

Machine Specifications

PUMA 3100 series

Description			Unit	PUMA 3100 /L/XL/UL	PUMA 3100 M/LM/XLM/ULM	PUMA 3100 Y(SY)/LY(LSY)/XLY(B)/ULY(B)
Capacity	Swing over bed		mm (inch)	850 (33.5)		
	Swing over front door		mm (inch)	720 (28.3)** / 850 (33.5)***		
	Swing over saddle*		mm (inch)	670 (26.4)		
	Recom. Turning diameter		mm (inch)	315 (12.4)		315 (12.4) (XLYB/ULYB : 380(15.0))
	Max. turning diameter		mm (inch)	525 (20.7)	420 (16.5)	
	Max. turning length		mm (inch)	790 / 1310 / 2150 / 3150 (31.1 / 51.6 / 84.6 / 124.0)	765 / 1285 / 2125 / 3125 (30.1 / 50.6 / 83.7 / 123.0)	
	Bar working diameter		mm (inch)	102 (4.0)		102 (4.0) (XLYB/ULYB : 116.5(4.6))
Travels		X-axis	mm (inch)	293 {30.5+262.5} (11.5 {1.2+10.3})*	293 {83+210} (11.5 {3.3+8.3})*	
		Travel distance	Z-axis	mm (inch)	830 / 1350 / 2190 / 3190(32.7 / 53.1 / 86.2 / 125.6)	
		Y-axis	mm (inch)	-		130 (±65) (5.1 (±2.6))
		B-axis	mm (inch)	-		750/1270(29.5/50.0) (SY/LSY)
Feedrates		X-axis	m/min (ipm)	30 (1181.1)		
		Z-axis	m/min (ipm)	30 / 30 / 30 / 26 (1181.1 / 1181.1 / 1181.1 / 1023.6)		
		Y-axis	m/min (ipm)	-		10 (393.7)
		B-axis	m/min (ipm)	-		30 (1181.1)
Spindle	Spindle speed (Belt Type)		r/min	2800		2800 (XLYB/ULYB : 2000)
	Spindle speed (Built-in Type)		r/min	3000		3000 (XLYB/ULYB : N/A)
	Spindle nose			ASA A2#11		
	Spindle bearing diameter (Front)		mm (inch)	160 (6.3)		160 (6.3) (XLYB/ULYB : 180(7.1))
	Spindle through hole diameter		mm (inch)	115 (4.5)		115 (4.5) (XLYB/ULYB : 132(5.2))
	Min. spindle indexing angle (C-axis)		deg	0.001		
Turret	No. of tool stations		st	10	12	
	OD tool size		mm (inch)	25 (1.0)		
	Boring bar diameter		mm (inch)	50 (2.0)		
	Indexing time (1st swivel time)		s	0.15		
	Rotary tool spindle speed		r/min	-	5000	
Tail stock	Quill diameter		mm (inch)	100 / 100 / 120 / 120 (3.9 / 3.9 / 4.7 / 4.7)		
	Quill bore taper (Live)			MT#5		
	Compressed air supply		mm (inch)	100 / 100 / 120 / 120 (3.9 / 3.9 / 4.7 / 4.7)		
Sub-spindle	Spindle speed (Belt [Built-in])		r/min	-		4000
	Spindle nose			-		A2-8
	Spindle bearing diameter (Front)		mm (inch)	-		130
	Spindle through hole diameter		mm (inch)	-		91
	Min. spindle indexing angle (C-axis)		deg	-		0.001
Motors	Main spindle motor		kW (Hp)	22 / 18.5 (30 / 25)		22 / 18.5 (30 / 25) (XLYB/ULYB : 30/22 (40/30))
	Sub spindle motor		kW (Hp)	-		22/22/15 (29.5/29.5 / 20.1)
	Rotary tool spindle motor		kW (Hp)	7.5 / 5.5 (7 / 10)		
	Coolant pump motor		kW (Hp)	-	5.5 {7.5} (7 {10})	
Power source	Electric power supply (Rated capacity)		kVA	41.64 / 41.64 / 42.83 / 42.83	44.42 / 44.42 / 45.61 / 45.61	46.40 / 46.40 / 47.59 / 47.59 (SY/LSY : 62.84, XLYB/ULYB : 55.81)
Machine size	Machine height		mm (inch)	2020 / 2020 / 2315 / 2315 (79.5 / 79.5 / 91.1 / 91.1)		2315 (91.1)
	Machine dimension	length	mm (inch)	3910 / 4530 / 5615 / 6585 (153.9 / 178.3 / 221.1 / 259.3) (XLYB : 5857 (230.6), ULYB : 6827 (268.8))		
		width	mm (inch)	2002 / 2105 / 2280 / 2280 (78.8 / 82.9 / 89.8 / 89.8) (SY : 1978(77.9) / LSY : 2067(81.4))		
	Machine weight		kg (lb)	5850/ 7350 / 10150 / 11650 (12896.9 / 16203.7 / 22376.6 / 23683.5)	6000 / 7500 / 10300 / 11800 (13227.5 / 16534.4/ 22707.3 / 26014.4)	6500 / 8000 / 10800 / 12300 (14329.8 / 17636.7 / 23809.6 / 27116.5) (SY : 7000(15432.1), LSY : 8500(18739.0), XLYB : 11000(24250.5), ULYB : 12500(27557.4))

* The specifications and information above-ntioned may be changed without prior notice.

** : PUMA 3100/M/L/LM/Y/LY

*** : PUMA 3100XL/UL/XLM/ULM/XLY/ULY For more details, please contact DN Solutions.

*{ } : Option