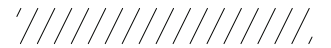
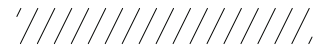


|  |  | DuraVersa-100  |
|--|--|--|
| <b>Hardness methods</b>                        | Vickers  | ISO 6507<br>ASTM E384, E92<br>JIS B 7725   |
|  | Knopp  | ISO 4545<br>ASTM E92<br>JIS Z 2251   |
|  | Brinell  | ISO 6506<br>ASTM E10<br>JIS Z 2243   |
|  | Rockwell - optional  | ISO 6508<br>ASTM E18<br>JIS Z 2245   |
| <b>Conversion</b>                              | Conversions to other hardness methods according to ASTM E140, ISO 18265, GB/T 1172 |  |
| <b>Force range</b>                             | DuraVersa-100A   | 1.96 - 2452 N (200 gf - 250 kgf)   |
|  | DuraVersa-100B   | 1.96 - 7357.5 N (200 gf - 750 kgf)   |
|  | DuraVersa-100C   | 1.96 - 29430 N (200 gf - 3000 kgf)   |
| <b>Test force</b>                              | Force application  | Load cell, closed loop, force feedback system  |
|  | Test force tolerance   | < 0.25% for test force 100 gf to 250 kgf<br>< 0.5 % for test forces below 100 gf             |
|  | Dwell time settings  | Default 10 seconds, user defined. Up to 250 seconds  |
| <b>Electrical data</b>                         | Power supply DuraVersa-100A/B  | 100 - 240 V AC, 50 / 60 Hz, single phase   |
|  | Power supply DuraVersa-100C  | Specify 100 - 110 V AC, 50 / 60 Hz, single phase or 220 - 240 V AC, 50 / 60 Hz, single phase |
|  | Power consumption max. work load   | 72 W   |
|  | Power consumption Idle   | 60 W   |
|  | Power consumption max. load  | 156 W  |
| <b>Residual Current Circuit Breaker (RCCB)</b> | Type A, 30 mA is required depending on local regulations                           |  |
| <b>Dimensions</b>                              | Width  | 31.5 cm (12.4")  |
|  | Depth  | 61.5 cm (24.2")  |
|  | Height   | 110 cm (43.3")   |
| <b>Weight</b>                                  | 280 kg (617 lbs)   |  |
| <b>Read method</b>                             | Automated from Camera Image  |  |



|  |                  | DuraVersa-100  |
|--|------------------|--|
| <b>Measurement camera resolution</b>             |                  | 18 MP  |
| <b>Overview camera resolution</b>                |                  | 13 MP  |
| <b>Overview camera field of view</b>             |                  | variable 40 x 30 mm - 140 x 110 mm (1.6 x 1.2" - 5.5 x 4.3")                                   |
| <b>Turret</b>                                    | Motorized turret | 9 position turret, incl. 1 laser / touch probe, rest freely configurable                       |
| <b>Position in nosepiece for overview camera</b> |                  | 1  |
| <b>Max no. of indenters</b>                      |                  | 7  |
| <b>Max no. of objectives</b>                     |                  | 7  |
| <b>Indenter Shaft</b>                            | Diameter         | 6.35 mm or 3 mm  |
| <b>Available objectives</b>                      |                  | Selectable 0,7x, 2,5x, 5x, 10x, 20x , 40x 60x and 100x , all long working distance objectives. |
| <b>Z-Axis</b>                                    |                  | Motorized  |



| <b>DuraVersa-100</b>                               |                                   |   |
|--|-----------------------------------|---|
| <b>Motorized Stage Options</b>                     | DirectConnect stage, 215 x 160 mm | Travel: 75 x 75 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 400 kgf    |
|  | DirectConnect stage, 260 x 205 mm | Travel: 120 x 120 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 400 kgf  |
|  | DirectConnect stage, 360 x 205 mm | Travel: 220 x 120 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 400 kgf  |
|  | DirectConnect stage, 490 x 224 mm | Travel: 340 x 120 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 4000 kgf |
|  | DirectConnect stage, 410 x 265 mm | Travel: 200 x 150 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 4000 kgf |
|  | DirectConnect stage, 510 x 265 mm | Travel: 300 x 150 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 4000 kgf |
|  | DirectConnect stage, 560 x 265 mm | Travel: 400 x 150 mm<br>Resolution: 0.001 mm<br>Repeatability: ± 0.015 mm<br>Load: up to 4000 kgf |
| <b>Auto Illumination</b>                           | Yes                               |   |
| <b>Stage Illumination</b>                          | Yes                               |   |
| <b>Laser/LED Guide with integrated touch probe</b> | Yes                               |   |



| DuraVersa-100  |  |  |
|--|--|--|
| <b>Software</b>                                      | Operating software                                       | Embedded software for work flow system & tester control                                    |
|  | Integrated PC  | Yes  |
|  | Monitor  | 27" touchscreen FHD (2nd monitor optional)   |
|  | Dual view  | Optional   |
|  | Possibility to connect Printer                           | Yes, but optional (A4, A3 full color laser printer)  |
|  | Ethernet Connection                                      | Yes  |
|  | Data Export  | 5 USB ports, RJ45 Ethernet LAN, W-LAN, RS-232, Bluetooth, HDMI                             |
| <b>System</b>  | Data output  | XML, CSV, Certified for Q-DAS (Optional)   |
| <b>Sample height</b>                                 | With motorized stage: 400 kg load capacity               | 120 mm (4.7")  |
|  | With motorized stage: 4000 kg load capacity              | 100 mm (3.9")  |
| <b>Sample weight</b>                                 | DuraVersa-100A/B   | 50 kg (110 lbs)  |
|  | DuraVersa-100C   | 200 kg (441 lbs)   |
| <b>Throat depth</b>                                  |  | 230 mm (9.1")  |
| <b>Safety standards</b>                              |  | CE labeled according to EU directives  |
| <b>REACH</b>   |  | For information about REACH. contact your local Struers office                             |
| <b>Operating environment</b>                         | Surrounding temperature                                  | 10 - 35°C (50 - 95°F)  |
|  | Humidity   | 10 - 90% RH non-condensing   |
| <b>Safety Circuit Categories / Performance Level</b> | Emergency stop   | EN ISO 13849-1 PL c, Category 1  |
|  |  | Stop category 0  |
| <b>Noise level</b>                                   | A-weighted sound emission pressure level at workstations | < 70 dB(A)   |
| <b>Vibration level</b>                               | During operation   | Total vibration exposure to upper parts of the body does not exceed 2.5 m/s <sup>2</sup> . |