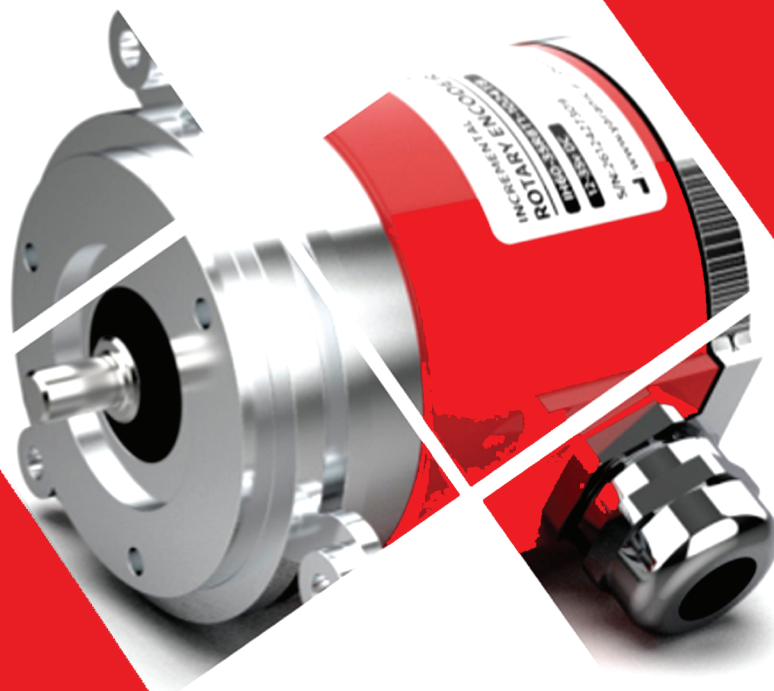




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MADE FOR MEASURE



MADE IN IRAN

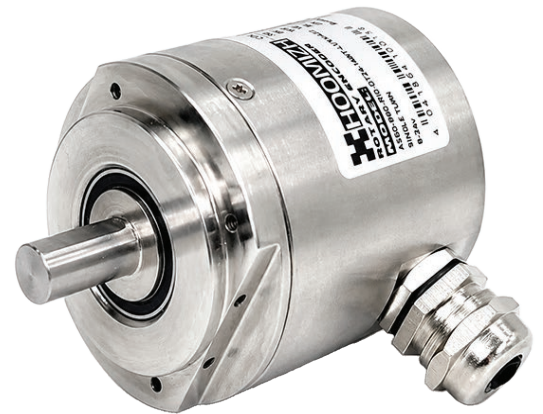


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ABSOLUT ROTARY ENCODER

series AS60-SSI

- ABSOLUT SINGLE TURN
- SSI (Synchronous Serial Interface)
- UP TO 14 BIT
- BINARY/GRAY



MECHANICAL SPECIFICATIONS

Dimension	See drawing
Shaft type	Solid Hollow
Body diameter	60 mm
Mass	~685 gr (Stainless steel body) ~310 gr (Aluminum body)
Operating speed	6000 rpm
Max radial shaft load	80N
Max axial shaft loading	40N
Bearing lifetime	3×10^9 rev.min
Max. angular acceleration	5×10^5 rad/s ²

CONNECTOR AND WIRING INFORMATION

Connection type	Cable
Wiring color	See label on box
Shield Connection	Body

ELECTRICAL SPECIFICATIONS

Standard Supply Type	e.g., 24 V DC $\pm 10\%$
Input power	10 – 30 VDC
Power consumption	Max. 1.5
Input power protection	Polarity Overcurrent
Termination Resistor	On board installation – 120 Ω
Output	SSI (Synchronous Serial Interface)

PROTOCOL SPECIFICATIONS

Encoder Type	Absolute
Resolution - Single turn	Up to 14bit
Communication Protocol	SSI (Synchronous Serial Interface)
Supported Baud Rates	UP to 250 Khz clock
Output Interface	RS422
Coding Type	Binary
Frame size	32bit

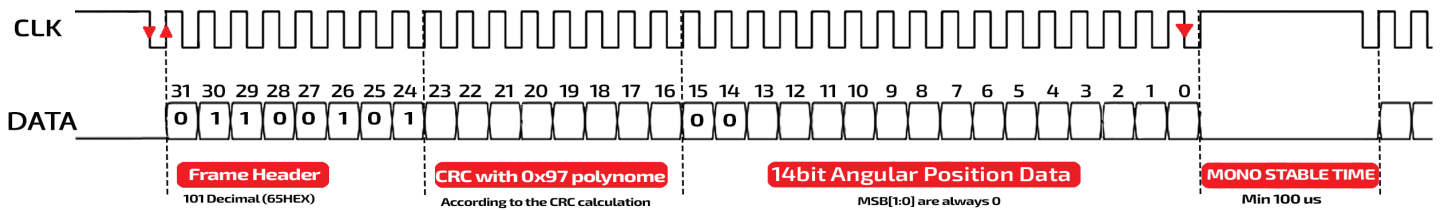
SPECIFICATIONS ENVIRONMENTAL

Body material	Stainless steel (heavy duty) Aluminum
Shaft material	Stainless steel
Working temperature range	0~80 °C
Storage temperature range	-20~100 °C
Permissible relative humidity	95%

ABSOLUT ROTARY ENCODER

series **AS60-55I**

SIGNALS

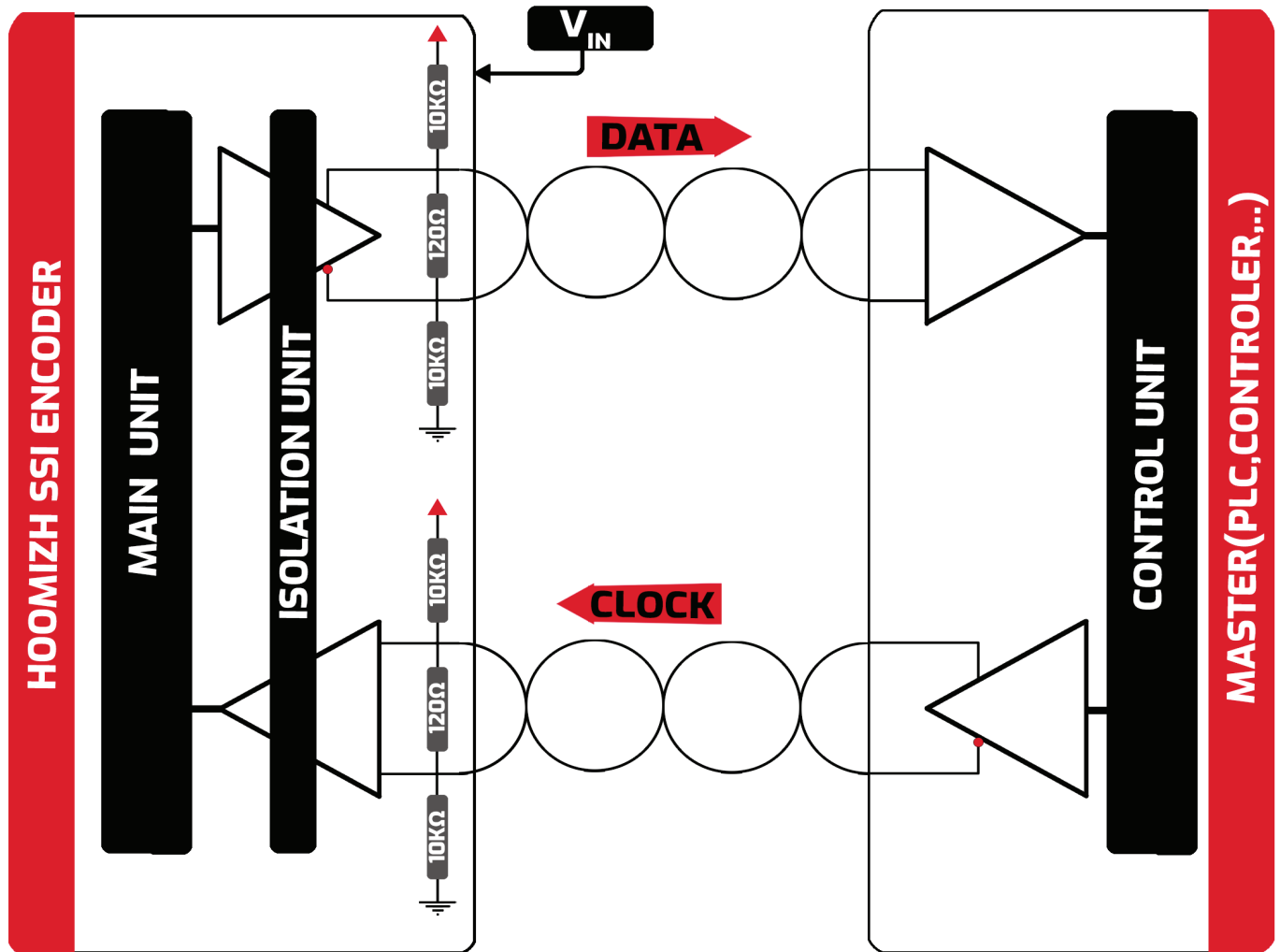


CRC Calculation

C Language: CRC-8 Implementation(Poly: 0x97)

```
/*  
 * Polynomial: 0x97  
 * Initial Value: 0x00  
 * Description: CRC-8 calculation (nibble-wise)  
 */  
  
unsigned char CRC_8bit(unsigned char crc, int Size,  
unsigned char *Buffer){  
    static const unsigned char CrcTable[ ] = {  
        0x00,0x97,0xB9,0x2E,0xE5,0x72,0x5C,0xCB,  
        0x5D,0xCA,0xE4,0x73,0xB8,0x2F,0x01,0x96 };  
    while(Size--)  
    {  
        crc = crc ^ *Buffer++;  
        crc = (crc << 4) ^ CrcTable[(crc >> 4) & 0xF];  
        crc = (crc << 4) ^ CrcTable[(crc >> 4) & 0xF];  
    }  
    return(crc);  
}
```

CIRCUIT DIAGRAM



ORDER CODE

ALUMINIUM BODY:

- SOLID SHAFT AS60-B60-RX-DT24 -14BIT-L1/SSI
- HOLLOW SHAFT AS60-B60-HX-DT24 -14BIT-L1/SSI

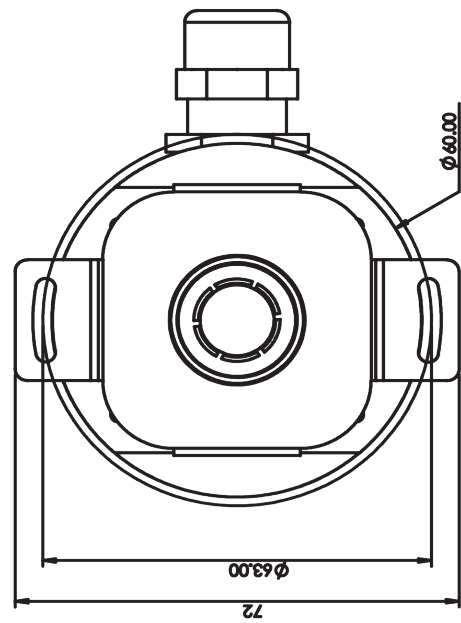
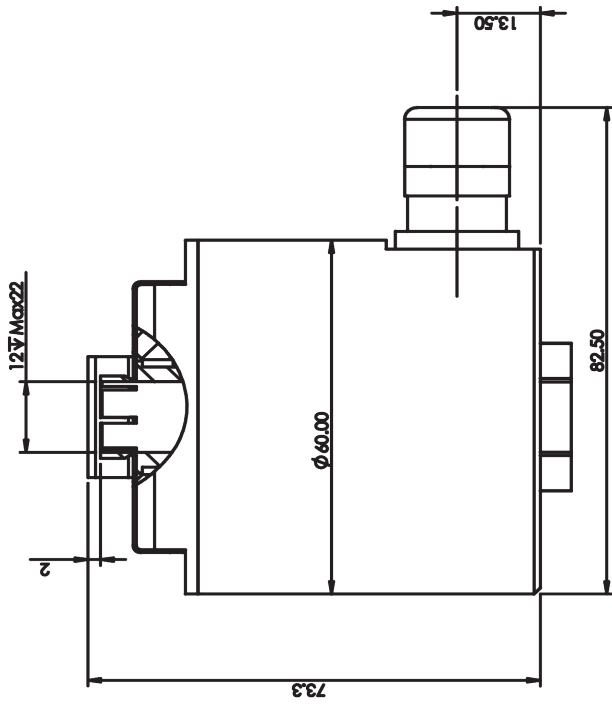
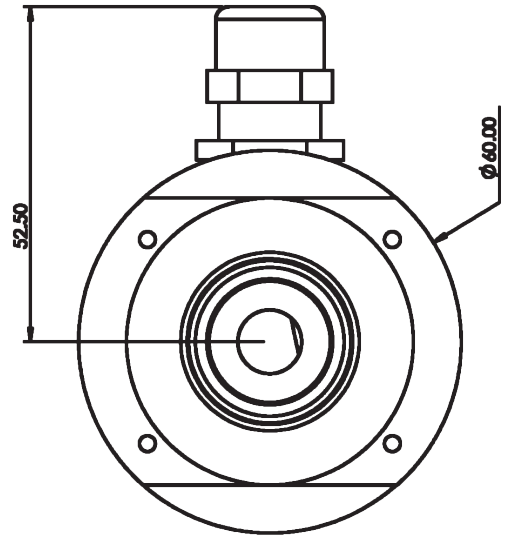
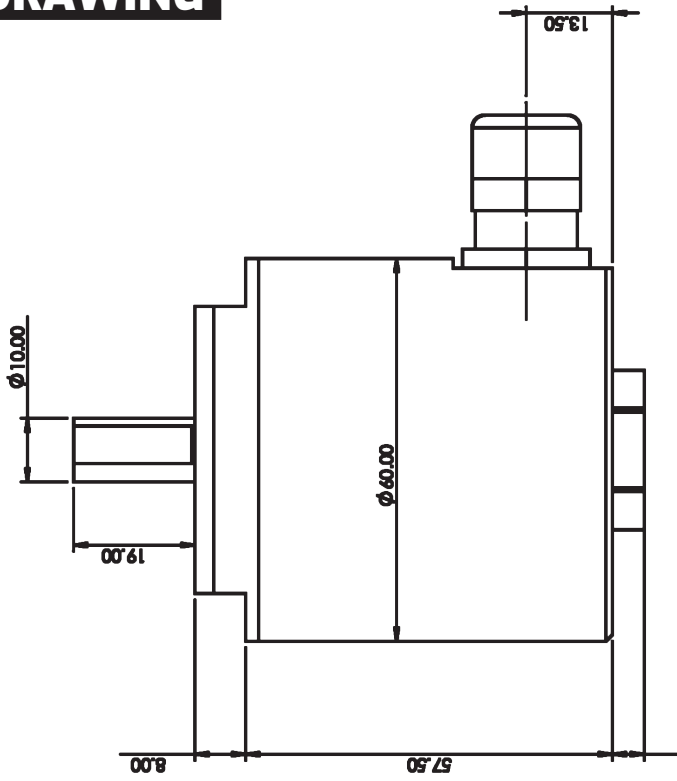
STAINLESS STEEL BODY:

- SOLID SHAFT AS60-B60-RX-DT24 -14BIT-L1/SSI-H
- HOLLOW SHAFT AS60-B60-HX-DT24 -14BIT-L1/SSI-H

ABSOLUT ROTARY ENCODER

series AS60-55I


DRAWING



1001,14050231,AS60-SSI_DATASHEET,V1.02



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