

# THE BRAND PLUMBERS TRUST



# elson **BUSH** PEX PULL-ON

PEX PLUMBING SYSTEM

Product information and installation manual





**Elson Australasia Pty Ltd** proudly presents the elson BUSHPEX range of PEX Plumbing Systems including, Pull-On and Crimp-On for water and elson BUSHPEX Crimp Gas.

This brochure provides specification and installation information relevant to the elson BUSHPEX Pull-On PEX Plumbing System for water reticulation, 16mm to 32mm outside diameter.

The elson BUSHPEX Pull-On PEX Plumbing System comprises two main components, a flexible cross-linked high density polyethylene pipe and solid DR Brass Pull-On fittings combined with hi-tensile strength brass sleeves.

elson BUSHPEX Pull-On Plumbing Systems are a cost effective alternative to other plumbing systems. The elson BUSHPEX Pull-On PEX system is fast and easy to install, usually with fewer fittings. The flexible pipe is light weight and resists corrosion and incrustation. Water flow noise is low in PE-X pipe and water hammer is significantly reduced.

**elson BUSHPEX Pipe** is a high strength PN20 PE-Xa pipe manufactured by Elson under strict quality controls at our ISO9001 accredited manufacturing facility to **Australian Standards AS 2492 with WaterMark certificate WMKA 21274.** 

elson BUSHPEX pipe is suitable for use in hot and cold water services for both domestic and commercial applications. elson BUSHPEX pipe options include black pipe for either hot or cold water, red for hot water, green for rainwater harvesting and lilac for recycled water.

elson BUSHPEX Pull-On fittings are a solid DR brass compression fitting manufactured using hi-tensile strength brass sleeves. The fittings are manufactured by Elson under strict quality controls at our ISO9001 accredited manufacturing facility to Australian and New Zealand Standards AS/NZS 2537.2 with watermark certificate WMKA 21276.

**elson BUSHPEX Pull-On tooling** comprises of both manual and battery hydraulic options to make installation fast and secure. All tooling used must be verified before use to ensure suitability to the elson BUSHPEX Pull-On system. elson BUSHPEX Pull-On tools are essential requirements for the installation procedure as detailed in this manual.

All elson BUSHPEX products are fully warranted for a period of **25 years** against manufacturing defects when installed in accordance with **AS/NZS 3500** and the **elson BUSHPEX Pull-On PEX Plumbing System Manual** by a licenced Plumber.

# Contents

Features and Benefits	4
Technical Information	
- Pipes	5
- Fittings	6
- Pipe Specification Chart	7
- Pipe and fitting protection and care during handling and installation	8
- Underground Installation.	9
- Fire Certification for elson BUSHPEX Water Pipe	9
- elson BUSHPEX Pull-On Tools	10
System Testing	12
Warranty	12
Frequently asked Questions	14
elson BUSHPEX Pull-On Jointing Instruction	15
Product Listings	
- Fittings	16
- Tools & Jaws	23
- Pines and Accessories	26

### features and Benefits

#### elson BUSHPEX Pull-On PEX Plumbing System:

- Manufactured, distributed and supported by Elson.
- 25 year product warranty against manufacturing defect when installed according to detailed requirements.
- elson BUSHPEX pipe manufactured to AS 2492 and fittings to AS/NZS 2537.2 standard within our ISO9001 accredited manufacturing facility with all Watermark Certification by SAI Global.
- Cost effective alternative to other systems.
- Fast and easy to install providing a safe + secure piping system.
- elson BUSHPEX Pull-On tools are available in either manual or battery hydraulic versions.
- elson BUSHPEX pipe properties:
  - Low water flow noise. High impact resistance.
  - Corrosion and incrustation resistant. Light weight and easy to install.
  - Significantly reduces water hammer. High pressure rating 2000kPa @ 20°C.
  - Smooth inner core to reduce pressure loss. Low levels of thermal conductivity and expansion.
  - Coils provide fast installation, less joints, save time, save costs.
  - Available in Black for hot and cold water, Red for hot water, Green for rainwater harvesting and Lilac for recycled water in sizes 16mm, 20mm, 25mm and 32mm.
  - Same pipe is compatible with two elson BUSHPEX jointing systems Crimp-On, Pull-On.
- elson BUSHPEX Pull-On fitting properties:
  - All fittings are tested DR BRASS manufactured by Elson ISO9001 accredited through SAI Global.
  - All elson BUSHPEX Pull-On sleeves are manufactured from hi-tensile brass.
  - German manufactured Battery Tools and Jaws developed, tested and approved for elson BUSHPEX Pull-On.
- National support network for training, technical information and tool service.

### Technical Information

#### elson BUSHPEX Pipe

elson BUSHPEX pipe is manufactured from PE-Xa raw material to exceed the performance requirements of AS 2492. The flexible elson BUSHPEX pipe is the perfect choice for hot and cold potable water and recycled water applications.

PE-Xa crosslinked polyethylene is polyethylene (PE) which has undergone a change in molecular structure whereby the polymer chains are chemically linked, crosslinked (X), with each other to form a three-dimensional network making it more durable within a wide range of temperatures and pressures typically where metals were used. PE-Xa pipe provides flexibility with improved mechanical, thermal and chemical properties. elson BUSHPEX PE-Xa pipe is typically between 80% to 85% crosslinked.

#### elson BUSHPEX pipe benefits:

- PE-Xa pipe will expand with excessive pressure and then return to its original shape when the pressure is removed.
- Temperature and pressure ratings on PEX pipe include 70C at 1300kPa.
- Resistant to freezing and high impact strength.
- Better resistance to surge pressures over copper.
- Reduced water hammer compared to metal pipes.
- High burst strength and long-term pressure ratings.
- Chemical resistance to glycols, latex paints, silicone and most acids and bases.
- Reduced heat loss and condensation through pipes when compared to copper.
- Corrosion Resistance from soil or water.
- Ease of installation with no flame, solder or glue.
- Lightweight and flexible for ease of handling and transport.
- Reduced heat loss and condensation through pipes when compared to copper.
- Smooth wall and excellent flow characteristics.
- Proven long life and durability.

elson BUSHPEX Pull-On is a complete plumbing system comprising of PE-Xa pipe in sizes 16, 20, 25 and 32mm plus a comprehensive range of DR Brass fittings with hightensile brass sleeves. Manual and battery tooling options for jointing the pipe and fittings completes the system.

elson BUSHPEX PE-Xa PN20 pipe is specifically designed for the elson BUSHPEX Pull-On jointing system in conformance with AS 2492 with watermark certificate WMKA 21274. elson BUSHPEX PE-Xa PN20 is compatible with all two elson BUSHPEX jointing systems for water including:

- elson BUSHPEX Pull-On
- elson BUSHPEX Crimp-On

elson BUSHPEX Pipe is available in four colours to identify the specific application.

**Black** – Suitable for potable hot and cold water plumbing in domestic and commercial applications.

**Red** – Specifically for hot water lines in domestic and commercial applications.

Lilac – Specifically for recycled, non-potable water.V

**Green** – Specifically for Rainwater.

NOTE: PE-X pipe exposed to sunlight must be protected.

#### elson BUSHPEX Pull-On Fittings

The elson axial compression sleeve fittings and sleeve system are Watermark approved (Certificate number: 21276) and certified to AS/NZS 2537.2. The elson fitting is proven and tested with over 10 years of successful service history in Australia.

The jointing concept relies on the distinctive elastic features of the elson BUSHPEX pipe to achieve a joint that is stronger than the pipe itself. elson BUSHPEX Pull-On Fittings provide for a solid, permanent, manufactured connection without the need for flame, glues, solder or flux. The proven memory performance of elson BUSHPEX PE-Xa piping forms a tight seal around the fitting resulting in a strong reliable water tight connection. elson BUSHPEX Pull-On Fittings are manufactured in a high tensile strength DZ (Dezincification Resistant) brass for pipe dimensions including DN16, DN20, DN25 and DN32.

#### elson BUSHPEX fitting benefits:

• safe and secure permanent compression sleeve connections can be done quickly.

- High tensile strength brass fittings for greater resistance to cracking and chemical attack from solvents and glues.
- Self-sealing PE-Xa material jointing connection without the use of an O-ring.
- Increased hydraulic properties from the full flow fitting design.
- Jointing requires no solder, flame, fluxes, glues or solvents.
- Corrosion free with no scale or corrosion build -up.
- Simple visual inspection following installation.
- Joint can be pressure tested immediately after installation.

	elson BUSHPE	( PULL-ON Technical Inform	ation	
Outside Diameter For SDR7.4 PEX (mm)	16.0 - 16.3	20.0 - 20.3	25.0 - 25.3	32.0 - 32.3
Internal Diameter For SDR7.4 PEX (mm)	10.8 - 11.9	13.6 - 14.7	17.0 - 18.3	22.0 - 23.5
Wall Thickness For SDR7.4 PEX (mm)	2.2 - 2.6	2.8 - 3.2	3.5 - 4.0	4.4 - 5.0
Nominal Pressure / Ambient Temp	2000kPa @ 20 °C	2000kPa @ 20 °C	2000kPa @ 20 °C	2000kPa @ 20 °C
Standard Pipe / Fittings	AS 2492 / AS/NZS 2537.2	AS 2492 / AS/NZS 2537.2	AS 2492 / AS/NZS 2537.2	AS 2492 / AS/NZS 2537.2
Licence Number For Pipe / Fittings	WMKA 21274 / WMKA 21276	WMKA 21274 / WMKA 21276	WMKA 21274 / WMKA 21276	WMKA 21274 / WMKA 21276
Max Clip Distance Horiz / Vertical (mm)	600 / 1200	700 / 1400	750 / 1500	850 / 1700
Min Bend Radius (mm)	160	200	250	320
Colours Available	Black, Red, Lilac, Green	Black, Red, Lilac, Green	Black, Red, Lilac, Green	Black
Coil Sizes Metres (Black, Red, Lilac, Green)	25m Black / 50m All / 100m Black	25m Black / 50m All / 100m Black	25m Black & Red / 50m All	25m & 50m All
Straight Lengths Metres (Black, Red, Lilac, Green)	5m lengths available in all colours	5m lengths available in all colours	5m lengths available in all colours	5m Black
Coefficient Of Linear Expansion / Thermal Expansion	1.53mm / metre / 10 °C	1.53mm / metre / 10 °C	1.53mm / metre / 10 °C	1.53mm / metre / 10 °C
Temp / Operating Pressure	70°C @ 1330kPa	70 °C @ 1330kPa	70 °C @ 1330kPa	70 °C @ 1330kPa
Temp / Operating Pressure	60°C @ 1500kPa	60 °C @ 1500kPa	60 °C @ 1500kPa	60 °C @ 1500kPa

April 2023

#### Pipe & Fitting Protection and Care during Handling and Installation

elson BUSHPEX pipe and Pull-On fittings must be protected from damage through all stages of the process from transport to storage and installation in accordance with AS/NZS 3500. Provision for pipe and fitting protection therefore includes but is not limited to the following:

- Care must be taken to keep the pipe and fittings free of grit, dirt, dust and any foreign matter.
- Pipe must be protected from physical damage. including cuts, abrasions, dents, kinks, tears, holes, etc.
- Pipes, either black, red, green or lilac, are not to be installed in direct sunlight.
- Pipe must be protected from long term or permanent U.V. exposure, by way of lagging, encasing in a conduit etc.
- Pipe and fittings must be protected from excessive heat or burning, chemical / solvent attack, animal or rodent attack, machinery damage, other external threats, etc.
- Pipe must never be installed where it could be exposed to a naked flame. PE-X Pipe has the potential to ignite and continue to burn after the source of the flame is extinguished. In accordance with AS/NZS 3500, all plastic pipe for water supply must be protected from excessive ambient heat.
- Chemical or corrosive environments.
  - Pipe must be protected.
  - Fittings must be wrapped and protected. This includes all underground installations for all fittings.
- Pipe support and clipping, both vertically and horizontally is required to ensure conformance for vibration, excessive tension, torsion or compressive stresses on fittings and pipe. Refer to Pipe Specification Chart for spacing.
- Pipe penetrations through timber and steel frames and concrete sections must conform and may require protection using grommets, fire collars, sleeving or wrapping. Holes, notches and cut-outs must be accurately drilled "in-line" to allow movement for expansion and contraction of the pipe and fittings so joints are not exposed to excessive stress. Refer to Pipe Specification Chart for timber frame cut-out limitations.
- Pipe expansion and contraction needs to be accommodated during installation to allow for movement due to thermal Linear Expansion. Failure to do so may exceed the torsional pull-out allowances on fittings resulting in leakage. Refer to the Pipe Specification Chart for the Thermal Expansion Co-efficient.
- elson BUSHPEX pipe is flexible but requires care when bending to avoid kinks or other permanent deformation
  that may restrict flow or put undue pressure on joints. If the pipe is kinked or damaged in any way it must be
  cut-out and replaced. elson BUSHPEX Pull-On elbows are recommended for tight bends.
   Refer to the Pipe Specification Chart for minimum bending radius and tools for bending.
- Connecting Barb soldered connection require special attention. Solder the brass connection barb first then allow to cool before jointing.
- In accordance with AS/NZS 3500 regions with extreme hot or cold temperatures require appropriate product selection and/or insulation for protection and compliance. Consideration should also be given to insulating the pipe for energy efficiency as well as the prevention of condensation which can occur in hot and cold lines.

#### **Underground Installation**

NOTE: It is a requirement to pressure test the pipe and fittings in accordance with AS/NZS 3500 prior to burying or concealing the elson BUSHPEX Plumbing System.

Underground installation of elson BUSHPEX Pull-On pipe and fittings must be in accordance with AS/NZS 3500 including but not limited to the following:

- Minimum buried depth required by standards.
- Minimum pipe separation distance.
- Wrapping and protection.
- Conduit sleeving through slab penetration.
- Underground Piping installation recommended with no joints.
- Concrete slab piping must be continuous with no joints.

# Fire Certification for elson BUSHPEX Water Pipe (Technical Information Section)

Elson BUSHPEX Water PEX pipe is certified for wall and floor penetrations in accordance with Australian Standard 1530: Part4 : 2005. The elson BUSHPEX water pipe was tested in connection with the Promat Passive Fire Protection collars.

#### For collars retrofitted to the underside of the concrete slab using a Promaseal ® CFC32

Size	DN16	DN20	DN32
FRL	-/180/90	-/180/120	-/240/120

#### For collars cast into the concrete slab using Promaseal ® CFC32 and Green 40

	Cast-I	n Collar Promaseal ®	CFC32	
Size	DN16	DN20	DN25	DN32
FRL	-/180/180	-/180/180	-/180/180	-/180/120

	Cast-In	Collar Promaseal ® G	reen 40	
Size	DN16	DN20	DN25	DN32
FRL	-/180/180	-/180/180	-/180/180	-/180/120

# For Promaseal <sup>®</sup> CFC32 collars retrofitted to either side of the wall for lightweight partition clad fire rated plasterboard 128mm thick

Size	DN16	DN20	DN25	DN32
FRL	-/180/180	-/180/180	-/180/180	-/180/120

#### For Promaseal ® CFC32 collars screwed together and inserted centrally within the Hebel wall 75mm thick

Size	DN20	DN25
FRL	-/180/120	-/180/90

# Speed Panel wall 77mm thick with Promaseal <sup>®</sup> CFC32 collars retrofitted on a layer of 25mm Promatect <sup>®</sup> 100 on each face

Size	DN20	DN25
FRL	-/120/30	-/120/120

#### Solid Fire Rated Plasterboard 48mm thick with single Promaseal ® CFC32 collar central within the wall

Size	DN32
FRL	-/90/90

#### elson BUSHPEX Pull-On Tools

elson BUSHPEX Pull-On Tools are specifically designed to be used with the elson BUSHPEX Pull-On PEX Pipe and fitting System and may not be compatible with other systems. elson BUSHPEX Pull-On Tools are manufactured to precise specifications and require care, regular maintenance and regular inspection to ensure accurate and consistent operation. The cleaning of tools, and expander jaws is recommended after each use. Always keep your tools and expander jaws free of dirt, dust, moisture and corrosion. Lubricate expanders and expander jaws regularly.

#### **WARNING:**

NEVER USE an expander head that is worn damaged or has missing parts. Isolate and dispose immediately. Damaged or worn expander heads cause joint leaks.

It is essential for all installers to read and recognise the operational requirements of the tools along with the Jointing Procedures and safety recommendations included in this manual and the Tool Instruction Manual. It is always recommended to incorporate a checking procedure to ensure that each joint has been correctly and completely jointed.

**IMPORTANT** – Please consult the Jointing Procedure included in this manual. This Guide procedure is a product installation requirement.

#### Ring Mains/Recirculating Hot Water Systems.

If not configured correctly, the entire plumbing system may have a dramatically reduced service life.

Recirculating Hot Water Systems or Ring Mains minimise the time it takes to get hot water to reach an appliance or outlet. It is also known that the continuous flow of water with exposure to high temperatures and high velocity makes this a very extreme and demanding application, whether using copper, Pex, or other piping materials.

To ensure system service life is maximised and to cater for the performance tolerances of heat sources, the following installation and water quality guidelines must be followed on any circulating hot water systems using Bushpex plumbing system in order to maintain the product warranty.

- Maximum pressure within the ring mains / recirculating hot water systems must be limited 500kPa (as per AS/NZ 3500)
- Maximum water temperature must not exceed 60°C.
- The pipe work design and recirculating pumps must be sized to limit the water velocity to the
  requirement of AS/NZS 3500 for non-metallic piping. Where copper pipe is part of the installation, the
  velocity restrictions for this material is extremely critical and must not be exceeded.
- A timer controlled recirculation pump must be used with a maximum circulation time of 12 hours per
   24-hour period. All pipe work should be insulated and the recirculating pump must be thermostatically controlled, to further reduce stress on the system and minimise energy consumption.
- The system layout of pipework and fittings should be designed with long wide sweeping pipe bends with limited use of fittings.
- Water quality Australian city potable water reticulation systems as defined in the Australian Drinking
   Water Guidelines.

#### **ELECTROCUTION WARNING!**

The potential threat of electrocution and death must be recognised if an earth line is disconnected by cutting metal pipes. ALWAYS check with a licenced electrician prior to proceeding.

# System Testing

Pipe and joint system testing must be carried out in accordance with AS/NZS 3500 and any other applicable local authority requirements prior to burying or concealing the elson BUSHPEX Pull-On Plumbing System. It is the responsibility of the Licenced Installer to ensure that all joints and fittings are inspected, tested and checked for leaks to ensure safety and compliance.

It is recommended to incorporate a checking procedure to ensure that each joint has been correctly and completely jointed.

# Warramty

The elson BUSHPEX Pull-On Plumbing System carries a 25 year product warranty which covers product manufacturing faults and defects. This warranty only applies under the following requirements:

- The system must have been installed by a licenced Plumber.
- Proof of installation by a licenced Plumber is required.
- Proof of purchase is required.
- Installation must be in accordance with AS/NZS 3500.
- Installation must be in accordance with any other relevant and applicable local authority codes which may take precedence.
- Installation must be in accordance with established installation practices.
- Installation must be in accordance with the jointing procedures included in this manual.
- Installation must only ever involve the use of the same approved elson BUSHPEX Pipe (watermark certificate WMKA 21274), elson BUSHPEX Pull-On fittings (watermark certificate WMKA 21276) and elson BUSHPEX approved tooling.

Elson Australasia Pty Ltd undertakes to repair or replace product which is found to be faulty or defective in workmanship or manufacture according to the warranty conditions. The benefits provided to the consumer by this warranty are in addition to other rights and remedies available to the consumer under the law.

To make a warranty claim please contact Elson Australasia Pty Ltd with your contact details, proof of purchase and Licenced Installers documentation details. If the product has not been installed please contact the place of purchase and return. If there is a problem returning the product please contact Elson Australasia Pty Ltd. To make a claim under warranty you must abide by the warranty conditions.

Elson Australasia Pty Ltd

ABN: 45 059 613 991

38 Eddie Road, Minchinbury, 2770.

Phone: 02 9625 7899 Fax: 02 9625 7855

Email: sales@elson.net.au

Our products come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

To the extent of the Law, Elson shall not be liable for any consequential loss or damage of any kind caused by any product faulty or defective in workmanship or manufacture.



### FAO

#### Can elson BUSHPEX pipe be installed under a slab?

YES – with the following requirements

- Installation in accordance with AS/NZS 3500.
- Installed within elson BUSHPEX corrugated sleeve conduit.
- Must be sleeved when penetrating through a slab.
- Installed in a single continuous length without fittings.

#### Can elson BUSHPEX pipe be used for underground cold water service applications?

**YES** – when installed in accordance with AS/NZS 3500 requirements.

#### Can elson BUSHPEX pipe and fittings be used to connect solar panels to the storage tank?

**NO** – Australian Standards do NOT allow PE-X Pipe to be used on the flow or return lines between solar panels and solar storage vessels.

#### Can braze-on adaptors be installed after crimping elson BUSHPEX Pipe?

**NO** – Brazing must only ever be done prior to the jointing of the elson BUSHPEX pipe to the fitting. Alternatively use elson PRESS Pull-On fittings from copper to elson BUSHPEX Pull-On.

#### Is there anything I need to do before using Pull-On Tools?

**YES** – follow all of these important steps below:

- Ensure that the all tools are clean, free of dirt, grit, corrosion and fully functional.
- Ensure the expander head screws entirely onto the expandertool. Incompatible expander tool and heads must never be used!
- Inspect the expander head for damage, worn or missing parts. If detected isolate, dispose and replace immediately.
- Refer to the Jointing Procedure in this manual for the correct installation method.

#### Is there anything I need to do before using the approved battery Pull-On Tool?

**YES** – follow all of these important steps below:

- Read and recognise the instructions contained in the manual
- Inspect the tool to ensure if functions properly
- Only use the retract slide button release if the battery goes flat or the tool jams. Regular use of this button release puts excessive load on the hydraulics that may affect your warranty.
- Always keep the tool and jaws clean and dry.

#### Do I need to inspect the pipe prior to jointing?

**YES**, always inspect the pipe to ensure it is elson BUSHPEX PE-Xa DN20 Pipe, certificate number WMKA21274. Always ensure the pipe is clean, free of debris and damage free. Any Kinks, cuts or imperfections must be cut out from the installation and disposed of.

#### Do I need to check every joint has been completed?

YES, it is recommended to incorporate a check system to confirm every sleeve joint has been completed.

# elson BUSHPEX PULL-ON Jointing Instruction



Cut the pipe clean and square using elson BUSHPEX pipe cutters, Any kinks, damage, imperfections must be cut out and disposed.



Slide the jointing sleeve over the pipe end with the internal tapered end of the sleve facing the joint. Keep the sleeve at least 50mm from the pipe end.



Inspect the expander tool and expander heads prior to use for damage or dirt build up on the heads. Do not use if damaged or missing parts.

Ensure the expander head screws completely onto the expander.

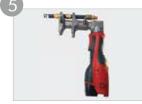
Never use incompatible heads. Insert the expander head into the pipe end and expand the pipe once, then rotate the expander tool approximately 30 degrees and expand the pipe again. This process ensures even and complete pipe expansion.

Note: Any damage to the pipe and from the use of a defective expander tool shall be discarded and cut off.



Immediately insert the expanded pipe end into the fitting until it reaches the last and largest ridge. Note the pipe contracts over time due to the PEX memory effect.

#### Manual Tool and Bettery Tool Installation



Slide the jointing sleeve to the fitting. Position the tool jaws squarely on and in line with the outer face of the sleeve and the fitting collar.



( This step is for either manual ratchet tool or for hydralic battery tool. )



Activate the compression process with either the manual ratchet tool or the hydraulic battery tool until the sleeve reaches the fitting collar.



Inspect every joint to ensure the process is correct and complete. The sleeve must be square with the fitting. The joint must be fully compressed.

8 Pressure test the installation in accordance with AS/NZS 3500.

# Product listing



#### NO.1 STRAIGHT COUPLING

Code	Description
23000	No.1 Straight Coupling 16mm
23002	No.1 Straight Coupling 20mm
23004	No.1 Straight Coupling 25mm
23006	No.1 Straight Coupling 32mm



#### NO.1R REDUCING COUPLING

Code	Description
23020	No.1 R Reducing Coupling 20 x 16mm
23022	No.1 R Reducing Coupling 25 x 16mm
23024	No.1 R Reducing Coupling 25 x 20mm
23025	No.1 R Reducing Coupling 32 x 20mm
23026	No.1 R Reducing Coupling 32 x 25mm



#### NO.2 STRAIGHT FEMALE CONNECTOR

Code	Description
23060	No.2 Straight Connector 16mm x 15mm FI
23062	No.2 Straight Connector 20mm x 15mm Fl
23064	No.2 Straight Connector 20mm x 20mm Fl
23068	No.2 Straight Connector 32mm x 25mm Fl



#### NO.3 STRAIGHT MALE CONNECTOR

Code	Description
23040	No.3 Straight Connector 16mm x 15mm MI
23058	No.3 Straight Connector 16mm x 20mm MI
23042	No.3 Straight Connector 20mm x 15mm MI
23044	No.3 Straight Connector 20mm x 20mm MI
23048	No.3 Straight Connector 20mm x 25mm MI
23052	No.3 Straight Connector 25mm x 15mm MI





Code	Description
23046	No.3 Straight Connector 25mm x 20mm MI
23050	No.3 Straight Connector 25mm x 25mm MI
23054	No.3 Straight Connector 32mm x 20mm MI
23056	No.3 Straight Connector 32mm x 25mm MI



#### NO.12 ELBOW

Code	Description
23080	No.12 Elbow 16mm
23082	No.12 Elbow 20mm
23084	No.12 Elbow 25mm
23086	No.12 Elbow 32mm



#### NO.13 MALE ELBOW

Code	Description
23400	No.13 Elbow 16mm x 15mm MI
23402	No.13 Elbow 20mm x 15mm MI
23404	No.13 Elbow 20mm x 20mm MI
23406	No.13 Elbow 25mm x 20mm MI



#### NO.14 FEMALE ELBOW

Code	Description
23420	No.14 Elbow 16mm x 15mm Fl
23421	No.14 Elbow 16mm x 20mm Fl
23422	No.14 Elbow 20mm x 15mm Fl
23424	No.14 Elbow 20mm x 20mm Fl



#### NO.15 LUGGED FEMALE ELBOW

Code	Description
23120	No.15BP Elbow 16mm x 15mm Fl
23122	No.15BP Elbow 20mm x 20mm FI



## NO.19BP LUGGED MALE ELBOW

Code	Description
23140	NO.19BP Elbow 16mm x 15mm MI 65mm Long
23142	NO.19BP Elbow 16mm x 15mm MI 90mm Long
23146	NO.19BP Elbow 16mm x 15mm MI 150mm Long
23144	NO.19BP Elbow 16mm x 15mm MI 200mm Long
23148	NO.19BP Elbow 20mm x 15mm MI 95mm Long
23152	NO.19BP Elbow 20mm x 15mm MI 200mm Long
23154	NO.19BP Elbow 20mm x 20mm MI 95mm Long
23156	NO.19BP Elbow 20mm x 20mm MI 150mm Long
23158	NO.19BP Elbow 20mm x 20mm MI 200mm Long



#### NO.24 TEE

Code	Description
23160	No.24 Tee 16mm
23162	No.24 Tee 20mm
23164	No.24 Tee 25mm
23166	No.24 Tee 32mm



#### NO.25 REDUCED CENTRE TEE

Code	Description
23180	No.25 Tee Reduced Centre 20 x 20 x 16mm
23188	No.25 Tee Reduced Centre 25 x 25 x 16mm
23182	No.25 Tee Reduced Centre 25 x 25 x 20mm
23189	No.25 Tee Reduced Centre 32 x 32 x 20mm
23190	No.25 Tee Reduced Centre 32 x 32 x 25mm



#### TEE REDUCED BOTH ENDS

Code	Description
23171	Tee Reduced Both Ends 16 x 16 x 20mm
23172	Tee Reduced Both Ends 20 x 20 x 25mm



#### NO.26 REDUCED END TEE

Code	Description
23186	No.26 Tee Reduced End 20 x 16 x 20mm
23192	No.26 Tee Reduced End 25 x 16 x 25mm
23194	No.26 Tee Reduced End 25 x 20 x 25mm
23195	No.26 Tee Reduced End 32 x 20 x 32mm



#### NO.27 REDUCED CENTRE & END TEE

Code	Description
23184	No.27 Tee Reduced Centre+End 20 x 16 x 16mm
23196	No.27 Tee Reduced Centre+End 25 x 16 x 16mm
23380	No.27 Tee Reduced Centre+End 25 x 20 x 16mm
23382	No.27 Tee Reduced Centre+End 25 x 16 x 20mm
23384	No.27 Tee Reduced Centre+End 25 x 20 x 20mm
23385	No.27 Tee Reduced Centre+End 32 x 20 x 20mm
23386	No.27 Tee Reduced Centre+End 32 x 25 x 25mm
-	



#### NO.30 TEE

Code	Description
23388	No.30 Tee 16 x 16 x 15mmFl
23389	No.30 Tee 20 x 20 x 15mmFl



#### NO.61 STOPPER

Code	Description
23260	No.61 Stopper 16mm
23262	No.61 Stopper 20mm



#### NO.62 STRAIGHT TAP CONNECTOR

Code	Description
23240	No.62 Straight Tap Connector CONE
	16mm x 15mm FI NUT
23242	No.62 Straight Tap Connector CONE
	20mm x 20mm FI NUT
23360	No.62 Straight Tap Connector FLAT
	16mm x 15mm FI NUT
23362	No.62 Straight Tap Connector FLAT
	20mm x 20mm FI NUT



#### NO.63 BENT TAP CONNECTOR

Code	Description
23340	No.63 Bent Tap Connector
	16mm x 15mm FI NUT
23342	No.63 Bent Tap Connector
	20mm x 20mm FI NUT



#### FLARED COMPRESSION UNION

Code	Description
23220	Flared Copper Compression Union
	16mm x15mm FL
23221	Flared Copper Compression Union
	20mm x15mm FL
23222	Flared Copper Compression Union
	20mm x 20mm FL





#### BATH/LAUNDRY ASSEMBLY

Code	Description
23280	Bath/Laundry Assembly Right Angled
	200mm (FLOOR ENTRY)
23282	Bath/Laundry Assembly Right Angled
	300mm (FLOOR ENTRY)
23286	Bath/Laundry Assembly Straight
	300mm (SIDE ENTRY)













#### SHOWER ASSEMBLY

Code	Description
23300	Shower Assembly Right Angled
	150mm (FLOOR ENTRY)
23302	Shower Assembly Right Angled
	200mm (FLOOR ENTRY)
23304	Shower Assembly Right Angled BARBS UP
	150mm (TOP ENTRY)
23306	Shower Assembly Right Angled BARBS UP
	200mm (TOP ENTRY)
23320	Shower Assembly Straight 150mm (SIDE ENTRY)

#### CONNECTING BARB

Code	Description
23440	Connecting Barb 16mm
23442	Connecting Barb 20mm
23444	Connecting Barb 25mm
23446	Connecting Barb 32mm

#### CONNECTING BARB FEMALE

Code	Description
23450	Connecting Barb Female 16mm
23452	Connecting Barb Female 20mm
23454	Connecting Barb Female 25mm
23456	Connecting Barb Female 32mm

#### COMPRESSION SLEEVE

Code	Description
23460	Compression Sleeve 16mm
23462	Compression Sleeve 20mm
23464	Compression Sleeve 25mm
23466	Compression Sleeve 32mm



#### HOT WATER ENTRY

Code	Description
23600	Hot Water Entry 16mm x 900mm
23602	Hot Water Entry 20mm x 900mm



# ADAPTOR LF BRASS PRESS WATER $\times$ BUSHPEX PULL-ON WATER



Code	Description
LF23880	ADAPTOR elson LF PRESS DN15 X BUSHPEX
	PULL-ON 16mm LF DR BRASS
LF23882	ADAPTOR elson LF PRESS DN20 X BUSHPEX
	PULL-ON 20mm LF DR BRASS
LF23884	ADAPTOR elson LF PRESS DN20 X BUSHPEX
	PULL-ON 25mm LF DR BRASS



#### elson BUSHPEX PULL-ON PEX BALL VALVE LF DR BRASS

Code	Description
LF72380	elson LF BUSHPEX PULL-ON WATER BALL VALVE
	LF DR BRASS L/H 16mm
LF72382	elson LF BUSHPEX PULL-ON WATER BALL VALVE
	LF DR BRASS L/H 20mm
LF72384	elson LF BUSHPEX PULL-ON WATER BALL VALVE
	LF DR BRASS L/H 25mm



# elson LF PRESS TO BUSHPEX PULL-ON PEX B/V LF DR BRASS L/H



Code	Description
LF72390	elson LF PRESS TO BUSHPEX PULL-ON PEX B/V
	LF DR BRASS L/H 16mm
LF72392	elson LF PRESS TO BUSHPEX PULL-ON PEX B/V
	LF DR BRASS L/H 20mm
LF72394	elson LF PRESS TO BUSHPEX PULL-ON PEX B/V
	LF DR BRASS L/H 25mm



#### NOVOPRESS BUSHPEX PULL-ON COMPRESSION TOOL KIT

Code	Description
23850	Novopress BUSHPEX Pull-On Compression Tool
	Kit 16-32mm



#### NOVOPRESS BUSHPEX PULL-ON JAW SET

Code	Description
23860	Novopress BUSHPEX Pull-On Jaw Set 16-20mm
23862	Novopress BUSHPEX Pull-On Jaw Set 25-32mm



#### NOVOPRESS BUSHPEX PULL-ON SECURING PIN

Code	Description
23869	Novopress BUSHPEX Pull-On SECURING PIN



#### **NOVOPRESS BATTERY**

Code	Description
23864	Novopress Battery 1.5AH LI-LON 12V



#### NOVOPRESS BATTERY CHARGER

Code	Description
23866	Novopress Battery Charger 12V 230V AUS



#### NOVOPRESS BUSHPEX PULL-ON EXPANDER TOOL KIT

Code	Description
23852	Novopress BUSHPEX Pull-On Expander Tool Kit
	16-32mm



#### M. TOOL COMPR & EXPAND KIT GEN2 COMPLT BUSHPEX

Code	Description
22900	M. Tool Compr & Expand Kit GEN2 Complt
	BUSHPEX 16-20mm



#### M. TOOL COMPR & EXPAND KIT GEN2 COMPLT BUSHPEX

Code	Description
22901	M. Tool Compr & Expand Kit GEN2 Complt
	BUSHPEX 16-32mm



#### MANUAL COMPRESSION TOOL

Code	Description
22902	Manual Compression Tool GEN2 BUSHPEX
	Including Jaw 16-20mm



#### COMPRESSION JAW GEN2 BUSHPEX

Code	Description
22904	Compression Jaw GEN2 BUSHPEX 16-20mm
22906	Compression Jaw GEN2 BUSHPEX 25-32mm



#### MANUAL EXPANDER TOOL GEN2 BUSHPEX

Code	Description
22910	Manual Expander Tool GEN2 BUSHPEX



#### EXPANDER HEAD

Code	Description
23919	Expander Head GEN2 BUSHPEX 16mm
23921	Expander Head GEN2 BUSHPEX 20mm
22922	Expander Head GEN2 BUSHPEX 25mm
22924	Expander Head GEN2 BUSHPEX 32mm
22928	Expander Head Dual GEN3 BUSHPEX 16-20mm



#### CUTTER PIPE PEX BUSHPEX/BUSHPEX GAS

Code	Description
23930	Cutter Pipe Pex BUSHPEX/BUSHPEX Gas 16-32



#### T135 DAWN KWIKCUT ORIGINAL PIPE CUTTER

Code	Description
21932	T135 DAWN KWIKCUT Original Pipe Cutter
	16mm-32mm



#### PIPE CUTTER PEX PIPE & PEX/AL/PEX PIPE

Code	Description
21936	Pipe Cutter PEX Pipe & PEX/AL/PEX Pipe
	16mm-32mm



#### TOOL GREASE

Code	Description
23980	Tool Grease



#### **BRASS BRUSH**

Code	Description
23940	Brass Brush

Important: Below listed elson BUSHPEX PE-Xa Pipes and Accessories can be used with all two elson BUSHPEX Plumbing Systems - Pull-On, Crimp-On.



#### HOT & COLD WATER PIPE (BLACK) STRAIGHT LENGTH

Code	Description
23700	Hot & Cold Water Pipe (Black) 5m Length 16mm
23702	Hot & Cold Water Pipe (Black) 5m Length 20mm
23704	Hot & Cold Water Pipe (Black) 5m Length 25mm
23706	Hot & Cold Water Pipe (Black) 5m Length 32mm



#### HOT & COLD WATER PIPE (BLACK) COIL

Code	Description
23710	Hot & Cold Water Pipe (Black) 100m Coil 16mm
23712	Hot & Cold Water Pipe (Black) 100m Coil 20mm
23717	Hot & Cold Water Pipe (Black) 50m Coil 16mm
23718	Hot & Cold Water Pipe (Black) 50m Coil 20mm
23714	Hot & Cold Water Pipe (Black) 50m Coil 25mm
23715	Hot & Cold Water Pipe (Black) 50m Coil 32mm
23707	Hot & Cold Water Pipe (Black) 25m Coil 16mm
23708	Hot & Cold Water Pipe (Black) 25m Coil 20mm
23709	Hot & Cold Water Pipe (Black) 25m Coil 25mm
23716	Hot & Cold Water Pipe (Black) 25m Coil 32mm



#### HOT & COLD WATER PIPE (BLACK) IN CONDUIT COIL

Code	Description
23720	Hot & Cold Water Pipe (Black)
	in Conduit 50m Coil 16mm
23722	Hot & Cold Water Pipe (Black)
	in Conduit 50m Coil 20mm
23724	Hot & Cold Water Pipe (Black)
	in Conduit 50m Coil 25mm



#### CONDUIT BLACK FOR BUSHPEX PE-X PIPE

Code	Description
23727	50mm Coil for 16mm PE-X Pipe (Conduit only)
23725	50mm Coil for 20mm PE-X Pipe (Conduit only)
23726	50mm Coil for 25mm PE-X Pipe (Conduit only)



#### HOT WATER PIPE (RED) STRAIGHT LENGTH

Code	Description
23750	Hot Water Pipe (Red) 5m Length 16mm
23752	Hot Water Pipe (Red) 5m Length 20mm
23754	Hot Water Pipe (Red) 5m Length 25mm



#### HOT WATER PIPE (RED) COIL

	· · ·
Code	Description
23756	Hot Water Pipe (Red) 50m Coil 16mm
23758	Hot Water Pipe (Red) 50m Coil 20mm
23753	Hot Water Pipe (Red) 50m Coil 25mm
23755	Hot Water Pipe (Red) 25m Coil 16mm
23757	Hot Water Pipe (Red) 25m Coil 20mm
23759	Hot Water Pipe (Red) 25m Coil 25mm



#### RECYCLED WATER PIPE (LILAC) STRAIGHT LENGTH

Code	Description
23737	Recycled Water Pipe (Lilac) 5m Length 16mm
23738	Recycled Water Pipe (Lilac) 5m Length 20mm
23739	Recycled Water Pipe (Lilac) 5m Length 25mm
23736	Recycled Water Pipe (Lilac) 5m Length 32mm





Code	Description
23730	Recycled Water Pipe (Lilac) 50m Coil 16mm
23732	Recycled Water Pipe (Lilac) 50m Coil 20mm
23734	Recycled Water Pipe (Lilac) 50m Coil 25mm



#### RAIN WATER PIPE (GREEN) STRAIGHT LENGTH

Code	Description
23747	Rain Water Pipe (Green) 5m Length 16mm
23748	Rain Water Pipe (Green) 5m Length 20mm
23749	Rain Water Pipe (Green) 5m Length 25mm



#### RAIN WATER PIPE (GREEN) COIL

Code	Description
23740	Rain Water Pipe (Green) 50m Coil 16mm
23742	Rain Water Pipe (Green) 50m Coil 20mm
23744	Rain Water Pipe (Green) 50m Coil 25mm



#### CLIP MASONRY NAIL

Code	Description
23810	Open Clip 16mm Masonry Nail
23812	Open Clip 20mm Masonry Nail
23814	Open Clip 25mm Masonry Nail



#### CLIP TIMBER NAIL

Code	Description
23816	Open Clip 16mm Timber Nail
23817	Open Clip 20mm Timber Nail
23818	Open Clip 25mm Timber Nail





Code	Description
23820	Open Clip 16mm Metal Screw
23822	Open Clip 20mm Metal Screw
23824	Open Clip 25mm Metal Screw



#### PROFILE BEND BRACKET

Code	Description
23830	Profile Bend Bracket 90 Deg x 5D 16mm
23832	Profile Bend Bracket 90 Deg x 5D 20mm
23834	Profile Bend Bracket 90 Deg x 5D 25mm



#### PROFILE BEND BRACKET

Code	Description
23831	Profile Bend Bracket w/ Spring 90 Deg 16mm
23833	Profile Bend Bracket w/ Spring 90 Deg 20mm
23835	Profile Bend Bracket w/ Spring 90 Deg 25mm



#### Elson Australasia Pty Ltd

ABN 45 059 613 991 ACN 059 613 991

P.O. Box 3217

Mount Druitt Village NSW 2770

Tel: (02) 9625 7899 Fax: (02) 9625 7855 Web: www.elson.net.au Email: sales@elson.net.au

#### **National Distribution Centre**

38 Eddie Road, Minchinbury New South Wales 2770 AUSTRALIA

Sales and service all over Australia



Disclaimer: The information provided within this Product Information and Installation Manual is designed as a guide only and is believed to be accurate at the time of printing. Elson Australasia Pty Ltd and its employees take no responsibility in regard to any specific installation. Installation must always require supervision and consultation from a licenced Plumber.