

ANSG Series

Absolute Shaft Encoder

Maximum Resolution ...13 Bit - 8192

Shaft Diameters 6 or 10mm

MECHANICAL SPECIFICATIONS

RPM Max. 6000
 Torque > 5Ncm
 Loading Axial 40N, Radial 30N
 Weight Stainless 630g - Aluminium 320g
 Temperature -20°C to +70°C

ELECTRICAL

Current consumption 100mA
 Signal frequency for the LSB Max. 50kHz
 Switching load 40mA

NOTE: Short circuit protection on all wires

NOTE 1: Gray code encoders with a non cyclic output code (360, 720 etc) have a zero off-set applied. This ensures that only one bit changes between the highest value and the home or zero positions.

e.g. An encoder with 360 divisions for each rotation of the shaft, will read between 76 and 435 only.

FEATURES

The ANSG encoders are suitable for most industrial applications. The series provides a high resolution for a small body size, up to 13 Bits.

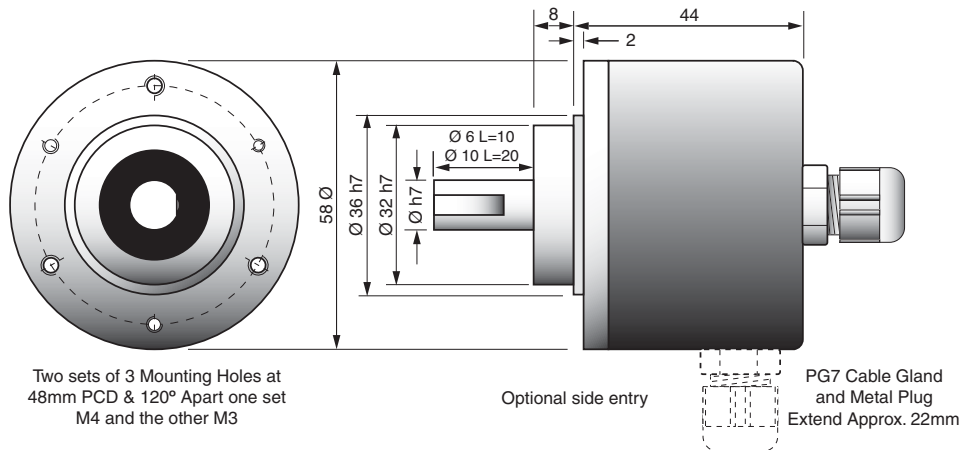
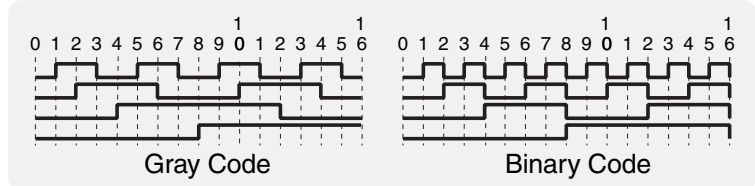
The direction select control wire determines the relationship between the rotation of the shaft and the count direction of the output. With the wire tied to the + the output value will increase as the shaft turns clockwise (CW), when the wire is connected to the 0 Volt supply the output will increase as the shaft turns counter clockwise (CCW).

Switching the optional "zero reset" input, from the positive to the negative supply for a minimum of .5 Seconds, will force the output code to reset to zero regardless of the shaft position. This provides a simple way to synchronise the encoder output to the machine physical zero position.

To ensure long-term reliability, each encoder must be mounted in accordance with the installation instructions. Refer to the Accessories section for a range of couplings and mounting hardware.

Function	Plug Pin	Wire
0 Volts	1	White
+ Volts	2	Brown
Bit 1 - 2 ⁰	3	Green
Bit 2 - 2 ¹	4	Yellow
Bit 3 - 2 ²	5	Grey
Bit 4 - 2 ³	6	Pink
Bit 5 - 2 ⁴	7	Blue
Bit 6 - 2 ⁵	8	Red
Bit 7 - 2 ⁶	9	Black
Bit 8 - 2 ⁷	10	Violet
Bit 9 - 2 ⁸	11	Grey/Pink
Bit 10 - 2 ⁹	12	Red/Blue
Bit 11 - 2 ¹⁰	13	White/Green
Bit 12 - 2 ¹¹	14	Brown/Green
15	15	
? Direction CW/CCW	16	Yellow/Brown

NOTE: For other wiring and plug combinations refer to data sheet "Plug & Wiring Variations"



Two sets of 3 Mounting Holes at 48mm PCD & 120° Apart one set M4 and the other M3

Part Number Selection Guide

Series				Mechanical Options				Electrical Options				Bit Range			
1	2	3	4	5	6	7	8	9	10	11	12	9-13 Bits 00512-08192			
A	N	S	G	<input type="checkbox"/>	<input type="checkbox"/>	H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stainless Shaft				Housing Material				Wiring Method				Voltage & Output Type			
Shaft 06 or 10mm				IP65 Aluminium H				Cable 2 Metres 2				5 Volt Line Driver 1			
				Wiring Entry				Cable 5 Metres 3				8-30 Volt Push Pull M			
				Rear or Axial R				Cable - Custom Length .. 4				Output Options			
				Side or Radial S				Plug 16 Pin Metal M				None Fitted A			
								Plug 17 Pin Metal S				Remote Zero Reset 7			
												Output Code			
												Standard Gray A			
												Binary B			

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