

Incremental encoders

Blind hollow shaft ø10 mm with EURO flange

200...2048 pulses per revolution

ITD 40 B10 Y18



ITD 40 B10 Y18 with EURO flange

Features

- Encoder with blind hollow shaft ø10 mm
- Max. 2048 pulses per revolution
- Solid shaft fastening by coupling
- Centering alignment ø100 mm, mounting screw hole circle ø115 mm
- Industrial standard with centering flange
- TTL or HTL output signals
- Flange socket axial

Technical data - electrical ratings

Voltage supply	5 VDC ±5 % 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤100 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 stage	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

Size (flange)	ø97 mm
Shaft type	ø10 mm (blind hollow shaft)
Shaft loading	≤50 N axial ≤80 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 66
Operating speed	≤3000 rpm
Starting torque	≤0.07 Nm (+20 °C)
Materials	Housing: aluminium, black, anodised Shaft: stainless steel
Operating temperature	-20...+70 °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	Connector M23 type 2, 12-pin
Weight approx.	1200 g

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Part number

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Protection

IP66 IP 66

Flange / Solid shaft

10 EURO flange B10 / ø10 mm

Operating temperature

S -20...+70 °C

Connection

D2SA12 Flange socket type 2, pin contacts, axial, 12-pin

Output signals

BI A, A inv, B, B inv

NI A, A inv, B, B inv, 0, 0 inv

Voltage supply / signals

T 5 VDC / TTL level, linedriver

H 8...30 VDC / HTL level, push pull

R 8...30 VDC / TTL level, linedriver

Pulse number - see table

Pulse number

200	500	720	1024	2048
360	512	1000	2000	

Incremental encoders

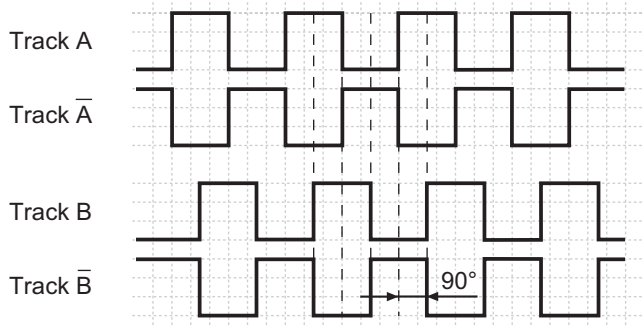
Blind hollow shaft ø10 mm with EURO flange
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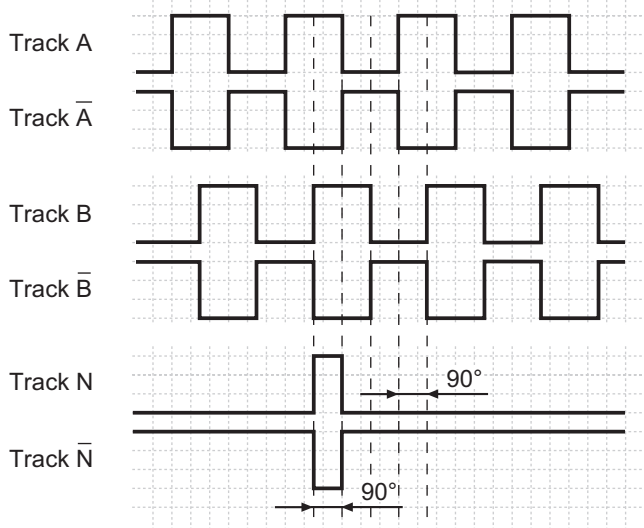
Output signals

Clockwise rotation when looking at the mounting side.

BI-Output signals

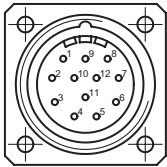


NI-Output signals



Terminal assignment

Connector	Assignment
Pin 5	Track A
Pin 6	Track A inv.
Pin 8	Track B
Pin 1	Track B inv.
Pin 3	Track N
Pin 4	Track N inv.
Pin 12	UB
Pin 10	GND
Pin 2	UB-Sense
Pin 11	GND-Sense
Pin 9	–
Pin 7	–



Trigger level

Outputs	Linedriver
Output level High	$\geq 2.4 \text{ V}$
Output level Low	$\leq 0.5 \text{ V}$
Load	$\leq 70 \text{ mA}$

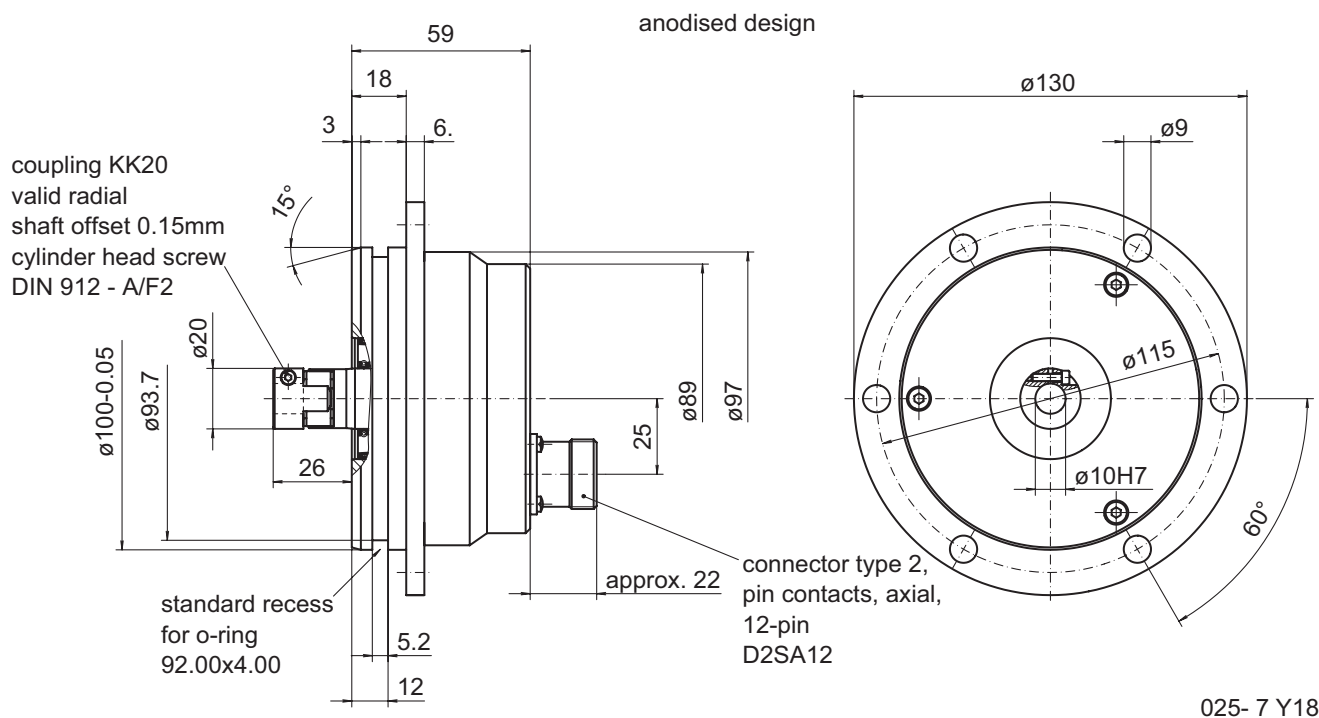
Outputs	Push-pull short-circuit proof
Output level High	$\geq \text{UB} - 3 \text{ V}$
Output level Low	$\leq 1.5 \text{ V}$
Load	$\leq 70 \text{ mA}$

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Dimensions



Subject to modification in technic and design. Errors and omissions excepted.