



## 3. Machine specifications

### 3. Machine specifications

#### 3.1 Specification tables

##### 3.1.1 PUMA 300MA/PUMA 300MB/PUMA 300LMA/PUMA 300LMB

Description	Unit	Specifications			
		PUMA 300MA	PUMA 300MB	PUMA 300LMA	PUMA 300LMB
<b>Capacity :</b>					
Swing over bed	mm(in.)	590(23.23)			
Swing over saddle	mm(in.)	450(17.72)			
Recom. machining dia.	mm(in.)	210(8.27)	255(10)	210(8.27)	255(10)
Max. machining dia.	mm(in.)	355(13.97)			
Max. work length	mm(in.)	595(23.43)	583(22.95)	1245(48.94)	1233(48.54)
Draw tube dia.	mm(in.)	52(2.04)	77(3.03)	52(2.04)	77(3.03)
<b>Travels :</b>					
X axis	mm(in.)	250(72+178) {9.84(2.83+7.01)}			
Z axis	mm(in.)	680(25.77)		1330(52.36)	
C axis	deg	360°			
<b>Spindle :</b>					
Chuck dia.	mm(in.)	210(8.27)	255(10.04)	210(8.27)	255(10.04)
Speed range	rpm	45-4,500	35-3,500	45-4,500	35-3,500
Spindle nose	ASA #	A2-6	A2-8	A2-6	A2-8
Spindle bore dia.	mm(in.)	62(2.44)	90(3.54)	62(2.44)	90(3.54)
Bearing dia.(Front)	mm(in.)	100(3.94)	130(5.12)	100(3.94)	130(5.12)
<b>Turret :</b>					
No. of tool stations(Type)	st.	12(BMT holder)			
OD tool height	mm(in.)	25(1)			
Boring bar dia.	mm(in.)	40(1-1/2)			
Indexing time	sec	0.1(1st. swivel)			
<b>Rotary tool :</b>					
Speed range	rpm	40~4000			
Collets, milling/tab	mm	20/M16			
<b>Feedrates :</b>					
Rapid traverse	mm/min	X:20,000/Z:24,000			
Cutting feed	mm/rev	X,Z:0.001~500,000			



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<b>Tail stock :</b>					
Quill dia.	mm(in.)	100(3.94)			
Quill bore taper	MT#	MT#5			
Quill travel	mm(in.)	100(3.94)			
<b>Motor :</b>					
Spindle(Cont./30min)	kW	11/15(15/18.5)	15/18.5(18.5/22)	11/15(15/18.5)	15/18.5(18.5/22)
Rotary tool(Cont./15min)	kW	-			
Feed drives	kW	X:2.8/Z:4.4			
Coolant pump	kW	0.24			
<b>Power requirements :</b>	kVA	45	50	45	50
<b>Machine size :</b>	1.9	2.25			
Height	mm(in.)	1,825(71.85)		2,065(81.30)	
Floor space	mmxmm (inxin)	3,430x1,800 {135.04x70.87}		3,990x1,934 {157.09x76.14}	
Weight(W/CNC system)	kgf	5,740		6,700	
<b>CNC system :</b>		FS18T-C(M520L, FS16T-C)			