ROMAC INDUSTRIES, INC.

INSTALLATION INSTRUCTIONS

Read installation instructions first before installing. Check parts to ensure that no damage has occurred during transit, the bolt guides are aligned with the axis of the pipe, and no parts are missing.

Certified to NSF/ANSI/CAN 61

Style Alpha End Cap™

Wide Range End Cap for 4" & 6" Pipe Sizes

When properly installed, ALPHA can be used at working pressures equal to the lesser of 350 psi, pipe rating, or value listed below:

PIPE MATERIAL	SIZE	WORKING PRESSURE
Ductile Iron	4-12"	350 psi
Cast Iron	4-12"	350 psi
PVC, IPS size	4-12"	350 psi
PVC, DI size	4-12"	350 psi
C909	4-6"	235 psi
C909	8-12"	150 psi
HDPE: SDR 9, 11, 13.5 & 17*	4-12"	rating of pipe

** For SDRs greater than 17, pipe stiffeners are required.*
For other SDR's and pipe materials, contact Romac.

ALPHA RANGES

STANDARD ALPHA: For IPS through DI sized pipe diameters.

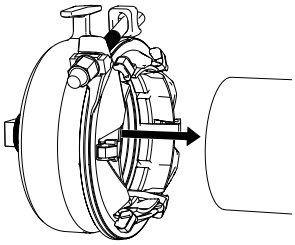
ALPHA XL: For DI sized through Oversize Cast pipe diameters.

SIZE	STANDARD ALPHA	ALPHA XL
4”	4.50 - 4.90	4.80 - 5.10
6”	6.60 - 7.00	6.90 - 7.10

Step 1 • Measure pipe diameter and verify with the ranges listed above to ensure the correct size end cap has been selected.

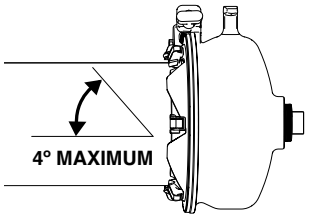
Step 2 • Remove any scale or debris that could interfere with gripper engagement of the pipe. Clean the pipe surfaces wherever the gasket will come in contact with the pipe, and check to see that the pipe surface is smooth (no dents, projections, gouges, etc.) where the gasket seal against the pipe.

Step 3 • Lubricate the gasket and pipe surface with a suitable gasket lubricant. For installation on HDPE, pipe ends should be butted against the back of the casting.

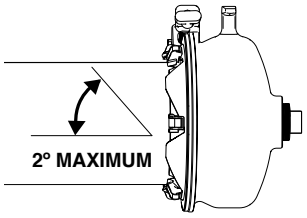


Step 4 • With the bolt in the extended position, place the end cap onto the pipe end until the pipe makes contact with the inside of the end cap. **Note:** If it's impossible to bottom-out the pipe, ensure there is a minimum of 4" of pipe insertion.

Step 5 • Set the desired pipe deflection angle.



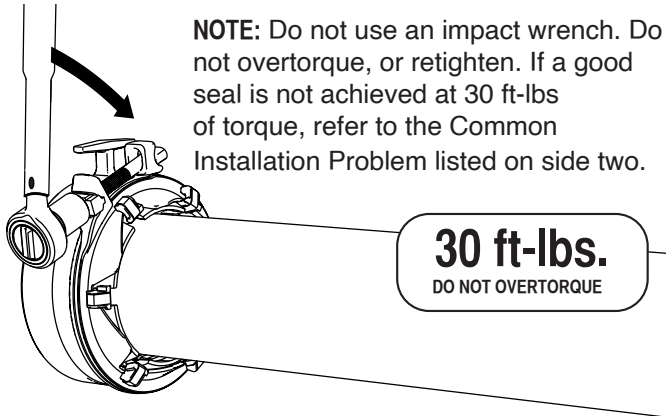
Std. Alpha & **Alpha XL**
Maximum deflection:
4 degrees



Alpha XL installations at the top of the range
Maximum deflection:
2° degrees

Note: Do not deflect pipe after installation.

Step 6 • With the end cap properly located, tighten the nuts to 30 ft-lbs using a torque wrench.



NOTE: Do not use an impact wrench. Do not overtorque, or retighten. If a good seal is not achieved at 30 ft-lbs of torque, refer to the Common Installation Problem listed on side two.

Step 7 • Confirm proper installation by pressurizing the line and checking for leaks.

Step 8 • Backfill and compact carefully around pipe and end cap.

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ROMAC INDUSTRIES, INC.

INSTALLATION INSTRUCTIONS

Style Alpha End Cap™

Wide Range End Cap for 4" & 6" Pipe Sizes

PRECAUTIONS

1. Check diameter of pipe to make sure the correct sized end cap has been selected.
2. Confirm the pipe is round. The end cap may not fit or function on pipe that is too far out of round.
3. Clean pipe to remove dirt and corrosion from pipe surface. Use appropriate scale removal tools where appropriate to assure all scale and debris is properly removed.
4. Lubrication and additional cleaning should be provided by brushing both the gasket and plain pipe end with soapy water or approved pipe lubricant per ANSI/AWWA C111/A21.11.
5. Make sure no foreign materials lodge between gasket and pipe, between the grippers or in the end ring mechanism.
6. Avoid loose fitting wrenches, or wrenches too short to achieve proper torque.
7. Keep threads free of foreign material to allow proper tightening.
8. For cold weather conditions (below 40° F), performance can be improved by warming up the end cap and gasket.
9. Verify that the grippers are in contact with the pipe surface.
10. Do not strike or pry on the end cap with hammers, shovels or other equipment.
11. When reinstalling, be sure to inspect all parts for damage.
12. If it's necessary to remove Alpha, loosen the bolt and tap the end ring bolt receiver open. Tapping the hooks into their notches may also be required. To assist removal, rotate coupling body back and forth while pulling.
13. It is common for the bolt receivers to meet on installations at the bottom of the range.
14. Directional drilling requires special consideration prior to installation. Contact Romac Engineering for any directional drilling applications.
15. Romac mechanical restraint products are designed and tested to provide axial load restraint as specified. System design must be such that the restraint is only exposed to this type of loading. Special consideration may be required for above ground installations where the alignment and support benefits of earth are not present.

PRECAUTIONS FOR HDPE PIPE

1. Alpha working pressure not to exceed pressure rating of pipe.
2. For SDRs greater than 17, pipe stiffeners are required.
3. Operating temperatures are limited to 85° F maximum and 32° F minimum.
4. Recommended for buried applications only. For above ground use, contact Romac Engineering.

REUSE

1. If it's necessary to remove Alpha, loosen the bolt and tap the end ring bolt receiver open. Tapping the hooks into their notches may also be required.
2. When reinstalling, be sure to inspect all parts for damage. The gasket should be free of rips, tears, or permanent deformation. Draw hooks should not be deformed, and gripper teeth should be sharp and undamaged. Romac recommends no more than five installs.

COMMON INSTALLATION PROBLEMS

1. Pipe not inserted into the end cap far enough.
2. Too much pipe deflection.
3. Damage to the outer pipe surface (dents, projections, gouges, etc.)
4. Bolt not tightened to proper torque.
5. Fasteners partially tightened down making insertion difficult. Remove yellow thread caps and back nuts off before pipe insertion.

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