QuickLock Catalog

QuickLock Pipe Point Repair
QuickLock BIG
QuickLock Liner End Sleeve

www.rauschusa.com
QuickLock Pipe Point Repair

QuickLock Pipe Point Repair is the most reliable point repair system for sewer and water lines. Augments structural integrity of pipe.

Application range: 6” to 32”

QuickLock BIG

QuickLock BIG is a mechanical point repair system for pipes large enough to walk.

Application range: 32” to 64”

QuickLock Liner End Piece

The Liner End Piece seals and protects liner ends where they enter the manhole.

Application range: 6” to 24”

QuickLock No-Dig Pipe Rehab

QuickLock is a trenchless point repair system for pipes. This revolutionary system consists of only (2) components: a 316L stainless steel sleeve structural body, covered by a seamless rubber compression seal - EPDM for sewage and silicon rubber for potable water.

Important: No chemicals or resins are used - no cure time!

The same effective principle applies to all three QuickLock products: QuickLock, QuickLock BIG, and QuickLock End.
QuickLock Sleeve Materials

The QuickLock sleeve body is made of 316L stainless steel. The sleeve maintains high corrosion resistance, which means it functions in sewage as well as potable water. This sleeve is the new interior of the pipe, and will augment the structural integrity.

The vulcanized EPDM rubber sealing gasket distinguishes itself with these excellent physical properties:

- Resistance against aging
- Resistance against sewage, thinned acids, and lye
- Conditionally resistant against aromatic and chlorinated hydrocarbons (oils, grease, fuels)

Different gasket materials are available for individual environmental conditions.


Operating Principle

Installation is quick and easy while ensuring a permanent fix. QuickLock sleeves can be installed with flow present due to the fact that the packer is hollow, allowing for the flow pass through. The installation packer can even be attached to most tractor brands currently on the market.

Through the manhole, the sleeve is inserted into the pipe and delivered to the damaged section. The sleeve is mechanically compressed against the inner pipe wall. Using an inflatable packer, the sleeve is then expanded and permanently locked into position.
Advantages over other systems

- Trenchless no-dig spot repair
- Permanent, reliable and instant fix
- Passes air & water pressure testing
- Augments structural strength & integrity of deformed and damaged pipe
- Can be installed with flow present
- Quick and easy installation - no cure time
- Inner pressure up to 214 psi (1.5 MPa)
- External pressure up to 21.4 psi
- Can be lined over.

Not Applicable For

- Fixing collapsing pipes
- Industrial sewage (except when corrosion levels have been evaluated)

Installation Process

1. Determine if correct application for QuickLock
2. Determine damage length
3. Prepare the QuickLock sleeve
4. Load the sleeve on the QuickLock Packer
5. Deliver the QuickLock sleeve to the installation
6. Inflate the Packer to install the sleeve

Equipment Involved

- Air Compressor
- Air Hose Reel
- QuickLock Sleeve
- QuickLock Packer
- Camera - Tractor
- Mounting Accessory (for camera - tractor)
Application For

Municipal sewage lines | Well and potable water piping systems | Augment structural integrity of pipe prior to lining
Two saw tooth channels are punched into the left and right side of the sleeve. In each channel, there is a locking and gear mechanism, guiding the sleeve sheet while being installed. Using the packer to expand the sleeve, the gear works like a one-way ratchet. Upon reaching maximum compression pressure, both gears lock into place and stay locked permanently.

The distance between tooth groove and tooth tip is one click. That means the maximum possible return stroke from tooth tip to the next lower groove may cause a maximum diameter reduction after compression of only about 0.025 inch, independent of the nominal size. Therefore, the locking mechanism operates in an almost infinitely-variable way.

QuickLock Packer

The QuickLock Packer is attached to a trolley and can be mounted to a pipe inspection crawler that guides the system through the line. This specially designed packer provides uniform expansion pressure throughout the overall sleeve length, thus ensuring that the gears run simultaneously during the installation process.

Various packer sizes cover a different installation diameter range. For each nominal pipe diameter, there is a suitable set of wheels.

Our newest packers feature adjustable wheels - there is only a single set of wheels and an adjustable slide to cover a range.
1. Beveled End - The beveled end faces the direction of flow and improves the hydrodynamics, prevents solids from depositing, and increases jetting resistance.

2. Metal Overlap - The steel sleeve is rolled up smaller than its nominal diameter. The overlap is what is left over for expanding to the pipe wall.

3. Toothed Strip

4. Locking Gear

5. Adhesive Tape - The tapes are put on at the factory to protect the sleeve during the transport and prevent it from unrolling.

6. Plastic Screw - protect the sleeve during transport with tape.

Rubber Gasket

7. Circumferential Seals - The actual seal is formed by the circumferential seals compressed against the host pipe. The damaged section must always be between these seals.

8. Trimming Line - There is a trimming line marked in the rubber gasket. It shows you where to cut off the projecting rubber end (when a single sleeve is installed).

9. Projecting Rubber End - The projecting rubber end acts as a seals between sleeves installed in a series.

IMPORTANT - this system meets NSF/ANSI 61 and ASTM F3110-14 standard.
### QuickLock Data Sheet

All QuickLock sleeves are available with EPDM rubber gaskets for sewer & water applications.

The NSF61 certified EPDM rubber gasket is available by special order.

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<th>Nominal Diameter</th>
<th>Overall Length</th>
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<th>Min Pipe Diameter</th>
<th>Max Pipe Diameter</th>
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The sleeve sizes in ( ) designate intermediate sizes which are available upon special order only. If the Internal Diameter (ID) of your pipe does not meet the range for standard sleeve sizes, you will need to order an intermediate size.
### Suitable Internal Sizes

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<th>Nominal Diameter</th>
<th>Overall Length</th>
<th>Total Rolled Diameter</th>
<th>Min Pipe Diameter</th>
<th>Max Pipe Diameter</th>
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**Special sleeve. Size compressed is 27.36 inches; normally the manhole reduction cone needs to be removed before installation.**
QuickLock BIG

The QuickLock BIG sleeve is a product to permanently seal leaking joints and radial or longitudinal cracks in accessible ducts and shafts from 32” to 64”. Unlike the QuickLock installations where an inflatable packer is involved, however, this installation is a manual process - the installer must get inside the pipe to install QuickLock BIG. Special QuickLock BIG tools are required for installation.

*Range: 32” to 64” Pipe Diameter*

Watch Video

www.rauschusa.com/quicklock-big
QuickLock Liner End Sleeve

The QuickLock Liner End Sleeve is an innovative method to seal the liner to the host pipe at the manhole. This system instantly and permanently eliminates 2 major problems after a pipe liner is installed:

- It fully seals the liner to the host pipe, preventing infiltration running along the liner into the manhole.
- It protects the liner end section from potential physical damage caused by root cutter or jetting nozzle.

Any liner installation without liner-end pieces in place are subject to failure over time.

Range: 6” to 24” Pipe Diameter

Sleeve Size Reference

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Our Mission: To provide advanced and innovative products for pipe inspection and point repair that match the ever-changing and evolving demands of success-oriented customers.

Where reliable fast service and repair are guaranteed.

QuickLock products are distributed through authorized regional dealers or sold direct.

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