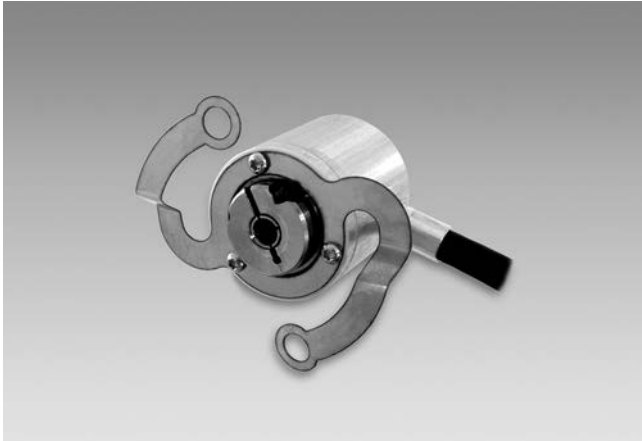


# Incremental encoders

Mini encoder with blind hollow shaft  $\varnothing 4$  mm

30...1024 pulses per revolution

ITD 01 A 4 Y 4



ITD 01 A 4 Y 4 with blind hollow shaft

## Features

- Mini encoder with blind hollow shaft  $\varnothing 4$  mm
- Max. 1024 pulses per revolution
- Optical sensing method
- Outer diameter  $\varnothing 24$  mm
- TTL or HTL output signals
- Cable output radial
- Clamping ring torsion-proof

## Technical data - electrical ratings

Voltage supply	5 VDC $\pm 5\%$ 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	$\leq 25$ mA
Pulses per revolution	30...1024
Reference signal	Zero pulse, width $90^\circ$
Sensing method	Optical
Output frequency	$\leq 100$ kHz
Output signals	A $90^\circ$ B, N
Output stages	TTL Push-pull short-circuit proof

## Technical data - mechanical design

Size (flange)	$\varnothing 24$ mm
Shaft type	$\varnothing 4$ mm (blind hollow shaft)
Mounting kit	102
Protection DIN EN 60529	IP 64
Operating speed	$\leq 10000$ rpm
Starting torque	$\leq 0.005$ Nm ( $+20^\circ\text{C}$ )
Materials	Housing: aluminium Shaft: stainless steel
Operating temperature	$-20...+85^\circ\text{C}$
Relative humidity	90 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 55-2000 Hz DIN EN 60068-2-27 Shock 30 g, 11 ms
Connection	Cable 1 m
Weight approx.	45 g

# Incremental encoders

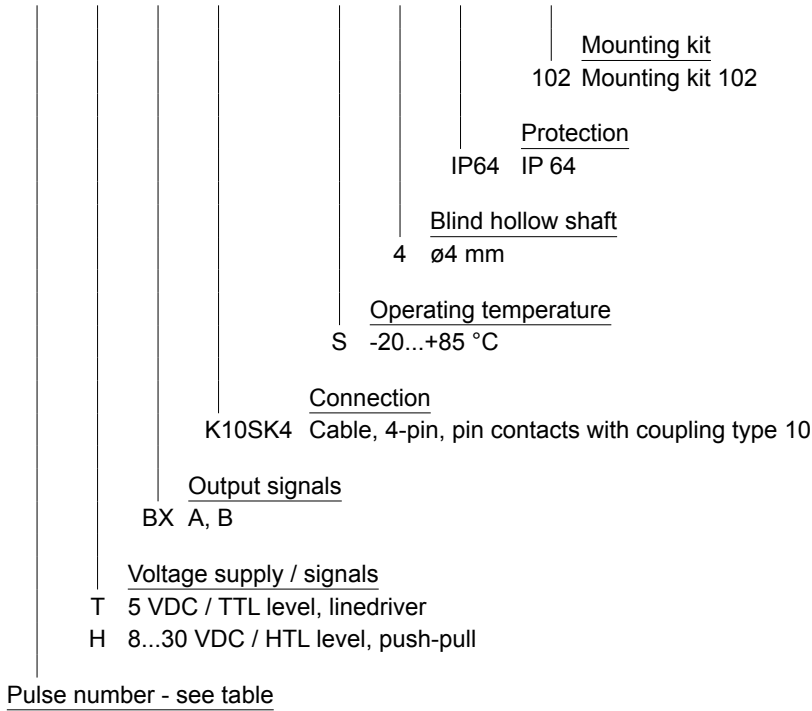
## Mini encoder with blind hollow shaft $\varnothing 4$ mm

### 30...1024 pulses per revolution

ITD 01 A 4 Y 4

#### Part number

ITD 01 A 4 Y 4     **BX** **K10SK4** **S** **4** **IP64** **102**



#### Pulse number

30	100	360	600	1024
60	300	500	1000	

# Incremental encoders

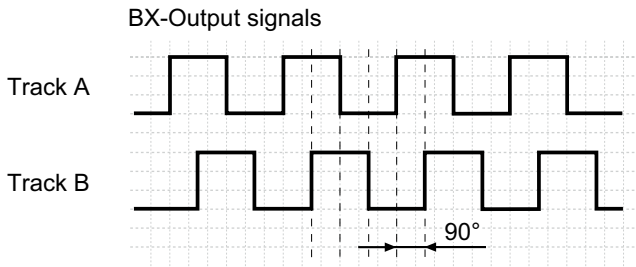
Mini encoder with blind hollow shaft  $\varnothing 4$  mm

30...1024 pulses per revolution

ITD 01 A 4 Y 4

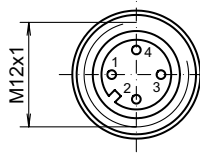
## Output signals

Clockwise rotation when looking at the mounting side.



## Terminal assignment

Connector	Assignment
Pin 1	UB
Pin 2	Track B
Pin 3	GND
Pin 4	Track A



## Trigger level

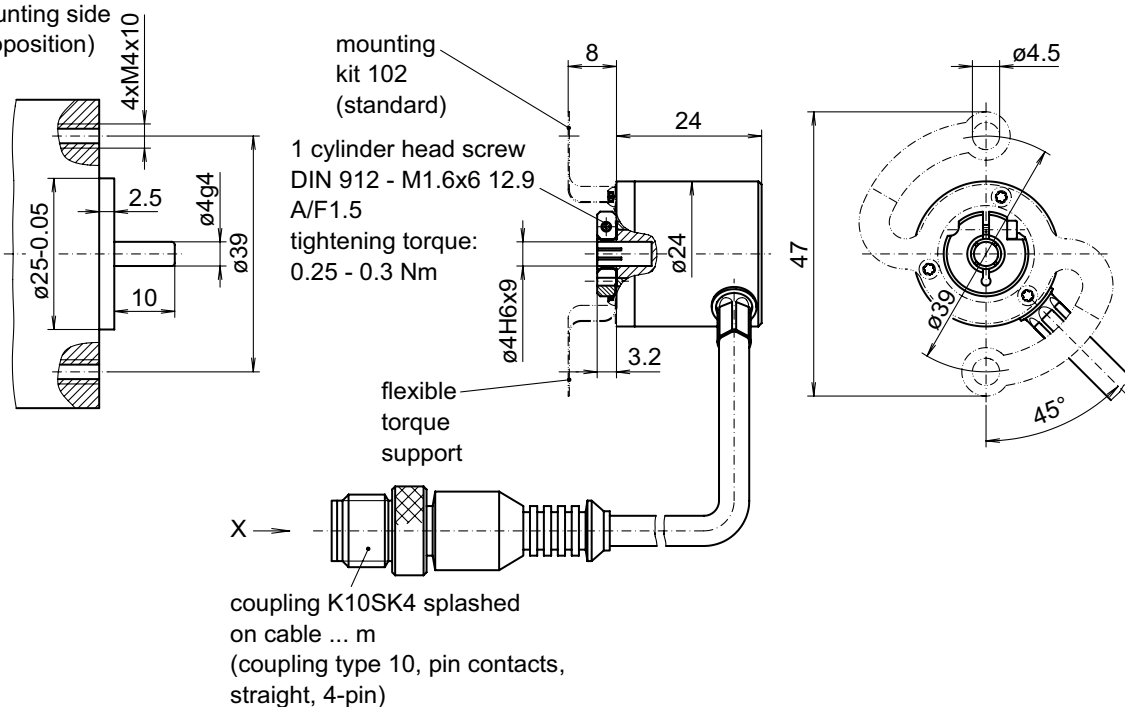
Outputs	Linedriver
Output level High	$\geq 2.4$ V
Output level Low	$\leq 0.5$ V
Load	$\leq 30$ mA

## Outputs

Outputs	Push-pull short-circuit proof
Output level High	$\geq UB - 3$ V
Output level Low	$\leq 1.5$ V
Load	$\leq 30$ mA

## Dimensions

mounting side  
(proposition)



031- 1 Y 4

# Incremental encoders

Mini encoder with blind hollow shaft  $\varnothing 4$  mm  
30...1024 pulses per revolution

ITD 01 A 4 Y 4

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