

## Series 14 incremental hollow shaft encoder up to 40 mm



[click for non intrinsically safe version](#)

1	4	X	X	-	1	3	X	R	-	X	X	X	X
Shaft Size					Connection				Resolution - ppr				
12	= 12 mm				1	= 2m cable							
14	= 14 mm				2	= 5 m cable							
20	= 20 mm				D = 9 pole D plug & socket								
25	= 25 mm				H = 9512 12 pin plug & socket								
30	= 30 mm												
40	= 40 mm												
B1 = 1"													

5...24 Volt Extended Line Driver is standard, optional Current Sink Open Collector is available



### Technical Data

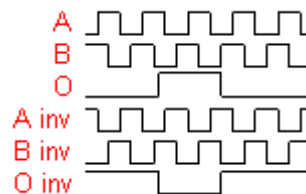
Operating temp:	- 20 ...+ 60 degrees C - 4 ...+ 140 degrees F
On request:	-20 ... + 80 degrees C
Max frequency:	150 kHz
Current consumption:	50 mA (max.)
Power supply:	5 - 24V
Weight:	21 oz (0.6 kg)
Protection:	IP 64S, NEMA 3
Housing:	Die Cast Zinc Alloy
Shaft:	Aluminum
Bearings:	2 x 6810 ZZ C2
Torque:	0.4 oz/in (3 N-cm)
Humidity:	Up to 98% permissible
Speed:	3000 RPM max.
Shock:	10g (6msec)
Vibration:	5g (500 Hz)
Shaft load:	Supports its own weight
Line driver output max:	50 mA per channel
Max. ppr	3000

### Connection Options

	9 pole	Cable	12 pin
PS GND	1	Black	1
PS 5 ... 24 V	2	Red	2
Output A	3	White	3
Output B	4	Blue	4
Output O	5	Yellow	5
Output A inv	6	Green	6
Output B inv	7	Violet	7
Output O inv	8	Brown	8

### Output

Diagram is shown with clockwise shaft rotation viewed from opposite side to shaft grub screws



### Certifications

To use the encoder in a hazardous area, **a safety barrier has to be used**. Our six channel barrier series AB was designed to work with our encoders. [Data Sheet](#)

IP 64 S

SIRA - 51D7236-1A

IM1 EEx (ia) I

I1G EEx (ia) IIB T4 [\[Certificate\]](#) PDF file

SIRA 02ATEX2317X [\[Certificate, P1, P2, P3\]](#) PDF file

UL E216028 [\[Certificate\]](#) PDF file

## Mounting Instructions

Mount fixture to the machine with three screws and three washers, M6 or 1/4". Slide the encoder onto the shaft. With the setscrews, tighten the hollow shaft encoder onto the shaft with a minimum clearance of 1/16" between fixture and encoder. This assembly allows the shaft to float and increases the lifetime of the bearings. Connect the encoder as per wiring specifications. Make sure power supply is within the proper voltage and current rating. Encoder can be mounted with the setscrew on the machine side or on the opposite side for either CW or CCW. See datasheet for CW and CCW directions of the outputs.

Technical data for mount: 1/8" stainless steel wire

## Dimensions

