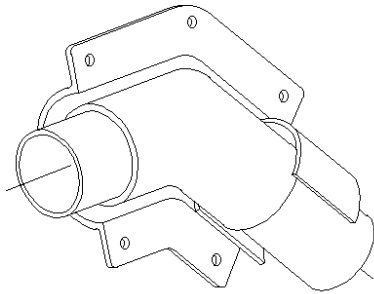




AMERON
INTERNATIONAL

FIBERGLASS - COMPOSITE PIPE GROUP



Dualoy 3000/L Secondary Containment Pipe and Fittings

UL-Listed nonmetallic underground containment piping for Motor Vehicle (MV), High Blend (HB), Concentrated (CT) and Aviation and Marine (A&M) fuels

Uses and applications

Service station product, vent and vapor recovery piping
Bulk plant terminals and fueling terminals
Central fuel oil systems
Marinas and marine terminals (onshore only)
All piping systems requiring UL or ULC listing for MV, HB, CT and A&M fuels
Containment piping for all of the above

Description

Dualoy 3000/L secondary containment systems employ pipe one size larger than the primary and specially designed fittings. The system provides complete enclosure of UL- and ULC-listed Ameron primary piping used in product lines and vapor recovery lines from the sump at the product storage tank to the shear valve at the dispenser, and vent lines from the tank. Dualoy containment systems have been sized for close make-up and ease of installation.

Features of Ameron Dualoy 3000/L containment systems include:

- Filament-wound, fiberglass-reinforced pipe with integral liner;
- Compact fittings dimensions to minimize trench excavation;
- Smooth exterior pipe surface that eliminates the need for special end preparation tools;
- Ready accessibility to and complete inspectability of primary fittings prior to closure of the containment;
- Complete testability during installation and at any other time thereafter;
- Rapid joint makeup with pre-inserted nuts and ambient cure adhesive.

Listings



Underwriters Laboratories Inc.

Dualoy 3000/L is Listed in the United States with Underwriters Laboratories Standard 971-2004 for nonmetallic underground piping for motor vehicle (MV), high blend (HB), concentrated (CT) and aviation and marine (A&M) fuels for both primary (File MH9162) and containment (File MH15596) piping systems. Dualoy 3000/L pipe and fittings are also Listed with Underwriters' Laboratories of Canada (File CMH 715). In Great Britain the Dualoy 3000/L system has been tested and accepted by the London Fire and Civil Defence Authority. Dualoy 3000/L has been issued a Certificate of Compliance to the Institute of Petroleum (IP) Specification by ERA Technology, Ltd.

Performance

Operating pressures to 100 psig

Continuous operating temperatures to 150°F (66°C)

Individual system components may not have the same ratings as the pipe. Refer to the detailed product information for the specific components to determine the pressure rating for the system as a whole.



Piping system characteristics

Secondary employs full-performance pipe — Many contained fuel handling systems employ materials in the secondary that fall far short of the primary piping in regards to chemical resistance and mechanical strength. By contrast, Dualoy 3000/L systems employ the same type of high-performance fiberglass-reinforced pipe in the secondary as in the primary. Thus, Dualoy 3000/L containment systems easily withstand both high external loads from backfill and traffic as well as internal pressures as high as 100 psig.

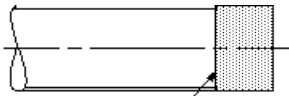
Compact containment fittings — Dualoy 3000/L containment fittings are more compact than competitive clam-shell type closure pieces. As a result, crossovers in a Dualoy 3000/L system occupy less space, so less excavation is required than with competing rigid-wall containment systems.

Precision pipe exterior eliminates scarfing — Dualoy pipe is manufactured in a proprietary continuous winding process that provides an extremely precise, consistent outside diameter. No scarfing of the pipe end is required to achieve a proper fit of the secondary pipe inside closure pieces. Light sanding of the pipe end to remove the surface gloss and obtain a suitable bonding surface is the only end prep required.

Easy containment fitting assembly — Dualoy 3000/L containment fitting clamshells are supplied in matched pairs. One half of each pair is fitted with pre-inserted propeller nuts, allowing the fitting to be assembled from one side, using the bolts provided.

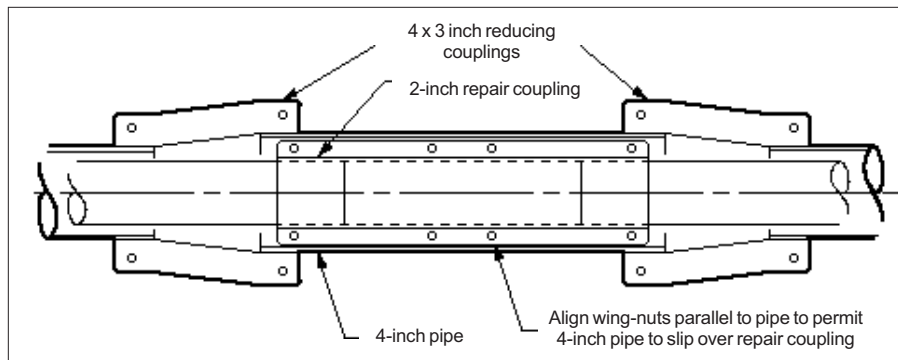
Complete retestability — Dualoy 3000/L containment employs rigid-wall pipe and fittings that maintain their shape during the entire service life of the station. When installed with isolating penetration fittings (see page 4), Dualoy 3000/L containment piping can be repeatedly retested whenever desired.

Convenient repair capability — Contained piping systems are occasionally damaged after installation. Damage is generally caused by paving or excavation operations. Dualoy 3000/L contained piping systems are designed so that only the damaged stretch need be replaced instead of the entire line. The 2-inch Dualoy repair coupling is sized so that it can be contained within 4-inch Dualoy 3000/L containment pipe.



Only end prep required is the removal by light sanding of surface gloss.

Two-inch primary pipe contained within 3-inch containment pipe can be repaired with a UL-listed 2-inch repair coupling. The containment is restored by replacement of a section of the existing containment pipe with a 4-inch containment nipple. The 4-inch replacement nipple is then joined to the existing containment pipe with Dualoy reducing couplings.

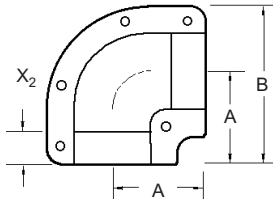


Containment pipe and fittings dimensions

Pipe

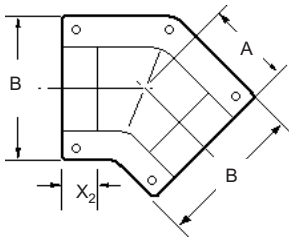
	Nominal Pipe Size		A	B	C	X ₂	No. of Bolt Holes	Wt. (lb)
	(in)	(mm)	(in)	(in)	(in)	(in)		
3	80	3.50	3.32	-	-	-	-	0.72
3½	90	3.88	3.70	-	-	-	-	0.85
4	100	4.50	4.33	-	-	-	-	1.00
6	150	6.63	6.39	-	-	-	-	2.10

90° elbows



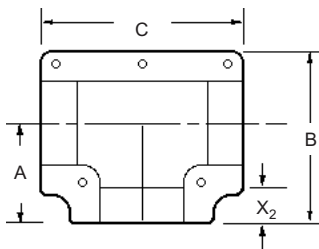
3	80	4.28	7.28	-	1.50	5	1.1
4	100	4.77	8.25	-	1.50	5	1.3
6	150	5.62	10.53	-	2.00	8	1.5

45° elbows



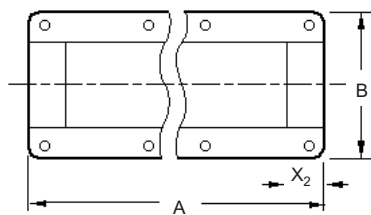
3	80	3.50	6.00	-	1.50	5	0.8
4	100	3.75	7.00	-	1.50	5	1.2
6	150	6.32	9.75	-	2.00	8	1.5

Tees



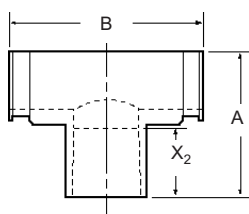
3	80	4.28	7.24	8.56	1.50	5	1.2
4	100	4.78	8.25	9.58	1.50	5	1.6
6	150	5.72	10.67	11.65	2.00	6	1.7

Couplings



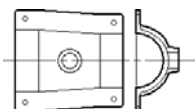
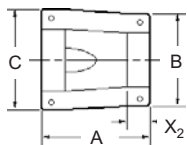
2	50	14.00	4.00	-	1.50	8	1.3
3	80	14.00	6.00	-	1.50	8	1.7
4	100	14.00	7.00	-	1.50	8	2.0
6	150	14.19	9.75	-	4.00	10	2.0

Saddles



3 x 2	80 x 50	4.00	6.00	-	2.15	-	1.3
4 x 2	100 x 50	4.50	6.00	-	2.15	-	1.7
6 x 2	150 x 50	5.56	7.75	-	2.15	-	2.1

Reducers, plain and with 3/4-inch NPT outlet



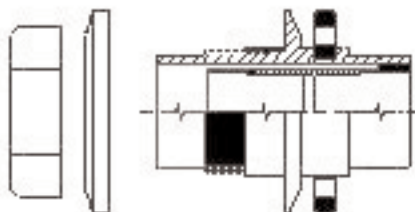
ported reducer

3 x 1 1/2	80 x 40	6.25	4.48	6.10	1.50	4	0.6
3 x 1 1/2	80 x 40	6.25	4.47	6.10	1.50	4	1.1 ¹
3 x 2	80 x 50	6.25	4.90	6.10	1.00	4	0.7
3 x 2	80 x 50	6.25	4.90	6.10	1.00	4	1.1 ¹
4 x 3	100 x 80	7.00	6.00	7.00	1.50	4	0.9
4 x 3	100 x 80	7.00	6.00	7.00	1.50	4	2.0 ¹
6 x 4	150 x 100	7.17	7.62	9.74	2.00	6	1.0

1) Ported reducer.

Sump penetration fittings

Ameron sump penetrations are designed for use at turbine sumps and dispenser pans. Plain sump penetration fittings permit the annular space between the primary and secondary lines to communicate with the interior of the sump or pan. Penetration fittings with factory-installed centralizers, sleeve couplings and monitoring ports may be used to isolate the pipe annular space from the sump or pan. When the annular space is so isolated, the secondary containment line can be retested at any time and as often as desired.



Important Notice

This literature and the information and recommendations it contains are based on data reasonably believed to be reliable. However, such factors as variations in environment, application or installation, changes in operating procedures, or extrapolation of data may cause different results. Ameron makes no representation or warranty, express or implied, including warranties of merchantability or fitness for purpose, as to the accuracy, adequacy or completeness of the recommendations or information contained herein. Ameron assumes no liability whatsoever in connection with this literature or the information or recommendations it contains. Product specifications are subject to change.



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