

HS/M 16 Encoder

Features:

- Integrated, compact dual encoder in the standard HeiMotion modular system
- Singleturn with SSI and sine/cosine
- Multiturn with BiSS-C
- 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)

	HS 16 (Singleturn)	HM 16 (Multiturn)
Supply voltage	5.0 V _{DC} +10/-5%	5.0 V _{DC} +10/-5%
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	BiSS-C or SSI gray + sine/cosine 1Vpp	BiSS-C + sine/cosine 1Vpp
Sine/cosine tracks	differential	differential
Number of sine/cosine 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
Order code	XXS1SXXXX	XXB1MXXXX

Safety parameters **(Functional safety)**

- Analog output for monitoring safety motor speed
- SIL2, PLd safety certified

Specifications

HS 16S (Singleturn)

HM 16S (Multiturn)

	HS 16S (Singleturn)	HM 16S (Multiturn)
Security integrity level ¹⁾ (EN IEC 61508, 62061, 61800-5-2, 61800-5-3)	SIL2	SIL2
Performance level ¹⁾ (EN ISO 13849-1)	Cat. 3 / PLd	Cat. 3 / PLd
Functional safety architecture ¹⁾	sine/cosine	sine/cosine
Electrical interface ¹⁾	1Vpp 2.5V DC (analog signal - sine/cosine)	1Vpp 2.5V DC (analog signal - sine/cosine)
Resolution for safety function ¹⁾	256 sine/cosine periods	256 sine/cosine periods
Order code	XXSASXXXX	XXBAMXXXX

¹⁾ Still in implementation

²⁾ 20 Bit on request