

APPROXIMATE PIPE SIZING FOR LTHW

Based on 10° Temperature Difference

STEEL

MW to 50mm, HW 65mm & above

	0.0 kW	0.0 l/s			
15 mm					335 / 0.59
	5.0 kW	0.12 l/s			77 / 0.33
20 mm					327 / 0.71
	10.9 kW	0.26 l/s			101 / 0.44
25 mm					336 / 0.84
	20.5 kW	0.49 l/s			83 / 0.48
32 mm					335 / 1.00
	42.7 kW	1.02 l/s			155 / 0.74
40 mm					339 / 1.12
	64.5 kW	1.54 l/s			103 / 0.70
50 mm					338 / 1.30
	119.7 kW	2.86 l/s			103 / 0.81
65 mm					336 / 1.50
	221.9 kW	5.30 l/s			144 / 1.08
80 mm					268 / 1.49
	305.7 kW	7.30 l/s			69 / 0.87
100 mm					198 / 1.50
	527.6 kW	12.60 l/s			64 / 0.97
125 mm					149 / 1.50
	816.5 kW	19.50 l/s			59 / 1.04
150 mm					119 / 1.50
	1172.4 kW	28.00 l/s			
					Pa/m / m/s

COPPER

	0.0 kW	0.0 l/s			
15 mm					334 / 0.59
	3.6 kW	0.085 l/s			51 / 0.59
22 mm					340 / 0.78
	10.5 kW	0.25 l/s			98 / 0.46
28 mm					336 / 0.93
	20.9 kW	0.50 l/s			118 / 0.60
35 mm					337 / 1.08
	37.7 kW	0.90 l/s			133 / 0.73
42 mm					333 / 1.22
	62.8 kW	1.50 l/s			93 / 0.72
54 mm					346 / 1.48
	129.8 kW	3.10 l/s			
					Pa/m / m/s

Sizing based on

15 mm to 50 mm	100 - 340 Pa/m
65 mm and above	Not more than 1.5 m/s

NOTES

It is normal practice to size pipework to the above parameters. Generally therefore, it can be expected that the flow for any given size pipe will fall in the above ranges.

e.g. for 35mm copper pipe the design flow will usually be between 0.50 & 0.90 l/s. At the lower flow of 0.50 l/s, the pressure drop will be 118 Pa/m with a velocity of 0.60 m/s. At the higher flow of 0.90 l/s the pressure drop will be 337 Pa/m and the velocity 1.08 m/s.

See separate sheet for where the steel pipe is HW for all sizes

APPROXIMATE PIPE SIZING FOR LTHW

Based on 10° Temperature Difference

STEEL HW all sizes

COPPER

	0.0 kW	0.0 l/s	
15 mm			339 / .056
	4.1 kW	0.098 l/s	71 / 0.030
20 mm			339 / 0.69
	9.5 kW	0.227 l/s	107 / 0.44
25 mm			340 / 0.81
	17.5 kW	0.419 l/s	78 / 0.45
32 mm			338 / 0.98
	38.1 kW	0.91 l/s	152 / 0.71
40 mm			337 / 1.08
	57.8 kW	1.38 l/s	99 / 0.67
50 mm			338 / 1.27
	110.1 kW	2.63 l/s	103 / 0.81
65 mm			336 / 1.50
	221.9 kW	5.30 l/s	144 / 1.08
80 mm			268 / 1.49
	305.7 kW	7.30 l/s	69 / 0.87
100 mm			198 / 1.50
	527.6 kW	12.60 l/s	64 / 0.97
125 mm			149 / 1.50
	816.5 kW	19.50 l/s	59 / 1.04
150 mm			119 / 1.50
	1172.4 kW	28.00 l/s	

Pa/m / m/s

	0.0 kW	0.0 l/s	
15 mm			334 / 0.59
	3.6 kW	0.085 l/s	51 / 0.59
22 mm			340 / 0.78
	10.5 kW	0.25 l/s	98 / 0.46
28 mm			336 / 0.93
	20.9 kW	0.50 l/s	118 / 0.60
35 mm			337 / 1.08
	37.7 kW	0.90 l/s	133 / 0.73
42 mm			333 / 1.22
	62.8 kW	1.50 l/s	93 / 0.72
54 mm			346 / 1.48
	129.8 kW	3.10 l/s	

Pa/m / m/s

<p>Sizing based on</p> <p>15 mm to 50 mm 100 - 340 Pa/m</p> <p>65 mm and above Not more than 1.5 m/s</p>
<p>NOTES</p> <p>It is normal practice to size pipework to the above parameters. Generally therefore, it can be expected that the flow for any given size pipe will fall in the above ranges.</p> <p>e.g. for 35mm copper pipe the design flow will usually be between 0.50 & 0.90 l/s. At the lower flow of 0.50 l/s, the pressure drop will be 118 Pa/m with a velocity of 0.60 m/s. At the higher flow of 0.90 l/s the pressure drop will be 337 Pa/m and the velocity 1.08 m/s.</p>
<p>See separate sheet for where the steel pipe is MW up to 50 mm and HW from 65 mm</p>