6.1 General Table of units of measurement

(dt-gen_pratika_1.0_6.1)

UNITS OF MEASURE USED			Conversion S.I.
kg	Weight in kilograms	Weight	9,807N
mm	Millimetres	Length	$1x10^{-3}$ m
m/sec	Metres per second	Speed	m/s
m/min	Metres per minute	Speed	1/60 m/s
rpm	Revs per minute	Rev speed	2π:60 rad/s
NL	Normal litres	Volume	
cm³	Cubic centimetres	Volume	$1x10^{-6}$ m³
mm²	Square millimetres	Area	$1x10^{-6}$ m²
kW	kilowatt	Power	1x10³ w
Hz	Hertz	Frequency	Hz
V	Volts	Voltage	V
A	Amperes	Electrical current intensity	A
g/sec	Grams per second	Weighing tools	$1x10^{-3}$ kg/s
m³/h	Cubic metres per hour	Flow rate	m³/3,6x10³ s
m³/sec	Cubic metres per second	Flow rate	m³/s
Pa	Pascal	Pressure	N/m²
bar	Bar	Pressure	$1x10^{5}$ N/m²
°C	Degrees Celsius	Temperature	K
dB	Decibel	Sound pressure	
N	Newton	Force	
Nm	Newton metre	Torque (torque moment)	
Hp (CV)	Steam horsepower	Power	735,49 W
Lux	Lux	Lighting	lx

6.2 Overall Dimensions

(dt-gen_rx40_1.0_6.2)

See the attachments at the end of the instructions manual

6.3 Characteristics of the machine (BORING - ROUTING MACHINE)

(dt-gen_cella_am600f_1.0_6.3)

GENERAL TECHNICAL SPECIFICATIONS		
Stroke of Z axis (boring machine)		
Stroke of "X" - "Y" axes: Refer to section “Work range dimensions"		
Ref Stroke of "Z" axes: Refer to section “"Z" Axis Stroke"		
Programmable speed on "X" axis	m/min	25
Progammable speed in "Y"-axis	m/min	25
Progammable speed in "Z"-axis	m/min	15
Panel feed : Refer to section "Z" Axis Stroke"	mm	
Overall weight with electrical equipment: Refer to layout plan (section on Overall Dimensions)		
Sound power according to standards ISO / EN : See chap. "Noisiness level"	DB	

6.3.1 Working field dimensions

(dt-gen_rx40_1.0_6.3.1)

See the attachments at the end of the instructions manual

6.3.1.1 "Z" Axis Stroke

(accord-wd_1.0_6.3.1.1)

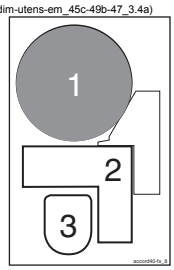
See the attachments at the end of the instructions manual

6.3.2 Dimensions of piece to be machined

(dt-gen_pratika_1.0_6.3.2)

Pieces being processed must fall within (X - Y) dimensions of the work top that are defined in the "General technical data" - "Work field dimensions" chapters and in dimension (Z) for panel passage which is defined in chapters "General technical data" - "Z axis strokes"

6.3.3.2 Maximum tools dimensions with 3 axes electrospindle



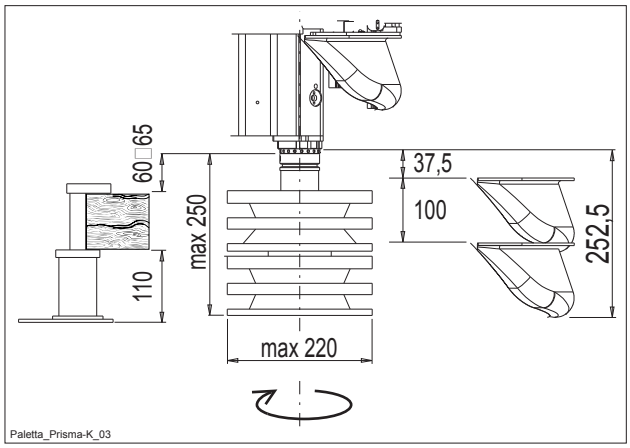
Machine with tool room type Rapid 16 / Rapid 24 / Catena 48 :
Ø max 350 mm
H max 300 mm

Machine with tool room type Rapid 12 On Board :
Ø max 230 mm
H max 230 mm

Machine with tool room type TR10 - TR12 :
See chapter Q7.2

Tool maximum dimensions that can be used on the electric spindle with chippings conveyor device (if it foresees and selected):
Ø max 220 mm
H max 250 mm

CAUTION:
THE SHAVING CONVEYOR DEVICE CAN ONLY BE USED WITH THE ELECTRO-SPINDLE IN VERTICAL SET-UP AND ONLY WITH RIGHT-HANDED TOOLS.
Having selected the shaving conveyor device and with the tool running, the tip of the spindle must be at a distance between 60 and 65 mm from the piece platen.

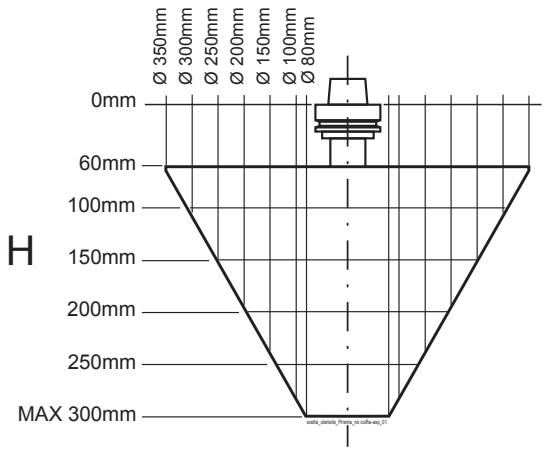


6.0.1 Max tool dimensions with “PRISMA K” electrospindle

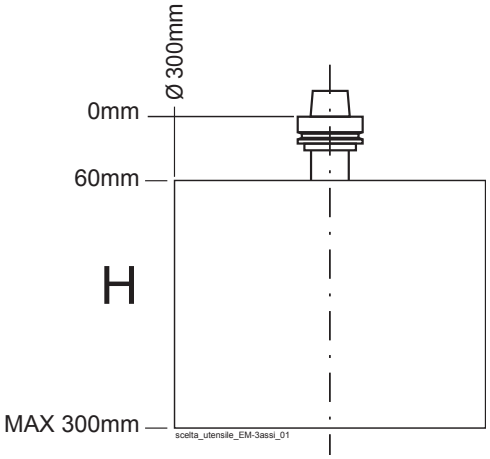
(dimens-utens-prisma-k_3.4a)

Tool maximum dimensions that can be used on the electric spindle with suction casing not selected (in standby position):

used 5-axis

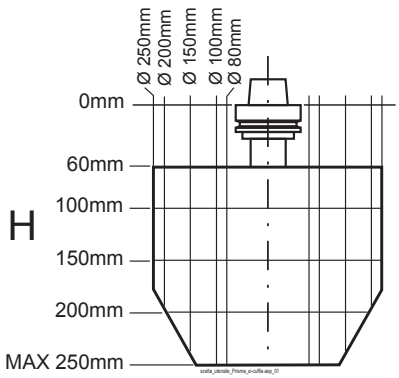


used 3-axis

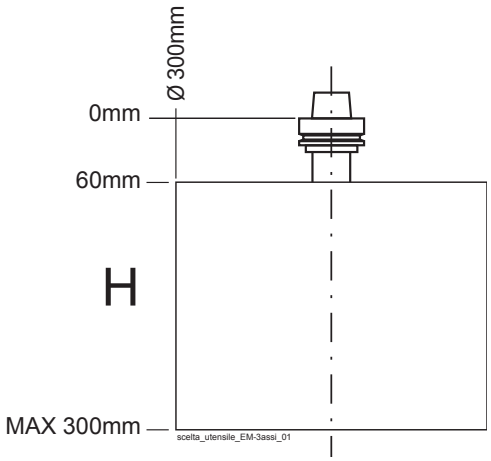


Tool maximum dimensions that can be used on the electric spindle with selected suction casing (in work position):

used 5-axis

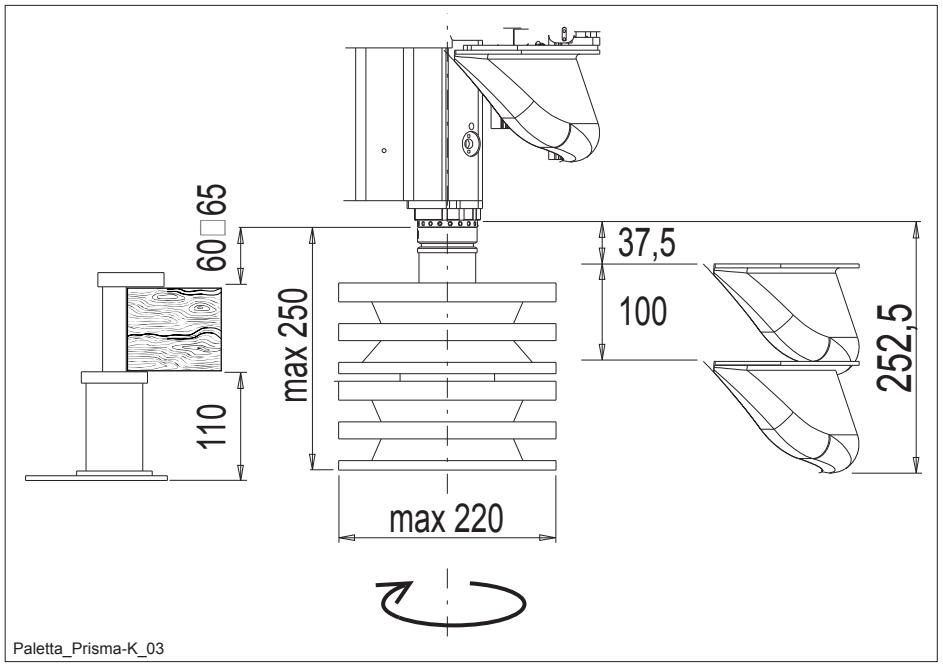


used 3-axis



Tool maximum dimensions that can be used on the electric spindle with chippings conveyor device (if it foresees and selected):

CAUTION:
THE SHAVING CONVEYOR DEVICE CAN ONLY BE USED WITH THE ELECTRO-SPINDLE IN VERTICAL SET-UP AND ONLY WITH RIGHT-HANDED TOOLS.
Having selected the shaving conveyor device and with the tool running, the tip of the spindle must be at a distance between 60 and 65 mm from the piece platen.



Tool maximum dimensions that can be mounted on Rapid 16 / Rapid 24 tools store:
Ø max 350 mm
H max 300 mm

Tool maximum dimensions that can be mounted on Rapid 12 On Board magazine :
Ø max 230 mm
H max 230 mm

Tool maximum dimensions that can be mounted on TR10 - TR12 magazine:
Machine with tool room type TR10 - TR12 :
See chapter Q7.2

6.4 Energy sources

(=dt-gen_pratika_1.0_6.4_inp)

6.4.1 Electricity

(dt-gen_pratika_1.0_6.4.1)

ELECTRIC TECHNICAL SPECIFICATIONS		
Motor power of 12 / 18 spindles drilling head	kW (Hp)	See specific chap.
Electrospindle power and/or optionals machining units	kW (Hp)	See specific chap.
Motor power of dust conveyor(1)	kW (Hp)	0.18
Standard power supply	V / Hz	400 / 50-60
Electric connecting cables = 3 Phases + Neutral + Earth		
Rated current in Amps: Refer to the machine's identification plate (section on Machine Identification)		

(1) Technical data: see motor data plate
Excluded from energy efficiency constraints of Commission Regulation (EC) No. 640/2009

6.4.2 Pneumatic supply

(dt-gen_rx-40_1.0_6.4.2)

TECHNICAL SPECIFICATIONS compressed air supply and extraction		
Compressed air supply	Bar	6,5
Medium consumption of compressed air	Nl/min	400
Istantaneous max. consumption of the compressed air	Nl/min	1000

6.8 Table of noise levels

(=dt-gen_pratika_1.1_6.8_su1pg)

DECLARED DUAL-NUMBER NOISE EMISSION VALUES, IN ACCORDANCE WITH ISO 4871

Working conditions: Drilling (in compliance with EN 848-3E)*					
Quantity measured description		Reference standards	Associated uncertainty K	Drilling	
Lop : level of sound pressure at operator stations - dB (A) and peak level [db(C)]	**Operator position**	EN ISO 11202:2010	5.0	**VSA**	**LAV**
	Infeed			80	83 [100]
	Outfeed			-	
Lw : level of sound pressure issued : $dB(A)_{re\ 1\ pw}$ [mW(A)]		EN ISO 3746:2010	4.0	97,6 [5,8]	101 [13]
The maximum value of the instantaneous acoustic pressure, C-weighted , is less than 130dB(C)					
VSA No machining without dust extractor equipment		**LAV** Machining with dust extractor equipment			
* Reference should be made to the test report for the analysis of operating conditions used differently from the standards prescribed above.					

Working conditions: Routing (in compliance with EN 848-3E)*					
Quantity measured description		Reference standards	Associated uncertainty K	Routing	
Lop : level of sound pressure at operator stations - dB (A) and peak level [db(C)]	**Operator position**	EN ISO 11202:2010	5.0	**VSA**	**LAV**
	Infeed			73	87 [102]
	Outfeed			-	-
Lw : level of sound pressure issued : $dB(A)_{re\ 1\ pw}$ [mW(A)]		EN ISO 3746:2010	4.0	91 [1]	108 [56]
The maximum value of the instantaneous acoustic pressure, C-weighted , is less than 130dB(C)					
VSA No machining without dust extractor equipment		**LAV** Machining with dust extractor equipment			
* Reference should be made to the test report for the analysis of operating conditions used differently from the standards prescribed above.					

NOTE:

The noise values are emission levels and not necessarily safe working levels.

While there is a correlation between emission levels and exposure levels, this is not a reliable parameter for determining whether further precautions should be taken.

The factors which influence the real exposure of the operator include the duration of exposure, environmental features, other sources of emission, e.g. number of machines and other adjacent machining operations.

The exposure level regulations may vary from country to country.

This information should however make it possible for the machine user to make a better assessment of the hazards and risks involved.

EAR DEFENDERS: use when the material being machined or the machining conditions raise the noise level above 80db.

Certain factors that positively affect machine noise level are:
- correct choice of tool
- correct selection of speed
- maintenance of tools and machine

(sp_210mm)