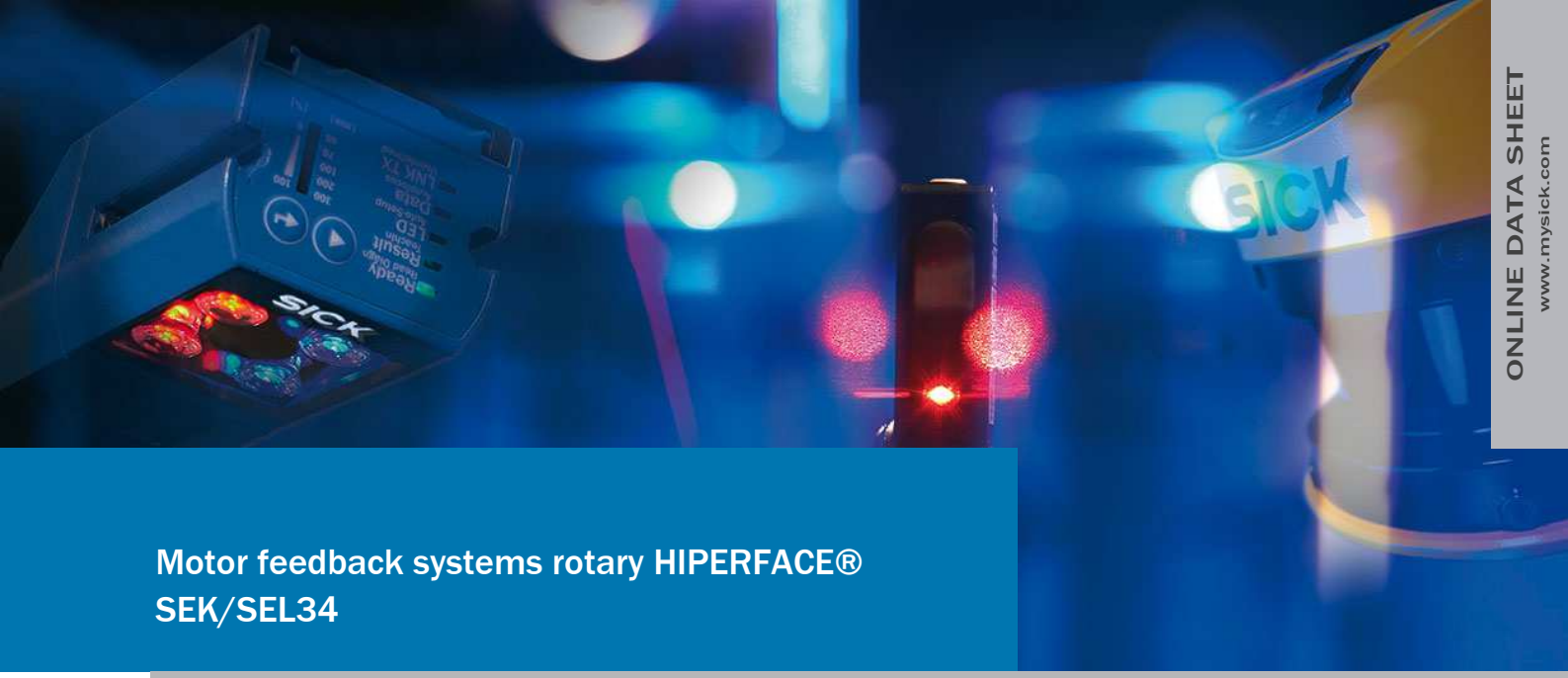


ONLINE DATA SHEET
www.mysick.com

Motor feedback systems rotary HIPERFACE®
SEK/SEL34

SEL34-HFB0K02



SICK
Sensor Intelligence.

SICK
Sensor Intelligence.

Motor feedback systems rotary HIPERFACE®
SEK/SEL34

Model Name > SEL34-HFB0K02
Part No. > 1053403

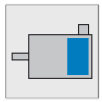




Illustration may differ

At a glance

- Motor feedback system for basic performance level
- Special design for motors with 40 mm square
- 16 sine/cosine periods per revolution
- Absolute position with a resolution of 512 increments per revolution and 4,096 revolutions with the multiturn system
- Programming of the position value
- Electronic type label
- HIPERFACE® interface
- Conform to RoHs

Your benefits

- The small dimension allows manufacturers of low-power and minimalpower motors to considerably reduce the size of their motors
- The SEK/SEL34 motor feedback systems are excellently suited for use under rough environmental conditions
- The capacitive principle of measurement with holistic scanning allows for high axial and radial tolerances

Performance

Number of sine/cosine periods per revolution:	16
Number of the absolute ascertainable revolutions:	4,096
Measuring step:	20 " At interpolation of the sine/cosine signals with e.g. 12 Bit
Integral non-linearity typ.:	± 288 (Error limits for evaluating sine/cosine period) typical values at nominal position ± 0,1 mm and + 20 °C
Differential non-linearity:	± 144 (Error limits for evaluating sine/cosine period) typical values at nominal position ± 0.1 mm und +20 °C
Operating speed:	6,000 /min, up to which the absolute position can be reliably produced
Available memory area:	1,792 Byte (EEPROM 2048) [1)]
Maximum number of steps per revolution:	2,097,152 Via RS485

[1)] If applying the electronic type label, in connection with numeric controllers, attention should be paid to Patent EP 425 912 B 2, application of the elektronic type label in connection with speed regulation ist exempt.

Mechanical data

Mass:	0.04 kg
Moment of inertia of the rotor:	1 gcm²
Maximum operating speed:	12,000 /min

Maximum angular acceleration:	500,000 rad/s²
Connection type:	Connector, 8-pin, radial
Permissible axial shaft movement:	± 0.3 mm
Shaft version:	Tapered shaft
Permissible radial shaft movement:	± 0.15 mm

Electrical data

Electrical interface:	HIPERFACE
Operating voltage range/supply Voltage:	7 V ... 12 V DC
Recommended supply voltage:	8 V DC
Operating power consumption (no load):	< 50 mA

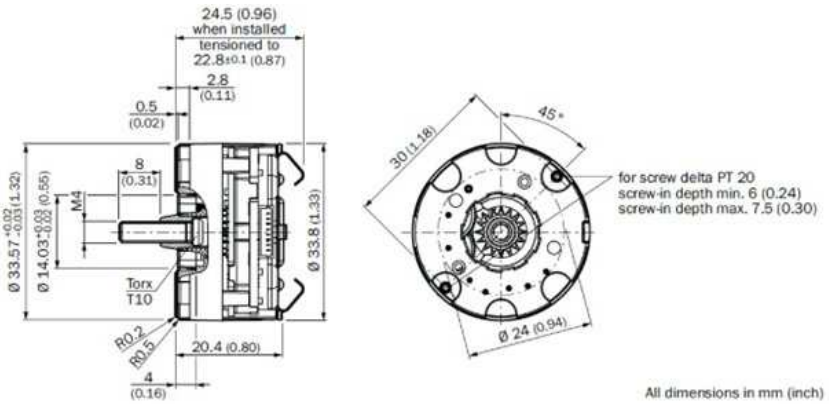
Interfaces

Type of code for the absolute value:	Binary
Code sequence:	For clockwise shaft rotation, looking in direction "A" (see dimensional drawing)
Interface signals:	Process data channel = SIN, REFSIN, COS, REFCOS analogue, differential: Parameter channel = RS 485 digital

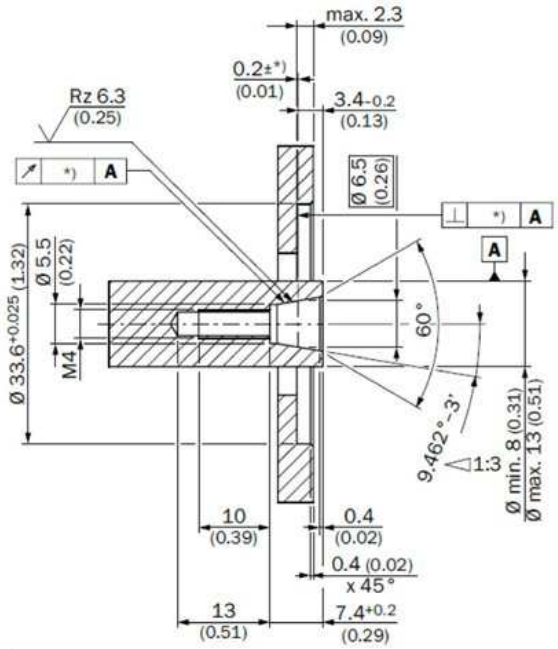
Ambient data

Working temperature range:	-20 °C ... 115 °C
Storage temperature range:	-50 °C ... 125 °C, without package
Relative humidity/Condensation:	90 %, Condensation not permitted
Resistance to shocks:	100 g, 10 ms (EN 60068-2-27)
Resistance to vibration:	50 g, 10 Hz ... 2,000 Hz (EN 60068-2-6)
EMC:	According to EN 61000-6-2 and EN 61000-6-3
Enclosure rating:	IP 20, IEC 60529, built-on version, with mating connector inserted and closed cover

Dimensional drawing



Proposed fitting



A4 4c int43

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