



S E R I E S

58FXA

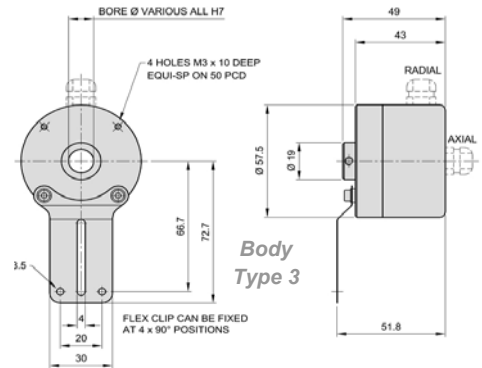
SSI MULTI-TURN ABSOLUTE SHAFT ENCODER

The 58SSI Series (in 58mm 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)

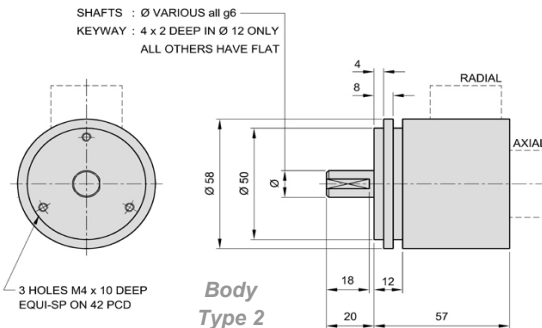


SEMI-HOLLOW SHAFT VERSION

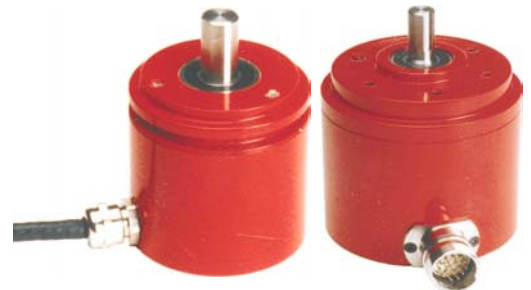


Body Type 3

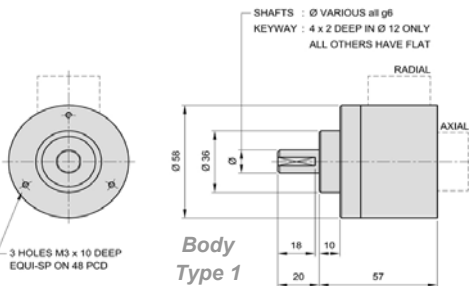
All are available in many other shaft sizes and semi-hollow bore sizes



Body Type 2



SOLID SHAFT VERSIONS



Body Type 1

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/s² / 10 to 2000 Hz

Shock
< 1000m/s² / 6ms

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

Inertia:
100gcm² (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 Black	Pin No. 1
Data (+)	colour White	Pin No. 2
Clock (+)	colour Yellow	Pin No. 3
Count Direction If not connected CW = UP If connected to 0v CCW = UP	colour Pink	Pin No. 5
+ Volts (Supply)	colour Red	Pin No. 8
Data (-)	colour Brown	Pin No. 10
Clock (-)	colour Violet	Pin No. 11
Reset to Zero (if shorted to 0v)	colour Green	Pin No. 12

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

SERIES
58 FXA

SHAFT SIZE
06 - 06mm
10 - 10mm
12 - 12mm
Note: A wide range of other shaft sizes and bore sizes available on request

PROTECTION
1 - [IP 65]
A - [IP 66 / IP 67]

OUTPUT CODE
G - SSI Gray Code CW/CCW
B - SSI Binary Code CW/CCW

SHAFT SEALING
IP65
A - Sealed front bearing
1 - Nitrile (General Purpose)
2 - Viton Food Quality (Food Industry)
3 - Viton Peroxide (Petro / Chemical Industry)
4 - Viton PTFE (High Speed)
5 - Thurban (UV, Mineral oil, off-shore)
6 - EPDM (as Thurban but ozone protection)

TEMPERATURE RANGE
C - [-20 to +85°C]
X - [-40 to +85°C]
(-40°C at extra cost)

SHAFT & Body Style
S1 - Solid Shaft - Body Type 1
S2 - Solid Shaft - Body Type 2
H1 - Semi-Hollow - Body Type 3

CONNECTION
D - [2000mm Cable]
E - [12 Pin] Contact connector (CW pins)
S - Special connector requested

BITS PER TURN
01 to 14
1 to 16384
Positions per Turn

BIT TURNS
02 to 18
2 to 262144
Turns

EXIT
A - Axial
R - Radial

OUTPUT CIRCUIT
1 - 5V Supply with RS422 SSI Output
2 - 10 to 30V Supply (RS422 SSI Output)

Encoder Type	List Price
IP65 Aluminium	£385.00
IP66/67 Aluminium	£435.00
IP66/67 Stainless	£535.00

IMPORTANT
Increases body length by 8mm