- Corrosion resistance with 316L (V4A) stainless steel (IP69K variant)
- Design of the IP69K variant suitable for high-pressure, warm-water washdown typical for environments in the food and beverage industry

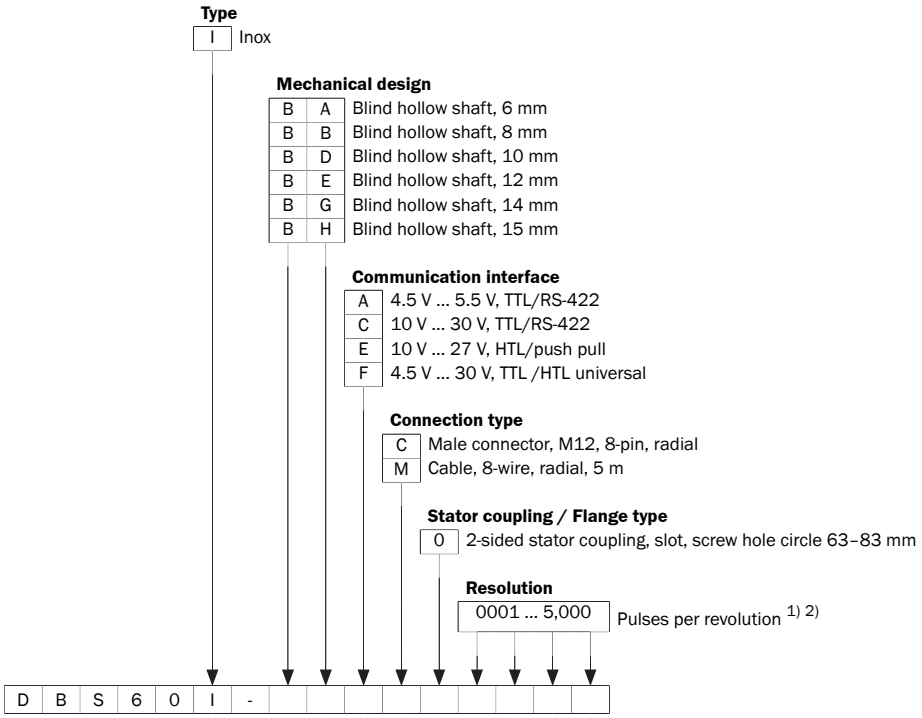
Fields of application

- Food and beverage industry
- Medical technology
- Packaging machines
- Challenging outdoor applications, e. g., in ports or offshore plants

Type code

Other models and accessories ➜ www.sick.com/DBS60_Inox

Hollow shaft



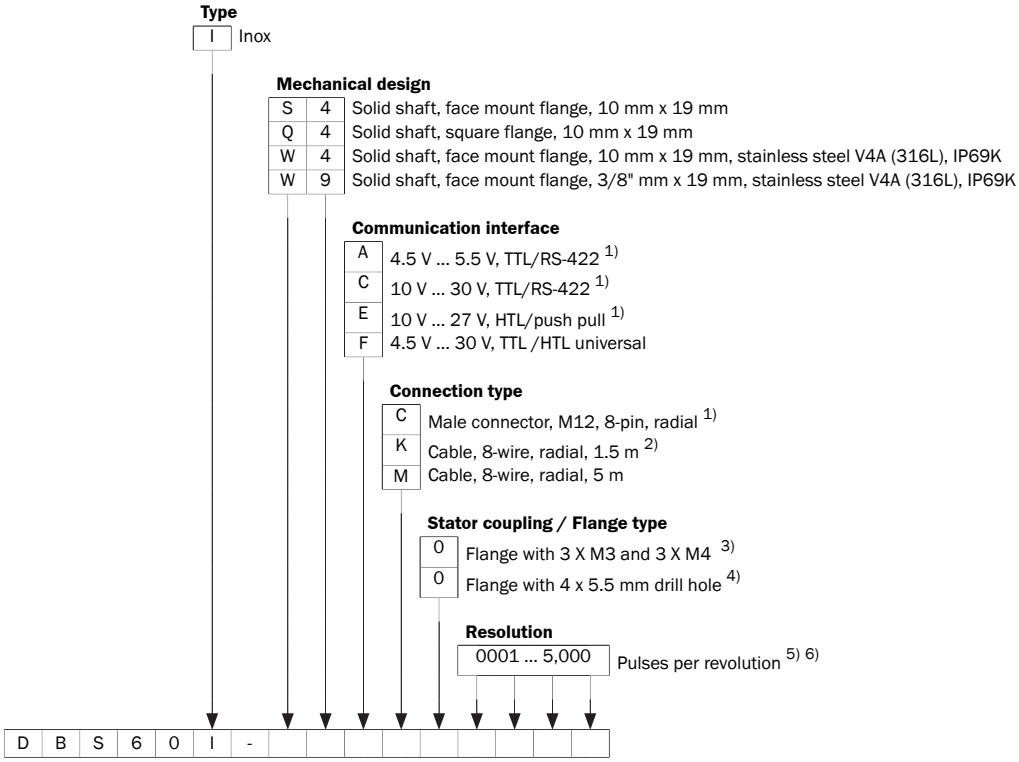
1) See “Pulses per revolution” table.
2) Other pulses upon request.

Pulses per revolution (other pulses upon request)

DBS60I
0010
0020

DBS60I
0050
0100
0128
0160
0200
0256
0360
0512
1000
1024
2000
2048
2500
3000
3600
4096
5000

Solid shaft



1) For mechanical design S4 and Q4.
2) For mechanical design W4 and W9.
3) For mechanical design S4, W4 and W9.
4) For mechanical design Q4.
5) See “Pulses per revolution” table.
6) Other pulses upon request.

Pulses per revolution (other pulses upon request)

DBS60I-S*, DBS60I-Q*	DBS60I-W*
0010	1000
0020	1024
0050	2048
0100	5000
0128	-
0160	-
0200	-
0256	-
0360	-
0512	-
1000	-
1024	-
2000	-
2048	-
2500	-
3000	-
3600	-
4096	-
5000	-

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

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