



S E R I E S

70FXA

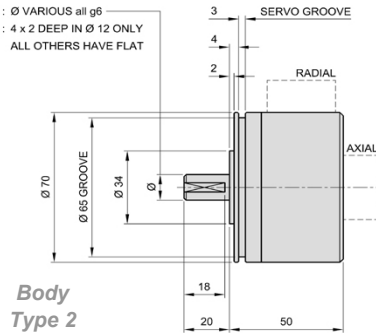
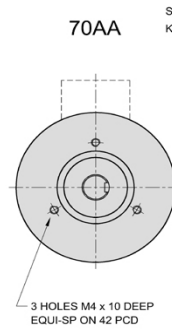
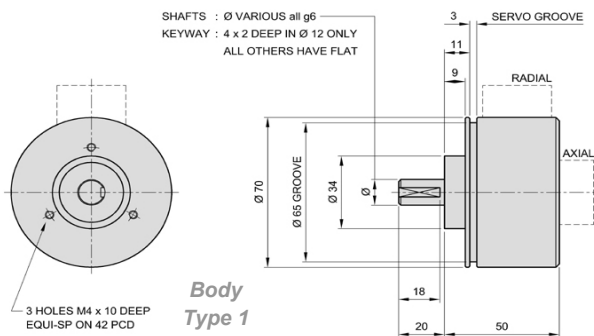
SSI MULTI-TURN ABSOLUTE SHAFT ENCODER

The 70SSI Series (in 70mm Frame Size) is an innovative **Low Cost Multiturn absolute** shaft encoder, machined from solid aluminium. It can be factory programmed up to a total of 32 bit resolution (**14 bits per turn x 18 bit turns**).

The encoder incorporates Magnetic ASIC technology for ultimate reliability and performance over a very wide temperature range (-20°C to +85°C). (-40C is also available on request)



Also available in many other shaft sizes



S P E C I F I C A T I O N S

**Body:**  
Precision Machined Aluminium  
(Stainless Steel Version also available - FXS Series)

**Cover:**  
Precision Machined Aluminium  
(Stainless Steel Version also available - FXS Series)

**Shaft:**  
Stainless Steel

**Bearings:**  
Ballraces

**Shaft Sealing:**  
IP65: Sealed front bearing  
IP66/IP67: Specialist shaft seal

**Protection:**  
Options:  
IP65 or  
IP66 / IP67

**Operating Temp:**  
-20 to +85°C  
(-40°C at extra cost)

**Vibration**  
< 300 m/s<sup>2</sup> / 10 to 2000 Hz

**Shock**  
< 1000m/s<sup>2</sup> / 6ms

**Maximum Mechanical Shaft Speed:**  
6000 RPM for IP65  
3000 RPM for IP66 / IP67

**Inertia:**  
100gcm<sup>2</sup> (typical)

**Shaft Loading:**  
Axial = 10N (max)  
Radial = 10N (max)

**Cable Version:**  
Screened, oil and salt water proof

**Output Format**  
SSI (RS422)

**SSI Clock Frequency:**  
1MHz (max)

**Current Consumption:**  
50 to 100mA

# CONNECTIONS

FUNCTION	CABLE	PLUG
0 Volts (Supply)	colour <b>Black</b>	Pin No. <b>1</b>
Data (+)	colour <b>White</b>	Pin No. <b>2</b>
Clock (+)	colour <b>Yellow</b>	Pin No. <b>3</b>
<b>Count Direction</b> If not connected <b>CW = UP</b> If connected to 0v <b>CCW = UP</b>	colour <b>Pink</b>	Pin No. <b>5</b>
+ Volts (Supply)	colour <b>Red</b>	Pin No. <b>8</b>
Data (-)	colour <b>Brown</b>	Pin No. <b>10</b>
Clock (-)	colour <b>Violet</b>	Pin No. <b>11</b>
<b>Reset to Zero</b> (if shorted to 0v)	colour <b>Green</b>	Pin No. <b>12</b>

# STANDARD FEATURES

- SSI Output (Binary or Gray)
- Magnetic Technology
- Very High Reliability
- IP65 or IP66/IP67 Protection
- Up To 32 Bit (at no extra cost)
- UK Manufactured
- Simple Reset To Zero Function
- Robust Construction
- Low Cost
- Fast Delivery
- 3 YEAR Warranty

# ORDERING CODES

