

Magnetic absolute single-turn hollow shaft encoder

BMSV – MAGRES

parallel

features

- miniature single-turn encoder / parallel
- magnetic sensing principle
- resolution: 9 bit
- housing \varnothing 42 mm
- high resistance against shock and vibration
- zero setting input
- shaft \varnothing 10 mm or 6 mm

general data

voltage supply	5 VDC \pm 10% (05T)
max. supply current no load	typ. 100 mA
output circuit	parallel 5 VDC
max. resolution	9 bit (1 step = 42' 11'')
max. error limit	\pm 1°
repeatability	0,3°
max. switching frequency	51,2 kHz
zero setting signal	zero setting: < 0,4 V, min. 2 ms off state: +Vs or open
direction of rotation	looking at the flange, position counts up as the shaft rotates clockwise (CW)

mechanical data

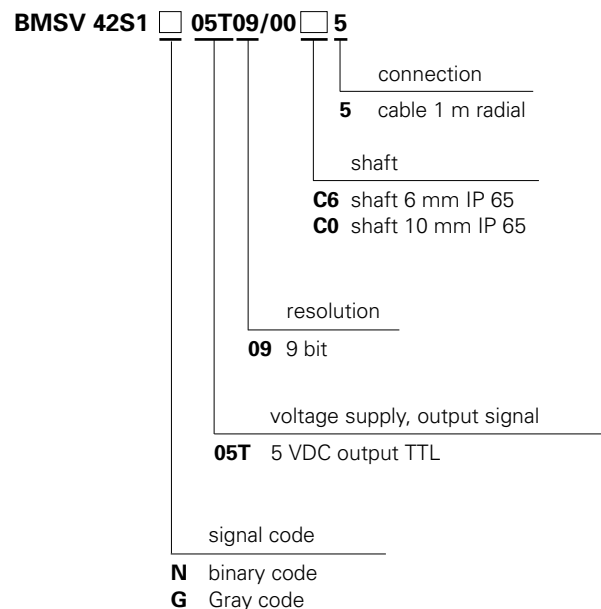
max. revolutions	12'000 rpm (mechanical) 6'000 rpm (electrical)
moment of inertia	typ. 12×10^{-7} kgm ²
torque	typ. 0,93 cNm (3'000 rpm / 20 °C)
max. shaft load	axial: 10 N radial: 25 N
product life	depending on ambient conditions (typ. 10 ⁹ revolutions)
max. protection class	IP 65
material	housing: steel flange: aluminium
weight	approx. 120 g

ambient conditions

temperature range	-20...+85 °C
relative humidity	max. relative humidity 95%
vibration	IEC 60068-2-6 (\leq 300 m/s ² / 10 - 2'000 Hz)
shock	IEC 60068-2-27 (\leq 1'000 m/s ² / 6 ms)
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3

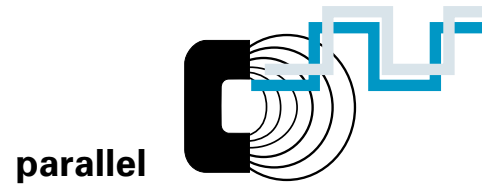


order designation



accessories

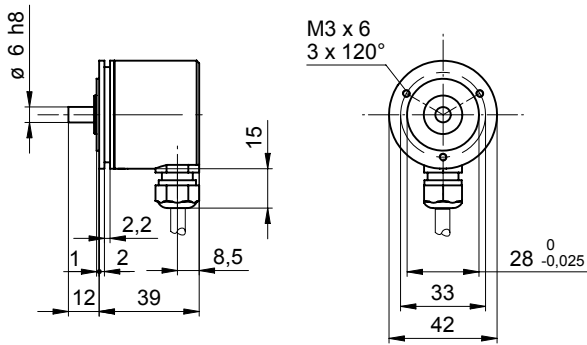
clamp set	part nr. 110616
couplings	see chapter accessories



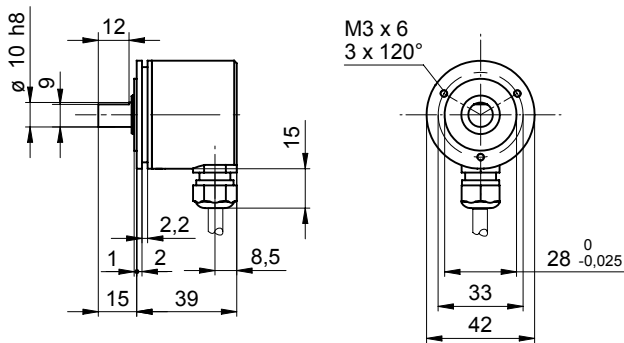
parallel

dimensions

-C6



-C0



Note

Mounting drawings see end of chapter.

assignment cable

for connection reference **-5**

cable color	signal	description
brown	+Vs	voltage supply
white	0 V	voltage supply
green	bit 1 LSB	data
yellow	bit 2	data
grey	bit 3	data
pink	bit 4	data
blue	bit 5	data
red	bit 6	data
black	bit 7	data
purple	bit 8	data
grey/pink	bit 9 MSB	data
red/blue	zero	zero setting input
screen		housing
cable data		16 x 0,14 mm ²