

Technical data

Spindle (ISO 702/I / DIN 55026)	632	642	
Spindle axial and radial runout	< 0.5	< 0.7	[µm]
Recommended maximum turning diameter	270	270	[mm]
Distance between spindle nose and headstock cover	50	80	[mm]
Maximum distance between spindle nose face and turret	380	350	[mm]
ISO spindle nose	A2-4	A2-5	
Spindle speed	0 - 6'000	0 - 5'000	[min ⁻¹]
Power, continuous / intermittent	7.5 / 15	7.5 / 15	[kW]
Continuous torque spindle / intermittently	41 / 109	55 / 145	[Nm]
Spindel throughbore (without drawbar)	39	51	[mm]
Max. bar capacity	32	42	[mm]
Recommended max. swin	140	250	[mm]
Adjustable axial pneumatic clamping force	60 - 1000	180 - 2700	[daN]
Pneumatic spindle interlock, interlocking moment at 5 bar	69	83	[Nm]
C axis			
Programmable increment		0.0001	[°]
Interpolation		X - Y - 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		320	[mm]
Longitudinal stroke, Y axis		+/- 27	[mm]
Longitudinal stroke, Z axis		350	[mm]
Programmable increment, Z axis		0.0001	[mm]
X and Z axes, AC motor drive, power		2.3	[kW]
X and Z axes, torque, continuous/intermittent		8 / 32	[Nm]
X and Z axes, ball screw, Ø x pitch		28 x 5	[mm]
Positioning accuracy [P] X and Y axes	VDI /DGQ 3441	5	[µm]
Positioning accuracy [P] Z axis	VDI /DGQ 3441	6	[µm]
Positioning repeatability [PS] X and Y axes	VDI /DGQ 3441	2	[µm]
Positioning repeatability [PS] Z axis	VDI /DGQ 3441	3	[µm]
Feed			
Cutting feedrate, X, Z and E axes		5	[m/min]
Rapid feed, X, Z and E axes		20	[m/min]
Feed force, X, Z and E axes, continuous		900	[daN]

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Tooling: Turret with rotary tools		
Tool holder		Radial
Number of tool stations		12
Number of stations for rotary tools		12
Standardized mounting of tool holders		VDI30 + TRIFIX
Drive of the rotary tools according to the standards		DIN 5480
Max. cross section of tool shank		20 x 20 [mm]
Spindle speed		0 - 12'000 [min ⁻¹]
Power, continuous/intermittent		4.6 / 8.8 [kW]
Torque, continuous / intermittent		11 / 21 [Nm]
Positioning accuracy		5 [μm]
Positioning repeatability		2 [μm]
Cross-slide Tailstock / Counter-spindle		
Longitudinal stroke, E axis		350 [mm]
Transverse stroke, Xt axis		190 [mm]
Programmable increment		0.0001 [mm]
AC motor drive, power		1.2 [kW]
Torque, continuous/intermittent		7 / 15 [Nm]
Ball screw, Ø x pitch		28 x 5 [mm]
Positioning accuracy [P]	VDI /DGQ 3441	5 [μm]
Positioning repeatability [PS]	VDI /DGQ 3441	3 [μm]
Counter-spindle A2-4 (ISO 702/1 / DIN 55026)		
Spindle axial and radial runout		0.5 [μm]
Spindle speed		0 - 5'000 [min ⁻¹]
AC motor drive, power		1 / 3.5 [kW]
Torque, continuous/intermittent		13 / 45 [Nm]
Spindel throughbore (without drawbar)		39 [mm]
Possibility to built on a 3 jaws chuck		✓
Recommended maximum turning diameter		140 [mm]
Adjustable axial pneumatic clamping force		45 - 750 [daN]
Pneumatic spindle interlock, interlocking moment at 5 bar		56 [Nm]
Max. distance between spindle noses A2-4 / A2-5		520 / 490 [mm]
C axis		
Programmable increment		0.0001 [°]
Interpolation		X - Y - Z - C
Rapid feed		36'000 [°/min]
Positioning accuracy		± 0.012° / ± 43''
Positioning repeatability		± 0.006° / ± 22''
Motor-driven tailstock		
Internal taper of the sleeve		Morse 3

Technical data

Version of machine with 2 paths		
Tooling: Linear for secondary operations		
Possible number tool holders	4	
Max. cross section of tool shank	12 x 12	[mm]
Tool clamping for collets	ESX 9	
Turret with rotary tools for secondary operations		
Number of tool stations	12	
Number of stations for rotary tools	6	
Standardized mounting of tool holders (DIN 69880)	VDI 16	
Drive of the rotary tools according to the standards	DIN 5480	
Max. cross section of tool shank	12 x 12	[mm]
Spindle speed, infinitely variable	0 - 6'000	[min ⁻¹]
Power, continuous/intermittent	1 / 1.3	[kW]
Torque, continuous / intermittent	3 / 7.5	[Nm]
Integrated cooling and indexing in both directions of rotation	✓	
Recommended maximum turning diameter with chuck	Ø65	[mm]

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Base coolant supply		
Tank capacity	80	[l]
Coolant flow	83l/min @ 2.4bar	
Pneumatic connection		
Min./max. pneumatic pressure	5 - 14	[bar]
Type of connection	G1/4"	[G]
Quality of the air	Clean and dry	
Electrical connection		
Voltage	400	[V]
Tolerated fluctuations	+/- 5	[%]
Other Voltage	Option	
Frequency	50	[Hz]
Tolerated fluctuations	+/- 5	[%]
Rated current	28	[A]
Protection at mains end	40	[A]
Power consumption of the machine	19	[kVA]
Obstruction and weight		
Overall dimensions: length x depth x height	1'720 x 1'680 x 1'990	[mm]
Approx. net weight of the machine (including oil)	2'800	[kg]
Floor load	10	[kg/cm ²]
Load per square meter for one machine	1000	[kg/m ²]
Dimensions of the pallet	2'350 x 2'220	[mm]
Weight of the pallet	200	[kg]
Spindle center height over floor	1100	[mm]
Lubrication of linear guideways and ball screws		
Kind of linear guideway and ball screws lubrication for axes X, Y, Z, Xt and E	Automatic	
Kind of oil	ISO VG 68	
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	76	[dB _A]
Machine and equipment in accordance with the CE safety standards	✓	
Operating temperature	+15 ⇔ +30	[°]
Relative humidity	10 ⇔ 75	[%]

Technical data

Control unit		
Type of control unit	Fanuc Oi-TF PLUS	
Cloor screen	10.4" LCD	
Manual Guide i	Option	
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	