

# JT40RAD

## Performance Table

Module	Item	Model	JT40RAD									
			20V (in preparation)			55V			110V			
			K	A	B (OP)	K	A	B (OP)	K	A	B (OP)	
Injection Unit	Screw cylinder type		K	A	B (OP)	K	A	B (OP)	K	A	B (OP)	
	Screw diameter	in	0.71	0.79	0.87	0.98	1.10	1.26	1.26	1.38	1.57	
	Screw stroke	in	2.559			3.543			4.331			
	Theoretical injection capacity	in <sup>3</sup>	1.04	1.22	1.53	2.69	3.36	4.39	5.37	6.47	8.42	
	Injection capacity (GP-PS)	oz	0.6	0.7	0.8	1.5	1.8	2.4	3.0	3.6	4.6	
	Standard	Injection pressure (Max.)	psi	32200	26110	21610	32780	26110	20020	31180	26110	20020
		Holding pressure (Max.)	psi	29010	23500	19440	29440	23500	17980	28140	23500	17980
		Injection speed	in/s	11.81			10.63			6.30		
		Injection rate	in <sup>3</sup> /s	4.7	5.8	7.0	8.1	10.1	13.3	7.9	9.4	12.3
		Plasticizing rate (GP-PS)	oz/s	0.14	0.18	0.22	0.20	0.24	0.29	0.29	0.39	0.49
		Screw speed	rpm	500			350			300		
		Low-inertia (HR) OP	Injection pressure (Max.)	psi	35820	29010	23930	36410	29010	22190	34660	29010
	Holding pressure (Max.)		psi	32200	26110	21610	32780	26110	20020	31180	26110	20020
	Injection speed		in/s	13.78			13.78			7.87		
	Injection rate		in <sup>3</sup> /s	5.5	6.7	8.1	10.5	13.2	17.2	9.8	11.7	15.3
	Plasticizing rate (GP-PS)		oz/s	0.14	0.18	0.22	0.20	0.24	0.29	0.29	0.39	0.49
	Screw speed		rpm	500			350			300		
	High-speed (HS) OP		Injection pressure (Max.)	psi	35820	29010	23930	36410	29010	22190	—	—
		Holding pressure (Max.)	psi	32200	26110	21610	32780	26110	20020	—	—	—
		Injection speed	in/s	21.65			19.69			—		
Injection rate		in <sup>3</sup> /s	8.6	10.6	12.8	15.0	18.8	24.6	—	—	—	
Plasticizing rate (GP-PS)		oz/s	0.14	0.18	0.22	0.20	0.24	0.29	—	—	—	
Screw speed		rpm	500			350			—			
Nozzle touch force		US ton	1.65			1.65			1.65			
Nozzle stroke from platen	in	0.8										
Type of nozzle		Open nozzle (Tip type)										
Cylinder temperature control		Cylinder: 3 / Nozzle: 1										
Heater wattage	kW	2.8			5.1			7.1				
Clamping Unit	Mechanism		Double toggle									
	Clamping force	US ton	44.1									
	Daylight opening (Max.)	in	18.50									
	Opening stroke (Max.)	in	7.87									
	Mold height	in	6.693~10.630									
	Mold size (Max.)	in	14.37×14.37									
	Lower mold weight (Max.)	lb	496×2 Molds									
	Table outside diameter	in	40.63									
	Ejector point		1 point									
	Ejector force	US ton	1.98									
	Ejector stroke	in	1.575									
Miscellaneous	Machine weight	US ton	3.3 (3.5)*			3.5 (3.7)*			3.7			
	Machine dimensions (LxWxH)	ft	7.30×4.00×8.77			7.30×4.00×9.33			7.30×4.00×10.18			
	Machine dimensions (HS) (LxWxH)	ft	7.30×4.00×10.00			7.30×4.00×10.73			—			
	Table height	ft	2.92									

**Remarks:**

- Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.
- The theoretical injection capacity is (cross sectional area of cylinder) x (stroke of screw).
- The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.
- The plasticizing rate is applicable for GP-PS.
- PC, HPVC, other engineering plastic, etc., low temperature setting and high speed molding may require a high torque depending on the grade or molding conditions. Please contact us if you plan.

**Note:**

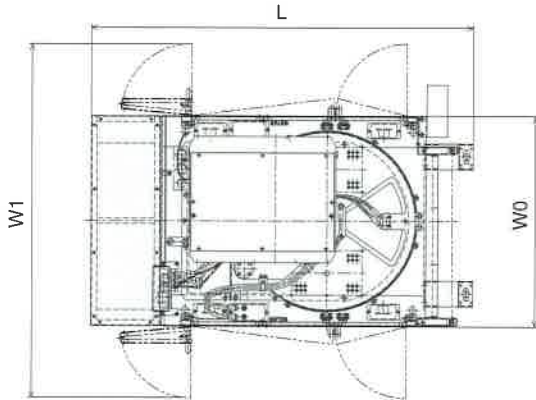
- Due to continual improvements, specifications are subject to change without notice.
- Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.
- Performance specifications are based on theoretical data.
- Low inertia injection specifications and high-speed injection specifications can be handled as option.
- Values in parentheses ( )\* in the table are for high-speed injection specifications.
- Screw cylinder size B is optional.
- 1 MPa = 10.2 kgf/cm<sup>2</sup>, 1 kN = 0.102 tf



JSW Hiroshima Plant

JSW Injection Molding Machinery Division

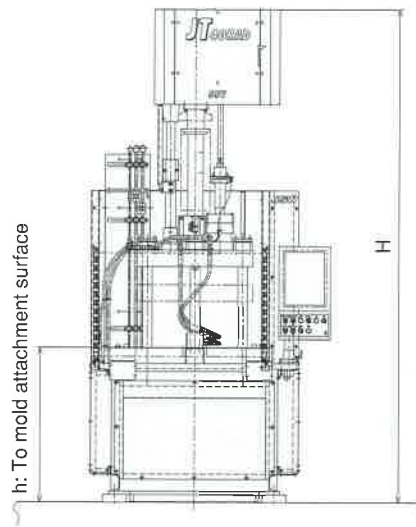
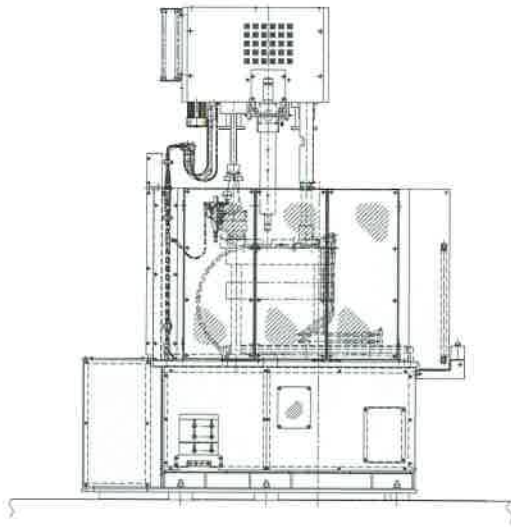
## Dimensions of Machine



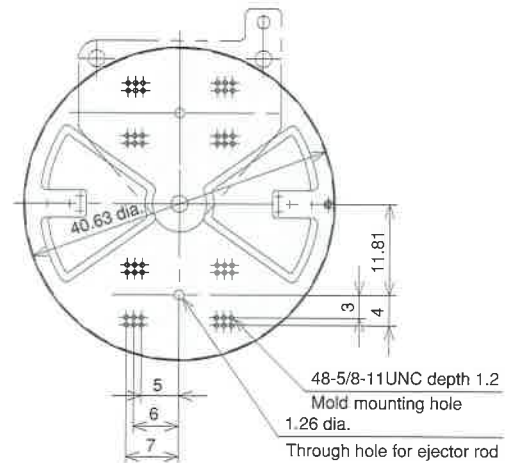
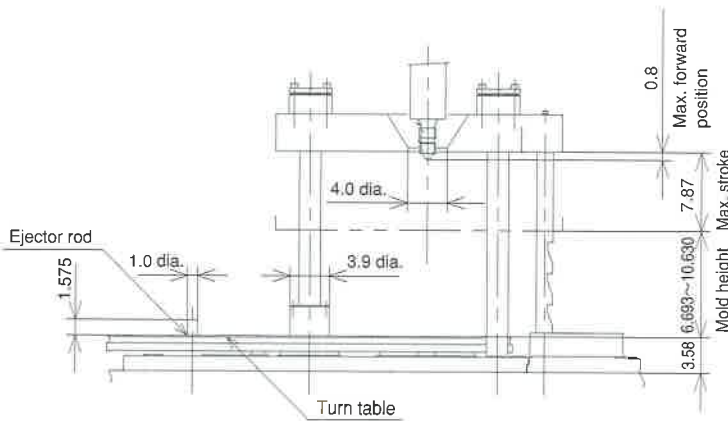
### ■ Dimensions of machine

(Unit: ft)

Model	L	W0	W1	H		h	
				MIN.	MAX.		
JT40RAD	7.30	4.00	6.73	20V	7.10	8.77	2.92
				20V-HR	7.10	8.77	
				20V-HS	8.33	10.00	
				55V	7.66	9.33	
				55V-HR	7.66	9.33	
				55V-HS	9.06	10.73	
				110V	8.50	10.18	
				110V-HR	8.50	10.18	



## Mold Related Dimensions



### ■ Total Power Capacity

Machine Model	Injection unit	Total Power Capacity (kVA)		
		Standard Injection	Low-inertia Injection	High Speed Injection
JT40RAD	20V	19.39	19.39	20.71
	55V	23.83	23.83	24.79
	110V	26.47	27.94	—

Note 1: The above incoming line size and main breaker capacity are values obtained by adding the capacity of molding machine unit to the capacity of mold thermal control/hydraulic unit, which is optional.

Note 2: We recommend that the rated interrupting current of the main power supply breaker is more than 25 kA at AC400V/460V.

### ■ Capacity of Cooling Water (outline)

Model	Injection unit	Cooling Water Capacity for Barrel Temperature Control (ft <sup>3</sup> /h)
		JT40RAD
	55V	
	110V	

Note: The above figures do not include the required quantity of water for the mold temperature controller.

### ■ Capacity of Air

Compressed air pressure	psi	72.5
Compressed air necessity volume	NI/min	2