



Copper Pipes - Insulation and Heat Loss

Heat loss to surrounding air from insulated copper tubes

The heat loss from an insulated copper pipe or tube to the surrounding air can be found in the table below. The heat loss is based on a temperature difference of 55°C (130°F) with an insulation thickness of 25 mm (1 inch) and a conductivity coefficient of $k = 0.043$ W/m °C (0.3 Btu in/ft² hr °F).

Nominal bore		Heat loss for fluid inside pipe	
(mm)	(inches)	(W/m)	(Btu/hr ft)
22	3/4	8	8
28	1	10	10
42	1 1/2	11.5	12
54	2	14.5	15
67	2 1/2	16	17
76	3	19	20