

Tube Plugs



Tube Plugs

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●-Recommended

○-Suitable

One-Piece Tube Plugs

Tube Size	Maximum Pressure
● 0.375" to 3.000" (9.5 to 76.2mm) OD	150 PSI

Elliott's One-Piece Tube Plugs cover a wide tube OD range, making them ideal for sealing leaky tubes in both heat exchangers and boilers.

It is good practice to install a plug that is the same as or a compatible material to the tube to be plugged. The tube plugs are available in an array of materials to suit your needs: brass, carbon steel, 304 stainless steel, 316 stainless steel, 416 stainless steel, aluminum, and monel (other materials are available upon request). Elliott recommends puncturing the leaky tube with a One-Revolution Tube Cutter. This will ensure the tube is properly vented prior to plugging.



Features & Benefits:

- Quick method to plug leaky tubes - less labor cost.
- Easy to weld to tube sheet - peace of mind.
- Plug covers multiple tube sizes - less inventory cost.

Specifications:

- Specifications vary upon tube size and tube plug material. Contact Customer Service for details.

How To Order:

1. Specify tube size(s) to be plugged. *See table on opposite page.*
2. Select tube plug material: Choose a plug that is the same as or comparable material to the tube and tube sheet.
See table on opposite page.
3. Determine quantity needed: Recommend quantity of 2 plugs per tube.
4. Choose spares & accessories.

Spares & Accessories:

- One Revolution Tube Cutter: Utilize to puncture the tube to ensure the tube is properly vented so pressure cannot build up in the tube and cause the plugs to loosen. *See "One-Revolution Tube Cutter" on page 2 of the Tube Removal Catalog.*

One-Piece Tube Plugs

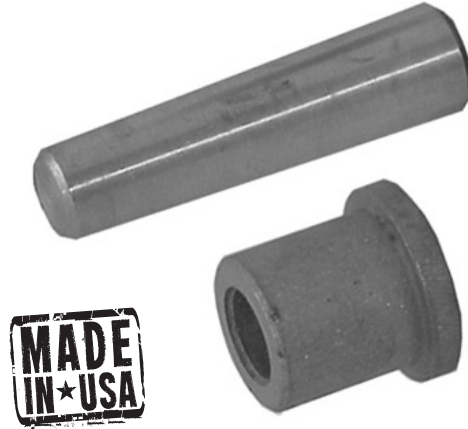
One-Piece Plug Part #									
Tube OD		BWG	Brass	Carbon Steel	Stainless Steel			Aluminum	Monel
Inch	mm				316	304	416		
3/8"	9.5	15-22	7180-6	7181-6	7182-6	7183-6	7184-6	7185-6	7186-6
1/2"	12.7	11-14							
1/2"	12.7	15-22	7180-8	7181-8	7182-8	7183-8	7184-8	7185-8	7186-8
5/8"	15.9	11-14							
5/8"	15.9	15-22	7180-10	7181-10	7182-10	7183-10	7184-10	7185-10	7186-10
3/4"	19.1	11-14							
3/4"	19.1	15-22	7180-12	7181-12	7182-12	7183-12	7184-12	7185-12	7186-12
7/8"	22.2	11-14							
7/8"	22.2	15-22	7180-14	7181-14	7182-14	7183-14	7184-14	7185-14	7186-14
1"	25.4	11-14							
1"	25.4	15-22	7180-16	7181-16	7182-16	7183-16	7184-16	7185-16	7186-16
1-1/8"	28.6	11-14							
1-1/8"	28.6	15-22	7180-18	7181-18	7182-18	7183-18	7184-18	7185-18	7186-18
1-1/4"	31.8	11-14							
1-1/4"	31.8	15-22	7180-20	7181-20	7182-20	7183-20	7184-20	7185-20	7186-20
1-3/8"	34.9	11-14							
1-3/8"	34.9	15-22	7180-22	7181-22	7182-22	7183-22	7184-22	7185-22	7186-22
1-1/2"	38.1	11-14							
1-1/2"	38.1	15-22	7180-24	7181-24	7182-24	7183-24	7184-24	7185-24	7186-24
2"	50.8	11-14	7180-28	7181-28	7182-28	7183-28	7184-28	7185-28	7186-28
2"	50.8	15-22	7180-30	7181-30	7182-30	7183-30	7184-30	7185-30	7186-30
2-1/4"	57.2	11-14	7180-32	7181-32	7182-32	7183-32	7184-32	7185-32	7186-32
2-1/4"	57.2	15-22	7180-34	7181-34	7182-34	7183-34	7184-34	7185-34	7186-34
2-1/2"	63.5	11-14							
2-1/2"	63.5	15-22	7180-40	7181-40	7182-40	7183-40	7184-40	7185-40	7186-40
3"	76.2	11-14	7180-48	7181-48	7182-48	7183-48	7184-48	7185-48	7186-48
3"	76.2	15-22	7180-50	7181-50	7182-50	7183-50	7184-50	7185-50	7186-50
Two plugs required per tube									
Note: Additional sizes and materials are available upon request. A minimum order quantity may be applicable for these special sizes and materials. Contact Customer Service for details.									

Two-Piece Tube Plugs

Tube Size	Maximum Pressure
● 0.375" to 1.250" (9.5 to 31.8mm) OD	150 PSI

Elliott's Two-Piece Tube Plugs offer more sealing compared to One-Piece Plugs. The tapered pin is driven into the ring, which is tapered on the inside and is parallel to the tube on the outside. This gives even expansion to the ring and a long contact to the seal.

It is good practice to install rings and pins that are the same as or a compatible material to the tube to be plugged. The tube plugs are available in an array of materials to suit your needs: brass, carbon steel, 316 stainless steel, 416 stainless steel, and aluminum (other materials are available upon request). Elliott recommends puncturing the leaky tube with a One-Revolution Tube Cutter. This will ensure the tube is properly vented prior to plugging.



Features & Benefits:

- Better method to plug leaky tubes - less labor cost.
- Pins fit several ring sizes - less inventory expense.
- Larger sealing surface - less chance for repeat leaking.
- Does not damage the tube sheet - no tube sheet repair cost.

Specifications:

- Specifications vary upon tube size and plug material. Contact Customer Service for details.

How To Order:

1. Specify tube size(s) to be plugged *See tables on pages 5-7.*
2. Select tube plug material: Choose a plug that is the same as or comparable material to the tube and tube sheet.
See tables on pages 5-7.
3. Determine quantity needed: Recommend quantity of 2 rings and 2 pins per tube.
4. Choose spares & accessories.

Spares & Accessories:

- One Revolution Tube Cutter: Utilize to puncture the tube to ensure the tube is properly vented so pressure cannot build up in the tube and cause the plugs to loosen. *See "One-Revolution Tube Cutter" on page 2 of the Tube Removal Catalog.*

Two-Piece Tube Plugs

Two-Piece Plug Part #												
Tube OD	BWG	Brass		Carbon Steel		316 Stainless Steel		416 Stainless Steel		Aluminum		
		Ring	Pin	Ring	Pin	Ring	Pin	Ring	Pin	Ring	Pin	
3/8" (9.5mm)	20	853002-308	853103-312	853102-308	853003-312	861802-308	861803-312	852902-308	852903-312	861902-308	861903-312	
	21	853002-315	853103-312	853102-315	853003-312	861802-315	861803-312	852902-315	852903-312	861902-315	861903-312	
	22	853002-322	853103-312	853102-322	853003-312	861802-322	861803-312	852902-322	852903-312	861902-322	861903-312	
	23	853002-322	853103-312	853102-322	853003-312	861802-322	861803-312	852902-322	852903-312	861902-322	861903-312	
	24	853002-333	853103-312	853102-333	853003-312	861802-333	861803-312	852902-333	852903-312	861902-333	861903-312	
1/2" (12.7mm)	15	853002-363	853103-312	853102-363	853003-312	861802-363	861803-312	852902-363	852903-312	861902-363	861903-312	
	16	853002-377	853103-375	853102-377	853003-375	861802-377	861803-375	852902-377	852903-375	861902-377	861903-375	
	17	853002-390	853103-375	853102-390	853003-375	861802-390	861803-375	852902-390	852903-375	861902-390	861903-375	
	18	853002-407	853103-375	853102-407	853003-375	861802-407	861803-375	852902-407	852903-375	861902-407	861903-375	
	19	853002-418	853103-375	853102-418	853003-375	861802-418	861803-375	852902-418	852903-375	861902-418	861903-375	
5/8" (15.9mm)	20	853002-435	853103-375	853102-435	853003-375	861802-435	861803-375	852902-435	852903-375	861902-435	861903-375	
	21	853002-440	853103-437	853102-440	853003-437	861802-440	861803-437	852902-440	852903-437	861902-440	861903-437	
	22	853002-445	853103-437	853102-445	853003-437	861802-445	861803-437	852902-445	852903-437	861902-445	861903-437	
	23	853002-455	853103-437	853102-455	853003-437	861802-455	861803-437	852902-455	852903-437	861902-455	861903-437	
	11	853002-397	853103-375	853102-397	853003-375	861802-397	861803-375	852902-397	852903-375	861902-397	861903-375	
3/4" (19.1mm)	12	853002-418	853103-375	853102-418	853003-375	861802-418	861803-375	852902-418	852903-375	861902-418	861903-375	
	13	853002-445	853103-437	853102-445	853003-437	861802-445	861803-437	852902-445	852903-437	861902-445	861903-437	
	14	853002-467	853103-437	853102-467	853003-437	861802-467	861803-437	852902-467	852903-437	861902-467	861903-437	
	15	853002-488	853103-437	853102-488	853003-437	861802-488	861803-437	852902-488	852903-437	861902-488	861903-437	
	16	853002-502	853103-500	853102-502	853003-500	861802-502	861803-500	852902-502	852903-500	861902-502	861903-500	
Continued on next page	17	853002-515	853103-500	853102-515	853003-500	861802-515	861803-500	852902-515	852903-500	861902-515	861903-500	
	18	853002-532	853103-500	853102-532	853003-500	861802-532	861803-500	852902-532	852903-500	861902-532	861903-500	
	19	853002-545	853103-500	853102-545	853003-500	861802-545	861803-500	852902-545	852903-500	861902-545	861903-500	
	20	853002-559	853103-500	853102-559	853003-500	861802-559	861803-500	852902-559	852903-500	861902-559	861903-500	
	21	853002-564	853103-500	853102-564	853003-500	861802-564	861803-500	852902-564	852903-500	861902-564	861903-500	
	22	853002-570	853103-500	853102-570	853003-500	861802-570	861803-500	852902-570	852903-500	861902-570	861903-500	
	9	853002-467	853103-437	853102-467	853003-437	861802-467	861803-437	852902-467	852903-437	861902-467	861903-437	
	10	853002-495	853103-437	853102-495	853003-437	861802-495	861803-437	852902-495	852903-437	861902-495	861903-437	
	11	853002-522	853103-500	853102-522	853003-500	861802-522	861803-500	852902-522	852903-500	861902-522	861903-500	
	12	853002-545	853103-500	853102-545	853003-500	861802-545	861803-500	852902-545	852903-500	861902-545	861903-500	
	13	853002-570	853103-500	853102-570	853003-500	861802-570	861803-500	852902-570	852903-500	861902-570	861903-500	
	Two plugs required per tube.											
Note: Additional sizes and materials are available upon request. A minimum order quantity may be applicable for these special sizes and materials. Contact Customer Service for details.												

Two-Piece Tube Plugs (Continued)

Two-Piece Plug Part #												
Tube OD	BWG	Brass		Carbon Steel		316 Stainless Steel		416 Stainless Steel		Aluminum		
		Ring	Pin	Ring	Pin	Ring	Pin	Ring	Pin	Ring	Pin	
3/4" (19.1mm)	14	853002-590	853103-500	853102-590	853003-500	861802-590	861803-500	852902-590	852903-500	861902-590	861903-500	
	15	853002-613	853103-1	853102-613	853003-1	861802-613	861803-1	852902-613	852903-1	861902-613	861903-1	
	16	853002-631	853103-1	853102-631	853003-1	861802-631	861803-1	852902-631	852903-1	861902-631	861903-1	
	17	853002-640	853103-1	853102-640	853003-1	861802-640	861803-1	852902-640	852903-1	861902-640	861903-1	
	18	853002-657	853103-1	853102-657	853003-1	861802-657	861803-1	852902-657	852903-1	861902-657	861903-1	
	19	853002-670	853103-1	853102-670	853003-1	861802-670	861803-1	852902-670	852903-1	861902-670	861903-1	
	20	853002-685	853103-1	853102-685	853003-1	861802-685	861803-1	852902-685	852903-1	861902-685	861903-1	
	21	853002-690	853103-1A	853102-690	853003-1A	861802-690	861803-1A	852902-690	852903-1A	861902-690	861903-1A	
7/8" (22.2mm)	22	853002-695	853103-1A	853102-695	853003-1A	861802-695	861803-1A	852902-695	852903-1A	861902-695	861903-1A	
	9	853002-590	853103-500	853102-590	853003-500	861802-590	861803-500	852902-590	852903-500	861902-590	861903-500	
	10	853002-620	853103-1	853102-620	853003-1	861802-620	861803-1	852902-620	852903-1	861902-620	861903-1	
	11	853002-647	853103-1	853102-647	853003-1	861802-647	861803-1	852902-647	852903-1	861902-647	861903-1	
	12	853002-670	853103-1	853102-670	853003-1	861802-670	861803-1	852902-670	852903-1	861902-670	861903-1	
	13	853002-695	853103-1A	853102-695	853003-1A	861802-695	861803-1A	852902-695	852903-1A	861902-695	861903-1A	
	14	853002-719	853103-1A	853102-719	853003-1A	861802-719	861803-1A	852902-719	852903-1A	861902-719	861903-1A	
	15	853002-738	853103-1A	853102-738	853003-1A	861802-738	861803-1A	852902-738	852903-1A	861902-738	861903-1A	
1" (25.4mm)	16	853002-752	853103-1A	853102-752	853003-1A	861802-752	861803-1A	852902-752	852903-1A	861902-752	861903-1A	
	17	853002-765	853103-1A	853102-765	853003-1A	861802-765	861803-1A	852902-765	852903-1A	861902-765	861903-1A	
	18	853002-782	853103-2	853102-782	853003-2	861802-782	861803-2	852902-782	852903-2	861902-782	861903-2	
	19	853002-793	853103-2	853102-793	853003-2	861802-793	861803-2	852902-793	852903-2	861902-793	861903-2	
	20	853002-809	853103-2	853102-809	853003-2	861802-809	861803-2	852902-809	852903-2	861902-809	861903-2	
	21	853002-809	853103-2	853102-809	853003-2	861802-809	861803-2	852902-809	852903-2	861902-809	861903-2	
	22	853002-820	853103-2	853102-820	853003-2	861802-820	861803-2	852902-820	852903-2	861902-820	861903-2	
	8	853002-687	853103-1A	853102-687	853003-1A	861802-687	861803-1A	852902-687	852903-1A	861902-687	861903-1A	
Continued on next page	9	853002-719	853103-1A	853102-719	853003-1A	861802-719	861803-1A	852902-719	852903-1A	861902-719	861903-1A	
	10	853002-745	853103-1A	853102-745	853003-1A	861802-745	861803-1A	852902-745	852903-1A	861902-745	861903-1A	
	11	853002-772	853103-1A	853102-772	853003-1A	861802-772	861803-1A	852902-772	852903-1A	861902-772	861903-1A	
	12	853002-793	853103-2	853102-793	853003-2	861802-793	861803-2	852902-793	852903-2	861902-793	861903-2	
	13	853002-820	853103-2	853102-820	853003-2	861802-820	861803-2	852902-820	852903-2	861902-820	861903-2	
	14	853002-845	853103-2	853102-845	853003-2	861802-845	861803-2	852902-845	852903-2	861902-845	861903-2	
	Two plugs required per tube.											
	Note: Additional sizes and materials are available upon request. A minimum order quantity may be applicable for these special sizes and materials. Contact Customer Service for details.											

Two-Piece Tube Plugs (Continued)

Two-Piece Plug Part #												
Tube OD	BWG	Brass		Carbon Steel		316 Stainless Steel		416 Stainless Steel		Aluminum		Pin
		Ring	Pin	Ring	Pin	Ring	Pin	Ring	Pin	Ring	Pin	
1" (25.4mm)	15	853002-863	853103-2	853102-863	853003-2	861802-863	861803-2	852902-863	852903-2	861902-863	861903-2	
	16	853002-877	853103-2A	853102-877	853003-2A	861802-877	861803-2A	852902-877	852903-2A	861902-877	861903-2A	
	17	853002-890	853103-2A	853102-890	853003-2A	861802-890	861803-2A	852902-890	852903-2A	861902-890	861903-2A	
	18	853002-907	853103-2A	853102-907	853003-2A	861802-907	861803-2A	852902-907	852903-2A	861902-907	861903-2A	
	19	853002-918	853103-2A	853102-918	853003-2A	861802-918	861803-2A	852902-918	852903-2A	861902-918	861903-2A	
	20	853002-934	853103-2A	853102-934	853003-2A	861802-934	861803-2A	852902-934	852903-2A	861902-934	861903-2A	
	21	853002-937	853103-2A	853102-937	853003-2A	861802-937	861803-2A	852902-937	852903-2A	861902-937	861903-2A	
	22	853002-945	853103-2A	853102-945	853003-2A	861802-945	861803-2A	852902-945	852903-2A	861902-945	861903-2A	
	8	853002-812	853103-2	853102-812	853003-2	861802-812	861803-2	852902-812	852903-2	861902-812	861903-2	
	9	853002-845	853103-2	853102-845	853003-2	861802-845	861803-2	852902-845	852903-2	861902-845	861903-2	
1-1/8" (28.6mm)	10	853002-870	853103-2	853102-870	853003-2	861802-870	861803-2	852902-870	852903-2	861902-870	861903-2	
	11	853002-897	853103-2A	853102-897	853003-2A	861802-897	861803-2A	852902-897	852903-2A	861902-897	861903-2A	
	12	853002-918	853103-2A	853102-918	853003-2A	861802-918	861803-2A	852902-918	852903-2A	861902-918	861903-2A	
	13	853002-945	853103-2A	853102-945	853003-2A	861802-945	861803-2A	852902-945	852903-2A	861902-945	861903-2A	
	14	853002-969	853103-3	853102-969	853003-3	861802-969	861803-3	852902-969	852903-3	861902-969	861903-3	
	15	853002-988	853103-3	853102-988	853003-3	861802-988	861803-3	852902-988	852903-3	861902-988	861903-3	
	16	853002-1002	853103-3	853102-1002	853003-3	861802-1002	861803-3	852902-1002	852903-3	861902-1002	861903-3	
	17	853002-1015	853103-3	853102-1015	853003-3	861802-1015	861803-3	852902-1015	852903-3	861902-1015	861903-3	
	18	853002-1032	853103-3	853102-1032	853003-3	861802-1032	861803-3	852902-1032	852903-3	861902-1032	861903-3	
	8	853002-937	853103-2A	853102-937	853003-2A	861802-937	861803-2A	852902-937	852903-2A	861902-937	861903-2A	
1-1/4" (31.8mm)	9	853002-969	853103-3	853102-969	853003-3	861802-969	861803-3	852902-969	852903-3	861902-969	861903-3	
	10	853002-995	853103-3	853102-995	853003-3	861802-995	861803-3	852902-995	852903-3	861902-995	861903-3	
	11	853002-1022	853103-3	853102-1022	853003-3	861802-1022	861803-3	852902-1022	852903-3	861902-1022	861903-3	
	12	853002-1043	853103-3	853102-1043	853003-3	861802-1043	861803-3	852902-1043	852903-3	861902-1043	861903-3	
	13	853002-1070	853103-3A	853102-1070	853003-3A	861802-1070	861803-3A	852902-1070	852903-3A	861902-1070	861903-3A	
	14	853002-1092	853103-3A	853102-1092	853003-3A	861802-1092	861803-3A	852902-1092	852903-3A	861902-1092	861903-3A	
	15	853002-1113	853103-3A	853102-1113	853003-3A	861802-1113	861803-3A	852902-1113	852903-3A	861902-1113	861903-3A	
	16	853002-1127	853103-3A	853102-1127	853003-3A	861802-1127	861803-3A	852902-1127	852903-3A	861902-1127	861903-3A	
	17	853002-1140	853103-3A	853102-1140	853003-3A	861802-1140	861803-3A	852902-1140	852903-3A	861902-1140	861903-3A	
	18	853002-1157	853103-3A	853102-1157	853003-3A	861802-1157	861803-3A	852902-1157	852903-3A	861902-1157	861903-3A	
Two plugs required per tube.												
Note: Additional sizes and materials are available upon request. A minimum order quantity may be applicable for these special sizes and materials. Contact Customer Service for details.												

High Pressure Tube Plugs

Tube Size	Maximum Pressure
● 0.410" to 1.000" (10.4 to 25.4mm) ID	6,500 PSI

Elliott's High Pressure Tube Plugs create a positive mechanical contact seal in excess of 6,500 PSI (448.2 bar), making them ideal for high pressure applications such as feedwater heaters and other high pressure heat exchangers over 200 PSI (13.8 bar). As the most secure method to plug leaky tubes, they can also be used in low pressure applications for peace of mind.

Setup of the High Pressure Tube Plug is fast and easy because the plug is installed without a hydraulic ram. With only a plug and hand torque wrench, the operator is ready to plug tubes. Simply insert the plug into the tube sheet of a leaking tube and expand with a standard 3/8" drive torque wrench. The plug will expand approximately

0.030" (0.76mm) to provide a positive mechanical contact seal. The one piece design allows operators to easily plug tubes in tight spaces like hemispherical heads, baffle plates, and dividers.

It is good practice to install tube plugs that are the same as or a compatible material to the tube and tube sheet. The tube plugs are available in an array of materials to suit your needs: brass, carbon steel, stainless steel, titanium, monel, and copper nickel. Elliott recommends puncturing the leaky tube with a One-Revolution Tube Cutter. This will ensure the tube is properly vented prior to plugging.



Features & Benefits:

- Expands in tube - can be installed into hard to reach areas.
- Most secure method to plug leaky tubes - peace of mind.
- No expensive capital equipment required - low investment.
- Tested to 6,500 PSI (448.2 bar) - use in feedwater units and other high pressure vessels.

Specifications:

- Pressure: Positive sealing in excess of 6,500 PSI (448.2 bar).
- Standard Reach:
 - 5" for 1/4" and 5/16" drive.
 - 6-1/2" for 3/8" drive.

How To Order:

1. Specify tube size(s) to be plugged. *See table on opposite page.*
2. Select tube plug material: Choose a plug that is the same as or comparable material to the tube to be plugged. *See table on opposite page.*
3. Determine quantity needed: Recommend quantity of 2 plugs per tube.
4. Choose spares & accessories.

1" long hex drive is included with each order.

Spares & Accessories:

- 8830TW Torque Wrench: Use to install the high pressure tube plug into the tube.

See table on opposite page for torque specifications.

- One Revolution Tube Cutter: Utilize to puncture the tube to ensure the tube is properly vented so pressure cannot build up in the tube and cause the plugs to loosen. *See "One-Revolution Tube Cutter" on page 2 of the Tube Removal Catalog.*

High Pressure Tube Plugs

Measured Tube ID Range		Plug OD		Plug Part #					
Inch	mm	Inch	mm	Brass	Carbon Steel	Stainless Steel	Titanium	Monel	90/10 Cu-Ni
0.410-0.430	10.41-10.92	0.405	10.29	8830-410	8831-410	8832-410	8833-410	8834-410	8835-410
0.430-0.450	10.92-11.43	0.125	10.80	8830-430	8831-430	8832-430	8833-430	8834-430	8835-430
0.450-0.470	11.43-11.94	0.445	11.30	8830-450	8831-450	8832-450	8833-450	8834-450	8835-450
0.470-0.490	11.94-12.45	0.465	11.81	8830-470	8831-470	8832-470	8833-470	8834-470	8835-470
0.490-0.510	12.45-12.95	0.485	12.32	8830-490	8831-490	8832-490	8833-490	8834-490	8835-490
0.510-0.530	12.95-13.46	0.505	12.83	8830-510	8831-510	8832-510	8833-510	8834-510	8835-510
0.530-0.550	13.46-13.97	0.525	13.34	8830-530	8831-530	8832-530	8833-530	8834-530	8835-530
0.550-0.570	13.97-14.48	0.545	13.84	8830-550	8831-550	8832-550	8833-550	8834-550	8835-550
0.570-0.590	14.48-14.99	0.565	14.35	8830-570	8831-570	8832-570	8833-570	8834-570	8835-570
0.590-0.610	14.99-15.49	0.585	14.86	8830-590	8831-590	8832-590	8833-590	8834-590	8835-590
0.610-0.630	15.49-16.00	0.605	15.37	8830-610	8831-610	8832-610	8833-610	8834-610	8835-610
0.630-0.650	16.00-16.51	0.625	15.88	8830-630	8831-630	8832-630	8833-630	8834-630	8835-630
0.650-0.670	16.51-17.02	0.645	16.38	8830-650	8831-650	8832-650	8833-650	8834-650	8835-650
0.670-0.690	17.02-17.53	0.665	16.89	8830-670	8831-670	8832-670	8833-670	8834-670	8835-670
0.690-0.710	17.53-18.03	0.685	17.40	8830-690	8831-690	8832-690	8833-690	8834-690	8835-690
0.710-0.730	18.03-18.54	0.705	17.91	8830-710	8831-710	8832-710	8833-710	8834-710	8835-710
0.730-0.750	18.54-19.05	0.725	18.42	8830-730	8831-730	8832-730	8833-730	8834-730	8835-730
0.750-0.770	19.05-19.56	0.745	18.92	8830-750	8831-750	8832-750	8833-750	8834-750	8835-750
0.770-0.790	19.56-20.07	0.765	19.43	8830-770	8831-770	8832-770	8833-770	8834-770	8835-770
0.780-0.800	19.81-20.32	0.775	19.69	8830-780	8831-780	8832-780	8833-780	8834-780	8835-780
0.800-0.820	20.32-20.83	0.795	20.19	8830-800	8831-800	8832-800	8833-800	8834-800	8835-800
0.820-0.840	20.83-21.34	0.815	20.70	8830-820	8831-820	8832-820	8833-820	8834-820	8835-820
0.840-0.860	21.34-21.84	0.835	21.21	8830-840	8831-840	8832-840	8833-840	8834-840	8835-840
0.860-0.880	21.84-22.35	0.855	21.72	8830-860	8831-860	8832-860	8833-860	8834-860	8835-860
0.880-0.900	22.35-22.86	0.875	22.23	8830-880	8831-880	8832-880	8833-880	8834-880	8835-880
0.900-0.920	22.86-23.37	0.895	22.73	8830-900	8831-900	8832-900	8833-900	8834-900	8835-900
0.920-0.940	23.37-23.88	0.915	23.24	8830-920	8831-920	8832-920	8833-920	8834-920	8835-920
0.940-0.960	23.88-24.38	0.935	23.75	8830-940	8831-940	8832-940	8833-940	8834-940	8835-940
0.960-0.980	24.38-24.89	0.955	24.26	8830-960	8831-960	8832-960	8833-960	8834-960	8835-960
0.980-1.000	24.89-25.40	0.975	24.77	8830-980	8831-980	8832-980	8833-980	8834-980	8835-980

Note: Elliott offers high pressure tube plugs to meet Nuclear ASME Sec. III or ISO 9002 QA specifications. Additional sizes and materials are available upon request. A minimum order quantity may be applicable for these special sizes and materials. Contact Customer Service for details.

Required Torque To Set Tube Plug							
Plug OD (Inches)	Brass & Cu-Ni		Carbon Steel		Stainless Steel, Titanium, & Monel		Hex Drive (Inches)
	in lbs.	Nm	in lbs.	Nm	in lbs.	Nm	
0.410-0.550	200	22.5	250	28.2	300	33.9	1/4
0.570-0.710	250	28.2	350	39.5	500	56.5	5/16
0.730-0.980	350	39.5	450	50.8	600	67.8	3/8

The range on the torque wrench is 120 – 960 pounds per inch.

Conversion Tables

Chart to Determine Inside Diameter of Tubes*

B.W.G.	Wall Thickness	Outside Diameter Tubes																				
		1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"	2 3/4"	3"	3 1/4"	3 1/2"	3 3/4"	4"	4 1/4"	4 1/2"
		6.35	9.52	12.70	15.87	19.05	22.22	25.40	31.75	38.10	44.45	50.80	57.15	63.50	69.85	76.20	82.55	88.90	95.25	101.60	107.95	114.30
00	inch	0.380					0.115	0.240	0.490	0.740	0.990	1.240	1.490	1.740	1.990	2.240	2.490	2.740	2.990	3.240	3.490	3.740
	mm	9.65					2.92	6.10	12.45	18.80	25.15	31.50	37.85	44.20	50.55	56.90	63.25	69.60	75.95	82.30	88.65	95.00
0	inch	0.340				0.070	0.195	0.320	0.570	0.820	1.070	1.320	1.570	1.820	2.070	2.320	2.570	2.820	3.070	3.320	3.570	3.820
	mm	8.64				1.78	4.95	8.13	14.48	20.83	27.18	33.53	39.88	46.23	52.58	58.93	65.28	71.63	77.98	84.33	90.68	97.03
1	inch	0.300			0.025	0.150	0.275	0.400	0.650	0.900	1.150	1.400	1.650	1.900	2.150	2.400	2.650	2.900	3.150	3.400	3.650	3.900
	mm	7.62			0.64	3.81	6.99	10.16	16.51	22.86	29.21	35.56	41.91	48.26	54.61	60.96	67.31	73.66	80.01	86.36	92.71	99.06
2	inch	0.284			0.057	0.182	0.307	0.432	0.682	0.932	1.182	1.432	1.682	1.932	2.182	2.432	2.682	2.932	3.182	3.432	3.682	3.932
	mm	7.21			1.45	4.62	7.80	10.97	17.32	23.67	30.02	36.37	42.72	49.07	55.42	61.77	68.12	74.47	80.82	87.17	93.52	99.87
3	inch	0.259			0.107	0.232	0.357	0.482	0.732	0.982	1.232	1.482	1.732	1.982	2.232	2.482	2.732	2.982	3.232	3.482	3.732	3.982
	mm	6.58			2.72	5.89	9.07	12.24	18.59	24.94	31.29	37.64	43.99	50.34	56.69	63.04	69.39	75.74	82.09	88.44	94.79	101.14
4	inch	0.238		0.024	0.149	0.274	0.399	0.524	0.774	1.024	1.274	1.524	1.774	2.024	2.274	2.524	2.774	3.024	3.274	3.524	3.774	4.024
	mm	6.05		0.61	3.78	6.96	10.13	13.31	19.66	26.01	32.36	38.71	45.06	51.41	57.76	64.11	70.46	76.81	83.16	89.51	95.86	102.21
5	inch	0.220		0.060	0.185	0.310	0.435	0.560	0.810	1.060	1.310	1.560	1.810	2.060	2.310	2.560	2.810	3.060	3.310	3.560	3.810	4.060
	mm	5.59		1.52	4.70	7.87	11.05	14.22	20.57	26.92	33.27	39.62	45.97	52.32	58.67	65.02	71.37	77.72	84.07	90.42	96.77	103.12
6	inch	0.203		0.094	0.219	0.344	0.469	0.594	0.844	1.094	1.344	1.594	1.844	2.094	2.344	2.594	2.844	3.094	3.344	3.594	3.844	4.094
	mm	5.16		2.39	5.56	8.74	11.91	15.09	21.44	27.79	34.14	40.49	46.84	53.19	59.54	65.89	72.24	78.59	84.94	91.29	97.64	103.99
7	inch	0.180		0.140	0.265	0.390	0.515	0.640	0.890	1.140	1.390	1.640	1.890	2.140	2.390	2.640	2.890	3.140	3.390	3.640	3.890	4.140
	mm	4.57		3.56	6.73	9.91	13.08	16.26	22.61	28.96	35.31	41.66	48.01	54.36	60.71	67.06	73.41	79.76	86.11	92.46	98.81	105.16
8	inch	0.165	0.045	0.170	0.295	0.420	0.545	0.670	0.920	1.170	1.420	1.670	1.920	2.170	2.420	2.670	2.920	3.170	3.420	3.670	3.920	4.170
	mm	4.19	1.14	4.32	7.49	10.67	13.84	17.02	23.37	29.72	36.07	42.42	48.77	55.12	61.47	67.82	74.17	80.52	86.87	93.22	99.57	105.92
9	inch	0.148	0.079	0.204	0.329	0.454	0.579	0.704	0.954	1.204	1.454	1.704	1.954	2.204	2.454	2.704	2.954	3.204	3.454	3.704	3.954	4.204
	mm	3.76	2.01	5.18	8.36	11.53	14.71	17.88	24.23	30.58	36.93	43.28	49.63	55.98	62.33	68.68	75.03	81.38	87.73	94.08	100.43	106.78
10	inch	0.134	0.107	0.232	0.357	0.482	0.607	0.732	0.982	1.232	1.482	1.732	1.982	2.232	2.482	2.732	2.982	3.232	3.482	3.732	3.982	4.232
	mm	3.40	2.72	5.89	9.07	12.24	15.42	18.59	24.94	31.29	37.64	43.99	50.34	56.69	63.04	69.39	75.74	82.09	88.44	94.79	101.14	107.49
11	inch	0.120	0.135	0.260	0.385	0.510	0.635	0.760	1.010	1.260	1.510	1.760	2.010	2.260	2.510	2.760	3.010	3.260	3.510	3.760	4.010	4.260
	mm	3.05	3.43	6.60	9.78	12.95	16.13	19.30	25.65	32.00	38.35	44.70	51.05	57.40	63.75	70.10	76.45	82.80	89.15	95.50	101.85	108.20
12	inch	0.109	0.032	0.157	0.282	0.407	0.532	0.657	0.782	1.032	1.282	1.532	1.782	2.032	2.282	2.532	2.782	3.032	3.282	3.532	3.782	4.032
	mm	2.77	0.81	3.99	7.16	10.34	13.51	16.69	19.86	26.21	32.56	38.91	45.26	51.61	57.96	64.31	70.66	77.01	83.36	89.71	96.06	102.41
13	inch	0.095	0.060	0.185	0.310	0.435	0.560	0.685	0.810	1.060	1.310	1.560	1.810	2.060	2.310	2.560	2.810	3.060	3.310	3.560	3.810	4.060
	mm	2.41	1.52	4.70	7.87	11.05	14.22	17.40	20.57	26.92	33.27	39.62	45.97	52.32	58.67	65.02	71.37	77.72	84.07	90.42	96.77	103.12
14	inch	0.083	0.084	0.209	0.334	0.459	0.584	0.709	0.834	1.084	1.334	1.584	1.834	2.084	2.334	2.584	2.834	3.084	3.334	3.584	3.834	4.084
	mm	2.11	2.13	5.31	8.48	11.66	14.83	18.01	21.18	27.53	33.88	40.23	46.58	52.93	59.28	65.63	71.98	78.33	84.68	91.03	97.38	103.73
15	inch	0.072	0.106	0.231	0.356	0.481	0.606	0.731	0.856	1.106	1.356	1.606	1.856	2.106	2.356	2.606	2.856	3.106	3.356	3.606	3.856	4.106
	mm	1.83	2.69	5.87	9.04	12.22	15.39	18.57	21.74	28.09	34.44	40.79	47.14	53.49	59.84	66.19	72.54	78.89	85.24	91.59	97.94	104.29
16	inch	0.065	0.120	0.245	0.370	0.495	0.620	0.745	0.870	1.120	1.370	1.620	1.870	2.120	2.370	2.620	2.870	3.120	3.370	3.620	3.870	4.120
	mm	1.65	3.05	6.22	9.40	12.57	15.75	18.92	22.10	28.45	34.80	41.15	47.50	53.85	60.20	66.55	72.90	79.25	85.60	91.95	98.30	104.65
17	inch	0.058	0.134	0.259	0.384	0.509	0.634	0.759	0.884	1.134	1.384	1.634	1.884	2.134	2.384	2.634	2.884	3.134	3.384	3.634	3.884	4.134
	mm	1.47	3.40	6.58	9.75	12.93	16.10	19.28	22.45	28.80	35.15	41.50	47.85	54.20	60.55	66.90	73.25	79.60	85.95	92.30	98.65	105.00
18	inch	0.049	0.152	0.277	0.402	0.527	0.652	0.777	0.902	1.152	1.402	1.652	1.902	2.152	2.402	2.652	2.902	3.152	3.402	3.652	3.902	4.152
	mm	1.24	3.86	7.04	10.21	13.39	16.56	19.74	22.91	29.26	35.61	41.96	48.31	54.66	61.01	67.36	73.71	80.06	86.41	92.76	99.11	105.46
19	inch	0.042	0.166	0.291	0.416	0.541	0.666	0.791	0.916	1.166	1.416	1.666	1.916									
	mm	1.07	4.22	7.39	10.57	13.74	16.92	20.09	23.27	29.62	35.97	42.32	48.67									
20	inch	0.035	0.180	0.305	0.430	0.555	0.680	0.805	0.930	1.180	1.430	1.680	1.930									
	mm	0.89	4.57	7.75	10.92	14.10	17.27	20.45	23.62	29.97	36.32	42.67	49.02									
21	inch	0.032	0.186	0.311	0.436	0.561	0.686	0.811	0.936	1.186	1.436	1.686	1.936									
	mm	0.81	4.72	7.90	11.07	14.25	17.42	20.60	23.77	30.12	36.47	42.82	49.15									
22	inch	0.028	0.194	0.319	0.444	0.569	0.694	0.819	0.944	1.194	1.444	1.694	1.944									
	mm	0.71	4.93	8.10	11.28	14.45	17.63	20.80	23.98	30.33	36.68	43.03	49.38									
23	inch	0.025	0.200	0.325	0.450	0.575	0.700	0.825	0.950	1.200	1.450	1.700	1.950									
	mm	0.64	5.08	8.26	11.43	14.61	17.78	20.96	24.13	30.48	36.83	43.18	49.53									
24	inch	0.022	0.206	0.331	0.456	0.581	0.706	0.831	0.956	1.206	1.456	1.706	1.956									
	mm	0.56	5.23	8.41	11.58	14.76	17.93	21.11	24.28	30.63	36.98	43.33	49.68									

*Above table does not allow for tube mill tolerance.

Table to Determine Pipe Size and Schedule Number

Nominal Pipe Size (in.)	O.D. (in.)	Schedule Number for Pipe Sizes Wall Thickness / Inside Diameter (Inches)							
		40	ID	80	ID	120	ID	160	ID
1/8	.405	.068	.269	.095	.215				
1/4	.540	.088	.364	.119	.302				
3/8	.675	.091	.493	.126	.423				
1/2	.840	.109	.622	.147	.546			.187	.466
3/4	1.050	.113	.824	.154	.742			.218	.614
1	1.315	.133	1.049	.179	.957			.250	.815
1-1/4	1.660	.140	1.380	.191	1.278			.250	1.160
1-1/2	1.900	.145	1.610	.200	1.500			.281	1.338
2	2.375	.154	2.067	.218	1.939			.343	1.689
2-1/2	2.875	.203	2.469	.276	2.323			.375	2.125
3	3.500	.216	3.068	.300	2.900			.437	2.626
3-1/2	4.000	.226	3.548	.318	3.364				
4	4.500	.237	4.026	.337	3.826	.437	3.626	.531	3.438
5	5.563	.258	5.047	.375	4.813	.500	4.563	.625	4.313
6	6.625	.280	6.065	.432	5.761	.562	5.501	.718	5.189
8	8.625	.322	7.981	.500	7.625	.718	7.189	.906	6.813
10	10.750	.365	10.020	.593	9.564	.843	9.064	1.125	8.500
12	12.750	.406	11.938	.687	11.376	1.000	10.750	1.312	10.126



Contact Us

Elliott Tool offers a complete line of precision tube tools to meet your needs. Contact us or your local support.

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