TUBE SIZE RANGE 1/2" THRU 4"

EVANS PL SERIES PRESSLOK® FIELD INSTALLATION POCKET GUIDE

EVANS COMPONENTS

WARNING

- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Evans Components Presslok® products.
- Depressurize and drain tubing systems before attempting to install, remove, adjust, or maintain any Evans Components Presslok® products.
- Wear safety glasses, hardhat, foot protection, and hearing protection (refer to required PPE at installation location).
- Failure to follow instructions and warnings could cause system failure, resulting in serious personal injury and/or property damage.

If you need additional copies of the instructions, or if you have questions about the safe and proper installation or operation of Evans Components Presslok® products, contact Evans Components or one of it's authorized Presslok® distributors.

Contents

INTRODUCTION

This field installation handbook is a basic field reference guide for Evans Components Presslok® products. This handbook provides easy reference to proper installation information.

Additional copies of installation information are available from Evans Components or Evans Components stocking distributors, upon request.

Always follow proper installation and workmanship practices. Specified pressures, temperatures, external loads, internal loads, performance standards, and tolerances must never be exceeded.

NOTICE

- Evans Components maintains a continual policy of product improvement. Therefore, Evans reserves the right to change product specifications, designs, and standard equipment without notice and without incurring obligation.
- EVANS COMPONENTS IS NOT RESPONSIBLE FOR SYSTEM DESIGN, NOR DOES THE COMPANY ASSUME ANY RESPONSIBILITY FOR SYSTEMS THAT ARE DESIGNED IMPROPERLY.
- This handbook is not intended to be a substitute for competent, professional assistance, which is a prerequisite for any product application.
- The information published in this handbook and other Evans Components literature, supersedes all previously published information.
- Drawings and/or pictures in this handbook may be exaggerated for clarity.
- This handbook contains trademarks, copyrights, and products with features that are the exclusive property of Evans Components.
- While every effort has been made to ensure its accuracy, Evans Components, its subsidiaries, and its affiliated companies make no expressed or implied warranty of any kind regarding the information contained or referenced in this handbook. Anyone who uses the information contained herein, does so at their own risk and assumes liability that results from such use.

IMPORTANT INFORMATION

Type 304/316 Stainless Steel PLT/PLHT Presslok® Fittings

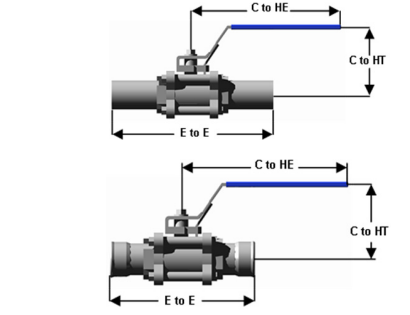
The Evans Components Presslok® System is designed for joining approved ASTM-A269 304 and 316 stainless steel tube in 1/2-inch (12.7-mm), 3/4-inch (19.05-mm), 1-inch (25.4-mm), 1-1/2-inch (38.1-mm), 2-inch (50.8-mm), 2-1/2-inch (63.5-mm), 3-inch (76.2-mm), and 4-inch (101.6-mm) sizes.

Evans Components Presslok® products along with ASTM-A269 tube sizes **1/2-inch to 1-1/2-inch** are rated for **300-psi** (20-Bar) and sizes **2-inch to 4-inch** are rated for **200-psi** (13-Bar) working pressure @ **70 F°** (23 C°). In addition, Evans Components Presslok® products are guaranteed to a helium leak rate of **1 x 10-7 scc/sec**.

The Evans Components Presslok® products meet the ASTM-F1387-99 specification. Refer to ASME-B31.1, ASME-B31.3, and ASTM-A269 for tubing support requirements.

Type 304/316 Evans SS PL/PLH Series Ball Valves

When installing ball valves with tube stub ends, using Evans Components Presslok® fittings, it's extremely important to ONLY install ball valves with ASTM-A269 compliant tube stub ends. Tube stub ends that are cast or do not meet the ASTM-A269 specification, may not press properly with Evans Components Presslok® fittings. Evans Components PL Series ball valves meet this specification requirement.



PREVENTION OF STAINLESS STEEL CONTAMINATION

*These recommendations are provided as a general guideline to help prevent surface contamination of stainless steel products.

Handling and Storage

- Stainless steel products should be handled only with non-contaminating apparatus (i.e. nylon straps or apparatus protected with a non-contaminating buffer material).
- If carbon steel straps are used, a buffer material must be placed between the strap and the stainless steel product. Common non-contaminating buffer materials include wood, cardboard, paper, fire hose, canvas, and other stainless steel material.
- Stainless steel products must be stocked on non-contaminating racks or skids.
- Stainless steel products must be stocked in an area separate from iron or carbon steel products.
- Do not climb on or stand on stainless steel products.
- In storage areas where salt is present in the air (i.e. near the ocean), stainless steel products must be covered with a plastic tarp.
- All stainless steel materials (fittings and valves) must be bagged, if not staged in a clean environment.

Shipping

- Stainless steel products must be shipped with new, non-contaminating and non-damaging packing materials. CFOS grade tubing must be bagged and ends capped.
- If markings are required directly on stainless steel products, the marking must have a water-soluble chloride content less than 50 parts per million (ppm). This chloride content must be measured upon drying of the marking.
- Identification tags and connectors, if required, must be constructed from non-contaminating materials.
- Stainless steel products must be shipped separately from iron or carbon steel products. If stainless steel and/or iron or carbon steel products must be shipped together, care must be taken to completely separate the dissimilar materials by using a non-contaminating buffer.
- **All Evans Components Presslok® products are factory packaged; PLHT and PLH in pink colored (Particle free) poly bags; PLT and PL in clear colored (general use) poly bag.**

TUBE SPECIFICATIONS

ASTM-A269 Approved Type 304 and Type 316 Stainless Steel Tubing

ASTM-A269 APPROVED TUBING DIMENSIONS & WEIGHTS				
Nominal Diameter Inches/ mm	Actual Outside Diameter Inches/ mm	Inside Diameter Inches/ mm	Wall Thickness Inches/ mm	Approx. Weight of Tube Per Foot lbs./ kg
1/2	0.50	0.402	0.049	0.236
12.7	12.7	10.2	1.245	0.107
3/4	0.750	0.620	0.065	0.476
19.05	19.1	15.7	1.651	0.215
1	1.00	0.870	0.065	0.649
25.4	25.4	22.1	1.651	0.294
1-1/2	1.500	1.370	0.065	0.996
38.1	38.1	34.8	1.651	0.451
2	2.00	1.870	0.065	1.343
50.8	50.8	47.5	1.651	0.609
2-1/2	2.50	2.370	0.065	1.69
63.5	63.5	60.2	1.651	0.766
3	3.00	2.870	0.065	2.037
76.2	76.2	72.9	1.651	0.923
4	4.00	3.83	0.083	2.70
101.6	101.6	97.2	2.11	1.22

MINIMUM TUBE NIPPLE LENGTH REQUIREMENTS

CAUTION

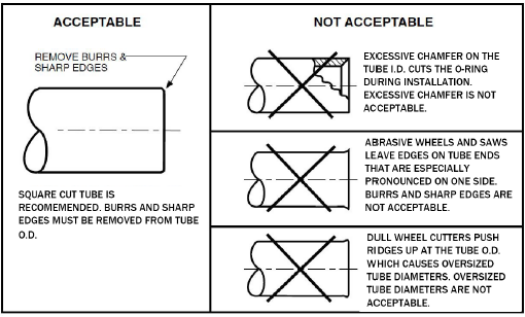
- Tube for use with Evans Components Presslok® couplings and fittings must meet the minimum tube nipple length requirements specified in the table below.
- Maintain clearances of a minimum of 1" from welds.
- Failure to follow these instructions could cause improper product installation, resulting in serious personal injury and/or property damage.

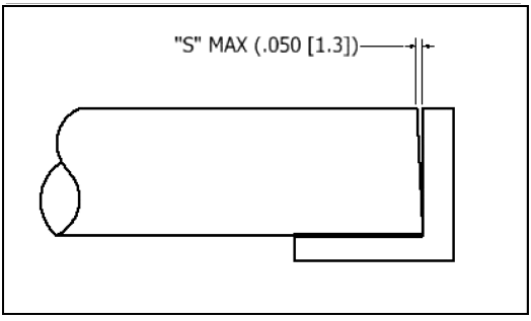
*Tube nipple lengths are recommended for clearance of the press tool jaws/tongs and design limits of the tubing.

PRESSLOK® MINIMUM TUBE NIPPLE LENGTH REQUIREMENTS	
Tube Size	Minimum Nipple Length
1/2" (12.7mm)	2.31" (58.67mm)
3/4" (19.05mm)	2.51" (63.75mm)
1" (25.4mm)	2.79" (70.87mm)
1-1/2" (38.1mm)	3.47" (88.14mm)
2" (50.8mm)	4.05" (102.87mm)
2-1/2" (63.5mm)	5.79" (147.07mm)
3" (76.2mm)	6.37" (161.80mm)
4" (101.6mm)	6.85" (174.00mm)

TUBE PREPARATION

Tube end preparation prior to installation of Evans Components Presslok® System products.





1	Tube ends must be square cut (“S” dimension shown left) within 0.050-inch (1.3-mm).
2	Clean and inspect the tube ends to meet the required cleanliness specification (i.e. CFOS, etc.). For general use, remove any oil, dirt, or debris that may be present. Insure the tube ends do not contain burrs, sharp edges, raised weld beads, and any deep scratches or indentations of a minimum of 2-inches (51-mm) back from the tube end.
3	Note: If tube ends are not properly prepared it can result in damaging the O-Ring when fitting is installed resulting in a leak path.

OPERATOR SAFETY REQUIREMENTS FOR PRESSLOK® TOOLS

EVANS 701 (REMS AKKU-PRESS ACC)	EVANS 801 (REMS POWER-PRESS XL ACC BATTERY)
	

PRESSLOK® TOOL RATINGS

# OF PRESSES FROM FULLY CHARGED BATTERY		
Press Tool Series	Presslok® Size Range	AVG Presses
Evans 801	2.5”, 3”, 4”	100
Evans 701	1/2”, 3/4”, 1”, 1-1/2”, 2”	200

***GREEN LED light on the tool indicates the battery is charged sufficiently to perform the pressing operation. RED LED light on the tool indicates the battery is insufficiently charged to perform the pressing operation.**

REMS Tool Checklist

1. Broken or cracked housing; do not use and return for repair
2. Oil leaking from ram; do not use and return for repair.
3. Power switch is loose and will not turn on; return for repair.
4. Insure set screws on Jaws/Tongs and tool shaft that holds jaws/tongs in place are tight.
5. Inspect jaws/tongs for any visual cracks; do not use, will require replacement.
6. Inspect jaw and tong to ensure the spring is not broken or missing. If arms on jaws are mis-aligned because the spring is broken or the jaw was dropped, do not use, return for repair or replacement.
7. For the Lithium Ion batteries, it is recommended that they be recharged every 6 months when not in use.
8. Do not store tools below 32°F or 0°C
9. We recommend preforming a test crimp before putting tool/jaws/tongs into service.

Servicing REMS Tools and Jaws

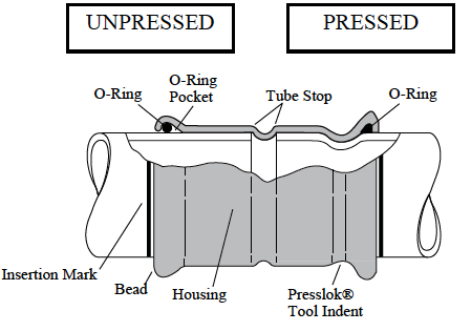
It is recommended that tools be serviced after 7500 crimps, or every 9-12 months depending on use (# of crimps) and environment (working conditions). Jaws are designed to last until they Fail; break or crack (15K-25K crimps).

PRODUCT INSTALLATION REQUIREMENTS

CAUTION

- Before operating any Evans Components Presslok® press tools, read and understand the operating and maintenance instructions manual for the tool.
- Learn the operation, applications, and potential hazards peculiar to the tool.
- Failure to follow these instructions could result in serious personal injury, property damage, product damage, and improper product installation.

NOTE



EXAGGERATED FOR CLARITY

The following instructions contain important information regarding installation of Evans Components Presslok® System products. These instructions must be followed to ensure proper joint performance. Before operating any Evans Components Presslok® press tools, read and understand the operating and maintenance instructions manual for the tool.

- **Tube dimensions must be within published tolerances**; these tolerances are subject to specified standards for acceptability (refer to the "Tube Specifications" section for details).

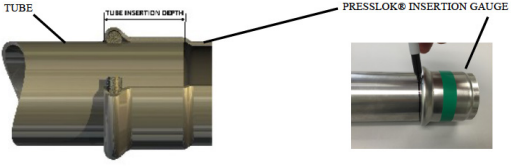
- **All Evans Components Presslok® products come with pre-lubricated O-rings.** Lubrication is essential to prevent pinching or tearing of the O-rings during installation.
- **All Evans Components Presslok® fittings come bagged, do not remove from bags until fitting is required for installation. This will prevent O-Ring contamination or debris from entering the fitting.**
- Evans Components Presslok® System products have unique center-to-end or end-to-end dimensions with uniform "takeout" dimensions. Threaded products with special features such as probes, thermowell, etc., must be checked to ensure thread standard and insertion length are compatible with fitting dimensions. Failure to verify dimensional suit-ability, may result in difficult and/or improper assembly.
- Do NOT use a wrench, tool, or vice on any part of the belled section of the Evans Components Presslok® products, where tube is inserted. This may cause damage to the fitting preventing a proper press and create a potential leak.

TUBE INSERTION DEPTH GAUGES & GO/NO-GO GAUGES

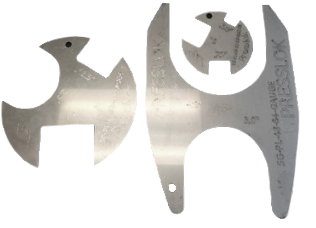
CAUTION

- Always measure tube insertion depth by using the Evans Components Presslok® INSERTION GAUGE, a ruler, or tape measure. ***DO NOT USE PRESSLOK® FITTINGS, INTENDED FOR USE, TO MARK INSERTION DEPTH.**
- Mark the tube at the correct measurement by using a marker or paint stick (Mark with the pen in a perpendicular orientation). *Failure to mark the tube prior to installing Evans Components Presslok® products, will not provide the visual check that is critical for confirming full tube insertion into the fitting.
- **Improperly inserted tube will cause joint failure and may result in serious personal injury and/or property damage.**
- **SEE PAGE 19 FOR GO/NO-GO GAUGE INFORMATION**

EVANS PRESSLOK® INSERTION DEPTH GAUGES	
Part Number	Description
SS-08-IS-GAUGE	1/2" INSERTION GAUGE
SS-12-IS-GAUGE	3/4" INSERTION GAUGE
SS-16-IS-GAUGE	1" INSERTION GAUGE
SS-24-IS-GAUGE	1-1/2" INSERTION GAUGE
SS-32-IS-GAUGE	2" INSERTION GAUGE
SS-48-IS-GAUGE	3" INSERTION GAUGE
SS-64-IS-GAUGE	4" INSERTION GAUGE
SS-08-32-IS-GAUGE	Set of gauges 1/2" thru 2"
SS-08-64-IS-GAUGE	Set of gauges 1/2" thru 4"

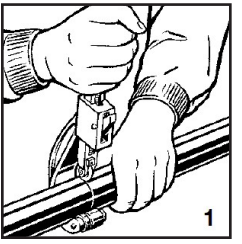


EVANS PRESSLOK® GO/NO-GO GAUGES	
Part Number	Description
SG-PL-08-12-16-GAUGE	1/2" thru 1" Presslok Go/No-Go Gauge 304 SS
SG-PL-24-32-40 GAUGE	1-1/2" thru 2-1/2" Presslok Go/No-Go Gauge 304
SG-PL-48-64-GAUGE	3" thru 4" Presslok Go/No-Go Gauge 304 SS
SG-PL-GAUGE-SET	Set of gauges 1/2" thru 4" 304 SS



PRODUCT INSTALLATION INSTRUCTION FOR SIZES 1/2" TO 2"

STEP 1	Cut stainless steel tube only with an approved stainless steel tube cutting tool. Inspect tube for scratches and dents or other abrasions that may affect proper O-Ring seal.
STEP 2	Remove burrs, dirt, and debris from inside and outside of tube and fittings before assembly. Wipe tube ends clean and dry.
STEP 3	Check fitting to ensure O-ring is properly seated. **(NOTE: O-RINGS COME PRE-LUBED, DO NOT CLEAN OR REMOVE O-RING)**
STEP 4	**Insert tube in insertion gauge until stop is encountered. (Do not use fitting to be crimped to measure)**
STEP 5	Mark tube with marker or paint pen to verify insertion depth. Now insert the tube into actual fitting to be installed.
STEP 5A	Before clamping fitting with jaw and tool, make sure the tubing is properly supported and the tool will not put an additional load on the joint causing misalignment.
STEP 6	Insert the appropriate fitting jaw into the Presslok® tool. Lock into place with spring pin.
STEP 6A	Tool head rotates axially, allowing tool body to be placed in desired position.
STEP 7	Open pressing jaws and place at right angles on the fitting making sure that the groove in the jaw fits around the fitting **O-Ring pocket**. **Check insertion depth marking on tube is still visual and has not move more than 3/16" away from face of fitting.**
STEP 8	Start pressing operation by holding the Presslok® tool trigger until jaws have engaged-hearing a **"popping"** sound as the jaws complete pressing operation. *Note: Once tool is in operation, jaws will not open, tool ram release button will have to be used. Do not use unless absolutely necessary
STEP 9	Once pressing operation is complete, press back of jaws to remove from fitting.
STEP 10	Visually inspect crimp and insertion marking to confirm a proper crimp was performed. **SEE PAGE 19 FOR CRIMP VERIFICATION.**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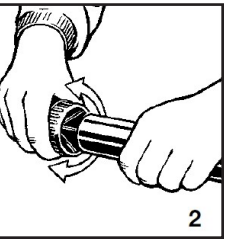
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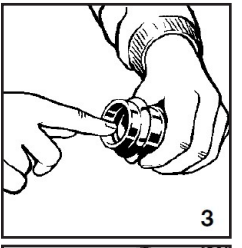
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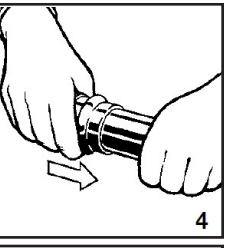
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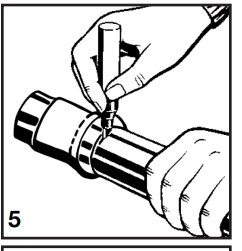
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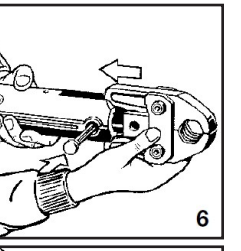
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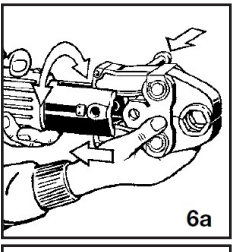
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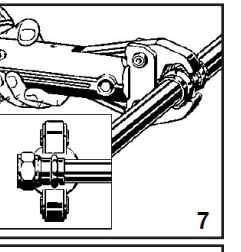
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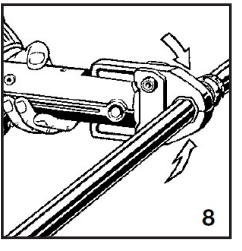
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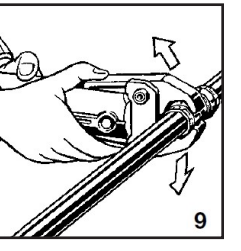
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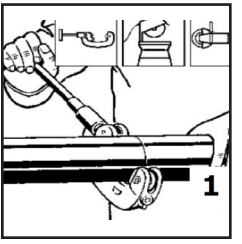
PRODUCT INSTALLATION INSTRUCTION FOR SIZES 2-1/2" TO 4"

STEP 1	Cut stainless steel tube only with an approved stainless steel tube cutting tool. Inspect tube for scratches and dents or other abrasions that may affect proper O-Ring seal.
STEP 2	Remove burrs, dirt, and debris from inside and outside of tube and fittings before assembly. Wipe tube ends clean and dry.
STEP 3	**Insert tube in insertion gauge until stop is encountered. (Do not use fitting to be crimped to measure)**
STEP 4	Mark tube with marker or paint pen to verify insertion depth. Now insert the tube into actual fitting to be installed.
STEP 5	Check fitting to ensure O-ring is properly seated. **(NOTE: O-RINGS COME PRE-LUBED, DO NOT CLEAN OR REMOVE O-RING)**
STEP 5A	With a slight rotating action insert fitting onto tube end.
STEP 6	801 Tool has 2 components a ring jaw and tong for crimping.
STEP 7	Ensure tubing is properly supported and will be able to support the jaw and tool when attached. This will prevent misalignment of the tubing.
STEP 7A	Attach ring jaw ensuring the groove in the jaw fits around the fitting O-Ring pocket. The ring jaw must be placed onto the fitting with the correct orientation, tube side and fitting side.
STEP 8	Open the pressing tong and place at right angles hooking the pins on the ring jaw with the tong. **Check insertion depth marking on tube is still visible and has not moved more than 3/16" away from face of fitting.**
STEP 9	Start pressing operation by holding the Presslok® tool trigger until jaws have engaged - hearing a "popping" sound as the jaws complete pressing operation. *Note: Once tool is in operation, jaws will not open, tool ram release button will have to be used. Do not use unless absolutely necessary.
STEP 9A	Once pressing operation is complete, press back of jaws to remove from fitting.
STEP 10	Visually inspect crimp and insertion marking to confirm a proper crimp was performed. **SEE PAGE 19 FOR CRIMP VERIFICATION.**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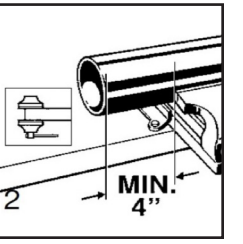
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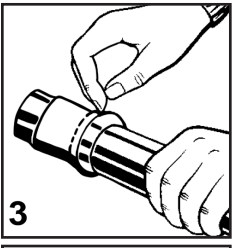
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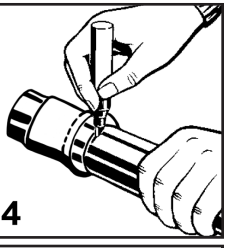
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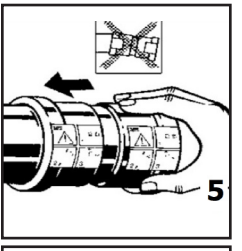
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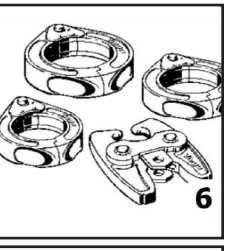
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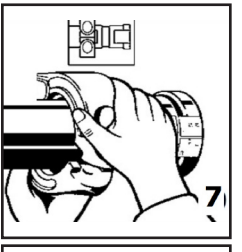
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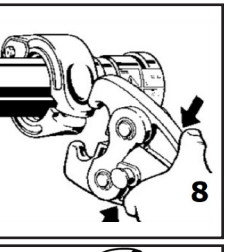
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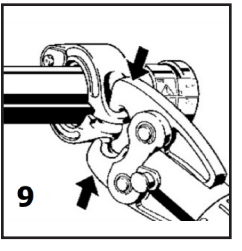
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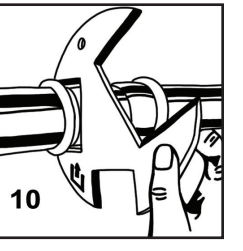

10

INSERTION DEPTH CHARTS

EVANS PRESSLOK® INSERTION DEPTH CHART (TOLERANCES +/- .100")		
Tube Size	TEE MAINS & CPLGS	TEE BRANCHES & HALF CPLGS
.5"	0.813	0.834
.75"	0.897	0.88
1"	0.961	0.948
1.5"	1.089	0.975
2"	1.529	1.515
2.5"	2.32	2.315
3"	2.595	2.569
4"	2.907	2.91

EVANS PRESSLOK® INSERTION DEPTH CHART (TOLERANCES +/- .100")		
Tube Size	45° ELBOWS	90° ELBOWS
.5"	0.847	0.803
.75"	0.851	0.861
1"	1.015	1.103
1.5"	1.145	1.136
2"	1.62	1.47
2.5"	2.32	2.354
3"	2.591	2.55
4"	3.15	3.118

Note:
Insertion depths vary between configurations

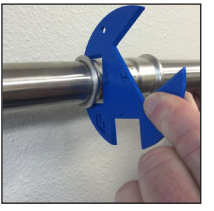
INSTALLATION INSPECTION GO/NO GO GAUGES

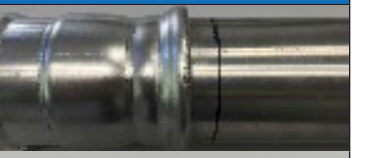
WARNING
• Always inspect each joint to ensure proper product installation. • Undersized or oversized tube and improperly pressed fitting or couplings are unacceptable. Any of these conditions must be corrected before attempting to pressurize the system. • Failure to follow these instructions could result in serious personal injury, property damage, joint leakage, and/or joint failure. • Proper tube preparation and proper pressing of coupling and fittings is essential for maximum joint performance. THESE CONDITIONS MUST BE PRESENT TO ENSURE PROPER JOINT ASSEMBLY.

PROPER PRESS (ACCEPTABLE)		
Sizes 1/2” thru 2” USE GO/NO-GO GAUGES 1/2”, 3/4” 1” 1-1/2”, 2”, 2-1/2”	Hexagonal Shaped Press	
Sizes 2-1/2” thru 4” USE GO/NO-GO GAUGES 1-1/2”, 2”, 2-1/2” 3”, 4”	360° Round Shaped Press	

Presslok® Go/No-Go Gauges

If Presslok® Go/No-Go Gauge slips over 2 SETS of pressed sections of fitting, press is acceptable. If gauge does not slip over 2 SETS of pressed sections, press is unacceptable.



IMPROPER PRESS (NOT ACCEPTABLE)	
Tube End Not Fully Inserted	
Not Pressed Correctly Due to Incorrect Jaw Placement*	
Note: Incorrect jaw placement for sizes 1/2" thru 2" jaws.	
*Note: Incorrect Jaw Placement for Sizes 2-1/2" thru 4". Damaged Jaws/ Tongs Causing Misalignment of Jaws	

O-RING SELECTION

CAUTION

- To ensure maximum product performance, always specify the proper grade O-ring for the intended service.
- Failure to select the proper grade O-ring, for the service intended, may cause joint failure resulting in property damage or personal injury.

Evans Components Presslok® System fittings are supplied with pre-lubricated O-rings. The O-rings are lubricated with Evans 111 high purity Teflon based lube. This proprietary lubricant contains no hydrocarbons, is oxygen compatible, and has a vapor pressure rating of 10-7 Torr and temperature rating of –100 F° to 450 F°. Evaporation ASTM D-2595, under 30 hours @ 400°F is 11.50%. Vapor Pressure, Knudsen @ 68°F 10-7 Torr. Vacuum Thermal Stability, NASA SP-R-0022A 24 hrs. @ 6X10-6, weight loss 0.07%, water vapor recovery 0.01%. Oxidation Stability ASTM D-942, 250°F @ 100 hours, 0 psi drop. A copy of Evans analytical report may be requested by contacting Evans Components or a local distributor.

Many factors must be considered for optimum O-ring performance. Do NOT subject O-rings to temperatures beyond the recommended limits, since excessive temperatures will degrade O-ring life and performance. The services listed below are general service recommendations and they apply only to Evans Components Presslok® O-rings. Recommendations for a particular service do not necessarily imply compatibility of the couplings, related fittings, or other components for the same service.

Evans Components Presslok® for stainless steel is approved for more than 225 applications, including many that are common within the semiconductor, solar, and pharmaceutical industries. Evans can provide a dependable solution that can not only withstand many corrosive materials but also save time and labor during installation. Whether the application is CDA or high purity gas , Evans Components Presslok® for stainless is a complete solution with tube, valves, and fittings. Since Presslok® systems can be joined under flow, full shutdowns are a thing of the past, which reduces downtime significantly.

Presslok® solutions are backed by written warranties.

	WATER SYSTEMS	GAS SYSTEMS
GRADE	E	V
TEMPERATURE RANGE	-30 F° to 230 F° (-34 C° to 110 C°)	20 F° to 300 F° (-7 C° to 149 C°)
COMPOUND	EPDM	Viton
COLOR STRIPE	NONE	Blue Stripe
*PRESSURE RATING	300 psig (20 Bar) Sizes 1/2" thru 1-1/2" 200 psig (13 Bar) Sizes 2" thru 4"	300 psig (20 Bar) Sizes 1/2" thru 1-1/2" 200 psig (13 Bar) Sizes 2" thru 4"

*Evans Components Presslok® stainless steel products must be used only on services that are compatible with the O-ring and fitting materials. Incompatible services may result in leakage. For services not listed, or for special services, contact Evans Components or local distributor for recommendations.

TUBING SUPPORT

CAUTION

- Do NOT climb on or hang from tubing installed with Evans Components Presslok® products. Failure to follow this instruction will cause undue stress on installed joint, resulting in joint failure, serious personal injury, and property damage.

Tubing that is joined with the Evans Components Presslok® System products, like all other tubing systems, requires support to carry the weight of tubes and equipment. The support or hanging method must eliminate stress on fitting/valve joints, tubing, and other components. In addition, the method of support must allow tube-line movement (expansion, contraction, and seismic), where required, along with other design requirements such as drainage.

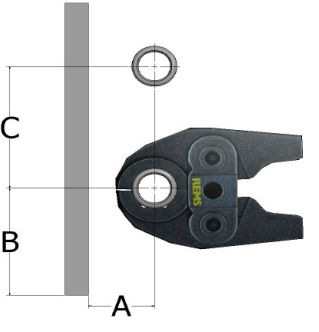
For approved Type 304 and 316 stainless steel tube, the maximum hanger spacing corresponds to ASME B31.1, ASME B31.3, and ASTM-A269, as noted, and must be used only in conjunction with Evans Components Presslok® System products on approved stainless steel tube.

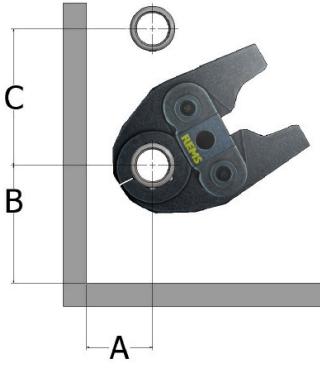
PIPING SUPPORT FOR APPROVED TYPE 304/304L, TYPE 316/316L STAINLESS STEEL PIPE AND SCHEDULE 5 CARBON STEEL PIPE					
Nominal Diameter Inches/mm	Actual Outside Diameter Inches/mm	Water Service			
		UL/ULC/ FM*	B31.1	B31.3	B31.9
1/2 15	0.840 21.3	-	6 1.8	6 1.8	7 2.1
3/4 20	1.050 26.9	-	7 2.1	7 2.1	8 2.4
1 25	1.315 33.7	12 3.7	7 2.1	7 2.1	9 2.7
1-1/4 32	1.660 42.4	12 3.7	7 2.1	7 2.1	11 3.4
1-1/2 40	1.900 48.3	12 3.7	7 2.1	7 2.1	12 3.7
2 50	2.375 60.3	12 3.7	10 3.1	10 3.1	13 4.0
Nominal Diameter Inches/mm	Actual Outside Diameter Inches/mm	Gas/Air Service			
		-	B31.1	B31.3	B31.9
1/2 15	0.840 21.3	-	8 2.4	8 2.4	7 2.1
3/4 20	1.050 26.9	-	9 2.7	9 2.7	8 2.4
1 25	1.315 33.7	-	9 2.7	9 2.7	9 2.7
1-1/4 32	1.660 42.4	-	9 2.7	9 2.7	11 3.4
1-1/2 40	1.900 48.3	-	9 2.7	9 2.7	13 4.0
2 50	2.375 60.3	-	13 4.0	13 4.0	15 4.6

SPACE REQUIREMENTS FOR THE PRESSING OPERATION (JAWS)

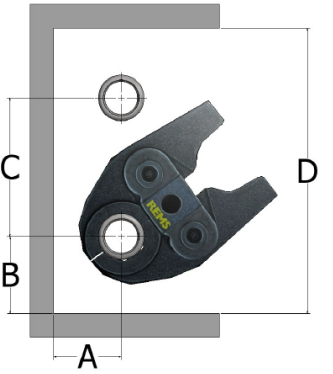
Evans 701 Series 1/2" thru 2"

I, II. SPACE REQUIREMENT DIMENSIONS - INCHES (MM)			
Outside Diameter	A	B	C
1/2 (12.7)	1.25 (31.75)	2.50 (63.5)	2.75 (69.85)
3/4 (19.05)	1.25 (31.75)	2.50 (63.5)	3.00 (76.2)
1 (25.4)	1.50 (38.1)	2.50 (63.5)	3.50 (88.9)
1-1/2 (38.1)	1.50 (38.1)	2.75 (69.85)	4.00 (101.6)
2 (50.8)	2.50 (63.5)	4.00 (101.6)	5.25 (133.35)





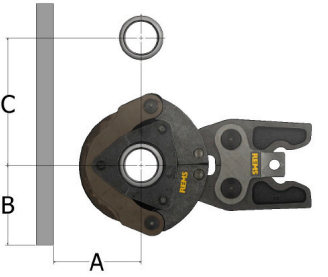
III. SPACE REQUIREMENT DIMENSIONS - INCHES (MM)				
Outside Diameter	A	B	C	D
1/2 (12.7)	1.75 (44.45)	1.75 (44.45)	3.50 (88.9)	12.00 (304.8)
3/4 (19.05)	1.75 (44.45)	1.75 (44.45)	4.25 (107.95)	12.50 (317.5)
1 (25.4)	2.25 (57.15)	2.25 (57.15)	5.00 (127)	12.50 (317.5)
1-1/2 (38.1)	2.00 (50.8)	2.25 (57.15)	5.00 (127)	12.75 (323.85)
2 (50.8)	2.75 (69.85)	3.25 (82.55)	6.75 (171.45)	16.00 (406.4)



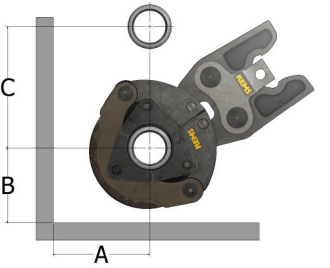
SPACE REQUIREMENTS FOR THE PRESSING OPERATION (JAWS)

Evans 801 Series 2-1/2" thru 4"

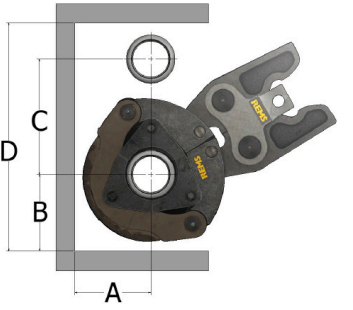
I. SPACE REQUIREMENT DIMENSIONS - INCHES (MM)			
Outside Diameter	A	B	C
4 (101.6)	7.50 (190.5)	8.00 (203.2)	9.75 (247.65)



II. SPACE REQUIREMENT DIMENSIONS - INCHES (MM)			
Outside Diameter	A	B	C
4 (101.6)	10.25 (260.35)	10.50 (266.7)	13.00 (330.2)



III. SPACE REQUIREMENT DIMENSIONS - INCHES (MM)				
Outside Diameter	A	B	C	D
4 (101.6)	10.25 (260.35)	10.50 (266.7)	13.00 (330.2)	18.00 (457.2)



REMS CENTO-EVANS PRESSLOK® TUBE CUTTERS

- Light, portable compact machine. Universal for cutting and deburring tube. For trade and industry. For the building site and the workshop.
- Stainless steel tube cutting for Evans Components Presslok® systems sizes 1/4-inch thru 4-inch (6.35mm thru 101.6mm).

REMS Cento– Cutting and Deburring Press Fitting Tool. Super Fast. Right Angled. Chip Free. No Outer Burr. Dry Cutting.

- **Ideal for Evans Components Presslok® Systems**
- **Right Angled Cutting**, according to requirements
- **Chip-free**, no chips in tubing system
- **No Outer Burr**, no damage to O-ring by outer burr
- **Dry**, no damage to the O-ring
- **Fast**, prevents degradation of the tube material through overheating

Design

Compact, mobile tube cutting machine for fast, right angled. cutting with no outer burr. Handy and light, only 16.8 kg. Stable, distortion-free cast construction for right angled cutting. East tube-cutting through specially designed cutter wheel. Powered cutter wheel and linear advance for fast cutting (Patent EP 1 782 904). Power saving feed-in through easy to grip, proven advance-lever and needle bearing mounted machine screw spindle. Cutter wheel protected-as movement restricted to before any contact with the rollers. Connection for driving outer/inner tube deburrer REMS REG 10-54 E. For work-bench, stand or wheel stand as an accessory, for easy transport, optimum working height, and stable positioning. An alternative feed lever is available for operating the drive unit on the floor - see accessories.

Running Rollers

REMS Cento with 4 strong hardened precision tubular steel running rollers on ball bearings for low-friction turning of the tubes to be cut1/4-inch thru 4-inch (6.35mm thru 101.6mm), trapezoidally arranged, replaceable.

Drive

Robust gear, precisely mounted in roller and needle bearings, maintenance-free. Proven universal motor, 1200 W. Powerful, e.g. stainless steel tube 2-inch (50.8mm) in just 4 sec. Ideal speed 115 rpm for optimum cutting speed of the tube. Safety foot-switch with emergency stop.

REMS Cutter Wheels

Top German quality. Cutter wheels specially designed to the performance capability of the REMS Cento and for numerous tube materials with variable cutting geometries for fast cutting with no outer burr. Specially hardened, from proven, through-hardened REMS die-steel, ensuring long service life.

REMS Tube Deburrer

Inner tube deburrer REMS REG 28-108 for tubes 1 -inch thru 4-inch (25.4mm thru 101.6mm), for electric drive with the REMS Cento tube cutting machine, as an accessory. Outer/inner tube deburrer REMS REG 10-54 E for tubes 3/4-inch thru 2" (19.05mm thru 50.8mm), for electric drive with the REMS Cento tube cutting machine.

REMS Cento Basic

Tube cutting machine for fast, right angled, cutting of tube with no outer burr. For tubes of the press fitting systems made from stainless steel, 1/4-inch thru 4-inch (6.35mm thru 101.6mm). With maintenance-free gear, proven universal motor 230 V or 110 V, 50-60Hz, 1200 W. Speed 115 rpm. Rollers in hardened precision steel pipe for tubes 1-inch thru 4-inch (19.05mm thru 101.6mm). Safety foot-switch. Ring spanner. Without cutter wheel. For workbench, stand, or wheel stand. In a carton.

Part Number: 113840

Part Number: 845001

ACCESSORIES	PART NUMBER
Feed Lever: for operating the drive unit on the floor (for drive units manufactured from 2014 onwards.)	845218
REMS Cutter Wheel CUINOX: Stainless steel tube of Presslok® systems. 	845050
Stainless Tubular Steel INOX rollers: Pack of 4 	845110
Wheel Stand 	849310

PRODUCT DATA

FOR ADDITIONAL INFORMATION, PLEASE REFER TO EVANS COMPONENTS PL SERIES PRESSLOK® 316L TUBE FITTINGS/ VALVES BROCHURE AVAILABLE ON OUR WEBSITE OR THROUGH A LOCAL DISTRIBUTOR.

EVANS COMPONENTS INC.
7606 SW Bridgeport Road
Portland, Oregon 97224
Phone 971-249-1600
Fax 971-249-1601
www.evanscomponents.com

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