



HEATING WATER iH2O PRE-INSULATED PIPING (R>1.5)

SERVICE PIPE/CASING: CARBON STEEL/PE100 S1 HDPE WHITE

SPECIFICATION: SCHEDULE 40

FUNCTIONAL OPERATING TEMP: -30°C TO +85°C (PUR) ; -20 °C TO +120 °C (PIR)

All R-values are calculated based on PUR factors

Service Pipe Material:

Carbon Steel (k = 46.7 W/m°K)

Insulation Material:

DPE1783R PUR (k = 0.024 W/m°K)

Casing Material:

PE100 S1 HDPE (k = 0.43 W/m°K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (PE100 S1 HDPE White) --- OD/ID (mm)																						Dry & Wet mass of iH2O insulated pipe* (standard stock items)	
					160	150	200	188	225	211	250	235	315	296	355	338	400	380	450	428	500	476	560	533	630	599		
		PUR_Thk (mm)	R-Val (m²K/W)		PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	Dry Mass of insulated pipe (kg/m)	Wet Mass or insulated pipe (kg/m)
60.3	2"	40	3.91	52.5	45.0	3.24	63.8	4.43																	8.4	10.6		
73.0	2 1/2"	40	5.16	62.7	38.7	2.25	57.4	3.68																	11.6	14.6		
88.9	3"	40	5.49	77.9	30.7	1.64	49.5	2.92	61.2	3.80															14.1	18.9		
114.3	4"	40	6.02	102.3			36.8	1.94	48.5	2.70	60.3	3.51													20.5	28.7		
141.3	5"	40	6.55	128.2					35.0	1.77	46.8	2.48	77.3	4.54											27.2	40.1		
168.3	6"	40	7.11	154.1							33.3	1.63	63.8	3.47											34.8	53.4		
219.1	8"	40	8.18	202.7									38.4	1.86	59.3	3.04									52.8	85.1		
273.1	10"	40	9.27	254.6											32.3	1.50	53.7	2.63							74.4	125.3		
323.9	12"	40	10.31	303.3											28.3	1.29	52.1	2.49							97.2	169.4		
355.6	14"	40	11.13	333.3													36.2	1.67	60.0	2.89					111.2	198.4		
406.4	16"	40	12.70	381.0															34.6	1.57	63.1	3.01			143.5	257.5		
457.0	18"	40	14.27	428.5																	37.8	1.72	71.1	3.39	181.0	325.2		
508.0	20"	40	15.09	477.8																			45.6	2.08	215.6	394.9		

RED BLOCKS DENOTE STANDARD STOCK ITEMS

*Dry mass of insulated pipe = Service pipe mass + PUR insulation mass + Casing mass,

Wet mass of insulated pipe = Dry mass of insulated pipe + Service fluid (water) mass