hohner
Elektrotechnik Werne

Series 14 incremental intrinsically safe hollow shaft encoder - WiFiEx
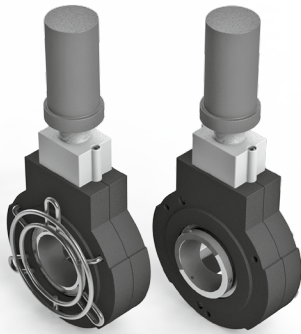
1	4	X	X	-	X	X	W	H	-	X	X	X	X

Shaft Size	Incremental Output	Resolution - ppr
12 = 12 mm	13 = Standard Quadrature	
14 = 14 mm	33 = DeviceNet	
20 = 20 mm	08 = XML RS232	
25 = 25 mm	57 = ModBUS	
30 = 30 mm		
40 = 40 mm		
B1 = 1"		

Ex ia IIC

Technical Data

Encoder:
Operating Temp:	-20C to +49C
Housing Material:	Die Cast Aluminum
Shaft Material:	Aluminum
IP rating:	IP64
Shaft load:	Supports 'system' weight
Humidity:	98% permissible
Shock:	10mg (6msec)
Vibration:	5g (500Hz)
Shaft Speed:	3000 rpm or 5kHz (electronics)

Transmitter:
Operating Temp:	-20C to +60C
Housing Material:	Plastic
IP rating:	IP66
Humidity:	98% permissible
Frequency:	2.4 GHz 124 channels
Data Rate:	250 kbs

Battery Pack:
Operating Temp:	-20C to +60C
Housing Material:	Stainless Steel
IP rating:	IP66
Humidity:	98% permissible
Type:	Lithium Thyonide Chloride
Life Time:	About 5 years
up to 100ppr	1 billion data transmissions
above 100 ppr	300 million data transmissions

Receiver Module:
- Click above for a full description of the outputs that can be generated from the receiver module.
- The default output protocol for incremental is the standard quadrature output.. This means the encoder can be replaced 1:1 with one in an existing system. The output is 5V pulses.

Function:
A low power incremental encoder output is fed into a 16 bit up-down counter. Every time the encoder shaft moves, a pulse edge triggers a data transmission to the distant module. Data is read 100 times per second. If the incremental encoder spins to fast, the data transmission jumps from one counter content to another. Every data transmission contains the full 16 bit counter value.

Identity:
Each encoder has a unique identity number in case multiple sensors are purchased. The ID numbers can be customer specified. As default, they be the serial number of the device, this way, there will never be conflicting identities on a system.
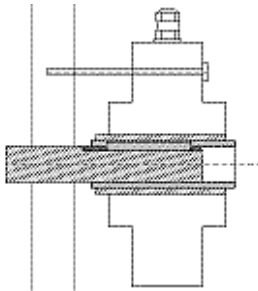
Certifications
IP 64
Ex ia IIC

IECEX (IECEx SIR 08-0015X) certificate
ATEX (SIRA 08ATEX2054X) certificate

Mounting Instructions

1. Just before installing encoder onto shaft, screw the battery pack in firmly to the transmitter housing (the clear part)
2. Mount the encoder mechanically as you would any other encoder.
3. On the safe side, plug in the receiver module into the PLC or computer and start reading the data in whatever format you have.
4. The battery can be 'hot-swapped' in the field for a new battery if it does run out.
5. If you will NOT immediately use the encoder, do NOT connect the battery. Only connect the battery right before using.

Dimensions

65
Ø 40
74
40
6,35
Suitable for Ø 8pin @120°
184
237
Ø 80
Ø Shaft
Ø 95
R53
Ø 110
2   34   2
All quotes in mm