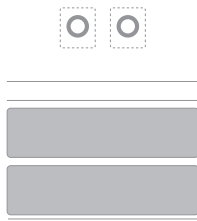
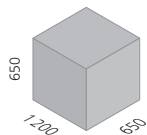


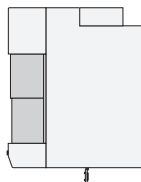
BF 12-21D



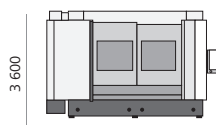
DOUBLE SWIVEL CARRIER



WORKSPACE PER SPINDLE



3 550



5 950

*optional, **on request, -o- occupancy of multiple magazine positions. Details depending on equipment. Technical data according to project planning. Deviation +/- 15% reserved. Subject to change without notice.

Working range	
X-axis (change position)	1 200 mm (1 460 mm)
Y-axis	650 mm
Z-axis	650 mm (100 - 750 mm)
Spindle distance A	600 - 3 000 mm
Workpiece carrier	
Max. dimensions of clamping device / workpiece	Ø 1 300 mm x 1 430 mm
Drive system	Torque-Motor
Transport load	2 x 1 200 kg
Speed range A1/A2 axis	1 - 40 rpm
Work spindle	
Speed range	1 - 17 500 rpm
Run up time n _{max}	< 0,75 s
Spindle bearing Ø	80 mm
Power (duty cycle)	32 kW (40%) / 4 200 min ⁻¹
Torque (duty cycle)	72 Nm (40%)
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 / 90 / 120 m/min
Axle acceleration X / Y / Z	12 / 10 / 20 m/s ²
Max. Feed force X / Y / Z	16 000 / 5 000 / 5 000 N
Accuracy	
Toolchange system	Direct, absolute
Positioning accuracy A /	≤ 0,012 mm
Repeatability R (ISO 230-2)	≤ 0,006 mm
Tool magazine	
Tool changing system	Pick-Up
Chain magazine capacity	2 x 20
Max. Tool Ø	72 / 170 mm (-o-)
Max. Tool length	450 mm
Max. Tool weight	7,5 kg
Toolchange	
Chip-to-chip time	2,75 s
Weight / Dimensions	
Weight of the machine	17 000 kg
Transport dimensions W x H x D	5,95 m x 3,60 m x 3,55 m
Machine installed W x H x L	7,50 m x 5,00 m x 5,00 m
Connected load	
Total connected load	approx 118 kVA
Mean air consumption	0,6 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK ONE