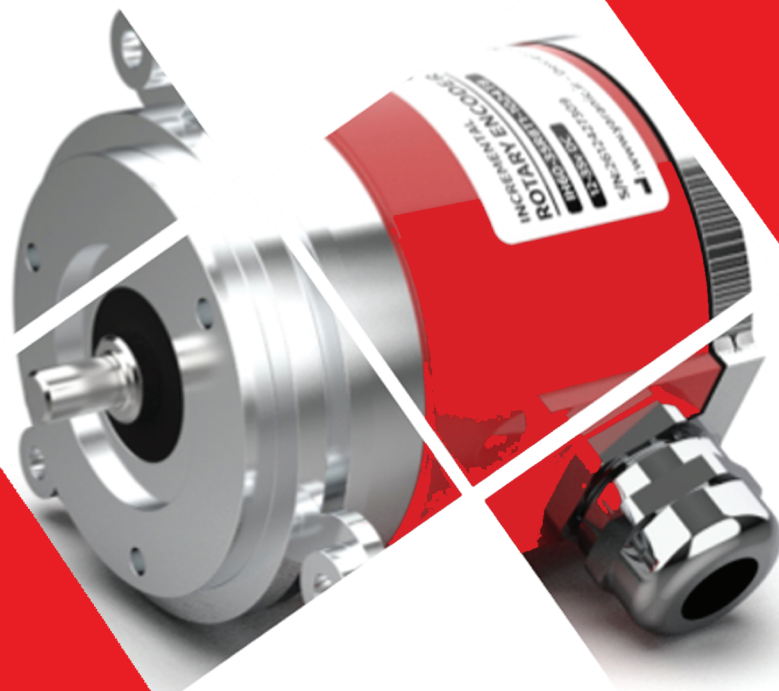




**HOOMIZH**  
MADE FOR MEASURE



MADE IN IRAN

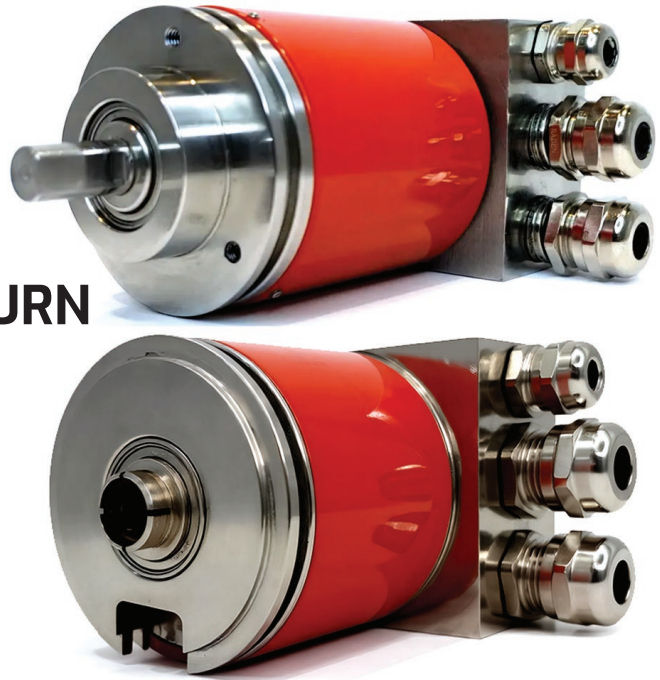


[YARANICS.COM](http://YARANICS.COM)

# ABSOLUT ROTARY ENCODER

series AM60/AS60

- ABSOLUT SINGLE/MULTITURN
- PROFIBUS
- UP TO 29 BIT (12+16)



## MECHANICAL SPECIFICATIONS

Dimension	See drawing
Shaft type	Solid Hollow
Body diameter	60 mm
Mass	800 gr
Operating speed	6000 rpm
Max radial shaft load	80N
Max axial shaft loading	40N
Bearing lifetime	$3 \times 10^9$ rev.min
Max. angular acceleration	$5 \times 10^5$ rad/s <sup>2</sup>

## CONNECTOR AND WIRING INFORMATION

Connection type	Terminal
terminal block Pinout	See drawing (2)
Power Supply Polarity	See drawing (2)
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 – 220 $\Omega$
Data bus protection	Polarity O.C O.V
Output	PROFIBUS DP V0 DP V1+V2

## FUNCTIONAL SPECIFICATIONS

Resolution - Single turn	Up to 12bit
Resolution – Multi turn	Up to 16bit
PROFIBUS Interface	RS485
Transmission rate	UP to 12 Mb/sec
Coding Type	Binary
Speed detection	Max 6,000 RPM

## PROTOCOL SPECIFICATIONS

Encoder Type	Absolute
Communication Protocol	PROFIBUS-DP DP V1+V2
Supported Baud Rates	UP TO 12MB/S
DEFAULT PROFIBUS Address ID	3
PROFIBUS Version/Class	e.g., DP-V0 / DP-V1
Address selection switch	On-board installation units and tens (up to address 99)

# ABSOLUT ROTARY ENCODER

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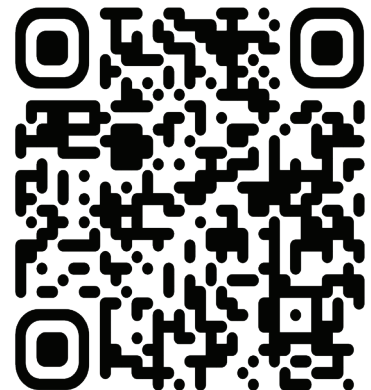
## Typical Configurable Functions in the GSD File

Encoder Class Selection	Class 1 / Class 2
Scaling Resolution Setting	Single-turn / Multi-turn
Preset Value (Zero Point Setting)	yes
Counting Direction	CW / CCW
Filter or Averaging Mode	yes
Speed Output Enable / Disable	yes
Alarm and Diagnostic Functions	no
Address and Bus Parameters	Yes (HW/SW)
Baudrate Setting	Bus-dependent (up to 12 MB/s)
Hardware / Software Version	1.01/1.3
GSD File Name	H00MIZH.GSD
Operating Mode	cyclic data exchange, sync, freeze

## Capabilities Accessible via Registers

Read-only	Position - Speed (RPM)
Write-enabled	Set position to zero (reset position) Preset New Position (Set Position)
Register Addresses (Read)	1- Position = double word 2- Speed = word
Register Addresses (Write) [Position reset write address]	double word: 0000 0000 0000 0000 0000 0000 0000 0000 (if MSB bit = 1 >> Position reset)
Register Addresses (Write) [Preset New Position]	double word: 0000 0000 0000 0000 0000 0000 0000 0000 (Move New Position to Output Address)

**DOWNLOAD GSD**



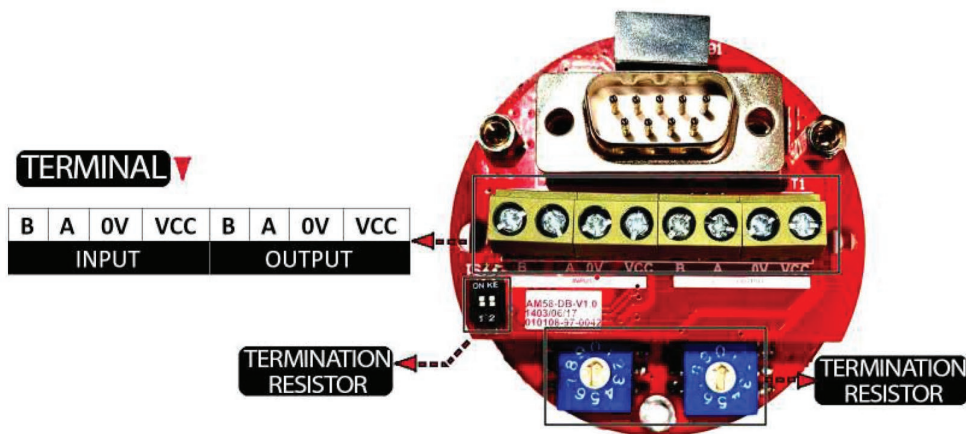
## SPECIFICATIONS ENVIRONMENTAL

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%

## CONNECTOR AND WIRING INFORMATION

Connection type	Terminal
terminal block Pinout	See CONNECTION
Power Supply Polarity	See CONNECTION
Shield Connection	Body

## CONNECTION



## ORDER CODE

**MULTI TURN:**  
**SOLID SHAFT**      **AM60-B60-RX-DT24 -28BIT-T8/PROFIBUS**  
**HOLLOW SHAFT**    **AM60-B60-HX-DT24 -28BIT-T8/PROFIBUS**

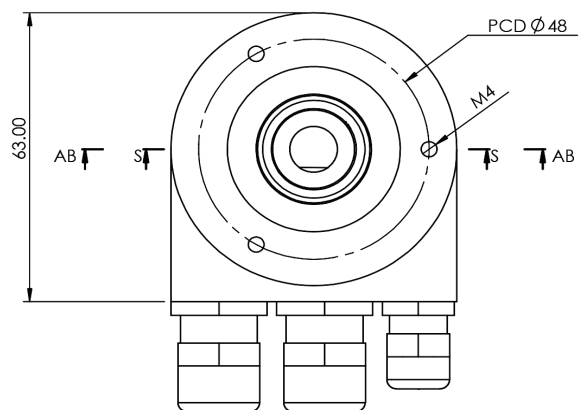
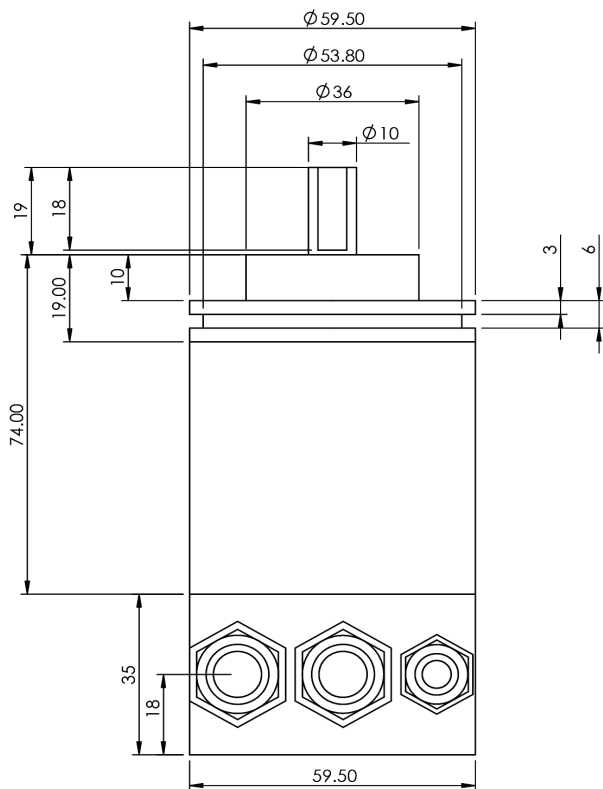
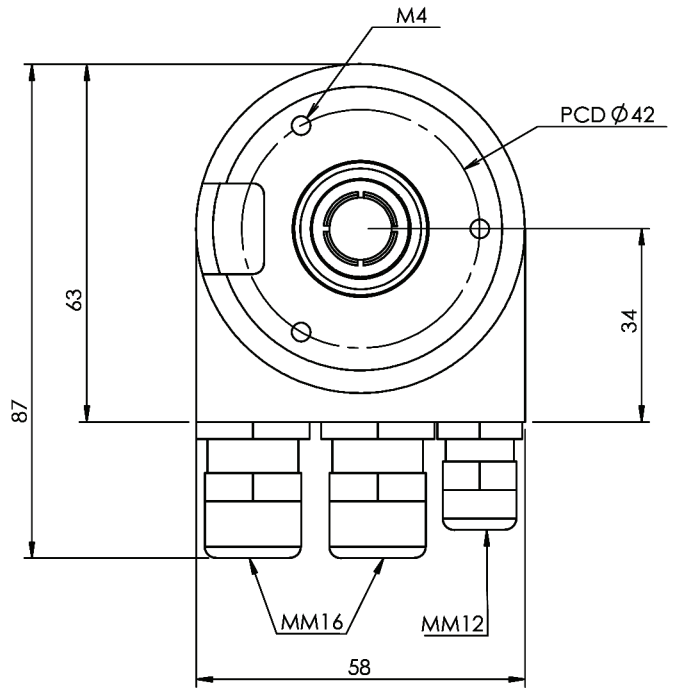
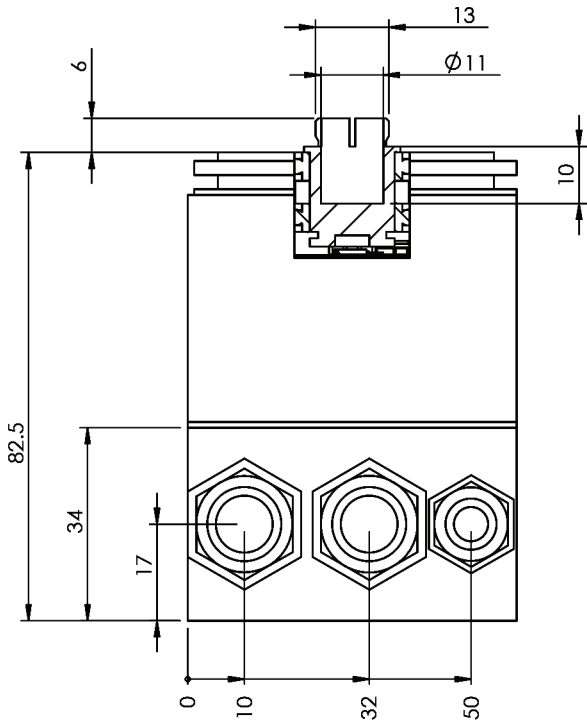
**SINGLE TURN:**  
**SOLID SHAFT**      **AS60-B60-RX-DT24 -28BIT-T8/PROFIBUS**  
**HOLLOW SHAFT**    **AS60-B60-HX-DT24 -28BIT-T8/PROFIBUS**

**X = Shaft Diameter**

# ABSOLUT ROTARY ENCODER

series AM60/AS60


## DRAWING



1001,14050129,AM60\_DATASHEET,V1.02



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