

ANSH Series

Absolute Shaft Encoder

Maximum Increments 8,192

Shaft Diameters 10 or 12mm

MECHANICAL SPECIFICATIONS

Maximum RPM 6000
 Torque >0.5Nm
 Loading Axial 60N, Radial 50N
 Weight 450g
 Temperature -20°C to +70°C

ELECTRICAL

Current Consumption 50mA
 Maximum output signal frequency 200kHz
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 ANSH encoders are suitable for most industrial applications. The series provides a high resolution for a medium body size, up to 13 Bits.

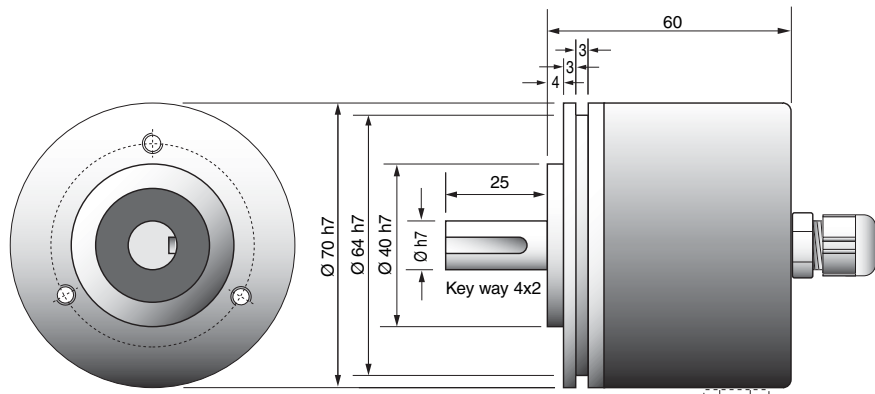
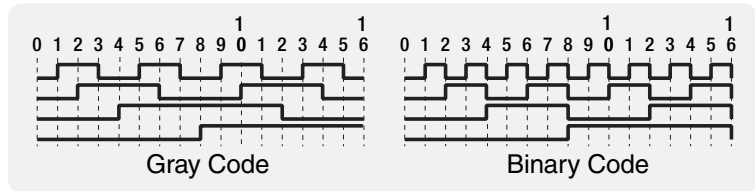
The direction select control wire determines the relationship between the rotation of the shaft and the count direction of the output. With the wire tied to the + the output value will increase as the shaft turns clockwise (CW), when the wire is connected to the 0 Volt supply the output will increase 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	
Direction CW/CCW	16	Yellow/Brown

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



3 x M5 Mounting Holes at 50mm PCD & 120° Apart

Optional side entry

PG7 Cable Gland and Metal Plug Extend Approx. 22mm

Part Number Selection Guide

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

A product of the world wide GESgroup made by W+S Germany Sold and serviced in Australia by PCA