FIG. 74FP SlideLOK® Ready for Installation Coupling

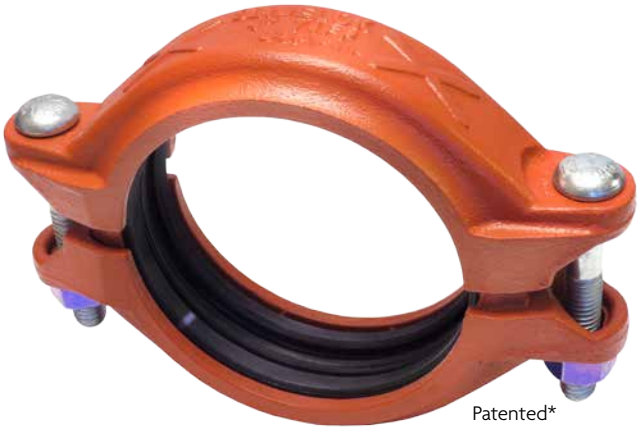
GRUVLOK®

The patented SlideLOK coupling is the most rigid ready for installation coupling designed to reduce installation time. The slide action eases assembly and reduces installation time. The patented gasket provides four separate sealing surfaces for added protection.

The SlideLOK coupling is designed to be used with roll, cut or swage grooved steel pipe, Gruvlok® and SPF® grooved-end fittings, and valves.

The SlideLOK coupling allows for a maximum working pressure of 450 psi on roll or cut grooved carbon steel standard wall pipe. The SlideLOK coupling provides a rigid connection allowing pipe hanging practices per ASME B31 Pipe Codes.

* Patent: 8550502, 8615865, 2732427, D680629, D680630, D696751, 8282136, 9239123, 9297482, 9194516, 9297484, 9039046, 9500307



Patented*

SlideLOK Pressure Responsive Gasket

c UL us LISTED FM APPROVED

For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil® Sales Representative.

MATERIAL SPECIFICATIONS

HOUSING:
Ductile Iron conforming to ASTM A-536, Grade 65-45-12

BOLTS:
- ☐ SAE J429, Grade 5, Zinc Electroplated (standard)
- ☐ ASTM A193, Grade B8, 304 Stainless Steel (optional)
- ☐ SAE J429, Grade 5, Thermo-Diffusion Coated (special order)

HEAVY HEX NUTS:
- ☐ ASTM A563, Grade A, Zinc Electroplated, Violet Dyed (standard)
- ☐ ASTM A194, Grade 8, 304 Stainless Steel (optional)
- ☐ ASTM A563, Grade A, Thermo-Diffusion Coated (special order)

COATINGS:
- ☐ Rust inhibiting paint Color: ORANGE (standard)
- ☐ Hot Dipped Zinc Galvanized (optional)

LUBRICATION:
- ☐ Gruvlok Xtreme™ required for dry pipe systems and freezer applications.

GASKETS: Materials
Properties as designated in accordance with ASTM D-2000.

- ☐ **Pre-Lubricated Grade "E" EPDM, Type A Gasket** (Violet color code)
  -40°F to 150°F (Service Temperature Range)(-40°C to 66°C)
  Recommended for wet and dry (oil free air) pipe fire protection sprinkler systems. For dry pipe systems and freezer applications, Gruvlok Xtreme™ Lubricant is required.

GASKET TYPE:
SlideLOK (1¼" - 8")

PROJECT INFORMATION	APPROVAL STAMP
Project:	☐ **Approved**
Address:	☐ **Approved as noted**
Contractor:	☐ **Not approved**
Engineer:	**Remarks:**
Submittal Date:	
Notes 1:	
Notes 2:	

FIG. 74FP SlideLOK® Ready for Installation Coupling

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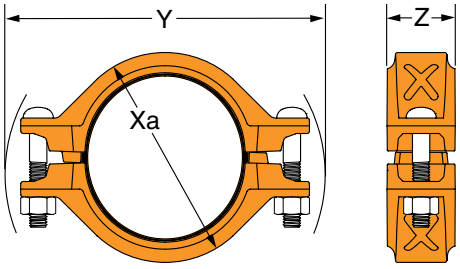
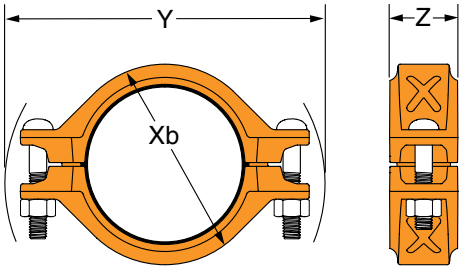
UNINSTALLED VIEW



INSTALLED VIEW



74FP SLIDELOK COUPLING

Figure Number	Nominal Size	Pipe O.D.	Max. Working Pressure▲	Max. End Load	Range of Pipe End Separation	Coupling Dimensions				Coupling Bolts		Specified Torque §		Approx. Wt. Ea.
						Xa	Xb	Y	Z	Qty.	Size	Min.	Max.	
	In./DN(mm)	*In./mm*	*PSI/bar*	*Lbs./kN*	*In./mm*	*In./mm*	*In./mm*	*In./mm*	*In./mm*		*In./mm*	*Ft.-Lbs./N-m*		*Lbs./Kg*
74FP	1¼ *32*	1.660 *42.2*	450 *31.0*	973 *4.33*	0-3/16 *0-4.8*	2 29/32 *74*	2½ *64*	5 17/32 *140*	2 *51*	2	½ x 2½ *M12 x 63*	80 *110*	100 *135*	1.9 *0.9*
74FP	1½ *40*	1.900 *48.3*	450 *31.0*	1,275 *5.67*	0-3/16 *0-4.8*	3 5/32 *80*	2¾ *70*	5 11/16 *144*	2 *51*	2	½ x 2½ *M12 x 63*	80 *110*	100 *135*	2.1 *1.0*
74FP	2 *50*	2.375 *60.3*	450 *31.0*	1,993 *8.87*	0-3/16 *0-4.8*	4 13/32 *112*	4 *102*	6 15/32 *164*	2 *51*	2	½ x 2¾ *M12 x 70*	80 *110*	100 *135*	2.5 *1.1*
74FP	2½ *65*	2.875 *73.0*	450 *31.0*	2,921 *12.99*	0-3/16 *0-4.8*	4 3/16 *106*	3 11/16 *94*	6 11/16 *170*	2 *51*	2	½ x 2¾ *M12 x 70*	80 *110*	100 *135*	2.6 *1.2*
74FP	3 *80*	3.500 *88.9*	450 *31.0*	4,329 *19.26*	0-3/16 *0-4.8*	4 29/32 *125*	4 13/32 *112*	7⅜ *187*	2 *51*	2	½ x 3 *M12 x 76*	80 *110*	100 *135*	3.1 *1.4*
74FP	4 *100*	4.500 *114.3*	400 *27.6*	6,361 *28.30*	0-¼ *0-6.3*	5 31/32 *152*	5 13/32 *137*	8 11/16 *221*	2 *51*	2	½ x 3½ *M12 x 89*	80 *110*	100 *135*	3.1 *1.4*
74*	5 *125*	5.563 *141.3*	300 *20.7*	7,291 *32.43*	0-5/16 *0-7.9*	7¼ *184*	6¾ *171*	10½ *267*	2 *51*	2	⅝ x 3½ *M16 x 89*	100 *135*	130 *175*	5.5 *2.5*
74*	6 *150*	6.625 *168.3*	300 *20.7*	10,341 *46.00*	0-5/16 *0-7.9*	8 5/16 *211*	7¾ *197*	11 *279*	2 *51*	2	⅝ x 3½ *M16 x 89*	100 *135*	130 *175*	6.3 *2.9*
74*	8 *200*	8.625 *219.1*	300 *20.7*	17,527 *77.96*	0-5/16 *0-7.9*	10¾ *273*	10⅛ *273*	14 *356*	2½ *64*	2	¾ x 4½ *M20 x 115*	130 *175*	180 *245*	14.3 *6.5*

Range of Pipe End Separation values are for system layout reference only. Actual installation spacing may vary based on pipe condition.

* When ordering, refer to product as FP74.

§ – Specified bolt torque values are suitable for Schedule 40, 30, 10, light wall, and specialty pipes.

▲ – Maximum Working Pressure Rating is for Schedule 40 pipe.

For use in Dry Pipe Systems: The SlideLOK pressure responsive gasket is featured with four sealing surfaces to increase protection in low temperature applications. Once the SlideLOK gasket is installed, the performance of the gasket is equivalent to the Gruvlok Flush Gap Gasket. Note: The Flush Gap Gasket is not interchangeable with the SlideLOK gasket.

⚠ WARNING

For dry pipe systems and freezer applications lubrication of the gasket is required, Gruvlok® Xtreme™ Lubricant is required.

FIG. 74FP SlideLOK® Ready for Installation Coupling

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LISTINGS AND APPROVALS

Manufacturer	Pipe	Groove	NPS Size Range	Pressure Rating	
				cULus	FM
			In./DN(mm)	*PSI/bar*	*PSI/bar*
Schedule 40*		Roll, Cut	1¼ - 3	450	450
			32 - 80	*31.0*	*31.0*
			4	400	400
			100	*27.6*	*27.6*
			5 - 8	300	300
			125 - 200	*20.7*	*20.7*
Schedule 30*		Roll	8	300	300
			200	*20.7*	*20.7*
Schedule 10*		Roll	1¼ - 4	365	365
			32 - 100	*25.2*	*25.2*
			5 - 8	300	300
			125 - 200	*20.7*	*20.7*
Wheatland Tube	Schedule 10	Swage	1¼ - 4	300	300
			32 - 100	*20.7*	*20.7*
	Mega-Flow	Roll	1¼ - 4, 6	300	300
			32 - 100, 150	*20.7*	*20.7*
	Mega-Thread	Roll	1¼ - 2	300	300
			32 - 50	*20.7*	*20.7*
	GL	Roll	1¼ - 2	300	300
			32 - 50	*20.7*	*20.7*
	MLT	Roll	1¼ - 2	300	300
			32 - 50	*20.7*	*20.7*
Youngstown	Fire-Flow	Roll	1½ - 4	300	300
			40 - 100	*20.7*	*20.7*
	EZ-Thread	Roll	1¼ - 2	300	300
			32 - 50	*20.7*	*20.7*
Bull Moose Tube	Eddy-Flow	Roll	1½ - 4	300	300
			40 - 100	*20.7*	*20.7*
	Eddy-Thread 40	Roll	1¼ - 2	300	300
			32 - 50	*20.7*	*20.7*

For the latest cULus pressure ratings, FM pressure ratings, and pipe approvals, please visit anvilintl.com or contact your local Anvil Representative.

* Schedule 40/30 pipe to ASTM A795/A53/ASME B36.10 in accordance with NFPA-13.

* Schedule 10 pipe to ASTM A135/A795/A53 in accordance with NFPA-13.

FIG. 74FP SlideLOK® Ready for Installation Coupling

GRUVLOK

INSTALLATION INSTRUCTIONS

READY FOR INSTALLATION - RIGHT OUT OF THE BOX

Do not disassemble the SlideLOK Coupling. The 74FP coupling is ready for installation. The bolt and gasket do not need to be removed.

1 Pipe Preparation

Pipe ends are to be cut, rolled or swage grooved according to Anvil specifications. Not for use on "EG" grooved pipe ends. The pipe end must be smooth and free from metal burrs, sharp edges or projections.

2 Gasket Preparation

Ensure the gasket is suitable for the intended application by referring to the Anvil gasket compatibility chart.

SlideLOK pre-lubricated gasket does not require lubrication.

CAUTION: Gruvlok Xtreme Lubricant must be applied when used in dry pipe systems or freezer applications.

3 Assembly

The SlideLOK Fig. 74FP may be installed by one of two methods. The preferred method depends on the type of pipe components being joined and their orientation. Please review both methods before installing.

STEP 3 – METHOD #1

Slide the SlideLOK coupling completely over the grooved pipe end. This will allow a clear and un-obstructed view of the pipe for correct alignment.

A. Slide the coupling on the pipe past the groove. The bolts and nuts can be hand tightened to position the coupling in place.

B. Align the mating pipe end. Align the two adjoining pipes together.

C. Slide the coupling back over the grooves so that the coupling keys are located over the respective grooves on both pipe ends.

D. Follow the instructions on fastening the coupling as shown in Step 4.

STEP 3 – METHOD #2

Slide the SlideLOK coupling half way onto the pipe end or fitting. This will better accommodate fitting, and valve accessories during installation.

A. Slide the coupling on the fitting so that the groove and keys are aligned.

B. Bring the pipe end or fitting towards the coupling and insert so that the groove and coupling keys are aligned.

C. Hand tighten the nuts to correctly position the couplings keys over the respective grooved ends.

D. Follow the instructions on fastening the coupling as shown in Step 4.

4 Tighten Nuts

Securely tighten nuts alternately and equally, keeping the gaps at the bolt pads evenly spaced.

ANSI Specified Bolt Torque		
Bolt Size	Wrench Size	Specified Bolt Torque*
In.	*In.*	*Ft.-Lbs*
1/2	7/8	80-100
5/8	1 1/16	100-130
3/4	1 1/4	130-180

* Non-lubricated bolt torque

CAUTION: Uneven tightening may cause the gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

5 Assembly is complete

Visually inspect the pipe joint to assure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have equal gaps on each side of the coupling.

NOTICE: Visually inspect both sides of the coupling to ensure gaps between bolt pads are evenly spaced and are parallel. Any deviations must be corrected before placing coupling into service.

CORRECT

INCORRECT

FIG. 74FP SlideLOK® Ready for Installation Coupling

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RE-INSTALLATION INSTRUCTIONS

REINSTALLATION OF THE 74FP SLIDELOK COUPLING

The SlideLOK coupling is designed to be installed in the ready for installation assembly position once. After the initial assemble the following steps are to be taken to re-install the 74FP SlideLOK coupling.

1 De-Pressurize the System

De-pressurize the system before removing the SlideLOK Coupling. Dis-assemble the couplings by removing the nuts, bolts and gasket from the housing halves. A wrench is required to overcome the epoxy used to secure the nuts on the bolts.

2 Pipe Preparation

Pipe ends are to be cut, rolled or swage grooved according to Anvil specifications. Not for use on "EG" grooved pipe ends. The pipe end must be smooth and free from metal burrs or projections.

3 Gasket Preparation

Ensure the gasket is suitable for the intended application by referring to the Anvil gasket compatibility chart. A light coating of Gruvlok® XTreme™ lubricant must be applied to the gasket prior to installation.

4 Pipe Alignment and Gasket Installation

Slide the gasket onto the pipe then align the two pipe ends together. Pull the gasket into position, centering it between the grooves on each pipe. Gasket should not extend into the groove on either pipe.

5 Housing Assembly

Place each of the housing halves on the pipe making sure the housing key fits into the groove. Be sure that the tongue and recess portions of the housing mate properly. Insert the bolts.

6 Tighten Nuts

Securely tighten nuts alternately and equally, keeping the gaps at the bolt pads evenly spaced.

ANSI Specified Bolt Torque

Bolt Size	Wrench Size	Specified Bolt Torque*
In.	*In.*	*Ft.-Lbs*
1/2	7/8	80-100
5/8	1 1/16	100-130
3/4	1 1/4	130-180

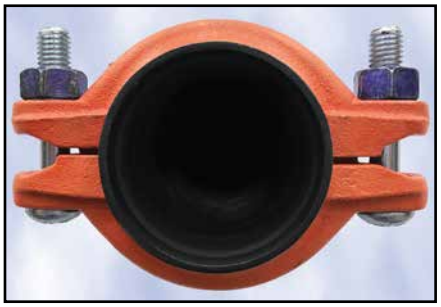
* Non-lubricated bolt torque

CAUTION: Uneven tightening may cause the gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

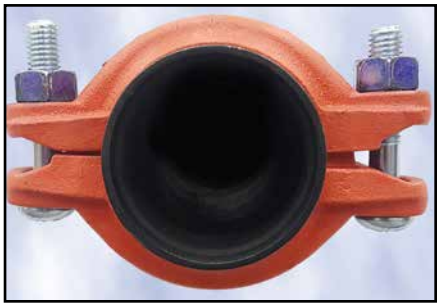
7 Assembly is complete

Visually inspect the pipe joint to assure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have equal gaps on each side of the coupling.

NOTICE: Visually inspect both sides of the coupling to ensure gaps between bolt pads are evenly spaced and are parallel. Any deviations must be corrected before placing coupling into service.

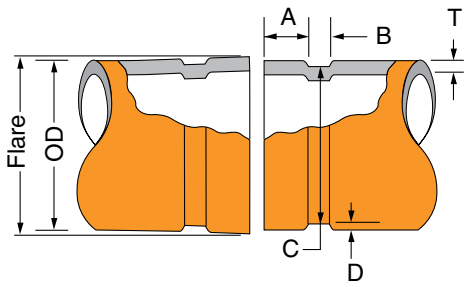


CORRECT



INCORRECT

FIG. 74FP SlideLOK® Ready for Installation Coupling



SWAGE GROOVE SPECIFICATION

-1-	-2-			-3-	-4-	-5-		-6-	-7-	-8-
Nominal Pipe Size	O.D.			"A" ±0.030/ ±0.76	"B" ±0.030/ ±0.76	"C" Actual	"C" Tol. +0.000	"D" (Ref. Only)	"T" Min. Allow. Wall Thick	Max. Flare Dia.
	Actual	Tolerance								
In./DN(mm)	*In./mm*	*+In./mm*	*-In./mm*	*In./mm*	*In./mm*	*In./mm*	*-In./mm*	*In./mm*	*In./mm*	*In./mm*
1¼ *32*	1.660 *42.2*	+0.016 *+0.41*	-0.016 *-0.41*	0.625 *15.88*	0.281 *7.14*	1.535 *38.99*	-0.015 *-0.38*	0.063 *1.60*	0.065 *1.7*	1.770 *45.0*
1½ *40*	1.900 *48.3*	+0.019 *+0.48*	-0.019 *-0.48*	0.625 *15.88*	0.281 *7.14*	1.775 *45.09*	-0.015 *-0.38*	0.063 *1.60*	0.065 *1.7*	2.010 *51.1*
2 *50*	2.375 *60.3*	+0.024 *+0.61*	-0.024 *-0.61*	0.625 *15.88*	0.344 *8.74*	2.250 *57.15*	-0.015 *-0.38*	0.063 *1.60*	0.065 *1.7*	2.480 *63.0*
2½ *65*	2.875 *73.0*	+0.029 *+0.74*	-0.029 *-0.74*	0.625 *15.88*	0.344 *8.74*	2.720 *69.09*	-0.018 *-0.46*	0.078 *1.98*	0.083 *2.1*	2.980 *75.7*
3 *80*	3.500 *88.9*	+0.035 *+0.89*	-0.031 *-0.79*	0.625 *15.88*	0.344 *8.74*	3.344 *84.94*	-0.018 *-0.46*	0.078 *1.98*	0.083 *2.1*	3.600 *91.4*
4 *100*	4.500 *114.3*	+0.045 *+1.14*	-0.031 *-0.79*	0.625 *15.88*	0.344 *8.74*	4.334 *110.08*	-0.020 *-0.51*	0.083 *2.11*	0.083 *2.1*	4.600 *116.8*

COLUMN 1- Nominal IPS Pipe size.

COLUMN 2 - IPS outside diameter.

COLUMN 3 - Gasket seat must be free from scores, seams, chips, rust or scale which may interfere with proper sealing of the gasket. Gasket seat width (Dimension A) is to be measured from the pipe end to the vertical flank in the groove wall.

COLUMN 4 - Groove width (Dimension B) is to be measured between vertical flank of the groove size walls.

COLUMN 5 - The groove must be of uniform depth around the entire pipe circumference. (See column 6).

COLUMN 6 - Groove depth: for reference only. Groove must conform to the groove diameter "C" listed in column 5.

COLUMN 7 - Minimum allowable wall thickness which may be roll grooved.

COLUMN 8 - Maximum allowable pipe end flare diameter. Measured at the most extreme pipe end diameter of the gasket seat area.

Out of roundness: Difference between maximum O.D. and minimum O.D. measured at 90° must not exceed total O.D. tolerance listed (reference column 2).

For IPS pipe, the maximum allowable tolerance from square cut ends is 0.03" for 1" thru 3½"; and 0.045" for 4".

Weld Seams must be ground flush with the pipe O.D. and ID prior to roll grooving. Failure to do so may result in damage to the roll grooving machine and unacceptable roll grooves may be produced.

▼ "A" tolerance +0.030" / -0.060" (+0.77 / -1.54 mm)