



- Large, 6-digit, 14 mm high LED display
- Up/down counter with prescaler
- 2 presets, one programmable as trailing preset
- Easy direct selection by 2 function keys
- 2 relay outputs with change-over contacts
- Keypad can be secured against unauthorized access
- npn/pnp-programming of inputs
- RS 232 / RS 485 interface optional

## DISPLAY

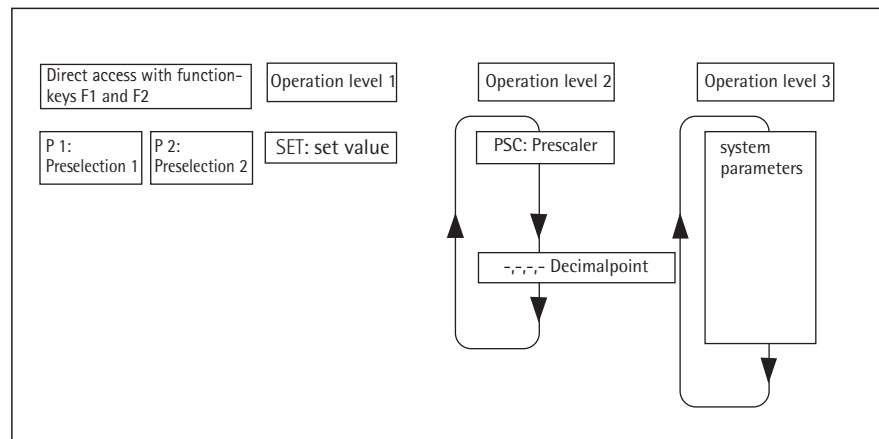
6-digit LED display with 14 mm high figures, easy to read, decimal point can be programmed.



**Section A** Shows the actual counting position when in counting mode, and the changeable parameters when in programming mode.

**Section B:** LED indicators showing the active output signal, and in programming mode indicating the changeable parameter.

## PROGRAMMING



Programming of signo 723.1 is divided into 3 operation levels and direct access.

**Direct access:** Preselection 1 and 2 can be directly selected by the function keys F1 and F2

**Operation level 1:** Includes the set value

**Operation level 2:** Includes machine parameters and application specific parameters.

**Operation level 3:** Includes system parameters like operation modes and count modes, which normally are programmed during start-up procedure.

Unauthorized programming of the signo 723.1 is prevented by a control input, which can lock the operation levels as well as the operation keys.

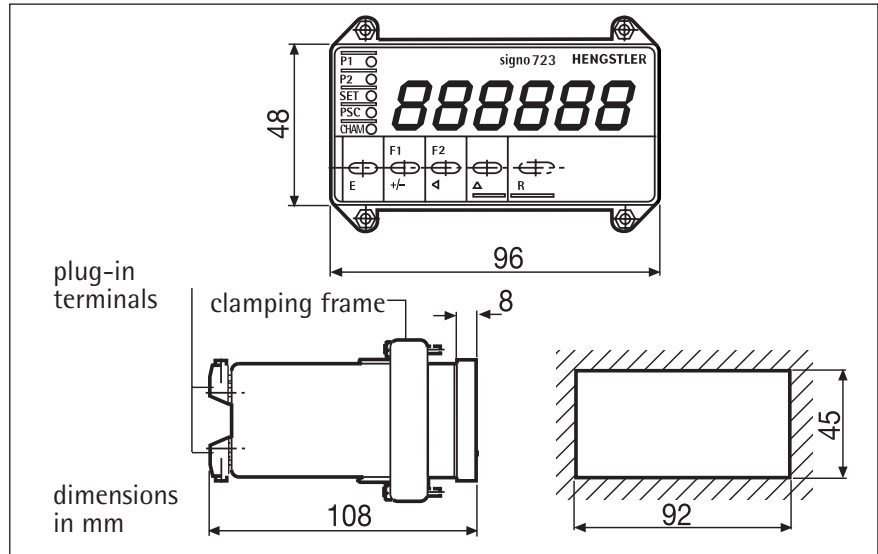
# signo 723.1

## TECHNICAL DATA

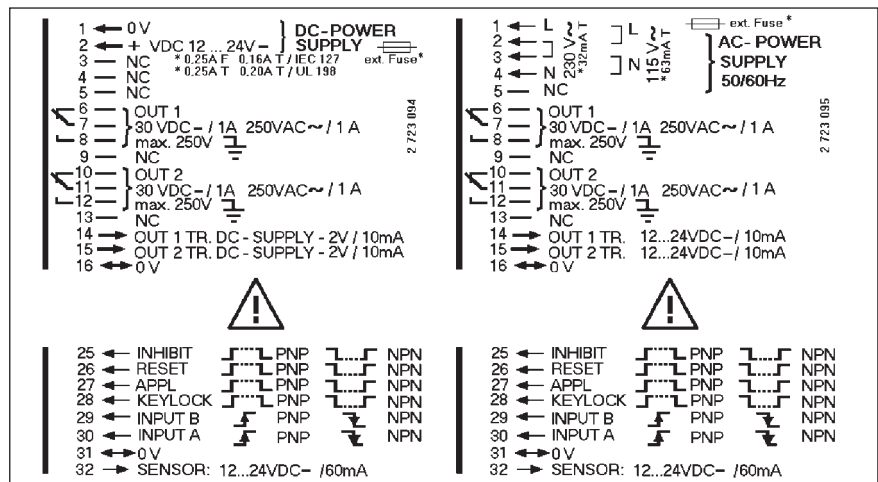
## Technical data

|                               |   |
|-------------------------------|---|
| Display                       | LED, 6 digits, suppression of leading zeros, programmable decimal point, minus sign   |
| Digit Height                  | 14 mm   |
| Power Supply Voltage $V_{op}$ | 12 ... 24 VDC or 115/230 VAC depending on version   |
| Current Consumption           | 12 ... 24 VDC < 250 mA,<br>115/230 VAC < 60 mA  |
| Sensor Supply                 | AC-operation: 12 ... 24 VDC, DC-operation: $V_{op} - 2 V$ ,<br>$I_{max.} = 60 mA$   |
| Data Retention                | non-volatile memory > 10 years  |
| Operating Temperature         | 0 ... 50 °C   |
| Storage Temperature           | -20 ... +70 °C  |
| Electrical Connection         | plug-in terminals   |
| Mounting                      | with clamping frame   |
| Protection Class (IEC 144)    | front side IP 54, terminals IP 20   |
| Noise Immunity EMC            | severity 3 according to IEC 801, part 2 + part 4  |
| Vibrostability                | 10 m/s <sup>2</sup> (10... 150 Hz) according to IEC 68-part 2-6   |
| Shock Stability               | 100 m/s <sup>2</sup> (18 ms) according to IEC 68-part 2-27  |
| General Rating                | according to VDE 0411, DIN 57411, protection class II   |
| <b>Inputs:</b>                |   |
| Switching Level               | <2 V and >8 V, max. 40 VDC  |
| Active Edge                   | positive when npn or<br>negative when npn, can be switched over   |
| Pulse Shape                   | any (square 1:1 at max. frequency)  |
| Input Resistance              | approx. 5 k $\Omega$ (static)   |
| Count Input                   | with prescaler programmable 0.0005 ... 99.9999<br>- as phase discriminator input with single, double or quadruple evaluation<br>- as differential input<br>- as up/down input |
| Pulse Duration                | 12.5 $\mu$ s (40 kHz), 17 ms (30 Hz)  |
| Count Frequency max.          | 40 kHz or 30 Hz   |
| <b>Control Input:</b>         |   |
| Reset                         | - manual by reset key<br>- external by reset input, static or dynamic, programmable pulse duration min. 3 ms (attenuated min. 17 ms)<br>- automatic when reaching preset 2    |
| Gate                          | static, pulse duration > 12 $\mu$ s / >17 ms  |
| Hold                          | static, pulse duration > 3 ms   |
| Keylock                       | static, pulse duration >3 ms  |
| <b>Outputs:</b>               |   |
| Relay                         | Out 1 and Out 2   |
| Contact Type                  | changeover relay  |
| Switching Voltage             | max. 250 VAC / 30 VDC, min. 5 VAC/DC  |
| Switching Current             | max. 1A, min. 10 mA   |
| Transistor                    | Out 1 and Out 2, PNP, 10 mA   |

## DIMENSIONS



## CONNECTION DIAGRAM



## ORDER INFORMATION

| Version           | Supply Voltage | Ordering code |
|-------------------|----------------|---------------|
| without interface | 12 ... 24 VDC  | 0 723 101     |
|                   | 115/230 VAC    | 0 723 102     |

This counter is available with several interfaces. See next pages.