EA 36 A
SSI

SOLID SHAFT MAGNETIC SINGLETURN ABSOLUTE ENCODER

MAIN FEATURES

Miniaturized singleturn absolute encoder for limited size applications.

- Magnetic sensor technology without contact (Magnetic ASIC)
- Sturdy construction thanks to separated chambers
- Resolution up to 12 bit (4096 ppr)
- Power supply up to +30 VDC with SSI as electronic interface
- Code reset for easy setup
- Cable output, connectors available on cable end
- 6 mm diameter solid shaft
- Mounting by fixing flange

ORDERING CODE	EA	36A	12	G	8/30	S	P	X	6	X	8	P	R	. XXX

SERIES
magnetic singleturn absolute encoder series EA

MODEL
fixing flange screw holes ø 28 mm 36A

SINGLETURN RESOLUTION
from 1 to 12 bit
360 / 720 ppr
please directly contact our offices for other pulses

CODE TYPE
binary B
gray G
(no powers of 2) binary offset code (0-XXX) BC
(no powers of 2) gray offset code (0-XXX) GC

POWER SUPPLY
5 V DC 5
8 ... 30 V DC 8/30

ELECTRONIC INTERFACE
Serial Synchronous Interface - SSI S

LOGIC
positive P

OPTIONS
to be reported if not used X
reset ZE

SHAFT DIAMETER
mm 6

ENCLOSURE RATING
IP 67 cover side / IP 65 shaft side X

MAX ROTATION SPEED
8000 rpm 8

OUTPUT TYPE
cable (standard length 0,5 m) P

DIRECTION TYPE
radial R

VARIANT
custom version XXX

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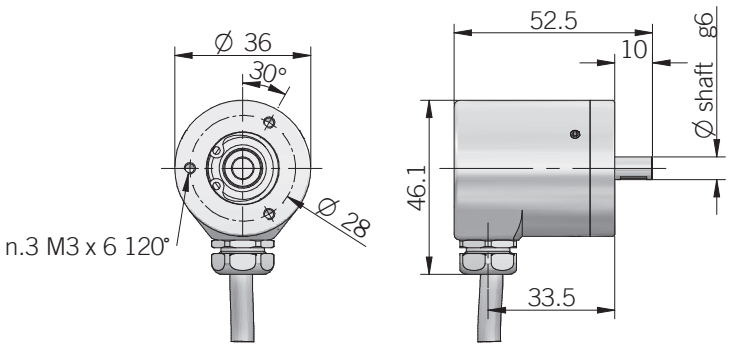

dimensions in mm

ELECTRICAL SPECIFICATIONS

Singleturn resolution	from 1 to 12 bit 360 / 720 ppr
Power supply	5 = 4,75 ... 5,25 V DC 8/30 = 7,6 ... 30 V DC (reverse polarity protection)
Power draw without load	< 400 mW
Output type	RS-422
Code type	binary or gray
Auxiliary inputs (U/D - Reset)	active high (+Vdc) *connect to 0V if not used / Reset tmin 150 ms*
Clock frequency	100 kHz ... 1 MHz
SSI monostable time (Tm)	20 µs
SSI pause time (Tp)	> 35 µs
SSI frame	(MSB ... LSB) 1 ... 12 bit = 13 bit data lenght
Accuracy	± 0,35° typical
Counting direction	decreasing clockwise (shaft view)
Start-up time	150 ms
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

MECHANICAL SPECIFICATIONS

Shaft diameter	ø 6 mm
Enclosure rating	IP 67 cover side / IP 65 shaft side (IEC 60529)
Rotation speed	8000 rpm continuous / 10000 rpm max
Max shaft load	20 N axial / radial
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	20 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	0,001 x 10^{-6} kgm^2
Starting torque (at +20°C / +68°F)	< 0,01 Nm
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	AISI 420 stainless steel
Bearings	2 ball bearings
Bearings life	10^9 revolutions
Operating temperature	-20° ... +85°C (-4° ... +185°F)
Storage temperature	-20° ... +85°C (-4° ... +185°F)
Weight	150 g (5,29 oz)

CONNECTIONS

Function	Cable output
+ Vdc	red
0 Volt	black
U / D	red / blue
data +	green
data -	brown
clock +	yellow
clock -	orange
RESET	white
⏚	shield