

# Product information

## Compact column amplifier Millimar S 1840 M

### Product features

- Easy-to-read 3-color analog display
- Measurement in conjunction with inductive probes (e. g. Mahr P2004) or electronic plug gages, etc.
- 2 inputs for inductive probes (compatible with probes from Mahr, Federal)
- Extensive calculation of input signals -  $\pm A$ ,  $\pm B$  and all combinations
- Dynamic measurements - Max, Min, Max-Min, Average
- Programmable either via the integrated keypad or the RS-232 interface by means of MS -Windows® configuration software
- Programmable warning and tolerance limits (exceeding the limit causes the color to change from yellow to red)
- Backlit, two-line LCD for displaying measured values, help texts and units of measurement
- 1 analog output
- 3 digital inputs (e.g. measurement start, master measurement)
- 3 digital outputs for good – reject – rework, measuring time

### Package contains

instruction manual, power source



Item no.: 5318400

### Technical data

|  |  |
|--|--|
| <b>Display</b>   | 101 LED elements, 3 colors   |
| <b>Scale reading</b>                                     | $\pm .0003$ ; $.001$ ; $.003$ ; $.01$ ; $.03$ ; $.1$ ; $.3$ inch   |
| <b>Range and text display</b>                            | 7-point LCD, 14 segment, alphanumeric  |
| <b>Digital display</b>                                   | 7 point LCD, 7 segment   |
| <b>Range of digital display <math>\mu\text{m}</math></b> | $\pm 2000$ , $\pm 10000$   |
| <b>Range of analog display <math>\mu\text{m}</math></b>  | $\pm 10$ , $\pm 30$ , $\pm 100$ , $\pm 300$ , $\pm 1000$ , $\pm 3000$ , $\pm 10000$ , tolerance related        |
| <b>Range of analog display inches</b>                    | $\pm .0003$ ", $\pm .001$ ", $\pm .003$ ", $\pm .01$ ", $\pm .03$ ", $\pm .1$ ", $\pm .3$ ", tolerance related |
| <b>Resolution <math>\mu\text{m}</math></b>               | 0,01, 0,1  |
| <b>Tolerance display</b>                                 | via color changes in the analog display  |
| <b>Measuring range, inductive probe</b>                  | $\pm 200$ , $\pm 2000$   |
| <b>Probe inputs</b>                                      | 2  |
| <b>Compatibility</b>                                     | Mahr   |
| <b>Measuring combination</b>                             | +A, -A, +B, -B, A+B, +A-B, -A+B, -A-B  |
| <b>Features</b>  | 2  |
| <b>Programs</b>  | 2  |
| <b>Test steps</b>  | 1  |
| <b>Dynamic functions</b>                                 | Max, Min, Max-Min, (Max+Min)/2, Mean   |
| <b>Configuration</b>                                     | PC, keyboard   |
| <b>Response time digital display</b>                     | 0.3  |
| <b>Response time analog display</b>                      | 0.02   |
| <b>Response time control outputs</b>                     | 0.02   |
| <b>Response time analog output</b>                       | 0.02   |
| <b>Response time measuring value memory</b>              | 0.008  |
| <b>Data transmission rate</b>                            | 40   |
| <b>Error limit, digital display</b>                      | 0,3% (min. 0,2 $\mu\text{m}$ )   |
| <b>Error limit, analog display</b>                       | 1% (101 LEDs)  |
| <b>Data interface</b>                                    | RS-232C, wireless  |
| <b>Hardware interfaces</b>                               | RS-232C, I/O interface   |
| <b>Control inputs</b>                                    | 3 optocoupler inputs, 24 V, 10 mA  |
| <b>Control outputs</b>                                   | 3 optocoupler outputs, 24 V, 100 mA  |
| <b>Analog output</b>                                     | max. $\pm 5$ V, Empfindlichkeit einstellbar  |
| <b>Energy supply</b>                                     | Power source, 230 V/115 V; 50/60 Hz  |
| <b>Power consumption</b>                                 | 12 VA  |
| <b>IP protection category</b>                            | IP 42  |

# Product information

## Compact column amplifier Millimar S 1840 M

### Technical data

|                                  |            |
|----------------------------------|------------|
| Relative humidity non-condensing | 80         |
| Working temperature MIN          | 0          |
| Working temperature MAX          | 45         |
| Operating temperature Min        | 0          |
| Operating temperature Max        | 40         |
| Temperature coefficient          | 0.005 %/°C |
| Product weight                   | 1.60       |

### Dimensions

|             |     |
|-------------|-----|
| Height (mm) | 487 |
| Depth (mm)  | 144 |
| Width (mm)  | 47  |

### Accessories

| Order no. | Designation                  | Product type   |
|-----------|------------------------------|----------------|
| 7024634   | Data connection cable RS232C |                |
| 4102331   | Adapter cable RS-232-USB     | Millimar - USB |
| 4102233   | Transmitter                  | RS-232 e       |
| 4102230   | Receiver                     | e-Stick        |