

# Magnetic absolute singleturn encoder kit

## BMSK SSI - MAGRES

BMSK



### features

- SSI interface
- Kit structure
- 10 Bit singleturn resolution
- Zero-point programmable



### general data

|                               |   |
|-------------------------------|---|
| voltage supply                | 5 VDC ±10% (05C)  |
| max. supply current (no load) | typ. 100 mA   |
| output circuit                | SSI, RS 422   |
| connection                    | connector 12 pin  |
| steps/rev                     | 1024  |
| max. resolution               | 10 Bit (1 steps relates to = 21' 6")  |
| pulse tolerance               | ±1°   |
| switching frequency f max.    | 1 MHz   |
| input signal                  | clock input, zero (zerosetting: < 0,4 V, > 2 ms off state: 3,3 V or open)         |
| sense of rotation             | looking at the <b>MAGRES</b> flange counts up as the shaft rotates clockwise (CW) |

### mechanical data

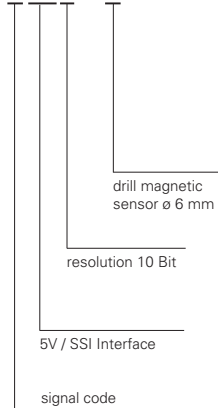
|                       |   |
|-----------------------|---|
| max. revolutions      | 6'000 rev/min                                   |
| rotor inertia         | typ. 1,3 x 10 <sup>7</sup> kgm <sup>2</sup>     |
| mounting tolerance    | axial: ±0,3 mm<br>Radial: ±0,1 mm               |
| max. protection class | IP 40   |
| material              | housing: aluminum/synthetic<br>flange: aluminum |
| weight                | approx. 50 g                                    |

### ambient conditions

|                   |  |
|-------------------|--|
| temperature range | -20...+85 °C   |
| relative humidity | max. 95%<br>non condensing                                 |
| vibration         | IEC 68 section 2-6<br>(≤ 100 m/s <sup>2</sup> / 10-200 Hz) |
| shock             | IEC 68 section 2-27<br>(≤ 500 m/s <sup>2</sup> / 11 ms)    |

### order designation

BMSK 42 1 05C10/0006B

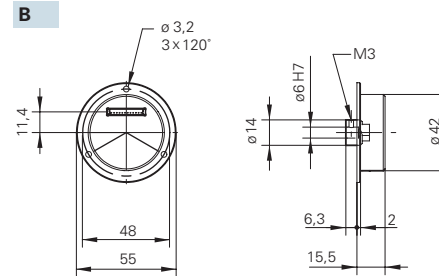


**N:** Binary-code  
**G:** Gray-code

### accessories

connector push-pull with wires part nr. 138525  
L = 300 mm

### dimensions and connection dimensions

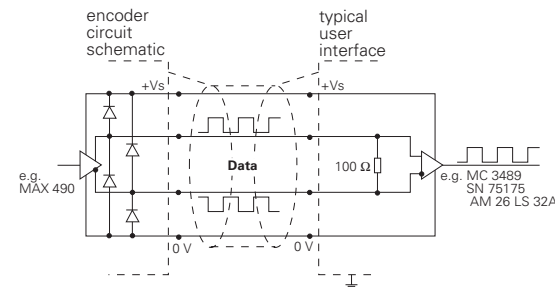


### assignment cable

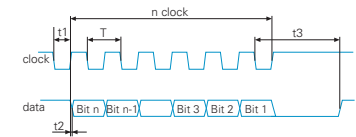
for connection reference -5

| pin number | signal | description        |
|------------|--------|--------------------|
| 1          | 0 V    | voltage supply     |
| 2          | +Vs    | voltage supply     |
| 3          | Data+  |                    |
| 4          | Data-  |                    |
| 5          | Clock+ |                    |
| 6          | Clock- |                    |
| 12         | Zero   | zero setting input |
| 7-11       |        | not connected      |

### SSI data output 05C



### output version



pulse times:  
T = 1 μs to 10 μs / t1 = 0,5 to 5 μs  
t2 < 0,2 μs / t3 > 12 μs to 25 μs

### clock input 05C

