

Incremental encoders

Hollow shaft $\varnothing 14$ mm

Resolution 128 pulses

ITD 23 A 4 Y 2



ITD 23 A 4 Y 2 with hollow shaft

Features

- Encoder with hollow shaft max. $\varnothing 14$ mm
- Resolution 128 ppr
- Optical sensing
- Mounting by torque support
- TTL or HTL output signals
- Tangential cable output

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 8...26 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 40 mA
Resolution (steps/turn)	128
Sensing method	Optical
Output frequency	≤ 30 kHz
Output signals	A 90° B
Output circuit	TTL Push-pull short-circuit proof

Technical data - mechanical design

Dimensions (flange)	60 x 72 mm
Shaft	$\varnothing 14$ mm hollow shaft
Motor shaft tolerance	0.25 mm axial 0.1 mm radial
Mounting kit variant	019
Protection DIN EN 60529	IP 54
Operating speed	≤ 6000 rpm
Starting torque	≤ 0.01 Nm
Materials	Housing: aluminium 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	Cable 0.5 m, connector M12, 4-polig, coupling K10SK4
Weight approx.	315 g

Incremental encoders

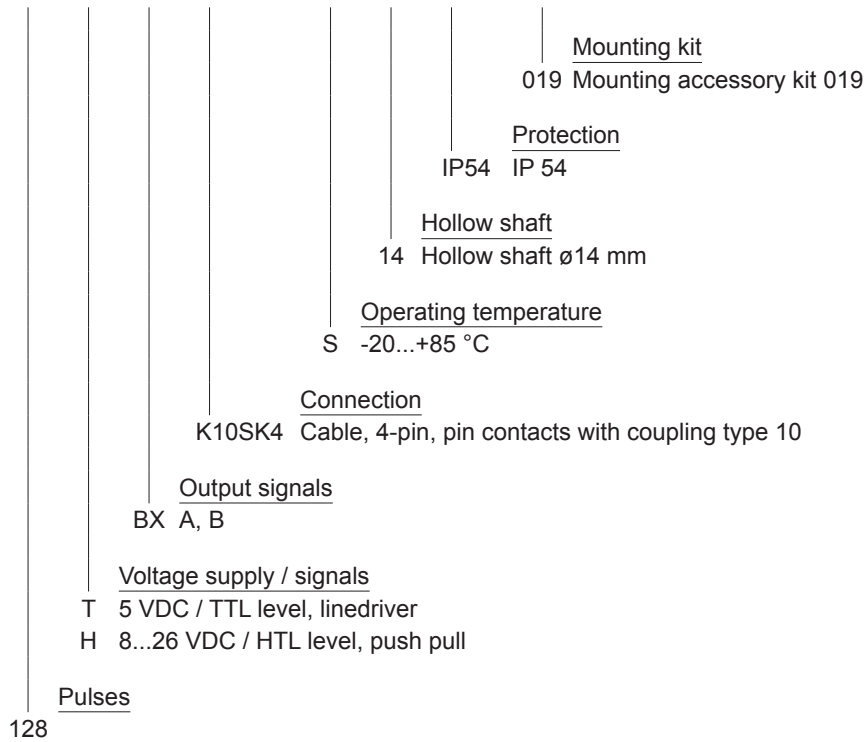
Hollow shaft $\varnothing 14$ mm

Resolution 128 pulses

ITD 23 A 4 Y 2

Part number

ITD 23 A 4 Y 2 | 128 | | BX | K10SK4 | S | 14 | IP54 | 019



Incremental encoders

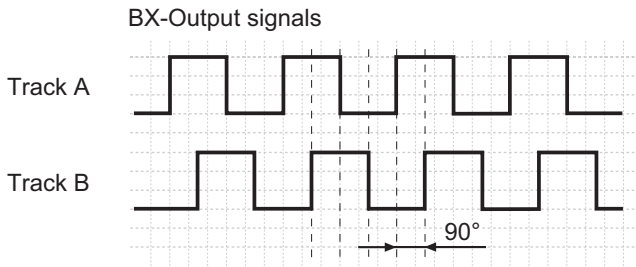
Hollow shaft $\varnothing 14$ mm

Resolution 128 pulses

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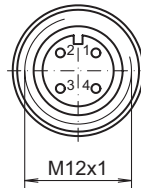
Output signals

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

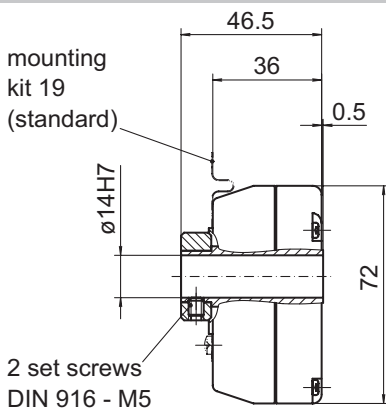


Trigger level

Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 40 mA

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

Dimensions



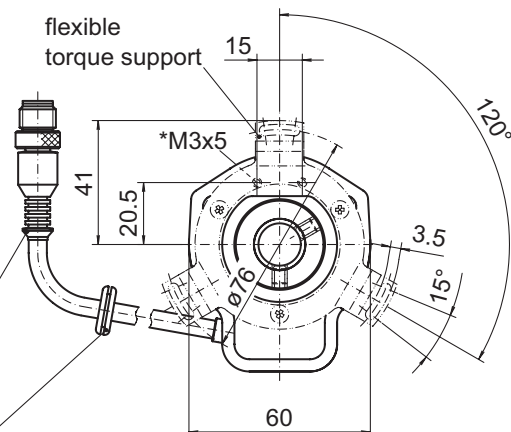
mounting kit 19 (standard)

2 set screws DIN 916 - M5 SW2.5
tightening torque max. 6 Nm

coupling K10SK4 splashed on cable 0.5 m coupling type 10, pin contacts, straight, 4-pin

grommet for bore $\varnothing 11$ mm and wall thickness 1 mm outer diameter 16 mm

* mounting also for attachment kits of the ITD 2.- series possible.



037- 6 Y 2

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