

Rotary Measuring Technology

Incremental hollow shaft encoder

Miniature Type 2420



- Low price with high performance
- IP 64
- Wide temperature range (-20 ... +85 °C)
- Sturdy cable output with multiple clamping
- Temperature compensation
- Broad input voltage range (5 ... 24 V or 8 ... 30 V)
- Highly flexible cable with stands constant flexing at 0 °C ... 70 °C)
- Low power consumption despite high scanning rate
- Reverse connection protected and short-circuit proof

Mechanical characteristics:

Speed:	max. 12000 min ⁻¹
Rotor moment of inertia:	approx. 0,1 x 10 ⁻⁶ kgm ²
Starting torque:	< 0.001 Nm
Weight:	approx. 0.06 kg
Protection acc. to EN 60 529:	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:

10, 25, 36, **50**, 60, **100**, 125, 180, 200, 250, **360**, **500**, **512**, 1000, **1024**

Other pulse rates on request

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)
- Doors and gates system
- Textil machines

Rotary Measuring Technology

Incremental hollow shaft encoder

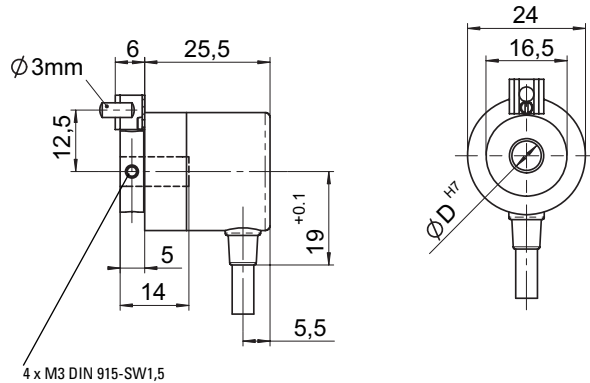
Miniature Type 2420

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		

Insulate unused outputs before initial startup.

Dimensions

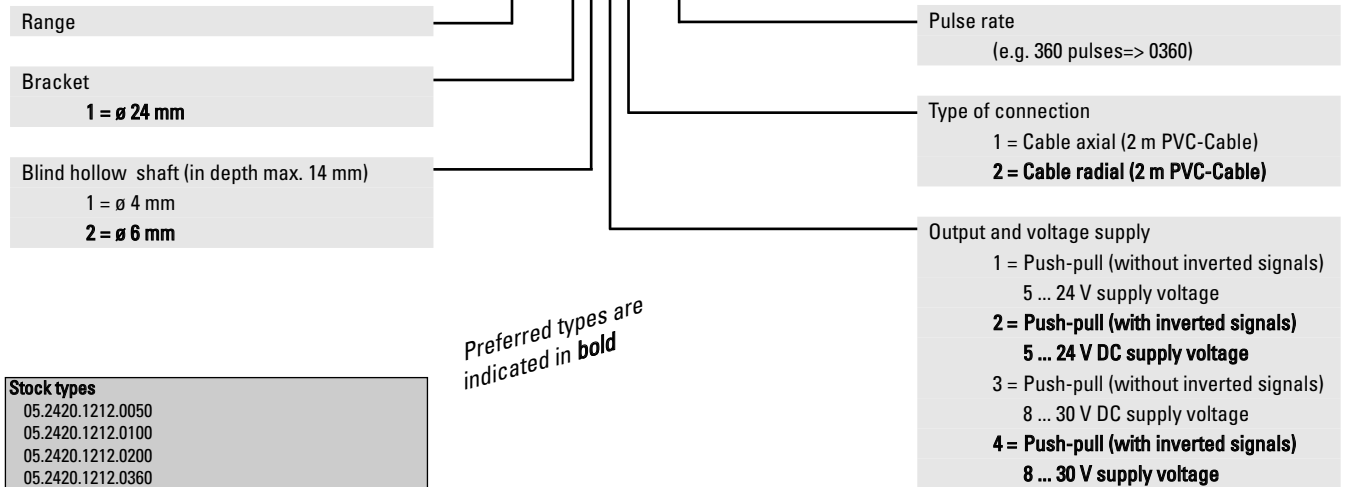


Mounting advice:

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:

05.2420.1XXX.XXXX



Preferred types are indicated in **bold**

Stock types

- 05.2420.1212.0050
- 05.2420.1212.0100
- 05.2420.1212.0200
- 05.2420.1212.0360
- 05.2420.1212.0500
- 05.2420.1212.1000
- 05.2420.1212.1024
- 05.2420.1222.0050
- 05.2420.1222.0100
- 05.2420.1222.0200
- 05.2420.1222.0360
- 05.2420.1222.0500
- 05.2420.1222.1000
- 05.2420.1222.1024