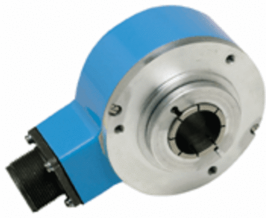


## DGS34

Large hollow shaft encoders for rough environmental conditions

**INCREMENTAL ENCODERS**

**SICK**  
Sensor Intelligence.



### Technical data overview

<b>Pulses per revolution</b>	120 ... 16,384
<b>Mechanical design</b>	Blind hollow shaft
<b>Shaft diameter</b>	30 mm <sup>1)</sup> 1" <sup>2)</sup>
<b>Connection type</b>	Cable, 11-wire, radial Male connector, MS, 10-pin, radial
<b>Communication interface</b>	Incremental
<b>Communication Interface detail</b>	TTL / RS-422 TTL / HTL HTL / Push pull
<b>Supply voltage</b>	4.5 ... 5.5 V 5 ... 15 V 8 ... 24 V
<b>Enclosure rating</b>	IP66
<b>Output frequency</b>	300 kHz
<b>Operating temperature range</b>	-20 °C ... +70 °C

<sup>1)</sup> Separately order collets for 24 mm and 25 mm as accessories.

<sup>2)</sup> Separately order collets for 1/2", 3/4", 5/8", 7/8", 10 mm, 12 mm, 14 mm, 15 mm, 18 mm, 20 mm, 22 mm, 24 mm and 25 mm as accessories.

### Product description

The high-resolution DGS34/DGS35 hollow shaft incremental encoder family is a rugged solution for very challenging encoder applications. With generous hollow shaft diameters of up to 1-1/8" or 30 mm, they are ideal for mounting directly on the motor shaft.

### At a glance

- Incremental encoder Ø 3.5"
- Electrical interface
- 5V TTL / RS422
- 8 ... 24V TTL / RS422
- 8 ... 24V HTL / push pull
- 8 ... 24V Open Collector"
- Blind hollow shaft Ø 30 mm; 1", 1/2", 5/8", 3/4", 7/8"
- Connection type cable 1 m, 1,5 m, 3 m, 5 m, 10 m
- Number of lines 120 ... 16,384

### Your benefits

- The high output frequency means that mechanical gear reduction is not required.
- Hollow shaft design does not require couplings or mounting bracket.
- Large selection of stator couplings available for virtually any AC asynchronous motor

### Fields of application

- Crane winches
- Stages and theaters
- Steel industry
- Elevators
- Packaging industry

## Ordering information

Other models and accessories → [www.sick.com/DGS34](http://www.sick.com/DGS34)

- **Mechanical design:** blind hollow shaft

Shaft diameter	Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.
1" <sup>1)</sup>	Incremental / HTL / Push pull	8 V ... 24 V	Cable, 11-wire, radial, 1.5 m	1,024	DGS34-5HK01024	7101733
				2,048	DGS34-5HK02048	7101734
				360	DGS34-5HK00360	7101732
				4,096	DGS34-5HK04096	7101735
				8,192	DGS34-5HK08192	7101736
			Male connector, MS, 10-pin, radial	1,024	DGS34-5H401024	7101718
1" <sup>1)</sup>	Incremental / HTL / Push pull	8 V ... 24 V	Male connector, MS, 10-pin, radial	2,048	DGS34-5H402048	7101719
				360	DGS34-5H400360	7101717
				4,096	DGS34-5H404096	7101720
				8,192	DGS34-5J404096	7102201
					DGS34-5H408192	7101721
	Incremental / TTL / HTL	5 V ... 15 V	Cable, 11-wire, radial, 1.5 m	1,024	DGS34-7HK01024	7101738
				2,048	DGS34-7HK02048	7101739
				360	DGS34-7HK00360	7101737
				4,096	DGS34-7HK04096	7101740
				8,192	DGS34-7HK08192	7101741
			Male connector, MS, 10-pin, radial	1,024	DGS34-7H401024	7101723
				2,048	DGS34-7H402048	7101724
				360	DGS34-7H400360	7101722
				4,096	DGS34-7H404096	7101725
				8,192	DGS34-7H408192	7101726
	Incremental / TTL / RS-422	4.5 V ... 5.5 V	Cable, 11-wire, radial, 1.5 m	1,024	DGS34-1HK01024	7101728
				2,048	DGS34-1HK02048	7101729
				360	DGS34-1HK00360	7101727
				4,096	DGS34-1HK04096	7101730
				8,192	DGS34-1HK08192	7101731
Male connector, MS, 10-pin, radial				1,024	DGS34-1H401024	7101713
				2,048	DGS34-1H402048	7101714
				360	DGS34-1H400360	7101712
				4,096	DGS34-1H404096	7101715
				8,192	DGS34-1H408192	7101716

<sup>1)</sup> Separately order collets for 1/2", 3/4", 5/8", 7/8", 10 mm, 12 mm, 14 mm, 15 mm, 18 mm, 20 mm, 22 mm, 24 mm and 25 mm as accessories.

<sup>2)</sup> Separately order collets for 24 mm and 25 mm as accessories.

Shaft diameter	Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.		
30 mm <sup>2)</sup>	Incremental / HTL / Push pull	8 V ... 24 V	Cable, 11-wire, radial, 1.5 m	1,024	DGS34-5LK01024	7101763		
				2,048	DGS34-5LK02048	7101764		
				360	DGS34-5LK00360	7101762		
				4,096	DGS34-5LK04096	7101765		
				8,192	DGS34-5LK08192	7101766		
30 mm <sup>2)</sup>	Incremental / HTL / Push pull	8 V ... 24 V	Male connector, MS, 10-pin, radial	1,024	DGS34-5L401024	7101748		
				2,048	DGS34-5L402048	7101749		
				360	DGS34-5L400360	7101747		
				4,096	DGS34-5L404096	7101750		
				8,192	DGS34-5L408192	7101751		
		Incremental / TTL / HTL	5 V ... 15 V	Cable, 11-wire, radial, 1.5 m	1,024	DGS34-7LK01024	7101768	
					2,048	DGS34-7LK02048	7101769	
					360	DGS34-7LK00360	7101767	
					4,096	DGS34-7LK04096	7101770	
					8,192	DGS34-7LK08192	7101771	
					Male connector, MS, 10-pin, radial	1,024	DGS34-7L401024	7101753
						2,048	DGS34-7L402048	7101754
						360	DGS34-7L400360	7101752
						4,096	DGS34-7L404096	7101755
						8,192	DGS34-7L408192	7101756
	Incremental / TTL / RS-422	4.5 V ... 5.5 V	Cable, 11-wire, radial, 1.5 m	1,024	DGS34-1LK01024	7101758		
				2,048	DGS34-1LK02048	7101759		
				360	DGS34-1LK00360	7101757		
				4,096	DGS34-1LK04096	7101760		
				8,192	DGS34-1LK08192	7101761		
				Male connector, MS, 10-pin, radial	1,024	DGS34-1L401024	7101743	
					2,048	DGS34-1L402048	7101744	
					360	DGS34-1L400360	7101742	
					4,096	DGS34-1L404096	7101745	
					8,192	DGS34-1L408192	7101746	

<sup>1)</sup> Separately order collets for 1/2", 3/4", 5/8", 7/8", 10 mm, 12 mm, 14 mm, 15 mm, 18 mm, 20 mm, 22 mm, 24 mm and 25 mm as accessories.

<sup>2)</sup> Separately order collets for 24 mm and 25 mm as 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](http://www.sick.com)