

DDS50E-S4PT00500

DDS50

INCREMENTAL ENCODERS

SICK
Sensor Intelligence.

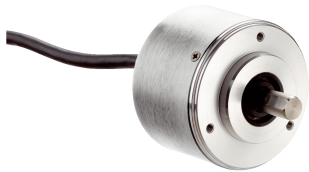


Illustration may differ



Ordering information

Type	Part no.
DDS50E-S4PT00500	1038812

Other models and accessories → www.sick.de/DDS50

Detailed technical data

Performance

Pulses per revolution	500
Error limits	± 0.05°
Measuring step deviation	± 0.018° ¹⁾
Measuring step	0.18° ²⁾

¹⁾ Measuring step x 0.1.

²⁾ 360° / (number of lines x 4)

Interfaces

Electrical interface	Cable, axial, 5 m
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Electrical data

Electrical interface	Open Collector NPN
Connection type	Cable, axial, 5 m
Operating power consumption (no load)	≤ 100 mA
Supply voltage	4.5 V ... 5.5 V
Output current	≤ 20 mA
Maximum output frequency	≤ 300 kHz
Reference signal, number	1
Reference signal, position	90°, electronically, gated with A and B

Mechanical data

Mechanical interface	Solid shaft, Face mount flangeSolid shaft
Shaft diameter	8 mm x 15.5 mm
Mass	145 g
Start up torque	1 Ncm (+20 °C)
Operating torque	4 Nmm (+20 °C)
Permissible shaft loading radial/axial	50 N, 30 N
Maximum operating speed	6,000 U/min ¹⁾
Moment of inertia of the rotor	0.8 kg/mm ²
Bearing lifetime	2 x 10 ⁹ revolutions

¹⁾ Self-warming 3.3 K per 1,000 1/min.

Max. angular acceleration	5 x 10 ⁵ rad/s ²
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¹⁾ Self-warming 3.3 K per 1,000 1/min.

Ambient data

EMC	EN 61000-6-2, EN 61000-6-4
Enclosure rating	IP 65
Protection class according to IEC 60529	IP 65
Air humidity	90 % ¹⁾
Working temperature range	-10 °C ... +70 °C
Storage temperature range	-25 °C ... +85 °C, without package
Resistance to shocks	100 g, 6 ms (EN 60068-2-27)
Resistance to vibration	5 g, 10 Hz ... 200 Hz (EN 60068-2-6)

¹⁾ Condensation of the optical scanning not permitted.

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