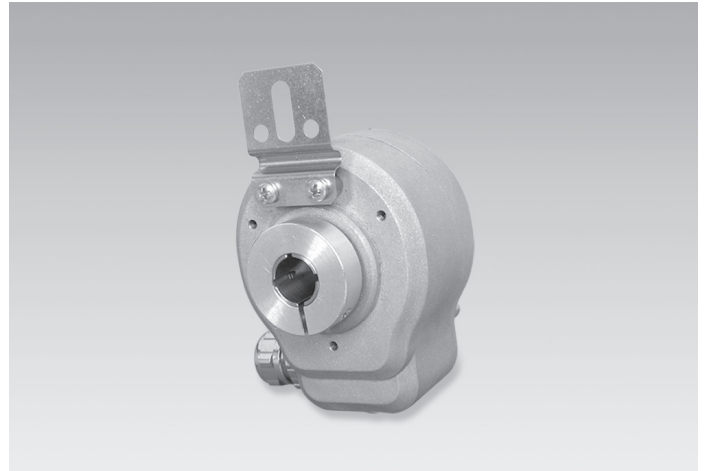


ITD 20 A 4 Y114

Blind hollow shaft $\varnothing 10$ to $\varnothing 14$ mm
200...2048 pulses per revolution

Overview

- Encoder with blind hollow shaft $\varnothing 10$...14 mm
- Max. 2048 pulses per revolution
- Optical sensing method
- Mounting by torque support
- TTL or HTL output signals
- Terminal box axial, screw connection sidewise or radial



Technical data

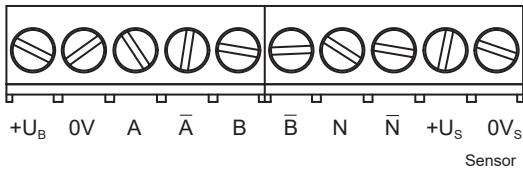
Technical data - electrical ratings

Voltage supply	5 VDC $\pm 5\%$ 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 85 mA
Pulses per revolution	200 ... 2048
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	A, B, N + inverted
Output stages	TTL linedriver (short-circuit proof) HTL push-pull (short-circuit proof)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3

Technical data - mechanical design

Shaft type	$\varnothing 10$ mm (blind hollow shaft) $\varnothing 12$ mm (blind hollow shaft) $\varnothing 14$ mm (blind hollow shaft)
Protection DIN EN 60529	IP 65
Operating speed	≤ 8000 rpm
Starting torque	$\leq 0,015$ Nm (+20 °C)
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-20...+85 °C
Relative humidity	90 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 55-2000 Hz DIN EN 60068-2-27 Shock 100 g, 11 ms
Connection	Terminal box
Weight approx.	350 g

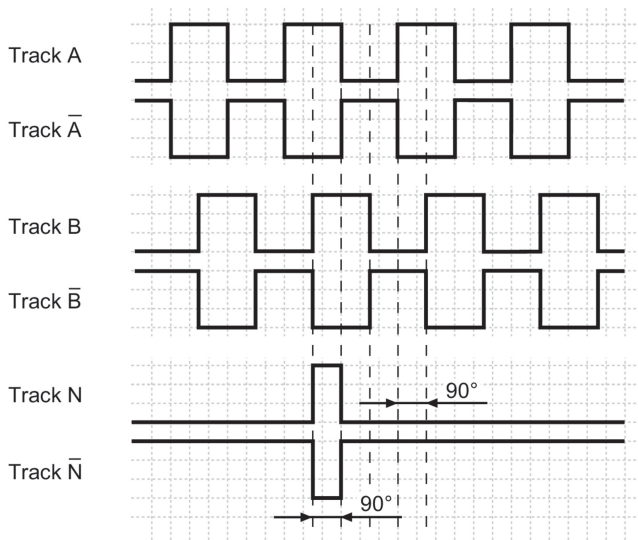
Terminal assignment



Output signals

Clockwise rotation when looking at the mounting side.

NI-Output signals



Trigger level

Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 70 mA

Outputs	Push-pull short-circuit proof
Output level High	$\geq U_B - 3$ V
Output level Low	≤ 1.5 V
Load	≤ 70 mA

ITD 20 A 4 Y114

 Blind hollow shaft $\varnothing 10$ to $\varnothing 14$ mm
 200...2048 pulses per revolution

Ordering reference

	ITD 20 A 4 Y114	#####	#	NI	#####	S	##	IP65	##
Product	ITD 20 A 4 Y114								
	ITD 20 A 4 Y114								
Pulse number									
200		200							
360		360							
500		500							
512		512							
720		720							
1000		1000							
1024		1024							
2048		2048							
Voltage supply / signals									
5 VDC / TTL level, linedriver				T					
8...30 VDC / HTL level, push-pull				H					
Output signals									
A, A inv, B, B inv, N, N inv				NI					
Connection									
Terminal box, 10-pin, M16x1.5 connection, sidewise					VS16				
Terminal box, axial, 12-pin, M16x1.5 connection, radial					VR16				
Operating temperature									
-20...+85 °C						S			
Blind hollow shaft									
$\varnothing 10$ mm							10		
$\varnothing 12$ mm							12		
$\varnothing 14$ mm							14		
Protection									
IP 65								IP65	
Mounting kit									
Mounting kit 003									003
Mounting kit 006									006
Mounting kit 007									007
Mounting kit 028									028
Mounting kit 041									041