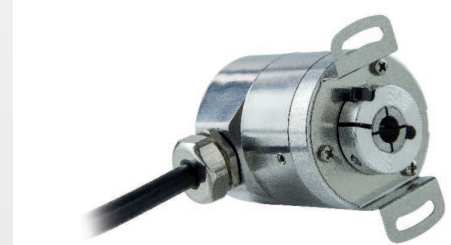


### MAIN FEATURES

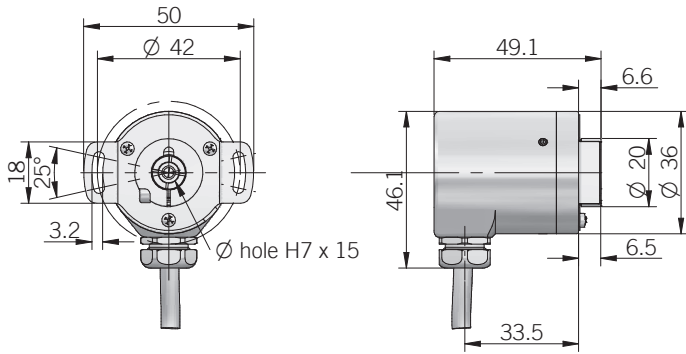
Miniaturized singleturn absolute encoder for limited size applications.

- 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 blind hollow shaft
- Mounting by stator coupling or anti-rotation pin



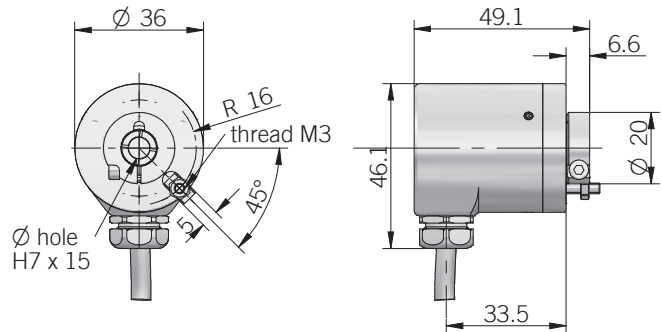
ORDERING CODE	EA	36G	12	G	8/30	S	P	X	6	X	8	P	R	.XXX
<b>SERIES</b> magnetic singleturn absolute encoder series EA														
<b>MODEL</b> blind hollow shaft with stator coupling 36F blind hollow shaft with antirotation pin 36G														
<b>SINGLETURN RESOLUTION</b> from 1 to 12 bit 360 / 720 ppr <i>please directly contact our offices for other pulses</i>														
<b>CODE TYPE</b> binary B gray G (no powers of 2) binary offset code (0-XXX) BC (no powers of 2) gray offset code (0-XXX) GC														
<b>POWER SUPPLY</b> 5 V DC 5 8 ... 30 V DC 8/30														
<b>ELECTRONIC INTERFACE</b> Serial Synchronous Interface - SSI S														
<b>LOGIC</b> positive P														
<b>OPTIONS</b> to be reported if not used X reset ZE														
<b>BORE DIAMETER</b> mm 6														
<b>ENCLOSURE RATING</b> IP 67 cover side / IP 65 shaft side X														
<b>MAX ROTATION SPEED</b> 8000 rpm 8														
<b>OUTPUT TYPE</b> cable (standard length 0,5 m) P														
<b>DIRECTION TYPE</b> radial R														
<b>VARIANT</b> custom version XXX														

EA 36 F



dimensions in mm

EA 36 G



anti-rotation pin is included in model G, for mounting instruction please refer to product installation notes

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 length
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	
Bore 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 <sup>-6</sup> kgm <sup>2</sup>
Starting torque (at +20°C / +68°F)	< 0,01 Nm
Body material	EN-AW 2011 aluminium
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	AISI 420 stainless steel
Bearings	2 ball bearings
Bearings life	10 <sup>9</sup> revolutions
Operating temperature	-20° ... +100°C (-4° ... +212°F)
Storage temperature	-20° ... +100°C (-4° ... +212°F)
Fixing torque for collar clamping	0,6 Nm recommended
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