

SlideLOK® Pre-Installed Cap & Coupling



ASC Engineered Solutions™ patented SLT Cap's geometry is combined with our patented SlideLOK coupling to form the Industry's only Ready for Installation Cap. SLT Technology is designed to reduce installation time by coming preassembled from the factory with no loose parts. Installation time for the SLT Cap is up to 50% less than all other industry grooved caps.

The SLT Cap is designed to be used with standard roll, cut or swage grooved steel pipe, Gruvlok or SPF grooved-end fittings and valves. The SLT Cap allows for a maximum working pressure up to 450psi.

Patents: 9039046; 9168585; 9297484; 9534715; D680629; D680630; D696751

Additional Patents Pending

For Listings/Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions $^{\text{\tiny M}}$ Sales Representative.

Material Specifications

Housing

Cap: Ductile Iron conforming to ASTM A536, Grade 65-45-12

Coupling: Ductile Iron conforming to ASTM A536, Grade 65-45-12

Bolts

SAE J429, Grade 5, Zinc Electroplated (standard) SAE J429, Grade 5, Thermo-Diffusion Coated (special order)

Heavy Hex Nuts

ASTM A563, Grade A, Zinc Electroplated (standard)

ASTM A563, Grade A, Thermo-Diffusion Coated (special order)

Hardware Kits

304 Stainless Steel (available in sizes up to 3/4")

KIT INCLUDES:

(2) Bolts per ASTM A193, Grade B8

(2) Heavy Hex Nuts per ASTM A194, Grade 8

Coatings

Rust inhibiting paint Color: Orange (standard) Hot Dipped Zinc Galvanized (optional)

Gasket Material

Properties as designated in accordance with ASTM D2000

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 (1" - 4")

Lubrication

Gruvlok Xtreme (when required)



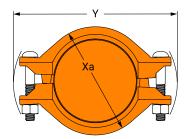


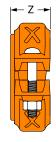
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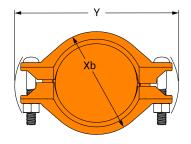
Gruvlok® Grooved Fittings



SlideLOK® Pre-Installed Cap & Coupling Fig. FP7074SLT









Uninstalled View

Installed View

Nominal Size	Pipe	Max. Working	Max. End	Max.	Coupling Dimensions				Co	Approx.	
	0.D.	Pressure	Load	Separation	Xa	Xb	Υ	Z	Qty.	Size	Wt. Ea
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In./mm	In./mm	In./mm	In./mm	In./mm		ln./mm	Lbs./k
1	1.315	450	611	1/16	211/16	21/2	5	21/8	2	³ / ₈ x 2 ¹ / ₄	1.9
25	33.4	31	2.72	1.6	68	64	127	54	2	M10 x 57	0.9
11/4	1.660	450	973	1/16	229/32	21/2	5 ¹⁷ / ₃₂	21/8	2	½ x 2½	2.4
32	42.2	31	4.33	1.6	74	64	140	54		M12 x 63	1.1
11/2	1.900	450	1,275	1/16	3 5/32	23/4	5 11/16	21/8	2	½ x 2½	2.7
40	48.3	31	5.67	1.6	80	70	144	54		M12 x 63	1.2
2	2.375	450	1,993	1/16	4 13/32	4	6 15/32	21/8	2	¹ / ₂ x 2 ³ / ₄	3.3
50	60.3	31	8.87	1.6	112	102	164	54		M12 x 70	1.5
21/2	2.875	450	2,921	1/16	4 ³ / ₁₆	3 11/16	6 11/16	21/8	2	¹ / ₂ x 2 ³ / ₄	3.8
65	73	31	12.99	1.6	106	94	170	54		M12 x 70	1.7
3	3.500	450	4,329	1/16	429/32	4 13/32	73/8	21/8	2	⅓ x 3	4.8
80	88.9	31	19.26	1.6	125	112	187	54		M12 x 76	2.2
4	4.500	450	6,361	1/8	531/32	5 13/32	8 11/16	21/4	2	½ x 3½	7.0
100	114.3	31	28.3	3.2	152	137	221	57		M12 x 89	3.2



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Listings and Approvals

Manufacturer	Pine	Groove	NPS Size	Pressure	Rating
	po	0.00.0	Range	cULus	FM
			In./DN(mm)	PSI/bar	PSI/bar
			1-4 25-100	450 31.0	450 31.0
Schedule 40*	ule 40*	Roll, Cut	5-6 125-150	300 20.7	300 20.7
			8 200	400 27.6	400 27.6
Sched	ule 30*	Roll	8 200	400 27.6	400 27.6
			1-4 25-100	365 25.2	365 25.2
Sched	ule 10*	Roll	5-6 125-150	300 20.7	300 20.7
			8 200	400 27.6	NR -
0.188	in. Wall	Roll	8 200	NR —	400 27.6
	Schedule 10	Swage	1 ½-4 32 - 100	365 25.2	300 20.7
		Swage	1 1/4-4 32 - 100	NR –	300 20.7
	меда-ноw	Roll	1¼-4, 6 32-100, 150	300 20.7	300 20.7
Wheatland Tube	Mega-Thread	Roll	1-2 25-50	300 20.7	300 20.7
	GL	Roll	1-2 25-50	300 20.7	300 20.7
	MLT	Roll	1-2 25-50	300 20.7	300 20.7
	WLS	Roll	1-2 25-50	300 20.7	NR –
	Fire-Flow	Roll	1½-4 40-100	300 20.7	300 20.7
Youngstown	EZ-Thread	Roll	1-2 25-50	300 20.7	300 20.7
Bull Moose	Eddy-Flow	Roll	1½-4 32-100	300 20.7	300 20.7
Tube	Eddy-Thread 40	Roll	1-2 25-50	300 20.7	300 20.7

Note:

For the latest cULus pressure ratings, FM pressure ratings, and pipe approvals, please visit asc-es.com or contact your local ASC Engineered Solutions Representative.



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 $^{^{\}ast}$ 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.

Grooved Fittings / Installation



Fig. FP7074SLT SlideLOK® Pre-Installed Cap & Coupling



Read and understand all instructions

WARNING

Ensure system is drained and depressurized before installation or service.

Use appropriate personal protective equipment.







Failure to follow these instructions could result in serious personal injury and/or property damage.

1 Pipe Preparation

Pipe ends are to be cut, rolled or swage grooved according to ASC Engineered Solutions™ 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 ASC gasket compatibility chart.

SlideLOK pre-lubricated gasket does not require lubrication.

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

3 Assembly

SLT Cap and Fittings may be installed onto any standard cut, rolled or swage grooved pipe ends or onto any standard groove fitting.

Step 3 - Grooved Pipe Assembly

- A. Slide the open coupling end onto the pipe until the cap butts against the pipe end.
- **B.** Align the open coupling key with the mating groove on the pipe end. The bolts and nuts may be hand tightened to position the coupling in place.





Step 3 – Grooved Fitting Assembly

- A. Slide the open coupling end onto the grooved fitting end until the cap butts against the end of the fitting.
- **B.** Align the open coupling key with the mating groove on the fitting. The bolts and nuts can be hand tightened to position the coupling in place.





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.

4 Tighten Nuts

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

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

Notice: Refer to Figure 74FP assembly instructions for replacement or disassembly of the coupling housing.

ANSI Specified Bolt Torque

Bolt Size	Wrench Size	Specified Bolt Torque*
In.	ln.	FtLbs
3/8	11/16	40-50
1/2	7/8	80-100
5/8	11/16	100-130
3/4	1 1/4	130-180

* Non-lubricated bolt torque



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.







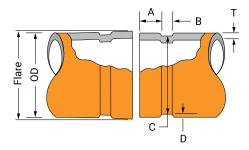


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Gruvlok® Grooved Fittings



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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 Diameter
1 ipc oizc	Actual	Toler	rance	10.000/ 10.70	10.000/ 10.70	Actual	10.000	(Ner. Omy)	Wall Tillok	2.4.110101
In./DN(mm)	In./mm	+In./mm	-In./mm	In./mm	In./mm	In./mm	-In./mm	In./mm	In./mm	In./mm
11/4	1.660	+0.016	-0.016	0.625	0.281	1.535	-0.015	0.063	0.065	1.770
32	42.2	+0.41	-0.41	15.88	7.14	38.99	-0.38	1.60	1.7	45.0
11/2	1.900	+0.019	-0.019	0.625	0.281	1.775	-0.015	0.063	0.065	2.010
40	48.3	+0.48	-0.48	15.88	7.14	45.09	-0.38	1.60	1.7	51.1
2	2.375	+0.024	-0.024	0.625	0.344	2.250	-0.015	0.063	0.065	2.480
50	60.3	+0.61	-0.61	15.88	8.74	57.15	-0.38	1.60	1.7	63.0
21/2	2.875	+0.029	-0.029	0.625	0.344	2.720	-0.018	0.078	0.083	2.980
65	73.0	+0.74	-0.74	15.88	8.74	69.09	-0.46	1.98	2.1	75.7
3	3.500	+0.035	-0.031	0.625	0.344	3.344	-0.018	0.078	0.083	3.600
80	88.9	+0.89	-0.79	15.88	8.74	84.94	-0.46	1.98	2.1	91.4
4	4.500	+0.045	-0.031	0.625	0.344	4.334	-0.020	0.083	0.083	4.600
100	114.3	+1.14	-0.79	15.88	8.74	110.08	-0.51	2.11	2.1	116.8

Note:

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.

 ${\bf COLUMN~4}$ – 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 $31\!\!/2$ "; 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)



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