



S E R I E S

90FXA

SSI MULTI-TURN ABSOLUTE SHAFT ENCODER

The 90SSI Series (in 90mm Frame Size) is an innovative **Low Cost Multiturn, Heavy Duty 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)



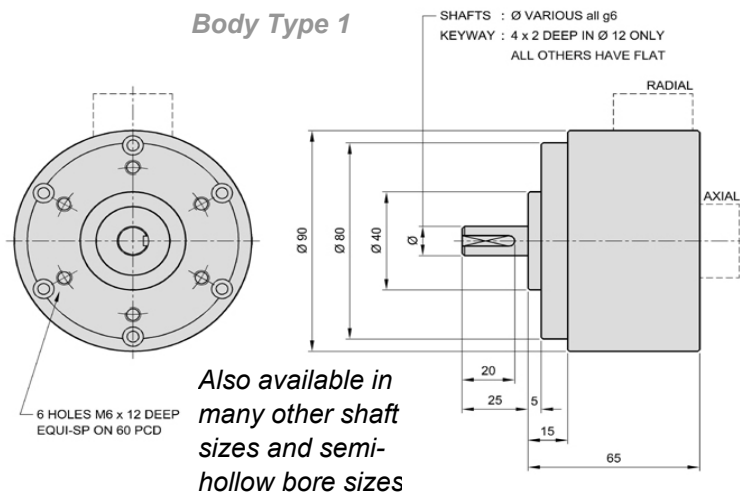
(Drawing available on request)

Body Type 2

SEMI-HOLLOW SHAFT VERSIONS ALSO AVAILABLE UP TO 30mm BORE



SOLID SHAFT VERSION



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

C O N N E C T I O N S

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

S T A N D A R D F E A T U R E S

- 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

O R D E R I N G C O D E S

SERIES 90FXA	SHAFT SIZE 12 - 12mm <i>Note: A wide range of other shaft sizes and bore sizes available on request)</i>	PROTECTION 1 - [IP 65] A - [IP 66 / IP 67]	OUTPUT CODE G - SSI Gray Code CW/CCW B - SSI Binary Code CW/CCW	TEMPERATURE RANGE C - [-20 to +85°C] X - [-40 to +85°C] (-40°C at extra cost)	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	OUTPUT CIRCUIT 1 - 5V Supply with RS422 SSI Output 2 - 10 to 30V Supply (RS422 SSI Output)	EXIT A - Axial R - Radial
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SHAFT SEALING 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)	Shaft & Body Style S1 - Solid Shaft -Body Type 1 H1 - Semi-Hollow -Body Type 2	Encoder Type IP65 Aluminium £385.00 IP66/67 Aluminium £435.00 IP66/67 Stainless £535.00
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