

High precision lead screw lathe 102N-VM-CF W20/W25

SCHAUBLIN 
MACHINES SA

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Technical data 0102-005 / 0102-006

Capacities

Max. permissible swing over bed	200 [mm]
Max. permissible swing over carriage	120 [mm]
Center height over bed	102 [mm]
Center height over carriage	20 [mm]
Maximum distance between centres	450 [mm]
Length of the bed	1'000 [mm]
Height of the bed	168 [mm]

Main spindle; AC motor drive

Speed variation by frequency converter with integral braking

Power continuous	4,2 [kW]
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CONTROLS

Control panel comprising:

- Speed pre-selection
- Digital spindle speed indication
- Configuration of the pedal functions with menu
- Auxiliary functions

Headstock W20

Spindle for SCHAUBLIN collets	W20
Spindle speed, infinitely variable	100 - 3'000 [min ⁻¹]
Spindle ID (without chuck key)	20 [mm]
Max. bar capacity with W20 collet	14.5 [mm]

Headstock W25

Spindle for SCHAUBLIN collets	W25
Spindle speed, infinitely variable	100 - 3'000 [min ⁻¹]
Spindle ID (without chuck key)	25 [mm]
Max. bar capacity with W25 collet	19 [mm]

Lever-type quick-clamping system

Max. spindle speed	option 3'000 [min ⁻¹]
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Cross slide

Transverse stroke, X axis	100 [mm]
Resolution, X axis (radius)	0.01 (vernier)
Trapezoidal thread screw, dia. x pitch	9 x 2 [mm]
Longitudinal stroke, Z axis	90 [mm]
Resolution, Z axis	0.01 (vernier)
Trapezoidal thread screw, dia. x pitch	9 x 2 [mm]

Lead screw

Maximum carriage stroke on bed	400 [mm]
Trapezoidal Lead screw, Ø x pitch	40 x 4 [mm]
Working feeds, Z-axis	0,02 : 0,03 : 0,04 : 0,06 : 0,08 : 0,1 : 0,2 : 0,3
Chart for 20 metric threads	0,25 - 4 [mm]
Chart for 25 metric threads	80 - 6 filets/1"

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Tooling : Linear

Max. cross section of tool shank (Multifix system)	10 x 10 [mm]
Max. cross section of tool shank (Tripan system)	10 x 10 [mm]
Bar holder (MULTIFIX system)	Ø20 [mm]
Bar holder (TRIPAN system)	Ø12 [mm]

Screw-type tailstock

Internal taper of the sleeve	Mo 2
Spindle OD	30 [mm]
Spindle stroke	80 [mm]

Lever-operated tailstock

Internal taper of the sleeve	option W20 / W25
Spindle OD	40 [mm]
Spindle stroke	100 [mm]

Star-wheel handle-type tailstock

Internal taper of the sleeve	option W20 / W25
Spindle OD	40 [mm]
Spindle stroke	150 [mm]

Steady rests

Capacity, stationary rest	option Ø70 [mm]
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Coolant supply

Tank capacity	option 23 [l]
Pump performance	0,19 [kW]

Electrical power supply

Voltage	400 [V]
Tolerated fluctuations	+/- 5 [%]
Frequency	50 / 60 [Hz]
Tolerated fluctuations	+/- 5 [%]
Rated current	12 [A]
Protection at mains end	20 [A]
Power consumption of the machine	6 [kVA]

Obstruction and weight

Overall dimensions: length x depth x height	1'500 x 510 x 1'550 [mm]
Approx. net weight of the machine	660 [kg]
Floor load	1'785 [kg/m ²]
Load floor	253 [kg/m ²]
Dimensions of the pallet	1'700 x 1'000 [mm]
Weight of pallet	55 [kg]

Lubrication of slideways and ball screws

Type of lubrication	Manual
Oil lubrication of slideways	MOBIL Vactra 2
Grease lubrication of ball screw	MOBIL Velocite 6

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Various

Color of the machine: SCHAUBLIN standard	NCS 1020-R80B
Color of the cast iron base: SCHAUBLIN standard	NCS 3030-R90B
Noise level under load at the operator's station	< 60 [dB _A]
Machine and equipment in accordance with the CE safety standards	✓
Operating temperature	+15 ⇔ +30 [°C]
Relative humidity	5 ⇔ 80 [%]