

# A58G-F

## ELECTRONIC HANDWHEEL



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ISO 9001:2000

Electronic handwheel mod. **A58G-F** is photoelectric rotary encoder (pulses generator) and is used for manual rotation and data set up to the machine tools with numeric control (NC).

The encoder consists of three parts: mechanical, optical and electronic.

The case of the encoder is fixed to an object by means of 3 screws M4.

The handwheel has the graduations, which indicate the number of pulses generated during rotation for definite angle in both directions of rotation.

Electronic handwheel has two output signals (square-wave pulses) shifted by 90°.

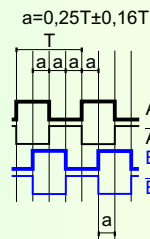
Electronic handwheel has four versions depending on output terminal group/connector.

### ■ Mechanical Data

• Line number on disc (Z):	100	• Storage temperature	-30...+80 °C
• Pulse number per shaft revolution	100	• Maximum humidity (without condensation of moisture)	98 %
• Resolution (at encoder output)	216 arc.min	• Permissible vibration (55 to 2000 Hz)	≤ 100 m/s <sup>2</sup>
• Accuracy :		• Permissible shock (11 ms)	≤ 1000 m/s <sup>2</sup>
- standard	±10 arc.min		
- on option	±5 arc.min		
• Protection (IEC 529):			
- version with terminal group/connector	IP50		
- version with cable	IP64		
• Maximum weight without cable	0,4 kg		
• Operating temperature	-10...+70°C		

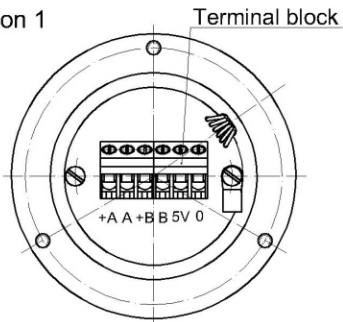
### ■ Electrical Data

• Power supply	+5 V ±5%	• Maximum rising and falling time	< 0,2 ms
• Maximum consumed current (without load)	120 mA		
• Light source	LED		
• Incremental signals	Square-wave <u>A</u> , <u>B</u> and their inverted <u>A</u> , <u>B</u> . Signal levels at 20 mA load current: - low ("0" logic) ≤ 0.5 V - high ("1" logic) ≥ 2.4 V		
• Maximum operating frequency	manual rotation		
Direction of signals	B lags A with clockwise rotation (viewed from shaft side)		

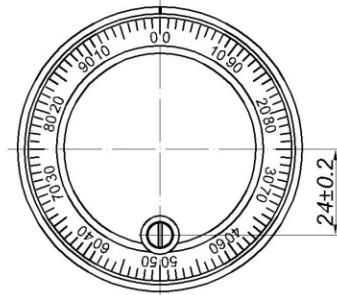
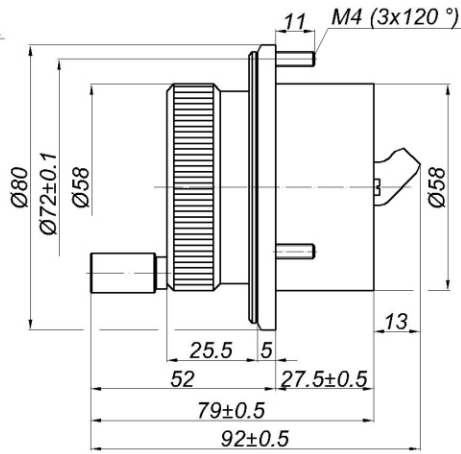


Note: The other type of signals: sine-wave current ~ 11mA, sine-wave voltage ~ 1V, square-wave HTL (10...30V) - on option.

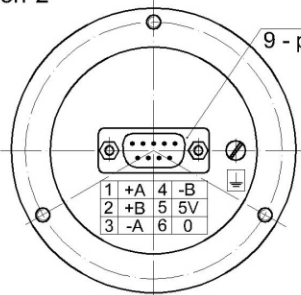
Version 1



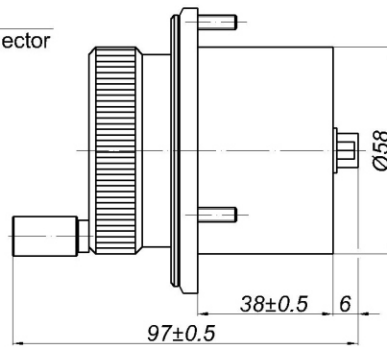
IP 50



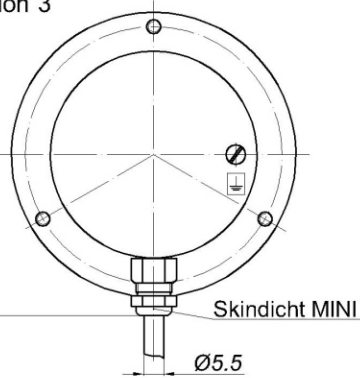
Version 2



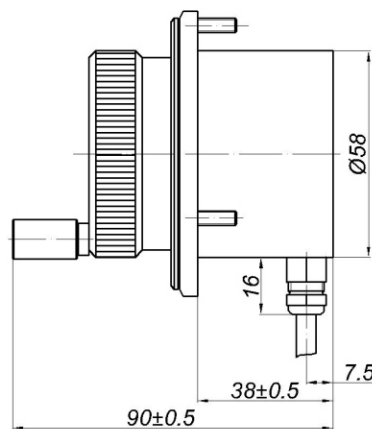
IP 50



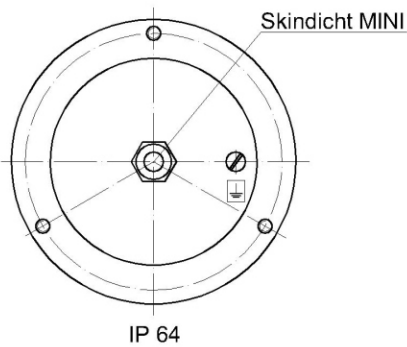
Version 3



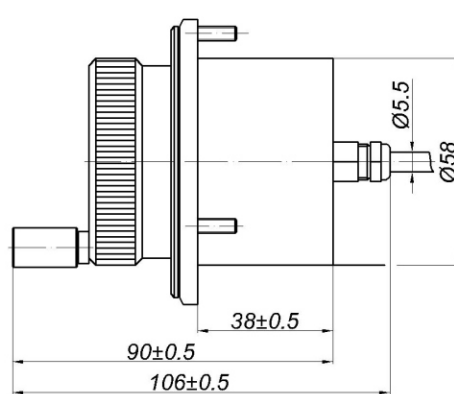
IP 64



Version 4



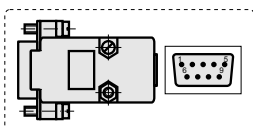
IP 64



■ Accessories

**D9**

9-pin flat connector



■ Order form

A58G-F - 100 - X - X X

**Version number:**

- 1 - with terminal group, 6 pins
- 2 - with flat connector, 9 pins
- 3 - with cable (radial output)
- 4 - with cable (axial output)

**Cable length**

- (for version 3 and 4):
- 01 - 1,0 m
  - 02 - 2,0 m
  - .....

