

ROMAC INDUSTRIES, INC.

# ALPHA<sup>TM</sup>

## RESTRAINED JOINT



Available ranges fit  
IPS PVC up through  
Oversize Cast Iron pipe



Cast components are  
high strength ductile iron



No pipe stiffener required  
for HDPE pipe



Working Pressure:  
up to 350 PSI



Fast installation takes  
less than 3 minutes



Manufactured in the U.S.A.

## NOW AVAILABLE IN THREE CONFIGURATIONS

### ALPHA<sup>TM</sup> COUPLING



### ALPHA<sup>TM</sup> END CAP



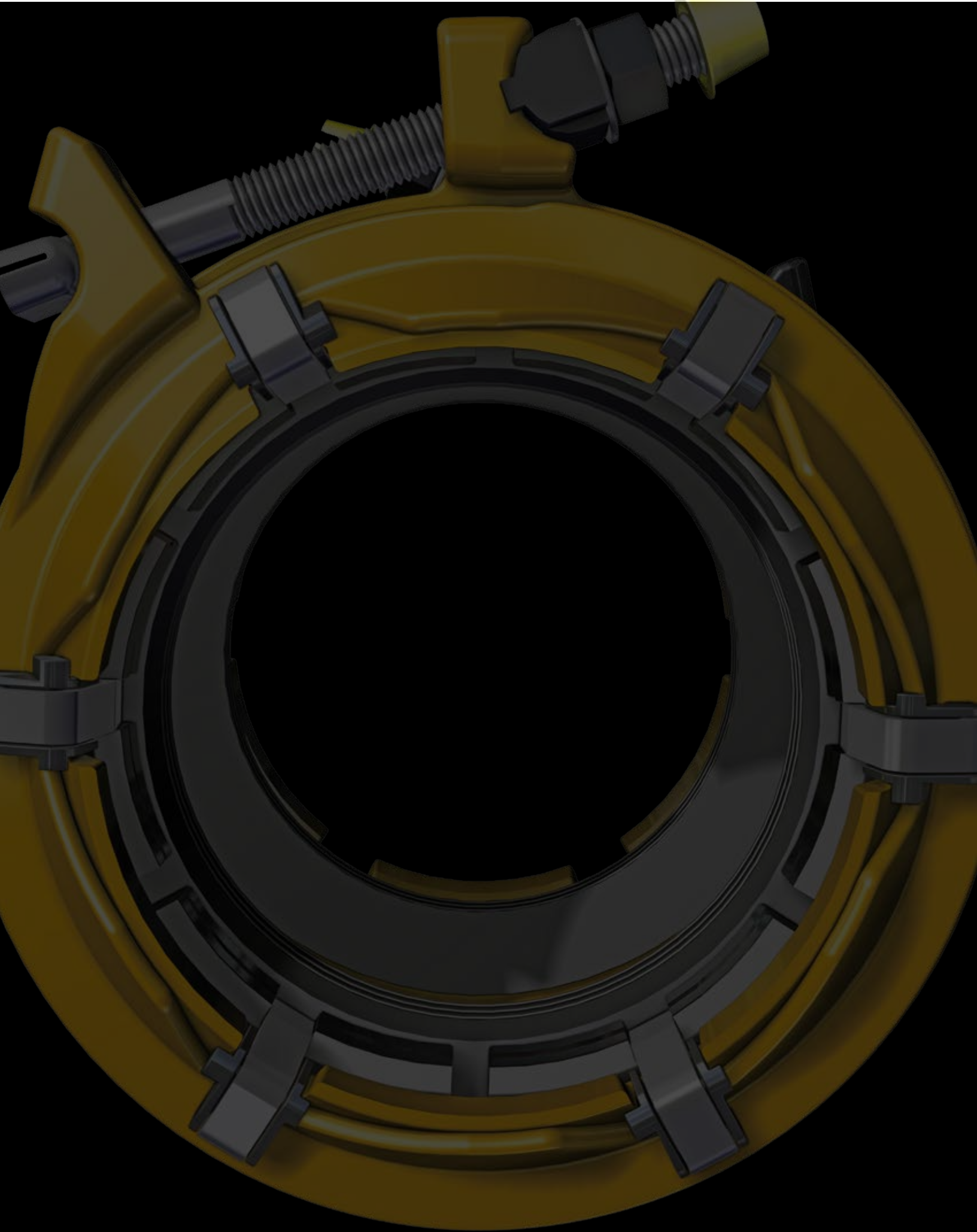
### ALPHA<sup>TM</sup> FLANGED COUPLING



 **ROMAC**  
INDUSTRIES, INC.

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BALPHA • 04.18.2016





# ROMAC ALPHA RESTRAINED JOINT CONFIGURATIONS



## ALPHA™

### Wide Range Restrained Coupling

Originally released in the summer of 2013, the Alpha coupling installs in about three minutes, and accommodates up to 8 degrees of deflection (4 degrees on each end).



## ALPHA™ EC

### Wide Range Restrained End Cap

The Alpha EC caps plain-end pipe for testing, blow-off or line flushing. The Alpha End Cap can also be used as a reliable pipe end seal for permanent installation.



## ALPHA™ FC

### Wide Range Restrained Flanged Coupling

The Alpha Flanged Coupling quickly adapts plain-end pipe to flanged fittings. The Alpha Flanged Coupling also accommodates flanged spool pieces for connecting to valves and other fittings.



# ALPHA™

## WIDE RANGE RESTRAINED JOINT

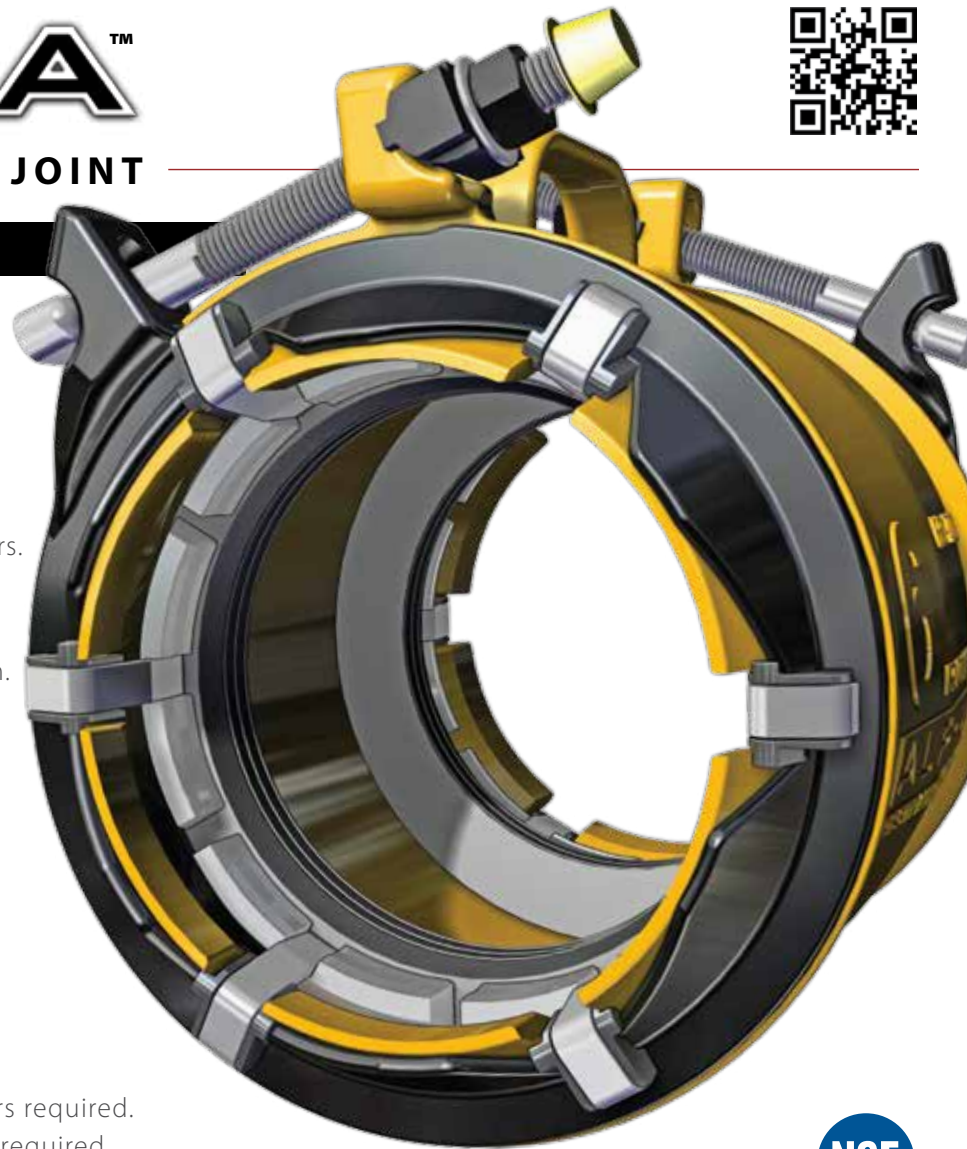


### ALPHA ADVANTAGES

- Standard Alpha covers IPS PVC through Ductile Iron pipe diameters.
- Alpha XL accommodates Ductile Iron through Oversize Cast Iron pipe sizes.
- Alpha can be configured to transition from IPS PVC up to Oversize Cast Iron pipe diameters.
- One piece, stab-fit installation.
- Cast components are high strength ductile iron.
- Working pressure: up to 350 PSI.
- Manufactured in the U.S.A.
- US Patent: 8,894,100
- Alpha products are approved for use on:
  - ✓ Ductile iron
  - ✓ Cast iron (Classes A, B, C & D)
  - ✓ PVC IPS size (Sch 40, Sch 80 & SDR 21)
  - ✓ PVC C900 and C909
  - ✓ HDPE: SDR 9, 11, 13.5 & 17, no pipe stiffeners required.
  - ✓ HDPE: SDRs greater than 17, pipe stiffeners required.

For other pipe materials, contact Romac.

Note: The original Alpha (with black grippers) is not compatible with HDPE pipe.



### INSTALLATION TIME IS A FRACTION OF OTHER RESTRAINT METHODS



#### 6" SLEEVE AND TWO MJ RESTRAINERS



- 30 Minutes to install
- 29 Total parts to assemble
- 12 T-Bolts to torque
- 9 Radial bolts to torque
- 2 Gaskets to seat



#### 6" COUPLING PLUS RESTRAINT SYSTEM



- 35 Minutes to install
- 33 Total parts to assemble
- 5 Coupling bolts to torque
- 4 Clamping bolts to torque
- 2 Gaskets to seat

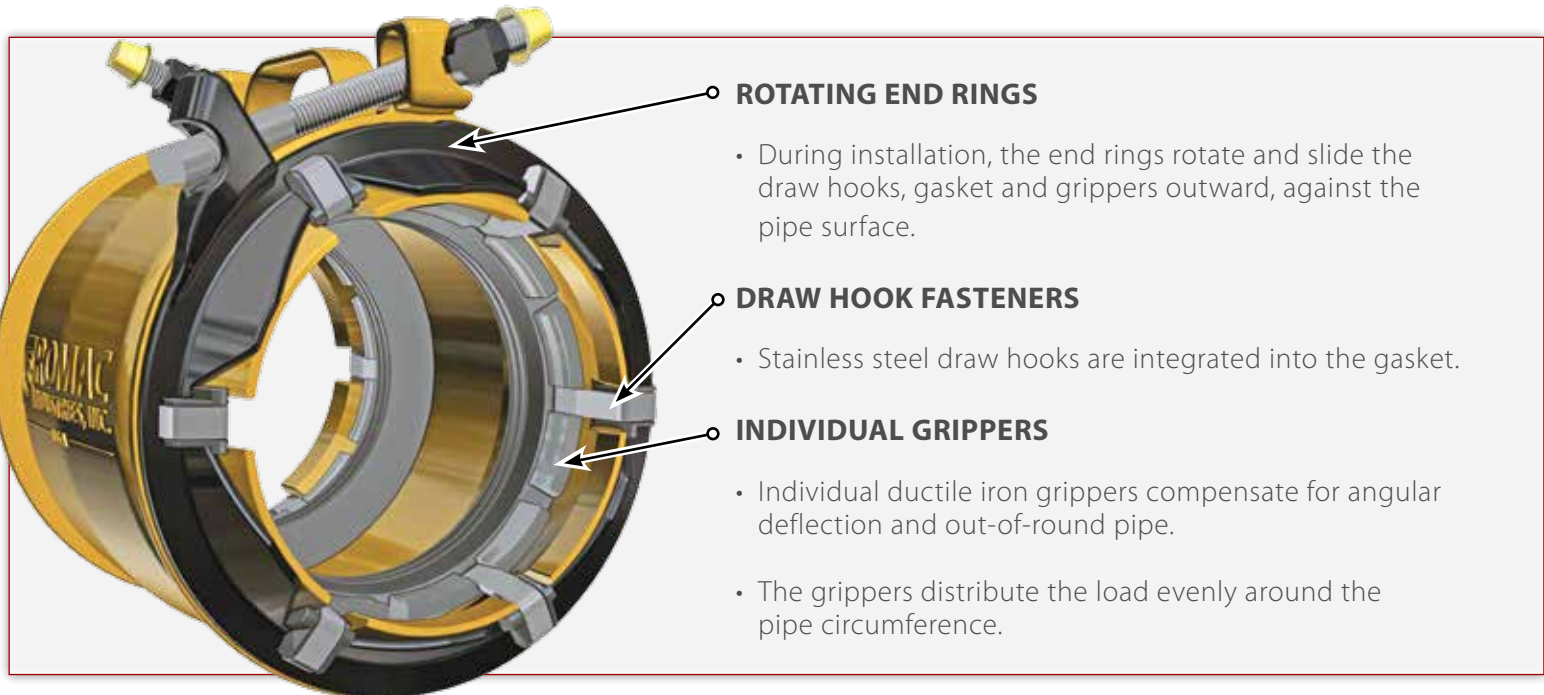


#### ALPHA

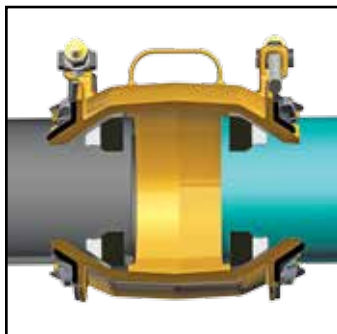


- 3 Minutes to install
- 2 Nuts to torque
- 1 Piece (stab-fit)
- 0 Guess-work

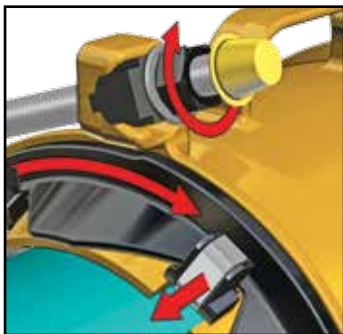
# KEY ALPHA COMPONENTS



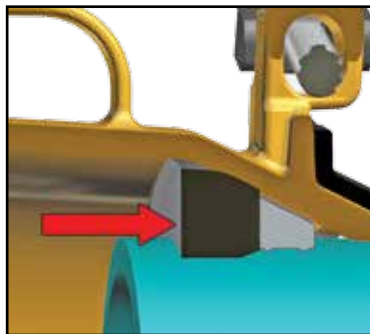
## HOW ALPHA WORKS



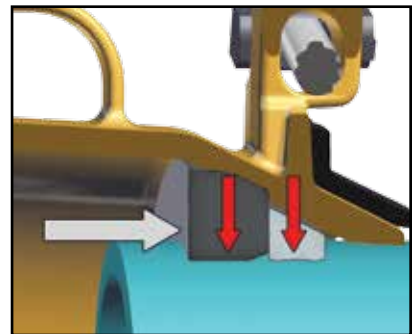
1 • Alpha is positioned over the pipe gap.



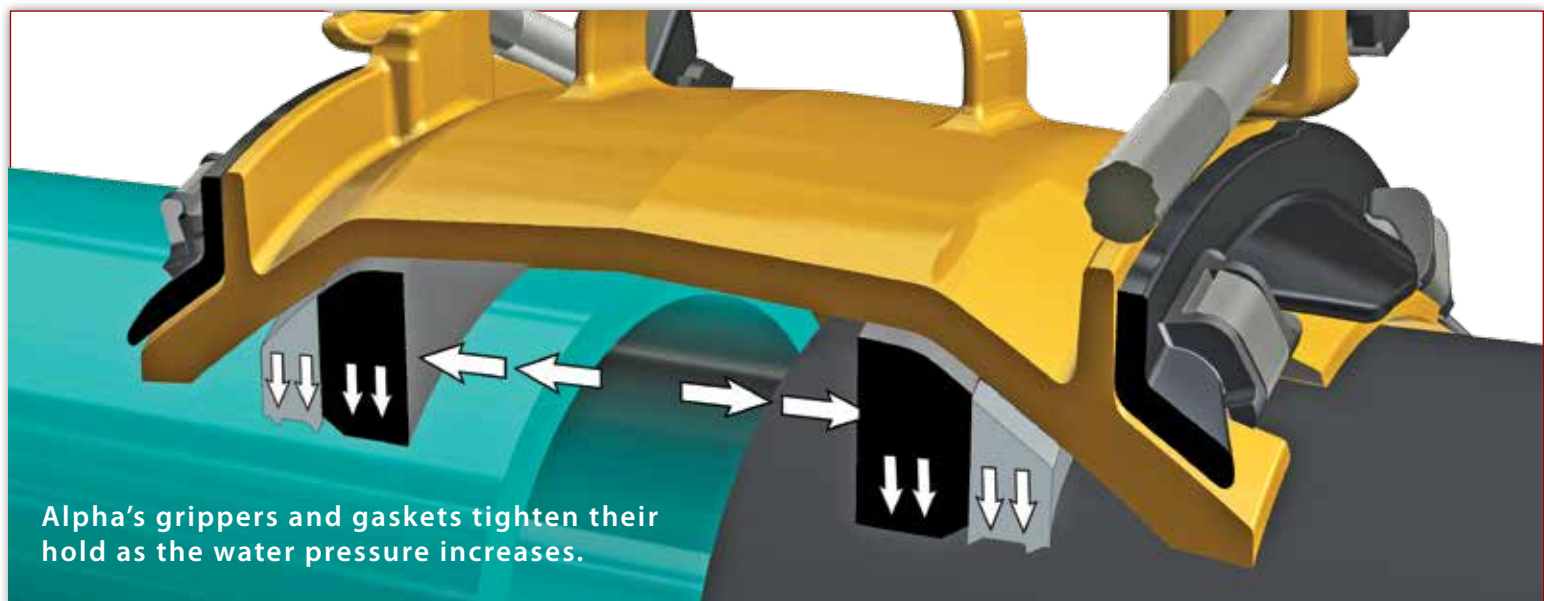
2 • Nuts are tightened, rotating the end ring.



3 • Draw hooks pull gasket and grippers outward and against the pipe.



4 • Gaskets compress and seal against the pipe surface. Gripper teeth are set.





# ALPHA™

## WIDE RANGE RESTRAINED COUPLING



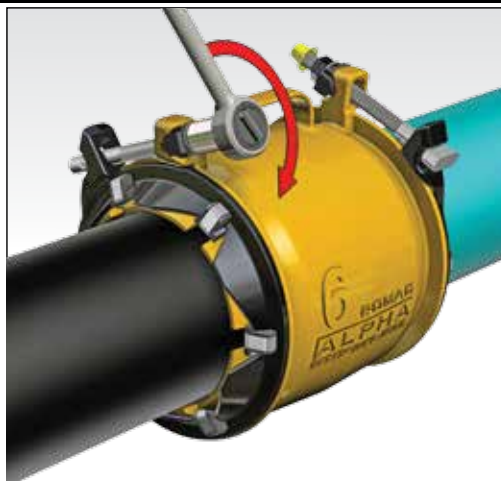
- With just two nuts to tighten, installation takes about three minutes, regardless of pipe diameter.
- Standard Alpha accommodates IPS PVC pipe through Ductile Iron pipe diameters.
- Alpha XL covers Ductile Iron through Oversize Cast Iron pipe sizes.
- Accommodates up to 8 degrees of deflection (4 on each side).
- The handle, located on top of the coupling, helps when positioning the coupling during installation.
- Manufactured in the U.S.A.
- US Patent: 8,894,100



## SIMPLE AND FAST INSTALLATION



**STEP 1:** Slide ALPHA over the pipe gap.



**STEP 2:** Tighten nuts to the appropriate torque.



A restrained joint with a working pressure of up to 350 psi installed in less than 3 minutes.

# ALPHA™



## WIDE RANGE RESTRAINED COUPLING

### MATERIAL SPECIFICATIONS

**CASTINGS:** All cast components (end ring, center ring and bolt guide) are ductile iron, meeting or exceeding the requirements of ASTM A 536, grade 65-45-12.

**GRIPPERS:** Ductile (nodular) iron, meeting or exceeding ASTM A 536, grade 65-45-12. Machine sharpened and heat treated. Xylan 1424 coated for enhanced corrosion protection.

**GASKET:** SBR compounded for water and sewer service per ASTM D2000 - classified by UL to meet NSF61, or NBR compounded for water and sewer service in accordance with ASTM D2000 and NSF61 Certified. Other compounds available upon request.

**DRAW-HOOK FASTENERS:** 304L stainless steel.

**RAMP RUNNERS:** Reinforced nylon.

**BOLT & NUT:** 304 stainless steel, 5/8-11 bolt with heavy hex e-coated nut. Fasteners provided with anti-galling protection.

**COATINGS:** Center ring is Romacoat fusion bonded epoxy. End ring is Romabond Polyester.

**WORKING PRESSURE:** up to 350 PSI.

### GASKET RANGE CONFIGURATION OPTIONS

Alpha can be configured in one of three ways.



#### STANDARD ALPHA

Standard Alpha accommodates IPS PVC through Ductile Iron pipe diameters.



#### ALPHA XL

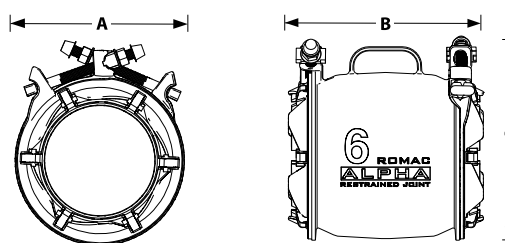
Alpha XL accommodates Ductile Iron through Oversize Cast Iron pipe diameters.

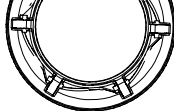







#### ALPHA TRANSITION COUPLING

In this configuration, Alpha provides a transition from IPS PVC pipe diameters up to Oversize Cast Iron pipe diameters.

### DIMENSIONS



NOM. PIPE SIZE	ALPHA GASKET RANGE CONFIGURATIONS														 Certified to NSF/ANSI 61-G
	SIDE ONE 			SIDE TWO 		DIMENSIONS			APPROXIMATE WEIGHT (lbs.)						
	ALPHA RANGE	GASKET RANGE		BY	ALPHA RANGE	GASKET RANGE	A	B		C					
							O.D.	LENGTH		HEIGHT					
4"	STD. ALPHA	4.50 - 4.90	X	STD. ALPHA	4.50 - 4.90	9.18	11.85	10.53	40						
	ALPHA XL	4.80 - 5.10		ALPHA XL	4.80 - 5.10										
6"	STD. ALPHA	6.60 - 7.00	X	STD. ALPHA	6.60 - 7.00	10.33	11.98	12.77	50						
	ALPHA XL	6.90 - 7.20		ALPHA XL	6.90 - 7.20										
8"	STD. ALPHA	8.60 - 9.10	X	STD. ALPHA	8.60 - 9.10	13.45	13.19	15.67	75						
	ALPHA XL	9.05 - 9.40		ALPHA XL	9.05 - 9.40										
10"	STD. ALPHA	10.75 - 11.20	X	STD. ALPHA	10.75 - 11.20	15.54	12.74	17.61	95						
	ALPHA XL	11.10 - 11.45		ALPHA XL	11.10 - 11.45										
12"	STD. ALPHA	12.75 - 13.30	X	STD. ALPHA	12.75 - 13.30	17.59	13.30	19.73	100						
	ALPHA XL	13.20 - 13.60		ALPHA XL	13.20 - 13.60										

Information contained in this document is subject to change. Contact Romac Industries for any updates.

# ALPHA™ EC



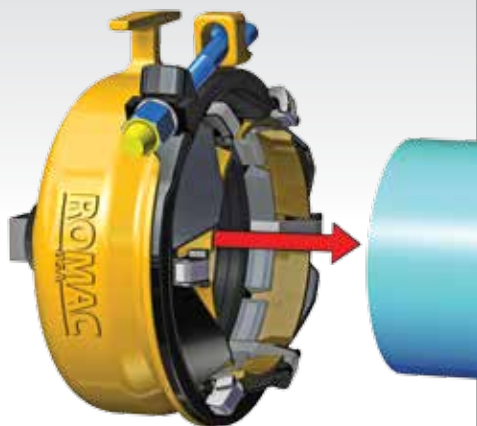
## WIDE RANGE RESTRAINED END CAP

**The Alpha EC provides a fast, easy way to cap plain-end pipe and has all the advantages as the original Alpha Coupling.**

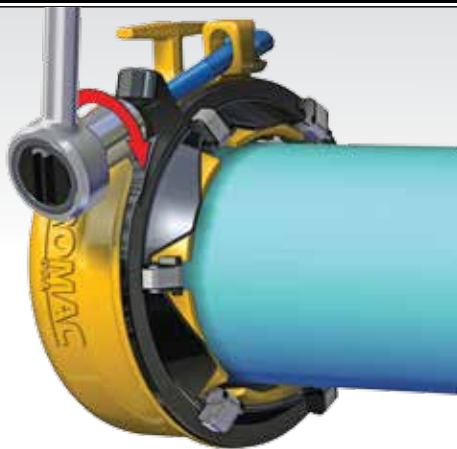
- With just one nut to tighten, the stab-fit Alpha End Cap installs fast.
- Standard Alpha End Caps cover IPS PVC through Ductile Iron pipe diameters.
- Alpha XL End Caps accommodate Ductile Iron through Oversize Cast Iron pipe diameters.
- Two-inch IP threaded outlet is standard.
- Designed for repeated use, the Alpha EC can also be used as a reliable pipe end seal for permanent installations.
- Made in the U.S.A.
- US Patent: 8,894,100



## SIMPLE AND FAST INSTALLATION



**STEP 1:** Insert ALPHA End Cap onto the pipe end.



**STEP 2:** Tighten nut to the appropriate torque.



The outlet allows for blow-off and draining the line.



# ALPHA™ EC



## WIDE RANGE RESTRAINED END CAP

### MATERIAL SPECIFICATIONS

**CASTINGS:** All cast components (end ring, center ring and bolt guide) are ductile iron, meeting or exceeding the requirements of ASTM A 536, grade 65-45-12.

**GRIPPERS:** Ductile (nodular) iron, meeting or exceeding ASTM A 536, grade 65-45-12. Machine sharpened and heat treated. Xylan 1424 coated for enhanced corrosion protection.

**GASKET:** SBR compounded for water and sewer service per ASTM D2000 - classified by UL to meet NSF61, or NBR compounded for water and sewer service in accordance with ASTM D2000 and NSF61 Certified. Other compounds available upon request.

**DRAW-HOOK FASTENERS:** 304L stainless steel.

**RAMP RUNNERS:** Reinforced nylon.

**BOLT & NUT:** R-Blue. HSLA. Xylan coated to reduce friction and provide corrosion protection. Washer is 304 stainless steel.

**COATINGS:** End cap is Romacoat fusion bonded epoxy. End ring is Romabond Polyester.

**WORKING PRESSURE:** up to 350 PSI.

### GASKET RANGE CONFIGURATIONS

Alpha End Caps are available in two configurations.



#### STANDARD ALPHA END CAP

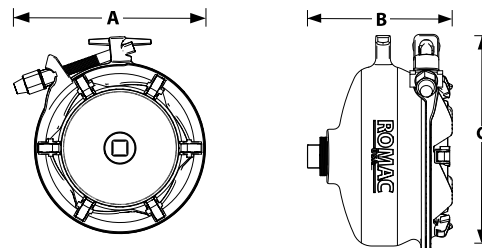
Alpha End Caps accommodate IPS PVC pipe through Ductile Iron pipe diameters.



#### ALPHA XL END CAP

Alpha XL End Caps covers Ductile Iron through Oversize Cast Iron pipe diameters.

### DIMENSIONS



NOMINAL PIPE SIZE	ALPHA EC GASKET RANGES		DIMENSIONS			APPROXIMATE WEIGHT (lbs.)
	ALPHA RANGE	GASKET RANGE	A	B	C	
			O.D.	LENGTH	HEIGHT	
4"	STD. ALPHA	4.50 - 4.90	10.20	7.15	9.70	21
	ALPHA XL	4.80 - 5.10				
6"	STD. ALPHA	6.60 - 7.00	11.35	7.75	11.90	30
	ALPHA XL	6.90 - 7.20				
8"	STD. ALPHA	8.60 - 9.10	13.40	9.45	15.00	52
	ALPHA XL	9.05 - 9.40				
10"	STD. ALPHA	10.75 - 11.20	15.45	9.75	17.10	63
	ALPHA XL	11.10 - 11.45				
12"	STD. ALPHA	12.75 - 13.30	17.50	10.10	19.15	78
	ALPHA XL	13.20 - 13.60				

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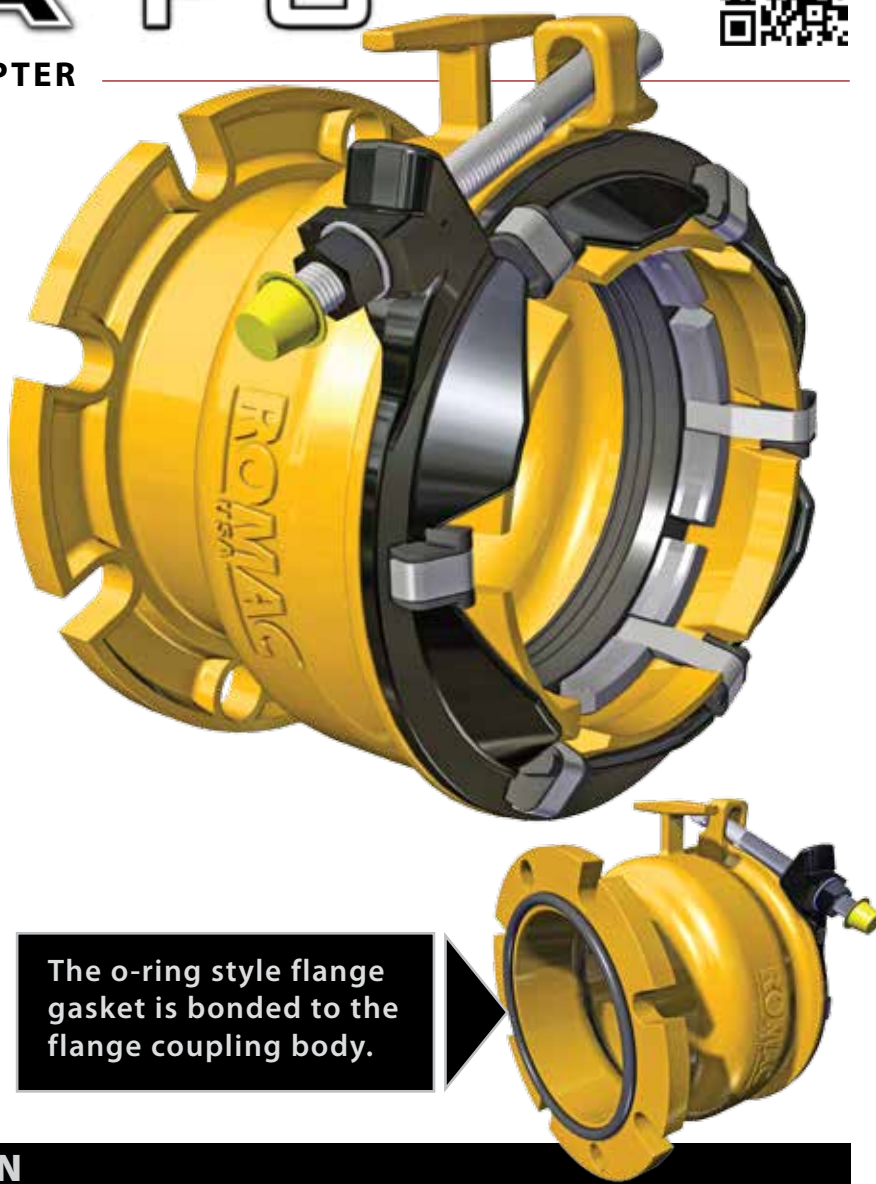
# ALPHA<sup>TM</sup> FC



## RESTRAINED FLANGE COUPLING ADAPTER

**The Alpha FC provides the quickest way to adapt plain end pipe to flanged fittings.**

- Once you've assembled the flanged joint, installation is simply inserting the plain end pipe and tightening one nut.
- Alpha FC flange is compatible with ANSI Class 125 and 150 bolt circles.
- Standard Alpha Flanged Couplings fit IPS PVC through Ductile Iron pipe diameters.
- Alpha XL Flanged Couplings fit Ductile Iron through Oversize Cast Iron pipe diameters.
- One nut dismantling allows for quick and easy access of valves and other fittings.
- The Alpha Flanged Coupling also accommodates flanged spool pieces for mating to valves and other fittings.
- US Patent: 8,894,100



**The o-ring style flange gasket is bonded to the flange coupling body.**

## SIMPLE AND FAST INSTALLATION



**STEP 1:** Assemble the flange joint using flange bolts.



**STEP 2:** Insert pipe and tighten nut.



ALPHA FC is the fast way to connect and restrain plain end pipe to a flanged connection





## RESTRAINED FLANGE COUPLING ADAPTER

### MATERIAL SPECIFICATIONS

**CASTINGS:** All cast components (end ring, center ring and bolt guide) are ductile iron, meeting or exceeding the requirements of ASTM A 536, grade 65-45-12.

**FLANGE** Compatible with ANSI Class 125 and 150 bolt circles.

**GRIPPERS:** Ductile (nodular) iron, meeting or exceeding ASTM A 536, grade 65-45-12. Machine sharpened and heat treated. Xylan 1424 coated for enhanced corrosion protection.

**GASKET:** SBR compounded for water and sewer service per ASTM D2000 - classified by UL to meet NSF61, or NBR compounded for water and sewer service in accordance with ASTM D2000 and NSF61 Certified. Other compounds available upon request. Flange gasket is o-ring style (NBR is standard).

**DRAW-HOOK FASTENERS:** 304L stainless steel.

**RAMP RUNNERS:** Reinforced nylon.

**BOLT & NUT:** 304 stainless steel, 5/8-11 bolt with heavy hex e-coated nut. Fasteners provided with anti-galling protection.

**COATINGS:** Flange coupling body is Romacoat fusion bonded epoxy. End ring is Romabond Polyester.

**WORKING PRESSURE:** up to 350 PSI.

### GASKET RANGE CONFIGURATIONS

Alpha Flange Couplings are available in two configurations.



#### STANDARD ALPHA FLANGED COUPLING

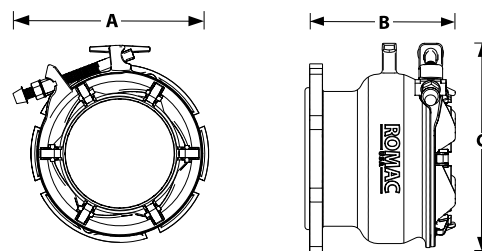
Alpha Flanged Coupling accommodate IPS PVC pipe through Ductile Iron pipe diameters.



#### ALPHA XL FLANGED COUPLING

Alpha XL Flanged Coupling covers Ductile Iron through Oversize Cast Iron pipe diameters.

### DIMENSIONS



NOMINAL PIPE SIZE	ALPHA FC GASKET RANGES		DIMENSIONS			APPROXIMATE WEIGHT (lbs.)
	ALPHA RANGE	GASKET RANGE	A	B	C	
			O.D.	LENGTH	HEIGHT	
4"	STD. ALPHA	4.50 - 4.90	11.20	8.15	10.25	29
	ALPHA XL	4.80 - 5.10				
6"	STD. ALPHA	6.60 - 7.00	11.35	8.24	12.45	40
	ALPHA XL	6.90 - 7.20				
8"	STD. ALPHA	8.60 - 9.10	13.40	9.96	15.55	57
	ALPHA XL	9.05 - 9.40				
10"	STD. ALPHA	10.75 - 11.20	15.45	10.18	17.65	82
	ALPHA XL	11.10 - 11.45				
12"	STD. ALPHA	12.75 - 13.30	17.50	10.28	19.70	105
	ALPHA XL	13.20 - 13.60				

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