CANUSA-CPS

Aqua-Shield®

Corrosion protection sleeves for water pipelines

Aqua-Shield® is a family of heat shrinkable sleeve products that have been specifically designed for the corrosion protection of large diameter water pipelines. Various product configurations are available that utilize a crosslinked polyolefin backing, coated with a protective, heat-activated adhesive which effectively bonds to metallic substrates and common pipeline coatings.

Long Term Protection

- Once installed, Aqua-Shield® provides durable protection against abrasion and chemical attack. The high performance crosslinked backing provides the superior abrasion resistance and mechanical strength required for water transmission and distribution lines. Aqua-Shield® effectively covers and protects the pipe surface to prevent corrosion. Since no special primers are required, less time is required for installation.

Flexible & Reliable Installation

- The Aqua-Shield® family of products are available in various configurations for flexibility of installation.

  Aqua-Shield® AQW-HS: Specially constructed and provided in custom cut lengths for field joints on large diameter water pipelines including "O"-ring and field welded configurations, as well as coating factory fittings and mitered elbows.

  Aqua-Shield® AQW-FPK: A high expansion/high recovery system, designed for corrosion protection and sealing of flanges and other high profile joints. The system includes skirting sleeves to protect flange bolt areas.

  Aqua-Shield® AQW-WAB: The AQW-WAB system is a two layer system comprised of a 6" wide AQW-WAB underlay sleeve followed with the secondary AQW-HS heat shrink sleeve for added protection over the heat affected zone for internally welded field joints / weld-after-backfill applications.

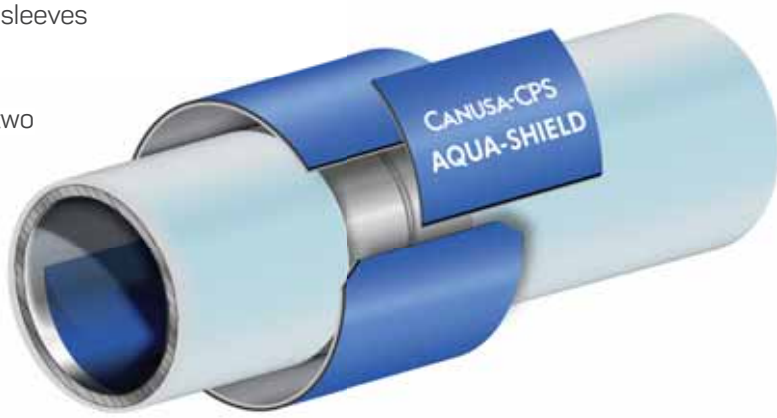
Assured Performance

- The AQW-HS and AQW-WAB products meet and exceed the requirements of AWWA standard C216-15.

Applications

Water Pipelines

Large Diameter



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The product information shown here is intended as a guide for standard products.

Consult your Canusa representative for specific projects or unique applications.

Sleeve Operating Characteristics		AWWA C216	AQW-HS	AQW-FPK	AQW-WAB
Minimum Installation Temp.		-	50°C (122°F)	50°C (122°F)	50°C (122°F)
Adhesive Properties	**Test Method**				
Softening Point	ASTM E28	-	77°C (170°F)	89°C (192°F)	102°C (215°F)
Lap Shear	ASTM D1002	12 psi	35 psi	13 psi	30 psi
Backing Properties					
Tensile Strength	ASTM D638	2200 psi	2900 psi	2900 psi	3000 psi
Elongation	ASTM D638	400%	700%	700%	600%
Hardness	ASTM D2240	-	46 Shore D	46 Shore D	52 Shore D
Volume Resistivity	ASTM D257	10^{14} Ohm-cm	10^{17} Ohm-cm	10^{17} Ohm-cm	10^{17} Ohm-cm
Dielectric Strength	ASTM D149	400 V/mil	700 V/mil	700 V/mil	700 V/mil
Water-vapour Transmission	ASTM E 96	0.05 g/h/m²	< 0.01 g/h/m²	< 0.01 g/h/m²	< 0.01 g/h/m²
Heat Shock	AWWA C216	Pass	Pass	Pass	Pass
Sleeve Properties					
Impact	ASTM G14	25 in.-lbs	50 in.-lbs	50 in.-lbs	50 in.-lbs
Adhesion to Steel	ASTM D1000	15 pli	25 pli	7 pli	46 pli
Low Temp. Flexibility	ASTM D2671	-	-20°C (-4°F)	-20°C (-4°F)	-14°C (7°F)
Width Deviation	-	±10	±5	±5	±5
Thickness					
Backing (nominal thickness as supplied)			0.8 mm (0.031")	0.9 mm (0.036")	0.6 mm (0.025")
Adhesive (nominal thickness as supplied)			1.1 mm (0.045")	1.1 mm (0.045")	1.3 mm (0.050")

Since 1967, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the product data sheet when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this data sheet is to be used as a guide and is subject to change without notice. This data sheet supersedes all previous data sheets on this product. E&OE

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