ANSG Series

MECHANICAL SPECIFICATIONS

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

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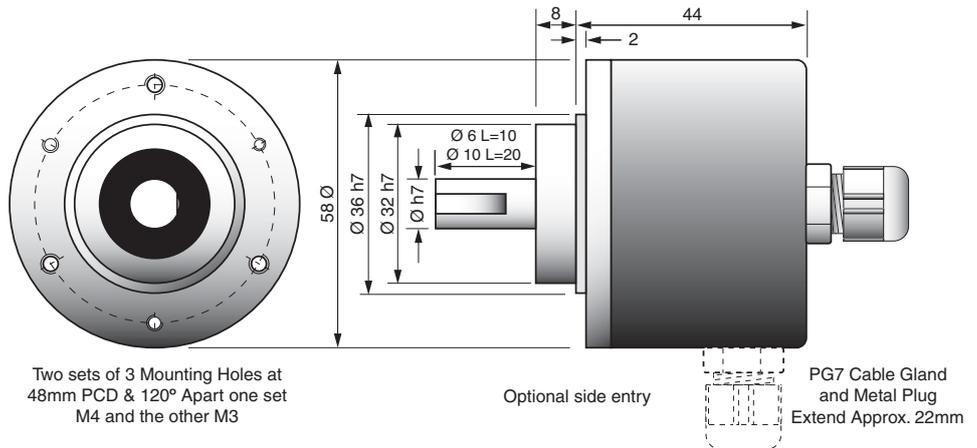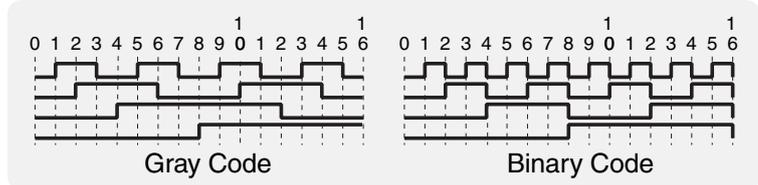
The direction select control wire determines the relationship between the rotation of the shaft and the count direction of the output. With the wire tied to the + the output value will increase as the shaft turns clockwise (CW), when the wire is connected to the 0 Volt supply the output will increase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

PCA AUS	Plug Pin	
Function		**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	
? Direction CW/CCW	16	Yellow/Brown

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

Gray Code   Binary Code

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

Optional side entry

PG7 Cable Gland and Metal Plug Extend Approx. 22mm

Part Number Selection Guide

Series — 1 2 3 4 — A N S G

Mechanical Options — 5 6 7 8

Electrical Options — 9 10 11 12

Bit Range — 9-13 Bits 00512-08192

Stainless Shaft
Shaft .... **06** or **10**mm

Housing Material
IP65 Aluminium .... **H**

Wiring Method
Cable 2 Metres **2**
Cable 5 Metres **3**
Cable - Custom Length .. **4**
Plug 16 Pin Metal .... **M**
Plug 17 Pin Metal .... **S**

Wiring Entry
Rear or Axial .... **R**
Side or Radial .... **S**

Voltage & Output Type
5 Volt Line Driver **1**
8-30 Volt Push Pull .... **M**

Output Options
None Fitted .... **A**
Remote Zero Reset **7**

Output Code
Standard Gray .... **A**
Binary .... **B**

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