

# APOLLO™ PVC-O Pressure Pipe Series 1 (White)

**Compliance:** Manufactured in accordance with AS/NZS 4441 Orientated PVC (PVC-O) Pipes for pressure applications for Series 1 pipe. Iplex PVC-O pipes are independently certified in accordance with the test requirements of AS/NZS 4441. Standards Mark Licence number SMK20682.

**Product Code:** 880 Series

**Benefits:** APOLLO™ PVC-O pressure pipe is an exceptionally tough, high performance thermoplastic pipe with a considerably greater hydraulic capacity than PVC-U and PVC-M pipes of the same OD size and similar pressure class. APOLLO™ has greater fatigue resistance, higher impact strength, especially at low temperatures, higher ductility, and reduced weight compared with traditional PVC-U pressure pipe. If you require plastic pipe products that are not listed here, please contact Iplex Pipelines for further information.

**Applications:**

- Major potable water supply trunk and reticulation mains
- Principal water mains
- Principal pressure sewer mains
- Industrial process lines
- Effluent pipelines for industrial and rural waste
- Irrigation and turf water systems

**Joining:** Pipe is supplied with a rubber ring joint utilizing the BlueSeal joint system where the seal ring is factory fitted and locked in place inside the pipe socket.

**Fittings:** Deep socket standard ductile iron fittings complying with AS/NZS 2280 “Ductile iron pipes and fittings”. Many DI fittings are now designed to use metric OD transition seal rings with Series 1 pipe. Socket spacers may be required in some diameters, and in some fitting brands with Series 1 pipe, to centrally locate and support the pipe. Iplex recommend that you consult your fitting supplier for specific advice on the need for Socket spacers.

**Service & Connections:** Iplex recommends the use of PVC compatible, full circle supported tapping bands with APOLLO™ pipe. These include Milnes Gunmetal, Crevet Taptite or other tapping bands manufactured to AS/NZS 4793 “Mechanical Tapping Bands for Water Works Purposes”. Either O or V type tapping band seals are suitable for use with APOLLO™.

**“Universal” tapping bands that use U-bolt support straps are prohibited.**

Tapping bands must be installed centrally positioned over the drilled service hole. This hole should be drilled using a fine-tooth hole saw. Twist Drills or flat bits MUST NOT BE USED on any PVC pipe.

**Mechanical Couplings:** Iplex recommends the use of unrestrained mechanical couplings manufactured to AS/NZS 4998 – Bolted Unrestrained Mechanical Couplings for Water Works Purposes.

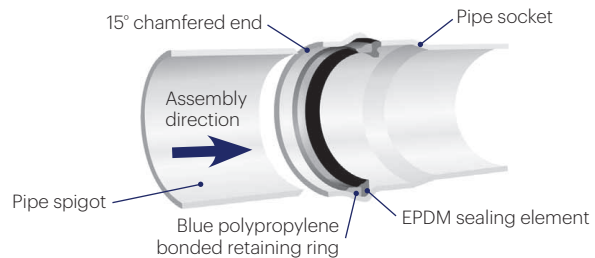
**Design & Installation:** Installation methods for APOLLO™ pipes are generally the same as those used for Iplex PVC-U and PVC-M pipes. Buried pipe installation should generally be in accordance with the following standards:

- **General Installation:**  
AS/NZS 2032, “Installation of PVC pipe systems”.
- **Buried Structural Design:**  
AS/NZS 2566 Part 1 and Supplement Structural Design.
- **Detailed Installation and Site Pressure Testing:**  
AS/NZS 2566 Part 2 “Installation” On site test pressure should not exceed 1.25 x the pipe PN pressure class.

**Length:** 6 metre effective length. Length of the witness mark is added to give the overall length.

APOLLO™ PVC-O Metric Series 1 Pressure Pipe Dimensions					
<b>Class</b>		PN10		PN12.5	
<b>Pressure rating (MPa)</b>		1.00 MPa		1.25 MPa	
<b>Approx rating (m head)</b>		100m head		125m head	
<b>Design MRS MPa</b>		31.5 MPa		40.0 MPa	
Nom. Dia (mm)	Mean O.D. (mm)	Mean I.D. (mm)	Mean W.T. (mm)	Mean I.D. (mm)	Mean W.T. (mm)
100	114.25	108.2	3.0	108.2	3.0
150	160.25	151.6	4.3	151.6	4.3
200	225.35	213.5	5.9	213.5	5.9
300	315.50	299.1	8.2	299.1	8.2

Minimum order quantities may apply.



**Limitations:** APOLLO™ and APOLLO™ BLUE PVC-O pressure pipes should not be used:

- With aromatic and chlorinated hydrocarbons, ketones, esters and ethers
- At any service temperature above 50°C
- Where provision for temperature derating has not been made above 20°C
- With compressed air
- Without adequate support to the pipe both in above ground and below ground applications
- Without adequate thrust support
- Where depth of cover is less than:
  - 300mm where pipeline is not subject to vehicular loadings
  - 450mm where pipeline is subject to vehicular loadings not in roadways
  - 600mm where pipeline is subject to vehicular loading in sealed roadways
  - 750mm where pipeline is subject to vehicular loading in unsealed roadways
  - 750mm where pipeline is subject to construction equipment loadings
- Without provision for fatigue design to accommodate dynamic stresses where appropriate (in accordance with published PIPA guidelines)
- Where working pressure plus surge/cyclic pressure exceeds the nominated pressure performance rating of the pipe
- When exposed to direct sunlight above ground for applications or storage exceeding 24 months without protection.
- This protection may include pale coloured UV resistant paint systems, nonexposed location or physical shading
- Never tap service connections directly into the pipe wall. Always use a full encirclement tapping band, designed for PVC pipe.

Solvent Cement Joints have been used successfully between APOLLO™ PVC-O Series 1 pipe and conventional PVC-U Series 1 solvent weld joint fittings, utilising the Iplex NOVAKEY™ Brand pressure solvent Cement and cleaner primer system. Refer to Iplex Installation Guide “How I Solvent Cement Joint PVC Pipes” available from Iplex Pipelines.