



**RISHABH**  
METAL & ENGINEERING CO.

*Quality Our First Priority*



# COMPANY PROFILE

Rushabh Metal & Engineering Co was formed by a team of young techno crafts with an aptitude & to deliver world class products in the field of instrumentation. Relatively young in the field, we have already ruffled many feathers in our industry for the quality, unimaginate & competitive pricing.

Rushabh Metal & Engineering Co aims to simplify the specification, installation and maintenance of your system to make instrumentation easy' for the engineer while delivering increased up - time through class leading design innovation.

With the latest in-house machining facility and infrastructure under one roof, we manufacture a wide range of tube fittings, pipe fittings, Ball valves, Manifold valves, Air Headers, Needle valves, pre-fab hookup and instrumentation accessories in different size and metals like Brass, Stainless Steel, Monel, Hastelloy C, and other materials according to customer's request.

We manufacture fluid system component for a wide variety of industries, including Chemical & Petrochemical, Oil & Gas, Desalination plant, Sanitray, Power generation, Paper & Pulp and Semiconductor.

Rushabh products has been designed & manufactured to meet highest quality and performance standards associated with process control system & the instrumentation industry. Our Quality Management System conforms to ISO 9001 : 2008

Our product range is most comprehensive, quality meeting most stringent requirements while the material specification are wide ranging meeting National & International Standards viz; BS 4368 PART IV, ASTM F 1387 (mandatory & Supplementary), ECE R110, ISO 15500.

Rushabh Metal & Engineering Co experienced professionals are dedicated towards meeting future requirements of the market. Our hard earned reputation for quality and Reliability comes from a singular commitment to be a skilled and manufacturing responsive supplier to the industries we serve.

Rushabh has been on the steady path of growth and development in the field of process control

Rushabh is determined to be your ultimate source for process control fittings.

BS- 6436



PED ( 97-34EC



## APPROVALS



## SINGLE/DOUBLE FERRULE COMPRESSION TUBE FITTINGS PRODUCT RANGE

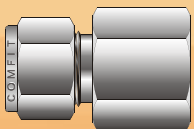
	Male Connector	Female Connector
Connectors	Thermocouple Male Connector Bulkhead Male Connector Long Male Connector Male Pipe Weld Connector	Bulkhead Female Connector Port Connector Reducing Port Connector
	Bulkhead Female Connector	Female Branch Tee
Tee	Positionable Male Branch Tee Male Run Tee Positionable Male Run Tee	Female Run Tee Union Tee Reducing Union Tee
Union	Union An Union Reducing Union Bulkhead Union	An Bulkhead Union Bulkhead Reducing Union Tube Socket Weld Union Union Cross
Elbow	Male Elbow Positionable Male Elbow Male Pipe Weld Elbow Tube Socket Weld Elbow	Female Elbow Union Elbow Reducing Union Elbow

Ferrules	Gaskets
Back Ferrule Front Ferrule Single Ferrule	RS Fitting Gasket RP Fitting Gasket RG Fitting Gasket
Caps End	Plugs
Caps End For Fractional Tube Connection	For Fractional Tube Connection
Caps End For Metric Tube Connection	For Metric Tube Connection
Nuts	Reducer
Nuts Bulkhead Lock Nut	Reducer Bulkhead Reducer

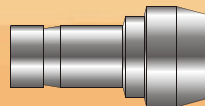
Single/Twin Ferrule compression Tube Fittings	
Precision Pipe Fittings & Adaptors	37 Degree Flared Fittings
Stainless Steel Push in Fittings	Quick Connect Couplings

## TUBE FITTINGS

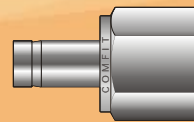
Female Connectors-CFC



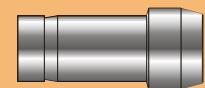
Reducer Port Connectors - CRPC



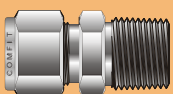
Female Adapters CFA



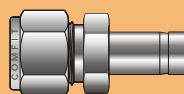
Port Connectors-CPC



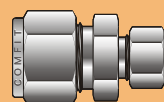
Male Connectors - CMC



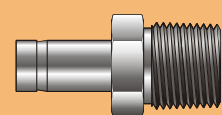
Reducers-CR



Reducer Unions-CRU

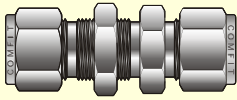


Male Adapters-CMA

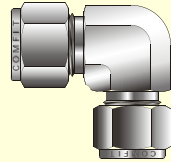


# TUBE FITTINGS

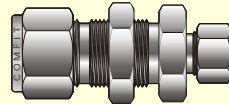
Bulkhead Unions-CBU



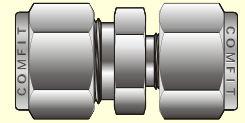
Reducer  
Union Elbows-CRUE



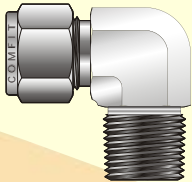
Bulkhead Reducer  
Unions-CBRU



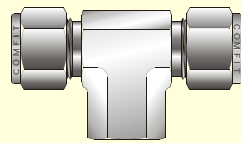
Unions-CU



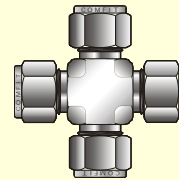
Male Elbows-CME



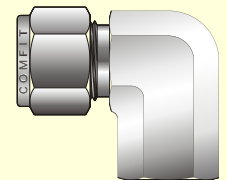
Female  
Branch Tees-CFBT



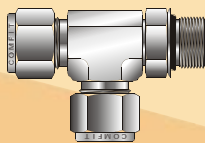
Union Cross-CUC



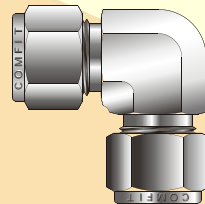
Female Elbows-CFE



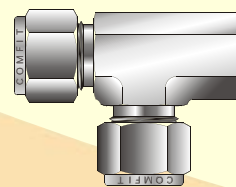
Positionable  
Male Run Tees-CPMRT



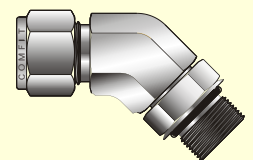
Union Elbows-CUE



Female Run Tees-CFRT



45° Positionable  
Male Elbows-C45PME



Double Ferrules - Front Ferrule CFF



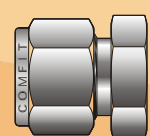
Single Ferrules



Nuts-CN



Tube Caps-CTC



## TUBE FITTINGS

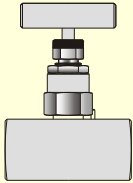
Connectors	Unions
37 Flares	Elbows
Reducers	Tees
Port Connectors	Union
Adaptrs	Component

## PIPE FITTINGS

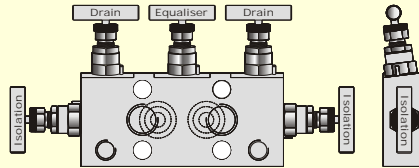
Nipples	Unions	Female Cross
Adapters	Elbow	Union Ball Joint
Bushings	45 Elbow	Caps
Couplings	Tees	Plugs
		Gasket

# INSTRUMENT VALVES

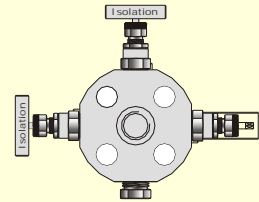
NEEDLE VALVES



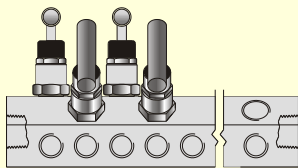
MANIFOLD VALVES



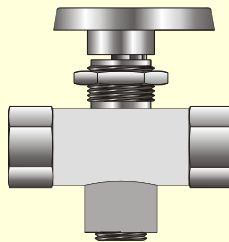
MONOFLANGE VALVES



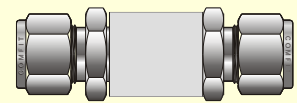
AIR HEADER DISTRIBUTER



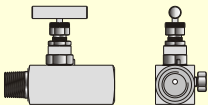
BALL VALVES



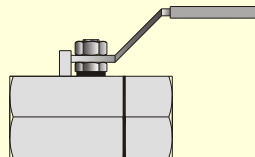
CHECK VALVES



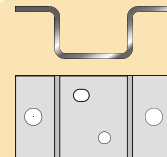
Gauge Valves



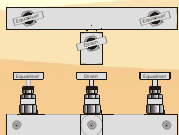
Ball Valves



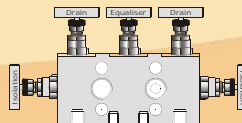
Instrument Manifold Valves



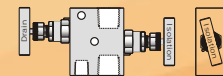
Natural Gas Manifold Valves



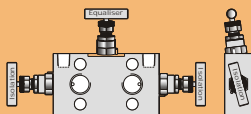
Five valve instrument manifolds



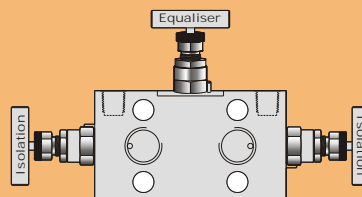
Two valve instrument manifolds



Two valve instrument manifolds  
Pressure (6000psig / 414barg)



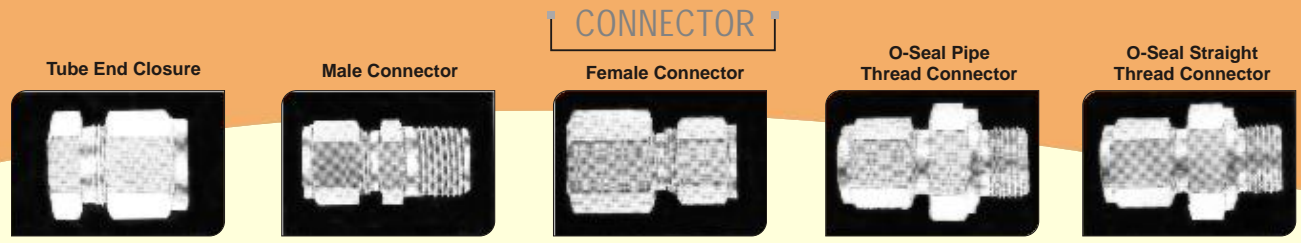
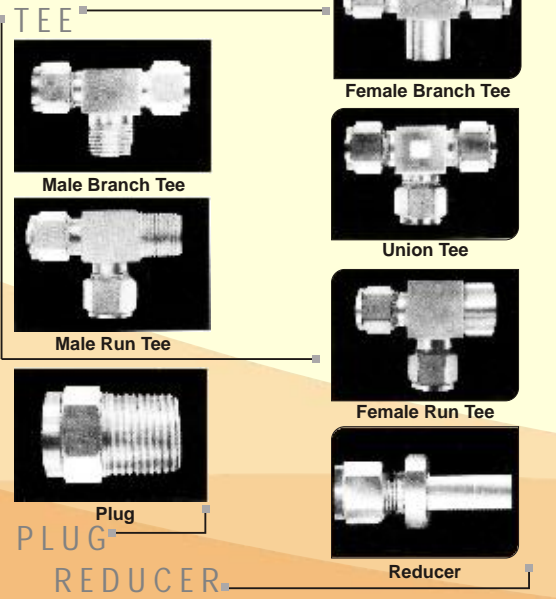
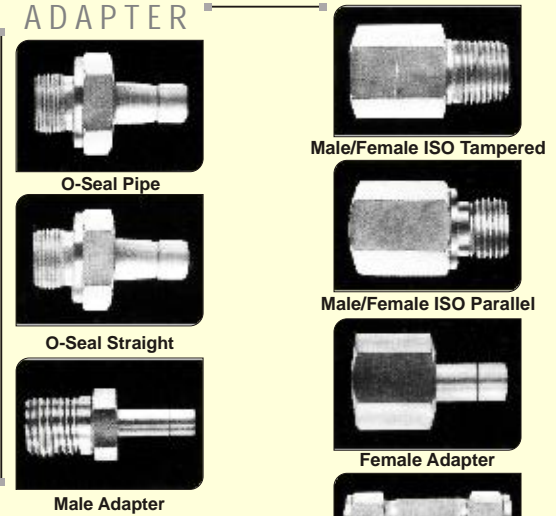
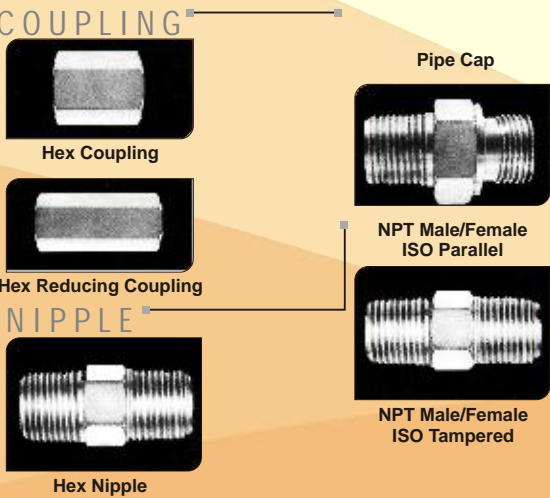
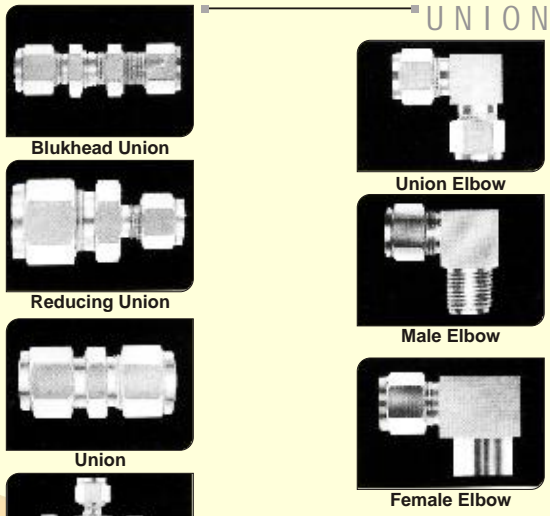
Three valve instrument manifolds  
Pressure (6000psig / 414barg)



Needle Valves  
Manifold Valves

Monoflange Valves  
Air Header Distributer

Ball Valves  
Check Valves



Double Ferrule Compression Tube Fitting provide leak proof torque free seals at all tubing connections. They eliminate hazardous leaks Instrumentation, Process, pneumatic, Hydraulic, Gas and other applicable tubing system which could otherwise turn out to be costly to be installation.

The basic Ferrule Tube Fittings is a four piece Fitting consisting of the Nut, the Back Ferrule, the Front Ferrule and the Body, When installed, it becomes a five piece connection with the addition of the tubing providing a solid leak free joint.

The two ferrule grasp tightly around the tube with no damage to the tube wall. Exhaustive tests have proven that the tubing will yield before a Double Ferrule joint starts leaking.

The secret behind the success of the Double Ferrule Fitting lies in the two ferrule design which is a tube instead of a rotary motion to create the joint. This axial movement prevents any torque to be transmitted from a fitting to the tubing. Since there is no initial strain in the tubing, the making of the joint does not weaken the tubing.

Another advantage of the Double Ferrule Fitting is that Sequential action of the ferrule overcomes variations in the wall thickness, hardness and dimensional tolerance of the tubes. This way proper ferrule interaction compensates for the variables which lead to failure in other fittings.

Double Fittings are easy to install and special tools in the process. They are reusable several times and can withstand heavy impulse and vibration both in vacuum and systems, Absence of damage to the surface prevents fatigue failure.

Double Ferrule Compression Tube Fittings Have The Following Features.

**We give below a summary of the advantages of Double Ferrule Fitting.**

**DESIGN**

- Be self aligning
- Works on thick and thin wall tubing
- Resists vibration
- Works on a variety of tube materials
- Have all components made of the same material and hence possess thermal compatibility and corrosion resistance.
- Resistance to temperature cycling
- Compensates for the variables encountered in tube, Materials, Dimensions and metallurgy.
- Does not significantly reduce flow area.

**ASSEMBLY**

- Uses geometry rather torque for uniformity of make-up
- It requires only one and quarter turns after snug tight to complete the joint.
- Does not require dis-assembly and inspection of ferrule swaging at every make - up.
- Does not require any special tools for assembly.

**PERFORMANCE**

- Work on vacuum as well as low and high pressures
- Seals at low cryogenic temperatures as well as elevated temperatures rated for the tube
- Seals consistently over a wide range of temperature cycling
- Seals repeatedly under make and break conditions.
- Resistant to pressure upto the burst point with the tubing without leakage.

**SERVICE**

Double Ferrule Tube Fittings are available in a wide range of materials, Size, connections and configurations you can contact us at our mumbai office or our sister concern at pune.

- TUBE FITTINGS
- PIPE FITTINGS
- INSTRUMENT VALVES
- FERRULE FITTING



**RISHABH**  
METAL & ENGINEERING CO.

89/91, Durgadevi Street, Office No. 113, 1st Floor  
Mumbai - 400 004 ( Maharashtra ) INDIA

**Tel.** : +91 22 6636 3472 / 6743 6464

**Fax** : 2389 3502

**Email** : [dinesh@rajgiri.com](mailto:dinesh@rajgiri.com) / [vinod@rajgiri.com](mailto:vinod@rajgiri.com)

