

General specifications	
Max. component diameter	200 mm
Max. component height	200 mm
Max. component weight	30 kg
Machine weight	7500 kg
Connection rating	35 kW

Machine column	
Mineral casting	Epument 145/B
Weight	3800 kg

X-axis	
Travel	800 mm
Ball screw drive	50 mm diameter × 30 mm pitch, ground version. High rigidity and damping. Long service life. Large diameter-to-rotational-speed ratio permits high speed.
Feed force	5800 N
Max. speed	60 m/min
Guides	Recirculating roller bearing unit RUE, size 45, four guide trolleys (optionally six), central oil lubrication system. Maximum rigidity and damping. High load capacity and accuracy values. Optimal collision behaviour.
Guide spacing	450 mm / trolley spacing 600 mm
Measuring system	Make: Heidenhain LC 483, 5 µm accuracy, 0.1 µm resolution, maximum quality and accuracy

Z-axis	
Travel	390 mm
Ball screw drive	40 mm diameter × 15 mm pitch, ground version. High rigidity and damping. Long service life. Large diameter-to-rotational-speed ratio permits high speed.
Feed force	7500 N
Max. speed	45 m/min

Guides	Recirculating roller bearing unit RUE, size 45, four guide trolleys (optionally six), central oil lubrication system. Maximum rigidity and damping. High load capacity and accuracy values. Optimal collision behaviour.
Guide spacing	380 mm / trolley spacing 590 mm
Measuring system	Make: Heidenhain LC 495, 5 µm accuracy, 0.1 µm resolution, maximum quality and accuracy

Spindle	
Nominal power	(S1/100%): 20.9 kW / (S6/40%): 26.8 kW
Nominal torque	(S1/100%): 205 Nm / (S6/40%): 256 Nm
Nominal speed	1000 rpm
Max. speed	5200 rpm
Interface	A6
Thermal motor protection	PT1000
Motor cooling	Water with additive
Run-out accuracy	0.003 mm radially at the centring diameter, 0.003 mm axially at the centring flange
Rotary encoder	Lenord & Bauer / 256 increments
Special features	High rigidity. Robust bearing assembly designed for maximum service life. Extremely well balanced, minimal natural vibration. Global service.

Front bearing	
Bore diameter	120 mm
Mean bearing diameter	150 mm
Outer diameter	180 mm
Bearing configuration	<<>> M =
Bearing type	Spindle bearing
Rear bearing	
Bore diameter	70 mm
Mean bearing diameter	85 mm
Outer diameter	100 mm
Bearing type	Adjustable roller bearing

Turret without tool drive	
Tool disc	12-fold VDI 40 / width across flats: 320 mm
Max. coolant pressure	5–25 bar
Switching time	0.15 seconds (one tool location)
Tools	Use only tool holders / spindle heads with straight shank and O-ring in accordance with the DIN ISO 10889 standard (formerly DIN 69880)

Driven turret	
Tool disc	12-fold VDI 40 / width across flats: 320 mm
Driven tools	DIN 5480 20 × 0.8
Speed	4000 rpm
Max. torque	63 Nm
Drive power	10 kW
Max. coolant pressure	5–25 bar (contamination < 100 µ)
Switching time without tool drive	0.15 seconds (one tool location)
Switching time with tool drive	0.39 seconds (one tool location)
Tools	Use only tool holders / spindle heads with straight shank and O-ring in accordance with the DIN ISO 10889 standard (formerly DIN 69880)

Drilling spindle	
Nominal power	4.5 kW–20 kW
Nominal torque	25 Nm–70 Nm
Max. speed	3500 rpm, other speeds optionally available
Tool holder	HSK 63 / manual clamping flange
Coolant pressure transmitted through spindle	Max. 20 bar (contamination < 25 µ)

Drill bracket	
Bracket	Solid steel
Tool holder	VDI 40, optional: Capto C6 or C8

Supply and removal belts	
Number of workpiece carriers, standard	0–140 mm diameter / 28 pcs 141–200 mm diameter / 14 pcs
Number of workpiece carriers, optional	141–200 mm diameter / 14 pcs
Max. load	300 kg
Belt speed, standard	0.5–5 m/min
Belt speed with additional safeguard	0.5–12 m/min

