

Technical data

VPC-U

| | | VPC 40-U | VPC 45-U | VPC 50-U | VPC 55-U | | |
|--|----------|----------------------------------|--|----------------------------------|--|------------|------------|
| Working area | | | | | | | |
| X-traverse range vertical | [mm] | 2300 (2940) ² | 2300 (2940) ² | 2300 (2940) ² | 2300 (2940) ² | | |
| X-traverse range horizontal | [mm] | 2000 (2640) ² | 2000 (2640) ² | 2000 (2640) ² | 2000 (2640) ² | | |
| Y-traverse range | [mm] | 1200 (1400, 1600) ² | 1400 (1600) ² | 1200 (1400, 1600) ² | 1400 (1600) ² | | |
| Z-traverse range | [mm] | 600 (700) ² | 900 | 600 (700) ² | 900 | | |
| Machine table | | | | | | | |
| Table width (dependent on Y-stroke) | [mm] | 1100 (1350, 1500) ² | 1100 (1350, 1500) ² | 1100 (1350, 1500) ² | 1100 (1350, 1500) ² | | |
| Table length approx. | [mm] | 1100 | 1100 | 1100 | 1100 | | |
| T-slots, reference slot H7 | [mm] | 14 H9 | 14 H9 | 14 H9 | 14 H9 | | |
| T-slots indexing | [mm] | 160 | 160 | 160 | 160 | | |
| Number of T-slots | | 7 | 7 | 7 | 7 | | |
| Max. table load per table | [kg] | 1500 (2000) ² | 2000 (3500) ² | 1500 (2000) ² | 2000 (3500) ² | | |
| Min. distance table - spindle nozzle vert. | [mm] | 260 | 260 | 210 | 210 | | |
| Min. distance table - spindle nozzle hor. | [mm] | 310 | 310 | 310 | 310 | | |
| CNC-rotary table | | | | | | | |
| Clamping surface | [mm] | 1100 x 1100 | 1100 x 1100 (ø 1500) ² | 1100 x 1100 | 1100 x 1100 (ø 1500) ² | | |
| Max. transport weight | [kg] | 1500 (2000) ² | 2000 (3500) ² | 1500 (2000) ² | 2000 (3500) ² | | |
| Max. tangential moment | [Nm] | 10000 | 10000 (18000) ² | 10000 | 10000 (18000) ² | | |
| Max. tilting moment | [Nm] | 26000 | 26000 (60000) ² | 26000 | 26000 (60000) ² | | |
| Accuracy measuring system | [arcsec] | ± 5" | ± 5" | ± 5" | ± 5" | | |
| Min. distance table - spindle nozzle vert. | [mm] | 110 | 110 | 60 | 60 | | |
| Min. distance table - spindle nozzle hor. | [mm] | 160 | 160 | 160 | 160 | | |
| Feed drive | | | | | | | |
| Max. rapid traverse in X/Y/Z | [m/min] | 20/20/20 (30/30/25) ² | 20/20/20 (30/30/25) ² | 20/20/20 (30/30/25) ² | 20/20/20 (30/30/25) ² | | |
| Max. feed force | [N] | 9000 | 9000 | 9000 | 9000 | | |
| Main spindle drive | | | | | | | |
| Standard drive no. ¹ | | 110 | 110 | 131 | 131 | | |
| Optional drive no. ¹ | | 100, 111, 113 | 100, 111, 113 | 133 | 133 | | |
| Tool holding fixture | | | | | | | |
| DIN 69871 A / DIN 69872 A | | SK 40 | SK 40 | SK 50 | SK 50 | | |
| Optional | | BT 40, HSK A63, C6 | BT 40, HSK A63, C6 | BT 50, HSK A100, C8 | BT 50, HSK A100, C8 | | |
| Tilting spindle head | | | | | | | |
| Swivelling range B-axis | | 90° | 90° | 90° | 90° | | |
| Indexing | | 2,5° (0,001) ² | 2,5° (0,001)°, fully interpolating) ² | 2,5° (0,001) ² | 2,5° (0,001)°, fully interpolating) ² | | |
| Tool changer | | | | | | | |
| Number of tool pockets standard | | 22 | 22 | 20 | 20 | | |
| Optional expandable up to | | 90 | 90 | 90 | 90 | | |
| Max. tool diameter | [mm] | 85 | 85 | 110 | 110 | | |
| By free adjacent pockets | [mm] | 135 | 135 | 180 | 180 | | |
| Max. tool length | [mm] | 400 | 400 | 400 | 400 | | |
| Tool change time approx. | [s] | 6 | 6 | 7 | 7 | | |
| Accuracy | | | | | | | |
| Positioning accuracy ³ | [mm] | ± 0,015 (± 0,008) ² | ± 0,015 (± 0,008) ² | ± 0,015 (± 0,008) ² | ± 0,015 (± 0,008) ² | | |
| Repeating accuracy | [mm] | ± 0,01 (± 0,006) ² | ± 0,01 (± 0,006) ² | ± 0,01 (± 0,006) ² | ± 0,01 (± 0,006) ² | | |
| ¹ Main spindle drives | | | | | | | |
| | | 100 | 110 | 111 | 113 | 131 | 133 |
| Speed range | [rpm] | 6000 | 6000 | 6000 | 6000 | 4000 | 4000 |
| Optional up to | [rpm] | 15000 | 12000 | 12000 | 10000 | 9000 | 9000 |
| Max. torque (40% DC) | [Nm] | 95 | 143 | 191 | 255 | 286 | 355 |
| Max. power (40% DC) | [kW] | 20 | 30 | 40 | 40 | 45 | 56 |

² Optional features ³ Per 1000 mm per axis X/Y/Z with vertical spindle