

Miniature Type ESI 24



- High performance at a competitive price
- Wide temperature range (-20 ... +85 °C)
- Sturdy cable outlet with multiple clamping
- Temperature compensation
- Broad input voltage range (5 ... 24 V or 8 ... 30 V)
- Highly flexible cable withstands constant flexing from 0 °C ... 70 °C
- Low power consumption despite high scanning rate
- Reverse connection protected and Short-circuit proof
- Very high EMV standard

Speed:	max. 12 000min ⁻¹
Rotor moment of inertia:	approx. 0.1 x 10 ⁻⁶ kgm ²
Starting torque:	<0.001 Nm
Radial load capacity of shaft:	10 N
Axial load capacity of shaft:	20 N
Weight:	approx. 0.06 kg
Protection acc. to EN 60529:	IP 64 housing side
Working temperature:	-20° C ... +85 °C ²⁾
Operating temperature:	-20° C ... +90 °C ²⁾
Shaft	stainless steel
Shock resistance acc. to DIN-IEC 68-2-27	1000 m/s ² , 6 ms
Vibration resistance acc. to DIN-IEC 68-2-6:	100 m/s ² , 55 ... 2000 Hz

²⁾ Non-condensing

Pulse rates available at short notice:

4, 6, 10, 16, 20, 25, 36, 40, **50**, 60, 80, **100**, 120, 125, 180, **200**, 250, 300, **360**, 400, **500**, 512, **1000**, **1024**, 1080

Electrical characteristics:

Output circuit:	Push-pull (7272) ¹⁾	Push-pull (7272) ¹⁾
Supply voltage:	5 ... 24 V DC	8 ... 30 V DC
Power consumption (no load):	max. 50 mA	max. 50 mA
Permissible load/channel:	max. 50 mA	max. 50 mA
Pulse frequency:	max. 160 kHz	max. 160 kHz
Signal level high:	min. U _B = -2.5 V	min. U _B = -3 V
Signal level low:	max. 0.5 V	max. 0.5 V
Rise time t _r :	max. 1 μs	max. 1 μs
Fall time t _f :	max. 1 μs	max. 1 μs
Short circuit proof outputs:	yes	yes
Conforms to CE requirements acc. to EN 61000-6-1, EN 61000-6-4 and EN 61000-6-3		

¹⁾ Max. recommended cable length 30 m

Applications:

- Pick and place machines
- Handling machines for electronic components
- Quality testing machines
- Medical machines
- Mail opening and mail stuffing machines
- Check weighers
- Labelling machines
- Mole machines (camera control)
- Door and gates systems
- Textil machines

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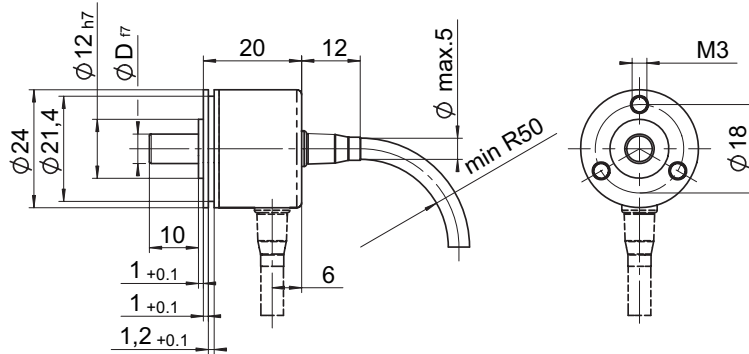
Terminal assignment

Signal:	0V	+U _B	A	\bar{A}	B	\bar{B}	0	$\bar{0}$	
Colour:	WH	BN	GN	YE	GY	PK	BU	RD	
without inverted signal:	WH	BN	GN		YE		GY		

Isolate unused outputs before initial start-up

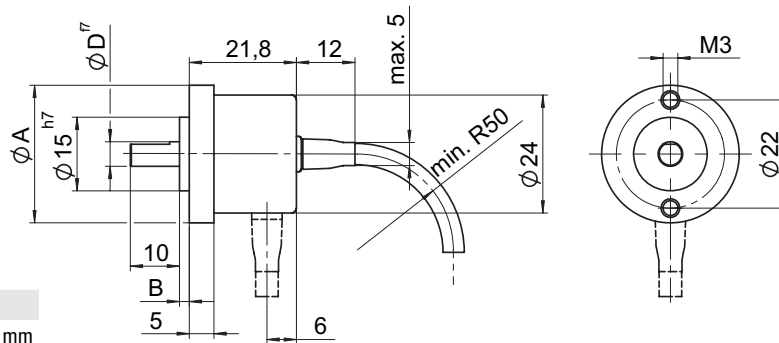
Dimensions:

Bracket type 1 (Ø 24 mm)



Bracket type 2 (Ø 30 mm)

Bracket type 3 (Ø 28 mm)



Bracket type 2	3
A	Ø 30 mm Ø 28 mm
B	3 mm 2 mm

Mounting advice:

The brackets and shafts of the encoder and drive should not both be rigidly coupled together at the same time! We recommend the use of suitable couplings (see Accessories section).

Order code:

ESI 24.XXXX.XXXX

