

# Magnetic absolute singleturn encoder

## BMSH parallel - MAGRES

BMSH



### features

- 9 Bit singleturn resolution
- Zero-point programmable
- Parallel interface



### general data

voltage supply	5 VDC $\pm 10\%$ (05T)
max. supply current (no load)	typ. 100 mA
steps/rev	512
max. measuring step	9 Bit (1 step relates to 42' 11")
pulse tolerance	$\pm 1^\circ$
switching frequency fmax.	51,2 kHz
input signal	Zero (zerosetting: $< 0,4\text{ V}$ , $> 2\text{ ms}$ 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)

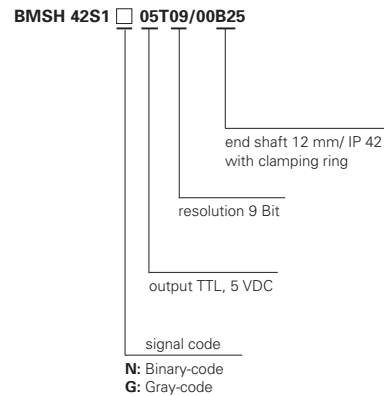
### mechanical data

max. revolutions	6'000 rev/min
rotor inertia	typ. $12 \times 10^{-7}\text{ kgm}^2$
torque	typ. 0,93 cNm (3000 rev/min 20 °C)
product life	depending on ambient conditions (typ. $10^9$ revolutions)
max. protection class	shaft IP 42 / housing IP 64
material	housing: inox/aluminum flange: aluminum
weight	approx. 120 g

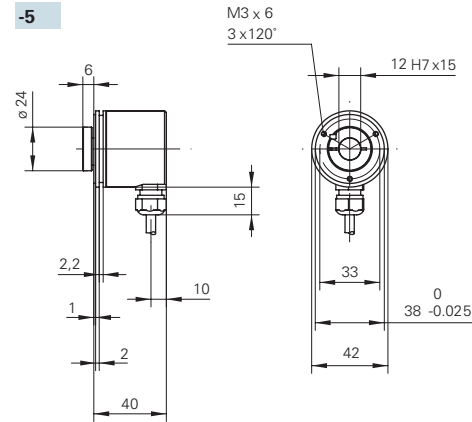
### ambient conditions

temperature range	-20...+85 °C
relative humidity	max. relative humidity 95%
vibration	IEC 68 part 2-6 ( $\leq 100\text{ m/s}^2 / 10 - 200\text{ Hz}$ )
shock	IEC 68 part 2-27 ( $\leq 500\text{ m/s}^2 / 11\text{ ms}$ )

### order designation



### dimensions and connection dimensions



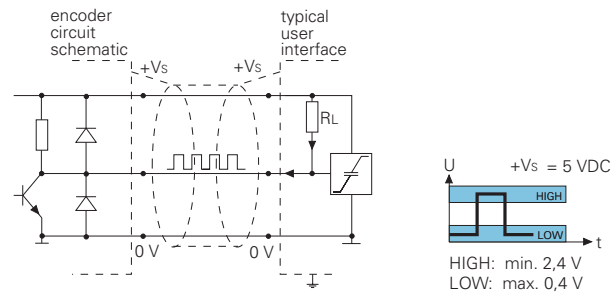
### assignment cable

for connection reference -5

cable color	signals	description
white	0 V	voltage supply
brown	+Vs	voltage supply
green	Bit 1 LSB	
yellow	Bit 2	
grey	Bit 3	
pink	Bit 4	
blue	Bit 5	
red	Bit 6	
black	Bit 7	
violet	Bit 8	
grey/pink	Bit 9 MSB	
red/blue	Zero	zero setting input

### output level

**05T**



voltage supply	5 VDC $\pm 10\%$
supply current (+Vs / o. charge)	typ. 100 mA
output current	HIGH 2 mA / LOW 10 mA