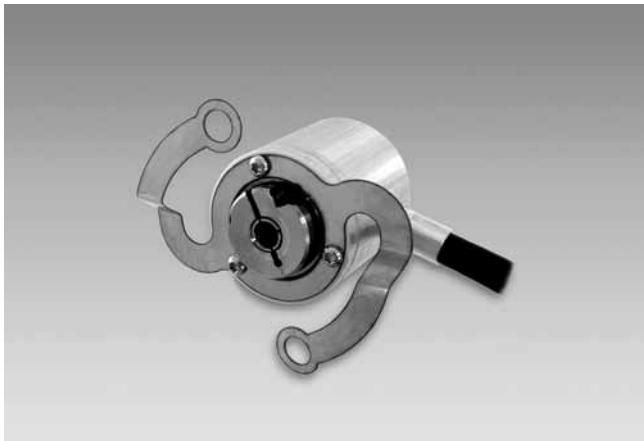


Incremental encoders

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
- 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	≤ 25 mA
Pulses per revolution	30...1024
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 100 kHz
Output signals	A 90° B, 0
Output stage	TTL Push-pull short-circuit proof

Technical data - mechanical design

Size (flange)	$\varnothing 24$ mm
Shaft type	$\varnothing 4$ mm (blind hollow shaft)
Motor shaft tolerance	0.25 mm axial 0.1 mm radial
Mounting kit	102
Protection DIN EN 60529	IP 64
Operating speed	≤ 10000 rpm
Starting torque	≤ 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

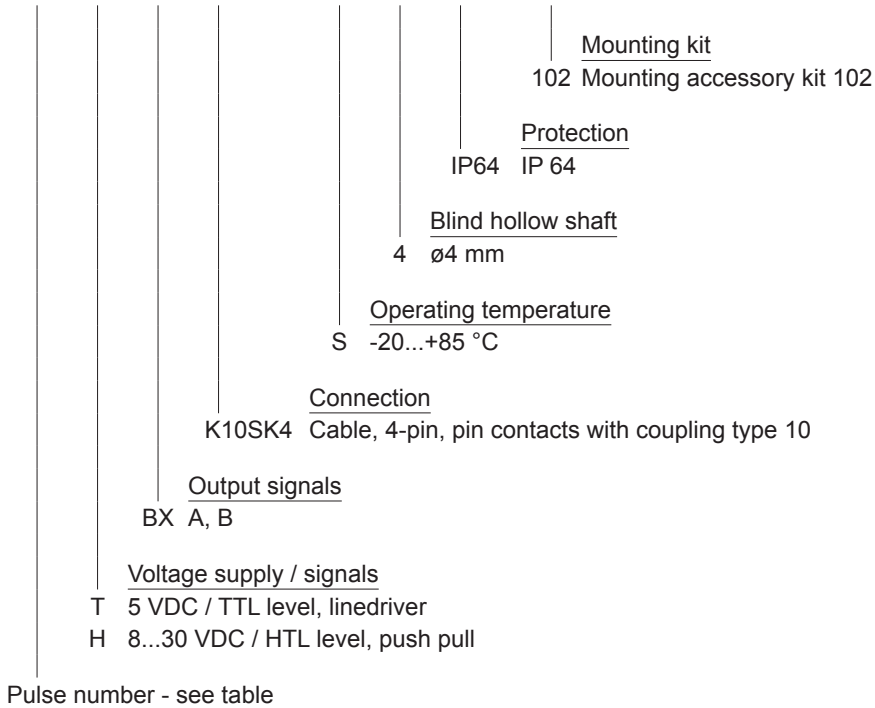
Mini encoder with blind hollow shaft $\varnothing 4$ mm

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

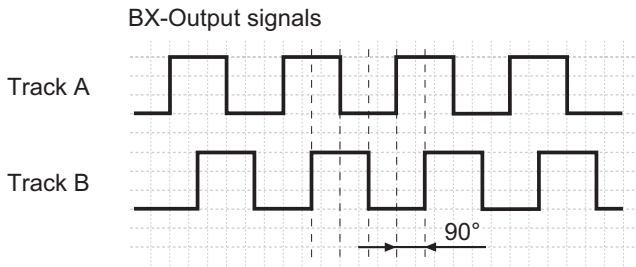
Mini encoder with blind hollow shaft $\varnothing 4$ mm

30...1024 pulses per revolution

ITD 01 A 4 Y 4

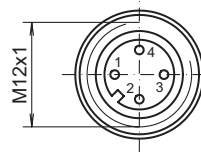
Output signals

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

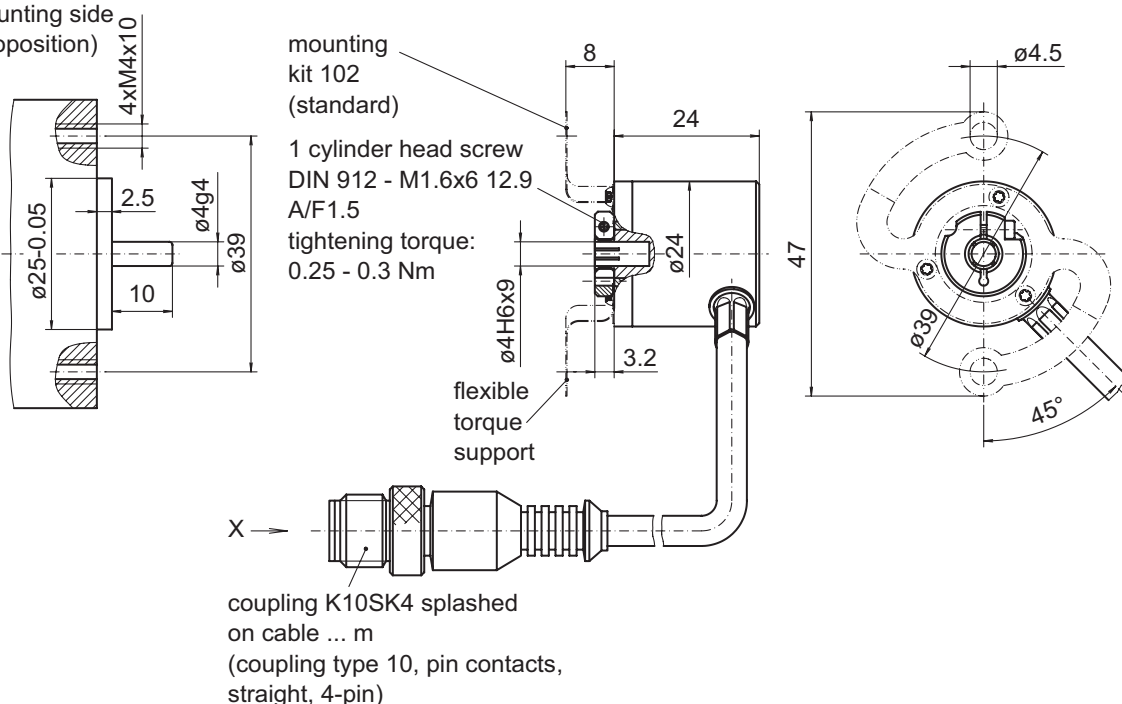
Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 30 mA

Outputs

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