

**rausch** USA

# QuickLock Catalog

QuickLock Pipe Point Repair

QuickLock BIG

QuickLock Liner End Sleeve

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Certified to  
NSF/ANSI 61

Meets ASTM F3110-14 Standard.



### QuickLock Pipe Point Repair

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

*Application range: 6" to 32"*

*(Page 2 - 8)*



### QuickLock BIG

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

*Application range: 32" to 64"*

*(Page 9)*



### QuickLock Liner End Piece

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

*Application range: 6" to 24"*

*(Page 10)*

# QUICK LOCK

## 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.



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## 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.



## 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.

NSF/ANSI 61 certified silicon rubber seal is available for use in potable water. Meets ASTM F3110-14 Standard.



## 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

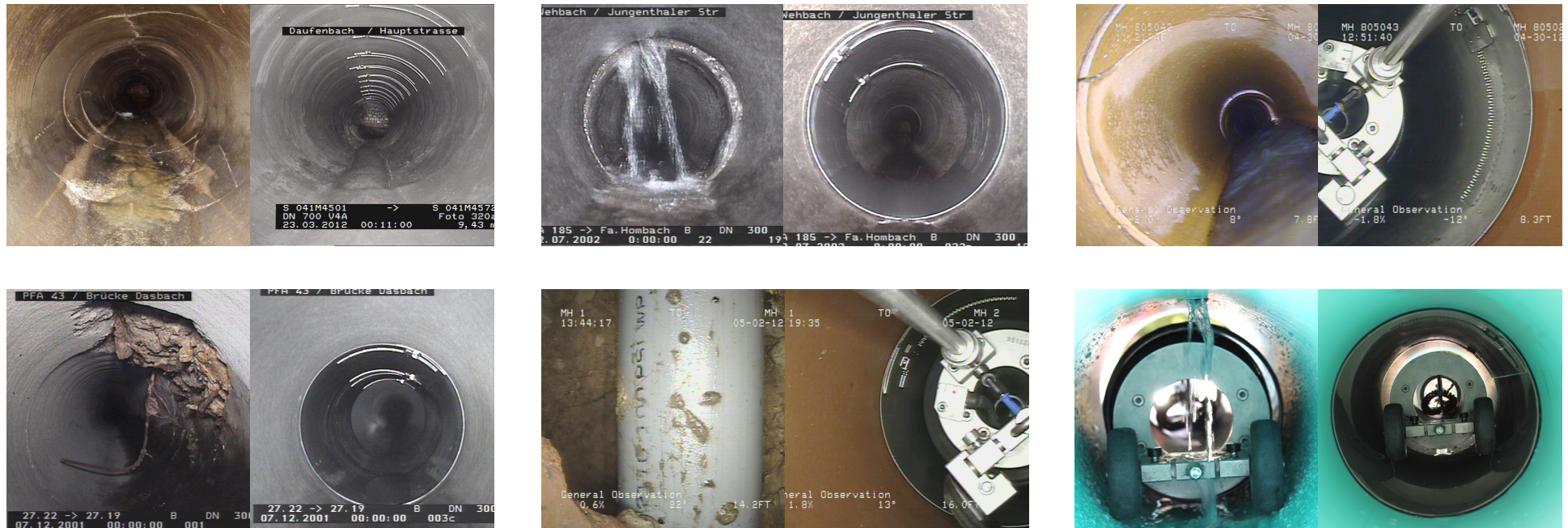
- Fixing collapsing pipes
- Industrial sewage (except when corrosion levels have been evaluated)

## 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

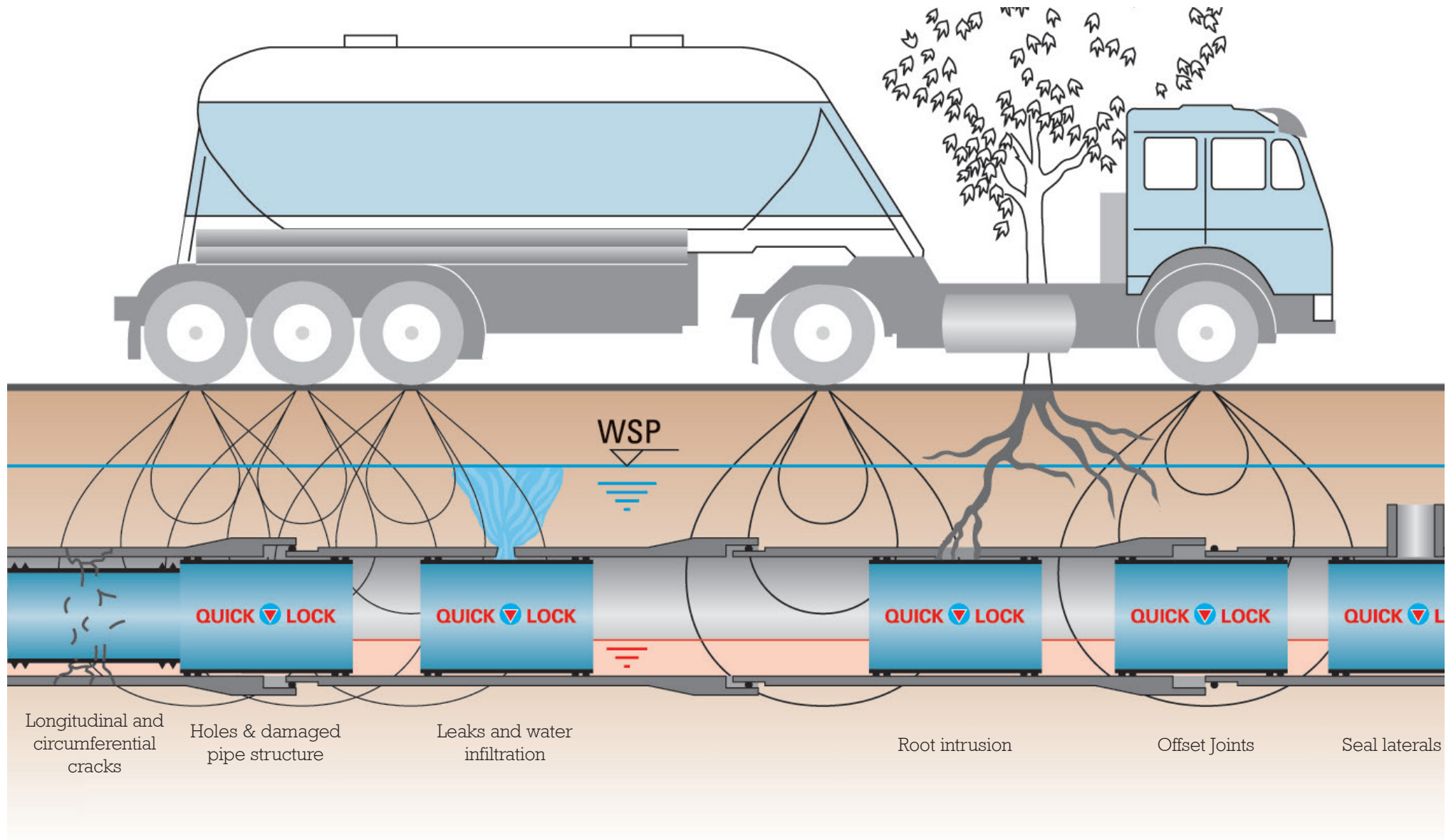
## Equipment Involved

- 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





## Locking Gear Mechanism

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.

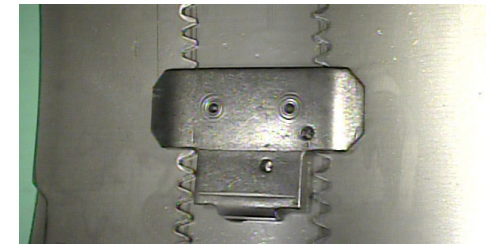
The distance between tooth groove and tooth tip is one click. That means the maximum possible return stroke from tooth tip to the next lower groove may cause a maximum diameter reduction after compression of only about 0.025 inch, independent of the nominal size. Therefore, the locking mechanism operates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

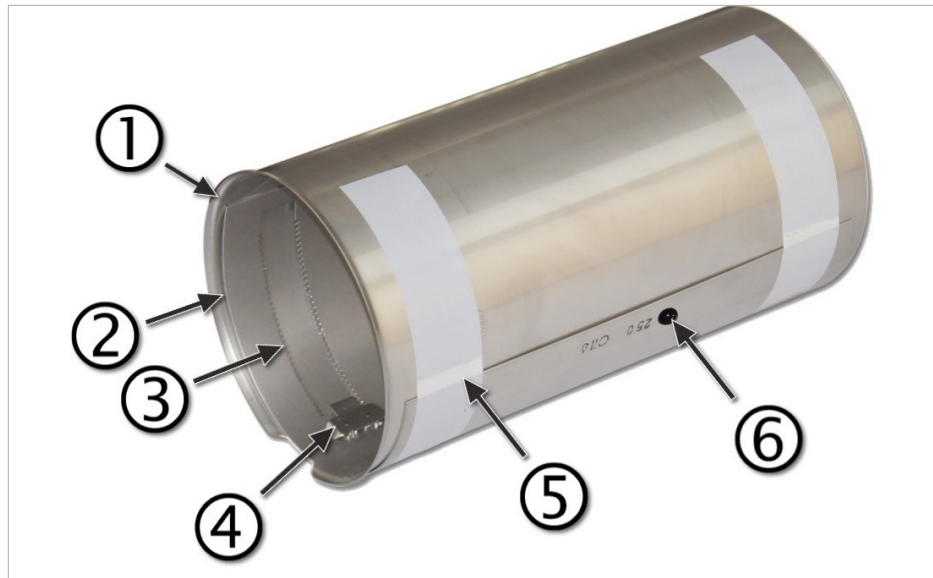
## QuickLock Packer

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.





## Stainless Steel Sleeve

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.

Nominal Diameter	DN	Overall Length	Total Rolled Diameter	Suitable Internal Sizes		Single Sealing Area	QuickLock Packer Required	Wheel Set Required	316L Stainless Steel Sleeve			Rubber Gasket			Total Weight
				Min Pipe Diameter	Max Pipe Diameter				Wall Thickness	316L Rolled Diameter	Max Expanded Diameter	Rubber Thickness	Rubber Profile Height	Rubber Gasket Size	
Inches		Inches	Inches	Inches	Inches	Inches	Part Number	Part Number	Inches	Inches	Inches	Inches	Inches	Label	Lbs.
<b>6</b>	150	16	5.08	5.75	6.06	<b>12.6</b>	AS1528	RS150	0.03	4.61	5.86	0.07	0.16	DN150	5.07
(6.22)	158	16	5.43	6.06	6.41	<b>12.6</b>	AS1528	RS158	0.03	4.96	6.22	0.07	0.16	DN150	5.51
(6.92)	176	16	5.94	6.73	7.17	<b>12.4</b>	AS1528	RS176	0.04	5.47	6.97	0.07	0.16	DN176	6.61
(7.40)	188	16	6.38	7.20	7.64	<b>12.6</b>	AS1528, AS1537	RS188, RS188	0.04	5.83	7.44	0.07	0.20	DN188	7.05
<b>8</b>	200	16	6.77	7.68	8.11	<b>12.6</b>	AS1528, AS1537	RS200, RS200	0.04	6.22	7.95	0.07	0.20	DN200	7.22
(8.26)	210	16	7.17	8.07	8.54	<b>12.6</b>	AS1528, AS1537	RS210, RS210	0.04	6.61	8.34	0.07	0.20	DN200	7.72
(8.85)	225	16	7.56	8.66	9.13	<b>12.4</b>	AS1537, AS1552	RS225+SPV300, RS225	0.04	7.00	8.93	0.07	0.20	DN225	8.59
(9.44)	240	16	7.95	9.25	9.72	<b>12.4</b>	AS1537, AS1552	RS240+SPV300, RS240	0.04	7.40	9.52	0.07	0.20	DN225	9.26
<b>10</b>	250	16	8.35	9.61	10.15	<b>12.4</b>	AS1537, AS1552	RS250, RS250	0.04	7.72	9.92	0.07	0.24	DN250	9.77
(10.86)	276	16	9.21	10.63	11.18	<b>12.4</b>	AS1537, AS1552	RS275+SPV300, RS275	0.04	8.58	10.86	0.07	0.24	DN276	10.14
(11.26)	286	16	9.61	10.98	11.54	<b>12.4</b>	AS1537, AS1552	RS280+SPV300, RS280	0.04	8.90	11.26	0.07	0.28	DN276	11.90
<b>12</b>	300	16	10.04	11.46	12.24	<b>12.2</b>	AS1537, AS1552	RS250+SPV300, RS300	0.04	9.33	12.00	0.07	0.28	DN300	11.90
(12.40)	315	16	10.63	12.00	12.64	<b>12.2</b>	AS1537, AS1552	RS250+SPV300, RS300	0.05	9.92	12.40	0.07	0.28	DN300	14.55
(12.99)	330	16	11.26	12.59	13.43	<b>12.2</b>	AS15137	RS330	0.05	10.55	13.18	0.07	0.28	DN300	15.43

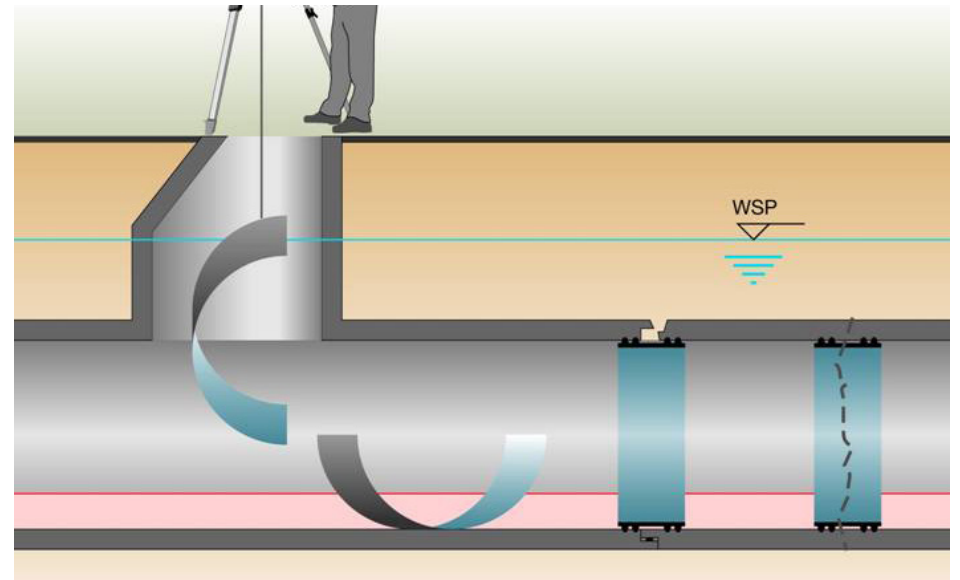
The sleeve sizes in () designate intermediate sizes which are available upon special order only. If the Internal Diameter (ID) of your pipe does not meet the range for standard sleeve sizes, you will need to order an intermediate size.



# QUICK LOCK

Nominal Diameter	Overall Length	Total Rolled Diameter	Suitable Internal Sizes		Sealing Area	QuickLock Packer Required	Wheel Set Required	316L Stainless Steel Sleeve			EPDM Rubber Gasket			Total Weight	
			Min Pipe Diameter	Max Pipe Diameter				Wall Thickness	316L Rolled Diameter	Max Expanded Diameter	Rubber Thickness	Rubber Profile Height	Rubber Gasket Size		
Inches	DN	Inches	Inches	Inches	Inches	Part Number	Part Number	Inches	Inches	Inches	Inches	Inches	Label	Lbs.	
<b>14</b>	350	16	12.12	13.38	14.25	<b>12.8</b>	AS15130	RS350	0.05	11.41	13.97	0.07	0.28	DN350	16.09
<b>15</b>	380	16	12.52	14.37	15.11	<b>12.8</b>	AS15130	RS380	0.05	11.81	14.84	0.07	0.28	DN350	17.06
<b>16</b>	400	16	13.74	15.23	16.22	<b>12.2</b>	AS15130	RS400	0.05	12.87	15.98	0.07	0.31	DN400	19.62
<b>18</b>	450	20	14.88	17.12	18.14	<b>15.6</b>	AS15130	RS400+SPV450	0.07	14.25	17.91	0.07	0.31	DN450	35.14
<b>(18.89)</b>	480	20	16.14	18.30	19.21	<b>15.6</b>	AS15130	RS480+SPV500	0.07	15.27	18.89	0.07	0.31	DN450	36.59
<b>20</b>	500	20	17.55	19.09	20.19	<b>15.2</b>	AS15130, AS15131	RS400+SPV500, RS500	0.07	16.69	19.88	0.07	0.35	DN500	36.95
<b>(20.62)</b>	524	20	17.63	19.48	20.94	<b>15.2</b>	AS15131	RS500	0.07	16.77	20.62	0.07	0.35	DN500	38.8
<b>(22.04)</b>	560	20	18.78	21.26	22.36	<b>15.2</b>	AS15131	RS600	0.07	17.91	22.04	0.07	0.35	DN500	44.5
<b>24</b>	600	20	21.18	22.83	24.21	<b>15.4</b>	AS15131, AS15133	RS500+SPV600, RS600	0.07	20.27	23.89	0.09	0.31	DN600	44.5
<b>(25.59)</b>	650	20	23.07	24.8	26.18	<b>15.4</b>	AS15133	RS650	0.07	22.24	25.91	0.09	0.31	DN600	48.5
<b>28</b>	700	19	23.46	26.57	28.54	<b>11.5</b>	AS15133, VP 700-800	RS600+SPV700, RS700	0.07	22.44	28.07	0.11	0.39	DN700	52.98
<b>30</b>	750	19	24.45	28.31	30	<b>14.8</b>	VP 700-800	SPV750	0.07	23.42	29.52	0.11	0.39	DN700	55.56
<b>32**</b>	800	19	28.39	30.7	32.55	<b>14.8</b>	VP 700-800	RS700+SPV800	0.07	27.36**	32.08	0.11	0.39	DN800	59.52

\*\*Special sleeve. Size compressed is 27.36 inches; normally the manhole reduction cone needs to be removed before installation.



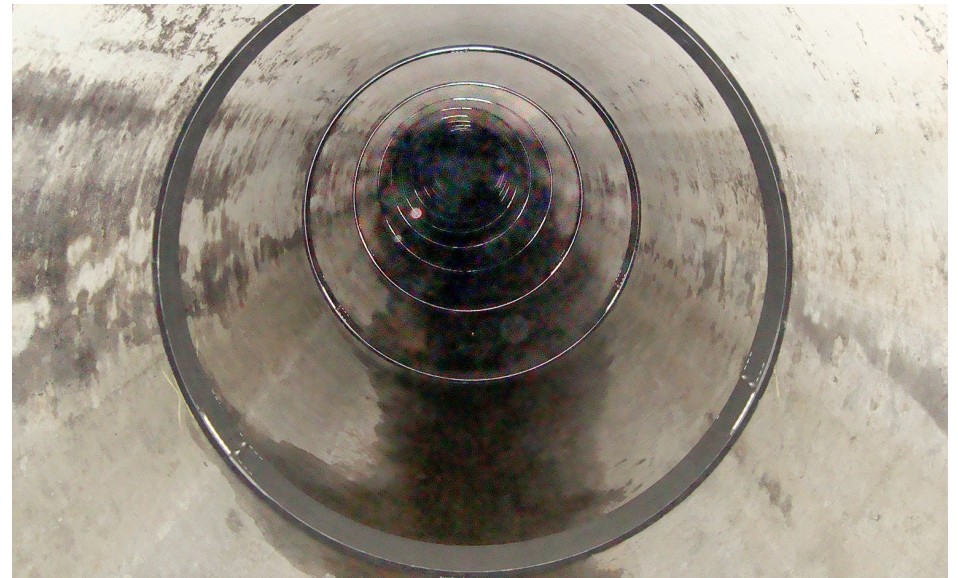
## QuickLock BIG

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





Step 1: Cut out the liner end



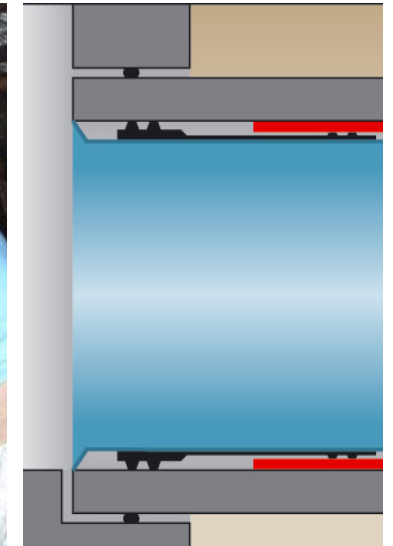
Step 2: Remove the liner cutout



Step 3: Prepare the QLE sleeve



Step 4: Install using packer



Step 5: Sleeve seals liner end

## 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

Nominal Diameter	Length	Part Number
6"	10"	US006ES
8"	10"	US008ES
10"	10"	US010ES
12"	10"	US012ES
14"	10"	US014ES
16"	10"	US016ES
18"	12"	US018ES
20"	12"	US020ES
24"	12"	US024ES



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**Rausch Electronics USA, LLC.**

1686 Opportunity Ave.  
Chambersburg, PA 17201

<b>Email:</b>	reusa@rauschusa.com
<b>Office:</b>	(717) 709-1005
<b>Toll Free:</b>	(877) Rauschl
<b>Fax:</b>	(717) 709-1009
<b>Service:</b>	(717) 263-8093

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Meets ASTM F3110-14 Standard.

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Edition: 01/2018