



SINCE 1962

**Cooling Tower**

**LRC-H  
LRC-SAS**

**SQUARE CROSS FLOW COOLING TOWER**

良機

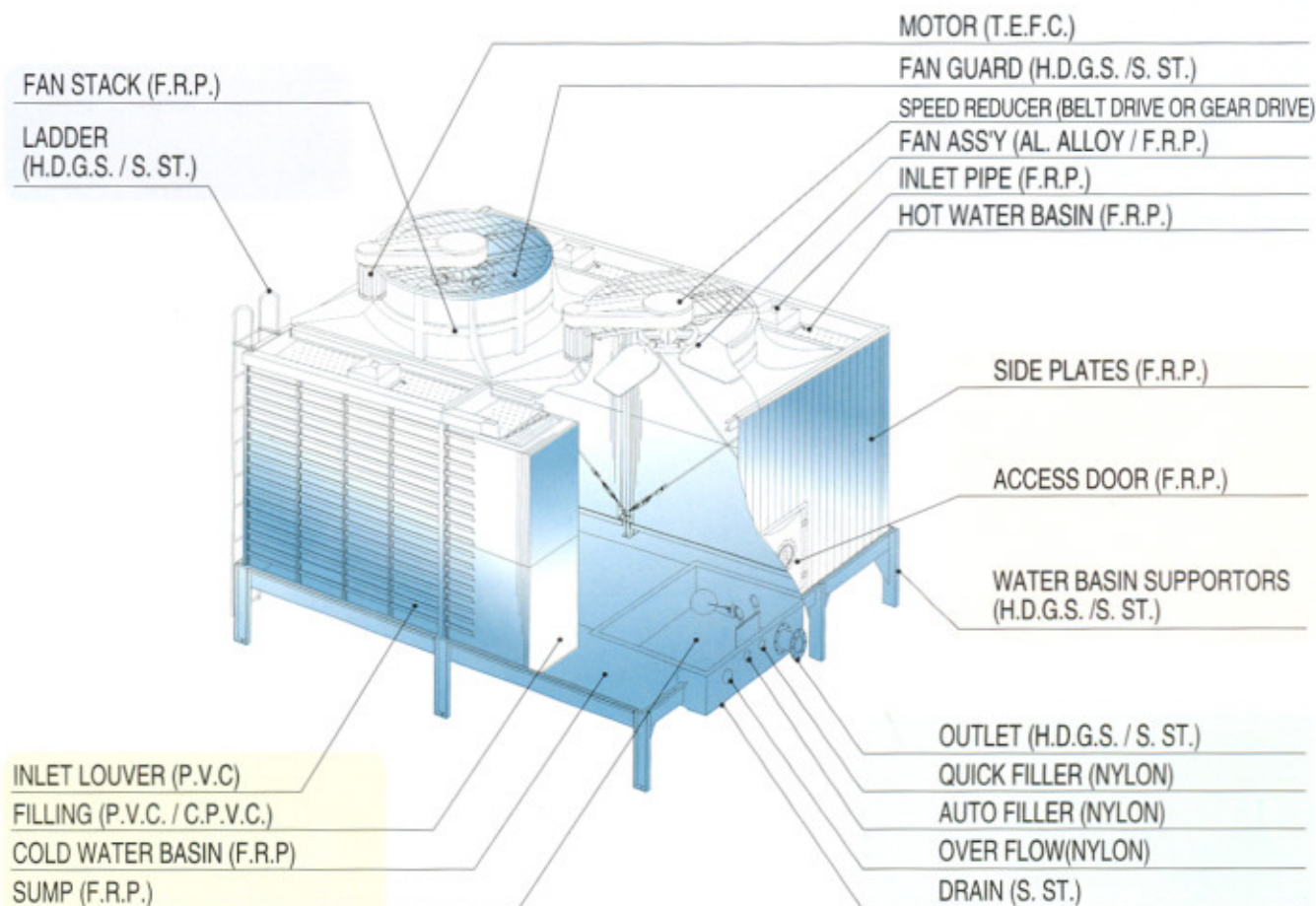
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# LRC-H AND LRC-SAS SQUARE CROSS FLOW TYPE COOLING TOWER

## PROFILE AND MATERIAL



### Remarks:

1. Above details are demonstrating the profile, parts name and various materials of the cooling tower. The black characters in the parentheses stand for the standard material while the red ones mean the special material that is optional. If necessary, please verify the specific material in advance so that we can quote accordingly.

2. Below are the optional accessories and If necessary, they can be purchased additionally..

- (a) Direct drive motor for LRC-H series
- (b) Internal piping
- (c) Cover for hot water basin
- (d) Ladder complete with safety cage
- (e) Safety handrail
- (f) Channel bases
- (g) Vibration isolator
- (h) Sand filter



# LRC-H AND LRC-SAS SQUARE CROSS FLOW TYPE COOLING TOWER

## CONSTRUCTION AND FEATURES

### Inlet Louver & Side Plate

PVC Inlet louvers and FRP side plates are anti-acid, anti-alkaline, weather-proof, anti-corrosive and resistant to Ultra-Violet, none-twisted and non-deformed.

### Water Sump

The water sump is made of FRP material and externally supported with hot-dipped-galvanized steel. The piping of water sump includes outlet water, auto filler pipe, quick filler pipe, over-flow pipe and drain pipe. The stainless steel suction strainer is installed on outlet pipe to blockade the alien objects from entering. The basin partitions can be additionally installed for multiple cells so that the tower can be cleaned or maintained for the individual cell or partially, without affecting the operation of the whole system.

### Plenum

The cross flow type's heat exchanging process is applied. The direct contact between vertical air from both sides and the falling water from hot water basin occurs inside the PVC fillings so that the heat can be rejected from the tower by the fan. The access door and walkway equipped inside the tower are to insure the convenience of maintenance and cleaning.

### Motor

Outdoor TEFC motors are applied.

### Fan & Driving Unit

The axial fan design is applied and can be adjusted based on actual operation of air volume. The speed reducer is driven with multi-belts to insure that there is larger contact area, low vibration and smooth transmission. The belts are protected with FRP casing so that they are not wetted and not gliding.

### Filling

PVC fillings are vacuum-formed and glued together on nipple ends so that there is adequate space to avoid scaling and clogging. Thus, the water can be evenly distributed to insure good heat exchanging of cooling towers. Each layer of filling block has steel supporters to prevent from deforming and falling off. The bottom are designed with suspended supporters to avoid depositing various objects and scaling so that cooling towers can be ease of maintenance and cleaning.

### Distribution System

Hot water basins are installed on two sides of tower and distribution water is gravitationally falling into tower with low water pressure. This design leads the water to spread into the fillings evenly and achieve the best efficiency of heat exchanging. FRP distribution box inside can lower the inlet water pressure to prevent the water from splashing.

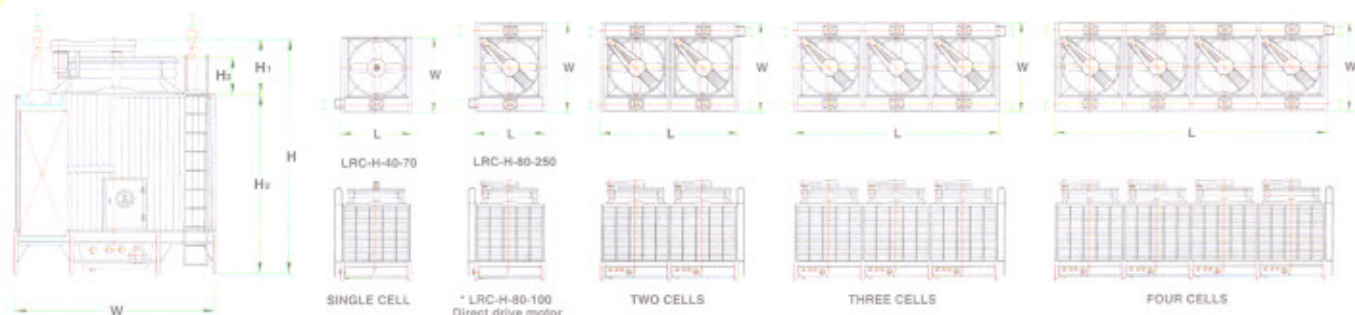
### Float Valve Ass'y

Bronze Float valve ass'y is equipped inside the water basin and adjustable for controlling normal water level during operation.

### Water Eliminators

The Z type water eliminators placed on the top of filling have best water elimination efficiency and are capable to save the make-up water by reducing drift loss.



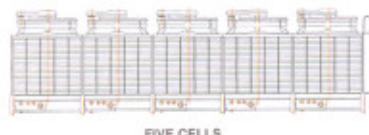
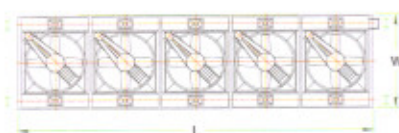


Item Model LRC-H	Water Flow Rate l/min	Dimensions						Driving Equipment		
		Width m/m	Length m/m	Height				Horsepower HP	Fan Dia. Dφmm	Air Volume M <sup>3</sup> /MIN/CELL
				(H)	(H <sub>1</sub> )	(H <sub>2</sub> )	(H <sub>3</sub> )			
40	520	2045	1555	3515	665	2850	460	1x1	1000	260
50	650	2045	1755	3515	665	2850	460	1x1	1000	330
60	780	2145	1955	3625	775	2850	460	1½x1	1200	420
70	910	2145	2155	3625	775	2850	460	1½x1	1200	450
80	1040	2680	1555	3670	820	2850	460	2x1	1200	560
100	1300	2680	1755	3670	820	2850	460	2x1	1300	700
125	1625	2880	1955	3660	810	2850	460	5x1	1500	840
150	1950	2880	2155	3710	860	2850	460	5x1	1500	995
175	2275	3080	2360	3710	860	2850	500	7½x1	1700	1135
200	2600	3180	2560	3730	880	2850	520	7½x1	1800	1340
225	2925	3380	2660	3730	880	2850	520	7½x1	2000	1540
250	3250	3380	2960	3730	880	2850	520	10x1	2000	1690
40-C2	1040	2045	2960	3515	665	2850	460	1x2	1000	260
50-C2	1300	2045	3360	3515	665	2850	460	1x2	1000	330
100-C2	2600	2680	3360	3670	820	2850	460	2x2	1300	700
125-C2	3250	2880	3760	3660	810	2850	460	5x2	1500	840
150-C2	3900	2880	4160	3710	860	2850	460	5x2	1500	995
175-C2	4550	3080	4570	3710	860	2850	500	7½x2	1700	1135
200-C2	5200	3180	4970	3730	880	2850	520	7½x2	1800	1340
225-C2	5850	3380	5170	3730	880	2850	520	7½x2	2000	1540
250-C2	6500	3380	5770	3730	880	2850	520	10x2	2000	1690
50-C3	1950	2045	4965	3515	665	2850	460	1x3	1000	330
100-C3	3900	2680	4965	3670	820	2850	460	2x3	1300	700
150-C3	5850	2880	6165	3710	860	2850	460	5x3	1500	995
200-C3	7800	3180	7380	3730	880	2850	520	7½x3	1800	1340
50-C4	2600	2045	6570	3515	665	2850	460	1x4	1000	330
100-C4	5200	2680	6570	3670	820	2850	460	2x4	1300	700
125-C4	6500	2880	7370	3660	810	2850	460	5x4	1500	840
150-C4	7800	2880	8170	3710	860	2850	460	5x4	1500	995
175-C4	9100	3080	8990	3710	860	2850	500	7½x4	1700	1135
200-C4	10400	3180	9790	3730	880	2850	520	7½x4	1800	1340
225-C4	11700	3380	10190	3730	880	2850	520	7½x4	2000	1540
250-C4	13000	3380	11390	3730	880	2850	520	10x4	2000	1690
40-C5	2600	2045	7175	3515	665	2850	460	1x5	1000	260
50-C5	3250	2045	8175	3515	665	2850	460	1x5	1000	330
60-C5	3900	2145	9175	3625	775	2850	460	1½x5	1200	420
70-C5	4550	2145	10175	3625	775	2850	460	1½x5	1200	450
80-C5	5200	2680	7175	3670	820	2850	460	2x5	1200	560
100-C5	6500	2680	8175	3670	820	2850	460	2x5	1300	700
200-C5	13000	3180	12200	3730	880	2850	520	7½x5	1800	1340
225-C5	14625	3380	12700	3730	880	2850	520	7½x5	2000	1540
250-C5	16250	3380	14200	3730	880	2850	520	10x5	2000	1690

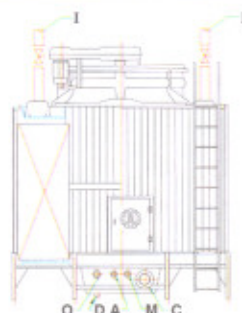
- Design Criteria: HWT=37°C ; CWT=32°C ; WBT=27°C ; Water Flow Rate=13 LPM/RT
- Total Pump Head: Piping Friction Loss + Chiller Pressure Loss+Tower Head
- Other multi-cells that are not listed are also available. Please contact your local sales engineers.



# LRC-H PIPING SPECIFICATIONS

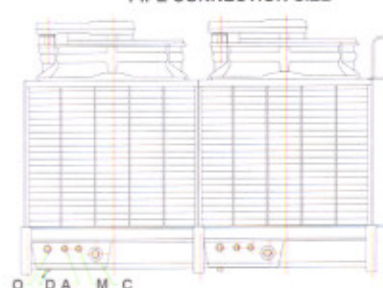


FIVE CELLS



LRC-H-40-250

PIPE CONNECTION SIZE



LRC-H-40-C2-250-C5

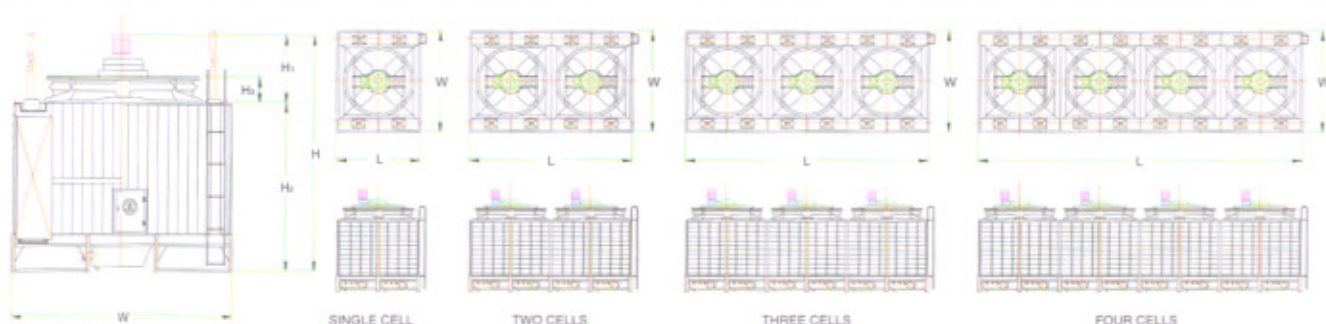
Item Model LRC-H	Dry Weight kg	Operating Weight kg	Tower Head M	Piping Dimensions					Auto Make-Up Manual Make-Up
				Inlet	Outlet	Drain	Overflow		
40	430	1150	3.5	3B(80A)x1	3B(80A)x1	2B(50A)x1	2B(50A)x1	1/2B(15A)x1	
50	480	1320	3.5	3B(80A)x1	3B(80A)x1	2B(50A)x1	2B(50A)x1	1/2B(15A)x1	
60	540	1520	3.5	4B(100A)x1	4B(100A)x1	2B(50A)x1	2B(50A)x1	3/4B(20A)x1	
70	620	1780	3.5	4B(100A)x1	4B(100A)x1	2B(50A)x1	2B(50A)x1	3/4B(20A)x1	
80	710	1940	3.7	3B(80A)x2	4B(100A)x1	2B(50A)x1	2B(50A)x1	3/4B(20A)x1	
100	750	2050	3.7	3B(80A)x2	5B(125A)x1	2B(50A)x1	2B(50A)x1	1B(25A)x1	
125	800	2220	3.7	4B(100A)x2	5B(125A)x1	2B(50A)x1	2B(50A)x1	1B(25A)x1	
150	850	2320	3.7	4B(100A)x2	6B(150A)x1	2B(50A)x1	2B(50A)x1	1B(25A)x1	
175	970	2670	3.8	5B(125A)x2	6B(150A)x1	2B(50A)x1	2B(50A)x1	1B(25A)x1	
200	1030	2830	3.8	5B(125A)x2	8B(200A)x1	2B(50A)x1	2B(50A)x1	1 1/2B(32A)x1	
225	1120	3170	3.8	5B(125A)x2	8B(200A)x1	2B(50A)x1	2B(50A)x1	1 1/2B(32A)x1	
250	1200	3370	3.8	5B(125A)x2	8B(200A)x1	2B(50A)x1	2B(50A)x1	1 1/2B(32A)x1	
40-C2	760	2200	3.5	3B(80A)x2	3B(80A)x2	2B(50A)x2	2B(50A)x2	1/2B(15A)x2	
50-C2	860	2540	3.5	3B(80A)x2	3B(80A)x2	2B(50A)x2	2B(50A)x2	1/2B(15A)x2	
100-C2	1400	4000	3.7	3B(80A)x4	5B(125A)x2	2B(50A)x2	2B(50A)x2	1B(25A)x2	
125-C2	1500	4340	3.7	4B(100A)x4	5B(125A)x2	2B(50A)x2	2B(50A)x2	1B(25A)x2	
150-C2	1600	4540	3.7	4B(100A)x4	6B(150A)x2	2B(50A)x2	2B(50A)x2	1B(25A)x2	
175-C2	1840	5240	3.8	5B(125A)x4	6B(150A)x2	2B(50A)x2	2B(50A)x2	1B(25A)x2	
200-C2	1960	5560	3.8	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/2B(32A)x2	
225-C2	2140	6240	3.8	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/2B(32A)x2	
250-C2	2300	6640	3.8	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/2B(32A)x2	
50-C3	1240	3760	3.5	3B(80A)x3	3B(80A)x3	2B(50A)x3	2B(50A)x3	1/2B(15A)x3	
100-C3	2050	5950	3.7	3B(80A)x6	5B(125A)x3	2B(50A)x3	2B(50A)x3	1B(25A)x3	
150-C3	2350	6760	3.7	4B(100A)x6	6B(150A)x3	2B(50A)x3	2B(50A)x3	1B(25A)x3	
200-C3	2890	8290	3.8	5B(125A)x6	8B(200A)x3	2B(50A)x3	2B(50A)x3	1 1/2B(32A)x3	
50-C4	1620	4980	3.5	3B(80A)x4	3B(80A)x4	2B(50A)x4	2B(50A)x4	1/2B(15A)x4	
100-C4	2700	7900	3.7	3B(80A)x8	5B(125A)x4	2B(50A)x4	2B(50A)x4	1B(25A)x4	
125-C4	2900	8580	3.7	4B(100A)x8	5B(125A)x4	2B(50A)x4	2B(50A)x4	1B(25A)x4	
150-C4	3100	8980	3.7	4B(100A)x8	6B(150A)x4	2B(50A)x4	2B(50A)x4	1B(25A)x4	
175-C4	3580	10380	3.8	5B(125A)x8	6B(150A)x4	2B(50A)x4	2B(50A)x4	1B(25A)x4	
200-C4	3820	11020	3.8	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/2B(32A)x4	
225-C4	4180	12380	3.8	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/2B(32A)x4	
250-C4	4500	13180	3.8	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/2B(32A)x4	
40-C5	1750	5350	3.5	3B(80A)x5	3B(80A)x5	2B(50A)x5	2B(50A)x5	1/2B(15A)x5	
50-C5	2000	6200	3.5	3B(80A)x5	3B(80A)x5	2B(50A)x5	2B(50A)x5	1/2B(15A)x5	
60-C5	2300	7200	3.5	4B(100A)x5	4B(100A)x5	2B(50A)x5	2B(50A)x5	3/4B(20A)x5	
70-C5	2700	8500	3.5	4B(100A)x5	4B(100A)x5	2B(50A)x5	2B(50A)x5	3/4B(20A)x5	
80-C5	3150	9300	3.7	3B(80A)x10	4B(100A)x5	2B(50A)x5	2B(50A)x5	3/4B(20A)x5	
100-C5	3350	9850	3.7	3B(80A)x10	5B(125A)x5	2B(50A)x5	2B(50A)x5	1B(25A)x5	
200-C5	4750	13750	3.8	5B(125A)x10	8B(200A)x5	2B(50A)x5	2B(50A)x5	1 1/2B(32A)x5	
225-C5	5200	15450	3.8	5B(125A)x10	8B(200A)x5	2B(50A)x5	2B(50A)x5	1 1/2B(32A)x5	
250-C5	5600	16450	3.8	5B(125A)x10	8B(200A)x5	2B(50A)x5	2B(50A)x5	1 1/2B(32A)x5	

- If the pipe diameter is to change or equalized pipes are required, please contact your local sales engineer in advance.
- External piping size (dia.) for make-up pipe 1 1/4B(32A) is 1 1/2B(40A)





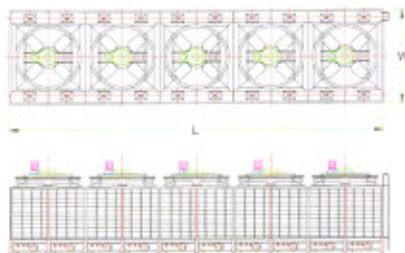
# LRC-SAS DIMENSIONAL OUTLINE & STANDARD SPECIFICATIONS



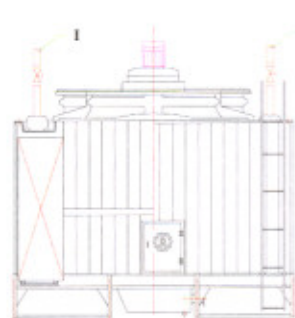
Item Model LRC-SAS	Water Flow Rate l/min	Dimensions						Driving Equipment		
		Width m/m	Length m/m	Height				Horsepower HP	Fan Dia. D φ mm	Air Volume M <sup>3</sup> /MIN/CELL
				(H) m/m	(H <sub>1</sub> ) m/m	(H <sub>2</sub> ) m/m	(H <sub>3</sub> ) m/m			
300	3900	4380	3570	4560	1460	3100	620	10x1	2970	1850
350	4550	4380	3770	4760	1460	3300	620	10x1	2970	2200
400	5200	4780	4170	4825	1525	3300	620	15x1	3380	2600
450	5850	5380	4170	4825	1525	3300	620	15x1	3380	2600
500	6500	5380	4370	5025	1525	3500	620	15x1	3380	2800
600	7800	5580	5170	5535	1835	3700	820	20x1	3580	3500
700	9100	5580	5770	5535	1835	3700	820	20x1	3580	4000
800	10400	6280	5770	6175	1975	4200	820	30x1	4270	4800
900	11700	6280	6370	6175	1975	4200	820	30x1	4270	5200
1000	13000	6280	7170	6175	1975	4200	820	40x1	4270	5500
300-C2	7800	4380	6990	4560	1460	3100	620	10x2	2970	1850
350-C2	9100	4380	7390	4760	1460	3300	620	10x2	2970	2200
400-C2	10400	4780	8190	4825	1525	3300	620	15x2	3380	2600
450-C2	11700	5380	8190	4825	1525	3300	620	15x2	3380	2600
500-C2	13000	5380	8590	5025	1525	3500	620	15x2	3380	2800
600-C2	15600	5580	10190	5535	1835	3700	820	20x2	3580	3500
700-C2	18200	5580	11390	5535	1835	3700	820	20x2	3580	4000
800-C2	20800	6280	11390	6175	1975	4200	820	30x2	4270	4800
900-C2	23400	6280	12590	6175	1975	4200	820	30x2	4270	5200
1000-C2	26000	6280	14190	6175	1975	4200	820	40x2	4270	5500
300-C3	11700	4380	10410	4560	1460	3100	620	10x3	2970	1850
400-C3	15600	4780	12210	4825	1525	3300	620	15x3	3380	2600
500-C3	19500	5380	12810	5025	1525	3500	620	15x3	3380	2800
600-C3	23400	5580	15210	5535	1835	3700	820	20x3	3580	3500
1000-C3	39000	6280	21210	6175	1975	4200	820	40x3	4270	5500
300-C4	15600	4380	13830	4560	1460	3100	620	10x4	2970	1850
350-C4	18200	4380	14630	4760	1460	3300	620	10x4	2970	2200
400-C4	20800	4780	16230	4825	1525	3300	620	15x4	3380	2600
450-C4	23400	5380	16230	4825	1525	3300	620	15x4	3380	2600
500-C4	26000	5380	17030	5025	1525	3500	620	15x4	3380	2800
1000-C4	52000	6280	28230	6175	1975	4200	820	40x4	4270	5500
300-C5	19500	4380	17250	4560	1460	3100	620	10x5	2970	1850
400-C5	26000	4780	20250	4825	1525	3300	620	15x5	3380	2600
450-C5	29250	5380	20250	4825	1525	3300	620	15x5	3380	2600
500-C5	32500	5380	21250	5025	1525	3500	620	15x5	3380	2800
600-C5	39000	5580	25250	5535	1835	3700	820	20x5	3580	3500
700-C5	45500	5580	28250	5535	1835	3700	820	20x5	3580	4000
800-C5	52000	6280	28250	6175	1975	4200	820	30x5	4270	4800
900-C5	58500	6280	31250	6175	1975	4200	820	30x5	4270	5200
1000-C5	65000	6280	35250	6175	1975	4200	820	40x5	4270	5500

- Design Criteria: HWT=37°C ; CWT=32°C ; WBT=27°C ; Water Flow Rate=13 LPM/RT
- Total Pump Head: Piping Friction Loss + Chiller Pressure Loss+Tower Head
- Other multi-cells that are not listed are also available. Please contact your local sales engineers.

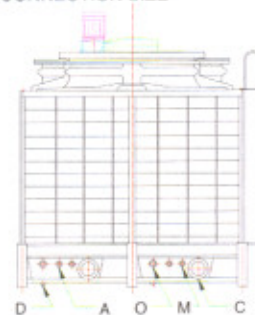




FIVE CELLS



PIPE CONNECTION SIZE



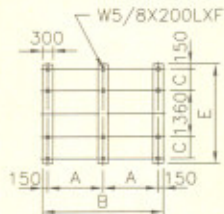
Item Model	Dry Weight kg	Operating Weight kg	Tower Head M	Piping Dimensions				
				Inlet	Outlet	Drain	Overflow	Auto Make-Up Manual Make-Up
LRC-SAS								
300	1590	3910	3.7	5B(125A)x4	6B(150A)x2	2B(50A)x2	2B(50A)x2	1B(25A)x2
350	1850	4640	3.9	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/4 B(32A)x2
400	1990	5510	3.9	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/4 B(32A)x2
450	2290	6420	3.9	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/4 B(32A)x2
500	2420	6830	4.1	5B(125A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/4 B(32A)x2
600	2800	7500	4.3	6B(150A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/4 B(32A)x2
700	3200	8800	4.3	6B(150A)x4	8B(200A)x2	2B(50A)x2	2B(50A)x2	1 1/4 B(32A)x2
800	3700	10300	4.7	6B(150A)x4	10B(250A)x2	2B(50A)x2	2B(50A)x2	2B(50A)x2
900	4100	11500	4.7	8B(200A)x4	10B(250A)x2	2B(50A)x2	2B(50A)x2	2B(50A)x2
1000	4600	12700	4.7	8B(200A)x4	10B(250A)x2	2B(50A)x2	2B(50A)x2	2B(50A)x2
300-C2	3060	7700	3.7	5B(125A)x8	6B(150A)x4	2B(50A)x4	2B(50A)x4	1B(25A)x4
350-C2	3560	9140	3.9	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/4 B(32A)x4
400-C2	3820	10860	3.9	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/4 B(32A)x4
450-C2	4400	12660	3.9	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/4 B(32A)x4
500-C2	4640	13460	4.1	5B(125A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/4 B(32A)x4
600-C2	5400	14800	4.3	6B(150A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/4 B(32A)x4
700-C2	6200	17400	4.3	6B(150A)x8	8B(200A)x4	2B(50A)x4	2B(50A)x4	1 1/4 B(32A)x4
800-C2	7200	20400	4.7	6B(150A)x8	10B(250A)x4	2B(50A)x4	2B(50A)x4	2B(50A)x4
900-C2	8000	22800	4.7	8B(200A)x8	10B(250A)x4	2B(50A)x4	2B(50A)x4	2B(50A)x4
1000-C2	9000	25200	4.7	8B(200A)x8	10B(250A)x4	2B(50A)x4	2B(50A)x4	2B(50A)x4
300-C3	4530	11490	3.7	5B(125A)x12	6B(150A)x6	2B(50A)x6	2B(50A)x6	1B(25A)x6
400-C3	5650	16210	3.9	5B(125A)x12	8B(200A)x6	2B(50A)x6	2B(50A)x6	1 1/4 B(32A)x6
500-C3	6860	20090	4.1	5B(125A)x12	8B(200A)x6	2B(50A)x6	2B(50A)x6	1 1/4 B(32A)x6
600-C3	8000	22100	4.3	6B(150A)x12	8B(200A)x6	2B(50A)x6	2B(50A)x6	1 1/4 B(32A)x6
1000-C3	13400	37700	4.7	8B(200A)x12	10B(250A)x6	2B(50A)x6	2B(50A)x6	2B(50A)x6
300-C4	6000	15390	3.7	5B(125A)x16	6B(150A)x8	2B(50A)x8	2B(50A)x8	1B(25A)x8
350-C4	6980	18140	3.9	5B(125A)x16	8B(200A)x8	2B(50A)x8	2B(50A)x8	1 1/4 B(32A)x8
400-C4	7480	21560	3.9	5B(125A)x16	8B(200A)x8	2B(50A)x8	2B(50A)x8	1 1/4 B(32A)x8
450-C4	8620	25140	3.9	5B(125A)x16	8B(200A)x8	2B(50A)x8	2B(50A)x8	1 1/4 B(32A)x8
500-C4	9080	26720	4.1	5B(125A)x16	8B(200A)x8	2B(50A)x8	2B(50A)x8	1 1/4 B(32A)x8
1000-C4	17800	50200	4.7	8B(200A)x16	10B(250A)x8	2B(50A)x8	2B(50A)x8	2B(50A)x8
300-C5	7470	19180	3.7	5B(125A)x20	6B(150A)x10	2B(50A)x10	2B(50A)x10	1B(25A)x10
400-C5	9310	26910	3.9	5B(125A)x20	8B(200A)x10	2B(50A)x10	2B(50A)x10	1 1/4 B(32A)x10
450-C5	10730	31380	3.9	5B(125A)x20	8B(200A)x10	2B(50A)x10	2B(50A)x10	1 1/4 B(32A)x10
500-C5	11300	33350	4.1	5B(125A)x20	8B(200A)x10	2B(50A)x10	2B(50A)x10	1 1/4 B(32A)x10
600-C5	13200	36700	4.3	6B(150A)x20	8B(200A)x10	2B(50A)x10	2B(50A)x10	1 1/4 B(32A)x10
700-C5	15200	43200	4.3	6B(150A)x20	8B(200A)x10	2B(50A)x10	2B(50A)x10	1 1/4 B(32A)x10
800-C5	17700	50700	4.7	6B(150A)x20	10B(250A)x10	2B(50A)x10	2B(50A)x10	2B(50A)x10
900-C5	19700	56700	4.7	8B(200A)x20	10B(250A)x10	2B(50A)x10	2B(50A)x10	2B(50A)x10
1000-C5	22200	62700	4.7	8B(200A)x20	10B(250A)x10	2B(50A)x10	2B(50A)x10	2B(50A)x10

- If the pipe diameters are to change or equalized pipes are required, please contact your local sales engineer in advance.
- External piping size (dia.) for make-up diameter 1 1/4B(32A) is 1 1/2B(40A)

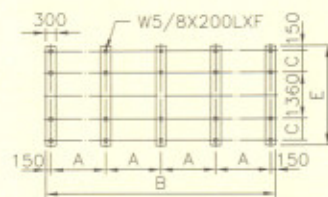




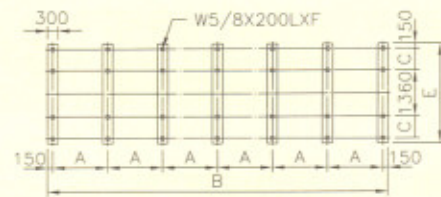
# LRC-SAS RECOMMENDED CONCRETE FOUNDATIONS



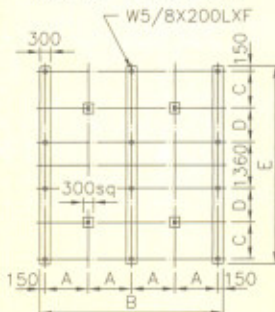
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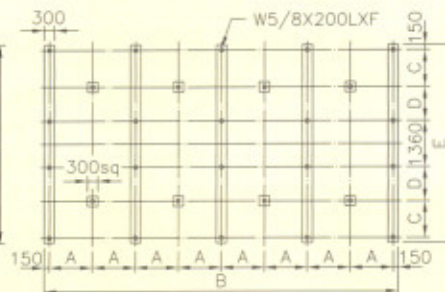
SAS-300~500-C2



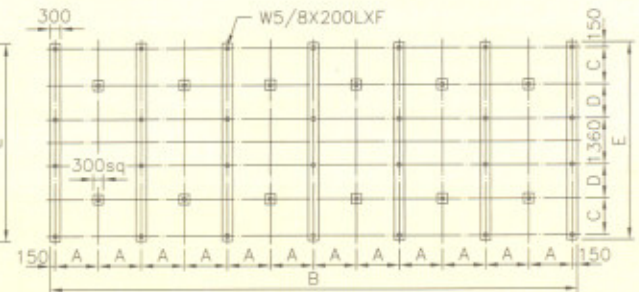
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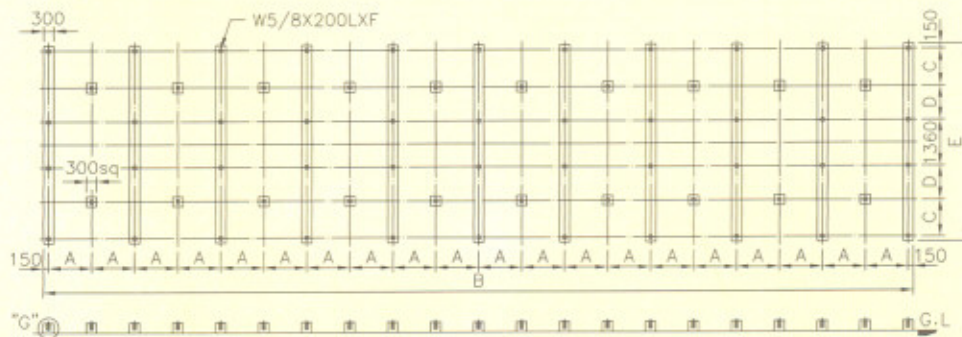
SAS-600~1000



SAS-600~1000-C2



SAS-600~1000-C3

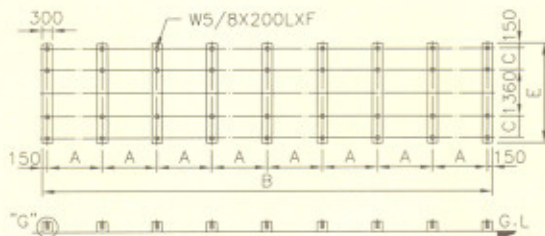


SAS-600~1000-C5

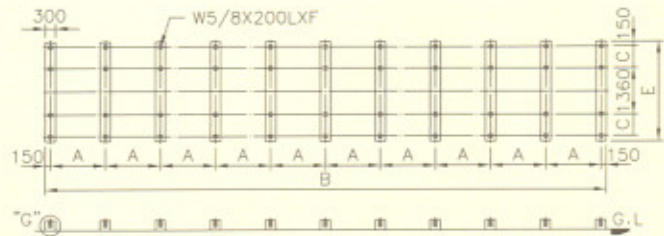
LRC-SAS Item	A	B	C	D	E	F
300	1710	3720	1485	—	4630	12
350	1810	3920	1485	—	4630	12
400	2010	4320	1685	—	5030	12
450	2010	4320	1985	—	5630	12
500	2110	4520	1985	—	5630	12
600	1255	5320	1085	1000	5830	16
700	1405	5920	1085	1000	5830	16
800	1405	5920	1260	1175	6530	16
900	1555	6520	1260	1175	6530	16
1000	1755	7320	1260	1175	6530	16
300-C2	1710	7140	1485	—	4630	20
350-C2	1810	7540	1485	—	4630	20
400-C2	2010	8340	1685	—	5030	20
450-C2	2010	8340	1985	—	5630	20
500-C2	2110	8740	1985	—	5630	20
600-C2	1255	10340	1085	1000	5830	28
700-C2	1405	11540	1085	1000	5830	28
800-C2	1405	11540	1260	1175	6530	28
900-C2	1555	12740	1260	1175	6530	28
1000-C2	1755	14340	1260	1175	6530	28



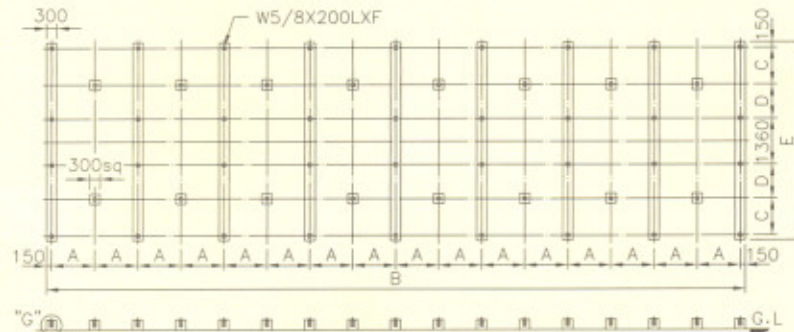
# LRC-SAS RECOMMENDED CONCRETE FOUNDATIONS



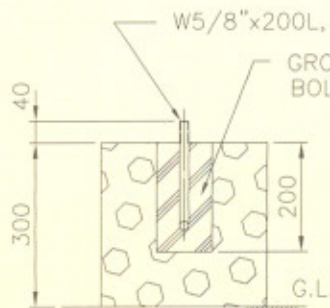
SAS-300~500-C4



SAS-300~500-C5



SAS-600~1000-C4



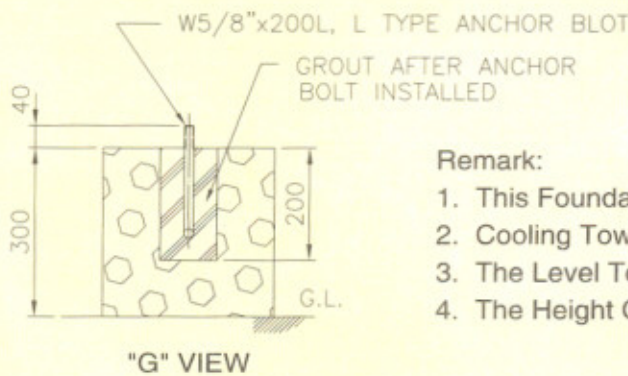
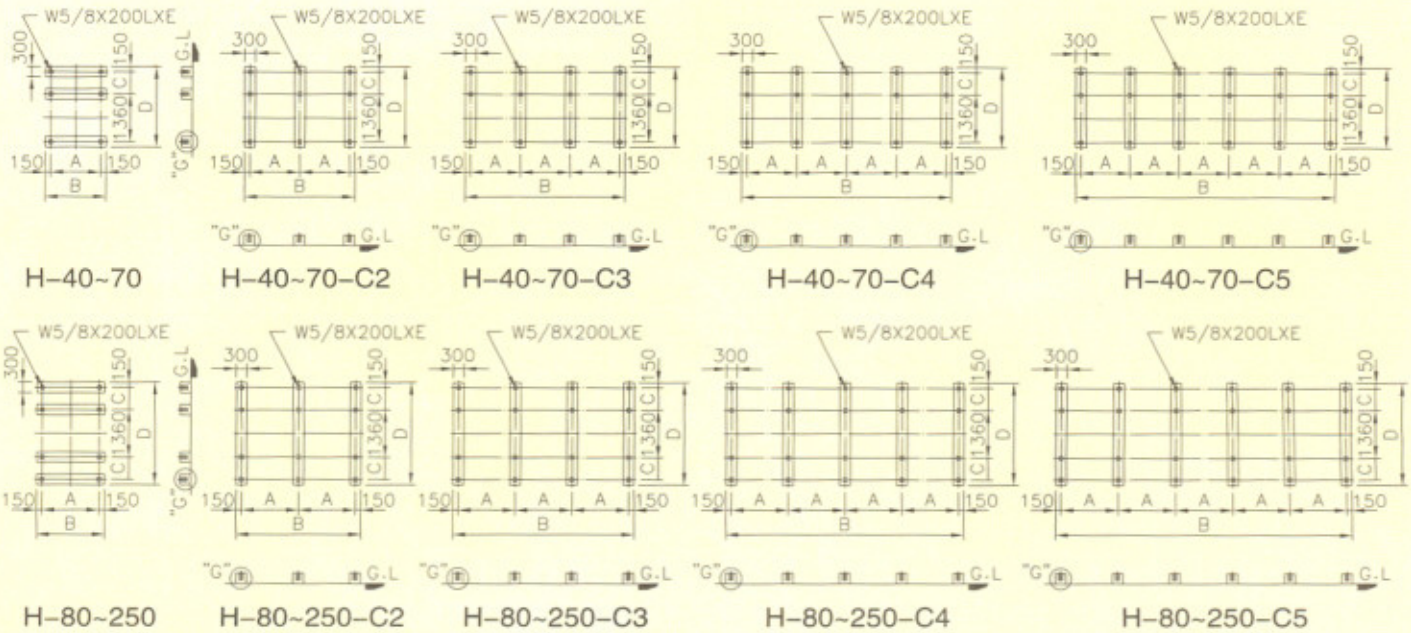
"G" VIEW

## Remark:

1. This Foundation Drawing is Provided For End User's Reference.
2. Cooling Tower Does Not Include Foundation And Anchor Bolts.
3. The Level Tolerance Of Foundation is  $\pm 2\text{mm}$ .
4. The Height Of Foundation Excludes Thermal Isolator And Water Proof.

LRC-SAS Item	A	B	C	D	E	F
300-C3	1710	10560	1485	-	4630	28
400-C3	2010	12360	1685	-	5030	28
500-C3	2110	12960	1985	-	5630	28
600-C3	1255	15360	1085	1000	5830	40
1000-C3	1755	21360	1260	1175	6530	40
300-C4	1710	13980	1485	-	4630	36
350-C4	1810	14780	1485	-	4630	36
400-C4	2010	16380	1685	-	5030	36
450-C4	2010	16380	1985	-	5630	36
500-C4	2110	17180	1985	-	5630	36
1000-C4	1755	28380	1260	1175	6530	52
300-C5	1710	17400	1485	-	4630	44
400-C5	2010	20400	1685	-	5030	44
450-C5	2010	20400	1985	-	5630	44
500-C5	2110	21400	1985	-	5630	44
600-C5	1255	25400	1085	1000	5830	64
700-C5	1405	28400	1085	1000	5830	64
800-C5	1405	28400	1260	1175	6530	64
900-C5	1555	31400	1260	1175	6530	64
1000-C5	1755	35400	1260	1175	6530	64





### Remark:

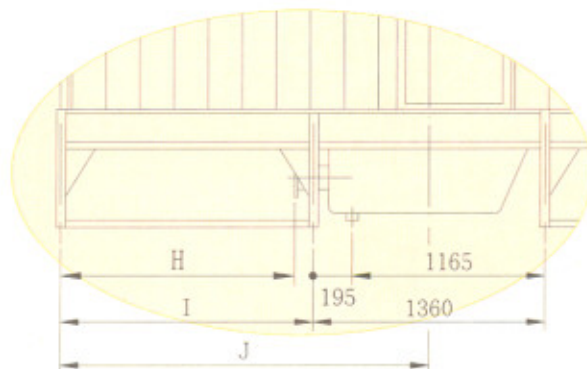
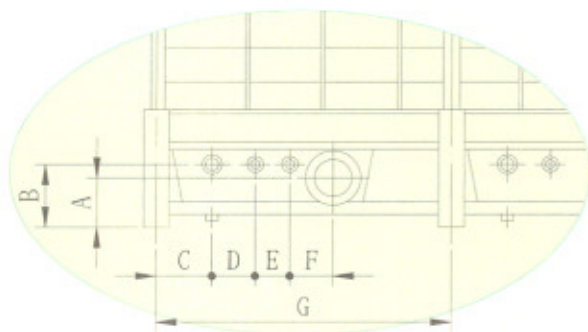
1. This Foundation Drawing is Provided For End User's Reference.
2. Cooling Tower Does Not Include Foundation And Anchor Bolts.
3. The Level Tolerance Of Foundation is  $\pm 2\text{mm}$ .
4. The Height Of Foundation Excludes Thermal Isolator And Water Proof.

Item	A	B	C	D	E
LRC-H					
40	1405	1705	635	2295	6
50	1605	1905	635	2295	6
60	1805	2105	735	2395	6
70	2005	2305	735	2395	6
80	1405	1705	635	2930	8
100	1605	1905	635	2930	8
125	1805	2105	735	3130	8
150	2005	2305	735	3130	8
175	2210	2510	835	3330	8
200	2410	2710	885	3430	8
225	2510	2810	985	3630	8
250	2810	3110	985	3630	8
40-C2	1405	3110	635	2295	9
50-C2	1605	3510	635	2295	9
100-C2	1605	3510	635	2930	12
125-C2	1805	3910	735	3130	12
150-C2	2005	4310	735	3130	12
175-C2	2210	4720	835	3330	12
200-C2	2410	5120	885	3430	12
225-C2	2510	5320	985	3630	12
250-C2	2810	5920	985	3630	12

Item	A	B	C	D	E
LRC-H					
50-C3	1605	5115	635	2295	12
100-C3	1605	5115	635	2930	16
150-C3	2005	6315	735	3130	16
200-C3	2410	7530	885	3430	16
50-C4	1605	6720	635	2295	20
100-C4	1605	6720	635	2930	20
125-C4	1805	7520	735	3130	20
150-C4	2005	8320	735	3130	20
175-C4	2210	9140	835	3330	20
200-C4	2410	9940	885	3430	20
225-C4	2510	10340	985	3630	20
250-C4	2810	11540	985	3630	20
40-C5	1405	7325	635	2295	18
50-C5	1605	8325	635	2295	18
60-C5	1805	9325	735	2395	18
70-C5	2005	10325	735	2395	18
80-C5	1405	7325	635	2930	24
100-C5	1605	8325	635	2930	24
200-C5	2410	12350	885	3430	24
225-C5	2510	12850	985	3630	24
250-C5	2810	14350	985	3630	24



# LRC-H AND LRC-SAS SUMP PIPING ORIENTATION



Item Model	Piping Orientation									
	A m/m	B m/m	C m/m	D m/m	E m/m	F m/m	G m/m	H m/m	I m/m	J m/m
LRC-H-40	290	370	325	250	200	250	1405	525	635	1315
50	290	370	325	250	200	250	1605	525	635	1315
60	290	370	325	250	200	250	1805	625	735	1415
70	290	370	325	250	200	250	2005	625	735	1415
80	290	370	325	250	200	250	1405	525	635	1315
100	290	370	325	250	200	250	1605	525	635	1315
125	290	370	325	250	200	250	1805	625	735	1415
150	290	370	325	250	200	250	2005	625	735	1415
175	290	370	325	250	200	250	2210	725	835	1515
200	290	370	325	250	200	250	2410	775	885	1565
225	290	370	325	250	200	250	2510	875	985	1665
250	290	370	325	250	200	250	2810	875	985	1665
40-Cn	290	370	325	250	200	250	1405	525	635	1315
50-Cn	290	370	325	250	200	250	1605	525	635	1315
60-Cn	290	370	325	250	200	250	1805	625	735	1415
70-Cn	290	370	325	250	200	250	2005	625	735	1415
80-Cn	290	370	325	250	200	250	1405	525	635	1315
100-Cn	290	370	325	250	200	250	1605	525	635	1315
125-Cn	290	370	325	250	200	250	1805	625	735	1415
150-Cn	290	370	325	250	200	250	2005	625	735	1415
175-Cn	290	370	325	250	200	250	2210	725	835	1515
200-Cn	290	370	325	250	200	250	2410	775	885	1565
225-Cn	290	370	325	250	200	250	2510	875	985	1665
250-Cn	290	370	325	250	200	250	2810	875	985	1665
LRC-SAS-300	290	370	325	250	200	250	1710	1375	1485	2165
350	290	370	325	250	200	250	1810	1375	1485	2165
400	290	370	325	250	200	250	2010	1575	1685	2365
450	290	370	325	250	200	250	2010	1875	1985	2665
500	290	370	325	250	200	250	2110	1875	1985	2665
600	290	370	325	250	200	250	2510	1975	2085	2765
700	290	370	325	250	200	250	2810	1975	2085	2765
800	340	470	345	230	200	230	2810	2325	2435	3115
900	340	470	345	230	200	230	3110	2325	2435	3115
1000	340	470	345	230	200	230	3510	2325	2435	3115
300-Cn	290	370	325	250	200	250	1710	1375	1485	2165
350-Cn	290	370	325	250	200	250	1810	1375	1485	2165
400-Cn	290	370	325	250	200	250	2010	1575	1685	2365
450-Cn	290	370	325	250	200	250	2010	1875	1985	2665
500-Cn	290	370	325	250	200	250	2110	1875	1985	2665
600-Cn	290	370	325	250	200	250	2510	1975	2085	2765
700-Cn	290	370	325	250	200	250	2810	1975	2085	2765
800-Cn	340	470	345	230	200	230	2810	2325	2435	3115
900-Cn	340	470	345	230	200	230	3110	2325	2435	3115
1000-Cn	340	470	345	230	200	230	3510	2325	2435	3115



Model No.	Single Cell	2 Cells	3 Cells	4 Cells	5 Cells
40RT	H-40				
50RT	H-50				
60RT	H-60				
70RT	H-70				
80RT	H-80	H-40-C2			
100RT	H-100	H-50-C2			
125RT	H-125				
150RT	H-150		H-50-C3		
175RT	H-175				
200RT	H-200	H-100-C2		H-50-C4	H-40-C5
225RT	H-225				
250RT	H-250	H-125-C2			H-50-C5
300RT	SAS-300	H-150-C2	H-100-C3		H-60-C5
350RT	SAS-350	H-175-C2			H-70-C5
400RT	SAS-400	H-200-C2		H-100-C4	H-80-C5
450RT	SAS-450	H-225-C2	H-150-C3		
500RT	SAS-500	H-250-C2		H-125-C4	H-100-C5
600RT	SAS-600	SAS-300-C2	H-200-C3	H-150-C4	
700RT	SAS-700	SAS-350-C2		H-175-C4	
800RT	SAS-800	SAS-400-C2		H-200-C4	
900RT	SAS-900	SAS-450-C2	SAS-300-C3	H-225-C4	
1000RT	SAS-1000	SAS-500-C2		H-250-C4	H-200-C5
1125RT					H-225-C5
1200RT		SAS-600-C2	SAS-400-C3	SAS-300-C4	
1250RT					H-250-C5
1400RT		SAS-700-C2		SAS-350-C4	
1500RT			SAS-500-C3		SAS-300-C5
1600RT		SAS-800-C2		SAS-400-C4	
1800RT		SAS-900-C2	SAS-600-C3	SAS-450-C4	
2000RT		SAS-1000-C2		SAS-500-C4	SAS-400-C5
2250RT					SAS-450-C5
2500RT					SAS-500-C5
3000RT			SAS-1000-C3		SAS-600-C5
3500RT					SAS-700-C5
4000RT				SAS-1000-C4	SAS-800-C5
4500RT					SAS-900-C5
5000RT					SAS-1000-C5

• Above table is provided for owners' or designers' reference for multi-cell application. If the site space is constrained or other factors are considered, please contact your local sales engineer for further and more multi-cell combinations.



# LRC-H AND LRC-SAS SELECTION TABLE



Wet Bulb Temp.	27°C			28°C			29°C			83°F	84°F
Inlet Water Temp.	37	42	55	37	42	55	37	42	55	100°F	100°F
Outlet Water Temp.	32	32	35	32	32	35	32	32	35	90°F	90°F
Water Flow Rate											
Model No.											
	LPM			LPM			LPM			GPM	
40	520	326	362	445	284	337	365	239	310	108	98
50	650	414	462	559	363	431	461	307	398	137	123
60	780	489	543	667	426	506	547	359	465	163	146
70	910	567	629	777	494	586	636	415	539	189	170
80	1040	652	724	890	568	674	730	478	620	217	195
100	1300	828	924	1118	726	862	922	614	796	274	246
125	1625	1030	1147	1394	900	1069	1148	760	986	341	307
150	1950	1246	1386	1677	1089	1293	1383	921	1194	409	370
175	2275	1457	1627	1958	1278	1519	1619	1082	1403	479	433
200	2600	1656	1837	2236	1452	1713	1844	1228	1580	545	492
225	2925	1845	2052	2506	1611	1912	2060	1358	1762	611	552
250	3250	2060	2289	2788	1802	2134	2296	1520	1968	681	614
300	3900	2482	2766	3350	2172	2580	2762	1836	2380	818	740
350	4550	2944	3293	3927	2587	3078	3259	2198	2847	963	873
400	5200	3300	3715	4474	2918	3468	3699	2471	3203	1095	990
450	5850	3897	4391	5091	3451	4121	4271	2960	3829	1254	1144
500	6500	4383	4955	5676	3894	4658	4783	3354	4335	1401	1281
600	7800	5078	5690	6744	4470	5322	5610	3806	4928	1654	1502
700	9100	6254	7104	7988	5584	6695	6778	4839	6250	1979	1815
800	10400	6741	7544	8981	5927	7054	7458	5038	6526	2202	1997
900	11700	7794	8782	10182	6902	8242	8542	5920	7658	2508	2288
1000	13000	9245	10604	11517	8330	10040	9893	7303	9424	2870	2650
1125	14625	9225	10260	12530	8055	9560	10300	6790	8810	3055	2760
1200	15600	10110	11316	13472	8890	10582	11186	7558	9790	3302	2996
1250	16250	10285	11445	13935	8990	10670	11470	7585	9840	3405	3070
1400	18200	12508	14208	15976	11168	13390	13556	9678	12500	3958	3630
1500	19500	13149	14865	17028	11682	13974	14349	10062	13005	4203	3843
1600	20800	13482	15088	17962	11854	14108	14916	10076	13052	4404	3994
1800	23400	15588	17564	20364	13804	16484	17084	11840	15316	5016	4576
2000	26000	18490	21208	23034	16660	20080	19786	14606	18848	5740	5300
2250	29250	19485	21955	25455	17255	20605	21355	14800	19145	6270	5720
2500	32500	21915	24775	28380	19470	23290	23915	16770	21675	7005	6405
3000	39000	27735	31812	34551	24990	30120	29679	21909	28272	8610	7950
3500	45500	31270	35520	39940	27920	33475	33890	24195	31250	9895	9075
4000	52000	36980	42416	46068	33320	40160	39572	29212	37696	11480	10600
4500	58500	38970	43910	50910	34510	41210	42710	29600	38290	12540	11440
5000	65000	46225	53020	57585	41650	50200	49465	36515	47120	14350	13250

- Remark:
1. Above 40RT~250RT are for LRC-H series.
  2. Above 300RT~1000RT are for LRC-SAS.
  3. CPVC filling material that can withstand hi-temperature is needed for the hot water between 45°C and 65°C.
  4. After selection, please refer to LRC-H AND LRC-SAS MULTI-CELL TABLE for proper multi-cell combination.



# LRC TYPICAL LRC-H REFERENCES



GIANT HYPERMARKET~  
KELANA JAYA 1 LRC-H-600 3SETS



HSU-SHOU-TZU COMPANY  
LRC-H-250C2 LRC-H-250C4



TAIWAN HI SPEED RAIL  
LRC-H-250 2SETS



POU YUEN VIETNAM ENTERPRISE LTD.  
LRC-H-150-C3



SINGAPORE PROJECT  
LRC-H-400 2 SETS



TAI NAN FAR EASTERN DEPARTMENTSTORE  
LRC-H-600 2SETS



VIETNAM JAPAN GAS CO., LTD.  
LRC-H-450-C4 1SET

PENNSYLVANIA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
BUREAU OF LABORATORIES  
LRC-H-800 2SETS







OPTIMAX TECHNOLOGY CO.  
LRC-SAS-500-C5  
1680 M<sup>3</sup>/MR 37-32-28°C



OPTIMAX TECHNOLOGY CO.  
LRC-SAS-750S-C6  
2250 M<sup>3</sup>/MR 37-32-29°C



CHUNGHWA PICTURE TUBES LTD.  
LRC-SAS-1800S-C7+C2-2 SETS  
16875 M<sup>3</sup>/MR 37-32-29°C



CHUNGHWA PICTURE TUBES LTD.  
LRC-SAS-500-C5-3 SETS  
5850 M<sup>3</sup>/MR 37-32-27°C



CHUNGHWA PICTURE TUBES LTD.  
LRC-SAS-500-C7  
1050 M<sup>3</sup>/MR 47-32-29°C



CHUNGHWA PICTURE TUBES LTD.  
LRC-SAS-450-C4-4 SETS  
4080 M<sup>3</sup>/MR 37-32-29°C



CHUNGHWA PICTURE TUBES LTD.  
LRC-SAS-1350S-C4-2 SETS  
1400 M<sup>3</sup>/MR 47-32-29°C