

# ENERGY & COMMUNICATIONS

## SPECIFICATION AND INSTALLATION GUIDE







The Iplex vision is to be the leading manufacturer and supplier of plastic building materials in New Zealand.

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## Iplex Volta™ PVC-U Rigid Electrical Conduit & Duct

Iplex Volta™ rigid electrical conduit is a heavy duty electrical conduit suitable for above and below ground. Iplex Volta™ electrical duct is suitable for below ground.

- Conduit available from 20mm to 50mm (nominal OD sizes)
- Duct available from 80mm to 200mm
- AS/NZS 61386.21
- Bureau Veritas S-Mark Licence



## Iplex 2700 Series PVC-U Rigid Electrical Duct

2700 series duct is suitable for below ground applications.

- Available from 32mm to 65mm
- AS/NZS 2053.2



## Iplex PVC-U Electrical Bends and Fittings

- Coloured orange for below ground applications
- Available in sizes from 50mm to 100mm



## Iplex PE-100 Flexible Electrical Duct

Iplex PE duct is designed for trenchless applications.

- Available from 32mm to 160mm
- Conforms dimensionally to AS/NZS 4130



## COMMUNICATIONS - SECTION 2

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### Iplex PVC-U Rigid Communications Duct

Iplex PE duct is designed for cable protection for trenched installation.

- Chorus and Non-Chorus offers



### Iplex PE Flexible Communications Duct

Iplex PE duct can be used in both trenchless and trenched applications.

- Conforms dimensionally to AS/NZS 4130
- Chorus and Non-Chorus branded offers



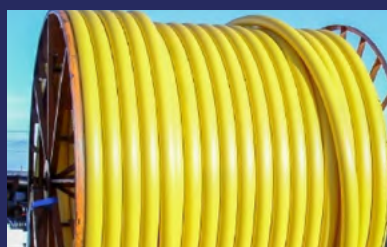
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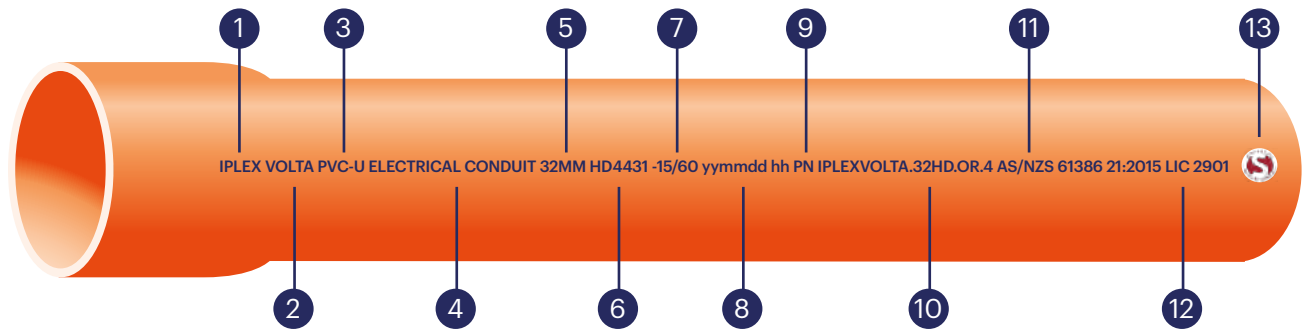


### Iplex Imperial and Metric Gas Pipe

Iplex gas pipe is available in both Imperial and Metric dimensions.

- AS/NZS 4130
- Available from 25mm to 110mm (metric), or 10mm to 100mm (imperial)
- Coiled, straight length and drum coil offerings.

## UNDERSTANDING PIPE CODES -EXAMPLE



- |                       |                                                   |
|-----------------------|---------------------------------------------------|
| ① Company Name        | ⑦ Service Temperature Range                       |
| ② Brand Name          | ⑧ Date and Hour of Manufacture                    |
| ③ Material Type       | ⑨ Location of Manufacture (PN = Palmerston North) |
| ④ Application         | ⑩ Order Code                                      |
| ⑤ Nominal Diameter    | ⑪ Manufacturing Standard                          |
| ⑥ Duty Classification | ⑫ 3rd Party Certification Licence                 |
|                       | ⑬ 3rd Party Certification Body Logo               |

**ELECTRICAL**

## SECTION 1

### ELECTRICAL

#### IPLEX VOLTA™ PVC-U RIGID ELECTRICAL CONDUIT

Iplex Volta™ PVC-U rigid electrical conduit is manufactured in New Zealand to AS / NZS 61386.21 "Conduit systems for cable management Part 21: Particular requirements – Rigid Conduit Systems".

Iplex Volta™ PVC-U Rigid Electrical Conduits are available in diameters ranging from 20mm to 50mm in 4m socketed lengths, suitable for solvent cement jointing.

##### STANDARDS COMPLIANCE

Coloured orange or grey, Iplex Volta rigid electrical conduit is available in nominal OD diameters ranging from 20 to 50mm in Heavy Duty classification manufactured to AS/NZS 61386.21. (Bureau Veritas S-Mark Licence 2901 & 2910).

#### Iplex Volta™ PVC-U Heavy Duty Rigid Electrical Conduit (Grey)

Grey coloured Iplex Volta™ electrical conduit, is suitable for exposed above-ground applications, or for photovoltaic (PV) panel installations and meets the standards required for photovoltaic (PV) arrays AS: NZS 5033. Grey coloured Iplex Volta™ electrical conduit is formulated for UV resistance compliant with AS/NZS 61386.1 and marked with the letter "T" and the word "SOLAR" indicating suitability for long term outdoor applications exposed to direct sunlight (AS/NZS 5033).

**Duty Classification** – HD4431

**Service temperature range:** -15°C to +60°C

#### Iplex Volta™ PVC-U Heavy Duty Rigid Electrical Conduit (Orange)

Orange coloured Iplex Volta™ electrical conduit is suitable for underground installation without further mechanical protection and offers high resistance to impact and compression.

**Duty Classification** – HD4431

**Service temperature range:** -15°C to +60°C

**NB:** If used unprotected from the sun above ground, orange colored Iplex Volta™ electrical conduit has limited UV /weathering resistance and colour fading (whitening) with some loss of impact strength can occur over time.

#### IPLEX VOLTA™ PVC-U RIGID ELECTRICAL DUCT

Iplex Volta™ PVC-U rigid electrical ducts are manufactured in New Zealand to AS / NZS 61386.21 and are coloured orange. These ducts are intended for conventional open cut (trench) methods, to identify and protect contained underground electrical cables.

Iplex Volta™ PVC-U rigid electrical ducts are available in diameters ranging from 80mm to 200mm in 6m socketed lengths, suitable for solvent cement jointing.

Nominal internal diameters 80mm (MD3331 & HD4431 duty classifications ), 100mm and 200mm ( MD3331, HD4431 and VHD5531 duty classifications.) manufactured to AS/NZS 61386.21

**Service temperature range:** -15°C to +60°C.

Manufactured to AS/NZS 61386.21. (Bureau Veritas S-Mark Licence 2901 & 2910).



Iplex Volta™ PVC-U Rigid Electrical Conduit



## SECTION 1

### ELECTRICAL

#### IPLEX 2700 SERIES PVC-U RIGID ELECTRICAL DUCT

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Iplex 2700 series PVC-U rigid electrical ducts are manufactured in New Zealand to AS / NZS 2053.2. This product is coloured orange, and intended for underground installation using conventional open cut (trench) methods, to identify and protect contained underground electrical cables.

Iplex 2700 Series PVC-U rigid electrical ducts are available in diameters ranging from 32mm to 65mm in 6m socketed lengths, suitable for solvent cement jointing.

Nominal internal diameters 32mm, 40mm, 50mm and 65mm manufactured to the OD and wall thickness dimensions of AS/NZS 1260.

Iplex 2700 Series PVC-U rigid electrical duct is used by major New Zealand power authorities.

**NB:** If used unprotected from the sun above ground, orange PVC-U electrical duct has limited UV /weathering resistance and colour fading (whitening) with some loss of impact strength can occur over time.

An alternative option used successfully above ground, such as under bridge structures, or on power poles, is Iplex Novadrain PVC-U, SN 16 DWV pipe to AS/NZS 1260, coloured light pearl grey, which has the same external dimensions as the 2700 Series orange ducts.

#### IPLEX PVC-U BENDS AND FITTINGS

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Iplex provide PVC-U electrical duct bends in various diameters, angles and bend radii.



*Iplex PVC-U Rigid Electrical Duct*

# SECTION 1 ELECTRICAL

## PRODUCT RANGE

### IPLEX VOLTA™ PVC-U RIGID ELECTRICAL CONDUIT - (GREY): ABOVE GROUND APPLICATIONS (TO AS/NZS 61386.21)

Joint Type - Spigot/Socket SCJ

|  | Nominal Diameter (mm) | Order Code           | **Duty Classification | Stiffness Class | Mean Outside Diameter (mm) | Minimum Internal Diameter (mm) | Bundle/Pack QTY |
|-----------------------------------------------------------------------------------|-----------------------|----------------------|-----------------------|-----------------|----------------------------|--------------------------------|-----------------|
|                                                                                   | 20                    | IPLEXVOLTA.20HD.GY.4 | HD4431                | N/A             | 19.9                       | 16.2                           | 10/1560         |
|                                                                                   | 25                    | IPLEXVOLTA.25HD.GY.4 | HD4431                | N/A             | 24.9                       | 20.5                           | 10/1100         |
|                                                                                   | 32                    | IPLEXVOLTA.32HD.GY.4 | HD4431                | N/A             | 31.9                       | 27.0                           | 10/640          |
|                                                                                   | 40                    | IPLEXVOLTA.40HD.GY.4 | HD4431                | N/A             | 39.9                       | 34.3                           | 10/420          |
|                                                                                   | 50                    | IPLEXVOLTA.50HD.GY.4 | HD4431                | N/A             | 49.9                       | 43.5                           | 5/280           |

### IPLEX VOLTA™ PVC-U RIGID ELECTRICAL CONDUIT - (ORANGE): BELOW GROUND APPLICATIONS (TO AS/NZS 61386.21)

Joint Type - Spigot/Socket SCJ

|  | Nominal Diameter (mm) | Order Code            | **Duty Classification | Stiffness Class | Mean Outside Diameter (mm) | Minimum Internal Diameter (mm) | Bundle/Pack QTY |
|------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------|----------------------------|--------------------------------|-----------------|
|                                                                                    | 20                    | IPLEXVOLTA.20.HD.OR.4 | HD4431                | N/A             | 19.9                       | 16.2                           | 10/1560         |
|                                                                                    | 25                    | IPLEXVOLTA.25.HD.OR.4 | HD4431                | N/A             | 24.9                       | 20.5                           | 10/1100         |
|                                                                                    | 32                    | IPLEXVOLTA.32.HD.OR.4 | HD4431                | N/A             | 31.9                       | 27.0                           | 10/640          |
|                                                                                    | 40                    | IPLEXVOLTA.40.HD.OR.4 | HD4431                | N/A             | 39.9                       | 34.3                           | 10/420          |
|                                                                                    | 50                    | IPLEXVOLTA.50.HD.OR.4 | HD4431                | N/A             | 49.9                       | 43.5                           | 5/280           |





# SECTION 1

## ELECTRICAL

### IPLEX VOLTA™ PVC-U RIGID ELECTRICAL DUCT - (ORANGE): BELOW GROUND APPLICATIONS (TO AS/NZS 61386.21)

Joint Type - Spigot/Socket SCJ

|  | Nominal Diameter (mm) | Order Code            | **Duty Classification | Stiffness Class | Mean Outside Diameter (mm) | Minimum Internal Diameter (mm) | Bundle/Pack QTY |
|-----------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------|----------------------------|--------------------------------|-----------------|
|                                                                                   | 80                    | IPEXVOLTA.80MD.OR.6   | MD3331                | N/A             | 82.5                       | 77.1                           | 88              |
|                                                                                   | 80                    | IPEXVOLTA.80HD.OR.6   | HD4431                | N/A             | 82.5                       | 75.3                           | 88              |
|                                                                                   | 100                   | IPEXVOLTA.100MD.OR.6  | MD3331                | SN4             | 110.2                      | 103.2                          | 67              |
|                                                                                   | 100                   | IPEXVOLTA.100HD.OR.6  | HD4431                | SN10            | 110.2                      | 102.0                          | 67              |
|                                                                                   | 100                   | IPEXVOLTA.100VHD.OR.6 | VHD5531               | SN25            | 110.2                      | 96.0                           | 67              |
|                                                                                   | 150                   | IPEXVOLTA.150MD.OR.6  | MD3331                | SN4             | 160.3                      | 150.4                          | 28              |
|                                                                                   | 150                   | IPEXVOLTA.150HD.OR.6  | HD4431                | SN10            | 160.3                      | 148.8                          | 28              |
|                                                                                   | 150                   | IPEXVOLTA.150VHD.OR.6 | VHD5531               | SN25            | 160.3                      | 141.4                          | 28              |
|                                                                                   | 200                   | IPEXVOLTA.200HD.OR.6  | HD4431                | SN10            | 225.3                      | 210.3                          | 15/1            |

### 2700 SERIES PVC-U RIGID ELECTRICAL DUCT - (ORANGE): BELOW GROUND APPLICATIONS (TO AS/NZS 2053.2)

Joint Type - Spigot/Socket SCJ

|  | Nominal Diameter (mm) | Order Code    | **Duty Classification | Stiffness Class | Mean Outside Diameter (mm) | Minimum Internal Diameter (mm) | Bundle/Pack QTY |
|-------------------------------------------------------------------------------------|-----------------------|---------------|-----------------------|-----------------|----------------------------|--------------------------------|-----------------|
|                                                                                     | 32**                  | 2700.32.6 SOE | N/A                   | N/A             | 36.4                       | 31.6                           | 10/240          |
|                                                                                     | 40**                  | 2700.40.6 SOE | N/A                   | N/A             | 42.9                       | 37.6                           | 10/180          |
|                                                                                     | 50**                  | 2700.50.6 SOE | N/A                   | N/A             | 55.8                       | 50.5                           | 5/150           |
|                                                                                     | 65**                  | 2700.65.6 SOE | N/A                   | N/A             | 68.8                       | 62.5                           | 10/102          |

\*\*Nominal diameter 32mm, 40mm, 50mm and 65mm PVC-U ducts coloured orange are manufactured to the OD and wall thickness dimensions of AS/NZS 1260.

Note: SN class and Duty Classification are not included in AS/NZS 1260 for these sizes, but these particular size dimensions deliver equivalent mechanical performance in excess of Heavy Duty Classification / SN10.

### PVC-U ELECTRICAL BENDS - (ORANGE)

|  | Order Code        | Size (mm/°)             |
|-------------------------------------------------------------------------------------|-------------------|-------------------------|
|                                                                                     | 2703.50.45R250    | 50 x 45° ROC* 250mm     |
|                                                                                     | 2703.50.90R250    | 50 x 90° ROC* 250mm     |
|                                                                                     | 2703.80.45R250    | 80 x 45° ROC* 250mm     |
|                                                                                     | 2703.80.90R250    | 80 x 90° ROC* 250mm     |
|                                                                                     | 2703.100.45R250   | 100 x 45° ROC* 250mm    |
|                                                                                     | 2703.100.90R250   | 100 x 90° ROC* 250mm    |
|                                                                                     | 2703.100.90R900   | 100 x 90° ROC* 900mm    |
|                                                                                     | 2703.100HD.45R350 | 100 x 45° HD ROC* 350mm |
|                                                                                     | 2703.100HD.90R900 | 100 x 90° HD ROC* 900mm |

\*ROC = Radius of Curvature

# SECTION 1 ELECTRICAL

## IPLEX PE 100 FLEXIBLE ELECTRICAL DUCT

Iplex supply a range of flexible PE electrical ducts for the identification and protection of buried electrical cable installations. They are designed for trenchless applications and support installation using trenchless methods, including Horizontal Directional Drilling under roads and built up areas where conventional open cut methods are difficult or impractical.

The Iplex PE flexible electrical duct range conforms dimensionally to AS/NZS 4130 and is available in nominal OD diameters from 32mm to 160mm and in various coil lengths. Iplex PE electrical duct is used by major New Zealand power authorities. **NB:** PE duct installed by

Horizontal Directional Drilling is subject to a maximum allowable axial tensile stress for each size / SDR of duct.

**NB:** If orange coloured PE flexible electrical duct is used unprotected from the sun above ground, UV/ weathering resistance is limited and colour fading (whitening), with some loss of mechanical strength can occur over time. An alternative option used successfully above ground such as under bridge structures, or on power poles is Iplex Poliplex PE 100 SDR 11 pipe to AS/NZS 4130, coloured black, which has the same external dimensions as the orange ducts and equivalent physical properties.

### IPLEX® PE FLEXIBLE ELECTRICAL DUCT - FREE STANDING COIL

#### FREE STANDING COIL



Iplex strongly recommends that mechanical straightening and mechanical re-rounding equipment be used when installing coiled DN 125, 140 and 160 PE duct.

| OD (mm) | Order Code                 | Colour | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (KN) |
|---------|----------------------------|--------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
| 32      | Cableduct OR 32/25.200     | Orange | 200m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
| 32      | Cableduct OR 32/25.500     | Orange | 500m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
| 32      | Cableduct OR 32/28.200     | Orange | 200m        | 17         | 32.1                       | 2.0                      | 1.5                                  |
| 32      | Cableduct OR 32/28.500     | Orange | 500m        | 17         | 32.1                       | 2.0                      | 1.5                                  |
| 32      | Cableduct OR 32/27.200     | Orange | 200m        | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
| 40      | Cableduct OR 40/35.100     | Orange | 100m        | 17         | 40.2                       | 2.6                      | 2.3                                  |
| 40      | Cableduct OR 40/35.200     | Orange | 200m        | 17         | 40.2                       | 2.6                      | 2.3                                  |
| 50      | Cableduct OR 50/44.100     | Orange | 100m        | 17         | 50.3                       | 3.2                      | 3.7                                  |
| 50      | Cableduct OR 50/42.100     | Orange | 100m        | 13.6       | 50.3                       | 3.9                      | 4.5                                  |
| 50      | Cableduct OR 50/44.200     | Orange | 200m        | 17         | 50.3                       | 3.2                      | 3.7                                  |
| 50      | Cableduct OR 50/42.200     | Orange | 200m        | 13.6       | 50.3                       | 3.9                      | 4.5                                  |
| 63      | Cableduct OR 63/55.100     | Orange | 100m        | 17         | 63.3                       | 4.0                      | 5.8                                  |
| 63      | Cableduct OR 63/53.100     | Orange | 100m        | 13.6       | 63.3                       | 5.0                      | 7.1                                  |
| 63      | Cableduct OR 63/55.150     | Orange | 150m        | 17         | 63.3                       | 4.0                      | 5.8                                  |
| 90      | Cableduct OR 90/79.50      | Orange | 50m         | 17         | 90.5                       | 5.8                      | 12.0                                 |
| 90      | Cableduct OR 90/79.100     | Orange | 100m        | 17         | 90.5                       | 5.8                      | 12.0                                 |
| 110     | Cableduct OR 110/97.50     | Orange | 50m         | 17         | 110.5                      | 7.0                      | 17.8                                 |
| 110     | Cableduct OR 110/97.100    | Orange | 100m        | 17         | 110.5                      | 7.0                      | 17.8                                 |
| 125     | Cableduct 125/110.100 CXOR | Orange | 100m        | 17         | 125.5                      | 7.8                      | 22.8                                 |
| 140     | Cableduct 140/123.100 CXOR | Orange | 100m        | 17         | 140.6                      | 8.8                      | 28.6                                 |
| 160     | Cableduct 160/140.100 CXOR | Orange | 100m        | 17         | 160.4                      | 10.0                     | 37.3                                 |

### IPLEX® PE FLEXIBLE ELECTRICAL DUCT - DRUM COIL

#### DRUM COIL



| OD (mm) | Order Code                 | Colour | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (KN) |
|---------|----------------------------|--------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
| 50      | Cableduct 50/44.800 CXOR   | Orange | 800m        | 17         | 50.3                       | 3.2                      | 3.7                                  |
| 50      | Cableduct 50/44.2800 CXOR  | Orange | 2800m       | 17         | 50.3                       | 3.2                      | 3.7                                  |
| 110     | Cableduct 110/97.600 CXOR  | Orange | 600m        | 17         | 110.5                      | 7.0                      | 17.8                                 |
| 140     | Cableduct 140/123.340 CXOR | Orange | 340m        | 17         | 140.6                      | 8.8                      | 28.6                                 |
| 160     | Cableduct 160/140.270 CXOR | Orange | 270m        | 17         | 160.4                      | 10.0                     | 37.3                                 |

# SECTION 1 ELECTRICAL

## IPLEX® PE FLEXIBLE ELECTRICAL DUCT

### STRAIGHT LENGTHS



| OD (mm) | Order Code                | Colour | Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum Safe Axial Pulling Load (kN) |
|---------|---------------------------|--------|--------|------------|----------------------------|--------------------------|--------------------------------------|
| 110     | Cableduct 110/97.12 CXOR  | Orange | 12m    | 17         | 110.5                      | 7.0                      | 17.8                                 |
| 110     | Cableduct 110/97.15 CXOR  | Orange | 15m    | 17         | 110.5                      | 7.0                      | 17.8                                 |
| 140     | Cableduct 140/123.12 CXOR | Orange | 12m    | 17         | 140.6                      | 8.8                      | 28.6                                 |
| 140     | Cableduct 140/119.12 CXOR | Orange | 12m    | 13.6       | 140.6                      | 10.3                     | 34.7                                 |
| 140     | Cableduct 140/123.15 CXOR | Orange | 15m    | 17         | 140.6                      | 8.8                      | 28.6                                 |
| 160     | Cableduct 160/130.12 CXOR | Orange | 12m    | 11         | 160.4                      | 14.6                     | 55.1                                 |
| 160     | Cableduct 160/140.12 CXOR | Orange | 12m    | 17         | 160.4                      | 10.0                     | 37.3                                 |
| 160     | Cableduct 160/136.15 CXOR | Orange | 15m    | 13.6       | 160.4                      | 11.8                     | 45.3                                 |
| 160     | Cableduct 160/140.12 CXOR | Orange | 12m    | 17         | 160.4                      | 10.0                     | 37.3                                 |

Iplex strongly recommends that mechanical straightening and mechanical re-rounding equipment be used when installing coiled DN 125, 140 and 160 PE duct.



Iplex DN 110 SDR 17 PE Flexible Electrical duct in Free Standing coils and Drum Coils



A background image of a large, modern building with a green, textured facade, possibly a library or museum, under a blue sky with clouds. The image is partially obscured by a diagonal white line and a semi-transparent blue overlay in the top right corner.

# COMMUNICATIONS

## SECTION 2

### COMMUNICATIONS

#### IPLEX PVC-U RIGID COMMUNICATIONS DUCT

##### Iplex PVC-U Rigid Communications Duct (Chorus Branded & Non-Chorus)

The Iplex range of PVC-U rigid communications duct is available for communications and fiber optic projects requiring cable protection for trenched installation.

Chorus Branded duct is available only to Chorus approved installers and only approved Chorus contractors can purchase and install these products. For further details please contact Iplex Pipelines.

##### Iplex PVC-U Communications Repair Sleeve (Chorus Branded)

Repair sleeves slide over the outside of the PVC Communications duct and are joined to the duct with PVC solvent cement.



20mm PVC-U Communications Duct  
(Chorus branded)



100mm PVC Repair Sleeve

#### IPLEX PE FLEXIBLE COMMUNICATIONS DUCT

##### (Chorus Branded & Non-Chorus)

Iplex Pipeline's ability to colour-jacket or colour-stripe polyethylene ducting assists the duct asset owner with identification in multiple duct applications.

NB: Flexible PE duct installed by Horizontal Directional Drilling is subject to a maximum allowable axial tensile stress for each size / SDR of duct. Please contact Iplex for further information.



Drum Coils – DN 110 PE Communications duct SDR17



## SECTION 2

### COMMUNICATIONS

## PRODUCT RANGE

### PVC-U RIGID COMMUNICATIONS DUCT

#### CHORUS BRANDED PVC-U RIGID COMMUNICATIONS DUCT

|  | Nominal Diameter (mm) | Order Code | Colour  | Duty Classification | Stiffness Class | #Joint Type       | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Bundle/Pack QTY |
|-----------------------------------------------------------------------------------|-----------------------|------------|---------|---------------------|-----------------|-------------------|----------------------------|--------------------------|-----------------|
|                                                                                   | 20mm x 6m             | 10012937   | ● Green | N/A                 | N/A             | Spigot/Socket SCJ | 26.7                       | 1.9                      | 150             |
|                                                                                   | 20mm x 6m             | 10013281   | ● White | N/A                 | N/A             | Spigot/Socket SCJ | 26.7                       | 2.1                      | 150             |
|                                                                                   | 50mm x 6m             | P4001      | ● Green | N/A                 | N/A             | Rubber Ring Joint | 60.3                       | 2.6                      | 123             |
|                                                                                   | 100mm x 6m            | P4000      | ● Green | SN6                 | N/A             | Rubber Ring Joint | 110.2                      | 3.6                      | 67              |

#### CHORUS BRANDED PVC-U REPAIR SLEEVE FOR COMMUNICATIONS DUCT

|  | Nominal Diameter (mm) | Order Code | Colour  | Duty Classification | Stiffness Class | #Joint Type    | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Bundle/Pack QTY |
|-----------------------------------------------------------------------------------|-----------------------|------------|---------|---------------------|-----------------|----------------|----------------------------|--------------------------|-----------------|
|                                                                                   | 50mm x 2m             | 10013103   | ● Green | N/A                 | N/A             | Plain End, SCJ | 65.6                       | 2.6                      | 1               |
|                                                                                   | 100mm x 2m            | 10013102   | ● Green | N/A                 | N/A             | Plain End, SCJ | 117.3                      | 3.6                      | 1               |

#### NON-CHORUS BRANDED PVC-U RIGID COMMUNICATIONS DUCT (GREEN)

|  | Nominal Diameter (mm) | Order Code                | Colour  | Duty Classification | Stiffness Class | #Joint Type       | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Bundle/Pack QTY |
|------------------------------------------------------------------------------------|-----------------------|---------------------------|---------|---------------------|-----------------|-------------------|----------------------------|--------------------------|-----------------|
|                                                                                    | 20mm x 6m             | CD80020                   | ● White | N/A                 | N/A             | Spigot/Socket SCJ | 26.7                       | 1.7                      | 150             |
|                                                                                    | 100mm x 6m            | 2780.100.LD.6 SOE         | ● Green | LD                  | SN4             | Spigot/Socket SCJ | 110.2                      | 3.6                      | 67              |
|                                                                                    | 150mm x 6m            | 2780.150.LD.6 SOE         | ● Green | LD                  | SN4             | Spigot/Socket SCJ | 160.3                      | 4.1                      | 28              |
|                                                                                    | 100mm x 6m            | COMMSDUCT.100SN10.HD.GR.6 | ● Green | HD                  | SN10            | Spigot/Socket SCJ | 110.2                      | 3.8                      | 67              |
|                                                                                    | 150mm x 6m            | COMMSDUCT.150SN10.HD.GR.6 | ● Green | HD                  | SN10            | Spigot/Socket SCJ | 160.3                      | 5.3                      | 28              |

#### NON-CHORUS BRANDED PVC-U RIGID COMMUNICATIONS DUCT (RED)

|  | Nominal Diameter (mm) | Order Code                 | Colour | Duty Classification | Stiffness Class | #Joint Type       | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Pack Qty |
|-------------------------------------------------------------------------------------|-----------------------|----------------------------|--------|---------------------|-----------------|-------------------|----------------------------|--------------------------|----------|
|                                                                                     | 50mm x 6m             | 2730.50.6 SOE              | ● Red  | N/A                 | N/A             | Spigot/Socket SCJ | 55.8                       | 2.4                      | 150      |
|                                                                                     | 100mm x 6m            | 2730.100MD.6 SOE           | ● Red  | MD                  | SN4             | Spigot/Socket SCJ | 110.2                      | 3.1                      | 67       |
|                                                                                     | 100mm x 6m            | COMMSDUCT.100SN10.HD.RED.6 | ● Red  | HD                  | SN10            | Spigot/Socket SCJ | 110.2                      | 3.8                      | 67       |

#### IPLEX PVC-U RIGID COMMUNICATIONS DUCT (SALMON OR SALMON PINK)

|  | Nominal Diameter (mm) | Order Code                 | Colour        | Duty Classification | Stiffness Class | #Joint Type       | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Pack Qty |
|-------------------------------------------------------------------------------------|-----------------------|----------------------------|---------------|---------------------|-----------------|-------------------|----------------------------|--------------------------|----------|
|                                                                                     | 50mm x 6m             | COMMSDUCT.50.SAP.6         | ● Salmon Pink | N/A                 | N/A             | Spigot/Socket SCJ | 55.8                       | 2.4                      | 150      |
|                                                                                     | 50mm x 6m             | 2720.50.6 SOE              | ● Salmon      | N/A                 | N/A             | Spigot/Socket SCJ | 55.8                       | 2.4                      | 150      |
|                                                                                     | 100mm x 6m            | 2720.100MD.6 SOE           | ● Salmon      | MD                  | SN4             | Spigot/Socket SCJ | 110.2                      | 3.1                      | 67       |
|                                                                                     | 100mm x 6m            | COMMSDUCT.100SN10.HD.SA.6  | ● Salmon      | HD                  | SN10            | Spigot/Socket SCJ | 110.2                      | 3.8                      | 67       |
|                                                                                     | 150mm x 6m            | COMMSDUCT.150SN10.HD.SA.6  | ● Salmon      | HD                  | SN10            | Spigot/Socket SCJ | 160.3                      | 5.3                      | 28       |
|                                                                                     | 100mm x 6m            | COMMSDUCT.100SN10.HD.SAP.6 | ● Salmon Pink | HD                  | SN10            | Spigot/Socket SCJ | 110.2                      | 3.8                      | 67       |

#### ONE NZ BRANDED PVC-U RIGID COMMUNICATIONS DUCT

|  | Nominal Diameter (mm) | Order Code              | Colour       | Duty Classification | Stiffness Class | #Joint Type       | Mean Outside Diameter (mm) | Wall Thickness (mm) | Pack Qty |
|-------------------------------------------------------------------------------------|-----------------------|-------------------------|--------------|---------------------|-----------------|-------------------|----------------------------|---------------------|----------|
|                                                                                     | 50                    | ONE NZ 50C SOE          | ● Light Blue | N/A                 | N/A             | Spigot/Socket SCJ | 60.3                       | 2.6                 | 123      |
|                                                                                     | 100                   | ONE NZ SN6.100.6 SOE    | ● Light Blue | N/A                 | SN6             | Spigot/Socket SCJ | 110.2                      | 3.2                 | 67       |
|                                                                                     | 100                   | ONE NZ SN10.100.6 SOE   | ● Light Blue | N/A                 | SN10            | Spigot/Socket SCJ | 110.2                      | 3.8                 | 67       |
|                                                                                     | 50                    | ONE NZ REPAIR SLEEVE 50 | ● Light Blue | N/A                 | N/A             | Sleeve            | 65.5                       | 2.2                 | 56       |

## SECTION 2

### COMMUNICATIONS

## PRODUCT RANGE

### PE FLEXIBLE COMMUNICATIONS DUCT

#### IPLEX® PE FLEXIBLE COMMUNICATIONS DUCT (SALMON)

|  | Nominal Diameter (mm) | Order Code               | Colour   | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|-----------------------------------------------------------------------------------|-----------------------|--------------------------|----------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
|                                                                                   | 25mm                  | Cableduct SA 25/22100    | ● Salmon | 100m        | 17         | 25.1                       | 1.7                      | 1.0                                  |
|                                                                                   | 32mm                  | Cableduct SA 32/25500    | ● Salmon | 500m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
|                                                                                   | 63mm                  | Cableduct SA 63/55100    | ● Salmon | 100m        | 17         | 63.3                       | 4.0                      | 5.8                                  |
|                                                                                   | 110mm                 | Cableduct SA 110/97100   | ● Salmon | 100m        | 17         | 110.5                      | 7.0                      | 17.8                                 |
|                                                                                   | 110mm                 | Cableduct SA 110/97340** | ● Salmon | 340m        | 17         | 110.5                      | 7.0                      | 17.8                                 |

\*\* Supplied as a Drum Coil

#### IPLEX® PE FLEXIBLE COMMUNICATIONS DUCT (RED)

|  | Nominal Diameter (mm) | Order Code                | Colour | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|------------------------------------------------------------------------------------|-----------------------|---------------------------|--------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
|                                                                                    | 25mm                  | COMMSDUCT Red 25/20200    | ● Red  | 200m        | 11         | 25.1                       | 2.5                      | 1.3                                  |
|                                                                                    | 25mm                  | COMMSDUCT Red 25/20500    | ● Red  | 500m        | 11         | 25.1                       | 2.5                      | 1.3                                  |
|                                                                                    | 32mm                  | COMMSDUCT Red 32/25500    | ● Red  | 500m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
|                                                                                    | 32mm                  | COMMSDUCT Red 32/27200    | ● Red  | 200m        | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 50mm                  | COMMSDUCT Red 50/44100    | ● Red  | 100m        | 17         | 50.2                       | 3.2                      | 3.7                                  |
|                                                                                    | 63mm                  | Cableduct Red 63/55100    | ● Red  | 100m        | 17         | 63.3                       | 4.0                      | 5.8                                  |
|                                                                                    | 110mm                 | Cableduct Red 110/97100   | ● Red  | 100m        | 17         | 110.5                      | 7.0                      | 17.8                                 |
|                                                                                    | 110mm                 | Cableduct Red 110/97340** | ● Red  | 340m        | 17         | 110.5                      | 7.0                      | 17.8                                 |

\*\* Supplied as a Drum Coil

#### IPLEX® PE FLEXIBLE COMMUNICATIONS DUCT (COLOUR RAL 3015 - LIGHT PINK)

|  | Nominal Diameter (mm) | Order Code             | Colour       | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|-------------------------------------------------------------------------------------|-----------------------|------------------------|--------------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
|                                                                                     | 32mm                  | COMMSDUCT SAP 32/28600 | ● Light Pink | 600m        | 17         | 32.1                       | 2.0                      | 1.5                                  |
|                                                                                     | 63mm                  | Cableduct SAP 63/55100 | ● Light Pink | 100m        | 17         | 63.3                       | 4.0                      | 5.8                                  |

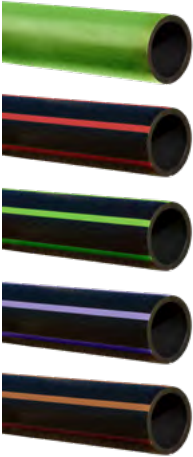
## SECTION 2

### COMMUNICATIONS

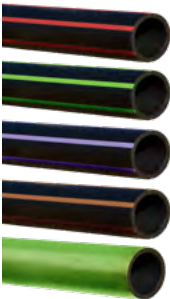
## PRODUCT RANGE

### PE FLEXIBLE COMMUNICATIONS DUCT

#### CHORUS BRANDED PE FLEXIBLE COMMUNICATIONS DUCT

|  | Size | Order Code  | Colour                           | SDR Rating | Coil Length | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|------------------------------------------------------------------------------------|------|-------------|----------------------------------|------------|-------------|----------------------------|--------------------------|--------------------------------------|
|                                                                                    | 25mm | 20021788    | ● Green                          | 11         | 100         | 20.1                       | 2.5                      | 1.3                                  |
|                                                                                    | 25mm | 20021789    | ● Green                          | 11         | 200         | 20.1                       | 2.5                      | 1.3                                  |
|                                                                                    | 32mm | 10012829    | ● Black with red multistripes    | 13.6       | 1000        | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012829500 | ● Black with red multistripes    | 13.6       | 500         | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012830    | ● Black with green multistripes  | 13.6       | 1000        | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012830500 | ● Black with green multistripes  | 13.6       | 500         | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012831    | ● Black with violet multistripes | 13.6       | 1000        | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012831500 | ● Black with violet multistripes | 13.6       | 500         | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012832    | ● Black with brown multistripes  | 13.6       | 1000        | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                    | 32mm | 10012832500 | ● Black with brown multistripes  | 13.6       | 500         | 32.1                       | 2.6                      | 1.8                                  |

#### NON - CHORUS BRANDED PE FLEXIBLE COMMUNICATIONS DUCT

|  | Nominal Diameter (mm) | Order Code               | Colour                          | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|-------------------------------------------------------------------------------------|-----------------------|--------------------------|---------------------------------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
|                                                                                     | 32mm                  | COMMSDUCT.32/27.1000RMS  | ● Black with red multistripe    | 1000m       | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                     | 32mm                  | COMMSDUCT.32/27.1000GMS  | ● Black with green multistripe  | 1000m       | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                     | 32mm                  | COMMSDUCT.32/27.1000LMS  | ● Black with violet multistripe | 1000m       | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                     | 32mm                  | COMMSDUCT.32/27.1000BRMS | ● Black with brown multistripe  | 1000m       | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                     | 110mm                 | Teleduct PE110/97.12CXGR | ● Green                         | 12m         | 17         | 110.5                      | 7.0                      | 17.8                                 |

#### NON-CHORUS PE FLEXIBLE COMMUNICATIONS DUCT

|  | OD (mm) | Order Code            | Colour       | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|-------------------------------------------------------------------------------------|---------|-----------------------|--------------|-------------|------------|----------------------------|--------------------------|--------------------------------------|
|                                                                                     | 32      | Teleduct PE32/25.100  | ● Lime Green | 100m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
|                                                                                     | 32      | Teleduct PE32/25.200  | ● Lime Green | 200m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
|                                                                                     | 32      | Teleduct PE32/25.500  | ● Lime Green | 500m        | 11         | 32.1                       | 3.2                      | 2.2                                  |
|                                                                                     | 32      | Teleduct PE32/27.200  | ● Lime Green | 200m        | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                     | 32      | Teleduct PE32/27.500  | ● Lime Green | 500m        | 13.6       | 32.1                       | 2.6                      | 1.8                                  |
|                                                                                     | 32      | Teleduct PE32/28.200  | ● Lime Green | 200m        | 17         | 32.1                       | 2.0                      | 1.5                                  |
|                                                                                     | 32      | Teleduct PE32/28.500  | ● Lime Green | 500m        | 17         | 32.1                       | 2.0                      | 1.5                                  |
|                                                                                     | 40      | Teleduct PE40/35.200  | ● Lime Green | 200m        | 17         | 40.1                       | 2.6                      | 2.3                                  |
|                                                                                     | 50      | Teleduct PE50/44.100  | ● Lime Green | 100m        | 17         | 50.2                       | 3.2                      | 3.7                                  |
|                                                                                     | 63      | Teleduct PE63/55.50   | ● Lime Green | 50m         | 17         | 63.3                       | 4.0                      | 5.8                                  |
|                                                                                     | 63      | Teleduct PE63/55.100  | ● Lime Green | 100m        | 17         | 63.3                       | 4.0                      | 5.8                                  |
|                                                                                     | 63      | Teleduct PE63/55.150  | ● Lime Green | 150m        | 17         | 63.3                       | 4.0                      | 5.8                                  |
|                                                                                     | 110     | Teleduct PE110/97.50  | ● Lime Green | 50m         | 17         | 110.5                      | 7.0                      | 17.8                                 |
|                                                                                     | 110     | Teleduct PE110/97.100 | ● Lime Green | 100m        | 17         | 110.5                      | 7.0                      | 17.8                                 |



## SECTION 2

### COMMUNICATIONS

## PRODUCT RANGE

### PE FLEXIBLE COMMUNICATIONS DUCT

#### SPARK BRANDED PE FLEXIBLE COMMUNICATIONS DUCT (COLOUR: PINK RAL4010)

|  | OD (mm) | Order Code             | Colour    | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Internal Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|-----------------------------------------------------------------------------------|---------|------------------------|-----------|-------------|------------|----------------------------|-----------------------------|--------------------------|--------------------------------------|
|                                                                                   | 110     | SPARK DUCT PE110/97100 | ● Magenta | 100m        | 17         | 110.5                      | 96.5                        | 7.0                      | 17.8                                 |

#### ONE NZ BRANDED PE FLEXIBLE COMMUNICATIONS DUCT

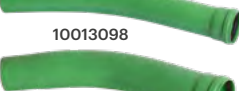
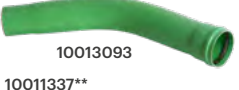
|  | OD (mm) | Order Code           | Colour                              | Coil Length | SDR Rating | Mean Outside Diameter (mm) | Mean Internal Diameter (mm) | Mean Wall Thickness (mm) | Maximum safe axial pulling load (kN) |
|------------------------------------------------------------------------------------|---------|----------------------|-------------------------------------|-------------|------------|----------------------------|-----------------------------|--------------------------|--------------------------------------|
|                                                                                    | 32      | ONE NZ PE 32/25.100  | ● Light Blue                        | 100m        | 11         | 32.1                       | 25.9                        | 3.2                      | 2.2                                  |
|                                                                                    | 32      | ONE NZ PE 32/25.1000 | ● Light Blue                        | 1000m       | 11         | 32.1                       | 25.9                        | 3.2                      | 2.2                                  |
|                                                                                    | 63      | ONE NZ PE 63/55.150  | ● Light Blue                        | 150m        | 17         | 63.5                       | 55.2                        | 4.0                      | 5.8                                  |
|                                                                                    | 63      | ONE NZ PE 63/55.150B | ● Light Blue with black multistripe | 150m        | 17         | 63.5                       | 55.2                        | 4.0                      | 5.8                                  |
|                                                                                    | 63      | ONE NZ PE 63/55.150R | ● Light Blue with red multistripe   | 150m        | 17         | 63.5                       | 55.2                        | 4.0                      | 5.8                                  |
|                                                                                    | 110     | ONE NZ 110/97.100    | ● Light Blue                        | 100m        | 17         | 110.5                      | 96.5                        | 7.0                      | 17.8                                 |

## Drum coil

## IPEX PE AND PVC-U COMMUNICATIONS BENDS & FITTINGS

Iplex Pipelines has a range of fittings for use with PVC-U and PE Communications ducting. These include post formed PVC bends, couplers and reducing saddles. Chorus Branded fittings are compatible for use with Chorus Branded Communications ducts. Standard duct fittings are compatible with Iplex Communications cable ducts.

#### CHORUS BRANDED PVC-U COMMUNICATIONS BENDS

|  | 10011337   | Size                 | Order Code | Colour  | Pack Qty |
|-------------------------------------------------------------------------------------|------------|----------------------|------------|---------|----------|
|                                                                                     |            | 20mm x 90° ROC* 240  | 10012582   | ● Green | 1        |
|  | 10013084   | 20mm x 90° ROC* 400  | 10013280   | ● Green | 1        |
|                                                                                     |            | 20mm x 90° ROC* 530  | 10012939   | ● Green | 1        |
|                                                                                     |            | 20mm x 90° ROC* 100  | 10013279   | ● White | 1        |
|                                                                                     | 10013088   | 20mm x 90° ROC* 300  | 10012940   | ● White | 1        |
|                                                                                     |            | 50mm x 30° ROC* 350  | 10013084   | ● Green | 1        |
|                                                                                     |            | 50mm x 45° ROC* 200  | 10013087   | ● Green | 1        |
|                                                                                     |            | 50mm x 45° ROC* 350  | 10013086   | ● Green | 1        |
|  | 10013098   | 50mm x 45° ROC* 900  | 10013100   | ● Green | 1        |
|                                                                                     |            | 50mm x 90° ROC* 350  | 10013088   | ● Green | 1        |
|                                                                                     | 10013091   | 50mm x 90° ROC* 900  | 10013099   | ● Green | 1        |
|                                                                                     |            | 100mm x 22° ROC* 900 | 10013098   | ● Green | 1        |
|                                                                                     | 10013093   | 100mm x 30° ROC* 300 | 10013091   | ● Green | 1        |
|                                                                                     |            | 100mm x 45° ROC* 300 | 10013093   | ● Green | 1        |
|                                                                                     |            | 100mm x 90° ROC* 350 | 10011337** | ● Green | 1        |
|                                                                                     |            | 100mm x 90° ROC* 400 | 10013095   | ● Green | 1        |
|  | 10011337** | 100mm x 90° ROC* 900 | 10013094   | ● Green | 1        |
|                                                                                     |            | 100mm x 90° ROC* 601 | 10013096   | ● Green | 1        |

\*ROC = Radius of Curvature \*\*Female / Female (F&F) Bend

## SECTION 2

### COMMUNICATIONS

#### CHORUS BRANDED PVC-U COMMUNICATIONS FITTINGS

| Coupler         |  | Size        | Order Code | Colour  | Pack Qty |
|-----------------|-----------------------------------------------------------------------------------|-------------|------------|---------|----------|
|                 |                                                                                   | 50mm        | 10013109   | ● Green | 1        |
| Reducing Saddle |  | Size        | Order Code | Colour  | Pack Qty |
|                 |                                                                                   | 50mm x 20mm | 10012938   | ● Green | 1        |
| Dust Cap        |  | Size        | Order Code | Colour  | Pack Qty |
|                 |                                                                                   | 50mm        | P4004      | ● Black | 1        |
|                 |                                                                                   | 100mm       | P4005      | ● Black | 1        |

#### WHITE PVC-U COMMUNICATIONS BENDS

|  | CD8032045<br>CD8032090 | Size     | Order Code | Colour  | Pack Qty |
|-----------------------------------------------------------------------------------|------------------------|----------|------------|---------|----------|
|                                                                                   |                        | 20 x 45° | CD8032045  | ● White | 1        |
|                                                                                   |                        | 20 x 90° | CD8032090  | ● White | 1        |

#### PLASSON® COMPRESSION COUPLINGS FOR PE COMMUNICATIONS DUCTS

|                        |                                                                                     | Size | Order Code | Colour  | End load restrained | Full pipe bore available |
|------------------------|-------------------------------------------------------------------------------------|------|------------|---------|---------------------|--------------------------|
| Plain Coupling         |  | 25   | 2510.25    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 32   | 2510.32    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 40   | 2510.40    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 50   | 2510.50    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 63   | 2510.63    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 110  | 2510.110   | ● Black | Yes                 | Yes                      |
| Slip (Repair) Coupling |  | 25   | 2511.25    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 32   | 2511.32    | ● Black | Yes                 | Yes                      |
|                        |                                                                                     | 63   | 2511.63    | ● Black | Yes                 | Yes                      |

|                                                                                     | Order Code | Size (mm) | Ctn/Bag Qty |
|-------------------------------------------------------------------------------------|------------|-----------|-------------|
|  | 430.32     | 32        | 1           |
|                                                                                     | 430.40     | 40        | 1           |
|                                                                                     | 430.50     | 50        | 1           |
|                                                                                     | 430.63     | 63        | 1           |
|                                                                                     | 430.90     | 90        | 1           |
|                                                                                     | 430.110    | 110       | 1           |
|                                                                                     | 430.125    | 125       | 1           |
|                                                                                     | 430.140    | 140       | 1           |
|                                                                                     | 430.160    | 160       | 1           |
|                                                                                     | 430.180    | 180       | 1           |

**FLEXIBLE PUSH-ON CAP**  
Removable Flexible Cap for  
Pipe End Protection



Plasson Line 7 Mechanical coupler (order code 2510 Series) joining Iplex PE Communication Ducts

## SECTION 2

### COMMUNICATIONS - INSTALLATION

## COMPRESSION FITTINGS FOR IPLEX PE ELECTRICAL DUCTS AND COMMUNICATIONS DUCTS

### Plasson Line 7 Fittings - Assembly Instructions (20mm - 63mm)

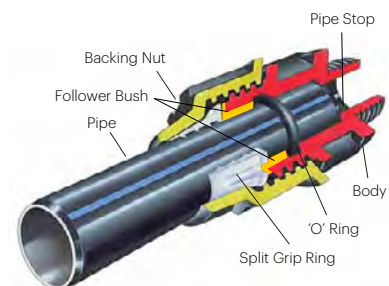


#### General Instructions

Follow these assembly Instructions for a secure, connection.

- Ensure the pipe end to be inserted into the fitting, and the fitting itself, are both totally free of dirt, grit, scratches and any other damage
- **Do not overtighten the Backing Nut** when closing. NEVER use wrenches with handle lengths longer than 22cm – excessive torque during tightening can spread the Backing Nut cone and result in pullouts.
- If fittings are reused, ensure the Split Grip Ring is sharp and can bite into the pipe to avoid pull outs. Alternatively replace the Split Grip Ring.

20mm - 63mm



#### STEP 1

Cut the pipe square and remove burrs. It is good trade practice to chamfer (with a file or Plasson 2555 chamfering tool) and lubricate the pipe ends. (use Medlube or an approved equivalent). Chamfering and lubrication will ease insertion, particularly for sizes DN 40, DN 50 and DN 63, however these steps are optional.



#### STEP 2

Undo the nut up to the last thread. **Do not remove the Backing Nut** from the fitting body.



#### STEP 3

Twist the pipe into the fitting through the Backing Nut and through the Split Grip Ring until it meets the first resistance – pushing against the captive O-ring. Then push and twist the pipe **through and past the O-ring** until it stops at the pipe stop inside the fitting – the final stop.



#### STEP 4

Twist the pipe into the fitting through the Backing Nut and through the Split Grip Ring until it meets the first resistance – pushing against the captive O-ring. Then push and twist the pipe through and past the O-ring until it stops at the pipe stop inside the fitting – the final stop.



## SECTION 2

### COMMUNICATIONS - INSTALLATION

## COMPRESSION FITTINGS FOR IPLEX PE ELECTRICAL DUCTS AND COMMUNICATIONS DUCTS

### Plasson Line 7 Fittings - Assembly Instructions (75mm - 125mm)



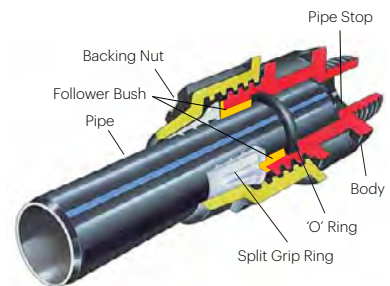
#### General Instructions

75mm - 125mm



#### STEP 1

Cut the pipe, square. Unscrew the Backing Nut and **remove the Split Grip ring**. Reposition Backing Nut, Follower Bush and O ring on the pipe, two diameters back. Lubricate pipe and O ring, with Medlube.



#### STEP 2

Push the pipe fully into the fitting body, up to the internal stop. Push the O ring and Follower Bush forward until they rest against the fitting (They will not enter the body of the fitting).



#### STEP 3

Tighten the Backing Nut to drive the Follower Bush and O ring together, right into the fitting until the Follower Bush is flush with fitting mouth. Use a Plasson C ring spanner to assist as needed.



#### STEP 4

Fully unscrew the Backing Nut, and pull back along the pipe.

Now, open the Split Grip Ring and place directly over and onto the pipe, with the lugs and flat end, **facing and touching** the Follower Bush.



#### STEP 5

Firmly tighten the Backing Nut with only a Plasson "C-ring" spanner. (Max handle length = 46cm) Do not overtighten.

An aerial photograph of a suburban neighborhood with various houses, trees, and a large semi-transparent white triangle overlaid on the left side. The triangle contains horizontal lines for notes. The word 'NOTES' is written in bold black text at the top left of the triangle.

**GAS**

## SECTION 3

### GAS

## IPLEX POLIGAS™ PE GAS PIPE

The Iplex Poligas™ range of polyethylene gas pipe for Natural Gas (fuel gas) applications includes both Imperial (nominal ID) and Metric (OD) dimension sizes. Poligas™ pipe is made in PE 80 material externally coloured yellow for easy identification as gas pipe. PE 100 material is also available either externally coloured yellow or as yellow multistripe.

- Poligas™ PE Metric Dimension Gas Pipe is manufactured to AS/NZS 4130 Series 1.
- Poligas™ PE Imperial Dimension Gas Pipe is manufactured to AS/NZS 4130 Series 3.

### IPLEX® POLIGAS® PE GAS PIPE - METRIC (OD) DIMENSION

|  | Nominal Outside Diameter (mm) | Order Code        | Coil Length | Outside Diameter (mm) | Colour                      | SDR |
|------------------------------------------------------------------------------------|-------------------------------|-------------------|-------------|-----------------------|-----------------------------|-----|
|                                                                                    | 25mm                          | 230.25SDR11.150   | 150m        | 25.1                  | ● Yellow                    | 11  |
|                                                                                    | 32mm                          | 230.32SDR11.150   | 150m        | 32.1                  | ● Yellow                    | 11  |
|                                                                                    | 63mm                          | 230.63SDR11.150   | 150m        | 63.3                  | ● Yellow                    | 11  |
|                                                                                    | 110mm**                       | 230.110SDR11.15BY | 15m         | 110.5                 | ● Black with Yellow Stripes | 7   |

Manufactured to AS/NZS 4130 Series 1

\*\* Straight lengths

### PE GAS PIPE- IMPERIAL (NOMINAL ID) DIMENSION

|  | Nominal Internal Diameter (mm) | Order Code            | Coil Length | Outside Diameter (mm) | Colour   | SDR |
|-------------------------------------------------------------------------------------|--------------------------------|-----------------------|-------------|-----------------------|----------|-----|
|                                                                                     | 10mm                           | 200.10.150.9 IMP      | 150m        | 15.7 - 16.0           | ● Yellow | 9   |
|                                                                                     | 15mm                           | 200.15.150.9 IMP SPL* | 150m        | 21.4 - 21.7           | ● Yellow | 9   |
|                                                                                     | 20mm                           | 200.20.150.11 IMP     | 150m        | 26.6 - 26.9           | ● Yellow | 11  |
|                                                                                     | 25mm                           | 200.25.150.11 IMP     | 150m        | 33.4 - 33.7           | ● Yellow | 11  |
|                                                                                     | 32mm                           | 200.32.50.11 IMP      | 50m         | 88.7 - 89.2           | ● Yellow | 11  |
|                                                                                     | 32mm                           | 200.32.150.11 IMP     | 150m        | 42.1 - 42.4           | ● Yellow | 11  |
|                                                                                     | 50mm                           | 200.50.100.11 IMP     | 100m        | 60.2 - 60.5           | ● Yellow | 11  |
|                                                                                     | 80mm                           | 200.80.100.11 IMP     | 100m        | 88.7 - 89.2           | ● Yellow | 11  |
|                                                                                     | 100mm                          | 200.100.100.11 IMP    | 100m        | 114.1 - 114.7         | ● Yellow | 11  |

Manufactured to AS/NZS 4130 Series 3 (Nominal Internal Diameter Series)

\*This SDR not included in AS/NZS4130, but is fully mechanically compliant with AS/NZS4130



## SECTION 3

### GAS

#### IPLEX® POLIGAS™ PE80 GAS PIPE - IMPERIAL (NOMINAL ID) DIMENSION: DRUM COIL

Drum Coil



| Nominal Internal Diameter (mm) | Order Code         | Coil Length | Outside Diameter (mm) | Colour   | SDR |
|--------------------------------|--------------------|-------------|-----------------------|----------|-----|
| 100mm                          | 200.100.430.11 IMP | 430m        | 114.1 - 114.7         | ● Yellow | 11  |

Drum Coils may be available in other sizes subject to minimum order quantity. Contact Iplex NZ for availability.

#### IPLEX® POLIGAS™ PE80 GAS PIPE - IMPERIAL (NOMINAL ID) DIMENSION, STRAIGHT LENGTHS

Straight Lengths



| Nominal Outside Diameter (mm) | Order Code         | Length | Outside Diameter (mm) | Colour   | SDR | Pack Qty |
|-------------------------------|--------------------|--------|-----------------------|----------|-----|----------|
| 32mm                          | 200.32.6.11 IMP*   | 6m     | 42.1 - 42.4           | ● Yellow | 11  | 5        |
| 50mm                          | 200.50.6.11 IMP*   | 6m     | 60.2 - 60.5           | ● Yellow | 11  | 3        |
| 80mm                          | 200.80.6.11 IMP*   | 6m     | 88.7 - 89.2           | ● Yellow | 11  | 1        |
| 80mm                          | 200.80.12.11 IMP*  | 12m    | 88.7 - 89.2           | ● Yellow | 11  | 1        |
| 100mm                         | 200.100.6.11 IMP*  | 6m     | 114.1 - 114.7         | ● Yellow | 11  | 1        |
| 100mm                         | 200.100.12.11 IMP* | 12m    | 114.1 - 114.7         | ● Yellow | 11  | 1        |
| 150mm                         | 200.150.12.11 IMP* | 12m    | 168.4                 | ● Yellow | 11  | 1        |

\* Manufactured to AS/NZS 4130 Series 3 (Nominal Internal Diameter Series)

## Manufactured to AS/NZS 4130 Series 1

## IPLEX QUALITY MANAGEMENT SYSTEMS

### Quality Assurance

Creating products of consistently high quality is at the forefront of the Iplex manufacturing process, and central to the customer promise that Iplex product quality meets or exceeds standards claimed.

All Iplex manufacturing plants operate under a strict ISO 9001 Quality Management System (QMS). External certifying bodies carry out regular audits to provide third-party certification of the Company's QMS. Continued third-party product certification of Iplex plastic pipeline products to relevant Australian & New Zealand standards, is also provided by these bodies.

The Iplex laboratory is an IANZ accredited facility, providing added assurance that any measurement and testing is carried out professionally and in a technically reliable manner in accordance with international standards.



| APPLICABLE STANDARD             | LICENCE TYPE       | LICENCE NUMBER                 | CONFORMITY ASSESSMENT BODY  |
|---------------------------------|--------------------|--------------------------------|-----------------------------|
| ISO 9001:2015                   | QMS Accreditation  | QEC4169                        | SAI Global                  |
| ISO/IEC 17025:2017              | IANZ Accreditation | NUMBER 61                      | IANZ                        |
| BEST ENVIRONMENTAL PRACTICE-PVC | BEP-PVC            | SPROD40057                     | SAI Global                  |
| AS/NZS 1254:2010                | StandardsMark™     | SMKP20126 & SMKP20180          | SAI Global                  |
| AS/NZS 1260:2017                | StandardsMark™     | SMKP20184, SMKP20185 & SMK1305 | SAI Global                  |
| AS/NZS 1260:2017                | WaterMark          | WM 26953                       | SAI Global                  |
| AS/NZS 1477:2017                | StandardsMark™     | SMK02569 & SMKP20181           | SAI Global                  |
| AS/NZS 1477:2017                | WaterMark          | WM 26954                       | SAI Global                  |
| AS/NZS 4130:2018                | StandardsMark™     | SMKP20400                      | SAI Global                  |
| AS/NZS 4130:2018                | ISO Type 5         | AMI 74891                      | Approval Mark International |
| AS/NZS 4441:2017                | StandardsMark™     | SMKP20682                      | SAI Global                  |
| AS/NZS 4765:2017                | StandardsMark™     | SMK02570                       | SAI Global                  |
| AS/NZS 61386.21:2015            | S-Mark             | LIC 2901 & LIC 2910            | Bureau Veritas              |

## IPLEX PIPELINES NZ THE COMPANY

Iplex is one of New Zealand's leading manufacturers and suppliers of plastic pipeline systems. Iplex provides products and services throughout New Zealand and to export markets around the Pacific and other international markets. Iplex has manufacturing operations in Palmerston North, Christchurch and Ashburton, as well as access to the Iplex Australian network.

Iplex has been manufacturing plastic pipelines since 1938 and with over 80 years of industry service and technical experience, Iplex is well positioned to ensure that projects are delivered successfully.

Energy and Communications is an important sector for Iplex NZ and there is a wide range of conduits, ducts and fittings available for new development and maintenance projects. The range covers electrical, communication and gas.

Iplex also services the following industry sectors:

**Civil:** Iplex provides a wide range of solutions for wastewater, drainage and potable water pipeline projects. Manufacturing both PE (Polyethylene) & PVC (Polyvinylchloride) for both pressure and non-pressure (gravity fed) pipeline systems including civil infrastructure, drainage systems and roading systems.

**Plumbing:** The Iplex plumbing sector covers pipes and fittings used within the property boundary. This includes reticulation of potable and non-potable water, sanitary plumbing, wastewater, drainage and gas reticulation. Iplex have the capabilities of supplying drain, waste and vent pipes and fittings, rainwater systems, traps and accessories.

**Rural:** Iplex also service the rural market providing pipes and fittings for rural use. Iplex provide systems for irrigation, stock water, land drainage, culverts and farm dairy effluent.



*Iplex Pipelines manufacturing plant and distribution hub in Palmerston North, New Zealand.*

# ENERGY & COMMUNICATIONS SPECIFICATION AND INSTALLATION GUIDE, SEPTEMBER 2025

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## LIMITATIONS

The information contained in this document is current as at September 2025 and is based on data available to Iplex Pipelines NZ Ltd at the time of going to print.

All photographic images are intended to provide a general impression only and should not be relied upon as an accurate example of Iplex Pipelines NZ Ltd products installed in accordance with this document or the referenced compliance documents.

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This publication replaces all previous Iplex Pipelines NZ design information and literature relating to Iplex Pipelines NZ Ltd Energy & Communications products. Iplex Pipelines NZ Ltd reserves the right to change the information contained in this document without prior notice. It is your responsibility to ensure that you have the most up to date information available. You can call toll free on 0800 800 262 or visit [www.iplex.co.nz](http://www.iplex.co.nz) to obtain current information.

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Iplex Pipelines NZ Ltd has used all reasonable endeavours to ensure the accuracy and reliability of the information contained in this document. However, to the maximum extent permitted by law, Iplex Pipelines NZ Ltd assumes no responsibility or liability for any inaccuracies, omissions or errors in this information nor for any actions taken in reliance on this information. Pipes and fittings have been shown as typical configurations, however, in some cases product dimensions may vary or be changed without notice. In all instances, the reader should contact Iplex Pipelines for clarification that the specific product is appropriate for their circumstance

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## TRADEMARKS

The name Iplex, Iplex Volta™, Iplex Poligas™ are registered trademarks of Fletcher Building Holdings Limited.

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## UNSUITABLE APPLICATIONS

**Iplex® PVC and PE Electrical Conduits and Ducts and PVC or PE Communication Ducts should not be used:**

- i. For any pressure or gravity water applications
- ii. At continuous service temperatures above 60°C
- iii. Without adequate support to the pipe in either, above ground or, below ground applications
- iv. Conduits and Ducts coloured orange and all Communications Ducts when exposed without protection from direct sunlight for service applications, or storage exceeding 12 months from the date of manufacture. This protection in storage can include hessian or canvas covers to allow adequate cooling air circulation. Do not use plastic sheet or film covers which will heat and damage the pipes. Protection in service can include permanent physical shading such as location under bridges or structures, or by painting with pale coloured UV. resistant, water based, paint systems.

**Note:** *Unprotected coloured PVC ducts including orange, green, red, lilac and salmon will exhibit some colour fading (whitening) of directly exposed surfaces during medium term storage.*

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## EXPOSED POLE RISER APPLICATIONS

**Exposed Pole Riser Applications for Electrical and**

**Communications ducts** *Iplex Novadrain DWV pipe to AS/NZS 1260 or Iplex Novakey PVC-U pressure pipe PN 15 to AS/NZS 1477 can be used for permanently exposed protective ducts for Pole Riser applications without painting or shading.*

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## COPYRIGHT

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