IPLEX Pipelines

PE PRESSURE SYSTEMS

SPECIFICATION AND INSTALLATION GUIDE

NOVEMBER 2025

iPLEX Pipelines

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

Kawerau Falls Bridge, Queenstown - Image courtesy of Waka Kotahi NZ Transport Agency

CONTENTS

Iplex Blueline®

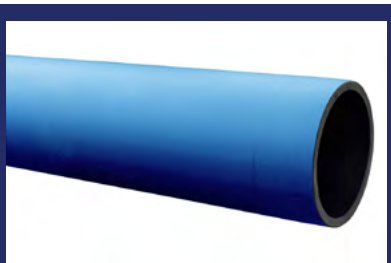
- Manufactured in accordance with AS/NZS 4130
- PN12.5 pressure rating
- Available in coils of 25m, 50m and 100m lengths
- Compatible with Plasson® Line 7 or Plasson® Series One mechanical fittings

Iplex Blackline™

- Manufactured in accordance with AS/NZS 4130
- PN16 pressure rating
- Available in coils of 25m, 50, and 100m lengths
- Compatible with Plasson® Line 7 or Plasson® Series One mechanical fittings

Iplex Blackline™ HP

- Manufactured in accordance with AS/NZS 4130
- Available in a PN20 or PN25 pressure rating
- Available in coils of 50m or 100m lengths
- Compatible with Blackline™ HP ductile iron mechanical fittings



Iplex Poliplex®

- Manufactured in accordance with AS/NZS 4130
- Available in various pressure ratings, subject to pipe diameter
- Available in various pipe lengths, subject to pipe diameter and pipe PN class
- Ability to offer raised crack resistant PE 100 material (PE 100RC)

SECTION 3 - IPLEX® PE FITTINGS

Iplex Plasson® Line 7 Fittings

- Compatible with Iplex Blueline®, Iplex Blackline™, Iplex Greenline®, Iplex Redline® and Iplex® PE Effluent

Iplex Plasson® Series 1 Fittings

- Push-fit joint style
- Compatible with Iplex Blueline®, Iplex Blackline™, Iplex Greenline®, Iplex Redline® and Iplex® PE Effluent

Iplex Blackline™ HP Ductile Iron Fittings

- Compatible with Iplex Blackline™ HP PN20 and PN25
- Adaptable by either flange or threaded joints to other types of pipes, pumps and valves

SECTION 4 - IPLEX® MOBILE EXTRUSION

Iplex® Mobile Extrusion

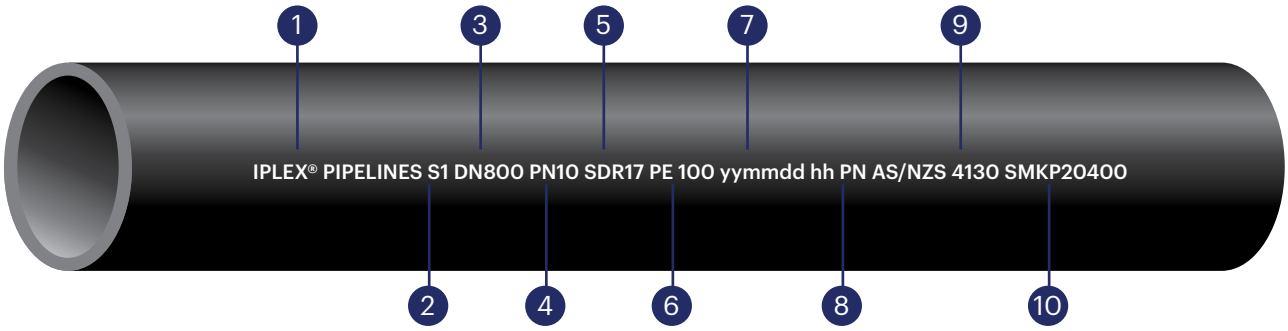
- Manufactured in accordance with AS/NZS 4130
- Available in various pressure ratings, subject to pipe diameter
- Available in various pipe lengths, subject to pipe diameter and pipe PN class
- The Iplex® Mobile Extrusion plant has the ability to be moved on site

CONTENTS

Trenchless or Trench Installation

- Consult the resources section of the Iplex® NZ website)
- Consult AS/NZS 2033:2024 - Design and Installation of Polyolefin Pipe Systems
- Consult PIPA POP Technical Guidelines
- Consult Australasian Society for Trenchless Technology (ASTT) website for information on best practice trenchless installation

UNDERSTANDING PIPE CODES - EXAMPLE



1. Company name
2. Pipe Series Number
3. Nominal Outside Diameter
4. Pressure/PN Rating
5. Standard Dimensional Ratio
6. Material Type
7. Date and Hour of Manufacture
8. Location of Manufacture (PN = Palmerston North)
9. Manufacturing Standard
10. 3rd Party Certification Licence Number

NOMINAL PRESSURE RATING (PN)

Iplex® PE pressure pipes are classified in terms of the Nominal Pressure Rating (PN). The table below shows the PN classification (measured in Bar) of Iplex® PE pipes identified in this guide and their corresponding Pressure Rating measured in Pounds per Square Inch (PSI). The maximum allowable operating pressure of Iplex® PE pressure pipes is calculated in accordance with the Overall Service (Design) Coefficients in AS/NZS 4130 Appendix B.

PN/Bar Pressure Rating	PSI Pressure Rating
PN6.3	91.4
PN10	145.0
PN12.5	181.3
PN16	232.1
PN20	290.1
PN25	362.6

IPLEX® PE 80

IPLEX BLUELINE®
PE 80 PRESSURE PIPE

Iplex Blueline® is metric series PN12.5 polyethylene pressure pipe in the size range 20mm – 63mm OD, manufactured from PE 80 material. Iplex Blueline® is coloured black with co-extruded light blue jacket and is available in coils of 25, 50 and 100 metre lengths.

Product Code:

- 2500 Series

Specification

Iplex Blueline® is manufactured in accordance with AS/NZS 4130 "PE Pipes for Pressure Applications" using precompounded materials conforming to AS/NZS 4131 "PE Compounds for Pressure Pipes and Fittings".

Listed in PIPA Technical Guideline POP004 - Polyethylene Pipe and Fittings compounds. (Refer to pipa.com.au)

(StandardsMark Licence number SMKP20400)

Applications

Iplex Blueline® pressure pipes are suitable for the following applications:

- Water distribution for town, rural and irrigation projects
- Rider mains & for urban water supply
- Cold water plumbing reticulation
- Household service lateral water connections from the main supply

Installation

Jointing:
Iplex Blueline® can be joined using mechanical compression fittings complying with AS/NZS 4129 such as the Plasson® Line 7 and Plasson® Series 1 ranges.

Plasson® Mechanical Compression Fittings:
For 'Plasson® Compression Fitting Assembly Instructions and 'Plasson® Series 1 Compression Fittings— Product and Technical Catalogue' refer to section 3 of this guide.

Electrofusion Jointing:
Iplex Blueline® can also be joined with compatible electrofusion fittings. Refer to the PIPA Guidelines for electrofusion procedures www.pipa.com.au.

Design & Installation Standards:
Iplex Blueline® pipe should be installed in accordance with the following Standards:

- AS/NZS 2566 Part 1 and Supplement "Buried Flexible Pipelines - Structural Design" Detailed Installation and Site Pressure Testing.
- AS/NZS 2566 Part 2 "Installation.
- AS/NZS 2033:2024 Design and Installation of Polyolefin Pipe Systems.

For more information on best practice installation and field testing procedures please consult the 'PolyPete - How I install PE pipes' and 'PolyPete - How I Pressure test PE pipes' guide (refer to www.iplex.co.nz/iplex-resources/).

Iplex Blueline® PE 80 pressure pipe.

IPLEX BLUELINE®
PRODUCT RANGE

Pressure Class			PN12.5 SDR11	
Nominal Size DN	Min O.D. (mm)	Max O.D. (mm)	Mean Wall (mm)	Mean ID (mm)
20	20.0	20.3	2.0	16.1
25	25.0	25.3	2.5	20.1
32	32.0	32.3	3.1	25.9
40	40.0	40.4	3.9	32.4
50	50.0	50.5	4.9	40.4
63	63.0	63.6	6.1	51.1

Iplex Blueline® PE 80 pipe in a drinking water service lateral connection, used with Plasson® Line 7 mechanical fittings.

IPLEX® PE 100

IPLEX BLACKLINE™ PE 100 PRESSURE PIPE

Iplex Blackline™ is metric series PE 100 PN16 polyethylene pressure pipe, including metric OD sizes from 25mm to 110mm for pressure water applications. Iplex Blackline™ pipe is coloured black with blue multistripe and is available in coil sizes 25, 50 and 100 metre lengths.

Product Code:

- 3500 BMS

Specification

Iplex Blackline™ is manufactured in accordance with AS/NZS 4130 "PE Pipes for Pressure Applications' using precompounded PE 100 materials conforming to AS/NZS 4131 "PE Compounds for Pressure Pipes and Fittings".

Listed in PIPA Technical Guideline POP004 - Polyethylene Pipe and Fittings compounds. (Refer to pipa.com.au)

(StandardsMark Licence number SMK20400)

Applications

Iplex Blackline™ may be used for:

- Pressure water applications including;
- Water distribution for town, rural stock water supply and irrigation projects
- Rider mains for urban water supply
- Household water connections from the main supply
- Compressed air lines Subject to special design and pipe pressure class rerating - contact Iplex® Pipelines for assistance, and refer to PIPA Technical Guideline POP002 - Polyethylene (PE) Pipes and Fittings for Compressed Air. (Refer to pipa.com.au)

Installation

Design & Installation Standards:
Iplex Blackline™ pipes should be designed and installed in accordance with the following Standards:

- AS/NZS 2566 Part 1 and Supplement "Buried Flexible Pipelines – Structural Design" Detailed Installation and Site Pressure Testing:
- AS/NZS 2566 Part 2 "Installation"
- AS/NZS 2033:2024 Design and Installation of Polyolefin Pipe Systems

Plasson® Mechanical Compression Fittings:
For 'Plasson® Compression Fitting Assembly Instructions and 'Plasson® Series 1 Compression Fittings—Product and Technical Catalogue' refer to section 3 of this guide.

Electrofusion Jointing:
Iplex Blackline™ can also be joined with compatible electrofusion fittings. Refer to the PIPA Guidelines for electrofusion procedures pipa.com.au.

For more information on best practice installation and field testing procedures please consult the 'PolyPete - How I install PE pipes' and 'PolyPete - How I Pressure test PE pipes' guide (refer to www.iplex.co.nz/iplex-resources/).

Iplex Blackline™ PE 100 pressure pipe.

IPLEX BLACKLINE™ PRODUCT RANGE

Pressure Class			PN16	
			SDR11	
Nominal Size DN	Min O.D. (mm)	Max O.D. (mm)	Mean Wall (mm)	Mean ID (mm)
25	25.0	25.3	2.5	20.2
32	32.0	32.3	3.1	26.0
40	40.0	40.4	3.9	32.3
50	50.0	50.5	4.9	40.4
63	63.0	63.3	6.1	51.0
75	75.0	75.7	7.2	61.0
90	90.0	90.9	8.7	73.1
110	110.0	111.0	10.5	89.4

Iplex Blackline™ PE 100 pipe installation by mole ploughing, for stock drinking water supply.

IPLEX BLACKLINE™ HP PE 100 PRESSURE PIPE

The Iplex Blackline™ HP system is a range of PE 100 polyethylene pipe and associated ductile iron mechanical fittings, designed to operate up to 20 bar or 25 bar. (PN20 or PN25). Iplex Blackline™ HP is manufactured in metric OD sizes 63mm, 90mm and 110mm and coil lengths of 50-metre or 100-metre.

Product Code:

- 3500 B

Specification

Iplex Blackline™ HP is manufactured in accordance with AS/NZS 4130 "PE Pipes for Pressure Applications' using pre-compounded PE 100 materials conforming to AS/NZS 4131 "PE Compounds for Pressure Pipes and Fittings".

Listed in PIPA Technical Guideline POP004 - Polyethylene Pipe and Fittings compounds. Refer to pipa.com.au.

(StandardsMark Licence number SMK20400)

Iplex Blackline™ HP ductile iron fittings are manufactured using a Quality Management System accredited to AS/NZS ISO9001

Applications

Iplex Blackline™ HP may be used for:

- Pressure water applications
- Hill country rural stock water applications

Installation

Design & Installation Standards:
Iplex Blackline™ HP pipes should be designed and installed in accordance with the following Standards:

- AS/NZS 2566 Part 1 and Supplement "Buried Flexible Pipelines – Structural Design" Detailed Installation and Site Pressure Testing:
- AS/NZS 2566 Part 2 "Installation"
- AS/NZS 2033:2024 Design and Installation of Polyolefin Pipe Systems

Jointing:
Iplex Blackline™ HP PN20 and PN25 can be joined using Iplex Blackline™ HP Ductile Iron mechanical fittings. Combining Iplex Blackline™ HP pipe and Iplex Blackline™ HP fittings provides farmers with an alternative to equivalent size threaded joint metal pipes for up to 25 bar applications.

Coil lengths:
Iplex Blackline™ HP pipe is supplied in 50-metre and 100-metre coils.

Bloat Treatments:
Iplex Blackline™ HP is suitable for use with in-line, anti-bloat agents used with in-line dispensing systems.

Fittings Adaptability:
Iplex Blackline™ HP mechanical fittings adaptable to either flanged or threaded joints, for coupling to other types of pipes, pumps and valves.

For more information on best practice installation and field testing procedures please consult the 'PolyPete - How I install PE pipes' and 'PolyPete - How I Pressure test PE pipes' guide (refer to www.iplex.co.nz/iplex-resources/).

Iplex Blackline™ HP PE 100 pressure pipe.

IPLEX BLACKLINE™ HP PRODUCT RANGE

Product Code	Nominal Size (mm)	Pressure Rating Bar	Coil Length (m)
3500.63PN20.50B	63	20	50
3500.63PN20.100B	63	20	100
3500.90PN20.50B	90	20	50
3500.90PN20.100B	90	20	100
3500.110PN20.50B	110	20	50
3500.110PN20.100B	110	20	100
3500.63PN25.50B	63	25	50
3500.63PN25.100B	63	25	100
3500.90PN25.50B	90	25	50
3500.90PN25.100B	90	25	100
3500.110PN25.50B	110	25	50
3500.110PN25.100B	110	25	100

Iplex Blackline™ HP PE 100 pipe, installed in an aerial river valley crossing for stock water supply, Pohangina Valley, Manawatu District.

IPLEX POLIPLEX®
PE 100 PRESSURE PIPE

Iplex Poliplex® is a range of metric series PE 100 polyethylene pressure pipe, including metric OD sizes from 75mm OD to 710mm OD for pressure water applications.

Product Codes:

- 3500 Series (Black)
- 3500 CX Blue Series (Co-extruded blue coloured jacket)
- 3500 CMS Series (Co-Extruded coloured multi-stripes
- 3100 Series (CX Cream jacket or CMS Cream multi-stripes)

Specification

Iplex Poliplex® is manufactured in accordance with AS/NZS 4130 'PE Pipes for Pressure Applications' using precompounded PE materials conforming to AS/NZS 4131 'PE Compounds for Pressure Pipes and Fittings' listed in PIPA Technical Guide POP004 - Polyethylene Pipe and Fittings compounds.
(Refer to pipa.com.au)
(StandardsMark Licence number SMK20400.)

PE 100 RC Resin (MRS10)
Raised Crack Resistant PE 100

Subject to agreement with Iplex® Pipelines NZ, alternative PE 100 material grades can be offered to suit the specific requirements of projects – such as PE 100 RC resin.

- Polyethylene resin conforming as PE 100 to AS/NZS 4131, and conforming to
- PIPA POP 016 High Stress Crack Resistant PE 100
- PIPA POP 004 Polyethylene Pipe and Fittings Compounds
- Black or blue / blue multi-stripe colours only

Applications

Iplex Poliplex® can be used for the following applications:

- Water distribution for town, rural and irrigation purposes
- Pressure sewer rising mains
- Submarine pipelines for ocean outfalls and under harbour pipelines
- Estuary and river crossings
- Above ground temporary and unrestrained pipelines
- Above ground fixed (restrained) pipe system
- Pipeline renovation liners
- Sleeve pipes for corrosion or mechanical protection
- Sub-soil drainage (when slotted)
- Dredge discharge lines
- Mine tailings disposal
- Trenchless installations, including horizontal directional drilling, pipe bursting and slip lining
- Landfill gas extraction

Iplex Poliplex® DN710, PN12.5, PE 100 sewer rising main being prepared for installation by horizontal directional drilling, in Christchurch City. Pipe is black with a cream coloured jacket, identifying it visually as a pressure sewer in accordance with AS/NZS 4130.

IPLEX POLIPLEX®
PE 100 PRESSURE PIPE

Colour Options

Colour options may be subject to diameter, tooling availability, and minimum order quantity. Black (B) , Royal blue (CX Blue) jacket, cream (CX) jacket, Black with coloured stripes.

Fully black pipe, for **general applications**.

Dark blue jacket or stripes on black inner for **pressure drinking water applications**.

Cream jacket or stripes on black inner for **pressure wastewater applications**.

Purple jacket or stripes on black inner for **recycled (non-potable) water applications**.

Light grey jacket or stripes on black inner for **gravity wastewater applications**.

PE 100 PIPE DIMENSIONS

PE 100 Polythene Pipe Dimensions to AS 4130 Series 1 (mm)																				
			SDR41		SDR33		SDR26		SDR21		SDR17		SDR13.6		SDR11		SDR9		SDR7.4	
PN for PE 100			4		-		6.3		8		10		12.5		16		20		25	
DN	Min O.D. (mm)	Max O.D. (mm)	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.	Mean Wall	Mean I.D.
20	-	-	-	-	-	-	-	-	-	-	-	-	1.7	16.7	2.0	16.0	2.5	15.2	3.0	14.2
25	-	-	-	-	-	-	-	-	-	-	1.7	21.7	2.0	21.0	2.6	20.2	3.0	19.2	3.8	17.7
32	-	-	-	-	-	-	-	-	1.7	28.7	2.0	28.0	2.6	27.0	3.1	26.0	3.8	24.5	4.7	22.8
40	-	-	-	-	-	-	-	-	2.0	36.1	2.6	35.0	3.2	33.8	4.0	32.3	4.8	30.6	5.8	28.5
50	-	-	-	-	-	-	-	-	2.6	45.0	3.2	43.9	4.0	42.4	4.9	40.4	5.8	38.4	7.2	35.7
63	-	-	-	-	-	-	2.6	58.1	3.2	56.9	4.0	55.2	5.0	53.3	6.1	51.0	7.6	48.2	9.2	45.1
75	75	75.7	-	-	2.5	70.4	3.1	69.2	3.9	67.6	4.8	65.8	5.9	63.7	7.2	61.0	8.9	57.6	10.9	53.6
90	90	90.9	-	-	3.0	84.5	3.7	83.0	4.6	81.3	5.7	79.0	7.0	76.5	8.7	73.1	10.7	69.1	13.0	64.5
110	110	111	2.9	104.7	3.6	103.2	4.6	101.3	5.6	99.2	7.0	96.5	8.6	93.3	10.5	89.4	13.0	84.5	16.0	78.5
125	125	126.2	3.3	118.9	4.1	117.3	5.1	115.4	6.3	112.9	7.8	109.9	9.7	106.1	12.0	101.5	14.8	96.0	18.1	89.4
140	140	141.3	3.8	133.1	4.6	131.4	5.8	129.1	7.1	126.4	8.8	123.1	10.9	118.8	13.4	113.9	16.6	107.6	20.2	100.3
160	160	161.5	4.2	152.3	5.2	150.4	6.6	147.6	8.1	144.5	10.0	140.7	12.4	135.9	15.4	130.0	18.9	123.1	23.1	114.6
180	180	181.7	4.7	171.5	5.9	169.2	7.3	166.3	9.1	162.7	11.3	158.3	14.0	152.8	17.3	146.3	21.2	138.5	25.9	129.1
200	200	201.8	5.2	190.5	6.6	187.7	8.1	184.6	10.1	180.6	12.5	175.8	15.5	169.9	19.2	162.5	23.6	153.7	28.8	143.3
225	225	227.1	5.8	214.4	7.3	211.5	9.1	207.9	11.4	203.3	14.1	197.8	17.5	191.1	21.6	182.9	26.5	173.1	32.4	161.3
250	250	252.3	6.6	238.0	8.1	234.9	10.1	230.9	12.5	226.1	15.6	220.0	19.4	212.4	23.9	203.4	29.4	192.4	36.0	179.2
280	280	282.6	7.3	266.7	9.1	263.1	11.3	258.7	14.1	253.0	17.5	246.3	21.7	237.9	26.7	227.8	33.0	215.3	40.3	200.7
315	315	317.9	8.1	300.2	10.2	296.0	12.8	290.9	15.8	284.9	19.7	277.1	24.4	267.9	30.1	256.3	37.1	242.3	45.2	226.1
355	355	358.2	9.2	338.2	11.5	333.6	14.3	327.9	17.8	321.0	22.2	311.1	27.5	301.6	33.9	288.8	41.7	273.2	51.0	254.6
400	400	403.6	10.3	380.0	13.0	375.8	16.1	369.5	20.1	361.5	24.9	351.9	30.9	339.9	38.2	325.4	47.0	307.8	57.4	287.0
450	450	454.1	11.6	428.9	14.5	423.0	18.1	415.8	22.6	406.8	28.1	395.9	34.8	382.4	43.0	366.1	52.8	346.5	64.7	322.7
500	500	504.5	13.0	476.3	16.1	470.0	20.1	462.0	25.1	452.0	31.1	440.0	38.7	424.9	47.7	406.8	58.7	384.9	71.7	358.9
560	560	565	14.4	533.7	18.1	526.3	22.5	517.5	28.1	506.4	34.9	492.7	43.3	475.9	53.4	455.8	-	-	-	-
630	630	635.7	16.2	600.4	20.3	592.2	25.4	582.1	31.5	569.8	39.2	554.4	48.7	535.5	60.1	512.6	-	-	-	-
710	710	716.4	18.3	676.5	22.9	667.3	28.6	655.9	35.6	641.9	44.3	624.6	54.9	603.4	68.5	577.2	-	-	-	-

- *Available lengths are subject to PN class and maximum weight limits.*
- *For all Iplex Poliplex® products 12 metre lengths or longer, freight costs are POA.*
- *3500 series, 3100 series and 3500 ME series polyethylene products are not necessarily held in stock, and manufacture is subject to the quantity requested being viable to produce. Please contact Iplex® NZ on 0800 800 262 for more information.*

Iplex Poliplex® PE 100 pipe, installed in a river crossing, for a drinking water transmission main, Waitaki District.

IPLEX POLIPLEX®
PE 100 PRESSURE PIPE

Installation

Jointing Methods:

- **Butt Fusion,** conforming to AS/NZS2033: 2024 and POP 003 "BUTT FUSION JOINTING OF PE PIPES AND FITTINGS - RECOMMENDED PARAMETERS". The pipe ends are heated to melting point, then brought together in a Butt Fusion machine to form a homogeneous weld. The resulting joint is end load resistant and if installed correctly should perform under pressure similarly to the parent pipe.
- **Electrofusion,** conforming to AS/NZS 2033:2024 and POP 001 - ELECTROFUSION JOINTING OF PE PIPES AND FITTINGS FOR PRESSURE APPLICATIONS. These employ an electrical heating coil incorporated inside a moulded socket. When energised from an electrofusion control box, the coil melts the adjacent material, causing the pipe and socket to fuse together.
- **Mechanical Fittings.** Pipe sizes DN20 to DN125 can be joined using Plasson® mechanical compression couplings complying with AS/NZS 4129. Larger pipe sizes can be joined using Ductile Iron restrained joint fittings, designed for use with PE pipe, conforming to AS/NZS 4129.

Design & Installation Standards:

Iplex Poliplex® pipe should be designed and installed in accordance with the following Standards and Guidelines.

- Buried Structural Design: AS/NZS 2566 Part 1 and supplement 1. "Buried Flexible Pipelines Structural Design"
- Installation and Site Pressure Testing: AS/NZS 2566 Part 2 "Installation"
- AS/NZS 2033:2014 Installation of polyolefin pipe systems

For more information on best practice installation and field testing procedures please consult the "PolyPete - How I Install PE Pipes " and "PolyPete - How I pressure test PE Pipes " guide (refer to www.iplex.co.nz/iplex-resources/).

Product Storage:

In direct hot sunlight, straight lengths of PE pipe may bow slightly due to uneven heating of individual pipe lengths. Rotation of bowed pipe by 180° in direct hot sunlight may assist with straightening.

Iplex® recommends that coloured PE pressure pipes, (such as jacketed, striped or solid colours, but excluding solid black), are not exposed to direct sunlight for service applications, or stored in direct sunlight for more than 24 months from the date of manufacture, without protection.

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 physical shading such as location under bridges or structures, or pale coloured U.V. resistant, water based, paint systems.

Iplex Poliplex® PE 100 pressure pipe showing butt fusion welding.

Iplex Poliplex® PE 100 pressure pipe showing electro fusion welding.

IPLEX® FITTINGS

PLASSON® SERIES 1
COMPRESSION FITTINGS - AS/NZS 4129

FOR USE WITH GREENLINE®, FARMLINE™, REDLINE®, RURAL BLACK™, BLUELINE®, BLACKLINE™ PN16 AND IPLEX® PE EFFLUENT PIPE

	Order Code	Size (mm)
 **90° Elbow F&F**	3501.20	20mm
	3501.25	25mm
	3501.32	32mm
	3501.40	40mm
	3501.50	50mm
	3501.63	63mm
 **Female Threaded Branch Tee F&F&F**	3503.20.15	20mm x ½"
	3503.25.15	25mm x ½"
	3503.25.20	25mm x ¾"
	3503.32.25	32mm x 1"
 **90° Tee F&F&F**	3504.20	20mm
	3504.25	25mm
	3504.32	32mm
	3504.40	40mm
	3504.50	50mm
	3504.63	63mm
 **Reducing Tee F&F&F**	3505.25.20	25 x 20 x 25mm
	3505.32.20	32 x 20 x 32mm
	3505.32.25	32 x 25 x 32mm
 **Female Threaded Adaptor F&F**	3506.20.15	20mm x ½"
	3506.25.20	25mm x ¾"
	3506.32.25	32mm x 1"
	3506.40.32	40mm x 1¼"
	3506.50.40	50mm x 1½"
	3506.63.50	63mm x 2"
 **90° Male Threaded Elbow M&F**	3507.25.20	25mm x ¾"
	3507.32.25	32mm x 1"
 **90° Female Threaded Elbow F&F**	3508.20.15	20mm x ½"
	3508.25.15	25mm x ½"
	3508.25.20	25mm x ¾"
	3508.32.25	32mm x 1"
	3508.50.40	50mm x 1½"
	3508.63.50	63mm x 2"
 **Female Wingback Adaptor F&F**	3509.20.15	20mm x ½"

	Order Code	Size (mm)
 **Coupling F&F**	3510.20	20mm
	3510.25	25mm
	3510.32	32mm
	3510.40	40mm
	3510.50	50mm
	3510.63	63mm
 **Universal Slip Repair Coupling F&F**	3511.14-18	14-18mm
	3511.19-22	19-22mm
	3511.24-28	24-28mm
	3511.31-35	31 - 35mm
	3511.40-43	40 - 43mm
	3511.48-51	48 - 51mm
	3511.60-64	60 - 64mm
 **Universal Coupling F&F**	3512.25.14-18	25 x 14-18
	3512.25.19-22	25 x 19-22
	3512.25.24-28	25 x 24-28
 **Male Threaded Adaptor M&F**	3513.20.15	20mm x ½"
	3513.25.20	25mm x ¾"
	3513.32.25	32mm x 1"
	3513.40.32	40mm x 1¼"
	3513.50.40	50mm x 1½"
	3513.63.50	63mm x 2"
 **Reducing Coupler F&F**	3523.25.20	25mm x 20mm
	3523.32.20	32mm x 20mm
	3523.32.25	32mm x 25mm
	3523.40.32	40mm x 32mm
	3523.50.25	50mm x 25mm
	3523.63.50	63mm x 50mm
 **End Plug F**	3530.20	20mm
	3530.25	25mm
	3530.32	32mm
	3530.40	40mm
	3530.50	50mm
	3530.63	63mm
 **Wrench-Plasson® Series 1**	Wrench.2032*	20mm x 32mm
	Wrench.4063*	40mm x 63mm

*For fitting disassembly only

PLASSON® LINE 7
COMPRESSION FITTINGS - AS/NZS 4129

FOR USE WITH GREENLINE®, FARMLINE™, REDLINE®, RURAL BLACK™, BLUELINE®, BLACKLINE™ PN16 AND IPLEX® PE EFFLUENT PIPE

	Order Code	Size (mm)
 **90° Elbow F&F**	2501.20.90	20 x 90°
	2501.25.90	25 x 90°
	2501.32.90	32 x 90°
	2501.40.90	40 x 90°
	2501.50.90	50 x 90°
	2501.63.90	63 x 90°
	2501.75.90	75 x 90°
	2501.90.90	90 x 90°
	2501.110.90	110 x 90°
 **45° Elbow F&F**	2501.32.45	32 x 45°
	2501.40.45	40 x 45°
	2501.50.45	50 x 45°
 **90° Slip Tee F&F&F**	2502.20	20
	2502.25	25
	2502.32	32
	2502.40	40
	2502.50	50
	2502.63	63
 **Female Threaded Branch Tee F&F&F**	2503.20.15	20mm x ½"
	2503.25.20	25mm x ¾"
	2503.32.25	32mm x 1"
	2503.40.32	40mm x 1¼"
	2503.50.40	50mm x 1½"
	2503.63.50	63mm x 2"
	2503.75.65	75mm x 2 ½"
	2503.90.80	90mm x 3"
	2503.110.100	110mm x 4"
 **90° Plain Tee F&F&F**	2504.20	20
	2504.25	25
	2504.32	32
	2504.40	40
	2504.50	50
	2504.63	63
	2504.75	75
	2504.90	90
	2504.110	110

	Order Code	Size (mm)
 **Reducing Branch Tee F&F&F**	2505.25.20	25 x 20
	2505.32.25	32 x 25
	2505.40.32	40 x 32
	2505.50.40	50 x 40
	2505.63.50	63 x 50
	2505.75.63	75 x 63
 **Female Threaded Adaptor F&F**	2506.20	20mm x ½"
	2506.25	25mm x ¾"
	2506.32	32mm x 1"
	2506.40	40mm x 1¼"
	2506.50	50mm x 1½"
	2506.63	63mm x 2"
	2506.75.65	75mm x 2 ½"
	2506.90	90mm x 3"
	2506.110	110mm x 4"
 **90° Male Threaded Elbow M&F**	2507.20	20mm x ½"
	2507.25	25mm x ¾"
	2507.32	32mm x 1"
	2507.40	40mm x 1¼"
	2507.50	50mm x 1½"
	2507.63	63mm x 2"
 **90° Female Threaded Elbow F&F**	2508.20	20mm x ½"
	2508.25	25mm x ¾"
	2508.32	32mm x 1"
	2508.40	40mm x 1¼"
	2508.50	50mm x 1½"
	2508.63	63mm x 2"
 **Female Wingback Adaptor F&F**	2509.20	20mm x ½"
	2509.25	25mm x ¾"

PLASSON® LINE 7
COMPRESSION FITTINGS - AS/NZS 4129

FOR USE WITH GREENLINE®, FARMLINE™, REDLINE®, RURAL BLACK™, BLUELINE®, BLACKLINE™ PN16 AND IPLEX® PE EFFLUENT PIPE

	Order Code	Size (mm)
 **Coupling F&F**	2510.20	20
	2510.25	25
	2510.32	32
	2510.40	40
	2510.50	50
	2510.63	63
	2510.75	75
	2510.90	90
	2510.110	110
	2510.125	125
 **Slip/Coupling F&F**	2511.20	20
	2511.25	25
	2511.32	32
	2511.40	40
	2511.50	50
	2511.63	63
 **Universal Coupling F&F**	2512.25.15-22	25 x 15-22
	2512.25.20-27	25 x 20-27
	2512.25.27-35	25 x 27-35
	2512.32.27-35	32 x 27-35
	2512.50.35-50	50 x 35-50
 **Male Threaded Adapter M&F**	2513.20	20mm x ½"
	2513.25.15	25mm x ½"
	2513.25	25mm x ¾"
	2513.32	32mm x 1"
	2513.40	40mm x 1¼"
	2513.50	50mm x 1½"
	2513.63	63mm x 2"
	2513.75.65	75mm x 2½"
	2513.90	90mm x 3"
	2513.110	110mm x 4"

	Order Code	Size (mm)
 **20-50mm**	2519.25.20	25 x ¾"
	2519.32.25	32 x 1"
	2519.40.25	40 x 1"
	2519.50.15	50 x ½"
	2519.50.20	50 x ¾"
	2519.50.25	50 x 1"
	2519.50.32	50 x 1¼"
 **63-110mm**	2519.63.15PS	63 x ½"
	2519.63.20PS	63 x ¾"
	2519.63.25PS	63 x 1"
	2519.63.32PS	63 x 1¼"
	2519.63.40PS	63 x 1½"
Female Threaded Branch Saddle	2519.75.25	75 x 1"
	2519.75.50	75 x 2"
	2519.90.25PS	90 x 1"
	2519.90.50	90 x 2"
	2519.110.25PS	110 x 1"
	2519.110.32PS	110 x 1¼"
 **Female Threaded Plassaddle (PS Series)**	2519.110.40PS	110 x 1½"
	2519.125.20PS	125 x 20
	2519.180.20PS	180 x 20
 **Reducing Coupling F&F**	2523.25.20	25 x 20
	2523.32.25	32 x 25
	2523.40.32	40 x 32
	2523.50.40	50 x 40
	2523.63.50	63 x 50
	2523.75.63	75 x 63
	2523.90.75	90 x 75
	2523.110.90	110 x 90

***Either bolted style or "Plassaddle" style may be supplied.**
Plassaddle is suitable for:
-DN63–90: PN10, 12.5, 16.
-DN110-180: PN6.3, 8, 10, 12.5, 16.

	Order Code	Size (mm)
 **Female ACME Threaded Branch Plassaddle (PS-ACME Series)**	2519.63.25ACME	63 x 1" ACME
	2519.63.32ACME	63 x 1¼"ACME
	2519.63.40ACME	63 x 1½" ACME

PLASSON® LINE 7
COMPRESSION FITTINGS - AS/NZS 4129

FOR USE WITH GREENLINE®, FARMLINE™, REDLINE®, RURAL BLACK™, BLUELINE®, BLACKLINE™ PN16 AND IPLEX® PE EFFLUENT PIPE

	Order Code	Size (mm)
 **Reducing Set**	2524.25.20	25 x 20
	2524.32.20	32 x 20
	2524.32.25	32 x 25
	2524.40.25	40 x 25
	2524.40.32	40 x 32
	2524.50.25	50 x 25
	2524.50.32	50 x 32
	2524.50.40	50 x 40
	2524.63.25	63 x 25
	2524.63.32	63 x 32
	2524.63.40	63 x 40
	2524.63.50	63 x 50
	2524.75.63	75 x 63
	2524.110.63	110 x 63
	2524.110.75	110 x 75
	2524.110.90	110 x 90
 **Shouldered Adapter M&F**	2525.63	63
	2525.110	110
 **Plug Adapter**	2530.20	20
	2530.25	25
	2530.32	32
	2530.40	40
	2530.50	50
	2530.63	63
 **End Plug**	2531.20	20
	2531.25	25
	2531.32	32
	2531.40	40
	2531.50	50
	2531.63	63
	2531.75	75
	2531.90	90
	2531.110	110

***Either bolted "tapper" or "Plassaddle tapper" style may be supplied.**
Plassaddle tapper is suitable for:
-DN63: PN10, 12.5, 16.
-DN110: PN8, 10, 12.5, 16.
-DN125–180: PN6.3, 8, 10, 12.5, 16.

	Order Code	Size (mm)
 **Tapper Swivel Tee for PE Pipe**	2536.63.25PS	63 x 25
	2536.110.25*	110 x 25
	2536.125.25PS	125 x 25
 **Plassaddle Tapper for PE Pipe (PS Series)**	2536.125.32*	125 x 32
	2536.180.25PS	180 x 25
	2536.180.32*	180 x 32
 **Tapper Swivel Tee for Series 2 PVC Pipe**	2536.122.25*	122 x 25
 **Plassaddle Tapper for Series 2 PVC Pipe (PS Series)**	2536.177.25*	177 x 25
 **Plasson 12mm Hex Key for Plassaddle & Plassaddle Tapper**	2536.KEY	12
 **4 Port Centre Connection Meter Manifold**	2540.50.4P	50
 **6 Port Centre Connection Meter Manifold**	2540.50.6P	50

PLASSON® LINE 7
COMPRESSION FITTINGS - AS/NZS 4129

FOR USE WITH GREENLINE®, FARMLINE™, REDLINE®, RURAL BLACK™, BLUELINE®, BLACKLINE™ PN16 AND IPLEX® PE EFFLUENT PIPE

	Order Code	Size (mm)
Barrel Union Threaded Male Adaptor	2572.25.15	25 x ½"
	2572.25.20	25 x ¾"
	2572.32.15	32 x ½"
	2572.32.20	32 x ¾"
	2572.32.25	32 x 1"
	2572.40.25	40 x 1"
	2572.40.32	40 x 1¼"
	2572.40.40	40 x 1½"
	2572.50.25	50 x 1"
	2572.50.32	50 x 1¼"
	2572.50.40	50 x 1½"
	2572.50.50	50 x 2"
	2572.63.25	63 x 1"
	2572.63.32	63 x 1¼"
	2572.63.40	63 x 1½"
	2572.63.50	63 x 2"
	2572.63.65	63 x 2½"
	2572.75.40	75 x 1½"
	2572.75.50	75 x 2"
	2572.75.65	75 x 2½"
	2572.75.80	75 x 3"

	Order Code	Size (mm)
Modular Adaptor	2579.20	20
	2579.25	25
	2579.32	32
	2579.40	40
	2579.50	50
	2579.63	63

Pipe Support Insert*	20mm plasson insert*	20
	25mm plasson insert*	25
	32mm plasson insert*	32
	40mm plasson insert*	40
	50mm plasson insert*	50
	63mm plasson insert*	63

*** PIPE SUPPORT INSERTS MUST BE USED WITH ANY APPLICATIONS WITH COMPRESSED AIR, NEGATIVE PRESSURE (VACCUM), OR ELEVATED TEMPERATURES ABOVE GROUND (NOT EXCEEDING 40 Deg C, & WITH PRESSURE RERATING)**

NOT REQUIRED WITH PLASSON FITTINGS FOR UNDERGROUND COLD WATER PRESSURE APPLICATIONS

PLASSON®
BSP THREADED PP FITTINGS - AS/NZS 4129

	Order Code	Size
 **Threaded Tee**	2514.15	½"
	2514.20	¾"
	2514.25	1"
	2514.32	1¼"
	2514.40	1½"
	2514.50	2"
 **Threaded Elbow**	2515.15	½"
	2515.20	¾"
	2515.25	1"
	2515.32	1¼"
	2515.40	1½"
	2515.50	2"
 **Threaded Nipple**	2516.15	½"
	2516.20	¾"
	2516.25	1"
	2516.32	1¼"
	2516.40	1½"
	2516.50	2"
 **Threaded Reducing Bush**	2517.20.15	¾" x ½"
	2517.25.15	1" x ½"
	2517.25.20	1" x ¾"
	2517.32.15	1¼" x ½"
	2517.32.20	1¼" x ¾"
	2517.32.25	1¼" x 1"
	2517.40.15	1½" x ½"
	2517.40.20	1½" x ¾"
	2517.40.25	1½" x 1"
	2517.40.32	1½" x 1¼"
	2517.50.15	2" x ½"
	2517.50.20	2" x ¾"
	2517.50.25	2" x 1"
	2517.50.32	2" x 1¼"
	2517.50.40	2" x 1½"
	2517.65.50	2½" x 2"
	2517.80.25	3" x 1"
	2517.80.32	3" x 1¼"
	2517.80.40	3" x 1½"
	2517.80.50	3" x 2"
	2517.80.65	3" x 2½"
	2517.100.50	4"x 2"
	2517.100.80	4" x 3"

	Order Code	Size
 **Threaded Reducing Nipple**	2518.20.15	¾" x ½"
	2518.25.15	1" x ½"
	2518.25.20	1" x ¾"
	2518.32.15	1¼" x ½"
	2518.32.20	1¼" x ¾"
	2518.32.25	1¼" x 1"
	2518.40.15	1½" x ½"
	2518.40.20	1½" x ¾"
	2518.40.25	1½" x 1"
	2518.40.32	1½" x 1¼"
	2518.50.15	2" x ½"
	2518.50.20	2" x ¾"
	2518.50.25	2" x 1"
	2518.50.32	2" x 1¼"
	2518.50.40	2" x 1½"
 **Threaded Socket**	2521.15	½"
	2521.20	¾"
	2521.25	1"
	2521.32	1¼"
	2521.40	1½"
	2521.50	2"
 **Threaded Plug**	2530T.15	½"
	2530T.20	¾"
	2530T.25	1"
	2530T.32	1¼"
	2530T.40	1½"
	2530T.50	2"
 **Quick Joint Tank Joiner M&F**	2535.15.10	½" x ⅜"
	2535.20.15	¾" x ½"
	2535.25.20	1" x ¾"
	2535.32.25	1¼" x 1"
	2535.40.32	1½" x 1¼"
	2535.50.40	2" x 1½"

PLASSON® JOINT ASSEMBLY TOOLS

	Order Code	Size (mm)
 **Wrench - Plasson Line 7**	2550.40.75	40 - 75
	2550.63.125	63 - 125
 **Pipe Chamfering Tool**	2555.20.63	20 - 63

PLASSON® POLYPROPYLENE VALVES

	Order Code	Size (mm)
 **Quick Coupling Valve**	2711	¾"
	2712	1"
	use with 2713 riser key	
 **Riser Key**	2713	
	use with 2711 or 2712 quick coupling valve	
 **Check Valve Insert**	2720.25	25
	converts a DN25 Plasson Line 7 compression fitting to a 'one way' check valve	

	Order Code	Size (mm)
 **F&F Valve**	2731	¾"
	2732	1"
 **Angle Seat Valve M&M**	2735.32	1¼"
	2735.40	1½"
	2735.50	2"
 **Compression Stopcock F&F**	2741.20	20
	2741.25	25
	2741.32	32

PLASSON® BALL VALVES

	Order Code	Size
 **Ball Valve**	2725.15	½"
	2725.20	¾"
	2725.25	1"
	2725.32	1¼"
	2725.40	1½"
	2725.50	2"
 **Ball Valve with Drain Port**	2725.15P	½"
	2725.20P	¾"
	2725.25P	1"
	2725.32P	1¼"
	2725.40P	1½"
	2725.50P	2"
 **Long Handle for Ball Valve**	2725.40-50 LH	40-50

COMBINATION AIR VALVES

	Order Code	Size
	2740.15	½"
	2740.20	¾"
	2740.25	1"

POLYETHYLENE WATER METER VALVE BOXES

	Order Code	Size (mm)
 **Blue Lid** **Green Lid** **Polyethylene (Water Meter) Valve Boxes**	193*	155 x 200 x 200 high
	193LIDGR**	155 x 200
	193LIDBL***	155 x 200

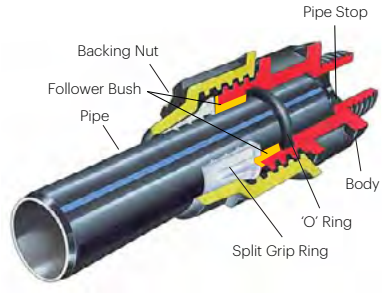
*** Valve box only - no lid** **** Green lid** ***** Blue lid**

PLASSON® LINE 7
PE COMPRESSION FITTINGS

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

PLASSON

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.

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 DN40, DN50 and DN63, 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

Firmly hand tighten the Backing Nut. Use a Plasson® C-Ring wrench for a further half turn past hand tight for final tightening of fittings for diameters DN40, DN50 and DN63. The full hydraulic seal is achieved when the pipe passes through the O-Ring. Nut tightening is only to achieve pullout resistance - the hydraulic seal is automatically created when the pipe is pushed past the captive O-Ring.

PLASSON® LINE 7
PE COMPRESSION FITTINGS

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

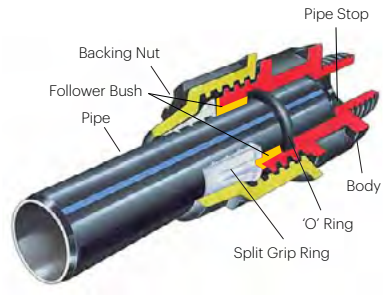
General Instructions

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.

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).

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.

75mm - 125mm



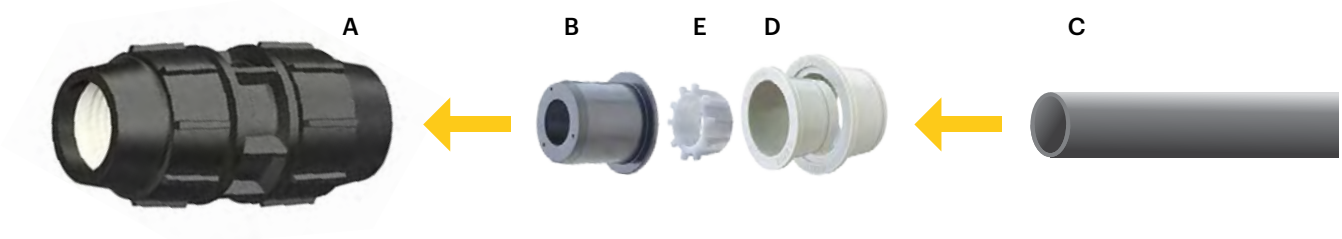
Fully unscrew the Backing Nut, and pull back along the pipe.

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.

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

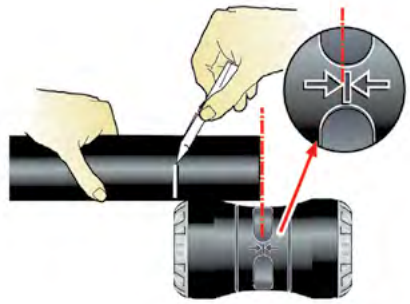
Plasson® 2524 Series Reducing Set - Installation Instructions

1. Fully unscrew and remove the fitting **Backing Nut, (A)** and slide it onto the reduced size **PE pipe (C)**
2. Remove and discard the existing full size split-grip ring from the fitting
3. Fully insert the **Reducing Set seal gasket (B)** through the fitting seal ring, into the fitting body
4. Fully insert the reduced size **PE pipe (C)** thorough the **adapter rings (D)** and **small grip ring (E)** and push fully into the **Reducing Set seal gasket (B)**
5. Replace the original **Backing Nut, (A)** screw up and tighten



PLASSON® SERIES 1
PUSH-FIT COMPRESSION FITTINGS

Installation Instructions

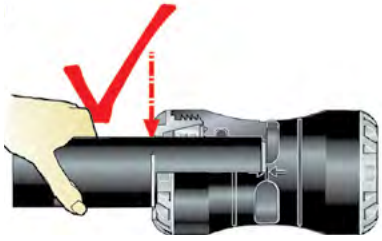


STEP 1

- Clean pipe end
- Remove burs
- Mark insertion depth using guide on fitting
- Sizes 40mm and above – chamfering the pipe with a Plasson® chamfer tool and using silicone lubricant will ease insertion.

STEP 2

- Insert pipe past O-ring until it meets the internal stop.



STEP 3

- Check witness mark to ensure pipe is inserted correctly.

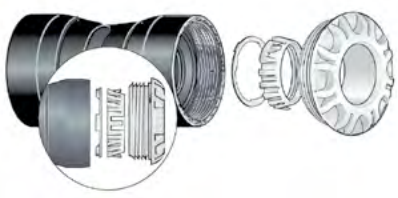
Disassembly

Plasson® Series 1 fittings can be easily disassembled, to allow fitting removal or adjustment, and can be reassembled, for reuse of the fitting.

STEP 1

- Use a Plasson® Series 1 wrench to loosen the nut.

Figure 1



STEP 2

- Remove the nut and slide pipe from fitting. When reassembling the fitting, ensure the components are placed into the fitting body in the correct orientation and assembly order. (Figure 1) Ensure any damaged/ blunted grip or split rings are replaced.

IPLEX BLACKLINE™ HP DUCTILE IRON FITTINGS
PRODUCT RANGE

Product Code	Description	Pipe OD (mm)
DIC63PE	Ductile Iron Coupling 63mm PN25	63mm
DIC90PE	Ductile Iron Coupling 90mm PN25	90mm
DIC110PE	Ductile Iron Coupling 110mm PN25	110mm

Product Code	Description	Pipe OD (mm)
DITC63PE	*Ductile Iron Transition Coupling 63mm PN25	63mm
DITC90PE	*Ductile Iron Transition Coupling 90mm PN25	90mm
DITC110PE	*Ductile Iron Transition Coupling 110mm PN25	110mm

Product Code	Description	Pipe OD (mm) x BSP "
SSMTA50	Stainless Steel Male Threaded Adapter 50mm BSP PN25	63 x 2"
SSMTA80	Stainless Steel Male Threaded Adapter 80mm BSP PN25	90 x 3"
SSMTA100	Stainless Steel Male Threaded Adapter 110mm BSP PN25	110 x 4"

Product Code	Description	Pipe OD (mm)	PCD (mm)	Hole Number
DIUFA50	Ductile Iron Universal Flange Adapter 50mm PN25	63mm	120 - 125	4
DIUFA80	Ductile Iron Universal Flange Adapter 80mm PN25	90mm	150 - 160	8
DIUFA100	Ductile Iron Universal Flange Adapter 100mm PN25	110mm	175 - 191	8

**Note: DITC Transition Coupler is used with either SSMTA (Male BSP Thread Adapter) , or DIUFA (Flange Adapter)*

ASSEMBLY INSTRUCTIONS

Iplex Blackline™ HP Ductile Iron fittings are designed to mechanically join PE 100 Polyethylene pipe, up to pressure rating PN25 (25-bar). Note: Iplex Blackline™ HP fittings are not intended for use on other types of Iplex® pipes.

STEP 1: Marking

Use a pen and tape measure to place marks 25mm from the end of each pipe. Ensure the pipe ends to be joined are accurately cut square and are totally free of any dirt or surface damage.

STEP 2: Gasket Mounting

Using a silicone based lubricant; slip the gasket over the pipe ends and center the gasket between the marks. Ensure the pipe ends are butted together.

STEP 3: Fitting Assembly

Place the housing over the gasket and insert bolts. Then tighten the nuts by hand.

STEP 4: Tightening Nuts

Using an appropriate tool, tighten the nuts sequentially until the fittings' housing bolt pads meet, metal to metal.

IPLEX® MOBILE EXTRUSION

IPLEX®
MOBILE EXTRUSION

Iplex® Mobile Extrusion is a mobile manufacturing plant that can be relocated to suitable pipeline projects for on-site manufacture of Iplex® PE 100 polyethylene pipe to AS/NZS 4130.

Availability of Iplex® Mobile Extrusion on-site is subject to minimum economic production quantities, and project location.

Pipes can range in diameter from DN75 to DN710 (Pressure Classes from PN6 - PN16 dependent on pipe size).

One key benefit of on-site manufacturing is that pipe can be extruded and handled in long continuous lengths up to 100m. This greatly reduces the amount of welded joints required in a pipeline asset.

Moving pipe on-site is facililated by the use of wheel dolly sets which allow the pipe lengths to be towed directly from the extrusion plant to the required location.

Wheel dollies can be made in a variety of designs and are typically part of the contractor's responsibility on a project.

For assistance, please contact Iplex® Customer Support on 0800 800 262.

Iplex® PE 100 pressure pipe extruded on site in the Central Plains, Canterbury District.

IPLEX® QUALITY STANDARDS

Specification

Iplex Poliplex® pipes are manufactured in accordance with AS/NZS 4130 "PE Pipes for Pressure Applications" using precompounded PE materials conforming to AS/NZS 4131 "PE Compounds for Pressure Pipes and Fittings" listed in PIPA Technical Guide POP004 - Polyethylene Pipe and Fittings compounds. (Refer to pipa.com.au)
(Standards Mark Licence number SMK20400)

PE 100 RC Resin (MRS10)
Raised Crack Resistant PE 100

Subject to agreement with Iplex® Pipelines NZ, alternative PE 100 material grades can be offered to suit the specific requirements of projects - such as PE 100 RC resin.

- Polyethylene resin conforming as PE 100 to AS/NZS 4131, and conforming to
- PIPA POP 016 High Stress Crack Resistant PE 100
- PIPA POP 004 Polyethylene Pipe and Fittings Compounds
- Black and blue/blue multi-stripe colours only

IPLEX® ENVIRONMENTAL CONDITIONS

Manufacturing in a variety of environmental conditions is fully expected. This includes high humidity, cold winter conditions, hot dry summer conditions and dusty environments. The Iplex® – Mobile Extrusion plant is climate controlled with the specifically designed containerised set up. Raw materials are kept dry and free from contamination at all stages of the handling process through a closed loop material feed and specialised driers.

Iplex® PE Duct being extruded at the Iplex® Ashburton plant.

INSTALLATION

INSTALLATION

- Consult the resources section of the Iplex® NZ website)
- Consult AS/NZS 2033:2024-Design and installation of polyolefin pipe systems
- Consult PIPA POP Technical Guidelines
- Consult Australasian Society for Trenchless Technology (ASTT) website for information on best practice trenchless installation

Trenchless Installation
Iplex® PE pressure pipes may be installed either using trenchless methods such as Horizontal Directional Drilling, Pipe Bursting and Slip Lining, or by conventional open-cut trench methods. Guidelines for trenchless installation may be found on the Australasian Society for Trenchless Technology (ASTT) website.

Open-Cut Trench Installation
Bedding particle size
Bedding material in direct contact with the pipe, including directly under, alongside and directly above the pipe must be compactible, non-cohesive material, not exceeding 20mm maximum particle size. This may include approved imported aggregate or approved selected screened as-dug material, compliant to the contract specification.

Backfill materials
Trench backfill material may include approved imported compactible aggregate, or other approved selected as-dug material, compliant to the contract specification

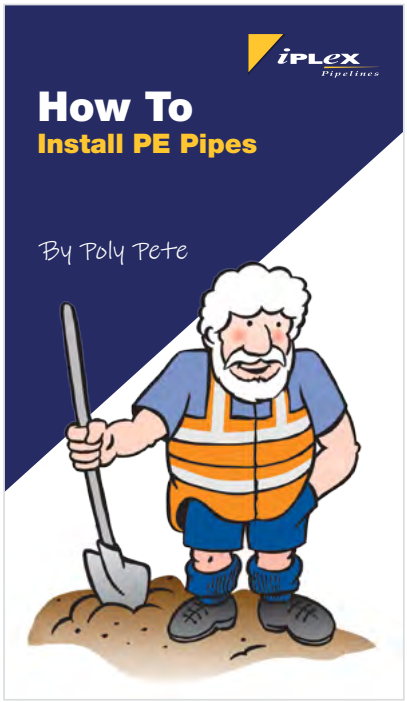
Backfill compaction
As with any buried flexible pipe, including any type of PE pipe, compaction of the backfill under and alongside the pipe barrel is important to ensure good structural performance of the backfill and also of the completed pipeline. The correct sequence of backfill actions includes placement and compaction of the bedding, under the pipe and secondly, beside and surrounding the pipe barrel, BEFORE placement and compaction of trench backfill above the bedding zone.

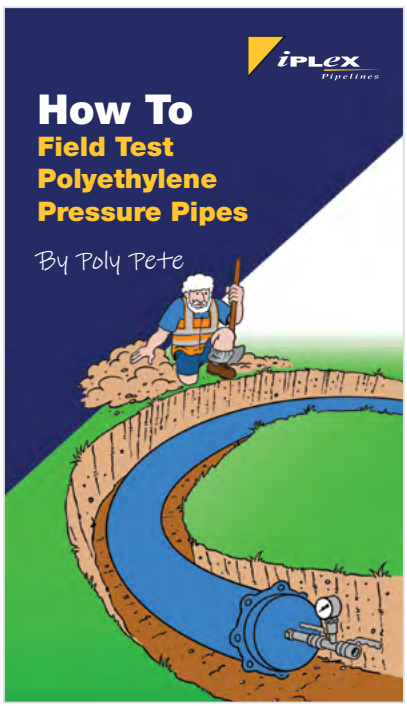
Field Testing
All pressure pipelines should be field tested to uncover any faults during pipeline construction.

You must check that:

- All pipe-joints, including butt fusion or electro fusion joints have been made correctly.
- All pipeline components valves, hydrants, bends, tees, tapping bands and any other fittings have been installed correctly.
- To determine that the pipeline will handle pressure greater than its design pressure— without leaking!

Best Practice Open-Cut Installation
Please consult the Iplex® Installation guides; 'PolyPete - How I Install PE Pipes' and 'PolyPete - How I Field Test PE Pipelines. For Iplex®'s recommendation for Iplex®'s recommendation for best practice installation refer to www.iplex.co.nz/iplex-resources/. You can also contact Iplex's technical support on 0800





THERMAL PRESSURE RE-RATING OF POLIPLEX® PE 100 PIPE

Poliplex® PE 100 pipes must be pressure re-rated at temperatures above 25°C, according to this table.

Maximum allowable operating pressure metres vs pipe operating temperature

Temp °C	PN4	PN6.3	PN8	PN10	PN12.5	PN16	PN20	PN25
20	40	63	80	100	125	160	200	250
25	36	58	73	91	115	145	182	227
30	36	58	73	91	115	145	182	227
35	33	53	67	83	106	133	167	208
40	33	53	67	83	106	133	167	208
45 (35y)*	31	49	62	77	99	123	154	192
50 (22y)*	29	46	57	71	91	114	143	179
55 (15)*	29	46	57	71	91	114	143	179
60 (7)*	27	43	53	67	85	107	133	167
80 (1y)*	20	32	40	50	63	80	100	125

** At constant temperatures greater than 40°C the design life of Poliplex® pipes is reduced.*

Maximum pipe support spacing above ground

Nominal outside diameter of pipe (mm)	Recommended maximum spacing of supports (m)	
	Horizontal or graded pipes	Vertical pipes
16	0.25	0.5
20	0.30	0.6
25	0.35	0.7
32	0.38	0.75
40	0.43	0.85
50	0.45	0.90
63	0.50	1.05
75	0.60	1.20
90	0.67	1.35
125	0.75	1.50
140	0.85	1.70
160	1.00	2.00
200	1.10	2.20
225	1.15	2.30
250	1.25	2.50
280	1.30	2.60
≥355	1.50	3.00

Maximum spacing for Poliplex® Pipe support spans above ground - conforming to AS/NZS 2033.

Minimum bending radius

SDR	At 20°C or more	At 0°C
41	40 x DN	100 x DN
33	30 x DN	75 x DN
26	25 x DN	60 x DN
≤21	20 x DN	50 x DN

Minimum bending radius for installing PE pipes.

Support brackets for Poliplex® PE 100 pressure sewer transmission main, including allowance for expansion and contraction, Gisborne City.

Curved Poliplex® PE 100 pressure sewer transmission main, Timaru District.

SAFE AXIAL (PULLING) LOADS FOR POLIPLEX® PIPE (KN)

SDR	41	26	21	17	13.6	11	9	7.4
PN for PE 100	4	6.3	8	10	12.5	16	20	25
DN50	-	-	2.8	3.5	4.3	5.2	6.2	7.3
DN63	-	3.7	4.5	5.5	6.8	8.2	9.9	11.7
DN75	-	5.2	6.4	7.8	9.6	11.7	14.0	16.5
DN90	-	7.5	9.2	11.3	13.9	16.8	20.1	23.8
DN110	7.2	11.2	13.8	16.8	20.7	25.1	30.0	35.5
DN125	9.3	14.5	17.8	21.7	26.8	32.5	38.8	45.9
DN140	11.7	18.2	22.3	27.3	33.6	40.7	48.7	57.6
DN160	15.3	23.8	29.2	35.6	43.8	53.2	63.5	75.2
DN180	19.4	30.1	36.9	45.1	55.5	67.3	80.4	95.2
DN200	23.9	37.2	45.6	55.7	68.5	83.1	99.3	117.5
DN225	30.3	47.1	57.7	70.4	86.7	105.2	125.7	148.7
DN250	37.4	58.1	71.2	87.0	107.0	129.8	155.1	183.6
DN280	46.9	72.9	89.4	109.1	134.2	162.8	194.6	230.3
DN315	59.3	92.2	113.1	138.1	169.9	206.1	246.3	291.5
DN355	75.4	117.1	143.6	175.4	215.8	261.8	312.8	370.2
DN400	95.7	148.7	182.4	222.6	273.9	332.3	397.2	470.0
DN450	121.1	188.2	230.8	281.8	346.7	420.6	502.7	594.8
DN500	149.5	232.4	285.0	347.9	428.0	519.3	620.6	-
DN560	187.5	291.5	357.4	436.4	536.9	651.4	778.4	-
DN630	237.4	368.9	452.4	552.3	679.5	824.4	985.2	-
DN710	301.5	468.5	574.6	701.4	863.1	1047.1	1251.3	-

Iplex Poliplex® PE 100 pressure sewer transmission main, installed by Horizontal Directional Drilling, Christchurch City.

Iplex Poliplex® PE 100 pressure sewer transmission main, installed by Slip Lining, Tauranga City.

IPLEX®
QUALITY MANAGEMENT SYSTEMS

Quality Assurance

Supplying products of consistently high quality is at the forefront of what we do at Iplex®, and central to our 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® have been manufacturing plastic pipelines since 1938 and with over 80 years of industry service and technical experience.

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.

Iplex® also services the following industry sectors:

Energy and Communications: 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.

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.

PE PRESSURE SYSTEMS SPECIFICATION AND INSTALLATION GUIDE, NOVEMBER 2025

LIMITATIONS

The information contained in this document is current as at November 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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the most up to date information available. You can call toll free on 0800 800 262 or visit www.iplex.co.nz to obtain current information.

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TRADEMARKS

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