

AURA double ferrule compression fittings have attained an unmatched reputation as precision components that eliminate costly, hazardous leaks in Instrumentation and process tubing.

The product range includes:

TUBE TO MALE THREAD	:	Male Connector, Male Elbow, Male Run Tee, Male Branch Tee, Male Adapter.
TUBE TO FEMALE THREAD	:	Female Connector, Female Elbow, Female Run Tee, Female Branch Tee, Female Adapter.
TUBE TO TUBE	:	Straight Union, Bulkhead Union, Reducing Union, Union Elbow, Union Tee, Union Cross.
ACCESSORIES	:	Reducer, Tube End Closure, Fitting End Closure, Hex Nut, Front Ferrule, Back Ferrule.

AURA double ferrule Compression Fittings are available from 1/16" OD to 1" OD tubing and are machined from SS 316 which meet specifications of ASTM. Fittings design meets the requirement codes of :

ANSI B31.1	-	for Power Piping
ANSI B31.3	-	for Petroleum Refinery & Chemical Plants
ASME Sec VIII	-	for Boiler & Pressure Vessels

The Advantages of such fittings are :

- Facility of assembling with self aligning front and back rings.
- Low tightening torque (the nut is of non-binding design).
- Controlled tightening effect, distortion of the tube without rupture of fibers, minimum reduction of tube bore size.
- No twisting of the tube when fitting.
- Withstands high vacuum and pressure.
- Re-usable, can be assembled and taken apart several times.
- Recommended for use with thin and thick walled tube.

AURA precision tube fittings are available with NPT/BSPT/BSP/ISO/UNF Threads.

As part of the standard QA program, all **Aura** fittings conform to various test procedures as adapted and laid down by such standard as BS 4368 Part IV. As a standard design, the nut threads are silver plated so as to increase their resistance to seizing and galling of nuts on body.

AURA

COMPRESSION TUBE FITTINGS SPECIFICATIONS

DESCRIPTION	:	Precision double ferrule compression tube fittings
DESIGN STANDARDS	:	Meets requirement code of : <ul style="list-style-type: none">- ANSI B31.1 – for power piping- ANSI B31.3 – for petroleum refineries/chemical plants- ASME Sec. VIII – for boilers and pressure vessels.- SAE-J-514 – for wall thickness
THREADS	:	Available with : <ul style="list-style-type: none">- NPT, BSP, BSPT, ISO, UNF Threads- Pipe threads conform to ANSI B2-1- Straight threads conform to ANSI B 1-1 (unified threads clause 2A & 2B)
MATERIAL OF CONSTRUCTION	:	<ul style="list-style-type: none">- Straight Fittings – Barstock, ASTM A-276 316 SS/Brass.- Angle Fittings – Barstock, ASTM A-276 316 SS / Forgings, ASTM A-182 G F 316, Brass.- Ferrules – Barstock, ASTM-A-276 316 SS (Minimum Hardness Rockwell B – 90) / PTFE / Brass / Nylon / D
TESTING	:	Following tests are carried out at various stages of manufacture. All tests carried out are in accordance with BS-4368- Part-IV <ul style="list-style-type: none">- Visual / Dimensional check- Pneumatic Pressure Test – at 2000 psi- Hydraulic Leak Test at 10,000 psi- Pressure Impulse & Vibration test – at vibration frequency of 23-47 Hz with 5 mm amplitude and simultaneous pressure cycling at 0-3000 psi and at 30-40 CPM for a minimum of 20 million cycles.- Minimum Burst Pressure Test – at a steady rate of 3000 psi per min. up to 15,000 psi.- Make & Break Test – hydraulically tested at 6000 psi and 10,000 psi.- Temperature Cycling Test – temperature increased from ambient to 320 C in 60 min., held for 60 min., reduced to ambient, then tested hydraulically at 10,000 psi.- Vacuum Test – at 700 m bar vacuum, deterioration in vacuum not to exceed 20 m bar in 20 mins.- Helium Leak Test – at 15 psi, helium leak not to exceed 2 x 10 STD cc per sec.