## POL니PE

## Sewerage \& Drainage Pipes



## Benefits of Poly Pipe

$\checkmark$ Long lengths
$\checkmark$ Cost effectiveness
$\checkmark$ Easy installation
$\checkmark$ Flexibility \& resilience
$\checkmark$ Chemical resistance
$\checkmark$
Corrosion resistance
$\checkmark$ Abrasion resistance
$\checkmark$ High flow capacity
$\checkmark$ Weathering resistance
$\checkmark$ Durability
$\checkmark$
High impact resistance

## About Poly Pipe Pty Ltd

Located in the Hunter Valley, NSW, Australia, Poly Pipe Pty Ltd (Poly Pipe) has an ultra modern extrusion, high tech manufacturing facility.

It supplies Polyethylene pipes (PE) and related products which comply with all relevant Australian statutory and regulatory requirements.

In addition Poly Pipe adheres and advances stringent safe work practices, environmental policies and quality practices in everything that it does.

As a member of a worldwide technology group with Australia-wide manufacturing facilities, Poly Pipe was established on the knowledge, experience, and reputation of its associated companies, some of which include Pipemakers and Metroll.

Its national and international customers are found in the mining, rural, irrigation, water, civil, telecommunication, sewerage and drainage industries.

## Industry Applications

TelecommunicationsElectricalMiningWaterGasAirIrrigationSewerage \& DrainageCivil Applications

## Product Information

## SewerFlex Pipe

Poly Pipe SewerFlex pipe is manufactured to the dimensions of AS/NZS4130-SDR21 using premium polyethylene (PE) 100 polyethylene compounds to SNIO.

It is designed and manufactured for gravity sewerage and drainage applications.

This pipe is ideal for use in non pressure sewer applications where the end user requires a white internal surface to assist in video imaging.

Poly Pipe SewerFlex PE 100 pipe can be joined using compression fittings, electrofusion systems or thermal butt-welding equipment.

## Features

Material Grade: PE 100
Standard length is 6 m
$\checkmark$ Colour Jacket: Grey outer with white (natural) inner

Dimensions

|  | O/D |  |  | ID |  | Wall |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nom Size | Min | Max | Ovality | Mean | Min | Max | WT/MT |
| 110 m SN 10 | 110.00 | 111.00 | 2,20 | 99.20 | 5.30 | 6.00 | 1.78 |
| 160 m SN 10 | 160.00 | 161.50 | 3.20 | 144.45 | 7.70 | 8.60 | 3.74 |
| 250 m SN 10 | 250.00 | 252.30 | 5.00 | 226.05 | 11.90 | 13.20 | 9.02 |

## Crate Dimensions

|  | Length <br> $(\mathbf{m})$ | Qty | Crate Kgs | Length <br> $(\mathbf{m})$ | Qty | Crate Kgs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 110 m SN 10 | 6 | 43.00 | 459.00 | 12 | 43.00 | 918.00 |
| 160 m SN 10 | 6 | 22.00 | 494.00 | 12 | 22.00 | 987.00 |
| 250 m SN 10 | 6 | 11.00 | 595.00 | 12 | 11.00 | 1191.00 |

## Product Information

## Sewerage \& Drainage

Poly Pipe Polyethylene (PE) pipe and a full range of fittings are manufactured and supplied for sewerage and drainage.

These include a range of pipe sizes and lengths pressurised drainage and sewerage requirements.

All PE pipes are made in continuous lengths that allow customers to order custom lengths.

These pipes are made from high density polyethylene.
The pipes are quality assured AS/NZS 4401 -Drainage-S16-SDR 33 and S12.5-SDR 26.

## Features



Pipe Capacity of Poly Pipe Trucks-PE100

## Pressure Unit Conversion

| PN | kPa | $\mathbf{m}$ | bar | psi |
| ---: | ---: | ---: | ---: | ---: |
| 4.0 | 400 | 40 | 4.0 | 58 |
| 6.3 | 630 | 63 | 6.3 | 90 |
| 8.0 | 800 | 80 | 8.0 | 116 |
| 10.0 | 1000 | 100 | 10.0 | 145 |
| 12.5 | 1250 | 125 | 12.5 | 181 |
| 16.0 | 1600 | 160 | 16.0 | 229 |
| 20.0 | 2000 | 200 | 20.0 | 290 |

Support Distances PE100

| Size <br> $(\mathbf{m m})$ | PN 6.3 | PN 8 | PN 10 | PN $\mathbf{1 2 . 5}$ | PN 16 | PN 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0}$ | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 |
| $\mathbf{2 5}$ | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 |
| $\mathbf{3 2}$ | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 |
| $\mathbf{4 0}$ | 0.7 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 |
| $\mathbf{5 0}$ | 0.9 | 1.0 | 1.0 | 1.1 | 1.2 | 1.2 |
| $\mathbf{6 3}$ | 1.0 | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 |
| $\mathbf{7 5}$ | 1.1 | 1.3 | 1.4 | 1.5 | 1.5 | 1.6 |
| $\mathbf{9 0}$ | 1.3 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 |
| $\mathbf{1 1 0}$ | 1.5 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 |
| $\mathbf{1 2 5}$ | 1.6 | 1.8 | 2.0 | 2.1 | 2.2 | 2.3 |
| $\mathbf{1 4 0}$ | 1.7 | 2.0 | 2.1 | 2.2 | 2.4 | 2.5 |
| $\mathbf{1 6 0}$ | 1.9 | 2.2 | 2.3 | 2.5 | 2.6 | 2.7 |
| $\mathbf{2 0 0}$ | 2.2 | 2.5 | 2.7 | 2.9 | 3.0 | 3.2 |


| Pipe Outside Diameter <br> $(\mathbf{m m})$ | No. of Pipes |
| :---: | :---: |
| $63(100 \mathrm{~m})$ | 35 |
| $75(100 \mathrm{~m})$ | 25 |
| $90(100 \mathrm{~m})$ | 24 |
| $110(100 \mathrm{~m})$ | 20 |
| 110 | 300 |
| 125 | 224 |
| 140 | 195 |
| 160 | 132 |
| 180 | 120 |
| 200 | 100 |
| 225 | 81 |
| 250 | 64 |
| 280 | 56 |
| 315 | 42 |
| 355 | 42 |
| 400 | 30 |
| 450 | 25 |
| 500 | 20 |
| 560 | 15 |
| 630 | 12 |
| 710 | 9 |
| 800 | 6 |

Guide Only: Weight restrictions may apply. Maximum weight for all trailers is 19T. Special trailers may carry more. Contact the Poly Pipe sales office for clarification.

## S12.5 - SDR 26 Dimensions

|  | O/D |  |  | Wall |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nom Size | Min | Max | Ovality | Mean | Min | Max | WT/ MT |
| $\mathbf{3 2}$ | 32.00 | 32.30 | 0.60 | 25.65 | 3.00 | 3.50 | 0.28 |
| $\mathbf{4 0}$ | 40.00 | 40.40 | 0.80 | 33.70 | 3.00 | 3.50 | 0.36 |
| $\mathbf{5 0}$ | 50.00 | 50.50 | 1.00 | 43.75 | 3.00 | 3.50 | 0.59 |
| $\mathbf{6 3}$ | 63.00 | 63.60 | 1.20 | 56.80 | 3.00 | 3.50 | 0.70 |
| $\mathbf{7 5}$ | 75.00 | 75.70 | 1.50 | 68.85 | 3.00 | 3.50 | 0.70 |
| $\mathbf{9 0}$ | 90.00 | 90.90 | 1.80 | 83.95 | 3.00 | 3.50 | 0.85 |
| $\mathbf{1 1 0}$ | 110.00 | 111.00 | 2.20 | 103.1 | 3.40 | 4.00 |  |
| $\mathbf{1 2 5}$ | 125.00 | 126.20 | 2.50 | 117.20 | 3.90 | 4.50 |  |
| $\mathbf{1 6 0}$ | 160.00 | 161.50 | 3.20 | 150.25 | 4.90 | 5.60 |  |
| $\mathbf{2 0 0}$ | 200.00 | 201.80 | 4.00 | 187.60 | 6.20 | 7.10 |  |
| $\mathbf{2 5 0}$ | 250.00 | 252.30 | 5.00 | 234.75 | 7.70 | 8.75 |  |
| $\mathbf{3 1 5}$ | 315.00 | 317.90 | 6.30 | 295.85 | 9.70 | 10.90 |  |

## S12.5 - SDR 26 Crate Dimensions

|  | Length | Qty | Crate Kgs | Length | Qty | Crate Kgs |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 2}$ | 6 mtr | 100.00 | 169.00 | 12 mtr | 100.00 | 339.00 |
| $\mathbf{4 0}$ | 6 mtr | 100.00 | 217.00 | 12 mtr | 100.00 | 433.00 |
| $\mathbf{5 0}$ | 6 mtr | 50.00 | 135.00 | 12 mtr | 50.00 | 271.00 |
| $\mathbf{6 3}$ | 6 mtr | 57.00 | 201.00 | 12 mtr | 57.00 | 401.00 |
| $\mathbf{7 5}$ | 6 mtr | 57.00 | 241.00 | 12 mtr | 57.00 | 482.00 |
| $\mathbf{9 0}$ | 6 mtr | 57.00 | 339.00 | 12 mtr | 57.00 | 677.00 |
| $\mathbf{1 1 0}$ | 6 mtr | 30.00 | 261.00 | 12 mtr | 30.00 | 522.00 |
| $\mathbf{1 2 5}$ | 6 mtr | 26.00 | 291.00 | 12 mtr | 26.00 | 582.00 |
| $\mathbf{1 6 0}$ | 6 mtr | 17.00 | 314.00 | 12 mtr | 17.00 | 629.00 |
| $\mathbf{2 0 0}$ | 6 mtr | 11.00 | 314.00 | 12 mtr | 11.00 | 627.00 |
| $\mathbf{2 5 0}$ | 6 mtr | 5.00 | 222.00 | 12 mtr | 5.00 | 444.00 |
| $\mathbf{3 1 5}$ | 6 mtr | 3.00 | 211.00 | 12 mtr | 3.00 | 422.00 |

## S16-SDR 33 Dimensions

|  | O/D |  |  | Wall |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nom Size | Min | Max | Ovality | Mean | Min | Max | WT/ MT |
| $\mathbf{3 2}$ | 32.00 | 32.30 | 0.60 | 25.65 | 3.00 | 3.50 | 0.28 |
| $\mathbf{4 0}$ | 40.00 | 40.40 | 0.80 | 33.70 | 3.00 | 3.50 | 0.36 |
| $\mathbf{5 0}$ | 50.00 | 50.50 | 1.00 | 43.75 | 3.00 | 3.50 | 0.59 |
| $\mathbf{6 3}$ | 63.00 | 63.60 | 1.20 | 56.80 | 3.00 | 3.50 | 0.70 |
| $\mathbf{7 5}$ | 75.00 | 75.70 | 1.50 | 68.85 | 3.00 | 3.50 | 0.70 |
| $\mathbf{9 0}$ | 90.00 | 90.90 | 1.80 | 83.95 | 3.00 | 3.50 | 0.85 |
| $\mathbf{1 1 0}$ | 110.00 | 111.00 | 2.20 | 103.1 | 3.40 | 4.00 | 1.19 |
| $\mathbf{1 2 5}$ | 125.00 | 126.20 | 2.50 | 117.20 | 3.90 | 4.50 | 1.53 |
| $\mathbf{1 6 0}$ | 160.00 | 161.50 | 3.20 | 150.25 | 4.90 | 5.60 | 2.45 |
| $\mathbf{2 0 0}$ | 200.00 | 201.80 | 4.00 | 187.60 | 6.20 | 7.10 | 3.88 |
| $\mathbf{2 5 0}$ | 250.00 | 252.30 | 5.00 | 234.75 | 7.70 | 8.70 | 6.00 |
| $\mathbf{3 1 5}$ | 315.00 | 317.90 | 6.30 | 295.85 | 9.70 | 10.90 | 9.48 |

## S16-SDR 33 Crate Dimensions

|  | Length | Qty | Crate Kgs | Length | Qty | Crate Kgs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 32 | 6 mtr | 100.00 | 169.00 | 12 mtr | 100.00 | 339.00 |
| 40 | 6 mtr | 100.00 | 217.00 | 12 mtr | 100.00 | 433.00 |
| 50 | 6 mtr | 50.00 | 138.00 | 12 mtr | 50.00 | 275.00 |
| 63 | 6 mtr | 57.00 | 201.00 | 12 mtr | 57.00 | 401.00 |
| 75 | 6 mtr | 57.00 | 241.00 | 12 mtr | 57.00 | 482.00 |
| 90 | 6 mtr | 57.00 | 291.00 | 12 mtr | 57.00 | 583.00 |
| 110 | 6 mtr | 30.00 | 214.00 | 12 mtr | 30.00 | 428.00 |
| 125 | 6 mtr | 26.00 | 239.00 | 12 mtr | 26.00 | 478.00 |
| 160 | 6 mtr | 17.00 | 250.00 | 12 mtr | 17.00 | 501.00 |
| 200 | 6 mtr | 11.00 | 256.00 | 12 mtr | 11.00 | 513.00 |
| 250 | 6 mtr | 5.00 | 180.00 | 12 mtr | 5.00 | 360.00 |
| 315 | 6 mtr | 3.00 | 171.00 | 12 mtr | 3.00 | 341.00 |

## Maximum Allowable Operating Pressure - PE100 (Black)

| Temp <br> ( ${ }^{\circ}$ C) | Design <br> Life (yrs) | Design <br> Factor | PN 4 | PN 6.3 | PN 8 | PN 10 | PN 12.5 | PN 16 | PN 20 | PN 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 100 | 1.0 | 40 | 64 | 80 | 100 | 127 | 160 | 200 | 250 |
| 25 | 100 | 1.1 | 36 | 58 | 73 | 91 | 115 | 145 | 182 | 227 |
| 30 | 100 | 1.1 | 36 | 58 | 73 | 91 | 115 | 145 | 182 | 227 |
| 35 | 50 | 1.2 | 33 | 53 | 67 | 83 | 106 | 133 | 167 | 208 |
| 40 | 50 | 1.2 | 33 | 53 | 67 | 83 | 106 | 133 | 167 | 208 |
| 45 | 35 | 1.3 | 31 | 49 | 62 | 77 | 99 | 123 | 154 | 192 |
| 50 | 22 | 1.4 | 29 | 46 | 57 | 71 | 91 | 114 | 143 | 179 |
| 55 | 15 | 1.4 | 29 | 46 | 57 | 71 | 91 | 114 | 143 | 179 |
| 60 | 7 | 1.5 | 27 | 43 | 53 | 67 | 85 | 107 | 133 | 167 |
| 80 | 1 | 2.0 | 20 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |

The design life periods may be considered to be the minimum potential service lives and represent the maximum extrapolated periods permitted by the ISO 9080:2003 extrapolation rules given the available test data.

## Comparison of SDR \& Pressure Ratings (PN)

| SDR | $\mathbf{4 1}$ | $\mathbf{3 3}$ | $\mathbf{2 6}$ | $\mathbf{2 1}$ | $\mathbf{1 7}$ | $\mathbf{1 3 . 6}$ | $\mathbf{1 1}$ | $\mathbf{9}$ | $\mathbf{7 . 4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| PE80 | PN 3.2 | PN 4 | - | PN 6.3 | PN 8 | PN 10 | PN 12.5 | PN 16 | PN 20 |
| PE100 | PN 4 | - | PN 6.3 | PN 8 | PN 10 | PN 12.5 | PN 16 | PN 20 | PN 25 |

SDR: Nominal ratio of outside diameter to wall thickness.
PN: Pressure rating at 20DC (MPa multiplied by 10).
PE Classification: Long term rupture stress at 20DC (MPa multiplied by 10) to which the minimum safety factor of 1.25 is applied in order to obtain the 20DC design hoop stress.

## Standard Pipe Colour Chart

|  | Colour | Common Use |
| :--- | :--- | :--- |
|  | Blue | Water |
|  | Orange | Electrical Conduit |
|  | Yellow | Gas - PEl00 |
|  | Light Yellow | Gas - PE80 |
|  | Red | Fire Service Water |
|  | Green | Imperial Rural/Raw Water |
|  | Purple | Recycled/Reclaimed Water |
|  | Grey | SewerFlex |
|  | Cream | Pressure Sewer |
|  | White | Communications Conduit |

Poly Pipe aims to meet its commitment to quality through continuous improvement programs, use of latest technology, close co-operation with key suppliers, commitment to staff development and regular customer feedback.

The Poly Pipe manufacturing plant has Quality Assurance Certification to ISO 9001:2008.
All Pressure Pipes, including Gas, have the WaterMark and Standards Certification.

External Agencies carry out regular audits to provide third party accreditation to the Poly Pipe Quality Management System and verify its ongoing compliance with this Standard.

## POL니PE

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