

# Technical Specifications Contracer CV-3100

| Measuring instrument            |  | CV 3100 S4                       | CV 3100 H4 | CV 3100 W4 | CV 3100 S8   | CV 3100 H8 | CV 3100 W8 |
|---------------------------------|--|----------------------------------|------------|------------|--|------------|------------|
| Measuring range                 | X axis   | 100 mm                           |            |            | 200 mm   |            |            |
|                                 | Z1 axis  | 50 mm                            |            |            | 50 mm  |            |            |
| Linear displacement accuracy    | X axis   | (1+ 0,01L) $\mu\text{m}$         |            |            | (1+ 0,02L) $\mu\text{m}$                           |            |            |
|                                 | Z1 axis  | (2,0+   4H   /100) $\mu\text{m}$ |            |            | (2,0+   4H   /100) $\mu\text{m}$                   |            |            |
| Traverse linearity              | X axis   | 0,8 $\mu\text{m}$ / 100 mm       |            |            | 2 $\mu\text{m}$ / 200 mm                           |            |            |
| Resolution                      | X axis   | 0,05 $\mu\text{m}$               |            |            | 0,05 $\mu\text{m}$                                 |            |            |
|                                 | Z1 axis  | 0,2 $\mu\text{m}$                |            |            | 0,2 $\mu\text{m}$                                  |            |            |
|                                 | Z2 axis  | 1 $\mu\text{m}$                  |            |            | 1 $\mu\text{m}$                                    |            |            |
| Measuring method                | X axis   | Linear scale                     |            |            | Linear scale                                       |            |            |
|                                 | Z1 axis  | Linear scale                     |            |            | Linear scale                                       |            |            |
|                                 | Z2 axis  | ABS scale                        |            |            | ABS scale  |            |            |
| Standard stylus                 | Carbide, tip radius 25 $\mu\text{m}$ , tip angle 12° |                                  |            |            | Carbid tip radius 25 $\mu\text{m}$ , tip angle 12° |            |            |
| Measuring speed                 | 0,02 mm/s bis 5,0 mm/s                               |                                  |            |            | 0,02 mm/s bis 5,0 mm/s                             |            |            |
| Drive speed                     | X axis   | up to 80 mm/s                    |            |            | up to 80 mm/s                                      |            |            |
|                                 | Z2 axis  | up to 20 mm/s                    |            |            | up to 20 mm/s                                      |            |            |
| Measuring force                 | 10 to 30 mN  |                                  |            |            | 10 to 30 mN  |            |            |
| Data transfer                   | USB  |                                  |            |            | USB  |            |            |
| <b>Stand</b>                    |  |                                  |            |            |  |            |            |
| Base                            | Granit   |                                  |            |            | Granit   |            |            |
| Inclination of drive unit       | $\pm 45^\circ$                                       |                                  |            |            | $\pm 45^\circ$                                     |            |            |
| Column moving range             | Z2 axis  | 300 mm                           | 500 mm     |            | 300 mm   | 500 mm     |            |
| Dimensions<br>Base<br>( B x T ) | [mm]   | 600 x 450                        | 600 x 450  | 1000 x 450 | 600 x 450  | 600 x 450  | 1000 x 450 |
| Mass Controller                 | 14 Kg  |                                  |            |            | 14 Kg  |            |            |
| Mass main unit                  |  | 140 Kg                           | 150 Kg     | 220 Kg     | 140 Kg   | 150 Kg     | 220 Kg     |