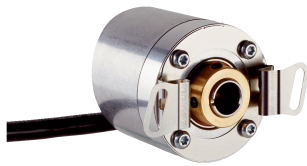




DBS36/50

Compact standard incremental encoder for industrial applications

SICK
Sensor Intelligence.



Technical data overview

Pulses per revolution	0 ... 2,500
Mechanical design	Solid shaft, Servo flange Solid shaft, face mount flange Blind hollow shaft Solid shaft, face mount flange 3xM4
Shaft diameter	6 mm, with feather key groove 6 mm, With face 1/4", With face 6 mm 8 mm ¹⁾ 8 mm, With face
Connection type	Cable, 8-wire, universal Cable, 8-wire, with male connector, M12, 8-pin, universal Cable, 8-wire, with male connector, M23, 12-pin, universal Cable, 5-wire, universal
Communication interface	Incremental
Communication Interface detail	TTL / RS-422 HTL / Push pull Open Collector
Supply voltage	4.5 ... 5.5 V 7 ... 30 V 7 ... 27 V 4.5 ... 30 V
Enclosure rating	IP65
Output frequency	≤ 300 kHz
Operating temperature range	
4.5 V ... 5.5 V, TTL, RS-422	-20 °C ... +85 °C
7 V ... 30 V, HTL, Push pull	-20 °C ... +85 °C
7 V ... 30 V, TTL, RS-422	-20 °C ... +85 °C
7 V ... 27 V, HTL, Push pull	-20 °C ... +70 °C -20 °C ... +85 °C
4.5 V ... 5.5 V, Open Collector	-20 °C ... +85 °C
7 V ... 30 V, Open Collector	-20 °C ... +85 °C -30 °C ... +85 °C
4.5 V ... 30 V, Open Collector	-20 °C ... +85 °C

¹⁾ Order collets for 5 mm, 6 mm and 1/4" mm separately as accessories.

Product description

The DBS36/50 incremental encoder is characterized by its high mechanical flexibility, excellent technical properties, and many variants. The encoders are available with housing diameters of 36 mm and 50 mm as well as various blind hollow shafts and solid shafts. Thanks to the various mounting hole patterns, servo clamps and servo grooves, and universal stator couplings, the DBS36/50 devices offer comprehensive mounting options. All models have compact dimensions and a universal cable connection. This allows both axial and radial cable routing.

At a glance

- Pulses per revolution: Up to 2,500
- Housing diameter: 36 mm or 50 mm
- Solid shaft and blind hollow shaft
- Enclosure rating: IP65
- Communication interfaces: TTL/RS-422, HTL/Push Pull, Open Collector
- Connection type: Cable, cable with M12 or M23 male connector

Your benefits

- The flexible cable connection makes installation flexible and easy especially when space is limited
- Tailorable to the application: Many mounting options due to various flanges and universal stator couplings
- Can be used internationally thanks to shafts in both metric and inch sizes
- The high mechanical flexibility and the large selection of supported accessories ensure the variants can be used in many applications
- The compact housing diameter saves valuable space
- The encoder has a longer service life and is more reliable in operation due to the high enclosure rating, temperature range, and storage life

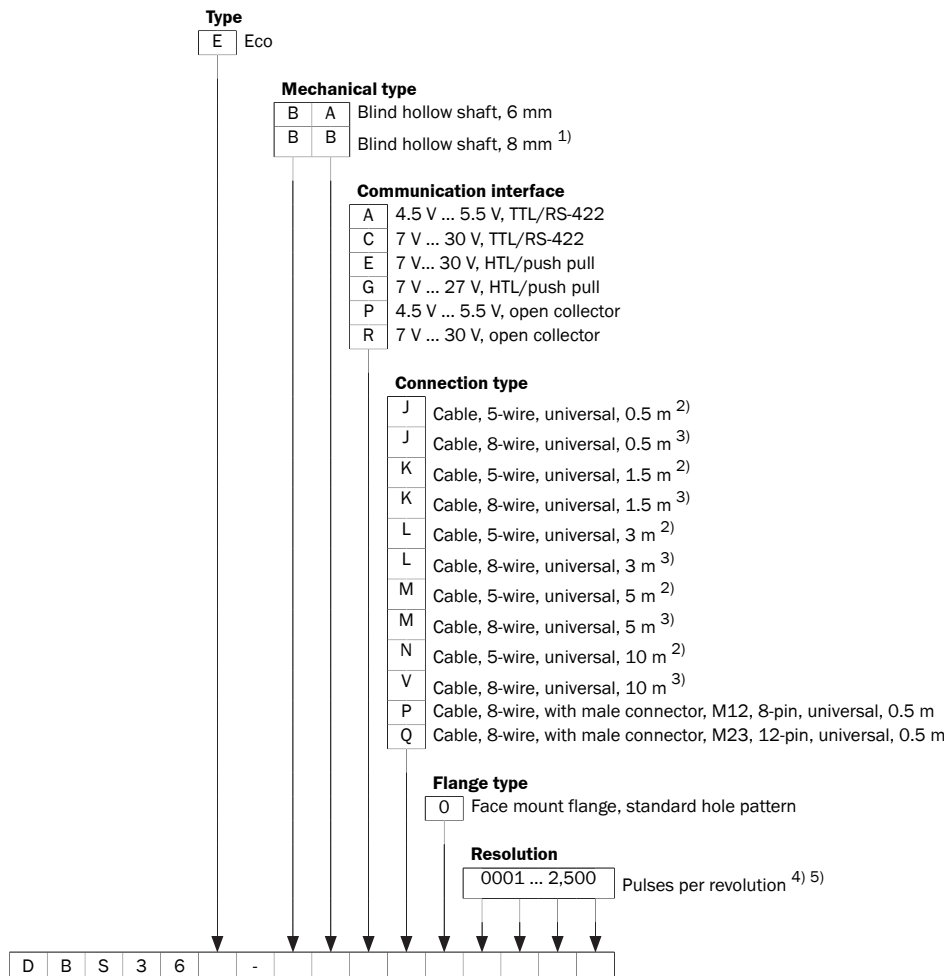
Fields of application

Positioning and speed measurement, e.g., in the textile industry, glass industry, drive technology, storage and conveyor technology, in packaging machines, printing presses, and elevators

Type code

Other models and accessories → www.sick.com/DBS36_50

Hollow shaft

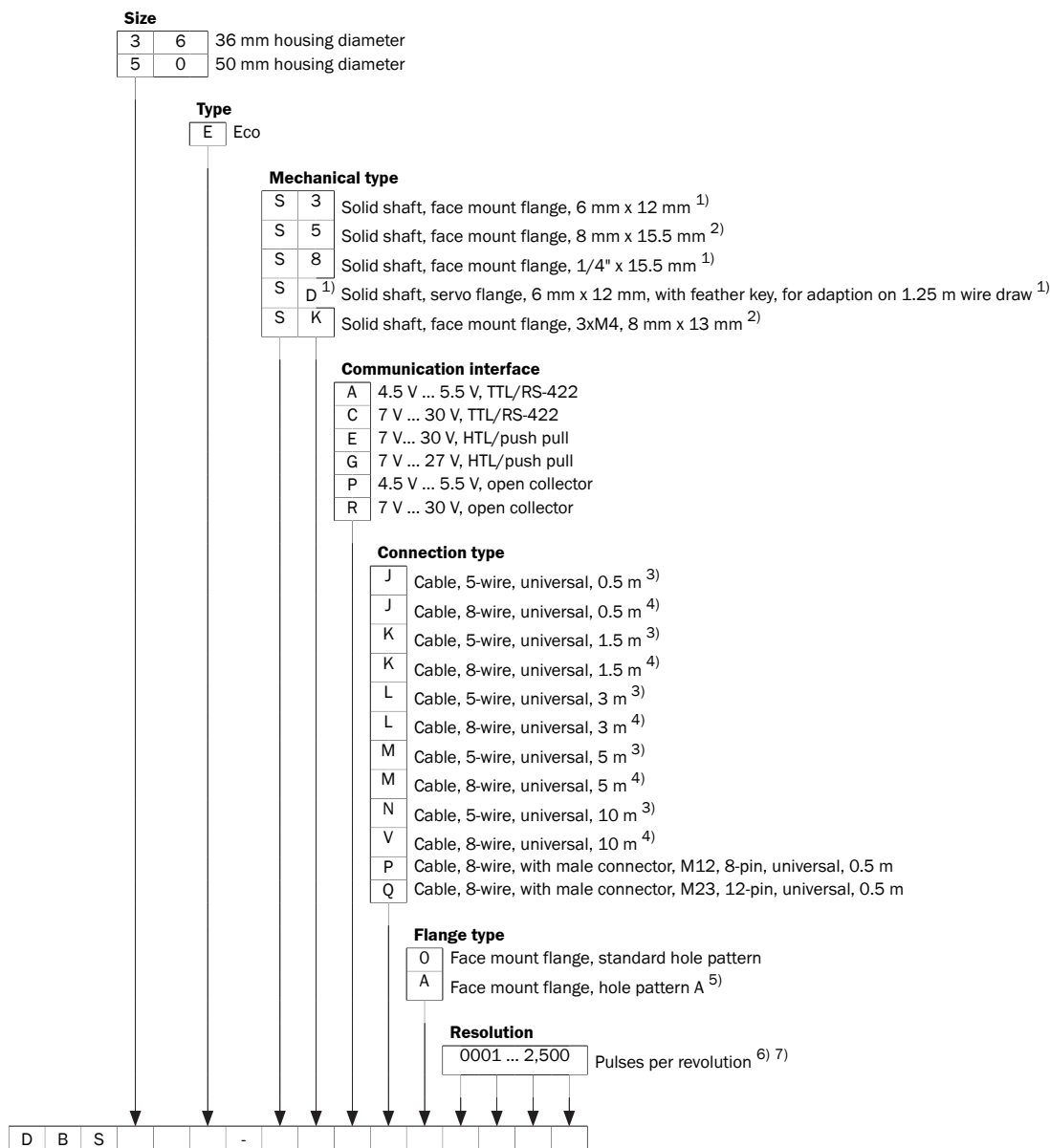


¹⁾ Order collets for 5 mm, 6 mm and 1/4" mm separately as accessories.
²⁾ Only for G, P and R communication interface.
³⁾ Only for A, C and E communication interface.
⁴⁾ See "Pulses per revolution" table.
⁵⁾ Other pulses upon request.

Pulses per revolution (other pulses upon request)

DBS36		
010	0250	0600
020	0256	1000
050	0300	1024
0100	0360	1200
0120	0400	2000
0125	0500	2048
0200	0512	2500

Solid shaft



¹⁾ Only for size 36.

²⁾ Only for size 50.

³⁾ Only for G, P and R communication interface.

- 4) Only for A, C and E communication interface.
5) Only for mechanical type S3.
6) See "Pulses per revolution" table.
7) Other pulses upon request.

Pulses per revolution (other pulses upon request)

DBS36/50		
010	0250	0600
020	0256	1000
050	0300	1024
0100	0360	1200
0120	0400	2000
0125	0500	2048
0200	0512	2500

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