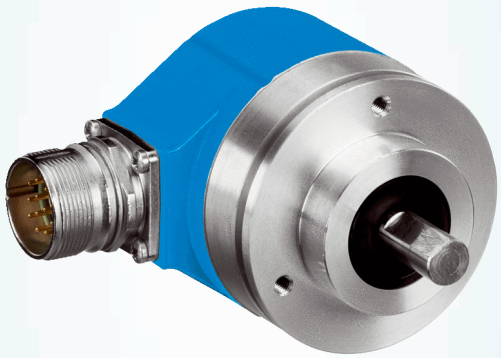
Online data sheet



DRS61-A4K08192

DRS61

INCREMENTAL ENCODERS

SICK
Sensor Intelligence.

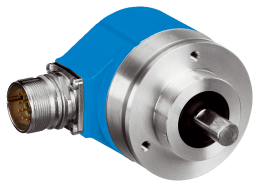


Illustration may differ

Ordering information

Type	Part no.
DRS61-A4K08192	1034987

Other models and accessories ➜ www.sick.com/DRS61

Detailed technical data

Performance

Pulses per revolution	8,192
Measuring step	90°, electronically/ppr
Measuring step deviation at non binary number of lines	0.016°
Measuring step deviation at binary number of lines	0.005°
Initialization time	40 s

Interfaces

Electrical interface	Radial, 1.5 m

Electrical data

Electrical interface	4.5 V ... 5.5 V, TTL/RS422
Connection type	Radial, 1.5 m
Supply voltage	4.5 V ... 5.5 V
Load current	≤ 20
Maximum output frequency	≤ 820 Hz
Zero pulse width	Freely programmable
Reference signal, number	1
Reference signal, position	90°, electric, logically gated with A and B 180°, electric, logically gated with A and B

Mechanical data

Mechanical version	Solid shaft, face mount flange
Shaft diameter	19 mm
Weight	+ 0.3 kg (relates to devices with male connector connection)
Start up torque	0.4 Ncm (+20 °C)
Operating torque	0.3 Ncm (+20 °C)
Moment of inertia of the rotor	54 gcm²
Bearing lifetime	3.6 x 10^9 revolutions

Ambient data

EMC	EN 61000-6-2 EN 61000-6-3
Enclosure rating	IEC 60529
Operating temperature range	–20 °C ... +85 °C
Storage temperature range	–40 °C ... +100 °C, without package
Resistance to shocks	50 g, 11 ms (EN 60068-2-27)
Resistance to vibration	20 g, 10 Hz ... 2,000 Hz (EN 60068-2-6)
Air humidity	90 % [1]

[1] Condensation of the optical scanning not permitted.

Classifications

ECl@ss 5.0	27270501
ECl@ss 5.1.4	27270501
ECl@ss 6.0	27270590
ECl@ss 6.2	27270590
ECl@ss 7.0	27270501
ECl@ss 8.0	27270501
ECl@ss 8.1	27270501
ECl@ss 9.0	27270501
ETIM 5.0	EC001486
ETIM 6.0	EC001486
UNSPSC 16.0901	41112113

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