

TECHNICAL DATASHEET

Incremental Encoder PC 9S



- Provides digital control inputs from operators's panel
- Bidirectional squarewave signal outputs
- Up to 512 increments
- Continuous and reversible rotation
- Non-contacting
- Operating temperature -40 ... 100 °C



NUMBER OF PULSES

100 ... 512

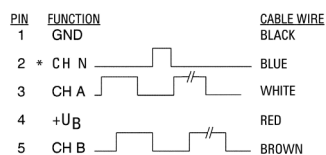
TECHNICAL DATA mechanical

Housing diameter	22.86 mm
Shaft diameter	1/8" / 0.25
Shaft load axial / radial	1/8" shaft: 4 N / 27 N 1/4" shaft: 4 N / 4 N
Moment of inertia	approx. 0.2 gcm ²
Operating temperature	-40 °C ... +100 °C
Storage temperature	-50 °C ... +125 °C
Relative humidity	90 %, non-condensing
Connection	5 pole header (Accessory: 30 cm ribbon cable with connector, ordering code CA0050012)
Recommended mating connector	AMP, ordering code 103675-4 (on request)

TECHNICAL DATA electrical

Supply voltage	DC 5 V ±10 %
Code	Incremental, optical
Max. pulse frequency	200 kHz
Index pulse width (N)	90° ± 36° electrical
Phasing	90° ± 18° electrical
Symmetry	180° ± 18° electrical
Number of pulses	100 ... 512
Output signals	min. 2.5 V high (VOH), max. 0.5 V low (VOL)
Output current	6 mA sink/source (25 °C), 4 mA (100 °C)
Pulse shape	Square wave
Pulse duty factor	1:1

OUTPUT WAVEFORMS



* only Code 2 = 04

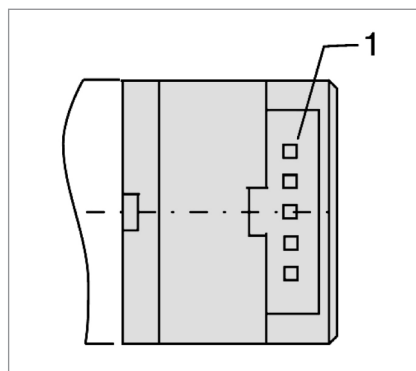
* only code 2 (output) = 04

Figure 3: Code 2 (Output) = 03/04

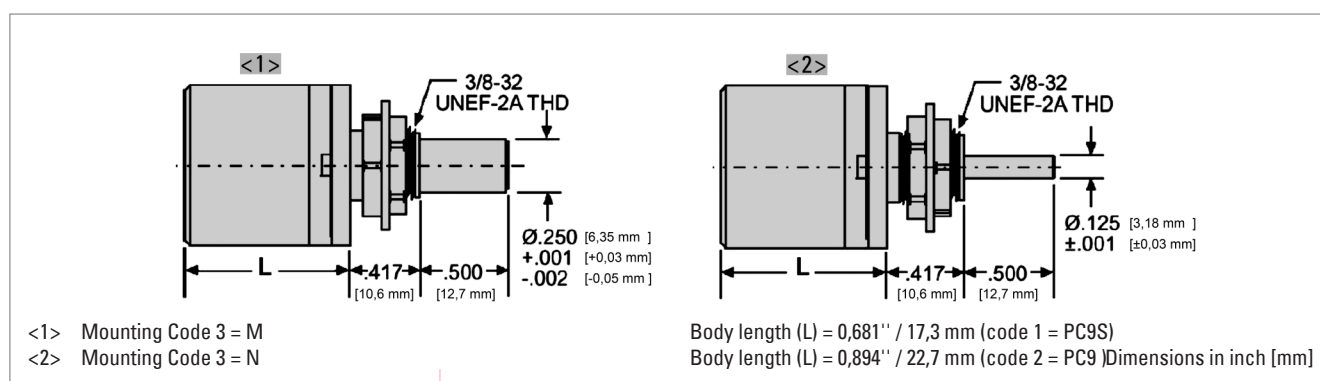
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CONNECTION



DIMENSIONED DRAWINGS



ORDERING INFORMATION

Type	Number of pulses	Code 2: Output	Mounting
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PC9S	0100 0144 0200 0256 0300 0360 0500 0512	03 see Fig. 3 (without index) 04 see Fig. 3	M 1/4" shaft, sleeve bearings N 1/8" shaft, ball bearings