

## Hot Water Coils

INLET SIZES 100, 125 & 150											
ROWS	WATER		Performance (kW)								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	0.035	0.050	0.060	0.075	0.100	0.125	0.150	0.175	0.200
One Row Single Circuit	0.032	0.5	1.4	1.7	1.8	2.0	2.3	2.5	2.7	2.8	3.0
	0.063	1.6	1.5	1.8	2.0	2.3	2.7	3.0	3.2	3.5	3.7
	0.125	5.3	1.6	2.0	2.2	2.5	2.9	3.3	3.6	3.9	4.2
	0.250	17.3	1.6	2.0	2.2	2.6	3.1	3.5	3.8	4.2	4.5
Two Rows Single Circuit	0.375	34.0	1.6	2.0	2.3	2.6	3.1	3.6	3.9	4.3	4.6
	0.032	0.9	1.9	2.4	2.7	3.0	3.4	3.7	4.0	4.2	4.4
	0.063	3.0	2.1	2.7	3.0	3.4	4.0	4.5	4.9	5.3	5.6
	0.125	9.4	2.1	2.8	3.2	3.7	4.4	5.0	5.6	6.1	6.6
Two Rows Single Circuit	0.250	31.0	2.2	2.9	3.3	3.8	4.6	5.4	6.0	6.6	7.1
	0.375	61.1	2.2	2.9	3.3	3.9	4.8	5.5	6.2	6.8	7.3

  

INLET SIZES 175, 200 & 225											
ROWS	WATER		Performance (kW)								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	0.120	0.150	0.200	0.225	0.250	0.275	0.300	0.350	0.500
One Row Single Circuit	0.032	0.5	2.5	2.7	3.0	3.1	3.2	3.3	3.3	3.5	3.8
	0.063	1.7	2.9	3.2	3.7	3.8	4.0	4.2	4.3	4.5	5.1
	0.125	5.3	3.2	3.6	4.2	4.4	4.6	4.8	5.0	5.3	6.3
	0.250	17.3	3.4	3.8	4.5	4.7	5.0	5.3	5.5	6.0	7.0
Two Rows Single Circuit	0.375	34.0	3.4	3.9	4.6	4.9	5.2	5.5	5.7	6.2	7.4
	0.032	0.5	4.3	4.8	5.4	5.6	5.9	6.0	6.2	6.6	7.3
	0.063	1.6	4.9	5.6	6.5	6.9	7.3	7.6	7.9	8.3	9.6
	0.125	5.4	5.4	6.1	7.2	7.7	8.2	8.6	9.0	9.8	11.6
Two Rows Single Circuit	0.250	7.8	5.4	6.2	7.5	8.0	8.4	8.9	9.3	10.0	12.1
	0.375	10.5	5.5	6.3	7.6	8.1	8.6	9.1	9.5	10.3	12.4

  

INLET SIZE 250											
ROWS	WATER		Performance (kW)								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	0.250	0.300	0.325	0.350	0.375	0.400	0.450	0.550	0.625
One Row Two Circuits	0.032	0.1	3.4	3.5	3.6	3.6	3.7	3.8	3.8	4.0	4.1
	0.063	0.3	4.4	4.7	4.8	4.9	5.0	5.1	5.4	5.6	5.8
	0.125	1.0	5.2	5.7	5.9	6.0	6.2	6.4	6.7	7.2	7.5
	0.250	3.3	5.8	6.3	6.7	6.8	7.1	7.3	7.7	8.4	9.0
Two Rows Two Circuits	0.375	6.4	6.0	6.6	6.9	7.2	7.4	7.7	8.1	8.9	9.5
	0.500	10.6	6.2	6.8	7.1	7.4	7.7	7.9	8.4	9.2	9.9
	0.063	0.7	6.9	7.4	7.6	7.8	8.0	8.2	8.5	8.9	9.3
	0.125	2.1	8.6	9.3	9.6	10.0	10.3	10.5	11.1	11.9	12.6
Two Rows Two Circuits	0.250	6.9	9.6	10.6	11.1	11.5	11.9	12.5	13.2	14.4	15.3
	0.375	13.5	10.0	11.2	11.7	12.2	12.6	13.2	14.0	15.5	16.6
	0.500	22.1	10.2	11.5	12.0	12.6	13.1	13.4	14.4	16.1	17.2
	0.625	32.3	10.4	11.5	12.2	12.8	13.3	13.8	14.8	16.5	17.8

  

INLET SIZE 300											
ROWS	WATER		Performance (kW)								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	0.400	0.450	0.500	0.550	0.600	0.750	0.800	0.900	1.000
One Row Multi Circuits	0.063	0.2	5.7	6.0	6.2	6.3	6.5	6.9	7.0	7.1	7.3
	0.125	0.5	7.3	7.7	7.9	8.2	8.5	9.2	9.4	9.8	10.1
	0.250	1.6	8.6	8.9	9.5	9.8	10.3	11.2	11.5	12.1	12.5
	0.375	3.2	9.0	9.5	10.1	10.4	11.0	12.1	12.5	13.2	13.7
Two Rows Multi Circuits	0.500	5.3	9.3	9.9	10.4	10.9	11.4	12.6	13.1	13.7	14.5
	0.625	7.8	9.4	10.0	10.7	11.1	11.7	13.1	13.4	14.3	15.0
	0.063	0.3	8.7	8.9	9.2	9.4	9.6	10.1	10.2	10.4	10.6
	0.125	0.9	11.5	12.0	12.5	12.9	13.4	14.4	14.7	15.1	15.6
Two Rows Multi Circuits	0.250	3.0	13.6	14.4	15.3	15.8	16.5	18.3	18.8	19.8	20.5
	0.375	5.9	14.4	15.4	16.3	17.1	18.0	19.9	20.5	21.7	22.9
	0.500	9.7	14.9	15.9	16.9	17.8	18.7	21.1	21.7	23.1	24.1
	0.625	14.1	15.3	16.4	17.4	18.5	19.2	21.8	22.5	23.9	25.0

Note See notes on page 274G.

## Hot Water Coils

### INLET SIZE 350

ROWS	WATER		Performance [kW]								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	0.600	0.650	0.700	0.750	0.800	0.900	1.000	1.250	1.500
One Row Multi Circuits	0.063	0.2	7.1	7.1	7.3	7.4	7.6	7.8	7.9	8.3	8.6
	0.125	0.6	9.3	9.5	9.8	10.0	10.3	10.6	11.0	11.6	12.4
	0.250	1.9	11.0	11.5	11.8	12.1	12.5	13.2	13.7	14.9	16.0
	0.375	3.6	11.9	12.3	12.7	13.1	13.4	14.3	15.0	16.4	17.9
	0.500	6.0	12.3	12.7	13.3	13.7	14.2	14.8	15.7	17.4	18.8
Two Rows Multi Circuits	0.063	0.4	10.5	10.7	10.9	11.1	11.2	11.4	11.6	12.0	12.4
	0.125	1.2	14.8	15.2	15.6	15.9	16.2	16.8	17.4	18.3	19.2
	0.250	3.9	18.3	19.1	19.7	20.2	20.8	22.0	22.9	24.8	26.6
	0.375	7.6	19.8	20.6	21.4	22.2	23.0	24.2	25.3	28.2	30.2
	0.500	12.6	20.7	21.6	22.4	23.4	24.2	25.6	26.4	30.2	32.5
	0.625	18.4	21.3	22.2	23.1	24.1	24.9	26.4	28.1	31.3	33.9

### INLET SIZE 400

ROWS	WATER		Performance [kW]								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	0.750	0.800	0.850	0.900	1.000	1.250	1.500	1.750	1.900
One Row Multi Circuits	0.063	0.2	8.2	8.4	8.4	8.6	8.8	9.2	9.5	9.8	9.9
	0.125	0.7	11.1	11.4	11.6	11.8	12.2	13.0	13.7	14.3	14.5
	0.250	2.2	13.5	13.9	14.3	14.6	15.3	16.6	17.9	19.0	19.4
	0.375	4.3	14.7	14.9	15.4	15.9	16.5	18.3	19.7	21.1	21.8
	0.500	7.1	15.1	15.6	16.1	16.5	17.4	19.5	21.1	22.4	23.2
Two Rows Multi Circuits	0.063	0.5	11.9	12.1	12.2	12.3	12.5	12.9	13.2	13.4	13.6
	0.125	1.4	17.4	17.6	18.0	18.4	18.9	20.0	20.8	21.6	22.0
	0.250	4.6	22.0	22.7	23.4	23.9	25.0	27.3	29.3	30.7	31.6
	0.375	8.9	24.3	24.9	25.7	26.4	27.8	30.9	33.4	35.3	36.6
	0.500	14.8	25.4	26.4	27.0	28.0	29.3	32.8	35.7	38.5	39.5
	0.625	21.4	26.1	27.1	28.0	28.9	30.5	34.4	37.6	40.1	41.8

### INLET SIZE 600 x 400

ROWS	WATER		Performance [kW]								
	Flow	Resistance	Air Flow Rate m <sup>3</sup> /s								
	litres/s	kPa	1.250	1.500	1.750	2.000	2.250	2.500	3.000	3.500	3.750
One Row Multi Circuits	0.125	0.9	15.7	16.5	17.1	17.7	18.2	18.7	19.5	20.0	20.3
	0.250	3.1	20.2	21.5	23.0	24.1	25.1	26.0	27.5	28.6	29.2
	0.375	6.1	22.2	24.1	25.7	26.9	28.2	29.4	31.6	33.1	34.4
	0.500	9.9	23.3	25.7	27.3	28.7	30.2	31.7	33.9	36.3	37.2
	0.625	14.4	24.1	26.6	28.3	29.9	31.6	33.2	35.7	38.5	39.5
Two Rows Multi Circuits	0.125	2.0	22.9	23.8	24.6	25.2	25.8	26.1	26.8	27.3	27.5
	0.250	6.4	31.9	33.9	35.8	37.3	38.8	40.1	41.7	43.3	44.1
	0.375	12.6	36.3	38.9	41.7	44.0	46.0	47.7	50.4	53.4	54.4
	0.500	20.4	38.6	42.1	45.4	47.6	50.2	52.7	56.3	59.9	60.7
	0.625	29.6	40.5	44.0	47.6	50.7	53.6	55.7	60.5	64.1	65.9

### Notes

1. Tabulated values are in kW and for hot water only.
2. Data is for the coil type specified. Data for alternative circuit types are available on request.
3. Tables are based on a temperature difference of 64°K between entering air and entering water. For other temperatures multiply tabulated values by the factors below.
4. Air temperature rise [°K] = kW / (1.2 x m<sup>3</sup>/s)
5. Water temperature drop [°K] = kW / (4.187 x l/s)
6. Connections: Single Circuit 12.5 O.D. male solder. Multi- Circuit 22.2 O.D. male solder.
7. Use tables above and on previous page to calculate suitable coil selection, or contact your local Holyoake branch, which can offer a coil calculation service.

ΔT [°K]	20	30	40	50	60	64	70	80	90
Factors	0.30	0.47	0.63	0.81	0.97	1.00	1.13	1.31	1.47