

# MDVR55X·MDVR85X

## Specifications

Items		Unit	MDVR55X				MDVR85X				
			Standard				Standard		High pressure		
Injection unit	Injection capacity ※1	T·m	i0.8				i1.4		i1.7		
	Screw type	-	Y (OP.)	YA (OP.)	A	B	A	B	A	B	
	Screw diameter	mm (in)	18(0.71)	22(0.87)	25(0.98)	30(1.18)	30(1.18)	35(1.38)	30(1.18)	35(1.38)	
	Screw stroke	mm (in)	85(3.35)				100 (3.94)				
	Calculated injection volume ※2	cm <sup>3</sup> (cu-in)	22(1.34)	32(1.95)	42(2.56)	60(3.66)	71(4.33)	96(5.86)	71(4.33)	96(5.86)	
	Injection weight(PS) ※3	g (oz)	20(0.71)	30(1.06)	38(1.34)	55(1.94)	65(2.29)	89(3.14)	65(2.29)	89(3.14)	
	Standard Specation.	Max injection pressure ※4	Mpa (psi)	280(40610)	250(36260)	200(29010)	140(20310)	200(29010)	150(21760)	235(34080)	175(25380)
		Max holding pressure ※4	Mpa (psi)	280(40610)	230(33360)	180(26110)	125(18130)	180(26110)	135(19580)	210(30460)	160(23210)
		Max injection speed ※5	mm/s(in/s)	250 (9.84)				250 (9.84)			
		Injection rate	cm <sup>3</sup> /s(cu-in/s)	64(3.91)	95(5.80)	123(7.51)	177(10.80)	177(10.8)	241(14.71)	177(10.8)	241(14.71)
	LP Specation.	Max injection pressure ※4	Mpa (psi)	280(40610)	250(36260)	200(29010)	140(20310)	200(29010)	150(21760)		
		Max holding pressure ※4	Mpa (psi)	280(40610)	230(33360)	180(26110)	125(18130)	180(26110)	135(19580)		
		Max injection speed ※5	mm/s(in/s)	200(7.87)				200(7.87)			
		Injection rate	cm <sup>3</sup> /s(cu-in/s)	51(3.11)	76(4.64)	98(5.98)	141(8.60)	141(8.6)	192(11.72)		
	Screw Speed	min-1	367				369				
	Plasticizing Capacity (PS) ※6	kg/h (oz/s)	9(0.09)	18(0.18)	27(0.26)	44(0.43)	43(0.42)	60(0.59)	43(0.42)	60(0.59)	
Nozzle Stroke	mm (in)	205(8.07)(Max.355(13.98))				205(8.07)(Max.355(13.98))					
Nozzle Touch Force	kN(Ust)	15(1.69)				15(1.69)					
Clamping unit	Clamping System	-	Double toggle				Double toggle				
	Clamping Force	kN(Ust)	500(56)				750(84.3)				
	Max.Mold Size ※7	mm (in)	365(14.37)×365(14.37)				420(16.54)×420(16.54)				
	Max. Mold Weight ※8	kg (oz )	Upper : 100 (3527) / Lower : 200(7054)×2 pcs				Upper : 150 (5291) / Lower : 300(10582)×2 pcs				
	Mold Opening Stroke	mm (in)	200(7.87)				250(9.84)				
	Mold Height(Min./Max)	mm (in)	150(5.91) / 300(11.81)				220(8.66)/320(12.60)				
	Open Daylight	mm (in)	500(19.69)				570(22.44)				
	Table Diameter	mm (in)	1060((41.73)				1206(47.48)				
	Ejector Stroke	mm (in)	60(2.36)				60(2.36)				
Ejector Force	kN(Ust)	22(2.47)				22(2.47)					
Others	Number of Ejector Rods	-	1				1				
	Machine Size (LXWXH) ※9	mm (in)	2317(91.22)×1436(56.54)×3049(120.04)				2460(96.85)X1576(62.05)X3356(132.13)				
	Height of Mold Mounting Surface	mm (in)	990(38.98)				1040 (40.9)				
	Machine Weight	t(Ust)	4.1(4.5)				5.4(5.9)				
	Power Supply	-	3 phase AC200V				3 phase AC200V				
	Temperature Control Zone (Nozzle/Heating barrel)	-	1G+2+1G				1G+2+1G				
	Temperature Control Zone (Hopper Base)	-	1				1				
	Heating Capacity	kW	3.0	3.5	4.2		6.31				
	Electric Capacity ※10	kVA	14				17		22		
	Cable Size ※11	mmf(A.W.G.)	8 ( 8 )				8 ( 8 )				
	Breaker	A	50				60				
	Max. Compressed Air Consumption ※12	Nl/min(gal/min)	200 (52.87 )				200 (52.87 )				
	Max. Coolig Water Consumption ※13	L/min(gal/min)	5 ( 1.32 )				5 ( 1.32 )				

● The mark of this "op." shows optional specification.

● Specifications are subject to change without notice.

※1.Injection capacity is shown by "maximum injection pressure"×  
"calculated injection capacity" = T·m.

※2.Calculated Injection Volume is reckoned with "screw's sectional area" ×"screw stroke".

※3.Shot mass is given by 92 % of Calculated Injection Volume with a mass of polystyrene.

※4.Max. injection pressure and Max. holding pressure will be limited by molding conditions.

※5.Max. Injection speed cannot reach this value by the effect of the load in case.

※6.Plasticizing capacity is shown by a mass of polystyrene.

※7.It shows square mold case.

※8.Consult with Niigata personnel when a mold weight exceeds these value.

※9.Exclude optional auxiliary equipments.

※10.This numerical value shows the standard capacity except ancillary equipment for the machine. If an equipment shall be installed to the machine, their power should be added to the machine power.

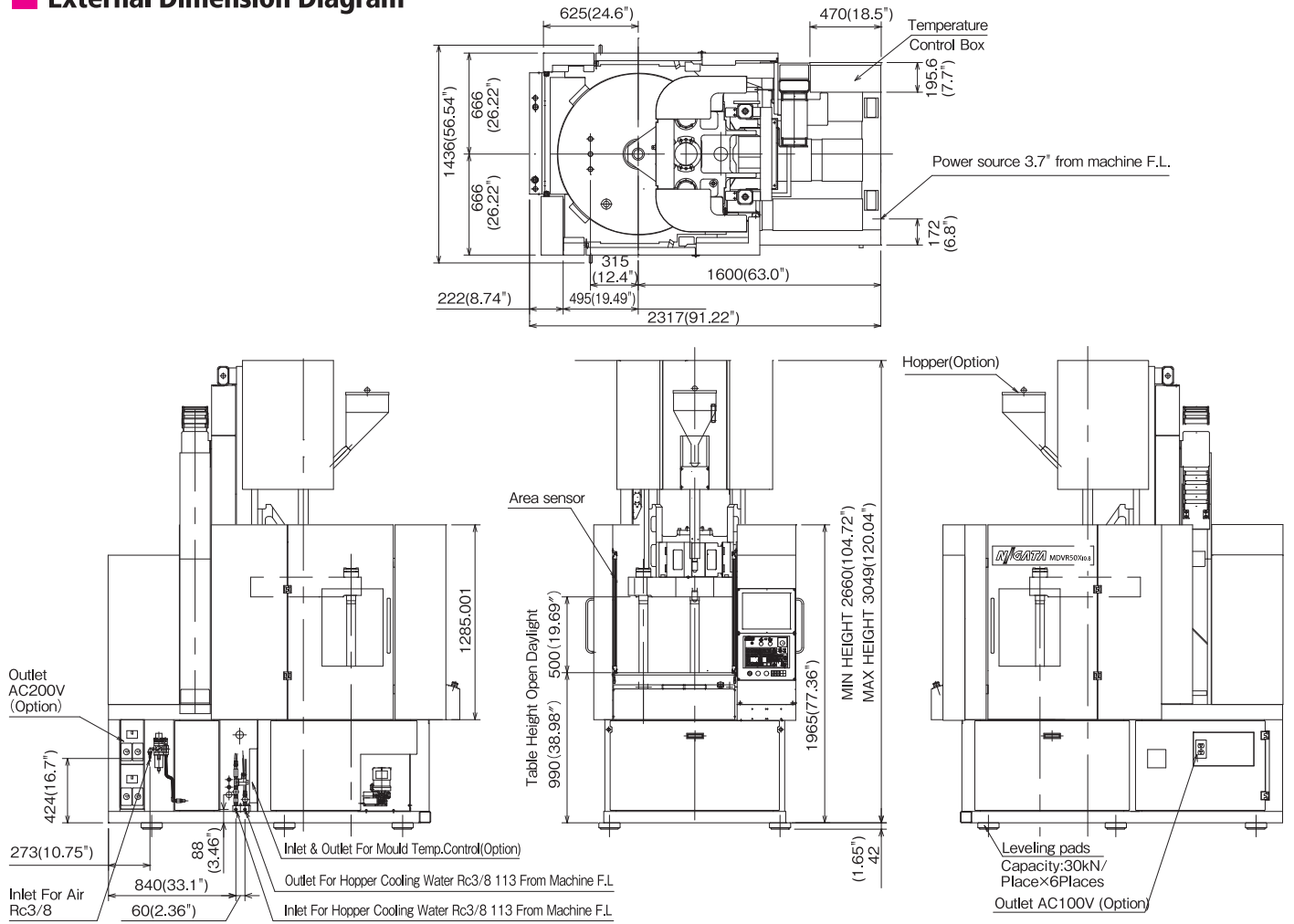
※11.Cable size is case of electrical hook up wire. It is need to reflect current derating (correcting) factor when multi conductor cable or so is used.

※12.Air consumption is different by cycle time. The air pressure value should be more than 0.35 Mpa ( 50.76 psi) for MDVR55X and 85X and more than 0.5 Mpa ( 72.52 psi) for MDVR10X and 165X.

※13.Water is used for hopper base cooling and it should maintain its pressure less than 0.5Mpa.

# MDVR55X

## External Dimension Diagram



## Mold Mounting Dimension Diagram

