

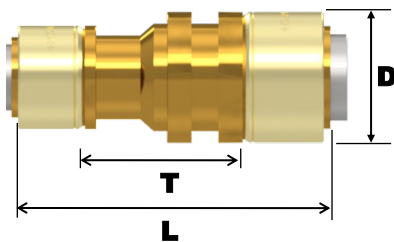
ARED Reducer



The reducer joins unequal size copper refrigeration tubing by means of a permanent mechanical seal.

The reducer is ETL listed for U.S. and Canada with an allowable working pressure of 1167 PSIG per UL-207. The reducer is intended for use with C12200 Type L copper tube conforming to dimensions of ASTM B280. All tempers of copper tube may be used (O60, H55, H58). Coupling may also be used with C19400 copper alloy.

Application	High Pressure HVAC/R
Max Rated Pressure	1167 psi (80 bar)
Compatible Tubing	Seamless Copper Tubing, Drawn H58, Light Drawn H55, or Annealed O60 made to ASTM B280 and ASTM B75 Standard
Agency Approval	ETL Listed 5011885. Conforms to UL 207 STD. Certified to CSA STD C22.2#140.3
Refrigerants	All CFC, HCFC, HFC, HFO, and class A2L refrigerants and refrigeration oils. The product is suitable for use with R744 (CO ₂) when used within the design pressure rating. The product is not suitable for use with ammonia, methyl chloride, hazardous or flammable refrigerants from Group 2 or 3 per ASHRAE 15.
Installation	The fittings must be installed per RCS installation instructions by skilled installers, trained specifically in the application and installation of RCS fittings. Contact RCS, Inc. for alternative tube support inserts when installing fittings on annealed copper coils or pre-insulated line sets with tube wall thicknesses less than specified by ASTM B280. Do not use on annealed copper sizes larger than 5/8" O.D.



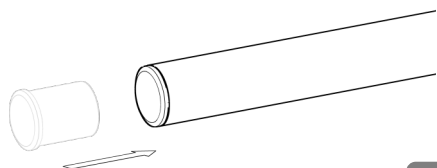
In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications, and/or materials. Technical specification sheets appearing on refcouplingsys.com are the most recent data available.

TUBE SIZES Inches	PART NUMBER	L Inches (mm)	D Inches (mm)	T (Takeoff) Inches (mm)
3/8" to 1/4"	ARED-0302	1.36 (34.5)	0.63 (16.0)	0.49 (12.4)
1/2" to 3/8"	ARED-0403	1.92 (48.8)	0.75 (19.0)	0.98 (24.9)
5/8" to 1/2"	ARED-0504	2.23 (56.7)	0.91 (23.1)	1.08 (27.6)
3/4" to 1/2"	ARED-0604	2.44 (62.0)	1.04 (26.4)	1.17 (29.7)
3/4" to 5/8"	ARED-0605	2.51 (63.8)	1.04 (26.4)	1.10 (28.0)
7/8" to 5/8"	ARED-0705	2.75 (70.0)	1.22 (31.0)	1.27 (32.2)
7/8" to 3/4"	ARED-0706	2.87 (73.0)	1.22 (31.0)	1.26 (32.0)
1-1/8" to 3/4"	ARED-0906	3.70 (93.6)	1.54 (39.1)	1.92 (48.7)
1-1/8" to 7/8"	ARED-0907	3.74 (95.1)	1.54 (39.1)	1.88 (47.9)
1-3/8" to 1-1/8"	ARED-1109	4.24 (107.6)	1.81 (46.0)	2.11 (53.7)

Assembly Guide

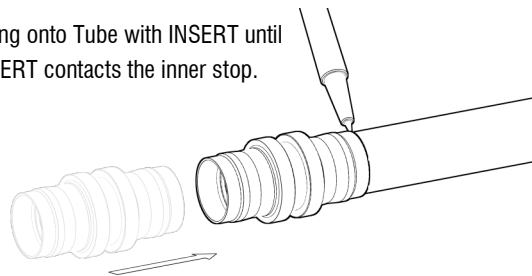
Tube surface must be clean, free from scratches or any surface imperfections, and de-burred inside and out.

Place tube support INSERT in to clean and de-burred tube.



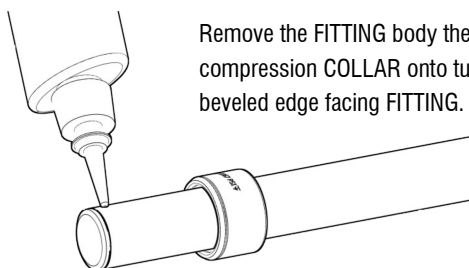
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Place Fitting onto Tube with INSERT until TUBE/INSERT contacts the inner stop.



Mark Tube at end of FITTING with permanent felt tip marker.

2

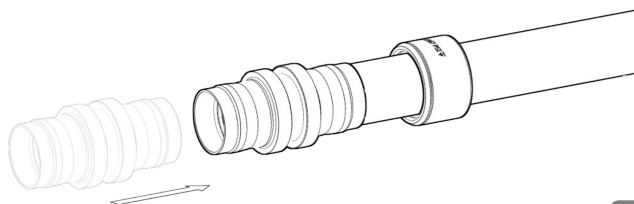


Remove the FITTING body then slide the compression COLLAR onto tube with the beveled edge facing FITTING.

Apply LocTite® to full circumference of tube end.
Keep LocTite® 1/8" from end of TUBE and INSERT.

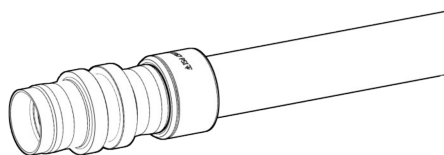
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Slide the FITTING body back onto the TUBE with INSERT in place until TUBE/INSERT contacts the fitting inner stop.



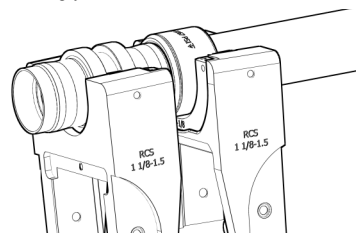
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Keeping the TUBE/INSERT against the FITTING inner stop, slide the COLLAR against the FITTING. Collar should overlap the FITTING body.



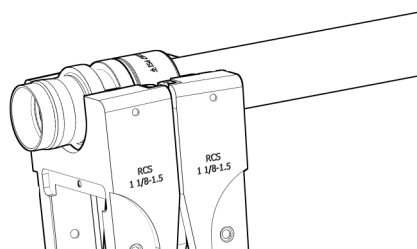
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Place the FITTING and COLLAR into correct size press clamps. The assembly **MUST** be fully seated on the lower circumference of the clamps. Do not change the insertion depth of the TUBE/INSERT and the connecting joint.



6

Using the press tool, press the COLLAR onto the FITTING body until it is fully seated against FITTING stop. TUBE/INSERT must be maintained against the FITTING inner stop during the pressing operation.



7



That the tube insert depth reference mark is visible and closely aligned with the end of the FITTING body.



That the COLLAR is in the correct orientation, fully seated, and is flush against the shoulder of the FITTING body.



That any gap between the COLLAR and the FITTING shoulders are less than 1mm.

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