Specifications

All Electric Servo Drive
Vertical Type Injection Molding Machine

JT AD SERIES

JT 20RAD

Performance Table

Module	Item		Model	JT20RAD					
				20V			55V		
Injection Unit	Screw barrel type			K	A	B (OP)	K	A	B (OP)
	Screw diameter		mm	18	20	22	25	28	32
	Screw stroke		mm	65			90		
	Theoretical injection capacity		cm³	17	20	25	44	55	72
	Injection capacity (GP-PS)		g	16	19	24	42	52	68
	Standard	Injection pressure (Max.)	MPa {kgf/cm²}	222 {2260}	180 {1840}	149 {1520}	226 {2300}	180 {1840}	138 {1410}
		Holding pressure (Max.)	MPa {kgf/cm²}	200 {2040}	162 {1650}	134 {1370}	203 {2070}	162 {1650}	124 {1260}
		Injection speed	mm/s	300			270		
		Injection rate	cm³/s	76	94	114	133	166	217
		Plasticizing rate (GP-PS)	kg/h	14	18	22	20	25	30
		Screw speed	min⁻¹	500			350		
	Low-inertia (HR) OP	Injection pressure (Max.)	MPa {kgf/cm²}	247 {2520}	200 {2040}	165 {1680}	251 {2560}	200 {2040}	153 {1560}
		Holding pressure (Max.)	MPa {kgf/cm²}	222 {2260}	180 {1840}	149 {1520}	226 {2300}	180 {1840}	138 {1410}
		Injection speed	mm/s	350			350		
		Injection rate	cm³/s	89	110	133	172	216	281
		Plasticizing rate (GP-PS)	kg/h	14	18	22	20	25	30
		Screw speed	min⁻¹	500			350		
	High-speed (HS) OP	Injection pressure (Max.)	MPa {kgf/cm²}	247 {2520}	200 {2040}	165 {1680}	—	—	—
		Holding pressure (Max.)	MPa {kgf/cm²}	222 {2260}	180 {1840}	149 {1520}	—	—	—
		Injection speed	mm/s	550			—		
		Injection rate	cm³/s	140	173	209	—	—	—
		Plasticizing rate (GP-PS)	kg/h	14	18	22	—	—	—
		Screw speed	min⁻¹	500			—		
	Nozzle touch force		kN {tf}	15 {1.5}					
	Nozzle stroke from platen		mm	20					
	Type of nozzle			Open nozzle					
	Barrel temperature control			Barrel: 3 / Nozzle: 2					
	Heater wattage		kW	3.0			5.5		
Clamping Unit	Mechanism			Double toggle					
	Clamping force		kN {tf}	196 {20}					
	Daylight opening (Max.)		mm	430					
	Opening stroke (Max.)		mm	200					
	Mold height		mm	150~230					
	Mold size (Max.)		mm	305×305					
	Lower mold weight (Max.)		kg	150×2					
	Table outside diameter		mm	912					
	Ejector point			1 point					
	Ejector force		kN {tf}	18 {1.8}					
	Ejector stroke		mm	40					
Miscellaneous	Machine weight		t	2.6 (2.7)*			2.7		
	Machine dimensions (LxWxH)		m	2.23×1.22×2.64			2.23×1.22×2.79		
	Machine dimensions (HS) (LxWxH)		m	2.23×1.22×3.00			—		
	Table height		mm	884					

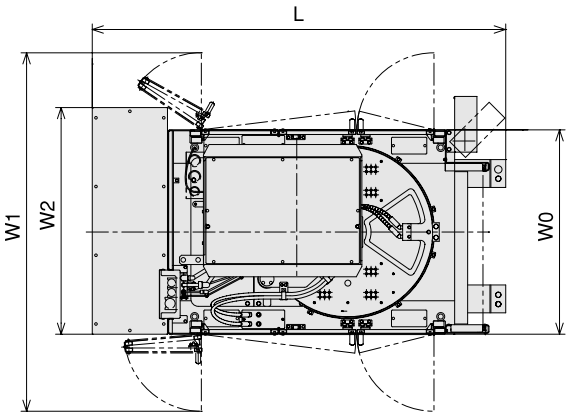
Remarks:
1. Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.
2. The theoretical injection capacity is (cross sectional area of barrel) x (stroke of screw).
3. The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.
4. The plasticizing rate is applicable for GP-PS.
5. 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:
1. Due to continual improvements, specifications are subject to change without notice.
2. Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.
3. Performance specifications are based on theoretical data.
4. Low inertia injection specifications and high-speed injection specifications can be handled as option.
5. Values in parentheses ( )* in the table are for high-speed injection specifications.
6. Screw cylinder size B is optional.
7. 1 MPa = 10.2 kgf/cm², 1 kN = 0.102 tf

JSW

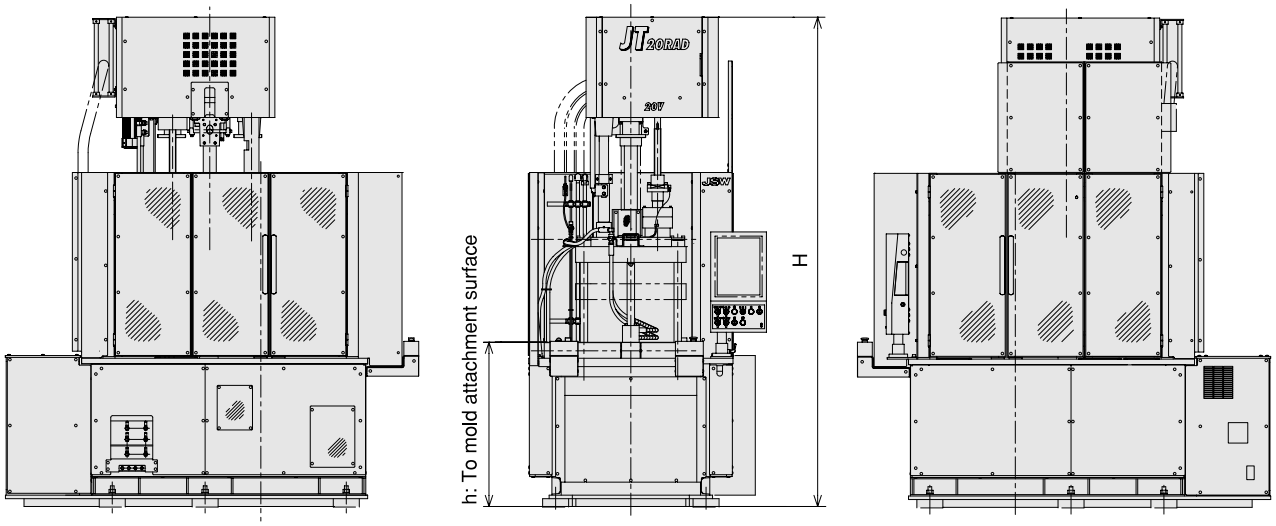
CERTIFIED JQA MANAGEMENT SYSTEM
ISO 9001
ISO 14001
JQA-QMA13993
JQA-EM6416

Dimensions of Machine

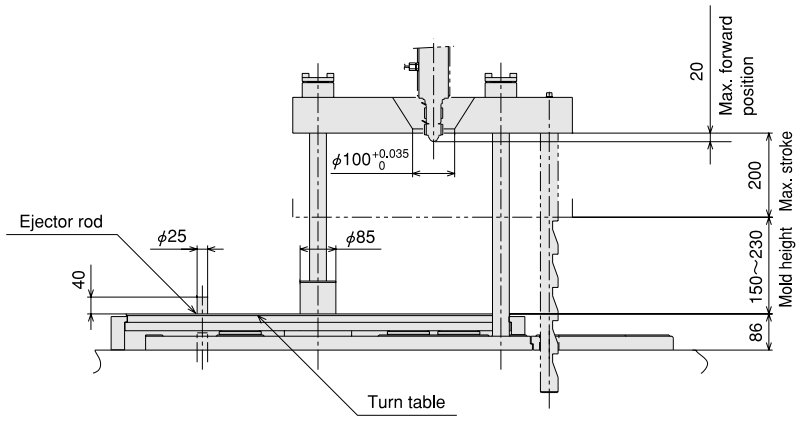


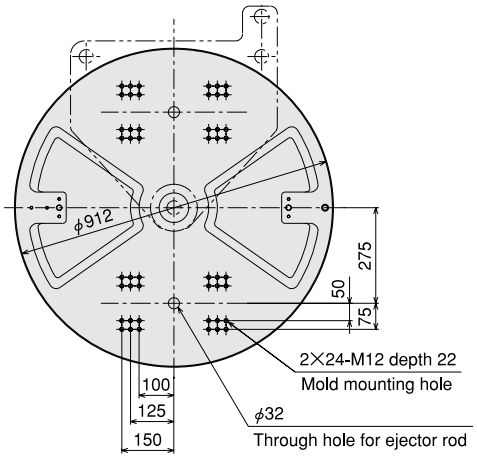
■ Dimensions of Machine (Unit: mm)

Model		L	W0	W1	W2	H		h
						MIN.	MAX.	
JT20RAD	20V	2226	1100	1929	1220	2398	2634	884
	20V-HR					2398	2634	
	20V-HS					2512	2992	
	55V					2398	2790	
	55V-HR					2398	2790	



Mold Related Dimensions





■ Total Power Capacity

Machine Model		Total Power Capacity (kVA)		
	Injection unit	Standard Injection	Low-inertia Injection	High Speed Injection
JT20RAD	20V	18.94	18.94	20.26
	55V	23.48	23.48	—

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 (m³/h)
JT20RAD	20V	0.3
	55V	

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

■ Capacity of Air

Compressed air pressure	MPa	0.5
Compressed air necessity volume	Nl/min	2