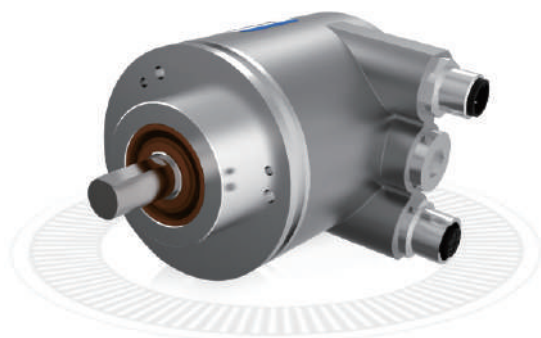




MTDCA58S Series
 Sensing method magnetic
 Functional principle Multiturn
 Multiturn technology Mechanical gears without batteries
 Housing size $\Phi 60\text{mm}$
 Shaft diameter Solid shaft $\Phi 10\text{mm}$
 Max. resolution 30Bit
 Steps per turn 65536/16Bit
 Number of turn 16384/14Bit
 Interface Modbus TCP
 Supply voltage 10-30VDC
 Protection IP67
 Connection Ethernet: Socket, M12, 4-pin, D-code
 Power: Plug, M12, 5-pin, A-code

Mechanical characteristics

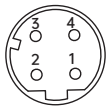
Shaft diameter	Solid shaft $\Phi 10\text{mm}$
Material	Aluminum alloy
Shell material	Aluminum alloy
Axial loading	$\leq 40\text{N}$
Radial load	$\leq 80\text{N}$
Bearing life	10^9turn
Rotary speed	Max.6000RPM
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000Hz
Protection grade	IP67
Working temperature	-40°C...+85°C
Storage temperature	-40°C...+85°C
Connection	Ethernet: Socket, M12, 4-pin, D-code Power: Plug, M12, 5-pin, A-code

Electrical characteristics

Interface	Modbus TCP
Transmission rate	10/100Mbit
Code	Binary
Absolute accuracy	$\pm 0.2^\circ$
Supply voltage	10-30VDC
Current consumption	$< 200\text{mA}$
Single turn resolution	16bit/ 65536
Multiturn resolution	14bit/ 16384
Output driver	Ethernet
Startup time	$< 1\text{ms}$
Interface cycle time	$> 10\text{ms}$
Power consumption	$< 2\text{W}$
Programming function	Resolution, Default setting, Precast counting direction, IP address
Anti-interference	EN61000-6-2
Launch interference	EN61000-6-4
Circuit protection	Surge protection, Reverse polarity protection, ESD protection

Terminal assignment

Modbus TCP

Function	M12 x1 Connector							
Bus port 1	Signal	Transmit data+	Receive data+	Transmit data-	Receive data-			D-coded
	Code	Tx+	Rx+	Tx-	Rx-			
	Pin	1	2	3	4			
Power Bus port	Signal	Power+	Power+	Power-	Power-	Shielding		A-coded
	Code	+Ub	+Ub	GND	GND	PE		
	Pin	1	2	3	4	5		

Ordering information

MTDCA58
XX
S
10
12
13
PRM

①
②
③
④
⑤
⑥

①Extended No. XX
 ②Shaft type S: Solid shaft
 ③Shaft diameter 10: Φ 10mm
 ④Resolution MT 14: 16384
 12: 4096
 ⑤Resolution ST 16: 65536
 13: 8192
 12: 4096
 ⑥Connection type
 PRM: Radial Modbus TCP protocol,
 Integrated bus coupler terminal box
 Ethernet: Signal socket, M12, 4 pin, D-code
 Power: Power plug, M12, 5 pin, A-code
 PAM: Axial Modbus TCP protocol,
 Integrated bus coupler terminal box
 Ethernet: Signal socket, M12, 4 pin, D-code
 Power: Power plug, M12, 5 pin, A-code

Note: Marked in bold=standard items

Notes: 1, Multiturn resolution and Singleturn resolution are common digits, Resolution MT $\leq$ 12bit, Resolution ST $\leq$ 16bit, other requirements on request.

2, Please chose the ordering information: Extended No., Shaft diameter、Multiturn resolution、Singleturn resolution、Connection type.

3, lease contact us for further electrical parameter Settings and requirements.

Ordering example: MTDCA58S101213PRM, Counting direction of the factory is set to clockwise increasing.

Explanation: MTDCA58S Series, Solid shaft 10mm, Output Binary, Multiturn resolution 4096, Singleturn resolution 8192, Modbus TCP protocol, Integrated bus coupler terminal box, 2 pcs socket (D-coded) , 1 pcs plug (A-coded) , M12×1.

Accessories (sold separately) Note: Please refer to the selection table for the selection of other accessories.



Coupling
Model : 8215 10-10



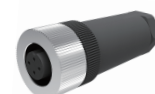
Synchro clamping elements (set of 3)
Model : 8531



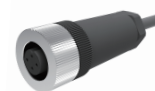
Signal Plug
Model : 9204-1B



Connector and Cable
Model : 9204-1B/X-20.001
Plug A: Signal Plug, M12, 4-pin, Straight, D-coding, Plastic Housing
Plug B: Bare Wire End, X-meter Cable, Green, 4-core Ethernet Cable, Ø6.5



Power Socket
Model : 9204B



Connector and Cable
Model : 9212B/X-22.002
Plug A: Power Socket, M12, 5-pin, Straight, A-coding, Plastic Housing
Plug B: Bare Wire End, X-meter Cable, Gray, 4-core Twisted Pair Shielded Cable 2*2*0.25mm², Ø6.8



Signal Plug
Model : 9204-1MB



Connector and Cable
Model : 9204-1MB/X-20.001
Plug A: Signal Plug, M12, 4-pin, Straight, D-coding, Metal Housing
Plug B: Bare Wire End, X-meter Cable, Green, 4-core Ethernet Cable, Ø6.5



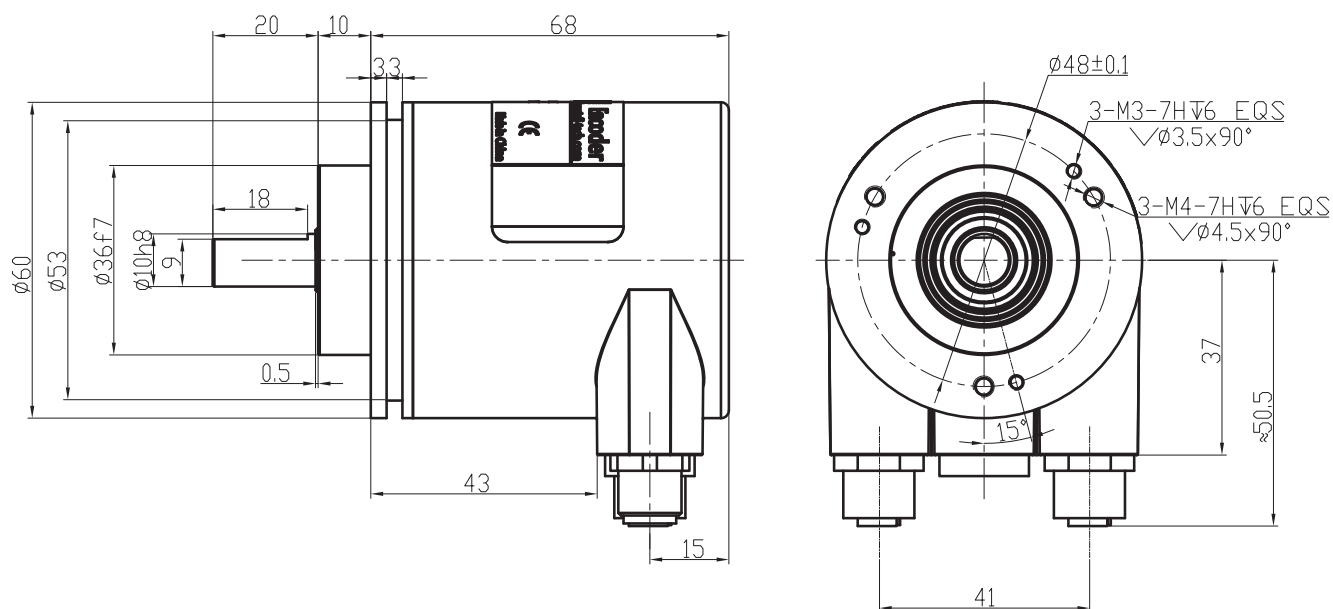
Power Socket
Model : 9204MB



Connector and Cable
Model : 9212MB/X-22.002
Plug A: Power Socket, M12, 5-pin, Straight, A-coding, Metal Housing
Plug B: Bare Wire End, X-meter Cable, Gray, 4-core Twisted Pair Shielded Cable 2*2*0.25mm², Ø6.8

Dimensions

MTDCA58S10 Radial



MTDCA58S10 Axial

