



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

SERVICE PIPE/CASING: CARBON STEEL/SPIRAL EBONY

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:

Painted Steel (k = 50 W/m°K)

| Pipe Diameter (mm) | Equivalent Imperial (in) | Class        |               | NB (mm) | Casing (Ebony--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 or insulated pipe (kg/m) |
| 60.3               | 2"                       | STD          | 3.91          | 52.5    | 45.9   | 2.90          | 58.9         | 3.98          |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 8.2          | 10.4          |   |                                   |
| 73.0               | 2 1/2"                   | STD          | 5.16          | 62.7    | 39.5   | 2.30          | 52.5         | 3.28          |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 11.4         | 14.5          |   |                                   |
| 88.9               | 3"                       | STD          | 5.49          | 77.9    | 31.6   | 1.68          | 44.6         | 2.55          | 57.1         | 3.46          |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 13.9         | 18.7          |   |                                   |
| 114.3              | 4"                       | STD          | 6.02          | 102.3   |  |               | 31.9         | 1.63          | 44.4         | 2.41          | 57.4         | 3.29          |              |               |              |               |              |               |              |               |              |               |              |               | 19.2         | 27.4          |   |                                   |
| 141.3              | 5"                       | STD          | 6.55          | 128.2   |  |               |              |               | 30.9         | 1.52          | 43.9         | 2.28          | 56.4         | 3.08          |              |               |              |               |              |               |              |               |              |               | 25.3         | 38.2          |   |                                   |
| 168.3              | 6"                       | STD          | 7.11          | 154.1   |  |               |              |               |              |               | 30.4         | 1.46          | 42.9         | 2.16          | 68.4         | 3.75          |              |               |              |               |              |               |              |               | 33.1         | 51.7          |   |                                   |
| 219.1              | 8"                       | STD          | 8.18          | 202.7   |  |               |              |               |              |               |              |               |              |               | 43.0         | 2.08          | 68.5         | 3.57          |              |               |              |               |              |               | 48.4         | 80.7          |   |                                   |
| 273.1              | 10"                      | STD          | 9.27          | 254.6   |  |               |              |               |              |               |              |               |              |               |              |               | 41.5         | 1.95          | 63.5         | 3.15          |              |               |              |               | 67.2         | 118.0         |   |                                   |
| 323.9              | 12"                      | STD          | 9.53          | 304.8   |  |               |              |               |              |               |              |               |              |               |              |               |              |               | 38.1         | 1.74          | 63.1         | 3.06          |              |               | 81.4         | 154.4         |   |                                   |
| 355.6              | 14"                      | STD          | 9.53          | 336.5   |  |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 47.2         | 2.19          | 76.2         | 3.74          | 90.4         | 179.3         |   |                                   |
| 406.4              | 16"                      | STD          | 9.53          | 387.3   |  |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 50.8         | 2.34          | 103.8        | 221.6         |   |                                   |
| 457.0              | 18"                      | STD          | 9.53          | 437.9   |  |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 76.5         | 3.64          | 119.8   | 270.4                             |
| 508.0              | 20"                      | STD          | 9.53          | 488.9   |  |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               | 51.0         | 2.31          | 129.8   | 317.6                             |

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