

High precision lathe 125-CCN (LT / RT / RTM)

Technical data

	A2-4 RT / RTM	D1-3" LT / RT	
Spindle			
Spindle axial and radial runout	< 0.5	< 0.5	[µm]
Recommended maximum turning diameter	270	270	[mm]
Max. permissible swing over carriage	115	115	[mm]
Max. permissible swing over bed	270	270	[mm]
Center height over carriage	60	60	[mm]
Center height over bed	125	125	[mm]
Distance between spindle nose and headstock cover	32	44	[mm]
distance between spindle nose face and turret/slide face	390	445	[mm]
Spindle for SCHAUBLIN collets	-	B32	
Spindle speed	0 - 5'000	0 - 5'000	[min ⁻¹]
Power, continuous / intermittent	7.5 / 11	7.5 / 11	[kW]
Continuous torque spindle / intermittently	43 / 84	43 / 84	[Nm]
Spindel throughbore (without drawbar)	39	28	[mm]
Max. bar capacity with B32 collet	24	24	[mm]
Max. bar capacity of the "HAINBUCH Gr 32" clamping head	32	-	[mm]
Max. bar capacity of the automatic chuck	32	19	[mm]
Recommended max. swing	200	150	[mm]
Adjustable axial pneumatic clamping force	1'150	1'150	[daN]
Pneumatic spindle interlock, interlocking moment at 5 bar	69	69	[Nm]
C axis (Spindle)			
Programmable increment		0.0001	[°]
Interpolation		X - Z - C	
Rapid feed		36'000	[°/min]
Positioning accuracy		± 0.012° / ± 43"	
Positioning repeatability		± 0.006° / ± 22"	
Cross slide			
Transverse stroke (on diameter), X axis	(LT / RT / RTM)	200 / 190 / 185	[mm]
Longitudinal stroke, Z axis	(LT / RT / RTM)	415 / 395 / 390	[mm]
Programmable increment, Z axis and X axis (diameter)		0.0001	[mm]
X and Z axes, AC motor drive, power		1.4	[kW]
X and Z axes, torque, continuous/intermittent		4 / 14	[Nm]
X axis, ball screw, Ø x pitch		20 x 5	[mm]
Z axis, ball screw, Ø x pitch		32 x 5	[mm]
Positioning accuracy [P] X and Z axes	VDI / DGQ 3441	5	[µm]
Positioning repeatability [PS] X and Z axes	VDI / DGQ 3441	2	[µm]
Feed			
Cutting feedrate, X and Z axes		5	[m/min]
Rapid feed, X and Z axes		7.5	[m/min]
Feed force, X and Z axes, continuous		500	[daN]

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Tooling: Linear			
Possible number of radial tool holders (according to Ø of the piece)		2	
Possible number of front tool holders (according to Ø of the piece)		2 ⇔ 5	
Max. cross section of tool shank (Multifix system)		16 x 16	[mm]
Max. cross section of tool shank (Tripan system)		16 x 16	[mm]
Tool clamping for collets		ESX20	
Bar holder		Ø20	[mm]
Tooling: Turret with stationary tools			
Tool holder		Axial	
Number of tool stations		8	
Standardized mounting of tool holders	DIN 69880	VDI20	
Max. cross section of tool shank		16 x 16	[mm]
Tooling: Turret with rotary tools			
Tool holder		Axial	
Number of tool stations		8	
Number of stations for rotary tools		4	
Standardized mounting of tool holders	DIN 69880	VDI20	
Drive of the rotary tools according to the standards		DIN 1809	
Max. cross section of tool shank		16 x 16	[mm]
Spindle speed		0 - 5'000	[min ⁻¹]
Power, continuous/intermittent		0.55 / 1.1	[kW]
Torque, continuous / intermittent		1.8 / 3.5	[Nm]
Pneumatic tailstock			
Internal taper of the sleeve		Mo 3	
Spindle OD		45	[mm]
Spindle stroke		70	[mm]
Adjustable pressing force		25 - 260	[daN]

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Base coolant supply			
Tank capacity		55	[l]
Coolant flow		32l/min @ 2 bar	
Pneumatic connection			
Min./max. pneumatic pressure		5 - 6	[bar]
Type of connection		G 3/8"	
Quality of the air		Clean and dry	
Average consumption		3	[m³/h]
Electrical connection			
Voltage		400	[V]
Tolerated fluctuations		+/- 5	[%]
Frequency		50	[Hz]
Tolerated fluctuations		+/- 5	[%]
Rated current		19	[A]
Protection at mains end		32	[A]
Power consumption of the machine		13	[kVA]
Obstruction and weight			
Overall dimensions: length x depth x height		1'830 x 1'260 x 1'700	[mm]
Approx. net weight of the machine (including oil)	(LT / RT / RTM)	1'250 / 1'400 / 1'570	[kg]
Floor load	(LT / RT / RTM)	1'708 / 1'912 / 2'145	[kg/m²]
Load per square meter for one machine	(LT / RT / RTM)	386 / 433 / 485	[kg/m²]
Dimensions of the pallet		2'270 x 1'450	[mm]
Weight of the pallet		130	[kg]
Spindle center height over floor		1'162	[mm]
Lubrication of linear guideways and ball screws			
Kind of X and Z slideways lubrication		Automatic	
Kind of lubricant		Oil ISO VG 68	
Kind of X ball screws lubrication		Lifetime lubrication	
Kind of Z ball screws lubrication		Manual	
Kind of lubricant		Grease	
Various			
Color of the machine: SCHAUBLIN standard color 2 colors, color 1 Grey		RAL 7015	
Color of the machine: SCHAUBLIN standard color 2 colors, color 2 White		RAL 9010	
Noise level under load at the operator's station		75	[dB _A]
Machine and equipment in accordance with the CE safety standards		✓	
Operating temperature		+15 ⇨ +30	[°]
Relative humidity		10 ⇨ 75	[%]

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Control unit	
Type of control unit	Fanuc Oi-TF PLUS
Color screen	10,4" LCD
Manual Guide i	✓
Memory	2 Mb
Number of programs	1000
Tool offsets	128 etx. 200
Programmable increment	0.0001
Axis feedrate override	0 - 120 [%]
Spindle override	50 - 120 [%]
M codes in one block	3
Background editing	✓
Constant surface speed control	✓
Spindle positioning	✓
Rigid tapping (with Spindle)	✓
Multiple threading	✓
Taper thread cutting	✓
Continuous threading	✓
Variable lead threading	✓
Custom Macro B	✓
Polar coordinate interpolation	✓
Cylindrical interpolation	✓
Helical Interpolation option	Option
Polygon turning	✓
Inch/Metric	✓
Fanuc Picture (Personnal customer page)	✓
Languages control unit	
French, German, English, Italian, Spanish, Portuguese, Dutch, Swedish, Danish, Russian, Polish, Czech, Hungarian, Turkish, Japanese, Korean, Chinese (simplified characters), Chinese (traditional characters)	✓
Interface control unit	
Interface RS232-C	✓
Interface PCMCIA	✓
Interface Ethernet (embedded)	✓
RS-232	Option
Profibus	Option
Port fast Ethernet (optional board)	Option
Data server (optional board)	Option