

Absolute encoders –Multiturn



NDDA58B Series
Sensing method Optical
Housing size $\Phi 58$ mm
Multiturn technology Mechanical gears without batteries
Housing size $\Phi 58$ mm
Shaft diameter Hollow shaft $\Phi 10$ 、 $\Phi 12$ 、 $\Phi 14$
Max. resolution 28Bit
Steps per turn 65536/16Bit
Number of turn 4096/12Bit
Interface PROFINET
Supply voltage DC10-30V
Protection IP65/IP67

Mechanical characteristics

Shaft diameter	$\Phi 10$ 、 $\Phi 12$ 、 $\Phi 14$ mm
Material	Aluminum alloy
Shell material	Aluminum alloy
Shaft loading	≤ 40 N
Radial load	≤ 80 N
Bearing life	10 turn ⁹
Rotational speed	Max. 6000RPM
Shock resistance	100g, 6ms
Shock resistance	10g, 10...2000Hz
Protection grade	IP65/IP67
Working temperature	-40°C...+80°C
Storage temperature	-40°C...+80°C
Weight	≈ 600 g
Wiring method	Terminal box, 3×M12 connector

Electrical characteristics

Interface	PROFINET-RT
Transfer rate	10 / 100Mbit
Code	Binary
Output driver	Ethernet
Startup time	< 250ms
Interface cycle time	≥ 1 ms
Power consumption	< 2.5W
linearity	16bit ± 2 LSB, 13bit ± 1 LSB, 12bit ± 0.5 LSB
Programming function	Resolution、Default setting、Precast counting direction、IP address
Anti-interference	EN61000-6-2
Launch interference	EN61000-6-4
Circuit protection	Surge protection (1KV) 、 Reverse polarity protection 、 ESD protection (8KV)

Terminal assignment

(一) PROFINET

Function	M12x1 Connector , 4pin						
Bus port 1	Signal	Transmit data +	Receive data +	Transmit data -	Receive data -		D-coded
	Code	Tx+	Rx+	Tx-	Rx-		
	Needle	1	2	3	4		
Power Bus port	Signal	Power +	-	Power -	-		A- coded
	Code	+Ub	-	GND	-		
	Needle	1	2	3	4		
Bus port 2	Signal	Transmit data +	Receive data +	Transmit data -	Receive data-		D-coded
	Code	Tx+	Rx+	Tx-	Rx-		
	Needle	1	2	3	4		

Ordering information

NDDA58 XX B 10 12 13 PRM

①
②
③
④
⑤
⑥

①Extended No. XX	②Shaft type S: Hollow shaft	③Shaft diameter 6: 6mm 10: 10mm	④Resolution MT 12: 4096	⑤Resolution ST 13: 8192 16: 65536	⑥Connection type PROFINET protocol, Integrated bus coupler terminal box 9204: 1 pcs plug(A-coded) , M12X1 9204-1 : 2 pcs socket(D-coded), M12X1
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Note: Printed in bold=standard items

- Notes: 1, Multiturn resolution and Singleturn resolution are common digits, Resolution MT≤12bit, Resolution ST≤16bit, other diameter 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: NDDA58B101213PRM, Counting direction of the factory is set to clockwise increasing.

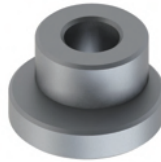
Explanation: NDDA58B Series, Hollow shaft 10mm, Output Binary, Multiturn resolution 4096, Singleturn resolution 8192, PROFINET protocol, Integrated bus coupler terminal box, 2 pcs socket(D-coded), 1 pcs plug (A-coded) , M12X1.

Accessories (sold separately) Note: Further stator coupling can be found in the accessories selection table.

Coupling
Model (common) : 8215 10-10



Synchro clamping elements (set of 3)
Model (common) : 8531



Power plug
Model: 9204B



Signal plug
Model: 9204-1B



Power plug
Model: 9204MB



Signal plug
Model: 9204-1MB



Dimensions

NDDA58B

