

Responsive

AquaFast

Couplings & Flange Adaptors
For Polyethylene & PVC Connections



VIKING JOHNSON™

PIPE CONNECTIONS, REPAIR & FLOW CONTROL PRODUCTS FOR THE UTILITIES INDUSTRY

CRANE

BUILDING SERVICES & UTILITIES



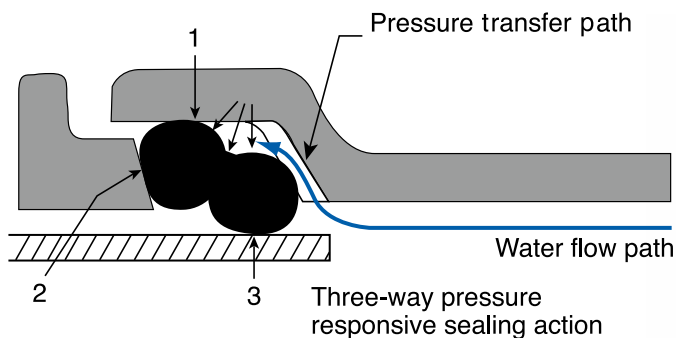
Designed & Engineered to Simplify Polyethylene & PVC Pipe Connections

Effortless Installation

AquaFast's unique 3-way pressure sealing system offers a simple and reliable solution to connecting polyethylene & PVC pipe. In addition, an enhanced gripping mechanism offers end load restraint, resisting pipe pull out. No special skills or tools are required making installation effortless and quicker than other systems.

On-the-spot Repairs

From start to finish, AquaFast offers benefits to the installer. The fittings come fully assembled, it is not necessary to chamfer pipe ends before use and it doesn't require the need for a support liner on PE or thin walled PVC pipe. It can be installed in all-weather conditions. There is no need for shelters so it is ideal for on-the spot repairs. In fact it can also be used in wet or submerged applications.



Simple Jointing

With fewer bolts to fasten – only two per fitting up to 125mm – and minimum bolt tightening using a standard spanner, the installation is further simplified by the easy alignment of bolt holes and a positive stop during bolt tightening ensuring optimum assembly every time. This metal-to-metal positive stop inhibits over tightening, removing the need for a torque wrench.

Transitional Connections

AquaFast couplings & flange adaptors are available from 63mm to 315mm OD. They are designed to work on PE80/PE100 PE Pipe SDR 11, 17 & 17.6 without a support liner and can also be used to connect metric PVC pipe so AquaFast is ideal for PE/PVC transitional connections.



AquaFast Flange Adaptor

Pipe Materials



AquaFast Couplings & Flange Adaptors

Product Design Benefits

Simple to Install

With fewer bolts to fasten and no torque wrench needed, AquaFast requires less skill and significantly less time and effort to install compared to other systems.

Positive Stop

Metal-to-metal positive stop inhibits over tightening removing the need for a torque wrench meaning less skill is needed to install and ensures the perfect installation every time.

Resists Pullout

Fully restrained fitting, designed to meet the performance requirements of WIS 4-24-01 Type 2 and ISO 14236.2.

Unique 3-way Pressure Sealing System



The patented gasket and metal component design features enable three-way pressure responsive sealing, ensuring high performance sealing even after pipe wall relaxation.

Customer Benefits

- As a support liner is not required, AquaFast is ideal for small diameter pumped sewerage pipelines.
- No need to dismantle before use, simply slip into place and tighten.
- Slip-on coupling without central obstruction makes it easier to make repairs to existing pipelines.
- Supplied as standard with EPDM gasket approved by WRAS for use with potable water.

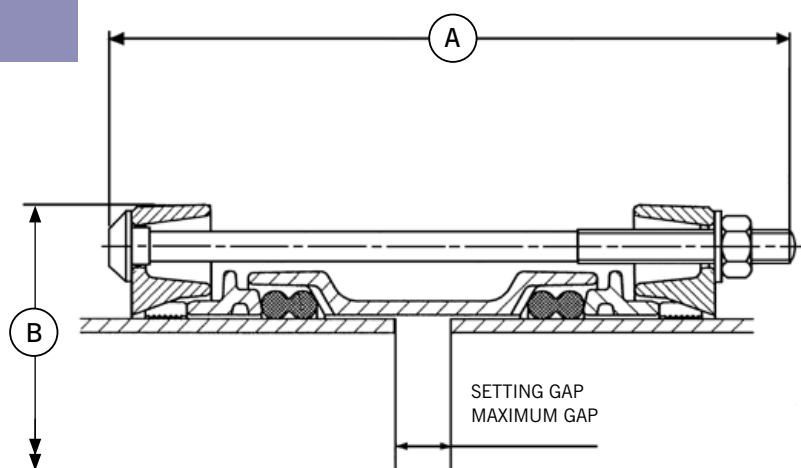
- Corrosion protection - Metal components are coated with Rilsan Nylon 11 which is WRAS approved for use with potable water. The nuts and bolts are Sheraplex coated to WIS 4-52-03, offering long term protection from corrosion, impact and abrasion ensuring a continued reliable performance.
- Dual function – can be used to connect PE80/PE100 and Metric PVC – ideal for PE/PVC transitional connections.



Flange Adaptor

AquaFast Couplings

Specifications



Coupling

Pipe OD	Bolt Size No.-Dia x Length	Dimensions (mm)		Setting Gap (mm)	Max Gap (mm)	Weight (kg)
		A max	B dia			
63	2-M12 x 250	257	141.5	20	30	3
75	2-M12 x 250	257	153.5	20	30	3.3
89.9/90	2-M12 x 250	257	170	20	30	3.9
110	2-M12 x 250	257	190.5	20	30	4.7
125	2-M12 x 250	257	207	20	30	5.2
140	4-M12 x 250	257	222	20	30	6.2
160	4-M12 x 250	257	242	20	30	9.5
180	4-M12 x 375	382	264	30	50	13.6
200	4-M12 x 375	382	292	30	50	14.8
225	4-M16 x 385	395	323	30	50	18.4
250	6-M16 x 385	395	351	30	50	24.1
315	6-M16 x 385	395	417	30	50	29.2

Materials & Relevant Standards

Centre Sleeve, End Ring and Flange Adaptor Body

Ductile Iron to BS EN 1563:1997:Symbol EN-GJS-450-10

Gripper Ring

Zinc alloy to BS EN 12844:1999 Designation ZP3

Intermediate Ring

Up to and including 160mm: Ductile iron to BS EN 1563:1997: Symbol EN-GJS-450-10.

180mm and over Aluminium alloy 6063 condition T6

Bolts

BS EN ISO 898-1:2009 Property class 8.8

Stainless Steel option - BS EN ISO3506-1:2009 Grade A2
Property Class 70 (Stainless steel available as special order)

Nuts (M97)

Steel to BS EN20898-2:1994 Property Class 8

Stainless Steel option - BS EN ISO3506-2:2009 Grade A4
Property Class 70 (Stainless steel available as special order)

Washers

BS 1449:Part 2:1983 Grade 304S15

Gasket (EPDM)

BS EN 681-1 1996 Type WA/BS 6920 hardness to 70 IRHD

Coatings

Centre sleeve, end ring, flange adaptor body and intermediate ring:

Rilsan Nylon 11

Gripper: Cathaphoretic coating

Bolts, nuts: Sheraplex to WIS 4-52-03

Working Pressure

Maximum 16 bar

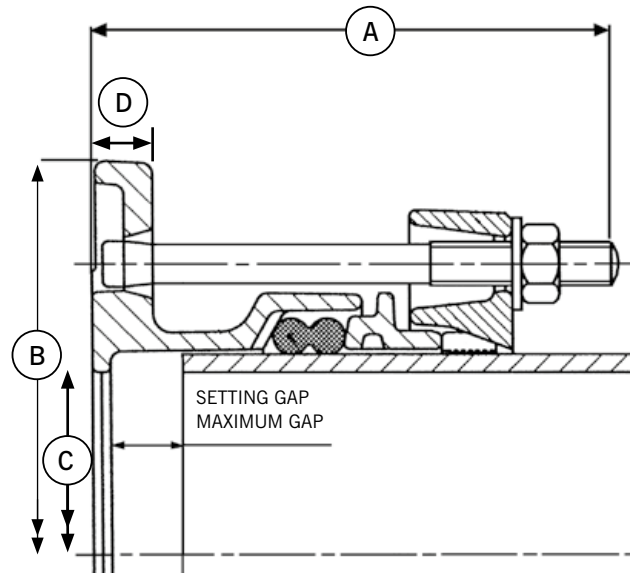
Approvals

WRAS

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.

AquaFast Flange Adaptors

Specifications



Flange Adaptor

Pipe OD	Flange Drillings	Tee Bolt Size No.-Dia x Length	Dimensions (mm)		Bore C (mm)	Flange Thickness D (mm)	Setting Gap (mm)	Max Gap (mm)	Weight (kg)
			A max	B dia					
63	50/65 PN10,16	2-M12 x 135	144	185	50	17	20	25	3.7
75	65/80 PN10,16	2-M12 x 135	144	200	65	17	20	25	4.3
75	60 PN10,16	2-M12 x 135	144	200	65	17	20	25	4.3
90	65/80 PN10,16	2-M12 x 135	144	200	80	17	20	25	4.4
110	100 PN10,16	2-M12 x 135	144	229.5	100	17	20	25	5.4
125	100/125 PN10,16	2-M12 x 135	144	250	100	17	20	25	6.3
140	125 PN10,16	4-M12 x 135	144	250	125	17	20	25	6.4
160	150 PN10,16	4-M12 x 135	144	285.5	150	17	20	25	7.3
180	150 PN10,16	4-M12 x 185	195	285.5	150	17	25	35	10.2
200	200 PN10,16	4-M12 x 185	195	343	190	18	25	35	13
225	200 PN10,16	4-M16 x 195	205	342.5	190	18	25	35	14.5
250	250 PN10,16	6-M16 x 195	208	406	240	20	25	35	19.5
315	300 PN10,16	6-M16 x 195	209	483	300	21.5	25	35	24.6

All flange drilled to BS EN 1092-1 (formerly BS 4504) /BS EN ISO 7005 PN10 and PN16

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Gripper Ring

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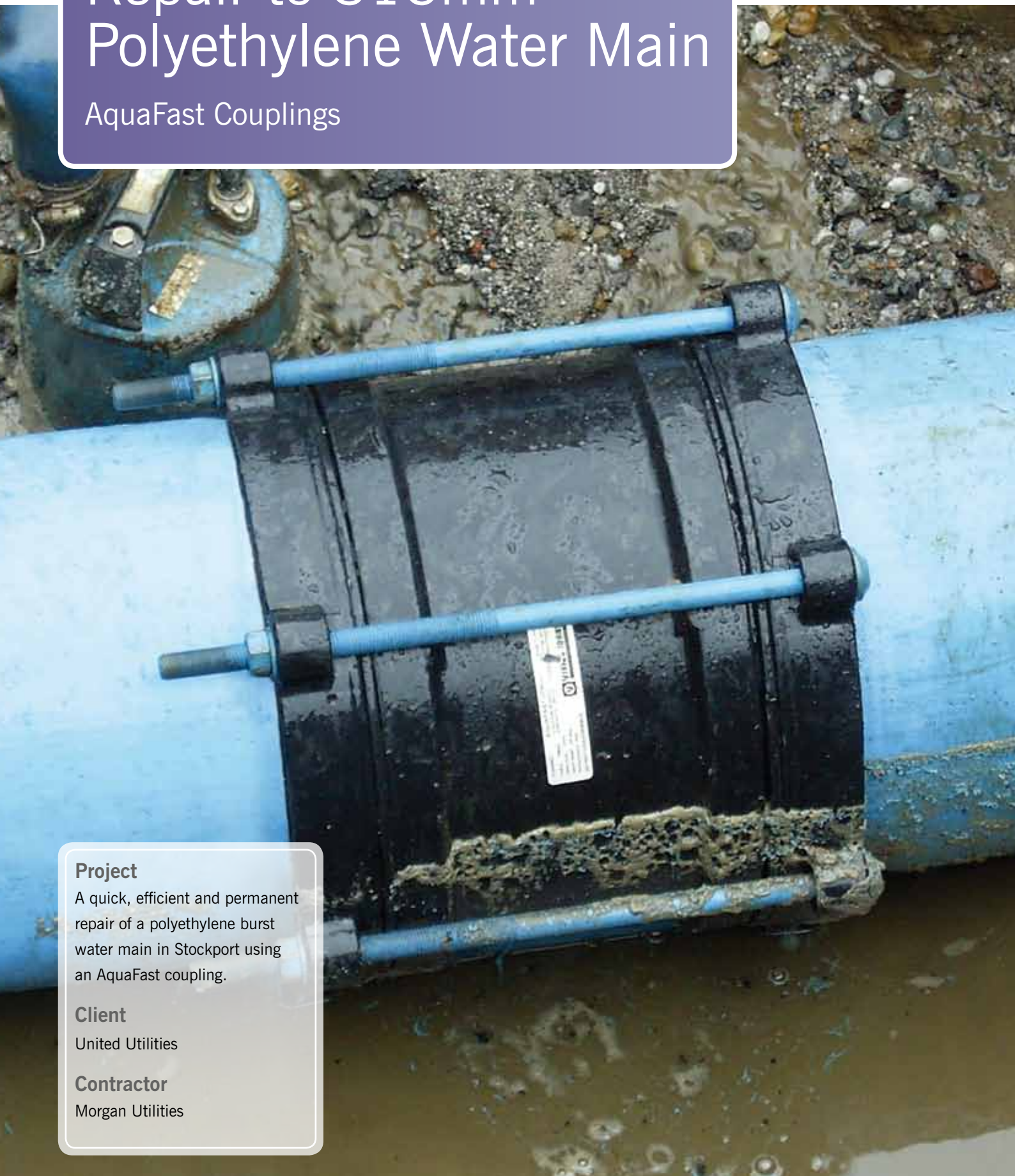
WRAS

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United Kingdom - Stockport

Repair to 315mm Polyethylene Water Main

AquaFast Couplings



Project

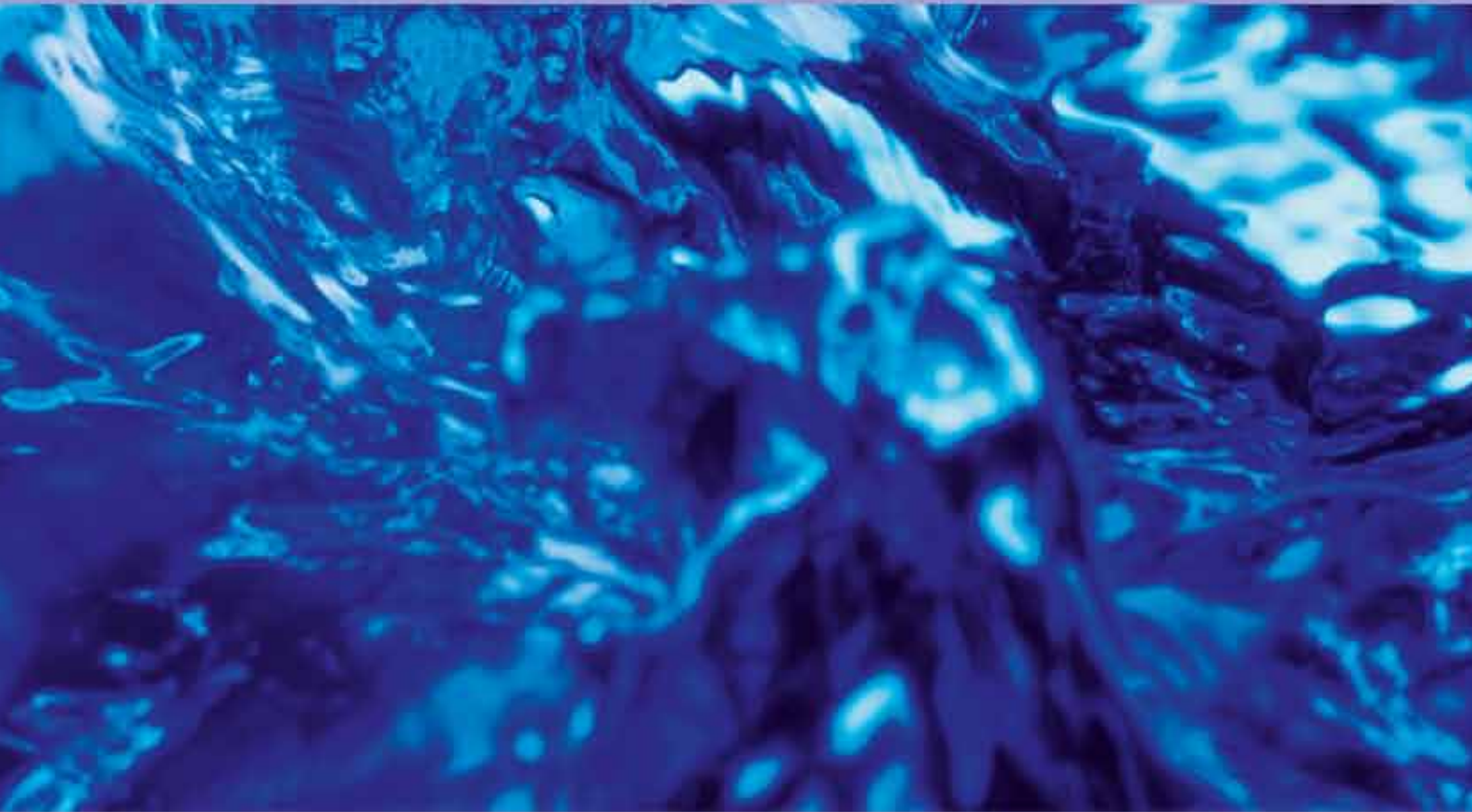
A quick, efficient and permanent repair of a polyethylene burst water main in Stockport using an AquaFast coupling.

Client

United Utilities

Contractor

Morgan Utilities



To visit our Video Library go to:
<http://www.youtube.com/user/CraneBSU>



46-48 WILBURY WAY
HITCHIN, HERTFORDSHIRE
SG4 0UD. UNITED KINGDOM
TELEPHONE: +44 (0)1462 443322
FAX: +44 (0)1462 443311
EMAIL: info@vikingjohnson.com



www.vikingjohnson.com



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