



Wire draw encoders Compact

BKS09-ATBM0220



Model Name > **BKS09-ATBM0220**
Part No. > **1035240**



Illustration may differ

At a glance

- Absolute encoder
- Compact housing (90 x 90 x 90 mm)
- Encoder integrated into housing
- Measuring lengths from 2 m to 5 m
- High resolution
- SSI interface

Your benefits

- Industrial designed encoder integrated in an aluminum housing makes it less susceptible to external damage, saving time and reducing maintenance costs
- Extremely precise measurements by eliminating the coupling between the encoder and the mechanism
- Space-saving installation, since the encoder is directly integrated into the wire draw mechanics.
- Very precise measurements thanks to high resolution
- No reference run necessary thanks to the absolute measuring principle



Performance

Measuring range:	0 m ... 2 m
Linearity:	$\leq \pm 0.7 \text{ mm}$
Piston speed:	3.5 m/s
Repeat accuracy typ:	3 measuring steps

Mechanical data

Mass:	1.5 kg
Measuring wire diameter:	0.6 mm
Housing material:	Aluminum
Spring return force:	5 N ... 6 N ¹⁾
Life of wire draw mechanism::	800,000 cycles ²⁾ ³⁾
Wire acceleration:	$\leq 20 \text{ m/s}^2$

¹⁾ These values were measured at an ambient temperature of 25 °C. There may be variations at other temperatures. ²⁾ Average values, which depend on the application ³⁾ At high operating speeds over great lengths, this figure can decrease; at slow operating speeds over short lengths, it can increase.

Electrical data

Initialization time:	200 s ¹⁾
Position forming time:	0.1 ms
Code type:	24 bit/Gray
Code sequence:	Rising at wire pull-out
MTTFd: mean time to dangerous failure:	150 a (EN ISO 13849) ²⁾

¹⁾ Valid positional data can be read once this time has elapsed. ²⁾ This product is a standard product and does not constitute a safety component as defined in the Machinery Directive.

Calculation based on nominal load of components, average ambient

temperature 40°C, frequency of use 8760 h/a. All

electronic failures are considered hazardous. For more information, see document no. 8015532.

Interfaces

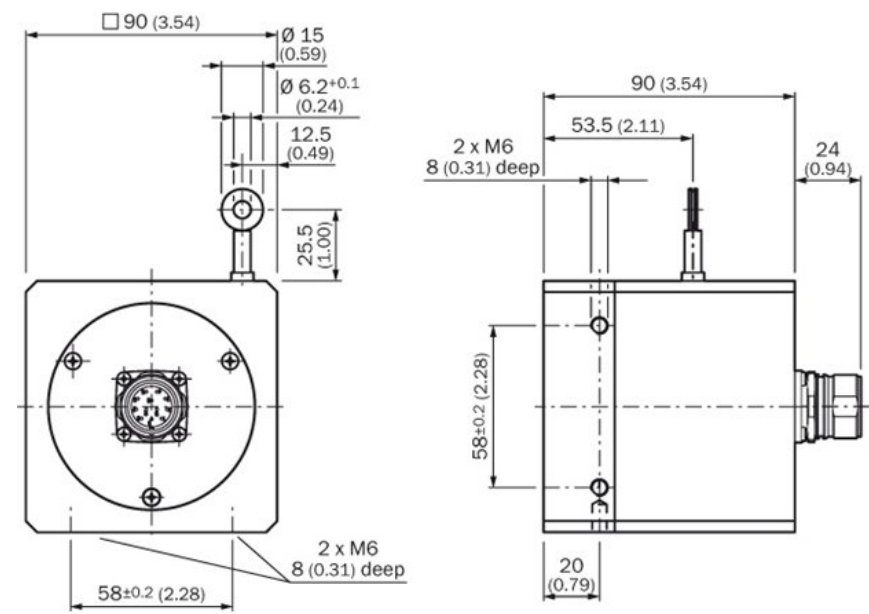
Electrical interface:	12 V ... 30 V, SSI
Connection type:	Connector M23, 12-pin, radial
Clock frequency:	1 MHz ¹⁾
Interface signals:	Clock +, Clock -, Data +, Data-

¹⁾

Ambient data

EMC:	(according to EN 61000-6-2 and EN 61000-6-3)
Enclosure rating encoder:	IP 52 (according to IEC 60529), Note required mounting position
Resistance to shocks:	20 g, 6 ms (according to EN 60068-2-27)
Resistance to vibration:	10 g, 10 Hz ... 2,000 Hz (according to EN 60068-2-6)
Working temperature range:	-10 °C ... 70 °C
Storage temperature range:	-20 °C ... 80 °C
Relative humidity/Condensation:	90 % (Condensation not permitted)

Dimensional drawing



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