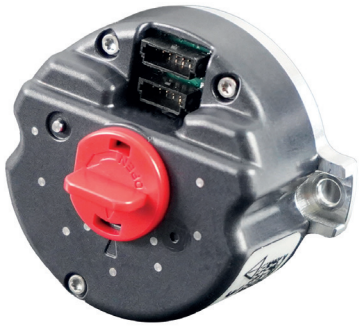
HS/M 16 Encoder

Features:

- Integrated, compact dual encoder in the standard HeiMotion modular system
- Singleturn with SSI and sin/cos
- Multiturn with BiSS-C [3] and sin/cos
- Speeds up to 12,000 min^{-1}
- Temperature evaluation via BiSS-C possible
- Electronic nameplate possible on request



Specifications	HS 16 (singleturn)	HM 16 (multiturn)
Supply voltage	5.0 V_{DC} +10/-5%	5.0 V_{DC} +10/-5%
Typical output current (without load)	120 mA	120 mA
Power consumption	0.6 W	0.6 W
Max. resolution singleturn	16 bit [2]	16 bit [2]
Max. number of absolute revolutions detected	-	12 bit (mechanical)
Data interface	SSI gray (RS422) + SinCos 1V_{pp}	BiSS-C (RS422) [3] + SinCos 1V_{pp}
Sin/cos tracks	differential	differential
Number of sin/cos periods per revolution	256 (8 bit)	256 (8 bit)
Max. angular acceleration	100,000 rad/sec^2	100,000 rad/sec^2
Resistance to shocks (DIN EN 60068-2-27)	3,000 m/s^2 (6 ms)	3,000 m/s^2 (6 ms)
Resistance to vibration (DIN EN 60068-2-6)	300 m/s^2	300 m/s^2
Operating temperature	-40°C / +120°C	-40°C / +120°C
Storage temperature	-30°C / +80°C	-30°C / +80°C
Order code	XXS1SXXXX	XXB1MXXXX

Safety parameters

- Analog output for monitoring functional safety
- SIL2, PL d safety certified [1]

Specifications	HS 16S (singleturn)	HM 16S (multiturn)
Security integrity level [1] (EN IEC 61508, 62061, 61800-5-3)	SIL2	SIL2
Performance level [1] (EN ISO 13849-1)	PL d	PL d
Functional safety architecture [1]	Canal 1: sin/cos Canal 2: SSI	Canal 1: sin/cos Canal 2: SSI
Electrical interface [1]	1V_{pp} 2.5V_{DC} (differential signal - sin+cos) + SSI (RS422)	1V_{pp} 2.5V_{DC} (differential signal - sin+cos) + BiSS-C (RS422)
Resolution for safety function [1]	512 sin+cos periods (9 bit)	512 sin+cos periods (9 bit)
Order code	XXSASXXXX	XXBAMXXXX

[1] Still in implementation
[2] 20 bit on request
[3] SSI gray on request

Heidrive
A Company of Allied Motion

Technical data subject to change! Last changes: 10/2024

Heidrive GmbH
Starenstraße 23
93309 Kelheim

Phone +49 9441/707-0
Fax +49 9441/707-259

info@heidrive.de
www.heidrive.com