



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

SERVICE PIPE/CASING: CARBON STEEL/SPIRAL ALUMINUM

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:

Aluminum (k = 205 W/m°K)

| Pipe Diameter (mm) | Equivalent Imperial (in) | Class | | NB (mm) | Casing (Aluminum--Spiral Wound) --- Outer Diameter (mm) | | | | | | | | | | | | | | | | | | | | | | Dry & Wet mass of iH2O insulated pipe* (standard stock items) | |
|--------------------|--------------------------|--------------|---------------|---------|---|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|---|-----------------------------------|
| | | | | | 152 | | 178 | | 203 | | 229 | | 254 | | 305 | | 356 | | 400 | | 450 | | 508 | | 610 | | | |
| | | 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 of insulated pipe (kg/m) |
| 60.3 | 2" | 40 | 3.91 | 52.5 | 45.9 | 2.90 | 58.9 | 3.98 | | | | | | | | | | | | | | | | | | 7.1 | 9.3 | |
| 73.0 | 2 1/2" | 40 | 5.16 | 62.7 | 39.5 | 2.30 | 52.5 | 3.28 | | | | | | | | | | | | | | | | | | 10.2 | 13.3 | |
| 88.9 | 3" | 40 | 5.49 | 77.9 | 31.6 | 1.68 | 44.6 | 2.55 | 57.1 | 3.46 | | | | | | | | | | | | | | | | 12.8 | 17.6 | |
| 114.3 | 4" | 40 | 6.02 | 102.3 | | | 31.9 | 1.63 | 44.4 | 2.41 | 57.4 | 3.29 | | | | | | | | | | | | | | 17.9 | 26.1 | |
| 141.3 | 5" | 40 | 6.55 | 128.2 | | | | | 30.9 | 1.52 | 43.9 | 2.28 | 56.4 | 3.08 | | | | | | | | | | | | | 23.8 | 36.7 |
| 168.3 | 6" | 40 | 7.11 | 154.1 | | | | | | | 30.4 | 1.46 | 42.9 | 2.16 | 68.4 | 3.75 | | | | | | | | | | | 31.2 | 49.8 |
| 219.1 | 8" | 40 | 8.18 | 202.7 | | | | | | | | | | | 43.0 | 2.08 | 68.5 | 3.57 | | | | | | | | | 46.1 | 78.4 |
| 273.1 | 10" | 40 | 9.27 | 254.6 | | | | | | | | | | | | | 41.5 | 1.95 | 63.5 | 3.15 | | | | | | | 64.5 | 115.4 |
| 323.9 | 12" | 40 | 10.31 | 303.3 | | | | | | | | | | | | | | | 38.1 | 1.74 | 63.1 | 3.06 | | | | | 84.3 | 156.5 |
| 355.6 | 14" | 40 | 11.13 | 333.3 | | | | | | | | | | | | | | | | | 47.2 | 2.19 | 76.2 | 3.74 | | | 100.2 | 187.5 |
| 406.4 | 16" | 40 | 12.70 | 381.0 | | | | | | | | | | | | | | | | | | | 50.8 | 2.34 | | | 130.0 | 244.0 |
| 457.0 | 18" | 40 | 14.27 | 428.5 | | | | | | | | | | | | | | | | | | | | | 76.5 | 3.64 | 165.8 | 310.0 |
| 508.0 | 20" | 40 | 15.09 | 477.8 | | | | | | | | | | | | | | | | | | | | | 51.0 | 2.31 | 191.5 | 370.8 |

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