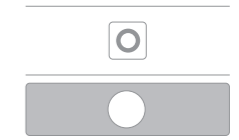
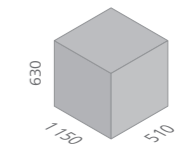




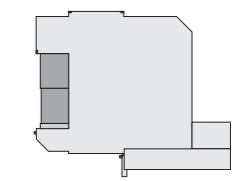
Working range		
X-axis	1 150 mm	
Y-axis (toolchange position)	630 mm (920 mm)	
Z-axis	510 mm	
Distance spindle to center A-axis	125 mm - 635 mm	
Workpiece carrier		
A-axis prepared to accept clamping bridges, up to max. ø 1 000 mm x 1 505 mm		
Drive system	Torque motor	
Transport load	1 000 kg	
Speed range A-axis	1 - 50 rpm	
Drive torque (both sides)*	2 050 Nm (2 x 2 050* Nm)	
Work spindle		
	HSK-A63	HSK A-80*
Speed range	1 - 17 500 rpm	1 - 12 500 rpm
Run-up time 0 - n _{max}	< 0,65 s	< 0,9 s
Spindle bearing Ø	80 mm	90 mm
Power / Torque (% ED)	35 kW / 80 Nm (40% ED)	42 kW / 200 Nm (10% ED)
Feed drive		
Drive system	Linear motor	
Rapid traverse X / Y / Z	120 m/min	
Axis acceleration X / Y / Z	12 / 12 / 24 m/s ²	11 / 11 / 18 m/s ²
Max. feed thrust X / Y / Z	5 000 / 10 000 / 5 000 N	
Accuracy		
Position measuring system	Direct, absolute	
Positioning tolerance X / Y / Z	Tp = 0,006 mm	
Tool magazine		
Toolchange system	Pick-Up	
Capacity	84 (144, 216)*	70 (120, 180)*
Max. tool ø	80 mm / 200 mm (-o-)	90 mm / 200 mm (-o-)
Max. tool length	450 mm	
Max. tool weight	10 kg	12 kg (-o-)
Toolchange		
Chip-to-chip time	approx. 2,25 s	approx. 2,50 s
Weight / Dimensions		
Total weight	approx. 18 000 kg	
Transport dimensions W x H x L	3,70 m x 3,25 m x 4,80 m	
Machine installed W x H x L	4,80 m x 3,50 m x 7,30 m	
SW automation interface*		
Total weight	approx. 20 000 kg	
Transport dimensions W x H x L	3,70 m x 3,25 m x 5,60 m	
Space requirement	15,8 m ²	
Machine installed W x H x L	4,80 m x 3,50 m x 8,10 m	
Connected load		
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz	
Total connected load	approx. 110 kVA	
Mean air consumption	0,4 Nm ³ /min (5,5 bar)	
CNC control system		
Siemens	SINUMERIK 840 D sl	



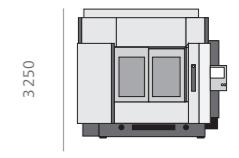
DOUBLE SWIVEL CARRIER
1 - 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



4 800

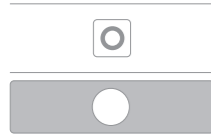


3 250

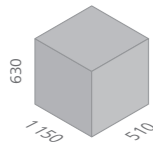
3 700

*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.

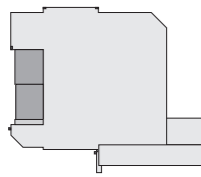
BA W06-11



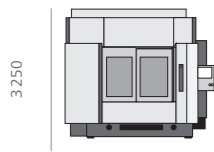
DOUBLE SWIVEL CARRIER
1 - 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



4 800



3 700

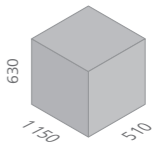
Working range	
X-axis	1 150 mm
Y-axis (toolchange position)	630 mm (920 mm)
Z-axis	510 mm
Distance spindle to center A-axis	125 mm - 635 mm
Workpiece carrier	
A-axis prepared to accept clamping bridges, up to max.	
	ø 1 000 mm x 1 505 mm
Drive system	Torque motor
Transport load	1 000 kg
Speed range A-axis	1 - 50 rpm
Drive torque (both sides)*	2 050 Nm (2 x 2 050* Nm)
Work spindle HSK-A100*	
Speed range	1 - 12 500 rpm
Run-up time 0 - n _{max}	< 1,05 s
Spindle bearing Ø	100 mm
Power / Torque (% ED)	42 kW / 200 Nm (10% ED)
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 m/min
Axis acceleration X / Y / Z	11 / 11 / 18 m/s ²
Max. feed thrust X / Y / Z	5 000 / 10 000 / 5 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,006 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	56 (96)*
Max. tool ø	115 mm / 200 mm (-o-)
Max. tool length	440 mm
Max. tool weight	20 kg
Toolchange	
Chip-to-chip time	approx. 2,75 s
Weight / Dimensions	
Total weight	approx. 18 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 4,80 m
Machine installed W x H x L	4,80 m x 3,50 m x 7,30 m
SW automation interface*	
Total weight	approx. 20 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 5,60 m
Space requirement	15,8 m ²
Machine installed W x H x L	4,80 m x 3,50 m x 8,10 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 110 kVA
Mean air consumption	0,4 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl

*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.

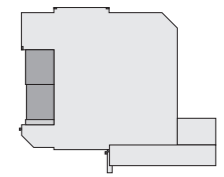
BA W06-12



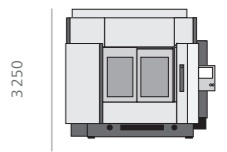
DOUBLE SWIVEL CARRIER
1 - 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



5 200

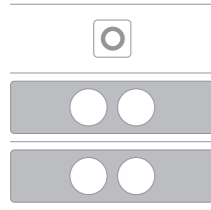


3 700

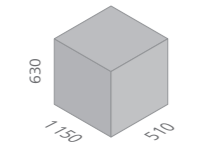
Working range	
X-axis	1 150 mm
Y-axis (toolchange position)	630 mm (920 mm)
Z-axis	510 mm
Distance spindle to center A-axis	100 mm - 610 mm
Workpiece carrier	
Swivel carrier / counterbearing with crown gear: swivel time 0 / 180°	
	approx. 3,4 s
A- and U-axis, prepared for mounting a fixture plate, up to max.	
	ø 675 mm x 1 430 mm
Drive system	Torque motor
Load capacity	2 x 600 kg (720 kg)*
Speed range A-, U-axis	1 - 50 rpm
Work spindle HSK-A63 HSK A-80*	
Speed range	1 - 17 500 rpm 1 - 12 500 rpm
Run-up time 0 - n _{max}	< 0,65 s < 0,9 s
Spindle bearing Ø	80 mm 90 mm
Power / Torque (% ED)	35 kW / 80 Nm (40% ED) 42 kW / 200 Nm (10% ED)
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 m/min
Axis acceleration X / Y / Z	12 / 12 / 24 m/s ² 11 / 11 / 18 m/s ²
Max. feed thrust X / Y / Z	5 000 / 10 000 / 5 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,006 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	84 (144,216)* 70 (120, 180)*
Max. tool ø	80 mm / 200 mm (-o-) 90 mm / 200 mm (-o-)
Max. tool length	425 mm
Max. tool weight	10 kg 12 kg (-o-)
Toolchange	
Chip-to-chip time	approx. 2,25 s approx. 2,50 s
Weight / Dimensions	
Total weight	approx. 20 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 5,20 m
Machine installed W x H x L	4,80 m x 3,50 m 7,50 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 110 kVA
Mean air consumption	0,4 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl

*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.

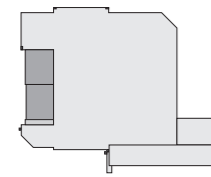
BA W06-12



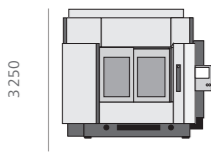
DOUBLE SWIVEL CARRIER
1 - 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



5 200

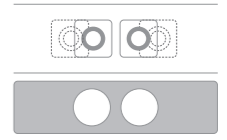


3 700

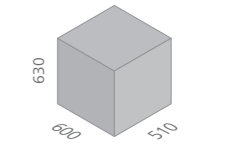
Working range	
X-axis	1 150 mm
Y-axis (toolchange position)	630 mm (920 mm)
Z-axis	510 mm
Distance spindle to center A-axis	100 mm - 610 mm
Workpiece carrier	
Swivel carrier / counterbearing with crown gear: swivel time 0 / 180°	approx. 3,4 s
A- and U-axis, prepared for mounting a fixture plate, up to max.	ø 675 mm x 1 430 mm
Drive system	Torque motor
Load capacity	2 x 600 kg (720 kg)*
Speed range A-, U-axis	1 - 50 rpm
Work spindle	
HSK-A100*	
Speed range	1 - 12 500 rpm
Run-up time 0 - n _{max}	< 1,05 s
Spindle bearing Ø	100 mm
Power / Torque (% ED)	42 kW / 200 Nm (10% ED)
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 m/min
Axis acceleration X / Y / Z	11 / 11 / 18 m/s ²
Max. feed thrust X / Y / Z	5 000 / 10 000 / 5 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,006 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	56 (96)*
Max. tool ø	115 mm / 200 mm (-o-)
Max. tool length	415 mm
Max. tool weight	20 kg
Toolchange	
Chip-to-chip time	approx. 2,75 s
Weight / Dimensions	
Total weight	approx. 20 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 5,20 m
Machine installed W x H x L	4,80 m x 3,50 m 7,50 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 110 kVA
Mean air consumption	0,4 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl

*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.

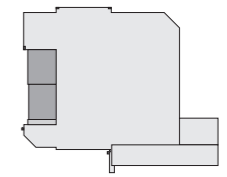
BA W06-21



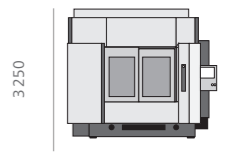
ROTARY
WORKPIECE CARRIER



WORKSPACE PER SPINDLE



4 900



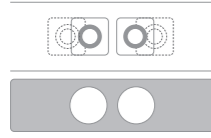
3 700

Working range		
X-axis	600 mm	
Y-axis (toolchange position)	630 mm (920 mm)	
Z-axis	510 mm	
Spindle distance fixed (variable)*	600 mm (590 - 651 mm)	
Workpiece carrier		
A- and U-axis, prepared for mounting a fixture plate, up to max.	ø 1 000 mm x 1 505 mm	
Drive system	Torque motor	
Transport load	1 000 kg	
A-axis speed range	1 - 50 rpm	
Work spindle		
HSK-A63	HSK-A80*	
Speed range	1 - 17 500 rpm	1 - 12 500 rpm
Run-up time 0 - n _{max}	< 0,65 s	< 0,9 s
Spindle bearing Ø	80 mm	90 mm
Power / Torque (% ED)	35 kW / 80 Nm (40% ED)	42 kW / 200 Nm (10% ED)
Feed drive		
Drive system	Linear motor	
Rapid traverse X / Y / Z	120 m/min	
Axis acceleration X / Y / Z	12 / 10 / 24 m/s ²	11 / 10 / 18 m/s ²
Max. feed thrust X / Y / Z	10 000 / 10 000 / 2 x 5 000 N	10 000 / 10 000 / 2 x 5 000 N
Accuracy		
Position measuring system	Direct, absolute	
Positioning tolerance X / Y / Z	Tp = 0,006 mm	
Tool magazine		
Toolchange system	Pick-Up	
Capacity	2 x 42 (2 x 72, 2 x 108)*	2 x 35 (2 x 60, 2 x 90)*
Max. tool ø	80 / 200 mm (-o-)	90 / 200 mm (-o-)
Max. tool length	450 mm	
Max. tool weight	10 kg	12 kg (-o-)
Toolchange		
Chip-to-chip time	approx. 2,25 s	approx. 2,50 s
Weight / Dimensions		
Total weight	approx. 18 000 kg	
Transport dimensions W x H x L	3,70 m x 3,25 m x 4,90 m	
Machine installed W x H x L	4,80 m x 3,50 m 7,20 m	
SW automation interface*		
Total weight	approx. 20 000 kg	
Transport dimensions W x H x L	3,75 m x 3,25 m x 5,60 m	
Space requirement	15,1 m ²	
Machine installed W x H x L	5,00 m x 3,50 m x 7,90 m	
Connected load		
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz	
Total connected load	approx. 133 kVA	
Mean air consumption	0,6 Nm ³ /min (5,5 bar)	
CNC control system		
Siemens	SINUMERIK 840 D sl	

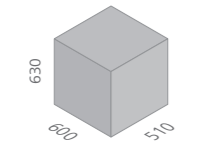
*optional, **on request, -o- occupancy of multiple magazine positions. Details depending on equipment. Technical data according to project planning. Deviation +/- 15% reserved. Subject to change without notice.

BA W06-21

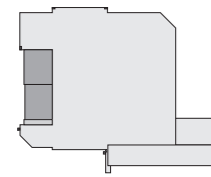
BA W06-22



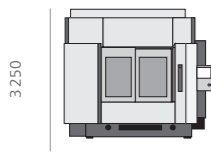
ROTARY WORKPIECE CARRIER



WORKSPACE PER SPINDLE



4900

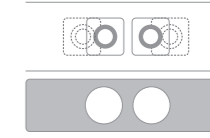


3700

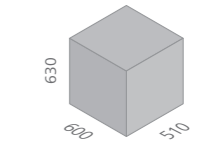
Working range	
X-axis	600 mm
Y-axis (toolchange position)	630 mm (920 mm)
Z-axis	510 mm
Spindle distance fixed (variable)*	600 mm (590 - 651 mm)
Workpiece carrier	
A- and U-axis, prepared for mounting a fixture plate, up to max.	
Drive system	Torque motor
Transport load	1 000 kg
A-axis speed range	1 - 50 rpm
Work spindle	
HSK-A100*	
Speed range	1 - 12 500 rpm
Run-up time 0 - n _{max}	< 1,05 s
Spindle bearing Ø	100 mm
Power / Torque (% ED)	42 kW / 200 Nm (10% ED)
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 m/min
Axis acceleration X / Y / Z	11 / 10 / 18 m/s ²
Max. feed thrust X / Y / Z	10 000 / 10 000 / 2 x 5 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,006 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	2 x 28 (2 x 48)*
Max. tool ø	115 mm / 200 mm (-o-)
Max. tool length	440 mm
Max. tool weight	20 kg
Toolchange	
Chip-to-chip time	approx. 2,75 s
Weight / Dimensions	
Total weight	approx. 18 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 4,90 m
Machine installed W x H x L	4,80 m x 3,50 m x 7,20 m
SW automation interface*	
Total weight	approx. 20 000 kg
Transport dimensions W x H x L	3,75 m x 3,25 m x 5,60 m
Space requirement	15,1 m ²
Machine installed W x H x L	5,00 m x 3,50 m x 7,90 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 133 kVA
Mean air consumption	0,6 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl

*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.

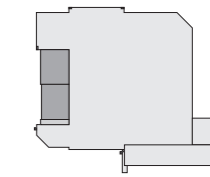
Working range	
X-axis	600 mm
Y-axis (toolchange position)	630 mm (920 mm)
Z-axis	510 mm
Spindle distance fixed (variable)*	600 mm (590 mm - 651 mm)
Workpiece carrier	
Swivel carrier / counterbearing with crown gear: swivel time 0 / 180°	
	approx. 3,4 s
A- and U-axis, prepared for mounting a fixture plate, up to max.	
Drive system	Torque motor
Load capacity	2 x 600 kg (720 kg)*
Speed range A-, U-axis	1 - 50 rpm
Work spindle	
HSK-A63	HSK-A80*
Speed range	1 - 17 500 rpm
Run up time n _{max}	< 0,65 s
Spindle bearings ø	80 mm
Power / Torque (duty cycle)	2 x 35 kW / 80 Nm (40% ED)
2 x 42 kW / 200 Nm (10% ED)	
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 m/min
Axis acceleration X / Y / Z	12 / 10 / 24 m/s ²
Max. feed thrust X / Y / Z	10 000 / 10 000 / 2 x 5 000 N
10 000 / 10 000 / 2 x 5 000 N	
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,006 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	2 x 42 (2 x 72 / 2 x 108)*
2 x 35 (2 x 60 / 2 x 90)*	
Max. tool ø	80 / 200 mm (-o-)
90 mm / 200 mm (-o-)	
Max. tool length	425 mm
Max. tool weight	10 kg
12 kg (-o-)	
Toolchange	
Chip-to-chip time	approx. 2,25 s
approx. 2,50 s	
Weight / Dimensions	
Total weight	approx. 20 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 5,20 m
Machine installed W x H x L	4,80 m x 3,50 m x 7,50 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 133 kVA
Mean air consumption	0,6 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl



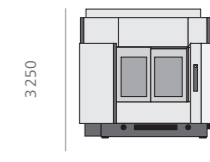
DOUBLE SWIVEL CARRIER 2 OR 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



5200

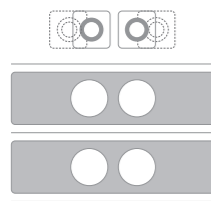


3700

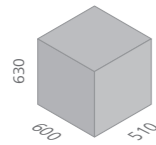
*optional, **on request, -o- occupancy of multiple magazine positions. Details depending on equipment. Technical data according to project planning. Deviation +/- 15% reserved. Subject to change without notice.

BA W06-22

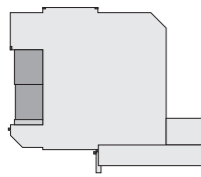
Working range	
X-axis	600 mm
Y-axis (toolchange position)	630 mm (920 mm)
Z-axis	510 mm
Spindle distance fixed (variable)*	600 mm (590 mm - 651 mm)
Workpiece carrier	
Swivel carrier / counterbearing with crown gear: swivel time 0 / 180°	approx. 3,4 s
A- and U-axis, prepared for mounting a fixture plate, up to max.	ø 675 mm x 1 430 mm
Drive system	Torque motor
Load capacity	2 x 600 kg (750 kg)*
Speed range A-, U-axis	1 - 50 rpm
Work spindle	
Speed range	1 - 12 500 rpm
Run up time n _{max}	< 1,05 s
Spindle bearings ø	100 mm
Power / Torque (10% duty cycle)	2 x 42 kW / 200 Nm (10% ED)
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	120 m/min
Axis acceleration X / Y / Z	11 / 10 / 18 m/s ²
Max. feed thrust X / Y / Z	10 000 / 10 000 / 2 x 5 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,006 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	2 x 28 (2 x 48)*
Max. tool ø	115 mm / 200 mm (-o-)
Max. tool length	415 mm
Max. tool weight	20 kg
Toolchange	
Chip-to-chip time	approx. 2,75 s
Weight / Dimensions	
Total weight	approx. 20 000 kg
Transport dimensions W x H x L	3,70 m x 3,25 m x 5,20 m
Machine installed W x H x L	4,80 m x 3,50 m 7,50 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 133 kVA
Mean air consumption	0,6 Nm ³ /min (5,5 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl



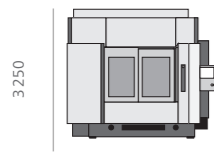
DOUBLE SWIVEL CARRIER
2 OR 4 ROTARY TABLES*



WORKSPACE PER SPINDLE



5 200

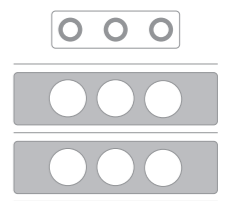


3 700

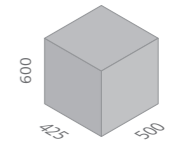
*optional, **on request, -o- occupancy of multiple magazine positions. Details depending on equipment. Technical data according to project planning. Deviation +/- 15% reserved. Subject to change without notice.

BA W06-32

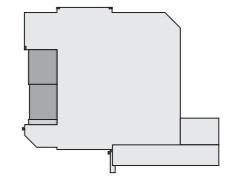
Working range	
X-axis	425 mm
Y-axis (toolchange position)	600 mm (875 mm)
Z-axis	500 mm
Spindle distance	425 mm
Workpiece carrier	
Swivel carrier / counterbearing with crown gear: swivel time 0 / 180°	approx. 3,5 s
A- and U-axis, prepared for mounting a fixture plate, up to max.	ø 675 mm x 1 430 mm
Drive system	Torque motor
Load capacity	2 x 600 kg
Speed range A-, U-axis	1 - 50 rpm
C- / W-axis*	3 satellites (ø 265 mm, 5 Distribution tracks)
Work spindle	
Speed range / Run up time n _{max}	1 - 17 500 rpm / 0,9 s
Spindle bearings ø	80 mm
Power / Torque (40% duty cycle)	3 x 32 kW / 4 200 rpm
Drehmoment (40% ED)	3 x 72 Nm
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	100 / 100 / 100 m/min
Axis acceleration X / Y / Z	9,5 / 13 / 20 m/s ²
Max. feed thrust X / Y / Z	10 000 / 20 000 / 15 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	Tp = 0,008 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	3 x 28
Max. tool ø	80 / 160 mm (-o-)
Max. tool length	400 mm
Max. tool weight	10 kg
Toolchange	
Chip-to-chip time	approx. 2,5 s
Weight / Dimensions	
Total weight	approx. 16 000 kg
Transport dimensions W x H x L	3,38 m x 3,25 m x 5,40 m
Machine installed W x H x L	4,80 m x 3,30 m 7,50 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	143 kVA
Mean air consumption	0,8 Nm ³ /min (6 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl



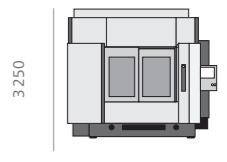
DOUBLE SWIVEL CARRIER



WORKSPACE PER SPINDLE



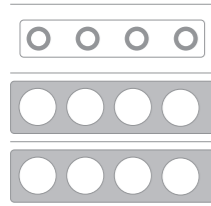
5 400



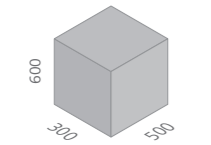
3 380

*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.

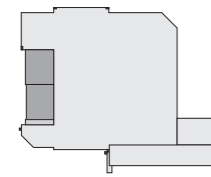
BA W06-42



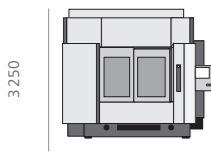
DOUBLE SWIVEL CARRIER



WORKSPACE PER SPINDLE



5400



3250

Working range	
X-axis	300 mm
Y-axis (toolchange position)	600 mm (875 mm)
Z-axis	500 mm
Spindle distance	300 mm
Workpiece carrier	
Swivel carrier / counterbearing with crown gear: swivel time 0 / 180°	approx. 3,5 s
A- and U-axis, prepared for mounting a fixture plate, up to max.	ø 675 mm x 1 430 mm
Drive system	Torque motor
Load capacity	2 x 600 kg
Speed range A-, U-axis	1 - 50 rpm
C- / W-axis*	4 satellites
Work spindle HSK-A63	
Speed range / Run up time n _{max}	1 - 17 500 rpm
Spindle bearings ø	80 mm
Power (40% duty cycle)	4 x 32 kW / 4 200 rpm
Torque (40% ED)	4 x 72 Nm
Feed drive	
Drive system	Linear motor
Rapid traverse X / Y / Z	70 / 100 / 100 m/min
Axis acceleration X / Y / Z	10 / 12 / 20 m/s ²
Max. feed thrust X / Y / Z	10 000 / 20 000 / 15 000 N
Accuracy	
Position measuring system	Direct, absolute
Positioning tolerance X / Y / Z	T _p = 0,008 mm
Tool magazine	
Toolchange system	Pick-Up
Capacity	4 x 21 (4 x 36, 4 x 54)*
Max. tool ø	80 / 160 mm (-o-)
Max. tool length	400 mm
Max. tool weight	10kg
Toolchange	
Chip-to-chip time	approx. 3,0 s
Weight / Dimensions	
Total weight	approx. 16 000 kg
Transport dimensions W x H x L	3,38 m x 3,25 m x 5,40 m
Machine installed W x H x L	4,80 m x 3,30 m 7,50 m
Connected load	
Operating voltage	3 x 400 Volt, 50 Hz, TN-S/TN-C Netz
Total connected load	approx. 156 kVA
Mean air consumption	0,8 Nm ³ /min (6 bar)
CNC control system	
Siemens	SINUMERIK 840 D sl

*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.