



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

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

SPECIFICATION: SCHEDULE STANDARD

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 Black) --- 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"	STD	3.91	52.5	45.0	3.24	63.8	4.43																	8.4	10.6		
73.0	2 1/2"	STD	5.16	62.7	38.7	2.25	57.4	3.68																	11.6	14.6		
88.9	3"	STD	5.49	77.9	30.7	1.64	49.5	2.92	61.2	3.80															14.1	18.9		
114.3	4"	STD	6.02	102.3			36.8	1.94	48.5	2.70	60.3	3.51													20.5	28.7		
141.3	5"	STD	6.55	128.2					35.0	1.77	46.8	2.48	77.3	4.54											27.2	40.1		
168.3	6"	STD	7.11	154.1							33.3	1.63	63.8	3.47											34.8	53.4		
219.1	8"	STD	8.18	202.7									38.4	1.86	59.3	3.04									52.8	85.1		
273.1	10"	STD	9.27	254.6											32.3	1.50	53.7	2.63							74.4	125.3		
323.9	12"	STD	9.53	304.8											28.3	1.29	52.1	2.49							91.3	164.3		
355.6	14"	STD	9.53	336.5													36.2	1.67	60.0	2.89					97.9	186.9		
406.4	16"	STD	9.53	387.3															34.6	1.57	63.1	3.01			113.4	231.3		
457.0	18"	STD	9.53	437.9																	37.8	1.72	71.1	3.39	130.4	281.0		
508.0	20"	STD	9.53	488.9																			45.6	2.08	149.3	337.1		

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