

# Incremental encoders

Through hollow shaft  $\varnothing 14$  mm

128 pulses per revolution

## ITD 23 A 4 Y 2



ITD 23 A 4 Y 2 with through hollow shaft

### Features

- Size  $\varnothing 58$  mm
- Precise optical sensing
- Output signal level TTL or HTL
- Through hollow shaft  $\varnothing 14$  mm
- Connection tangential
- 128 pulses per revolution
- Operating temperature  $-20\dots+85$  °C

### Technical data - electrical ratings

Voltage supply	5 VDC $\pm 5$ % 8...26 VDC
Reverse polarity protection	Yes
Consumption w/o load	$\leq 40$ mA
Pulses per revolution	128
Sensing method	Optical
Output frequency	$\leq 30$ kHz
Output signals	A 90° B
Output stages	TTL 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)	60 x 72 mm
Shaft type	$\varnothing 14$ mm (through hollow shaft)
Motor shaft tolerance	0.25 mm axial 0.1 mm radial
Mounting kit	019 021
Protection DIN EN 60529	IP 54, IP 65
Operating speed	$\leq 5000$ rpm $\leq 3000$ rpm IP 65 ( $>70$ °C)
Starting torque	$\leq 0.01$ Nm ( $+20$ °C)
Materials	Housing: aluminium Shaft: stainless steel
Operating temperature	$-20\dots+85$ °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	Cable 0.5 m, connector M12, 4-polig, coupling K10SK4
Weight approx.	315 g

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

# Incremental encoders

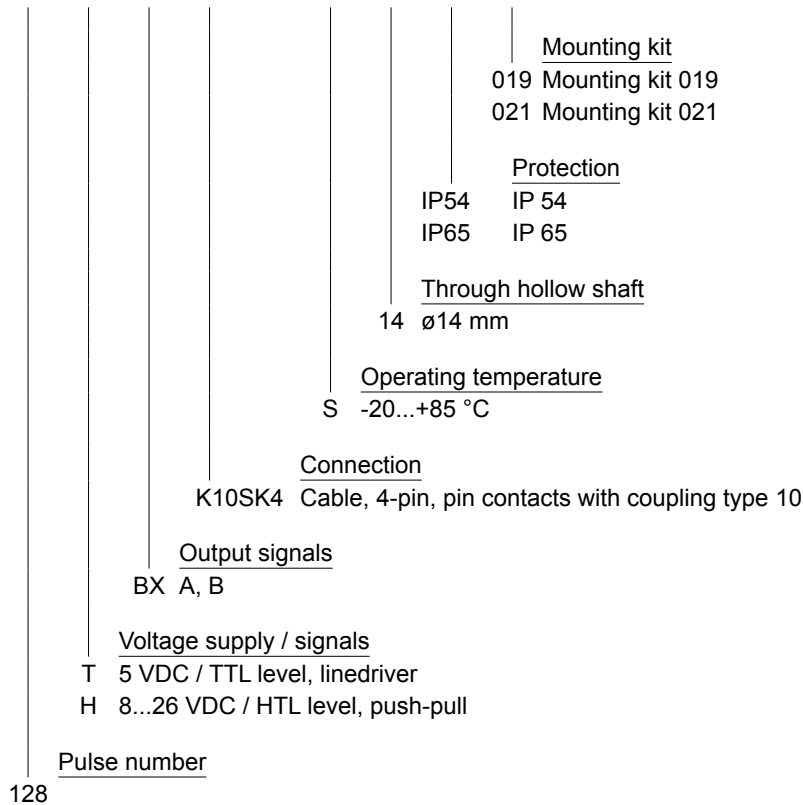
Through hollow shaft  $\varnothing 14$  mm

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## Part number

ITD 23 A 4 Y 2 128 BX K10SK4 S 14



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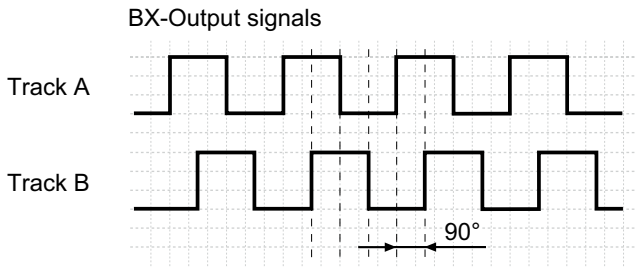
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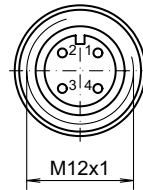
### Output signals

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	$\leq 40$ mA

Outputs	Push-pull short-circuit proof
Output level High	$\geq UB - 3$ V
Output level Low	$\leq 1.5$ V
Load	$\leq 40$ mA

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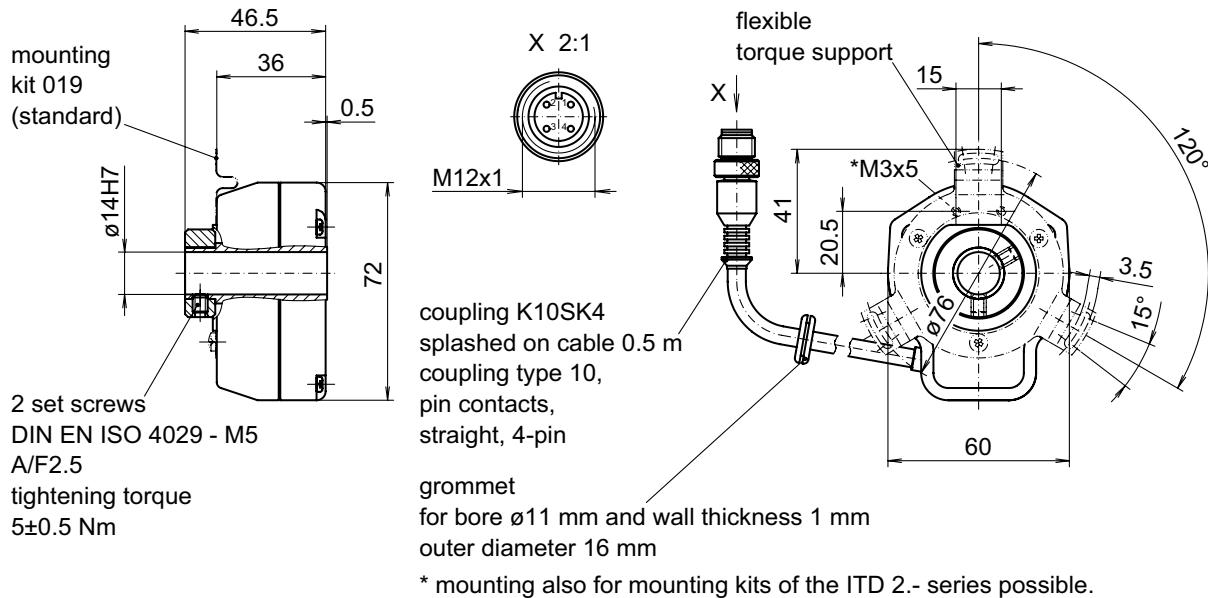
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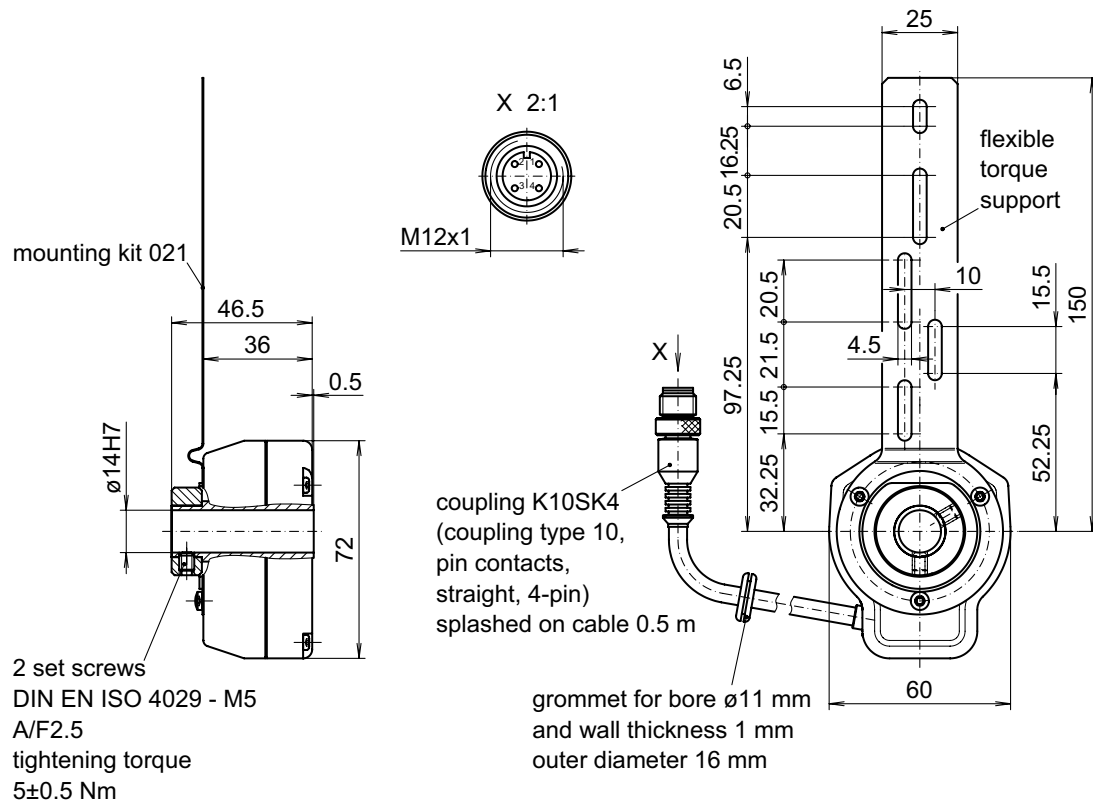
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## Dimensions

### ITD 23 A 4 Y 2 with mounting kit 019



### ITD 23 A 4 Y 2 with mounting kit 021



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