

SNAP IT® ENGINEERED TUBE PLUGS



READY TO SHIP 24/7 / 365

Snap-It tube plugs provide a safe, weld-free solution for sealing heat exchanger, boiler, and condenser tubes. When installed correctly, they stop leaks without damaging tubes or tube sheets. The system includes full tube preparation and installation tooling for both near-end and far-end applications, making tube plugging faster, easier, and more reliable than traditional methods.



SNAP IT®

JR & SR
ENGINEERED TUBE PLUGS

AVAILABLE IN THE FOLLOWING MATERIALS:

(S) Stainless Steel (C) Carbon Steel (B) Brass
(J) 70/30 CuNi (K) 90/10 CuNi (Y) Chrome/Moly
(H) Hastelloy (I) Inconel (N) Incoloy (M) Monel
(N200) Nickel 200 (T) Titanium (Z) Zirconium
Other materials available upon request

JR

SR

Rated holding pressures up to **1,000 PSID**

Rated holding pressures up to **7,000 PSID**

INSTALLATION & REMOVAL KIT WITH THE ALL NEW SURESNAP™ PRO CORDLESS INSTALLATION TOOL
(Conventional Kit with Chorded Tool & Pump also available)



KITS AVAILABLE TO BUY | RENT



SR. PLUG SIZES	PSID
0.400 → 0.680	= 7000
0.700 → 0.960	= 4500
0.980 → 2.000	= 2000

WHEN ORDERING SPECIFY

- Tube ID (or OD & BWG Wall Thk. - JR only)
- Material / Alloy
- Max. Temp. & Pressure
- Tube/Tube Sheet Joint Type (Rolled, Welded, etc.)
- # of Brush Kits Needed
- Cordless or Chorded Tool Install/Removal Kit
- Qty. of Plugs
- Delivery Date

SNAP-IT PLUG BENEFITS

INSTALLATION PERFORMANCE	Consistent, controlled installation with predictable holding forces Plugs install in minutes, minimizing downtime and labor costs Rear Head Cover removal not required for through-the-tube plugging. (Jr. model plugs)
SAFETY & RISK REDUCTION	Eliminates welding—no sparks or open flames Engineered design minimizes risk of plug ejection during removal Prevents damage to tube sheets or ligaments from welding or overdriving tapered plugs
SEALING & RELIABILITY	Leak-tight helium seal: $\geq 1 \times 10^{-9}$ c/sec. Reduces reloading time when plugging tubular reactors; does not impede catalyst loading systems
COMPATIBILITY & FLEXIBILITY	Each plug covers a range of tube diameters Available in any available alloy Tooling compatible with similar mechanical tube plugs for installation/removal Can plug tube sheets directly when tubes are absent Ideal for plugging through headers in air-cooled exchangers
STANDARDS COMPLIANCE & SUPPORT	Complies with ASME PCC-2 recommendations 24/7/365 manufacturing and technical support

Snap-It Plugs must be installed within the tube's rolled section in the tubesheet. If tubes are not rolled, contact USA Industries (800-456-8721) before installation. Clean scale and pitting using Snap-It Brushes, and remove any weld droop to ensure proper seating of the plug.

WARNING: Never stand in front of any installed plug under pressure. Plugs ejected under pressure can cause serious bodily injury.

SNAP IT® JR SPECS & ACCESSORIES

Plug #	Plug Range - Tube ID In(mm)	Pin Length In(mm)	Brush Kit	Positioner	Pull Rod	Channel Head Pull Rod
JR-471-"m"	0.472-0.515 (11.99-13.08)	1.63 (41.4)	JRA-471***	PP-471	I	CHPRA-"X"-I
JR-491-"m"	0.492-0.540 (12.50-13.72)	1.67 (42.4)	JRA-491***	PP-491		
JR-512-"m"	0.513-0.562 (13.03-14.27)	1.59 (40.3)	JRA-512***	PP-512		
JR-524-"m"	0.525-0.585 (13.34-14.86)	1.28 (32.5)	JRA-524***	PP-524		
JR-555-"m"	0.556-0.616 (14.12-15.65)	1.40 (35.6)	JRA-555***	PP-555		
JR-584-"m"	0.585-0.649 (14.86-16.48)	1.32 (35.5)	JRA-584***	PP-584	II	CHPRA-"X"-II
JR-621-"m"	0.622-0.689 (15.80-17.50)	1.57 (39.9)	JRA-621***	PP-621		
JR-649-"m"	0.650-0.713 (16.51-18.11)	1.32 (35.5)	JRA-649***	PP-649		
JR-670-"m"	0.671-0.740 (17.04-18.80)	1.66 (42.2)	JRA-670***	PP-670		
JR-712-"m"	0.713-0.777 (18.11-19.74)	1.32 (35.5)	JRA-712***	PP-712		
JR-735-"m"	0.736-0.810 (18.69-20.57)	1.68 (42.7)	JRA-735***	PP-735		
JR-774-"m"	0.775-0.838 (19.69-21.29)	1.32 (35.5)	JRA-774***	PP-774	III	CHPRA-"X"-III
JR-804-"m"	0.805-0.890 (20.45-22.61)	1.7 (43.2)	JRA-804***	PP-804		
JR-837-"m"	0.838-0.902 (21.29-22.91)	1.32 (35.5)	JRA-837***	PP-837		
JR-853-"m"	0.854-0.949 (21.69-24.10)	1.72 (43.7)	JRA-853***	PP-853		
JR-899-"m"	0.900-0.963 (22.86-24.46)	1.32 (35.5)	JRA-899***	PP-899		
JR-919-"m"	0.920-1.019 (23.37-25.88)	1.76 (44.7)	JRA-919***	PP-919		
JR-962-"m"	0.963-1.027 (24.46-26.09)	1.32 (35.5)	JRA-962***	PP-962		
JR-979-"m"	0.980-1.079 (24.89-27.41)	1.82 (46.2)	JRA-979***	PP-979		
JR-1024-"m"	1.025-1.088 (26.04-27.64)	1.32 (35.5)	JRA-1024***	PP-1024		
JR-1054-"m"	1.055-1.156 (26.80-29.31)	1.90 (48.3)	JRA-1054***	PP-1054		
JR-1087-"m"	1.088-1.152 (27.65-29.26)	1.32 (35.5)	JRA-1087***	PP-1087		
JR-1103-"m"	1.104-1.203 (28.04-30.56)	1.90 (48.3)	JRA-1103***	PP-1103		
JR-1149-"m"	1.150-1.213 (29.21-30.81)	1.32 (35.5)	JRA-1149***	PP-1149		
JR-1171-"m"	1.172-1.270 (29.77-32.26)	2.00 (50.8)	JRA-1171***	PP-1171		
JR-1212-"m"	1.213-1 336 (30 81-33.93)	2.00 (50.8)	JRA-1212***	PP-1212		

Notes:

"m" - Substitute the suffix "m" with the following material code: C - carbon steel, S - 316 stainless, B - brass, Y - Cr/Moly, M - monel, K - 90/10 CuNi, J - 70/30 CuNi. Other Materials Available.

"*" - For Brass, Copper, or Copper Nickel tubes add the Suffix -LD to the Brush Kit. Tube Preparation Brushes are required for use with Snap It™ Jr Plugs.

"X" - Channel Head Pull Rod Assemblies are available in 2', 4', or 6' lengths. Insert the appropriate # for the length required. For Through the Tube Applications, Extension Assemblies (See page 7T) are available in 2', 4', or 6' lengths. Specify the total # of each size needed for your application.



SNAP IT® SR SPECS & ACCESSORIES

SR Kit Part No.	Plug Range - Tube ID Inches (mm)	Brush Kit	Positioner	Plug Positioner	Pull Rod Assembly	Channel Head Pull Rod		
SR-400-"m"	0.401-0.420 (10.16-10.68)	SRA-400- ^{***}	PP-400		I	CHPRA-"X"-I		
SR-420-"m"	0.421-0.440 (10.69-11.19)	SRA-420- ^{***}	PP-420	PP 400-440				
SR-440-"m"	0.441-0.460 (11.20-11.70)	SRA-440- ^{***}	PP-440					
SR-460-"m"	0.461-0.480 (11.71-12.21)	SRA-460- ^{***}	PP-460	PP 460-500				
SR-480-"m"	0.481-0.500 (12.22-12.72)	SRA-480- ^{***}	PP-480					
SR-500-"m"	0.501-0.520 (12.73-13.22)	SRA-500- ^{***}	PP-500					
SR-520-"m"	0.521-0.540 (13.23-13.73)	SRA-520- ^{***}	PP-520				II	CHPRA-"X"-II
SR-540-"m"	0.541-0.560 (13.74-14.24)	SRA-540- ^{***}	PP-540	PP 520-580				
SR-560-"m"	0.561-0.580 (14.25-14.75)	SRA-560- ^{***}	PP-560					
SR-580-"m"	0.581-0.600 (14.76-15.26)	SRA-580- ^{***}	PP-580					
SR-600-"m"	0.601-0.620 (15.27-15.76)	SRA-600- ^{***}	PP-600	PP 600-680				
SR-620-"m"	0.621-0.640 (15.77-16.27)	SRA-620- ^{***}	PP-620					
SR-640-"m"	0.641-0.660 (16.28-16.78)	SRA-640- ^{***}	PP-640					
SR-660-"m"	0.661-0.680 (16.79-17.27)	SRA-660- ^{***}	PP-660					
SR-680-"m"	0.681-0.700 (17.28-17.79)	SRA-680- ^{***}	PP-680					
SR-700-"m"	0.701-0.720 (17.80-18.30)	SRA-700- ^{***}	PP-700		III	CHPRA-"X"-III		
SR-720-"m"	0.721-0.740 (18.31-18.81)	SRA-720- ^{***}	PP-720	PP 700-780				
SR-740-"m"	0.741-0.760 (18.82-19.32)	SRA-740- ^{***}	PP-740					
SR-760-"m"	0.761-0.780 (19.33-19.83)	SRA-760- ^{***}	PP-760					
SR-780-"m"	0.781-0.800 (19.84-20.34)	SRA-780- ^{***}	PP-780					
SR-800-"m"	0.801-0.820 (20.35-20.84)	SRA-800- ^{***}	PP-800	PP 800-860				
SR-820-"m"	0.821-0.840 (20.85-21.35)	SRA-820- ^{***}	PP-820					
SR-840-"m"	0.841-0.860 (21.36-21.86)	SRA-840- ^{***}	PP-840					
SR-860-"m"	0.861-0.880 (21.87-22.37)	SRA-860- ^{***}	PP-860					
SR-880-"m"	0.881-0.900 (22.38-22.87)	SRA-880- ^{***}	PP-880		III	CHPRA-"X"-III		
SR-900-"m"	0.901-0.920 (22.88-23.38)	SRA-900- ^{***}	PP-900	PP 880-960				
SR-920-"m"	0.921-0.940 (23.39-23.87)	SRA-920- ^{***}	PP-920					
SR-940-"m"	0.941-0.960 (23.88-24.40)	SRA-940- ^{***}	PP-940					
SR-960-"m"	0.961-0.980 (24.41-24.89)	SRA-960- ^{***}	PP-960					
SR-980-"m"	0.981-1.000 (24.90-25.40)	SRA-980- ^{***}	PP-980	PP 980-1060				
SR-1000-"m"	1.001-1.020 (25.41-25.91)	SRA-1000- ^{***}	PP-1000					
SR-1020-"m"	1.021-1.040 (25.92-26.42)	SRA-1020- ^{***}	PP-1020					
SR-1040-"m"	1.041-1.060 (26.43-26.92)	SRA-1040- ^{***}	PP-1040					
SR-1060-"m"	1.061-1.080 (26.93-27.43)	SRA-1060- ^{***}	PP-1060					
SR-1080-"m"	1.081-1.100 (27.44-27.94)	SRA-1080- ^{***}	PP-1080		PP 1080-1160			
SR-1100-"m"	1.101-1.120 (27.95-28.45)	SRA-1100- ^{***}	PP-1100					
SR-1120-"m"	1.121-1.140 (28.46-28.96)	SRA-1120- ^{***}	PP-1120					
SR-1140-"m"	1.141-1.160 (28.97-29.46)	SRA-1140- ^{***}	PP-1140					
SR-1160-"m"	1.161-1.180 (29.47-29.97)	SRA-1160- ^{***}	PP-1160					

Notes:

Standard Sr Kit includes 10 plugs, 1 Brush and 1 Go/No Go Gauge. However, plugs and items can be ordered individually - Consult factory for more information.

"m" - Substitute the suffix "m" with the following material code: C - carbon steel, S - 316 stainless, B - brass, Y - Cr/Moly, M - monel, K - 90/10 CuNi, J - 70/30 CuNi. Other Materials Available.

"*" - Brush and Go/No Go Gauge furnished with every 10 plugs.

"X" - Channel Head Pull Rod Assemblies (See Page 7T) are available in 2', 4', or 6' lengths. Insert the appropriate # for the length required.



SNAP IT® JR SIZING CHART FOR ROLLED TUBES

	TUBE GAUGE		TUBE O.D.					
	BWG	WALL TKNS	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"
Rolled I.D.	8				.578	.703	.953	1.203
Near End	8				555-M	670-M	919-M	1171-M
Far End	8				524-M	649-M	899-M	1171-M
Rolled I.D.	9	0.148		.484	0.609	0.734	0.984	1.234
Near End	9	0.148		471-M	584-M	712-M	979-M	1212-M
Far End	9	0.148		471-M	555-M	670-M	919-M	1171-M
Rolled I.D.	10	0.134		.509	.634	.759	1.009	1.259
Near End	10	0.134		491-M	621-M	735-M	979-M	1212-M
Far End	10	0.134		471-M	584-M	712-M	962-M	1171-M
Rolled I.D.	11	0.12		.534	.659	.784	1.034	1.284
Near End	11	0.12		524-M	649-M	774-M	1024-M	1212-M
Far End	11	0.12		491-M	621-M	735-M	979-M	1212-M
Rolled I.D.	12	0.109		.554	.679	.804	1.054	1.304
Near End	12	0.109		524-M	670-M	774-M	1024-M	1212-M
Far End	12	0.109		512-M	621-M	735-M	979-M	1212-M
Rolled I.D.	13	0.095		.579	.704	.829	1.079	1.329
Near End	13	0.095		555-M	670-M	804-M	1054-M	1212-M
Far End	13	0.095		524-M	649-M	774-M	1024-M	1212-M
Rolled I.D.	14	0.083	.476	.601	.726	.851	1.101	
Near End	14	0.083	471-M	584-M	712-M	837-M	1087-M	
Far End	14	0.083		555-M	670-M	804-M	1054-M	
Rolled I.D.	15	0.072	.495	.620	.745	.870	1.120	
Near End	15	0.072	491-M	584-M	735-M	853-M	1103-M	
Far End	15	0.072	471-M	584-M	712-M	837-M	1054-M	
Rolled I.D.	16	0.065	.508	.633	.758	.883	1.133	
Near End	16	0.065	491-M	621-M	735-M	853-M	1103-M	
Far End	16	0.065	471-M	584-M	712-M	837	1054-M	
Rolled I.D.	17	0.058	.521	.646	.771	.896	1.146	
Near End	17	0.058	512-M	621-M	735-M	853-M	1103-M	
Far End	17	0.058	491-M	584-M	735-M	853-M	1103-M	
Rolled I.D.	18	0.049	.537	.662	.770	.912	1.162	
Near End	18	0.049	524-M	649-M	774-M	899-M	1149-M	
Far End	18	0.049	491-M	621-M	735-M	853-M	1103-M	
Rolled I.D.	19	0.042	.549	.674	.799	.924	1.174	
Near End	19	0.042	524-M	649-M	774-M	899-M	1149-M	
Far End	19	0.042	512-M	621-M	735-M	853-M	1149-M	
Rolled I.D.	20	0.035	.562	.687	.812	.937	1.187	
Near End	20	0.035	524-M	649-M	774-M	899-M	1149-M	
Far End	20	0.035	524-M	649-M	774-M	853-M	1149-M	
Rolled I.D.	21	0.032	.567	.692	.817	.942	1.192	
Near End	21	0.032	555-M	670-M	804-M	919-M	1171-M	
Far End	21	0.032	524-M	649-M	774-M	853-M	1149-M	
Rolled I.D.	22	0.028	.575	.700	.825	.950	1.200	
Near End	22	0.028	555-M	670-M	804-M	919-M	1171-M	
Far End	22	0.028	524-M	649-M	774-M	919-M	1171-M	
Rolled I.D.	23	0.025	.580	.705	.830	.955	1.205	
Near End	23	0.025	555-M	670-M	804-M	919-M	1171-M	
Far End	23	0.025	555-M	670-M	804-M	919-M	1171-M	
Rolled I.D.	24	0.022	.585	.710	.835	.960	1.210	
Near End	24	0.022	555-M	670-M	804-M	919-M	1171-M	
Far End	24	0.022	555-M	670-M	804-M	899-M	1171-M	

Substitute the suffix "M" with the following material code:

- C = Carbon Steel
- B = Brass
- S = 316 SS
- J = 70/30 CuNi
- K = 90/10 CuNi
- Y = Chrome/Moly
- M = Monel
- I = Inconel
- N = Nickel 200
- T = Titanium
- H = Hastelloy
- Z = Zirconium

Near End = Plugging front end of tube sheet

Far End = "Through the tube," plugging rear end of tube sheet

NOTES:

- 1) Tube ID's often vary between inlet & outlet due to corrosion and/or erosion, this chart and recommended tube sizes are to be used as Reference only.
- 2) Tube Preparation Brushes are required for use with all Snap It Plugs.

* Larger sizes available upon request

A
V
A
I
L
A
B
L
E
O
N
R
E
Q
U
E
S
T



All tube inner diameters listed above are based upon a 10% wall reduction