

# ANHJ Series

## Absolute Hollow Shaft Encoder

Maximum Resolution ..... 13 Bit - 8192

Shaft Hole Diameters ..... 6 to 18mm

### MECHANICAL SPECIFICATIONS

RPM ..... Max. 6000  
 Torque ..... > 4Ncm  
 Loading ..... Axial 40N, Radial 30N  
 Weight ..... Aluminium 250g  
 Temperature ..... -20°C to +70°C

### ELECTRICAL

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

**NOTE:** Short circuit protection on all wires.

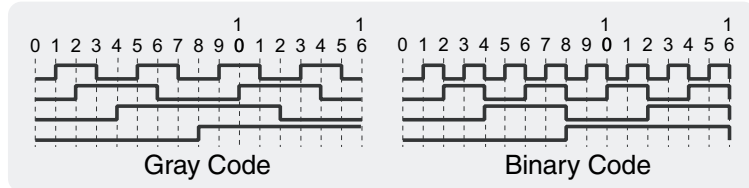
**NOTE:** Gray code encoders with a non cyclic output code (360, 720 etc) have a zero off-set applied. This ensures that only one bit changes between the highest value and the home or zero positions.

*E.G. An encoder with 360 divisions for each rotation of the shaft, will read between 76 and 435 only. It will never read "0" even when the reset is applied, the lowest value will be 76.*

### FEATURES

The ANHJ encoders are suitable for most industrial applications. This series provides a high resolution option for a small body, up to 13 Bits. The hollow shaft system eliminates the necessity for most additional fixing hardware, such as flexible couplings, drive belts and mounting plates or brackets.

Each encoder has a direction control wire for connection to either the + or 0 volt supply. This control wire provides the facility to change the relationship between the up/down count of the output data and the shaft rotation direction.



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

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

2 Mounting Holes  
 Dia 3mm H6  
 69mm PCD  
 180° Apart

PG7 Cable Gland  
 or 9 Pin D Type Plug  
 Extend Approximately 20mm

Shaft Bore Range 6 to 18mm H7  
 2 Shaft Fixing Set Screws  
 M4 x 6 at 120°

## 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			
<b>A</b>	<b>N</b>	<b>H</b>	<b>J</b>	<input type="checkbox"/>	<input type="checkbox"/>	<b>H</b>	<b>S</b>	<input type="checkbox"/>	<input type="checkbox"/>	<b>A</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Stainless Steel Shaft Hole</b> Hole ..... 06 to 18mm Standard .. 06, 10, or 12								<b>Voltage &amp; Output Type</b> 5 Volt Line Driver ..... 1 8-30 Volt Push Pull ..... M							
<b>Housing Material</b> IP65 Aluminium ..... H				<b>Wiring Entry</b> Side or Radial ..... S				<b>Output Options</b> None Fitted ..... A							
<b>Wiring Method</b> Cable 2 Metres ..... 2 Cable 5 Metres ..... 3 Cable - Custom Length .... 4 16 Pin Metal Plug ..... M								<b>Output Code</b> Standard Gray ..... A Binary ..... B							

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