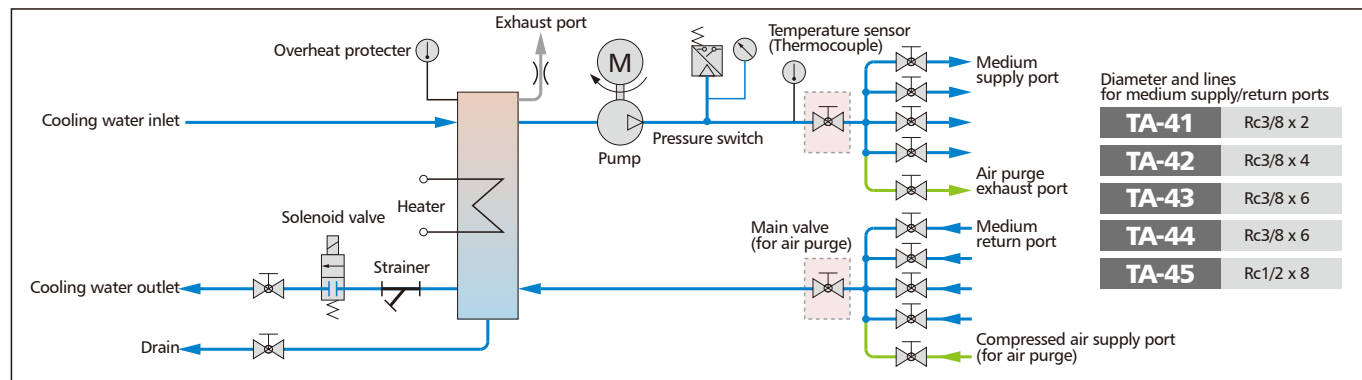


TA/TB/TC series

Digital Mold Temperature Controller

		TA-41	TA-42	TA-43	TA-44	TA-45 Build-to-order	
Heating medium		Water					
Temperature setting range	℃	Water supply temperature + 10 -- Max. 95 (Accuracy: ±1)					
Cooling mechanism		Direct cooling					
Total electric capacity (50/60Hz)	kVA	3.63 / 3.53	6.84 / 6.70	10.57 / 10.43	15.46 / 15.39	19.16 / 19.09	
Heater power	kW	2.9	5.8	8.7	12.0	15.0	
Pump	Type	Multistage whirlpool pump					
	Motor power	kW	0.37	0.55	1.1	2.2	3.0
	Max. pressure	MPa	0.16 / 0.25	0.34 / 0.39	0.42 / 0.62	0.31 / 0.42	0.43 / 0.41
	Max. flowrate	L/min	40 / 48	60 / 70	75 / 90	200 / 235	367 / 433
Controller	Temperature control mechanism	Heating: PID, Cooling: Proportional					
	Temperature detection mechanism	Thermocouple type JIS K (Set on the medium supply line)					
	Setting and indication mechanism	Touch keys and digital display					
	Timer	Setting range: 0 -- 99 hr (Operation start after set time elapses)					
	Alarm	Pump overload, low water supply pressure, overheating, sensor disconnection, reverse phase, set temperature					
Piping	Cooling water inlet	Rc3/8	Rc3/8	Rc3/8	Rc3/8	Rc1/2	
	Cooling water outlet	Rc3/8	Rc3/8	Rc3/8	Rc3/8	Rc1/2	
	Medium supply port	Rc3/8 x 2	Rc3/8 x 4	Rc3/8 x 6	Rc3/8 x 6	Rc1/2 x 8	
	Medium return port	Rc3/8 x 2	Rc3/8 x 4	Rc3/8 x 6	Rc3/8 x 6	Rc1/2 x 8	
	Drain	Rc3/8	Rc3/8	Rc3/8	Rc3/8	Rc1/2	
	Air purge exhaust port	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/8	
Tank capacity	L	1.2	2.0	2.7	2.7	14.0	
Power	Power supply standard	200 / 220V 50 / 60Hz 3ø					
	Power plug	20A-3P plug with protective ground	30A-3P plug with protective ground	Without plug			
Outer dimensions (WxDxH)	mm	263 x 546 x 551	263 x 546 x 600	295 x 570 x 702	333 x 620 x 795	483 x 870 x 1,105	
Weight	kg	55	60	75	100	210	
Accessories	Heat-resistant hose	8m x 1	16m x 1	12m x 2	Special arrangement		
	Hose nipple (1004-9)	x 8	x 16	x 24	Special arrangement		
	Adaptor (1013-3/8 x 1/8)	x 8	x 16	x 24	Special arrangement		
	Adaptor (1013-3/8 x 1/4)	x 8	x 16	x 24	Special arrangement		

TA series flow chart



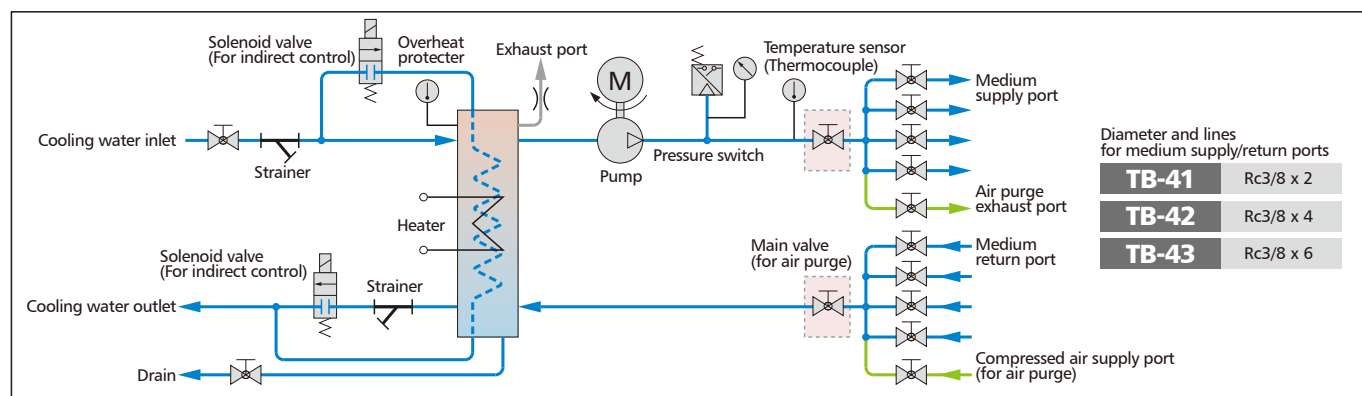
- Use cooling water in a pressure range of 0.15 -- 0.2 MPa. Pressures greater than 0.59 MPa require a regulator and relief valve.
- Use of a regulator on the cooling water supply side and use of cooling water flowmeters of molding machines exceeds 0.59 MPa, therefore a regulator and relief valve are required.
- If discharge return pressure to a cooling tower or other source exceeds 0.15 MPa, cooling water cannot be discharged from the temperature controller even when cooling water pressure is reduced to 0.15 MPa via a regulator. In such case, run cooling water discharge directly into a pit.
- Prepare a regulator and relief valve separately.
- The air purge is optional equipment.
- Specifications are subject to change without notice.

TA/TB/TC series

Digital Mold Temperature Controller

		TB-41	TB-42	TB-43	
Heating medium		Water			
Temperature setting range	℃	Water supply temperature +10 -- Max. 120 (Accuracy: ±1)			
Cooling mechanism		Direct / Indirect cooling switching			
Total electric capacity (50/60Hz)	kVA	3.63 / 3.53	6.84 / 6.70	10.57 / 10.43	
Heater power	kW	2.9	5.8	8.7	
Pump	Type	Multistage whirlpool pump			
	Motor power	kW	0.37	0.55	1.1
	Max. pressure	MPa	0.16 / 0.25	0.34 / 0.39	0.42 / 0.62
	Max. flowrate	L/min	40 / 48	60 / 70	75 / 90
Controller	Temperature control mechanism	Heating: PID, Cooling: Proportional			
	Temperature detection mechanism	Thermocouple type JIS K (Set on the medium supply line)			
	Setting and indication mechanism	Touch keys and digital display			
	Timer	Setting range: 0 -- 99 hr (Operation start after set time elapses)			
	Alarm	Pump overload, low water supply pressure, overheating, sensor disconnection, reverse phase, set temperature			
Piping	Cooling water inlet	Rc3/8	Rc3/8	Rc3/8	
	Cooling water outlet	Rc3/8	Rc3/8	Rc3/8	
	Medium supply port	Rc3/8 x 2	Rc3/8 x 4	Rc3/8 x 6	
	Medium return port	Rc3/8 x 2	Rc3/8 x 4	Rc3/8 x6	
	Drain	Rc3/8	Rc3/8	Rc3/8	
	Air purge exhaust port	Rc1/8	Rc1/8	Rc1/8	
Tank capacity	L	1.0	1.6	2.3	
Power	Power supply standard	200 / 220V 50 / 60Hz 3ø			
	Power plug	20A-3P plug with protective ground	30A-3P plug with protective ground	Without plug	
Outer dimensions (WxDxH)	mm	263 x 546 x 551	263 x 546 x 600	295 x 572 x 702	
Weight	kg	55	60	75	
Accessories	Heat-resistant hose	8m x 1	16m x 1	12m x 2	
	Hose nipple (1004-9)	x 8	x 16	x 24	
	Adaptor (1013-3/8 x 1/8)	x 8	x 16	x 24	
	Adaptor (1013-3/8 x 1/4)	x 8	x 16	x 24	

■ TB series flow chart



Precautions in use in direct cooling mode ---

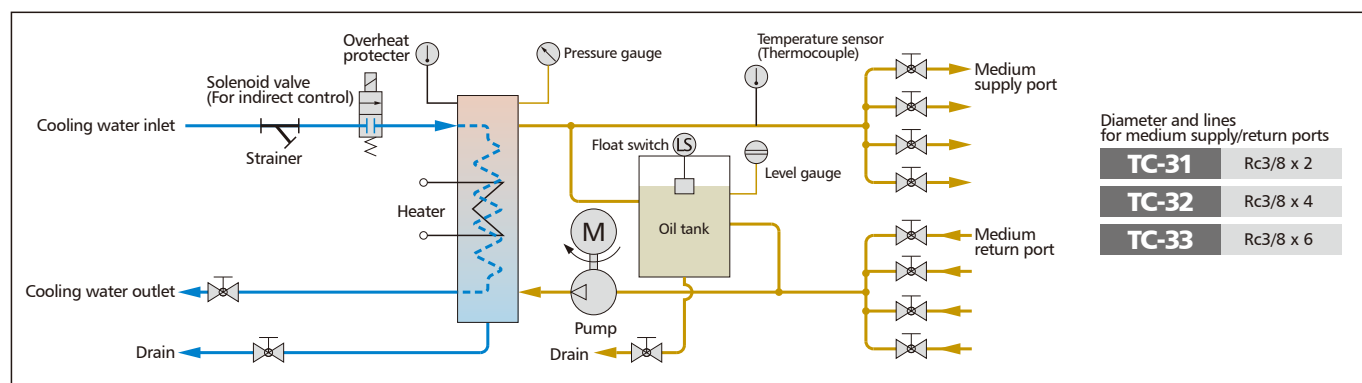
- Use cooling water in a pressure range of 0.25 -- 0.3 MPa. Pressures greater than 0.59 MPa require a regulator and relief valve.
- Also, pressures of 0.15 MPa and below can cause cavitation, therefore do not use them.
- Use of a regulator on the cooling water supply side and use of cooling water flowmeters of molding machines exceeds 0.59 MPa, therefore a regulator and relief valve are required.
- If discharge return pressure to a cooling tower or other source exceeds 0.25 MPa, cooling water cannot be discharged from the temperature controller even when cooling water pressure is reduced to 0.25 MPa via a regulator. In such case, either run cooling water discharge directly into a pit or use the indirect cooling mode.
- Prepare a regulator and relief valve separately.
- The air purge is optional equipment.
- Specifications are subject to change without notice.

TA/TB/TC series

Digital Mold Temperature Controller

			TC-31	TC-32	TC-33
Heating medium			Oil		
Temperature setting range		℃	Water supply temperature +30 -- Max. 150 (Accuracy: ±1)		
Cooling mechanism			Indirect cooling		
Total electric capacity (50/60Hz)		kVA	3.69 / 3.66	7.18 / 7.11	11.01 / 10.97
Heater power		kW	3.0	6.0	9.0
Pump	Type		Cascade pump		
	Motor power	kW	0.4	0.75	1.5
	Max. pressure	MPa	0.47 / 0.39	0.49 / 0.39	0.64 / 0.54
	Max. flowrate	L/min	25 / 32	50 / 62	80 / 94
Controller	Temperature control mechanism		Heating: PID, Cooling: Proportional		
	Temperature detection mechanism		Thermocouple type JIS K (Selectable between medium supply and medium return lines)		
	Setting and indication mechanism		Touch keys and digital display		
	Timer		Setting range: 0 -- 99 hr (Operation start after set time elapses)		
	Alarm		Pump overload, low water supply pressure, overheating, sensor disconnection, reverse phase, set temperature		
Piping	Cooling water inlet		Rc3/8	Rc3/8	Rc3/8
	Cooling water outlet		Rc3/8	Rc3/8	Rc3/8
	Medium supply port		Rc3/8 x 2	Rc3/8 x 4	Rc3/8 x 6
	Medium return port		Rc3/8 x 2	Rc3/8 x 4	Rc3/8 x 6
	Drain		Rc3/8	Rc3/8	Rc3/8
	Air purge exhaust port		Rc1/8	Rc1/8	Rc1/8
Tank capacity		L	2.9	4.9	6.6
Power	Power supply standard		200 / 220V 50 / 60Hz 3ø		
	Power plug		20A-3P plug with protective ground	30A-3P plug with protective ground	Without plug
Outer dimensions (WxDxH)		mm	220 x 540 x 586	250 x 570 x 759	290 x 630 x 921
Weight		kg	54	76	99
Accessories	Heat-resistant hose		8m x 1	16m x 1	12m x 2
	Hose nipple (1004-9)		x 8	x 16	x 24
	Adaptor (1013-3/8 x 1/8)		x 8	x 16	x 24
	Adaptor (1013-3/8 x 1/4)		x 8	x 16	x 24
	Heating oil (5L)		x 1	x 2	x 3
	Funnel (15cm)		x 1	x 1	x 1

■ TC series flow chart



- Use a heat-resistant (to 230°C) Teflon hose for medium temperatures of 120 -- 150°C.
- Specifications are subject to change without notice.