

ABC INDIA PRIVATE LIMITED

Instrumentation Valves & Fittings and Sealant Injection Grease Fittings



INTEGRATED MANAGEMENT SYSTEM



AN IMS CERTIFIED COMPANY

SINCE 2000 IN THE INSTRUMENTATION VALVES & FITTINGS WORLD MARKET

TUBE FITTING INSTALLATION INSTRUCTION

Ferrule fittings are especially useful in installations that may require occasional disassembly or partial removal for maintenance etc., since these joints can be broken and remade without affecting the integrity of the joint.

To assemble, insert tube into the fitting then tighten the nut first by hand until it is too difficult to continue and then tighten the nut further more with the aid of a wrench.

As the ferrule(s) moves axially into the fitting body, the body's angled shape radially compresses the end of the ferrule onto the outer diameter of the tubing. It is this radial compression that creates the leak tight seal between the fitting, ferrule, and tubing.

If the nut is overtightened the ferrule will deform improperly causing the joint to fail.

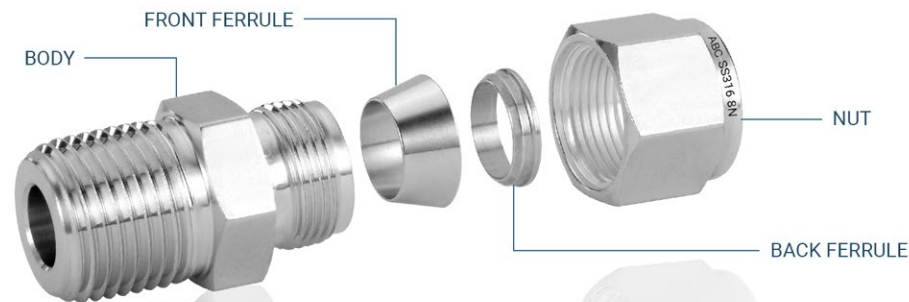
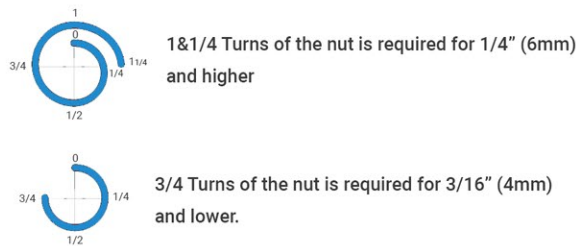


Figure. A

Figure. B



DISASSEMBLY & REASSEMBLY

The ease of assembly and disassembly is one of the reasons why compression fittings are so widely used. Disassembly involves simply loosening the compression nut. Reassembly can be accomplished in a similar manner to the initial assembly, although typically fewer turns of the nut are required, since the ferrule is already swaged to the tubing.

Tube Selection







- Tube OD & wall thickness should be as given in ASTM A269/213 standard.
- Tube End should be squarely cut, to allow the tubing to sit symmetrically in the fitting body.
- Hardness of tube should not be more than Rockwell HRB 90.
- Tube should be free from scratches & burrs.

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel alloy / Brass / Teflon.

Size : 1/8" to 2" ; 4mm to 50mm OD

End Connections : NPT / BSP / BSPT / UNF / METRIC / SW / Plain

Pressure Rating : Upto 9000 PSI

<p>MALE CONNECTOR</p>  <p>ABCTMC</p>	<p>FEMALE CONNECTOR</p>  <p>ABCTFC</p>	<p>BULKHEAD MALE CONN.</p>  <p>ABCTMBH</p>	<p>BULKHEAD FEMALE CONN.</p>  <p>ABCTFBH</p>
<p>EQUAL UNION</p>  <p>ABCTEU</p>	<p>UNEQUAL UNION (REDUCING)</p>  <p>ABCTRU</p>	<p>BULKHEAD UNION</p>  <p>ABCTBHU</p>	<p>EQUAL UNION CROSS</p>  <p>ABCTEUC</p>
<p>MALE ELBOW</p>  <p>ABCTME</p>	<p>FEMALE ELBOW</p>  <p>ABCTFE</p>	<p>UNION ELBOW</p>  <p>ABCTUE</p>	<p>BULKHEAD UNION ELBOW</p>  <p>ABCTBUE</p>
<p>45° MALE ELBOW</p>  <p>ABCT45ME</p>	<p>45° FEMALE ELBOW</p>  <p>ABCT45FE</p>	<p>45° UNION ELBOW</p>  <p>ABCT45UE</p>	<p>45° BULKHEAD UNION ELBOW</p>  <p>ABCT45BUE</p>
<p>EQUAL TEE</p>  <p>ABCTET</p>	<p>UN EQUAL TEE</p>  <p>ABCTUET</p>	<p>MALE BRANCH TEE</p>  <p>ABCTMBT</p>	<p>FEMALE BRANCH TEE</p>  <p>ABCTFBT</p>
<p>MALE RUN TEE</p>  <p>ABCTMRT</p>	<p>FEMALE RUN TEE</p>  <p>ABCTFRT</p>	<p>MALE ADAPTOR</p>  <p>ABCTMA</p>	<p>FEMALE ADAPTOR</p>  <p>ABCTFA</p>
<p>TUBE ADAPTOR</p>  <p>ABCTAD</p>	<p>PLAIN CONNECTOR</p>  <p>ABCTPC</p>	<p>TUBE CAP</p>  <p>ABCTCA</p>	<p>TUBE PLUG</p>  <p>ABCTPL</p>



FLARE END FITTINGS

Technical Information

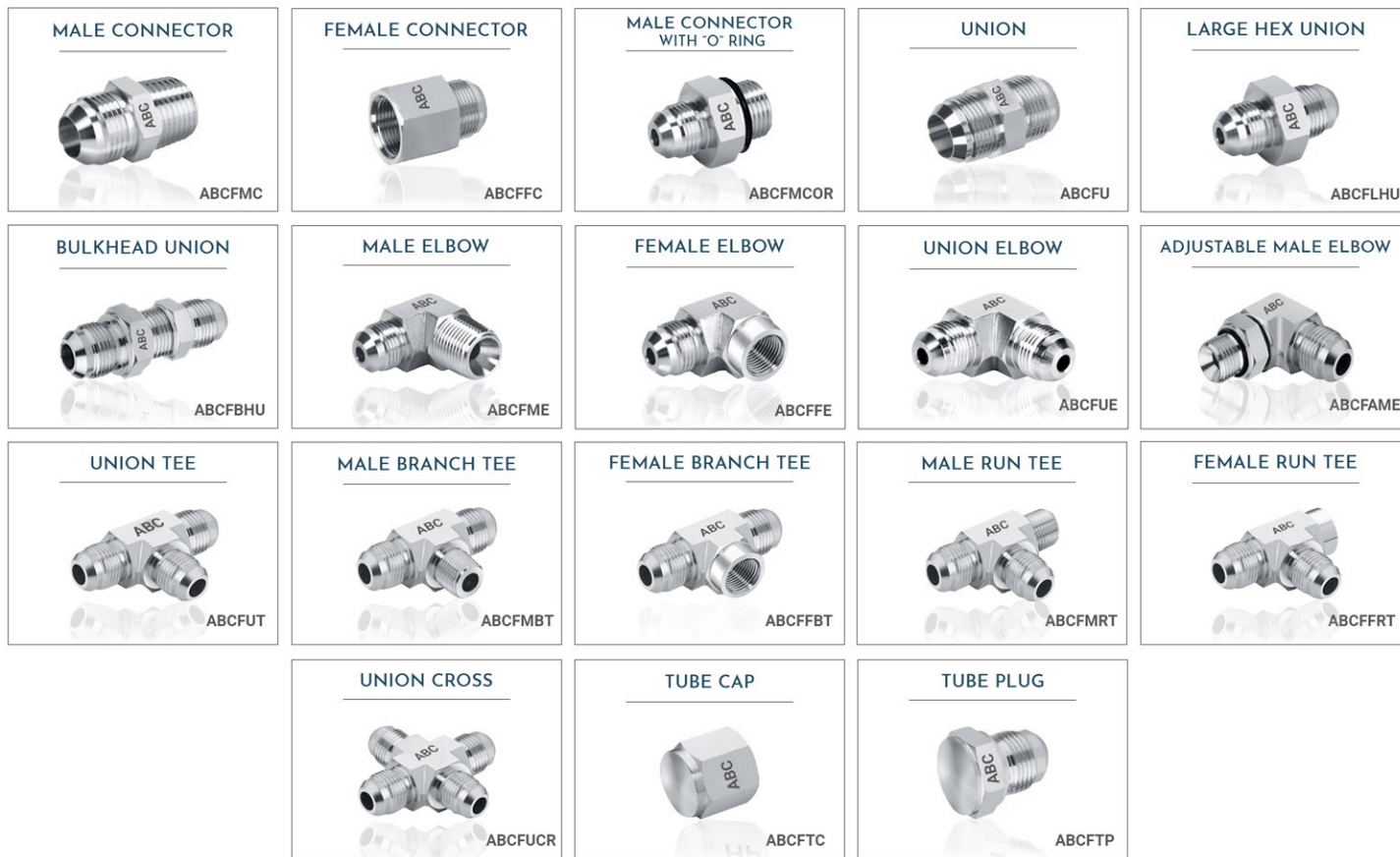


M.O.C : Stainless Steel / Carbon Steel / Brass / Alloy Steel / Teflon

Size : 1/8" to 2"

End Connections : NPT / BSP / BSPT / UNF / METRIC

Pressure Rating : Upto 10000 PSI



ORBITAL WELD FITTINGS

Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel

Size : 1/8" to 2"

End Connections : BW & SW

Pressure Rating : Upto 10000 PSI



ERMETO FITTINGS

Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel

End Connections : NPT / BSP / BSPT / SW

Size : 1/8"NB OD to 2"NB OD & 6mm OD to 50mm OD & 1/8" to 2" Threaded

Pressure Rating : Upto 10000 PSI



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel alloy / Brass / Teflon.

End Connections : NPT / BSP / BSPT / METRIC / SW / BW

Size : 1/8" to 2"

Pressure Rating : Upto 9000 PSI

NOTE : All Fittings are available in both Round and Hex as per standard ASME B16.11

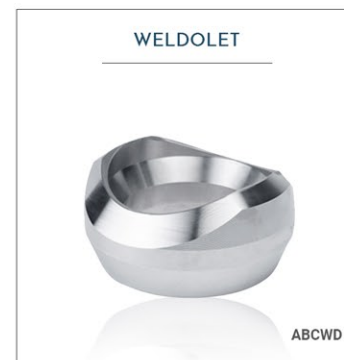
<p>MALE TEE</p> <p>ABC ABCPMT</p>	<p>MALE RUN TEE</p> <p>HEX-TH ABC ABCPMRT</p> <p>ROUND-SW ABC ABCPMRT</p>		<p>MALE BRANCH TEE</p> <p>HEX-TH ABC ABCPMBT</p> <p>ROUND-SW ABC ABCPMBT</p>	
<p>HEX-TH ABC</p>	<p>FEMALE TEE</p> <p>ROUND-TH ABC ABCPFT</p>	<p>ROUND-SW ABC ABCPFT</p>	<p>MALE ELBOW</p> <p>ABC ABCPME</p>	<p>45° MALE ELBOW</p> <p>ABC ABCP45ME</p>
<p>FEMALE ELBOW</p> <p>ABC ABCPFE</p>	<p>ABC ABCPFE</p>	<p>45° FEMALE ELBOW</p> <p>ABC ABCP45FE</p>	<p>STREET ELBOW</p> <p>ABC ABCPSE</p>	<p>45° STREET ELBOW</p> <p>ABC ABCP45SE</p>
<p>FEMALE CROSS</p> <p>HEX-TH ABC ABCPCRF</p>	<p>ROUND-TH ABC ABCPCRF</p>	<p>PIPE PLUG</p> <p>ABC ABCPPL</p>	<p>PIPE CAP</p> <p>ABC ABCPCA</p>	<p>BREATHER</p> <p>ABC ABCPBR</p>
<p>HEX-TH ABC ABCPFCO</p>	<p>FULL COUPLING</p> <p>ROUND-TH ABC ABCPFCO</p>	<p>ROUND-SW ABC ABCPFCO</p>	<p>HALF COUPLING</p> <p>ROUND-TH ABC ABCPHCO</p> <p>ROUND-SW ABC ABCPHCO</p>	
<p>HEX-TH ABC ABCP3PU</p>	<p>PIPE UNION 3PC</p> <p>ROUND-SW ABC ABCP3PU</p>	<p>BULKHEAD UNION</p> <p>HEX-SW ABC ABCPBHU</p> <p>ROUND-TH ABC ABCPBHU</p>		<p>HEX NIPPLE</p> <p>ABC ABCPHN</p>
<p>PIPE NIPPLE PL X TH</p> <p>ABCPNPT</p>	<p>PIPE NIPPLE PL X PL</p> <p>ABCPNPN</p>	<p>PIPE NIPPLE TH X TH</p> <p>ABCPNPT</p>	<p>REDUCER SWAGE NIPPLE</p> <p>ROUND-BW ABC ABCPRSN</p>	<p>ROUND-TH ABC ABCPRSN</p>
<p>MALE ADAPTOR (REDUCER)</p> <p>ABC ABCPMA</p>	<p>FEMALE ADAPTOR (REDUCER)</p> <p>ABC ABCPFA</p>	<p>WELDABLE MALE CONNECTOR</p> <p>ABC ABCPWMC</p>	<p>NUT & TAIL ADAPTOR(MALE)</p> <p>ABC ABCPMNTA</p>	<p>NUT & TAIL ADAPTOR(FEMALE)</p> <p>ABC ABCPFNTA</p>

THREDOLET & WELDOLET

Technical Information



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel
Size : 1/2" to 2"
End Connections : NPT, BSP, BSPT, SW
Pressure Rating : Upto 9000 PSI



BUTT WELD FITTINGS

Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel
End Connections : BW

Size : 1/2" to 4"
Schedule : SCH10 to XXS



HOSE FITTINGS & QRC

Technical Information

M.O.C : Stainless Steel / Carbon Steel / Brass / Alloy Steel
End Connections : NPT / BSP / BSPT / SW

Size : 1/8" to 2"
Pressure Rating : Upto 10000 PSI



THERMOWELLS

Technical Information

Thermowells are tubular fittings used to protect temperature sensors installed in industrial processes. A thermowell consists of a tube closed at one end and mounted in the process stream. A temperature sensor such as a thermometer, thermocouple or resistance temperature detector is inserted in the open end of the tube, which is usually in the open air outside the process piping or vessel and any thermal insulation

Available in different materials & sizes with threaded, welded & flanged connections.

Female End : 1/2"
Male End : 3/4"
Immersion Length : Specified by customer

ABC TW



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

Size : 1/4" to 2"

End Connections : NPT / BSP / BSPT / UNF / METRIC

Pressure Rating : Upto 10000 PSI

VENTED BODY GREASE FITTINGS



GIANT BUTTON HEAD



INTERNAL CHECK VALVE



LUBRICANT FITTINGS



GREASE FITTINGS



BODY VENT FITTINGS



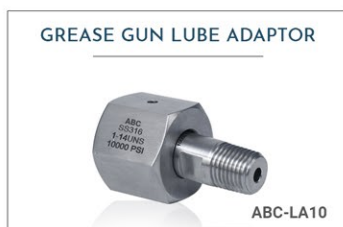
PACKING INJECTION



LEAK LOCK FITTINGS



FITTING ACCESSORIES



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

Size : 1/4" to 1/2"

End Connections : NPT / BSP / BSPT / SW / METRIC

Pressure Rating : 3000 / 6000 / 9000 PSI

2 WAY MANIFOLD VALVES

2 WAY "F" TYPE (BLOCK & BLEED)



2WM/F

ABC201BB

2 WAY "T" TYPE (INTEGRAL MOUNTING)



2WM/T

ABC202DM

2 WAY ANGLE TYPE



2WM/A

ABC204AT

2 WAY - GAUGE TYPE (F)X(F)



2WM/G

ABC203GV

2 WAY - GAUGE TYPE (F)X(M)



2WM/G

ABC205GV

2 WAY - GAUGE TYPE (M)X(F)



2WM/G

ABC206GV

3 WAY MANIFOLD VALVES

3 WAY "F" TYPE (SEPARATE MOUNTING)



3WM/F

ABC301RM

3 WAY "F" TYPE WITH DRAIN (SEPARATE MOUNTING)



3WM/F

ABC302RM

3 WAY "T" TYPE (INTEGRAL MOUNTING)



3WM/T

ABC303DM

3 WAY "T" TYPE WITH DRAIN (INTEGRAL MOUNTING)



3WM/T

ABC304DM

3 WAY - "H" TYPE (INTEGRAL MOUNTING)



3WM/H

ABC305FF

5 WAY MANIFOLD VALVES

5 WAY "F" TYPE (SEPARATE MOUNTING)



5WM/F

ABC501RM

5 WAY "T" TYPE (INTEGRAL MOUNTING)



5WM/T

ABC502DM

5 WAY "H" TYPE (INTEGRAL MOUNTING)



5WM/H

ABC503FF

COPLANAR MANIFOLD VALVES

Technical Information

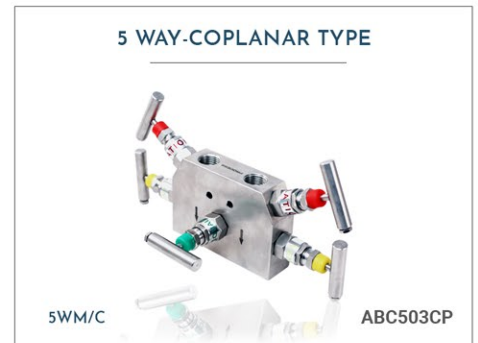
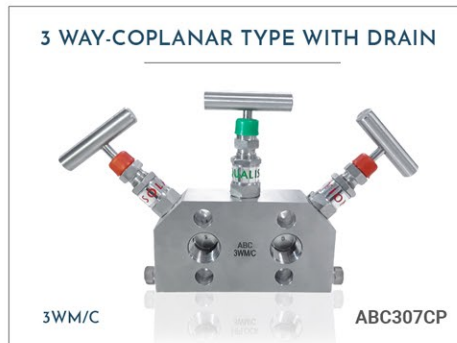


M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

Size : 1/4" to 1/2"

End Connections : NPT / BSP / BSPT

Pressure Rating : 3000 / 6000 / 9000 PSI



MONOFLANGE MANIFOLD VALVES

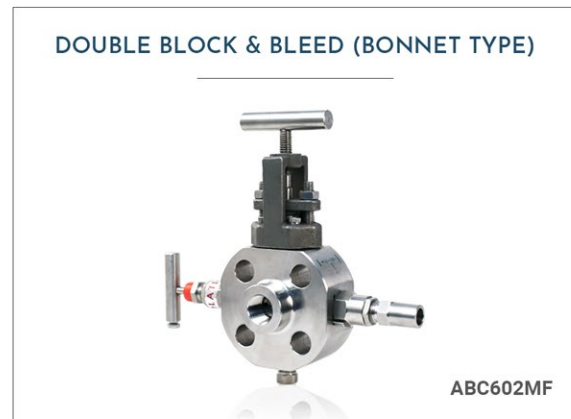
Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

End Connections : NPT / BSP / BSPT

Size : 1/2" to 3"

Pressure Rating : Class 800# to 2500#



DOUBLE BLOCK & BLEED VALVES

Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

Size : 1/2" to 1"

End Connections : NPT / BSP / BSPT / SW / Flange End

Pressure Rating : Class 800# to 2500#

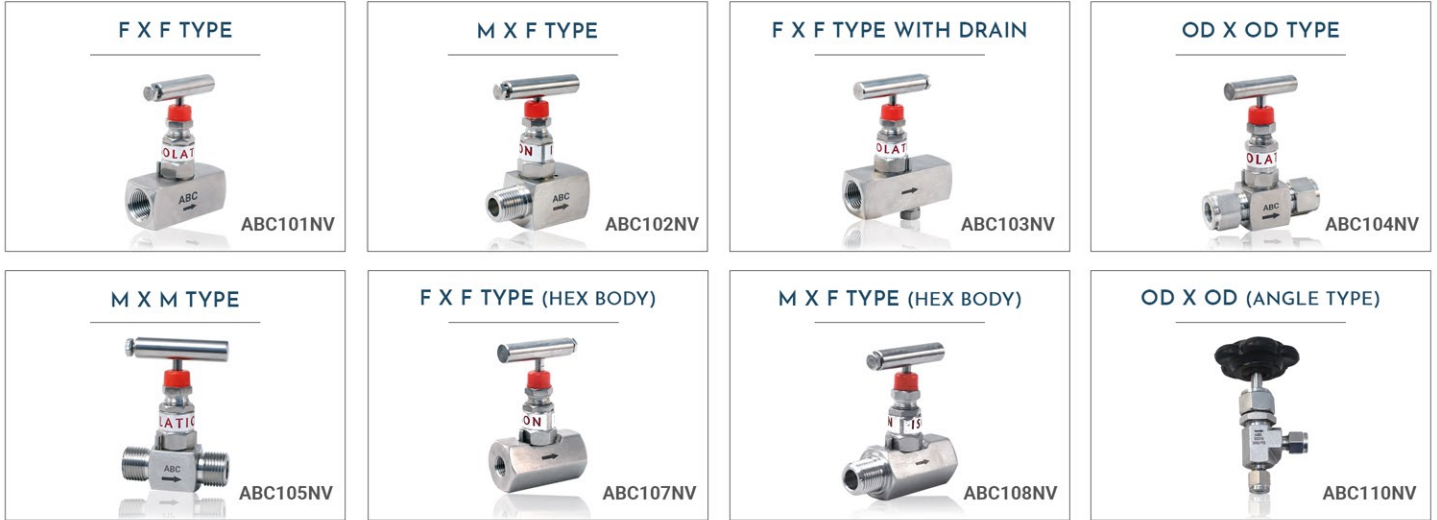


NEEDLE VALVES

Technical Information



- M.O.C** : Stainless Steel / Carbon Steel / Alloy Steel / Brass / Nickel Alloy
- Size** : 1/8" to 2" ; 1/8" to 1" OD & 4mm to 25mm OD (Suitable for Tube Conn.)
- End Connections** : NPT / BSP / BSPT / SW / Tube OD / UNF / METRIC
- Pressure Rating** : Upto 10000 PSI



HIGH PRESSURE NEEDLE VALVES

Technical Information

- M.O.C** : Stainless Steel / Carbon Steel / Alloy Steel
- End Connections** : NPT / BSP / BSPT
- Size** : 1/8" to 3/4"
- Pressure Rating** : Upto 40000 PSI



GAUGE COCK & SNUBBER

Technical Information

- M.O.C** : Stainless Steel / Carbon Steel / Alloy Steel / Brass
- End Connections** : NPT / BSP / BSPT / SW
- Size** : 1/4" to 1/2"
- Pressure Rating** : Upto 6000 PSI for Snubber ; Upto 3000 PSI for Gauge Cock



BALL VALVES

Technical Information



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Brass / CF8m / CF8 **Size** : 1/4" to 2"

Pressure Rating : Upto 1000 PSI for IC BV / Upto 3000 PSI

End Conn. : NPT / BSP / BSPT / Tube OD & SW



HIGH PRESSURE BALL VALVES

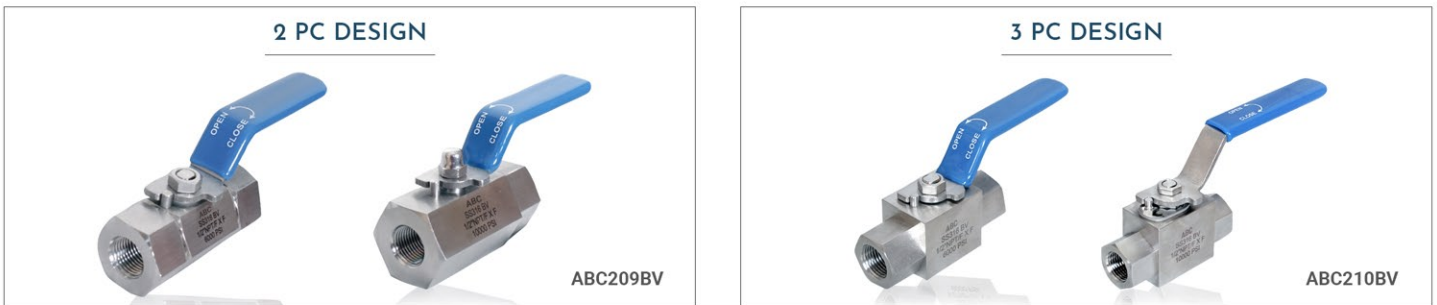
Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Brass

Size : 1/4" to 2"

End Connections : NPT / BSP / BSPT / SW

Pressure Rating : Upto 10000 PSI



TRUNNION BALL VALVES

Technical Information

M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Brass

Size : 1/4" to 1"

End Connections : NPT / BSP / BSPT / Tube OD & SW

Pressure Rating : Upto 3000 PSI



CHECK VALVES (NRV)

Technical Information



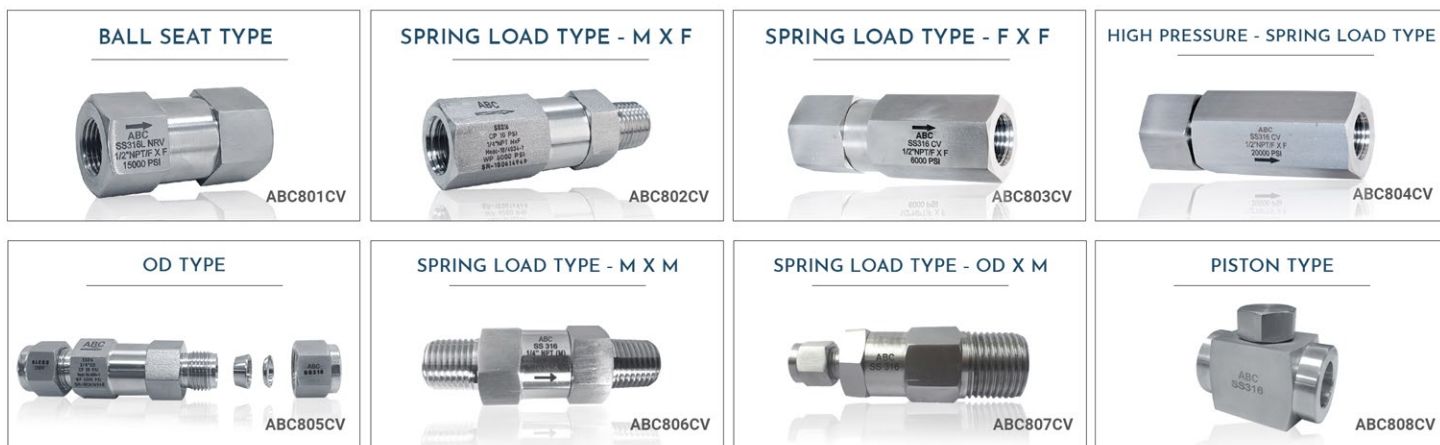
M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Brass

Pressure Rating : Upto 20000PSI

Size : 1/4" to 2"

Cracking Pressure : 1.5 kg/cm2

End Connections : NPT / BSP / BSPT/ Tube OD / SW



RELIEF VALVE

Technical Information

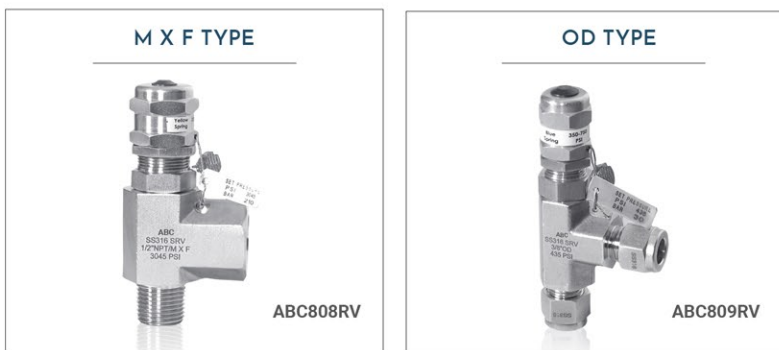
M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

Size : 1/4" to 1/2"

End Connections : NPT / Tube OD

PR. Rating : Upto 10000PSI

Opening Set Pressure : 20PSI to 3000PSI and as customer requirements



GLOBE VALVE

Technical Information



M.O.C : Stainless Steel, Carbon Steel, Alloy Steel, Nickel Alloy

Size : 15 NB to 50 NB

End Connections : Screwed, Socket Welded, Butt Welded

Pressure Rating : Class 800# to 4500#

Max Temp : 1300°C



GATE VALVE

Technical Information

M.O.C : Stainless Steel, Carbon Steel, Alloy Steel

Size : 15 NB to 50 NB

End Connections : Screwed, Socket Welded, Butt Welded

Pressure Rating : Class 150# to 1500#



AIR HEADERS

Technical Information



- M.O.C** : Stainless Steel / Carbon Steel
- Inlet Size** : 1/4" to 2" Threaded / Socket Welded / Flanged - Needle Valve / Ball Valve
- Outlet Size** : 1/4" to 1" Threaded / Socket Welded - Needle Valve / Ball Valve
- Drain Size** : 1/4" to 2" Threaded / Socket Welded / Flanged - Needle Valve / Ball Valve with Plug
- Pipe Schedule** : SCH 20 to SCH XXS



CONDENSATE POT / SAMPLING POT

Technical Information

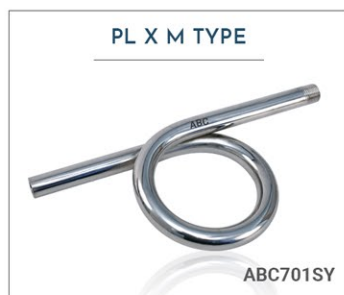
- M.O.C** : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy
- Size** : 2" to 6"
- End Connections** : NPT / BSP / BSPT / SW
- Pipe Schedule** : SCH 40 to SCH XXS



SYPHONS

Technical Information

- M.O.C** : Stainless Steel / Carbon Steel / Alloy Steel
- Size** : 1/4" to 1/2"
- End Connections** : NPT / BSPT / BSP / PL / SW
- Pipe Schedule** : SCH 40 to SCH XXS



AIR FILTER REGULATOR

Technical Information

- Ranges** : 0 to 30, 0 to 60, 0 to 100, 0 to 150 PSI
- End Size** : 1/4" / 1/2" / 3/4" / 1"
- End Connections** : NPT(F) / BSP(F)
- Body & Bowl Mtrl.** : Aluminum Die Cast
- Filterization** : 5 to 40 micron
- Bowl Capacity** : 130cc (Approx.)
- Drain** : Manual Type
- Accuracy** : ± 5% FSR

ABCAFR



FLANGES

Technical Information



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy **PR. Rating** : Class 150#, 300#, 600#, 900#, 1500# & 2500#
Size : 1/2" NB to 24" NB



TUBES

Technical Information



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Copper
Size : 1/8" to 2" (Seamless) & 6mm OD to 50mm OD
Pressure : Upto 9000 PSI
Type : Seamless

PIPES

Technical Information

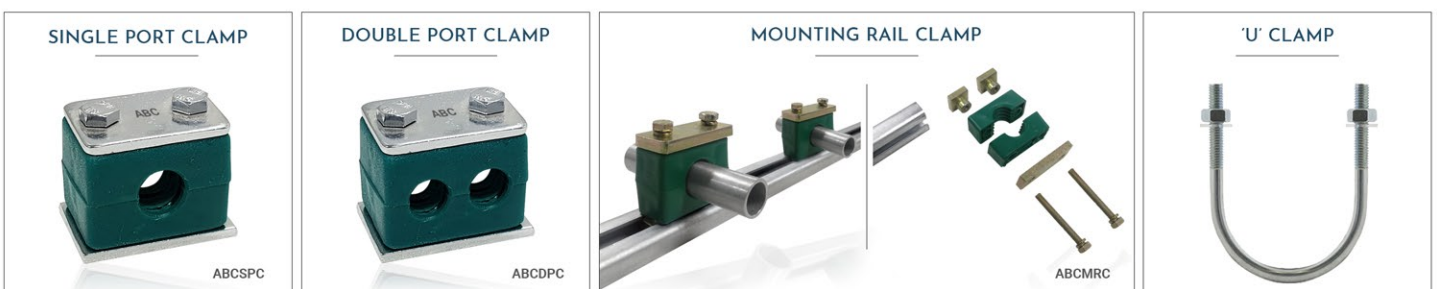
M.O.C : Stainless Steel / Carbon Steel / Alloy Steel
Size : Upto 24" NB
Pipe Schedule : SCH10 to SCHXXS
Type : Seamless



PIPE, TUBE & 'U' CLAMP

Technical Information

Clamps are available in sizes ranging from 1/8" to 2" & 6mm to 50mm which eliminate vibrations with its unique construction. HDPE body with top and bottom steel plates are supplied.



M.O.C : Stainless Steel / Carbon Steel / Alloy Steel / Nickel Alloy

Size : 1/2" to 3"

Pr. Rating : Upto 2500#

ABCFR



CUSTOMIZED ITEMS

Technical Information

ABC manufactures custom made components as per customer drawing or sample.



CLIENT LOCATIONS ACROSS THE WORLD



ABC INDIA PRIVATE LIMITED

Instrumentation Valves & Fittings and Sealant Injection Grease Fittings

ADDRESS :

PLOT NO : 82, Survey no: 459, Phase -III, IDA Patancheru,
Sangareddy -502319, Telangana state, India

Tel: +91 40 23555278 | Fax: +91 40 23555278 | Mob: +919666619905 / +919666619908

Email: crichard@abc-essais.com | Website: www.abc-essais.com