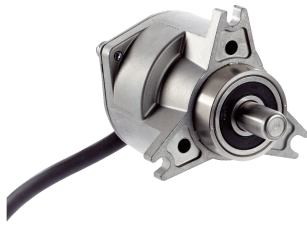


DKS40

Rugged, high-performance incremental encoder

INCREMENTAL ENCODERS

SICK
Sensor Intelligence.



Technical data overview

Pulses per revolution	1 ... 2048
Mechanical design	Solid shaft, face mount flange
Shaft diameter	8 mm
Connection type	Cable, 8-wire, universal Cable, 8-wire, with male connector, M12, 8-pin, universal
Communication interface	Incremental
Communication Interface detail	Open Collector TTL / RS-422 HTL / Push pull
Supply voltage	4.5 ... 5.5 V 10 ... 30 V
Enclosure rating	IP64
Output frequency	≤ 50 kHz ≤ 200 kHz (depending on type)
Operating temperature range	0 °C ... +60 °C

Product description

The DKS40 incremental encoder offers an outstanding price-performance ratio. Its housing is made of solid zinc die cast and, with an external diameter of 50 mm, it is extremely compact, saving valuable installation space. Use of mini-disc technology makes the DKS40 extremely resistant to shock and vibration. In addition, the DKS40 has a high IP64 enclosure rating

At a glance

- Compact housing
- Durable, low-cost design
- Interfaces: Open collector NPN, TTL/RS-422 or HTL/push pull.
- Connection via cable connection, for radial or axial use with open ends or fitted with an M12 connector
- Face mount flange with solid shaft
- Housing for simple clamping ring mounting
- Any line count possible from 1 to 2,048

Your benefits

- Low-cost encoder of outstanding quality
- Withstands harsh ambient conditions due to high IP protection class and rugged design
- Universal cable connection supports axial and radial cable routing
- Compact dimensions facilitate straightforward installation even where space is at a premium

Fields of application

- Due to the variety of products, there is a wide range of application possibilities such as in tool machines, textile machines, wood processing machines, packaging machinery

Ordering information

Other models and accessories → www.sick.com/DKS40

- **Mechanical design:** Solid shaft, face mount flange
- **Shaft diameter:** 8 mm

Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.
Incremental / HTL / Push pull	10 V ... 30 V	Cable, 8-wire, universal, 0.5 m ¹⁾	1	DKS40-E5J00001	1061657
			1,000	DKS40-E5J01000	1034658
		Cable, 8-wire, universal, 0.5 m ¹⁾	1,024	DKS40-E5J01024	1034659
			1,800	DKS40-E5J01800	1037294
			10	DKS40-E5J00010	1034647
			100	DKS40-E5J00100	1034650
			125	DKS40-E5J00125	1035337
			16	DKS40-E5J00016	1059211
			2,000	DKS40-E5J02000	1034817
			2,048	DKS40-E5J02048	1034818
			20	DKS40-E5J00020	1034648
			200	DKS40-E5J00200	1034651
			250	DKS40-E5J00250	1034652
			Incremental / HTL / Push pull	10 V ... 30 V	Cable, 8-wire, universal, 0.5 m ¹⁾
30	DKS40-E5J00030	1037301			
300	DKS40-E5J00300	1035475			
330	DKS40-E5J00330	1035297			
360	DKS40-E5J00360	1034654			

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

²⁾ No UL certification.

Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.			
			380	DKS40-E5J00380	1035776			
			400	DKS40-E5J00400	1035089			
			5	DKS40-E5J00005	1035377			
			50	DKS40-E5J00050	1034649			
	10 V ... 30 V	Cable, 8-wire, universal, 0.5 m ¹⁾	500	DKS40-E5J00500	1034655			
			512	DKS40-E5J00512	1034656			
			60	DKS40-E5J00060	1035474			
			600	DKS40-E5J00600	1035301			
			720	DKS40-E5J00720	1034657			
			Cable, 8-wire, universal, 1.5 m ^{1) 2)}	1,000	DKS40-E5K01000	1035797		
				1,024	DKS40-E5K01024	1035234		
				1,200	DKS40-E5K01200	1036635		
		100		DKS40-E5K00100	1035361			
		2,000		DKS40-E5K02000	1035672			
		20		DKS40-E5K00020	1071156			
		200		DKS40-E5K00200	1036377			
		250		DKS40-E5K00250	1035795			
					360	DKS40-E5K00360	1035796	
					50	DKS40-E5K00050	1035794	
					500	DKS40-E5K00500	1035671	
Incremental / HTL / Push pull	10 V ... 30 V				Cable, 8-wire, universal, 1.5 m ^{1) 2)}	600	DKS40-E5K00600	1065652
						Cable, 8-wire, universal, 3 m ^{1) 2)}	1,000	DKS40-E5L01000
					2,000		DKS40-E5L02000	1035549
					2,048		DKS40-E5L02048	1035410
						200	DKS40-E5L00200	1035384

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²⁾ No UL certification.

Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.
	10 V ... 30 V	Cable, 8-wire, universal, 5 m ^{1) 2)}	360	DKS40-E5L00360	1036148
			500	DKS40-E5L00500	1035723
			1,000	DKS40-E5M01000	1036327
			1,024	DKS40-E5M01024	1036328
		Cable, 8-wire, universal, 5 m ^{1) 2)}	1,510	DKS40-E5M01510	1069868
			10	DKS40-E5M00010	1065326
			100	DKS40-E5M00100	1095970
			16	DKS40-E5M00016	1074835
			2,000	DKS40-E5M02000	1062028
			250	DKS40-E5M00250	1070179
	300		DKS40-E5M00300	1037170	
	50		DKS40-E5M00050	1035750	
	600		DKS40-E5M00600	1035330	
	Cable, 8-wire, with male connector, M12, 8-pin, universal, 1.5 m ¹⁾		1,024	DKS40-E5P01024	1037022
		2,000	DKS40-E5P02000	1073438	
		250	DKS40-E5P00250	1070276	
		256	DKS40-E5P00256	1067501	
		360	DKS40-E5P00360	1036072	
		50	DKS40-E5P00050	1061665	
		500	DKS40-E5P00500	1035406	
Incremental / Open Collector	10 V ... 30 V	Cable, 8-wire, universal, 0.5 m ¹⁾	1	DKS40-R5J00001	1035691
			1,000	DKS40-R5J01000	1034632
			1,024	DKS40-R5J01024	1034633
			1,500	DKS40-R5J01500	1036155
			10	DKS40-R5J00010	1034621
Incremental / Open Collector	10 V ... 30 V	Cable, 8-wire, universal, 0.5 m ¹⁾	100	DKS40-R5J00100	1034624
			12	DKS40-R5J00012	1036698
			2	DKS40-R5J00002	1036294
			2,000	DKS40-R5J02000	1034813

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²⁾ No UL certification.

Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.		
	10 V ... 30 V	Cable, 8-wire, universal, 0.5 m ¹⁾	2,048	DKS40-R5J02048	1034814		
			20	DKS40-R5J00020	1034622		
			200	DKS40-R5J00200	1034625		
			250	DKS40-R5J00250	1034626		
			256	DKS40-R5J00256	1034627		
			360	DKS40-R5J00360	1034628		
			50	DKS40-R5J00050	1034623		
			500	DKS40-R5J00500	1034629		
			512	DKS40-R5J00512	1034630		
			600	DKS40-R5J00600	1035300		
			720	DKS40-R5J00720	1034631		
			800	DKS40-R5J00800	1036154		
			Cable, 8-wire, universal, 1.5 m ^{1) 2)}	2,000	DKS40-R5K02000	1095141	
				20	DKS40-R5K00020	1064478	
		Cable, 8-wire, universal, 3 m ^{1) 2)}	100	DKS40-R5L00100	1036684		
			2,000	DKS40-R5L02000	1035619		
			256	DKS40-R5L00256	1075859		
			360	DKS40-R5L00360	1035772		
		Cable, 8-wire, universal, 5 m ^{1) 2)}	1	DKS40-R5M00001	1036323		
			100	DKS40-R5M00100	1036685		
			200	DKS40-R5M00200	1062854		
		Incremental / Open Collector	10 V ... 30 V	Cable, 8-wire, universal, 5 m ^{1) 2)}	50	DKS40-R5M00050	1036229
					500	DKS40-R5M00500	1085086
				Cable, 8-wire, with male connector, M12, 8-pin, universal, 1.5 m ¹⁾	2,048	DKS40-R5P02048	1065090
500	DKS40-R5P00500				1061105		

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

²⁾ No UL certification.

Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.
	4.5 V ... 5.5 V	Cable, 8-wire, universal, 0.5 m ¹⁾	1,000	DKS40-P5J01000	1034619
			1,024	DKS40-P5J01024	1034620
			10	DKS40-P5J00010	1034608
			100	DKS40-P5J00100	1034611
			16	DKS40-P5J00016	1036178
			2,000	DKS40-P5J02000	1034811
			2,048	DKS40-P5J02048	1034812
			20	DKS40-P5J00020	1034609
	4.5 V ... 5.5 V	Cable, 8-wire, universal, 0.5 m ¹⁾	200	DKS40-P5J00200	1034612
			250	DKS40-P5J00250	1034613
			256	DKS40-P5J00256	1034614
			360	DKS40-P5J00360	1034615
			50	DKS40-P5J00050	1034610
			500	DKS40-P5J00500	1034616
			512	DKS40-P5J00512	1034617
			64	DKS40-P5J00064	1036376
		720	DKS40-P5J00720	1034618	
		Cable, 8-wire, universal, 1.5 m ^{1) 2)}	1,200	DKS40-P5K01200	1062754
			2,000	DKS40-P5K02000	1037860
			2,000	DKS40-P5M02000	1053470
DKS40-P5P02048	1055770				
Incremental / TTL / RS-422	4.5 V ... 5.5 V	Cable, 8-wire, universal, 0.5 m ¹⁾	1,000	DKS40-A5J01000	1034645
			1,024	DKS40-A5J01024	1034646
			1,090	DKS40-A5J01090	1063729
			1,500	DKS40-A5J01500	1035458
			10	DKS40-A5J00010	1034634
			100	DKS40-A5J00100	1034637
			2,000	DKS40-A5J02000	1034815
			2,048	DKS40-A5J02048	1034816
			20	DKS40-A5J00020	1034635
			200	DKS40-A5J00200	1034638
			250	DKS40-A5J00250	1034639
			256	DKS40-A5J00256	1034640
Incremental / TTL / RS-422	4.5 V ... 5.5 V	Cable, 8-wire, universal, 0.5 m ¹⁾	360	DKS40-A5J00360	1034641
			4	DKS40-A5J00004	1036293
			50	DKS40-A5J00050	1034636

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

²⁾ No UL certification.

Communication interface	Supply voltage	Connection type	Pulses per revolution	Type	Part no.
			500	DKS40-A5J00500	1034642
			512	DKS40-A5J00512	1034643
			600	DKS40-A5J00600	1035204
			64	DKS40-A5J00064	1035661
			720	DKS40-A5J00720	1034644
		Cable, 8-wire, universal, 1.5 m ^{1) 2)}	1,000	DKS40-A5K01000	1036073
			100	DKS40-A5K00100	1035605
			2,048	DKS40-A5K02048	1036137
			360	DKS40-A5K00360	1036730
			50	DKS40-A5K00050	1064683
			500	DKS40-A5K00500	1035779
			600	DKS40-A5K00600	1065717
			1,000	DKS40-A5L01000	1035582
			2,000	DKS40-A5L02000	1035581
			2,048	DKS40-A5L02048	1035616
		Cable, 8-wire, universal, 5 m ^{1) 2)}	1,024	DKS40-A5M01024	1035705
			2,048	DKS40-A5M02048	1036631
			360	DKS40-A5M00360	1036504
			500	DKS40-A5M00500	1036627
		Cable, 8-wire, with male connector, M12, 8-pin, universal, 1.5 m ¹⁾	1,024	DKS40-A5P01024	1037727
			2,048	DKS40-A5P02048	1036702
			360	DKS40-A5P00360	1035695

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²⁾ No UL certification.

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