

## Incremental Encoder WDG 50N



- Robust encoder with small dimensions
- Reliable sturdy design
- Small Size & Easy Mounting

### Resolution

Max. pulses per revolution/  
PPR 1 ~ 5000 PPR

### Mechanical Data

#### Housing

Flange clamping flange  
- Max. operating speed 5000 rpm  
Housing Ø 50 mm

#### Shaft(s)

Shaft material stainless steel  
Starting torque approx.  $\leq 1.5$  Ncm at ambient temperature  
Shaft Ø 8 mm  
Max. Permissible shaft load radial 50 N  
Max. Permissible shaft load axial 30 N

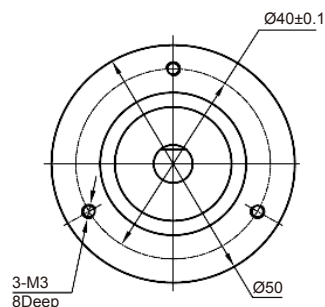
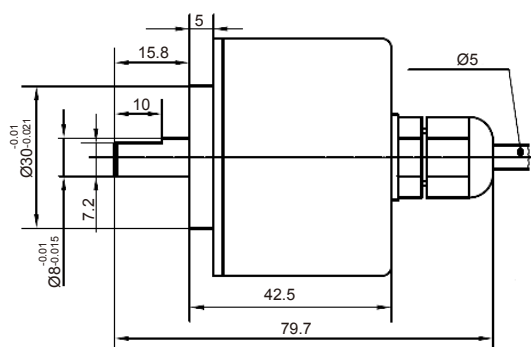
### Electrical Data

Power supply/Current consumption 4.75VDC up to 5.25VDC / 60~100mA  
Power supply/Current consumption 8VDC up to 26VDC / 60~80mA  
Output circuit TTL  
TTL + inv  
HTL  
HTL + inv  
Pulse Frequency TTL  $\leq 5000$ ppr: max. 300kHz  
HTL  $\leq 5000$ ppr: max. 300kHz  
Channels ABN and inverted signals  
Load 60~100 mA/channel (depends on output circuit)  
**Accuracy**  
Phase offset  $90^\circ \pm$  max. 12.5% of the period duration

### General Data

Weight approx. 200 g  
Connections cable  
Protection rating (EN 60529) IP65  
Operating temperature  $-30^\circ\text{C} \sim +85^\circ\text{C}$   
Storage temperature  $-35^\circ\text{C} \sim +95^\circ\text{C}$   
Shock  $980 \text{ m/s}^2$ , 3Dx3times, 6ms  
Vibration  $49 \text{ m/s}^2$ , 10~200Hz, 3Dx120min

### Cable connection L2 (IP65) with 2 m cable



### Description

**L2** axial, shield and connected (IP65)

### Assignment

Description	L2	L2
Output circuit	H05/H24	R05/R24
GND	BU	BU
(+) Vcc	BN	BN
A	BK	BK
B	WH	WH
N	OG	OG
A inv.	-	RD
B inv.	-	GY
N inv.	-	YE
Shield	Shield	Shield

Example order No.	Type					Your encoder
WDG 50N	WDG 50N					WDG 50N
<b>Shaft size</b>						
08	8 mm					
<b>Pulses per revolution PPR</b>						
1024	0~5000 PPR Above 5000 PPR on request					
<b>Channels</b>						
ABN	ABN, ABN inverted signals					
<b>Power Supply</b>						
H24	<b>Resolution PPR</b>	<b>Power supply VDC</b>	<b>Output circuit</b>	<b>Light reserve warning</b>	<b>Order key</b>	
	up to 5000	4,75 - 5,25	TTL ( Push-pull )	-	H05	
		4,75 - 5,25	TTL + inv. (Line Driver)	-	R05	
		8 - 26	HTL ( Push-pull )	-	H24	
8 - 26		HTL + inv. (Line Driver)	-	R24		
<b>Electrical connectons</b>						
L2	<b>Description</b>				<b>Order key</b>	
	<b>Cable length (2 m standred)</b> axial, shield and connected (IP65)				L2	
<b>Cable length</b>						
	<b>Description</b>			<b>Order key</b>		
	Cable length			XXX = Decimeter		

Example order No.= WDG 50N 08 1024 ABN H24 L2

WDG 50N Your encoder