DISTRIBUIDOR AUTORIZADO PARA AMERICA
COMERCIALIZADORA IMPORVAL SAS

Cra 38 No. 12ª -47 local 103 Bogotá
Colombia

TELEFONO: 3124871169

EMAIL: imporval@hotmail.com www.imporval.com.co

Imporval
Comercializadora S.A.S

INTRODUCCION

Accesorios de tubo de compresión de doble férula de imporlok

Proporcione sellos a prueba de fugas sin torque en todas las conexiones de tubería. Eliminan fugas peligrosas en instrumentación, proceso, neumática, hidráulicos, de gas y otros sistemas de tuberías aplicables que, de lo contrario, podrían resultar costosos para la instalación.

Imporlok

Los accesorios de férula doble son fáciles de instalar y no requieren herramientas especiales en el proceso. Son reutilizables varias veces y puede soportar fuertes impulsos y vibraciones tanto en sistemas de vacío como de presión. Ausencia de daños en el tubo.

La superficie evita fallas por fatiga.

CompressionTubeFittings tiene las siguientes características y ventajas:

DISEÑO

- Autoalineación
- Funciona en tuberías de paredes delgadas y gruesas
- Resiste la vibración
- Funciona en una variedad de materiales de tubos
- Como todos los componentes están hechos del mismo material. los accesorios poseen compatibilidad térmica y resistencia a la corrosión
- Demuestra resistencia a los ciclos de temperatura
- Compensa las variables encontradas en los materiales de los tubos
- No requiere área de flujo significativamente

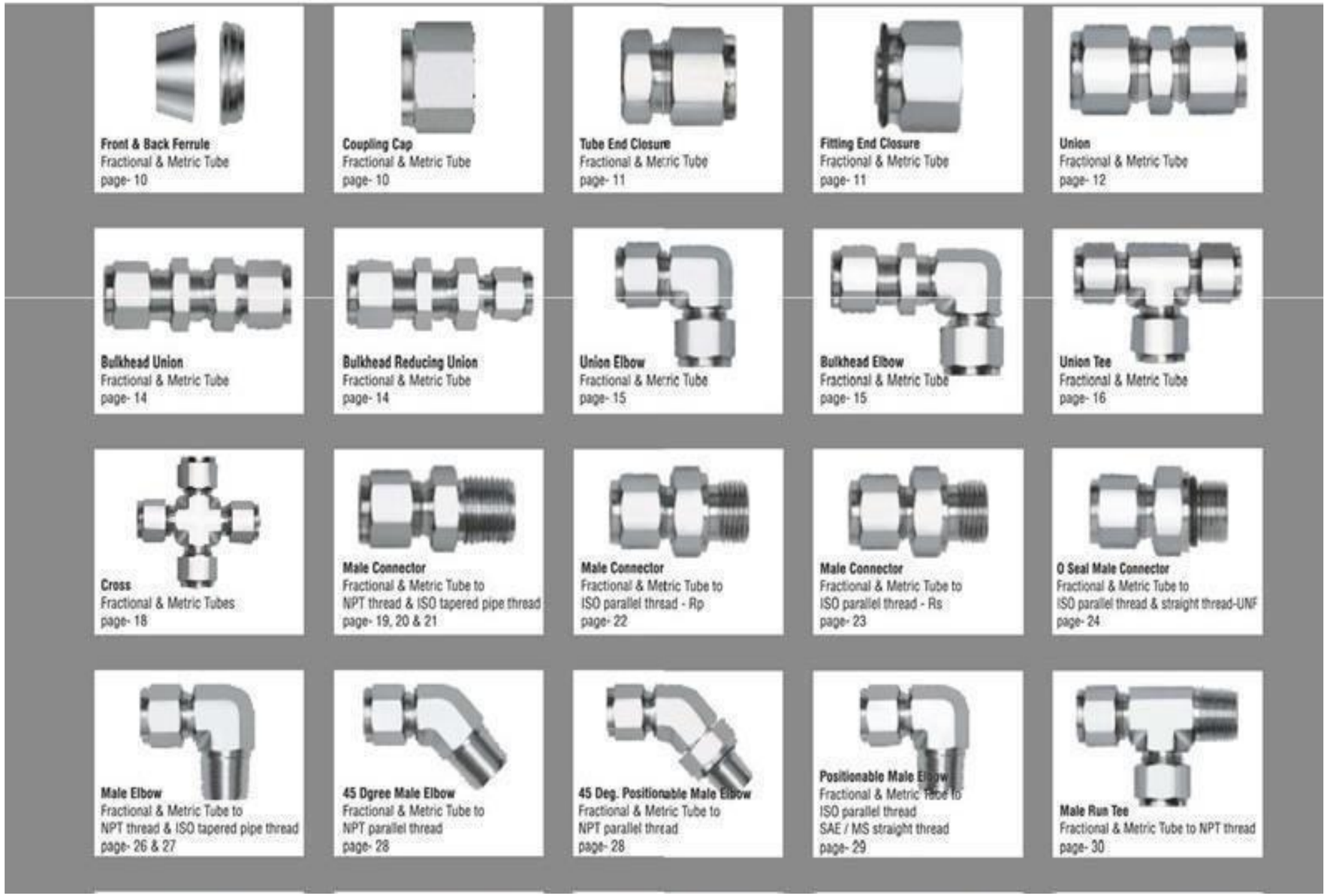
ACTUACIÓN

- Funciona en vacío, así como en presiones bajas y altas
- Sella a temperaturas criogénicas, así como a temperaturas elevadas clasificadas para el tubo
- Los sellos examinan constantemente una amplia gama de ciclos de temperatura
- Sella repetidamente < condiciones de hacer y romper
- Resistente a la presión hasta el punto de ruptura con la tubería sin fugas

SERVICIO

Los racores imporlok están disponibles en una amplia gama de materiales, tamaños, conexiones y configuraciones.

LOCALIZADOR DE PRODUCTOS



LOCALIZADOR DE PRODUCTOS

Positionable Male Run Tee
Fractional & Metric Tube to ISO parallel thread SAE / MS straight thread
page- 32 & 33

Positionable Male Branch Tee
Fractional & Metric Tube to ISO parallel thread SAE /MS straight thread
page-32 & 33

Female Connector
Fractional & Metric Tube to NPT thread & ISO tapered pipe thread
page- 34 & 35

Female Manometer Connector
Fractional & Metric Tube to ISO parallel thread (gauge)
page- 36

Bulkhead Female Connector
Fractional & Metric Tube to NPT thread
page- 37

Female Run Tee
Fractional & Metric Tube to NPT thread
page- 40

Female Branch Tee
Fractional & Metric Tube to NPT thread
page- 40

Butt Weld Pipe Connector
Fractional & Metric Tube to pipe
page- 41

Butt Weld Pipe Elbow
Fractional Tube to pipe
page- 41

Socket Weld Tube Connector
Fractional & Metric Tube to Tube
page- 42

Reducer
Fractional & Metric Tube
page- 43

Bulkhead Reducer
Fractional & Metric Tube
page- 44

Male Adapter
Fractional & Metric Tube to NPT thread & ISO tapered pipe thread
page- 45 & 46

Male Adapter
Fractional & Metric Tube to ISO parallel thread
page- 47

O Seal Male Adapter
Fractional Tube to Male Straight Thread
page- 47

CONTENIDO

Reducing Union
Fractional & Metric Tube
page- 13

Reducing Union Tee
Fractional & Metric Tube
page- 17

Bulk Head Male Connector
Fractional & Metric Tube to NPT thread
page- 21

Male Branch Tee
Fractional & Metric Tube to NPT thread
page- 31

Female Elbow
Fractional & Metric Tube to NPT thread
page- 38 & 39

Socket Weld Tube Elbow
Fractional & Metric Tube to tube
page- 42

Female Adapter
Fractional & Metric Tube to
NPT thread & ISO tapered pipe thread
page- 48 & 49

Female Manometer Adapter
Fractional & Metric Tube to
ISO parallel thread (gauge)
page- 49

SELECCION DE TUBOS

La selección, el manejo y la instalación adecuados de los tubos cuando se combinan con la proporción de los racores de tubo de doble férula de imporlok son esenciales.
sistemas de tuberías fiables. Aunque imporlok no es un fabricante o proveedor de tubos, creemos que es nuestro deber recalcar en nuestros clientes la vital
importancia de una cuidadosa selección de tubería de alta calidad para instalar sistemas seguros y sin fugas. imporlok "estará encantada de ayudar en la selección
de dichos tubos a nuestros clientes cuando lo soliciten.

Las selecciones de tubos se basan en el material, la dureza, el grosor de la pared y el acabado de la superficie. Las especificaciones de ASTM para varios tubos cubren el material,
dureza y espesor de pared, pero no da detalles sobre el acabado de la superficie.

Por ejemplo, ASTM A269, una de las especificaciones más utilizadas, dice lo siguiente en la cláusula 14.1 bajo el título "ACABADO".

Los tubos terminados deberán ser razonablemente rectos y tener extremos lisos sin rebabas. Estarán libres de defectos perjudiciales y tendrán un trabajador como
acabado. Los defectos menores se pueden eliminar mediante esmerilado siempre que el espesor de la pared no se reduzca a menos de lo permitido en la cláusula 13".

El estándar ASTM es silencioso en el acabado de la superficie, que debe ser suave y libre de rayones, axiales o circunferenciales que
Deje vías de fuga a lo largo de las juntas.

Damos nuestros comentarios a continuación sobre las selecciones de tubos. Estos requisitos se especifican en la sección 3.1.9 de ASTMA 269 o la sección 3.1.11 de ASTMA
213.

DUREZA DE TUBOS

El acero ha sido probado con éxito con una dureza de tubería de hasta RB 90, la dureza máxima permitida bajo

ASTM A213 y ASTM A269.

Aunque dicha dureza de tubería es permisible y los accesorios de doble férula marca imporlok funcionarán satisfactoriamente en tales tubos,

no darán la máxima ventaja y rendimiento para tubos de dureza superior a RB 80. Por lo tanto, se sugiere que al comprar

tubos de acero inoxidable a la norma ASTM A213 / A269, los clientes especifican que la dureza de los tubos no debe exceder RB 80. Mejor aún, hemos encontrado que los mejores resultados se obtienen donde la dureza de la tubería de acero inoxidable está en el rango de RB70-74, esta tubería (en el rango de RB 70-74) reduce los costos de instalación

porque es más fácil de doblar e instalar.

Los instaladores de tuberías deben tener especial cuidado de que se den las vueltas y cuarto completas sugeridas después de ajustarlas bien.

realizado para asegurar las juntas adecuadas. Esto le dará el mejor rendimiento. Esto es especialmente cierto en el caso de los más duros.

tubería donde se requieren torques más altos.

Volvemos a repetir que la dureza máxima RB 80 es una sugerencia para el uso de los conectores marca imporlok Double Ferrule Fitting en acero inoxidable.

acero para aumentar las prestaciones del herraje. Tenga en cuenta que si la dureza del tubo supera la RB90, es necesario pedir accesorios especiales.

ESPESOR DE PARED DE TUBERÍA

Las clasificaciones de presión permisibles de la tubería para la amplia gama de espesores de pared se calculan a partir de los valores "S" según lo especificado por

Código ANSIB31.1. El rango de espesores de pared de la tubería varía de 0,028" a 0,109" en la serie de pulgadas OD y de O,75 mm a 2,5 mm en

la serie Métrica OD respectivamente. Generalmente se prefieren estos espesores de pared para tamaños de tubo de hasta 1" de DE y 25 mm

OD en los dos sistemas respectivamente. Para tamaños de tubo más altos, estos espesores de pared se pueden aumentar a 0,125" o (3 mm) y 0,167" o

(4 mm) en el sistema de pulgadas (métrico) respectivamente.

Por lo general, no se recomiendan tubos con paredes de mayor grosor, ya que pueden reducir el rendimiento y aumentar el par.

requisitos para crear la junta. Tampoco se recomiendan tubos con espesores de pared más bajos, ya que existe la posibilidad de colapso del tubo.

TUBERIA PARA SERVICIO DE GAS

Para obtener el mayor factor de seguridad contra los defectos de la superficie en cualquier sistema de gas, se recomienda que la pared el espesor empleado no debe ser inferior al que se muestra en la siguiente tabla:

Tube O.D	Suggested Minimum Wall Thickness	Tube O.D	Suggested Minimum Wall Thickness
1/16"	0028"	314"	062"
1/8"	0028'	7/8"(20mm)	0073"
1/4"f6mml	0.028"	1"(25mml	0.083"
5/16"18mml	0.035"	1 -1/4"	C104"
3,'8"(10mm)	0.035'	' 1 12"	C125'
1/2"112mml	0.041"	2”	0167"
5/8"(16mm)	0.052"		

Los gases ligeros como el helio, el hidrógeno, el nitrógeno, etc. tienen moléculas pequeñas que pueden escapar incluso a través del ruta de fuga más pequeña creada por un defecto en la superficie de la tubería. A medida que aumenta el diámetro exterior del tubo, también lo hace la probabilidad de una búsqueda o otro defecto superficial que interfiere con el sellado adecuado.

La conexión más exitosa para el servicio de gas ocurrirá si se siguen cuidadosamente todas las instrucciones de instalación y se se seleccionan los espesores de pared permisibles de la tubería. Un espesor de pared pesado resiste la acción de la férula más que un espesor de pared delgado que permite la férula para acuñar la superficie a la perfección. Hay pocas posibilidades de acuñar defectos en la superficie esenciales para los servicios de gas.

MANIPULACIÓN DE TUBOS

Los rayones en el diámetro exterior del tubo son fuentes potenciales de problemas en el sistema de tubería a prueba de fugas.

Las buenas prácticas de manejo pueden reducir en gran medida los rayones.

y proteger el buen acabado superficial de los tubos bien hechos.

Los tubos nunca deben arrastrarse fuera de una gradilla para tubos, particularmente en tamaños de ¾" y más grandes, el peso del tramo que se extrae es

suficiente para perforar el diámetro exterior si hay rebabas en el extremo de los tubos debajo de este en la gradilla.

La tubería nunca debe arrastrarse sobre cemento, asfalto, grava o cualquier otra superficie que pueda rayar la superficie y recrear el

piezas de fuga.

Los cortatubos o las sierras para metales siempre deben estar afilados y no debe intentar hacer un corte demasiado profundo con cada uno.

giro del cortador o con cada movimiento hacia adelante y hacia atrás de la hoja de sierra.

Los extremos de los tubos siempre deben desbarbarse. Esto permite entradas más fáciles del tubo en el orificio del accesorio.

y ayuda a asegurar al instalador que la tubería atravesará las férulas sin daños

al borde de sellado de la férula.

ESPECIFICACION DE TUBOS

A continuación, proporcionamos las especificaciones que se deben seguir para varios tubos para usar con los accesorios de compresión de doble férula imporlok

TUBERÍA DE ACERO AL CARBONO

Tubería hidráulica de acero al carbono recocido suave según ASTMAl79, DIN 2391 o equivalente según la resistencia máxima a la tracción

resistencia de 47,000 psi y para temperaturas del metal que no excedan los 20°C a 100°C. Para servicio a temperatura más alta, factores reductores para temperatura elevada

Se debe aplicar la operación como se especifica en la tabla 302.3 1A y 304.1.2 del código para tuberías a presión en ANSIB31.3.

La dureza del tubo se recomienda a RB72 o menos.

Los tubos deben ser aptos para ser doblados y abocinados y libres de todos los defectos e imperfecciones superficiales.

TUBERÍA DE ACERO INOXIDABLE

Tubería de acero inoxidable recocido 304 o 316 según ASTM A269 o ASTM A213 "equivalente". Basado en la máxima resistencia a la tracción de 75,000 psi y adecuado para temperaturas 20'C a 100'C. La dureza de estos tubos no debe exceder RB 80 y se prefiere en el rango RB 7()-74. Los tubos deben ser adecuados para doblar y ensanchamiento y debe estar libre de defectos superficiales e imperfecciones.

COBRE TUBING

Tubería de cobre blando recocido sin costura según ASTM B75 o ASTM B88 con base en una resistencia máxima a la tracción de 30,000 psi y para una temperatura en el rango de 20'C a 80'C. La dureza máxima del tubo no debe exceder RB50. Se prefieren los tubos en el rango RB4G-45.

ESPECIFICACIONES DE ROSCA

Los conectores imporlok tienen uno o más tubos conexiones y los otros con roscas macho o hembra. Hay una variedad de roscas de tubería.

Para los cuales están disponibles los accesorios de doble férula de conectores imporlok. Las conexiones roscadas más populares son las roscas American National Pipe (NPT)

Roscas de tubería estándar británica (BSP) y roscas métricas. Estos hilos pertenecen a estándares de países individuales así como a ISO donde

han sido codificados. Todos los accesorios de los conectores imporlok con roscas de tubería o roscas de extremo de espárrago que cumplan con las especificaciones que se detallan a continuación.

• Rosca de tubería nacional estadounidense (NPT): Especificación de referencia ANSIBl.20.1:1983

• Rosca de tubería paralela ISO (rosca de tubería estándar británica):

Especificaciones de referencia BS 2770, ISO 022811, DIN259, JISB 0202, IS 2643

Rosca de tubería cónica ISO (rosca cónica de tubería estándar británica) Especificación de referencia BS21,ISO7/1,DIN2999,JIS80203, IS 554

• Roscas de Tubería Nacional Unificada: Especificaciones de referencia ANCIB1.1:1964

ESPECIFICACIONESTÉCNICASA LAS QUE FUNCIONAN LOS ACCESORIOS

No hay estándares disponibles para obturaciones de compresión de doble férula. Las presiones de trabajo están restringidas por la presión máxima de trabajo de los tubos que se utilizan con los accesorios.

La presión descrita en la sección titulada Valores nominales de presión permitidos para la tubería prevalecerá como la presión de trabajo para estos accesorios.

La presión máxima de trabajo de estos accesorios también está restringida por los valores nominales de presión para las conexiones de los extremos de las tuberías adoptadas (consulte la sección titulada 'Presión

Clasificaciones para el extremo de la tubería). La menor de las dos será la presión máxima de trabajo de los accesorios.

No hay especificaciones estándar disponibles para las pruebas de rendimiento de los accesorios de compresión de doble férula. ASTM International ha formulado una norma

mientras que cubre una gama de pruebas de rendimiento para aplicaciones críticas y en alta mar. Este estándar es ASTMF1387 99 (2012) para la especificación estándar para

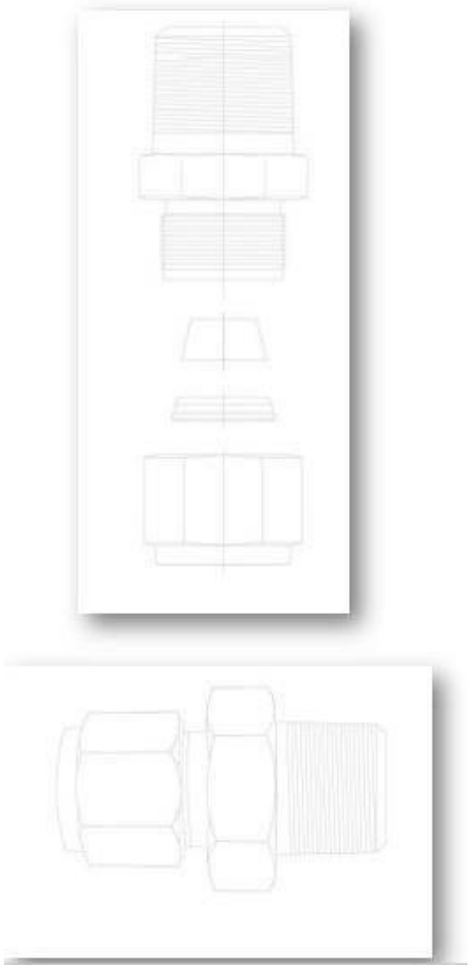
Desempeño de Rellenos de Tubería y Tubería Fijados Mecánicamente.

V. Engineers (imporlok) obtuvo la certificación ASTM F1387-99 (2012) para accesorios de doble casquillo. Las certificaciones para las pruebas Obligatorias y Complementarias

especificado por la norma y cubre rellenos de acero inoxidable y latón.

Pruebas obligatorias ASTM F1387-99:

- Prueba de rendimiento
- Examen de muestras
- Prueba de prueba neumática
- Prueba de prueba hidrostática
- Prueba de impulso
- Prueba de fatiga por flexión
- Ensayo de tracción
- Prueba de explosión
- Repita la prueba de ensamblaje
- Prueba de flexión rotatoria



Pruebas complementarias ASTM F1387-99:

- Prueba de ciclos térmicos
- Prueba de corrosión bajo tensión
- Test de vibración
- Prueba de fuego
- Prueba de temperatura elevada
- Prueba de torsión
- Los detalles de las pruebas individuales y las copias de nuestros certificados están disponibles a pedido o se pueden descargar de nuestro sitio web: www.imporval.com.co

ESPECIFICACIONES TECNICAS A LAS QUE FUNCIONAN LOS ACCESORIOS

No hay estándares disponibles para obturaciones de compresión de doble férula. Las presiones de trabajo están restringidas por la presión máxima de trabajo de los tubos que se utilizan con los accesorios.

La presión descrita en la sección titulada Valores nominales de presión permitidos para la tubería prevalecerá como la presión de trabajo para estos accesorios.

La presión máxima de trabajo de estos accesorios también está restringida por los valores nominales de presión para las conexiones de los extremos de las tuberías adoptadas (consulte la sección titulada 'Presión

Clasificaciones para el extremo de la tubería). La menor de las dos será la presión máxima de trabajo de los accesorios.

No hay especificaciones estándar disponibles para las pruebas de rendimiento de los accesorios de compresión de doble férula. ASTM International ha formulado una norma mientras que cubre una gama de pruebas de rendimiento para aplicaciones críticas y en alta mar. Este estándar es ASTMF1387 99 (2012) para la especificación estándar para Desempeño de Rellenos de Tubería y Tubería Fijados Mecánicamente.

V. Engineers (imporlok) obtuvo la certificación ASTM F1387-99 (2012) para accesorios de doble casquillo. Las certificaciones para las pruebas Obligatorias y Complementarias especificado por la norma y cubre rellenos de acero inoxidable y latón.

Pruebas obligatorias ASTM F1387-99:

- Prueba de rendimiento
- Examen de muestras
- Prueba de prueba neumática
- Prueba de prueba hidrostática

- Prueba de impulso
- Prueba de fatiga por flexión
- Ensayo de tracción
- Prueba de explosión
- Repita la prueba de ensamblaje
- Prueba de flexión rotatoria

Pruebas complementarias ASTM F1387-99:

- Prueba de ciclos térmicos
- Prueba de corrosión bajo tensión
- Test de vibración
- Prueba de fuego
- Prueba de temperatura elevada
- Prueba de torsión

Los detalles de las pruebas individuales y las copias de nuestros certificados están disponibles a pedido o se pueden descargar de nuestro sitio web: www.imporval.com.co

EMSAMBLE IMPORLOK

ACCESORIOS DE DOBLE CASQUILLO:

vienen completamente ensamblados, apretados con los dedos. Están listos para su uso inmediato. Este montaje antes del uso puede resultar en suciedad o material extraño que entre en el accesorio y provoque fugas.

Step 1
Insert the tubing into the Venus Engineers" TUBE FITING. Make sure that the tubing rests firmly on the shoulders of the fitting and that the **n u t** is snug tight in this position the tube does not rotate **by** hand.

Step 2
Before tightening the Venus Engineers " nut. scribe the nut at the 6.00 O'Clock position

Step 3
Now while holding the fitting body steady with a back up wrench. Tighten the nut one-**and—one quarter tums.**
watch the scribe mark make one complete **revolution and continue to** the **9.00 O'clock** position.
For 1/8', 3/16", 3 & 4 mm size tube fittingonly 2/4.turns from finger tight is **necessary** the **jointis now** complete.

HIGH PRESSURE APPLICATIONS,HIGHSAFETY FACTOR SYSTEMS

Due to the variation of tubing diameters a common starting point is desirable. Therefore, use a wrench to snug up the nut until the tubing will not tum **(by** hand) in the fitting. Nowtighten the nut one-and-one Quarter turnsand the fitting is ready to hold pressure well above the working pressure of the tubing,

RE –TIGHTENINGNSTRUCTIONS

Connections can be disconnected and re-tightened many, many times and the same reliable, leak-proof seal obtained every time the reconnection ismade.

PRE-SWAGING

When Venus Engineers"TUBE FITTINGS are to be installed in cramped quatres or overhead where ladders must beused. It is sometimes found advantageous to use a pre-swaging tool on the tubing in an open ground area, thus pre-swaging the ferrules onto the tubing. The tubing is then removed from the pre-swaging tool and tubing (with nut and pre-swaging ferrules) can now be attached to the fitting merely by following there-tightening instructions.

1. Assemble Venus Engineers'"nut and ferrules to pre-swagingtool. Insert tubing until it bottoms in the fitting body. And tighten nut one-and-onequarterturns
2. The nut is loosenedand the tubingwith pre-swaged ferrules is removed from the pre-swaging tool.
3. The connection can now be made by merely snugging up the nut as describedin the re-tightening instruction.


Imporlok
Imporlok
Imporlok

ORDERING CODES

INCH SIZE TUBING

● – ● S ● – ● . ●

- Tube O.D. in multiples of 1/16"
- Pipe thread size in multiples of 1/16"
- Reduced Tube O.D. in multiples of 1/16"
- Code for Double Ferrule Fittings
- (No symbol for conversion fittings)
- Fitting type designator
- Pipe thread specification

NPT threads to ANSI B 1.20.1 - 1983	N
ISO parallel threads to ISO : 228/1	R
ISO taper threads to ISO : 7/1	Rx
UNF threads to ANSI B1.1 - 1964	U

Material designator

Carbon Steel	CS
Brass	b
304 or 304L Stainless Steel	S/SL
316 or 316L Stainless Steel	SS/SSL
Monel	M
Titanium	Ti

METRIC SIZE TUBING

S ● – ● ● – ● . ●

- Code for Double Ferrule Fittings
- (No symbol for conversion fittings)
- Fitting type designator
- Tube O.D. in mm
- Pipe thread size in multiples of 1/16"
- Pipe thread specifciation

NPT threads to ANSI B1.20.1 - 1983	N
ISO parallel threads to ISO : 221/1	R
ISO taper threads to ISO : 7/1	Rx
UNF threads to ASA B1 - 1964	U

Material designator

Carbon Steel	
Brass	b
304 or 304L Stainless Steel	S/SL
316 or 316L Stainless Steel	SS/SSL
Monel	M
Titanium	Ti

FITTING TYPE DESIGNATOR

ITEM	DESIGNATOR
Front Ferrule	ff
Back Ferrule	fb
Coupling Cap	n
Tube End Closure	PC
Fitting End Closure	FC
Union	C
Reducing Union	R
Bulkhead Union	CB
Bulkhead Reducing Union	CRB
Union Elbow	E
Union Tee	T
Reducing Union Tee	TR
Cross	K
Reducing Cross	KR
Male Connector	CM
Bulkhead Male Connector	CMB
O - Seal Male Connector	CO
45 °Male Elbow	EM / 45
Positionable Male Elbow	Esw
Male Run Tee	TRM
Male Branch Tee	TBM
Positionable Male Run Tee	TRsw
Positionable Male Branch Tee	TBsw
Socket Weld Tube Connector	SC-SW
Socket Weld Tube Elbow	SE - SW
Butt Weld Pipe Connector	SC-NB BW
Butt Weld Pipe Elbow	SE NB BW
Female Connector	CF
Bulkhead Female Connector	CFB
Female Elbow	EF
Female Run Tee	TRF
Female Branch Tee	TBF
Reducer	R
Bulkhead Reducer	RB
Male Adaptor	AM
O - Seal Male Adaptor	AMO
Female Adaptor	AF

NOTE :-

(1)The bodies of fittings for metric tubes are provided with a Collar on the tube end side. This is only for identification purposes to differentiate from inch tube fittings.

(2) Dimensions 'C' (in some cases 'Cx', 'F' and 'K') are measured from the Collar in the case of metric tube fittings.

FRONT FERRULE

INCH OD TUBES

T TUBE OD	IMPORLOK PART NO.
1/16	IFF-1
1/8	IFF-2
1/4	IFF-4
5/16	IFF-5
3/8	IFF-6
1/2	IFF-8
5/8	IFF-10
3/4	IFF-12
7/8	IFF-14
1	IFF-16
1.1/4	IFF-20
1.1/2	IFF-24
2	IFF-32

METRIC OD TUBES

T TUBE OD	IMPORLOK PART NO.
3	IFF-3
6	IFF-6
8	IFF-8
10	IFF-10
12	IFF-12
14	IFF-14
15	IFF-15
16	IFF-16
18	IFF-18
20	IFF-20
22	IFF-22
25	IFF-25
28	IFF-28
30	IFF- 30
32	IFF-32
38	IFF-38

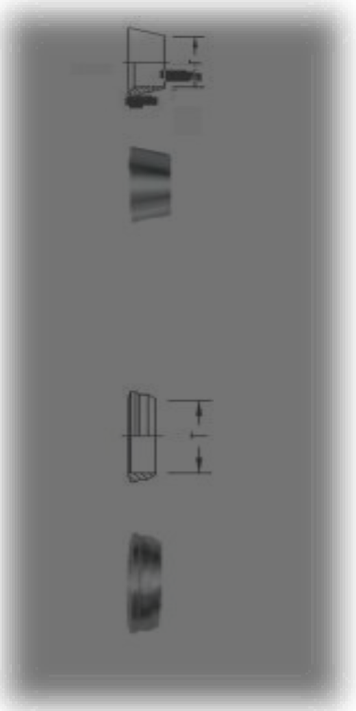
BACK FERRULE

INCH OD TUBES

T TUBE OD	IMPORLOK PART NO.
1/16	IBF-1
1/8	IBF-2
1/4	IBF-4
5/16	IBF-5
3/8	IBF-6
1/2	IBF-8
5/8	IBF-10
3/4	IBF-12
7/8	IBF-14
1	IBF-16
1.1/4	IBF-20
1.1/2	IBF-24
2	IBF-32

METRIC OD TUBES

T TUBE OD	IMPORLOK PART NO.
3	IBF-3
6	IBF-6
8	IBF-8
10	IBF-10
12	IBF-12
14	IBF-14
15	IBF-15
16	IBF-16
18	IBF-18
20	IBF-20
22	IBF-22
25	IBF-25
28	IBF-28
30	IBF- 30
32	IBF-32
38	IBF-38



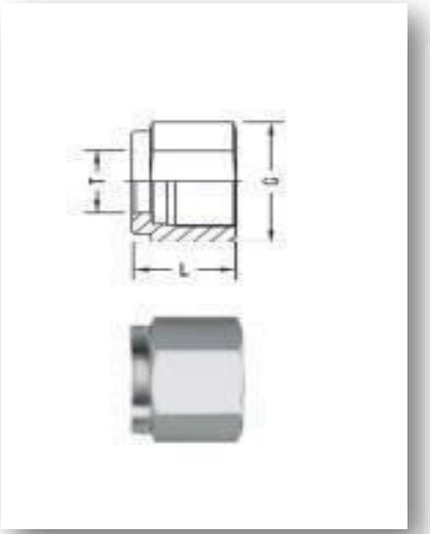
COUPLING CAP

INCH OD TUBES

T TUBE OD	L	G A/F	IMPORLOK PART NO.
1/16	8.0	8	IN-1
1/8	12.0	11	IN-2
1/4	12.7	14	IN-4
5/16	14.0	16	IN-5
3/8	14.5	17	IN-6
1/2	17.5	22	IN-8
5/8	17.5	25	IN-10
3/4	17.5	28.5	IN-12
7/8	17.5	32	IN-14
1	20.6	38	IN-16
1.1/4	31.8	50	IN-20
1.1/2	38.0	57	IN-24
2	52.5	76	IN-32

METRIC OD TUBES

T TUBE OD	L	G A/F	IMPORLOK PART NO.
3	12.0	11	IN-3
6	12.7	14	IN-6
8	13.5	16	IN-8
10	15.1	19	IN-10
12	17.5	22	IN-12
14	17.5	25	IN-14
15	17.5	25	IN-15
16	17.5	25	IN-16
18	17.5	30	IN-18
20	17.5	32	IN-20
22	17.5	32	IN-22
25	20.6	38	IN-25
28	30.6	46	IN-28
30	32.7	50	IN- 30
32	31.8	50	IN-32
38	38.1	57	IN-38



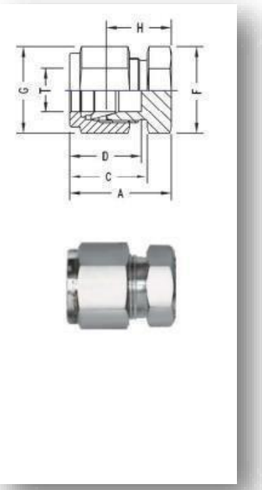
TUBE END CLOSURE

INCH OD TUBES

T TUBE OD	A	C	D	F A/F	G A/F	H	IMPORLOK PART NO.
1/16	13.0	11.0	8.6	11	8	11.2	ITC-1
1/8	20.0	15.3	12.7	11	11	13.5	ITC-2
¼	23.4	17.8	15.3	14	14	16.0	ITC-4
5/16	24.4	18.5	16.3	16	16	17.0	ITC-5
3/8	25.7	19.3	16.8	17	17	18.3	ITC-6
½	29.2	21.8	22.9	22	22	19.0	ITC-8
5/8	30.0	21.8	24.4	24	25	19.8	ITC-10
¾	31.5	21.8	24.4	27	28.5	21.4	ITC-12
7/8	34.0	21.8	25.9	35	32	23.9	ITC-14
1	38.4	26.4	31.2	35	38	26.2	ITC-16
1.1/4	53.3	38.9	41.2	46	50	31.2	ITC-20
1.1/2	64.5	45.2	50.0	55	57	37.4	ITC-24
2	88.6	62.7	67.6	70.0	76.0	49.3	ITC-32

METRIC OD TUBES

T TUBE OD	A	C	D	F A/F	G A/F	H	IMPORLOK PART NO.
3	20.1	15.3	12.9	11	11	13.5	ITC-3
6	23.1	17.7	15.3	14	14	15.7	ITC-6
8	24.5	18.6	16.2	16	16	17.0	ITC-8
10	26.6	19.5	17.2	17	19	19.0	ITC-10
12	29.1	22.0	22.8	22	22	19.0	ITC-12
14	29.9	22.0	24.4	24	25	19.8	ITC-14
15	29.9	22.0	24.4	24	25	19.8	ITC-15
16	29.9	22.0	24.4	24	25	19.8	ITC-16
18	31.4	22.0	24.4	27	30	21.3	ITC-18
20	34.0	22.0	26.0	32	32	23.9	ITC-20
22	34.0	22.0	26.0	32	32	23.9	ITC-22
25	38.5	26.5	31.3	35	38	26.2	ITC-25
28	48.5	36.5	36.6	41	46	27.7	ITC-28
30	53.4	39.2	39.6	46	50	31.8	ITC-30
32	55.8	41.6	42.0	46	50	32.8	ITC-32
38	65.4	47.9	49.4	55	57	37.8	ITC-38



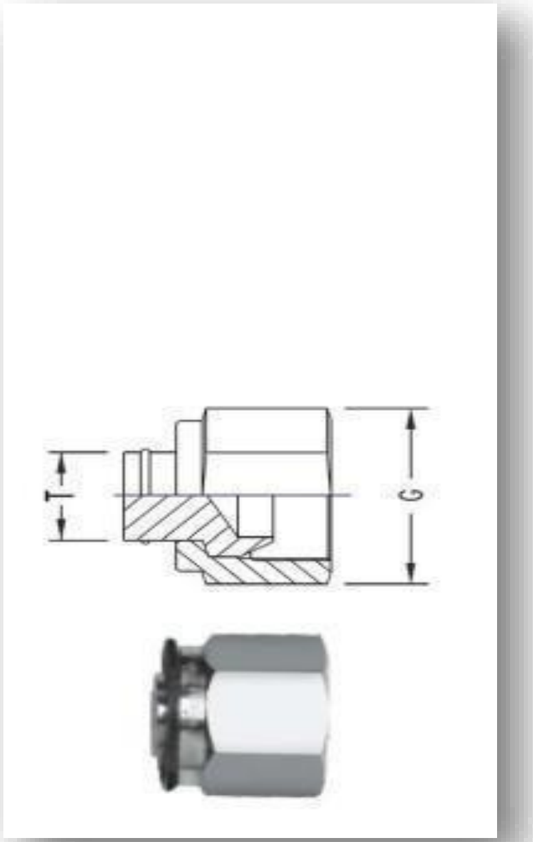
FITTING AND CLOSURE

INCH OD TUBES

T TUBE OD	G A/F	IMPORLOK PART NO.
1/16	8	IN-1
1/8	11	IN-2
¼	14	IN-4
5/16	16	IN-5
3/8	17	IN-6
½	22	IN-8
5/8	25	IN-10
¾	28.5	IN-12
7/8	32	IN-14
1	38	IN-16
1.1/4	50	IN-20
1.1/2	57	IN-24
2	76	IN-32

METRIC OD TUBES

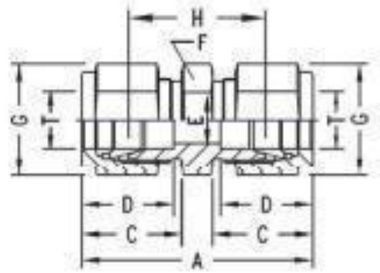
T TUBE OD	G A/F	IMPORLOK PART NO.
3	11	IN-3
6	14	IN-6
8	16	IN-8
10	19	IN-10
12	22	IN-12
14	25	IN-14
15	25	IN-15
16	25	IN-16
18	30	IN-18
20	32	IN-20
22	32	IN-22
25	38	IN-25
28	46	IN-28
30	50	IN- 30
32	50	IN-32
38	57	IN-38



UNION

INCH OD TUBES

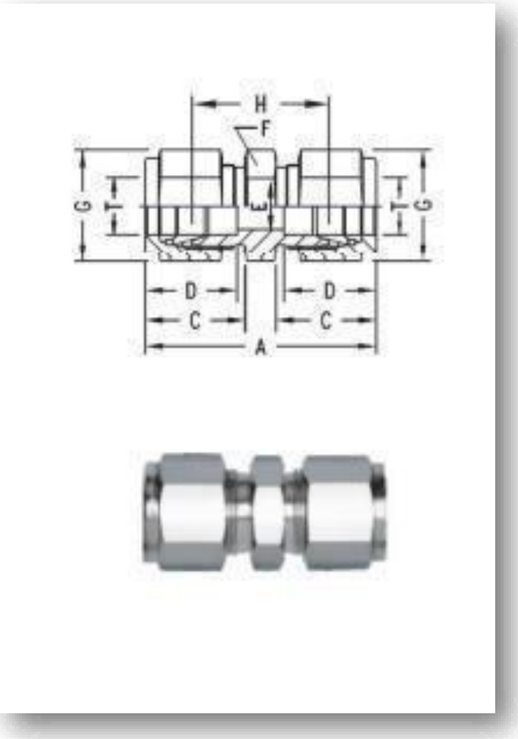
T TUBE OD	A	C	D	E MIN.	F A/F	G	H	IMPORLOK PART NO.
1/16	25.1	11.0	8.6	1.3	8	8	17.5	IU-1
1/8	35.6	15.3	12.7	2.4	11	11	22.4	IU-2
¼	40.9	17.8	15.3	4.8	14	14	26.2	IU-4
5/16	42.9	18.5	16.8	6.3	14	16	28.2	IU-5
3/8	45.0	19.3	16.8	7.1	16	17	30.2	IU-6
½	51.3	21.8	22.9	10.4	22	22	31.0	IU-8
5/8	52.0	21.8	24.4	12.7	24	25	31.8	IU-10
¾	53.6	21.8	24.4	15.8	27	28.5	33.3	IU-12
7/8	55.2	21.8	25.9	18.2	30	32	34.8	IU-14
1	64.8	26.4	31.2	22.3	35	38	40.4	IU-16
1.1/4	92.2	38.9	41.2	27.6	46	50	48.0	IU-20
1.1/2	106.0	45.2	50.0	34.0	55	57	53.6	IU-24
2	149.4	52.7	67.6	46.0	70	76	74.7	IU-32



UNION

METRIC OD TUBES

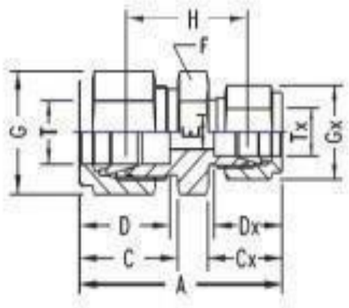
T TUBE OD	A	C	D	E MIN.	F A/F	G	H	IMPORLOK PART NO.
3	35.3	15.3	12.9	2.4	11	11	22.1	IU-3
6	41.0	17.7	15.3	4.8	14	14	26.2	IU-6
8	43.2	18.6	16.2	6.3	16	16	28.2	IU-8
10	46.2	19.5	17.2	7.9	17	19	31.0	IU-10
12	51.2	22.0	22.8	9.5	22	22	31.0	IU-12
14	52.0	22.0	24.4	11.1	24	25	31.0	IU-14
15	52.0	22.0	24.4	11.9	24	25	31.8	IU-15
16	52.0	22.0	24.4	12.7	24	25	31.0	IU-16
18	53.5	22.0	24.4	15.1	27	30	33.3	IU-18
20	55.0	22.0	26.0	15.9	30	32	34.8	IU-20
22	55.0	22.0	26.0	18.3	30	32	34.8	IU-22
25	65.0	26.5	31.3	21.8	35	38	40.4	IU-25
28	85.0	36.6	36.6	21.8	41	46	43.4	IU-28
30	92.7	39.2	39.6	26.2	46	50	49.5	IU-30
32	97.3	41.0	42.0	20.0	40	50	51.0	IU-32
38	113.6	47.9	49.4	33.7	55	57	58.4	IU-38



REDUCING UNION

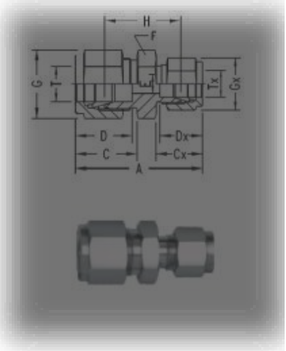
INCH OD TUBES

T TUBE OD	T X TUBE OD	A	C	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	IMPORLOK PART NO.
¼	1/8	38.6	17.8	15.3	15.3	12.7	2.4	14	14	11	24.6	IRU-4-2
5/16	1/8	39.6	18.6	15.3	16.3	12.7	2.4	14	16	11	25.7	IRU-5-2
5/16	¼	42.2	18.6	17.8	16.3	15.3	4.8	14	16	14	27.5	IRU-5-4
3/8	1/8	40.9	19.3	15.3	16.8	12.7	2.4	16	17	11	26.9	IRU-6-2
3/8	¼	43.2	19.3	17.8	16.8	15.3	4.8	16	17	14	28.5	IRU-6-4
½	1/8	45.2	21.8	15.3	22.9	12.7	2.4	22	22	11	28.5	IRU-8-2
½	¼	47.0	21.8	17.8	22.9	15.3	4.8	22	22	29.5	29.5	IRU-8-4
½	3/8	48.5	21.8	19.3	22.9	16.8	7.1	22	22	17	31.0	IRU-8-6
5/8	3/8	49.3	21.8	19.3	24.4	16.8	7.1	24	25	17	31.0	IRU-10-6
5/8	½	52.0	21.8	21.8	24.4	22.9	10.4	24	25	22	31.0	IRU-10-8
¾	¼	49.3	21.8	17.8	24.4	15.3	4.8	27	28.5	14	31.0	IRU-12-4
¾	3/8	50.8	21.8	19.3	24.4	16.8	7.1	27	28.5	17	33.3	IRU-12-6
¾	½	53.6	21.8	21.8	24.4	22.9	10.4	27	28.5	22	33.3	IRU-12-8
1	½	60.5	26.5	21.8	31.2	22.9	10.4	35	38	22	38.1	IRU-16-8
1	¾	60.5	26.5	21.8	31.2	24.4	15.8	35	38	28.5	38.1	IRU-16-12
1.1/4	1	92.2	38.9	26.4	41.2	31.2	22.3	45	50	38	48.0	IRU-20-16
1.1/2	1.1/4	60.5	26.5	21.8	31.2	24.4	15.8	55	57	50	53.6	IRU-24-20



METRIC OD TUBES

T TUBE OD	T X TUBE OD	A	C	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	IMPORLOK PART NO.
6	3	38.6	17.7	15.3	15.3	12.9	2.4	14	14	11	24.6	IRU-6-3
8	6	42.3	18.6	17.7	15	15.3	4.8	14	16	14	27.4	IRU-8-6
10	6	44.5	19.5	17.7	17.2	15.3	4.8	17	19	14	29.5	IRU-10-6
10	8	45.1	19.5	18.6	17.2	16.2	6.3	17	19	16	30.0	IRU-10-8
12	6	47.0	22.0	17.7	22.8	15.3	4.8	22	22	14	29.5	IRU-12-6
12	8	47.8	22.0	18.6	22.8	16.2	6.4	22	22	16	30.2	IRU-12-8
12	10	48.7	22.0	19.5	22.8	17.2	7.9	22	22	19	31.8	IRU-12-10
16	10	49.5	22.0	19.5	24.4	17.2	7.9	24	25	19	31.8	IRU-16-10
16	12	52.0	22.0	22.0	24.4	22.8	9.5	24	25	22	31.8	IRU-16-12
22	18	55.0	22.0	22.0	26.0	24.4	15.1	30	32	30	34.8	IRU-22-18
22	20	55.0	22.0	22.0	26.0	26.6	15.9	30	32	32	34.8	IRU-22-20
25	12	65.0	26.5	22.0	31.3	22.8	9.5	35	38	22	40.4	IRU-25-12
25	20	65.0	26.5	22.0	31.3	26.0	15.9	35	38	32	40.4	IRU-25-20
30	20	75.4	39.2	22.0	39.6	26.0	15.9	45	50	32	43.7	IRU-30-20
30	25	80.1	39.2	26.5	39.6	31.3	21.8	45	50	38	46.2	IRU-30-25
32	20	77.8	41.6	22.0	42.0	26.0	15.9	45	50	32	44.7	IRU-32-20
32	25	82.3	41.6	26.5	42.0	31.3	21.8	45	50	38	47.0	IRU-32-25
38	20	92.0	47.9	26.5	49.4	31.3	21.8	55	57	38	52.1	IRU-38-20
38	25	104.6	47.9	39.2	49.4	39.6	26.2	55	57	50	55.4	IRU-38-25

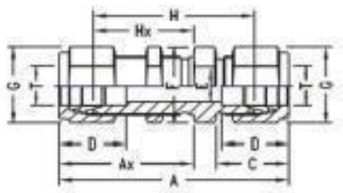


NOTE: The Combinations shown above are representative of various possibilities, Other combinations not shown are also available. please consult us.

BULK HEAD UNION

INCH OD TUBES

T TUBE OD	A	AX	C	D	E MIN.	F A/F	G A/F	H	HX	Panel Hole Drill Size	Max. Panel Thick-ness	IMPORLOK PART NO.
1/16	31.5	17.3	11.0	8.6	1.3	11	8	23.8	13.5	5.2	3.0	IBU-1
1/8	51.3	31.2	15.3	12.7	2.4	11	11	38.1	24.6	8.3	12.7	IBU-2
¼	57.6	33.6	17.8	15.3	4.8	16	14	43.0	26.2	11.5	10.1	IBU-4
5/16	60.7	35.8	18.5	16.3	6.3	17	16	46.0	28.5	13.0	11.1	IBU-5
3/8	62.2	36.8	19.3	7.1	7.1	22	17	47.5	29.5	14.6	11.1	IBU-6
1/2	71.1	41.9	21.8	22.9	10.4	24	22	50.8	31.8	19.5	12.7	IBU-8
5/8	72.6	42.7	21.8	24.4	12.7	27	25	52.3	32.5	22.6	12.7	IBU-10
¾	79.0	47.5	21.8	24.4	16.0	30	28.5	58.6	37.4	25.8	16.8	IBU-12
1	95.6	57.4	26.4	31.2	22.3	35	38	71.3	45.2	33.7	19.0	IBU-16
1.1/4	123.2	69.9	38.9	41.2	27.6	50	50	79.0	47.7	41.6	19.0	IBU-20
1.1/2	139.2	76.4	45.2	50.0	34.0	60	57	84.8	49.3	49.6	19.0	IBU-24
2	180.4	93.7	62.7	67.6	46.0	70	76	105.6	56.4	67.0	19.0	IBU-32



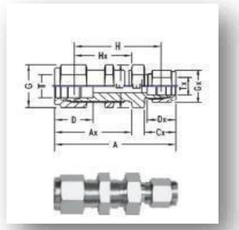
METRIC OD TUBES

T TUBE OD	A	AX	C	D	E MIN.	F A/F	G A/F	H	HX	Panel Hole Drill Size	Max. Panel Thick-ness	IMPORLOK PART NO.
3	51.3	31.2	15.3	12.9	2.4	14	11	38.1	24.6	8.3	12.7	IBU-3
6	57.7	33.6	17.7	15.3	4.8	16	14	42.9	26.2	11.5	10.2	IBU-6
8	61.0	36.1	18.6	16.2	6.3	17	16	46.0	28.6	13.1	11.2	IBU-8
10	63.7	37.0	19.5	17.2	7.9	22	19	48.5	29.4	16.3	11.2	IBU-10
12	71.0	41.9	22.0	22.8	9.5	24	22	50.8	31.8	19.5	12.7	IBU-12
14	72.5	42.6	22.0	24.4	11.1	27	25	52.3	32.5	22.5	12.7	IBU-14
15	72.5	42.6	22.0	24.4	11.9	27	25	52.3	32.5	22.8	12.7	IBU-15
16	72.5	42.6	22.0	24.4	12.7	27	25	52.3	32.5	22.8	12.7	IBU-16
18	78.9	47.4	22.0	24.4	15.1	30	30	58.7	37.3	26.0	16.8	IBU-18
20	84.5	53.0	22.0	26.0	15.8	35	32	64.3	42.9	29.0	19.0	IBU-20
25	95.6	57.4	26.4	31.2	22.3	35	38	71.3	45.2	33.7	19.0	IBU-25
30	123.7	70.2	39.2	39.6	26.2	50	45	80.5	48.6	40.5	19.0	IBU-30
32	128.3	72.5	41.6	42.0	27.6	50	50	82.3	49.5	42.5	19.0	IBU-32
38	144.6	79.1	47.9	49.4	33.7	60	57	89.4	51.5	50.5	19.0	IBU-38

BULK HEAD REDUCING UNION

INCH OD TUBES

T TUBE OD	T TUBE OD	A	AX	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	HX	Panel Hole Drill Size	Max. Panel Thick-ness	IMPORLOK PART NO.
1/4	1/8	55.2	33.5	15.3	15.3	12.7	2.4	16	14	11	41.2	26.2	11.5	10.2	IRBU-4-2
3/8	¼	60.7	36.6	17.8	16.8	15.3	4.8	22	17	14	46.0	29.5	14.6	11.2	IRBU-6-4
½	¼	66.8	41.9	17.8	22.4	15.3	4.8	24	22	14	49.2	31.8	19.5	12.7	IRBU-8-4
½	3/8	66.8	41.9	17.8	22.4	16.8	7.1	24	22	17	49.2	31.8	19.5	12.7	IRBU-8-6



METRIC OD TUBES

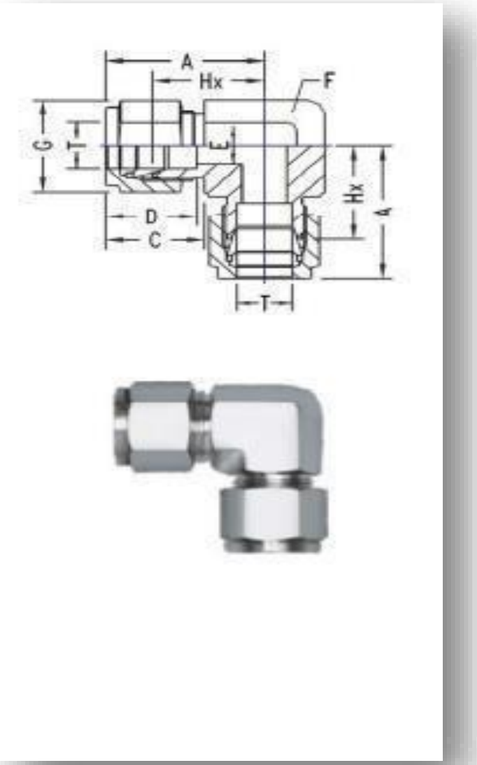
T TUBE OD	T TUBE OD	A	AX	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	HX	Panel Hole Drill Size	Max. Panel Thick-ness	IMPORLOK PART NO.
6	3	56.0	33.6	17.7	15.3	12.9	2.4	16	14	11	41.2	26.2	11.5	10.2	IRBU-6-3
8	6	61.0	36.1	18.6	16.2	15.3	4.8	17	16	14	48.0	28.6	13.1	11.2	IRBU-8-6
10	6	63.7	37.0	19.5	17.2	15.3	4.8	22	19	14	48.5	29.4	16.3	11.2	IRBU-10-6
12	6	71.0	41.9	22.0	22.8	15.3	4.8	24	22	14	50.8	31.8	19.5	12.7	IRBU-12-6
12	10	71.0	41.9	22.0	22.8	17.2	7.9	24	22	17	50.8	31.8	19.5	12.7	IRBU-12-10

NOTE: The Combinations shown above are representative of various possibilities, Other combinations not shown are also available. please consult us.

UNION ELBOW

INCH OD TUBES

T TUBE OD	A	C	D	E MIN	F A/F	G	HX	IMPORLOK PART NO.
1/16	17.8	11.0	8.6	1.3	11	8	14.0	IE-1
1/8	22.4	15.3	12.7	2.4	11	11	15.8	IE-2
¼	26.9	17.8	15.3	4.8	14	14	19.6	IE-4
5/16	28.7	18.5	16.3	6.3	16	16	21.3	IE-5
3/8	30.5	19.3	16.8	7.1	17	17	23.2	IE-6
½	36.0	21.8	22.9	10.4	22	22	25.9	IE-8
5/8	38.1	21.8	24.4	12.7	24	25	27.9	IE-10
¾	39.9	21.8	24.4	15.8	27	28.5	29.7	IE-12
7/8	44.7	21.8	25.9	18.2	35	32	34.6	IE-14
1	49.0	26.4	31.2	22.3	35	38	36.8	IE-16
1.1/4	66.6	38.9	41.2	27.6	46	50	44.5	IE-20
1.1/2	78.0	45.2	50.0	34.0	55	57	50.8	IE-24
2	107	62.7	67.6	46.0	70	76	69.9	IE-32



METRIC OD TUBES

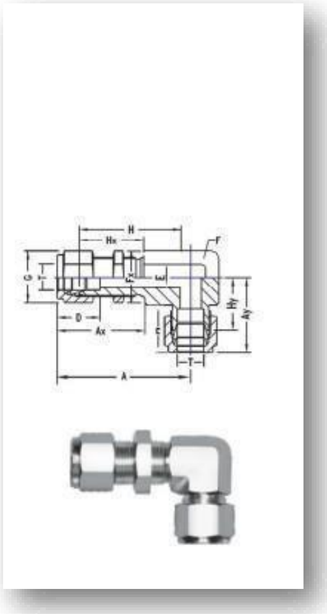
T TUBE OD	A	C	D	E MIN	F A/F	G	HX	IMPORLOK PART NO.
3	22.3	15.3	12.9	2.4	11	11	15.7	IE-3
6	27.0	17.7	15.3	4.8	14	14	19.6	IE-6
8	28.8	18.6	16.2	6.3	16	16	21.3	IE-8
10	31.5	19.5	17.2	7.9	17	19	23.9	IE-10
12	36.0	22.0	22.8	9.5	22	22	25.9	IE-12
14	38.0	22.0	24.4	11.1	24	25	27.9	IE-14
15	38.0	22.0	24.4	11.9	24	25	27.9	IE-15
16	38.0	22.0	24.4	12.7	24	25	27.9	IE-16
18	39.8	22.0	24.4	15.1	27	30	29.7	IE-18
20	44.6	22.0	26.0	15.9	32	32	34.5	IE-20
22	44.6	22.0	26.0	18.3	32	32	34.5	IE-22
25	49.1	26.5	31.3	21.8	35	38	36.8	IE-25
28	64.0	36.6	36.6	21.8	41	46	43.5	IE-28
30	69.9	39.2	39.6	26.2	46	50	48.3	IE-30
32	72.3	41.6	42.0	29.6	46	50	49.3	IE-32
38	84.0	47.9	49.4	33.7	55	57	56.4	IE-38

BULKHEAD
ELBOWINCH OD
TUBES

T TUBE OD	A	AX	AY	C	D	E MIN.	F A/F	G A/F	H	HX	HY	Panel Hole Drill Size	Max. Panel Thick-ness	IMPORLOK PART NO.
1/8	43.1	31.2	22.4	15.3	12.7	2.4	11	11	36.5	24.6	15.8	8.3	12.7	IBE-2
¼	48.9	33.6	26.9	17.8	15.3	4.8	16	14	41.5	26.2	19.6	11.5	10.1	IBE-4
3/8	54.9	36.8	30.5	19.3	16.8	7.1	22	17	46.8	29.5	23.2	14.6	11.1	IBE-6
½	63.5	41.9	36.0	21.8	22.9	10.4	24	22	53.4	31.8	25.9	19.5	12.7	IBE-8
¾	75.3	47.5	39.9	21.8	24.4	16.0	30	29	65.2	37.4	29.7	25.8	16.8	IBE-12
1	91.8	57.4	49.0	26.4	31.2	22.3	35	38	79.6	45.2	36.8	33.7	19.0	IBE-16

METRIC OD TUBES

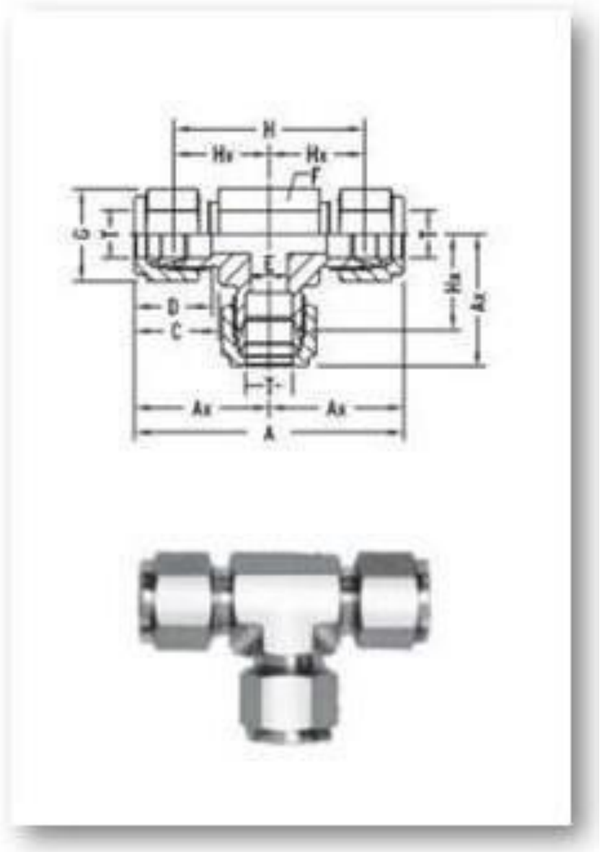
T TUBE OD	A	AX	AY	C	D	E MIN.	F A/F	G A/F	H	HX	HY	Panel Hole Drill Size	Max. Panel Thick-ness	IMPORLOK PART NO.
3	43.0	31.2	22.3	15.3	12.9	2.4	14	11	36.4	24.6	15.7	8.3	12.7	IBE-3
6	49.3	33.6	27.0	17.7	15.3	4.8	16	14	41.9	26.2	19.6	11.5	10.2	IBE-6
8	52.6	36.1	28.8	18.6	16.2	6.3	17	16	45.1	28.6	21.3	13.1	11.2	IBE-8
10	56.2	37.0	31.5	19.5	17.2	7.9	22	19	48.6	29.4	23.9	16.3	11.2	IBE-10
12	63.0	41.9	36.0	22.0	22.8	9.5	24	22	52.9	31.8	25.9	19.5	12.7	IBE-12
16	66.5	42.6	38.0	22.0	24.4	12.7	27	25	56.4	32.5	27.9	22.8	12.7	IBE-16
22	85.1	53.0	44.6	22.0	26.0	18.3	35	32	75.0	42.9	34.5	29.0	19.0	IBE-20
25	91.8	57.4	49.1	26.4	26.4	22.3	35	38	79.6	45.2	36.8	33.7	19.0	IBE-25



UNION TEE

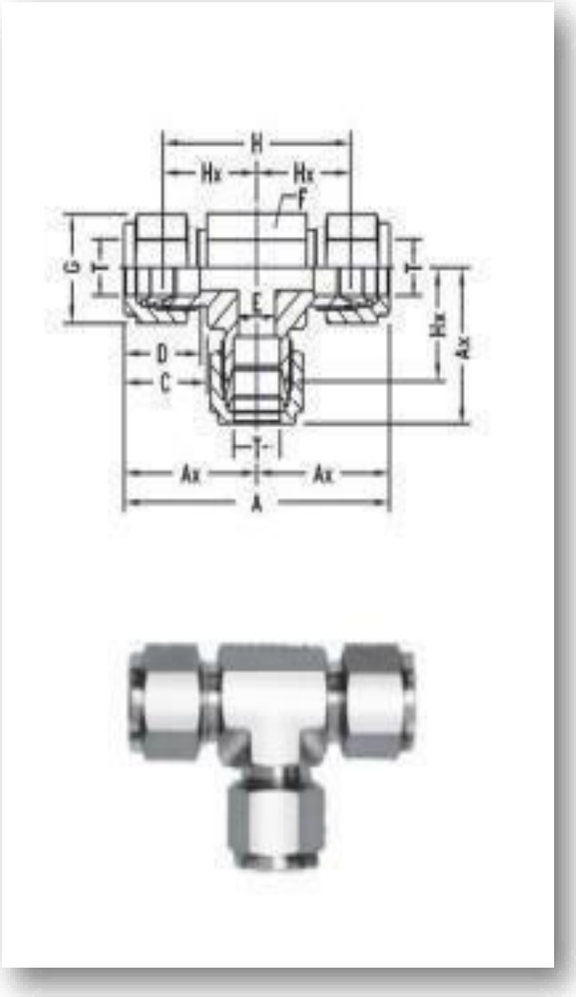
INCH OD TUBES

T TUBE OD	A	AX	C	D	E MIN	F A/F	G A/F	H	HX	IMPORLOK PART NO.
1/16	35.6	17.8	11.0	8.6	1.3	11	8	28.0	14.0	IT-1
1/8	44.8	22.4	15.3	12.7	2.4	11	11	31.6	15.8	IT-2
¼	53.8	26.9	17.8	15.3	4.8	14	14	39.2	19.6	IT-4
5/16	57.4	28.7	18.5	16.3	6.3	16	16	42.6	21.3	IT-5
3/8	61.0	30.5	19.3	16.8	7.1	17	17	46.4	23.2	IT-6
½	72.0	36.0	21.8	22.9	10.4	22	22	51.8	25.9	IT-8
5/8	76.2	38.1	21.8	24.4	12.7	24	25	55.8	27.9	IT-10
¾	79.8	39.9	21.8	24.4	15.8	27	28.5	59.4	29.7	IT-12
7/8	89.4	44.7	21.8	25.9	18.2	35	32	69.2	34.6	IT-14
1	98.0	49.0	26.4	31.2	22.3	35	38	73.6	36.8	IT-16
1.1/4	133.2	66.6	38.9	41.2	27.6	46	50	89.0	44.5	IT-20
1.1/2	156.0	78.0	45.2	50.0	34.0	55	57	101.6	50.8	IT-24
2	214.4	107.4	62.7	67.9	46.0	70	76	139.8	69.9	IT-34



METRIC OD TUBES

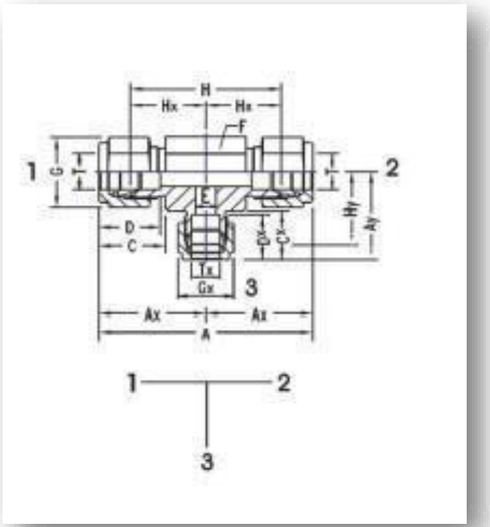
T TUBE OD	A	AX	C	D	E MIN	F A/F	G A/F	H	HX	IMPORLOK PART NO.
3	44.6	22.3	15.3	12.9	2.4	11	11	31.4	15.7	IT-3
6	54.0	27.0	17.7	15.3	4.8	14	14	39.2	19.6	IT-6
8	57.6	28.8	18.6	16.2	6.3	16	16	42.6	21.3	IT-8
10	63.0	31.5	19.5	17.2	7.9	19	19	47.8	23.9	IT-10
12	72.0	36.0	22.0	22.8	9.5	22	22	51.8	25.9	IT-12
14	76.0	38.0	22.0	24.4	11.1	25	25	55.8	27.9	IT-14
15	76.0	38.0	22.0	24.4	11.9	25	25	55.8	27.9	IT-15
16	76.0	38.0	22.0	24.4	12.7	25	25	55.8	27.9	IT-16
18	79.6	39.8	22.0	24.4	15.1	30	30	59.4	29.7	IT-18
20	89.2	44.6	22.0	26.0	15.9	32	32	69.0	34.5	IT-20
22	89.2	44.6	22.0	26.0	18.3	32	32	69.0	34.5	IT-22
25	98.2	49.1	26.5	31.3	21.8	38	38	73.6	36.8	IT-25
28	128.0	64.0	36.6	36.6	21.8	41	46	87.0	43.5	IT-28
30	139.8	69.9	39.2	39.6	26.2	46	50	96.6	48.3	IT-30
32	144.6	72.3	41.6	42.0	28.6	46	50	98.6	49.3	IT-32
38	168	84.0	47.9	49.4	33.7	55	57	112.8	56.4	IT-38



REDUCING UNION TEE

INCH OD TUBES

T TUBE OD	T X TUBE OD	A	AX	AY	C	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	HX	HY	IMPORLOK PART NO.
3/8	¼	61.0	30.5	29.0	19.3	17.8	16.8	15.3	4.8	16	17	14	46.2	23.1	21.6	IRT-6-6-4
½	¼	72.2	36.0	31.8	21.8	17.8	22.9	15.3	4.8	22	22	14	51.8	25.9	24.4	IRT-8-8-4
½	3/8	72.2	36.0	33.3	21.8	19.3	22.9	16.8	7.1	22	22	17	51.8	25.9	25.9	IRT-8-8-6
¾	3/8	79.8	39.9	37.0	21.8	19.3	24.4	16.8	7.1	27	28.5	17	59.4	29.7	29.7	IRT-12-12-6
¾	½	79.8	39.9	39.9	21.8	21.8	24.4	22.9	10.4	27	28.5	22	59.4	29.7	29.7	IRT-12-12-8
1	3/8	98.0	49.9	41.9	26.4	19.3	31.2	16.8	7.1	35	38	17	73.6	36.8	34.5	IRT-16-16-6
1	½	98.0	49.9	44.7	26.4	22.9	31.2	21.8	10.4	35	38	22	73.6	36.8	34.5	IRT-16-16-8
1	¾	98.0	49.9	44.7	26.4	24.4	31.2	24.4	15.8	35	38	28.5	73.6	36.8	34.5	IRT-16-16-12
1.1/4	1	135.6	67.8	55.1	38.9	26.4	41.2	31.2	22.3	46	50	38	91.4	45.7	42.9	IRT-12-12-16
1.1/2	1	157.5	78.7	60.0	44.7	26.4	50.0	31.2	22.3	55	57	38	103.2	51.6	47.8	IRT-24-24-16



INCH OD TUBES

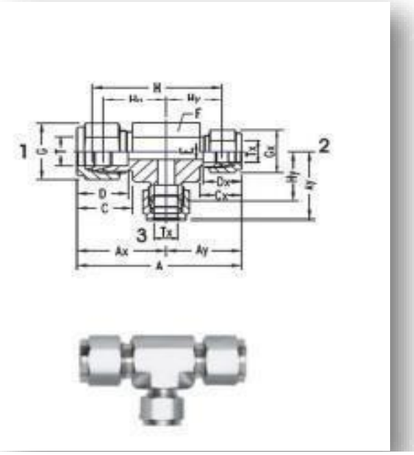
T TUBE OD	T X TUBE OD	A	AX	AY	C	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	HX	HY	IMPORLOK PART NO.
3/8	¼	59.4	30.5	29.0	19.3	17.8	16.8	15.3	4.8	16	17	14	44.7	23.1	21.6	IRT-6-4-6
½	¼	67.7	36.0	31.8	21.8	17.8	22.9	15.3	4.8	22	22	14	50.2	25.9	24.3	IRT-8-4-8
½	3/8	69.3	36.0	33.3	21.8	19.3	22.9	16.8	7.1	22	22	17	51.8	25.9	25.9	IRT-8-6-8
¾	3/8	77.0	39.9	37.0	21.8	19.3	24.4	16.8	7.1	27	28.5	17	59.4	29.7	29.7	IRT-12-6-12
¾	½	79.8	39.9	39.9	21.8	21.8	24.4	22.9	10.4	27	28.5	22	59.4	29.7	29.7	IRT-12-8-12
1	3/8	98.9	49.9	41.9	26.4	19.3	31.2	16.8	7.1	35	38	17	71.3	36.8	34.5	IRT-16-6-16
1	½	93.7	49.9	44.7	26.4	22.9	31.2	21.8	10.4	35	38	22	71.3	36.8	34.5	IRT-16-8-16
1	¾	93.7	49.9	44.7	26.4	24.4	31.2	24.4	15.8	35	38	28.5	71.3	36.8	34.5	IRT-16-12-16
1.1/4	1	119.6	67.8	53.0	38.9	26.4	41.2	31.2	18.2	46	50	38	85.3	45.7	40.8	IRT-20-16-20
1.1/2	1	150.9	78.7	72.9	45.2	26.4	50.0	41.3	27.6	55	57	38	101.6	50.8	50.8	IRT-24-20-24

INCH OD TUBES

T TUBE OD	T X TUBE OD	A	AX	AY	C	CX	D	DX	E MIN.	F A/F	G A/F	GX A/F	H	HX	HY	IMPORLOK PART NO.
3/8	¼	59.6	30.5	29.0	19.3	17.8	16.8	15.3	4.8	16	17	14	44.8	23.2	21.6	IRT-6-4-4
½	¼	67.7	36.0	31.8	21.8	17.8	22.9	15.3	4.8	22	22	14	50.2	25.9	24.3	IRT-8-4-4
½	3/8	69.3	36.0	33.3	21.8	19.3	22.9	16.8	7.1	22	22	17	51.8	25.9	25.9	IRT-8-6-6
¾	3/8	77.0	38.9	37.0	21.8	19.3	24.4	16.8	7.1	27	28.5	17	59.4	29.7	29.7	IRT-12-6-6
¾	½	79.8	39.9	39.9	21.8	21.8	24.4	22.9	10.4	27	28.5	22	59.4	29.7	29.7	IRT-12-8-8
1	3/8	99.9	39.9	41.9	26.4	19.3	31.2	16.8	7.1	35	38	17	71.3	36.8	34.5	IRT-16-6-6
1	½	93.7	49.9	44.7	26.4	22.9	31.2	21.8	10.4	35	38	22	71.3	36.8	34.5	IRT-16-8-8
1	¾	93.7	49.9	44.7	26.4	24.4	31.2	24.4	15.8	35	38	28.5	71.3	36.8	34.5	IRT-16-12-12
1.1/4	1	122.9	67.8	55.1	38.9	26.4	41.2	31.2	22.3	46	50	38	88.6	45.7	42.9	IRT-20-16-16
1.1/2	1	138.7	78.7	60.0	44.7	26.4	50.0	31.2	22.3	55	57	38	99.4	51.6	47.8	IRT-24-16-16

NOTE: 1 The Order of the sizes is as per the designation (1-2-3) in figure shown above.

NOTE: The Combinations shown above are representative of various possibilities,
Other combinations not shown are also available.
please consult us.

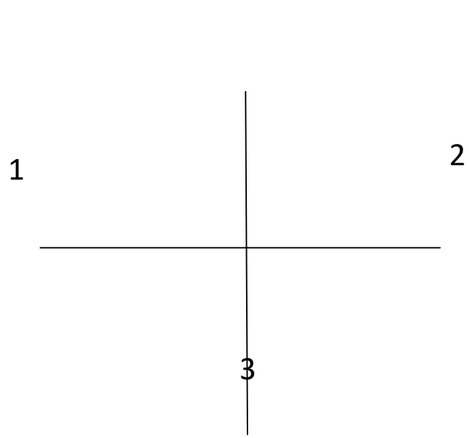


UNION CROSS

INCH OD TUBES

T TUBE OD	A	AX	C	D	E MIN.	F A/F	G A/F	H	HX	IMPORLOK PART NO.
1/8	44.8	22.4	15.3	12.7	2.4	11	11	31.6	15.8	IC-2
¼	53.8	26.9	17.8	15.3	4.8	14	14	39.2	19.6	IC-4
3/8	61.0	30.5	19.3	16.8	7.1	17	17	46.4	23.2	IC-6
½	72.0	36.0	21.8	22.9	10.4	22	22	51.8	25.9	IC-8
¾	79.8	39.9	21.8	24.4	15.8	27	28.5	59.4	29.7	IC-12
1	98.0	49.0	26.4	31.2	22.3	35	38	73.6	36.8	IC-16

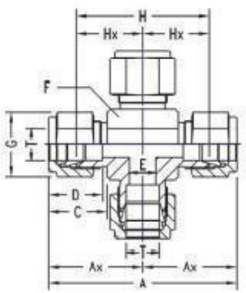
NOTE: Reducing Cross with variation in the tube sizes are available.
The tube sizes are designated in the order given below.



METRIC OD TUBES

T TUBE OD	A	AX	C	D	E MIN.	F A/F	G A/F	H	HX	IMPORLOK PART NO.
3	44.6	22.3	15.3	12.9	2.4	11	11	31.4	15.7	IC-3
6	54.0	27.0	17.7	15.3	4.8	14	14	39.2	19.6	IC-6
8	57.6	28.8	18.6	16.2	6.3	16	16	42.6	21.3	IC-8
10	63.0	31.5	19.5	17.2	7.9	17	19	47.8	23.9	IC-10
12	72.0	36.0	22.0	22.8	9.5	22	22	51.8	25.9	IC-12
16	76.0	38.0	22.0	24.4	12.7	24	25	55.8	27.9	IC-16
22	89.0	44.6	22.0	26.0	18.3	32	32	69.0	34.5	IC-22
25	98.2	49.1	26.5	31.3	21.8	35	38	73.6	36.8	IC-25

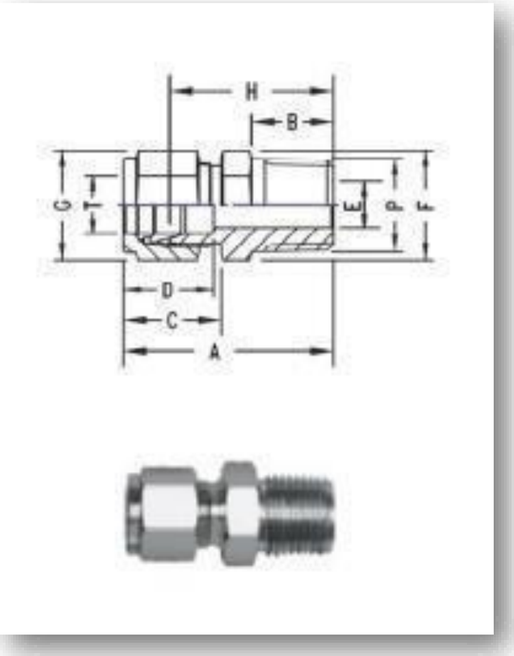
The Tube sizes are indicated in the part number in the same order above.



MALE CONNECTOR

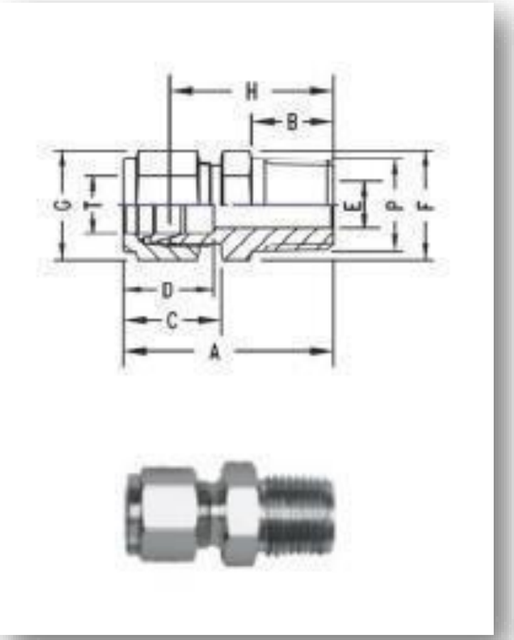
INCH OD TUBES X MALE NPT THREADS

T TUBE OD	P NPT MALE	A	B	C	D	E MIN.	F A/F	G A/F	H	IMPORLOK PART NO.
1/6 1/6	1/16 1/8	23.9 26.2	9.6 9.6	11.0 11.0	8.6 8.6	1.3 1.3	8 14	8 8	20.0 22.4	IMC-1-1N IMC-1-2N
1/8 1/8	1/8 ¼	30.5 35.6	9.6 14.3	15.3 15.3	12.7 12.7	2.4 2.4	11 14	11 11	23.9 29.0	IMC-2-2N IMC-2-4N
¼ ¼ ¼ ¼	1/8 ¼ 3/8 ½	32.8 37.8 38.4 44.7	9.6 14.3 14.3 19.1	17.8 17.8 17.8 17.8	15.3 15.3 15.3 15.3	4.8 4.8 4.8 4.8	14 14 19 22	14 14 14 14	25.4 30.5 31.0 37.4	IMC-4-2N IMC-4-4N IMC-4-6N IMC-4-8N
5/16	¼	38.6	14.3	18.5	16.3	6.3	14	16	31.2	IMC-5-4N
3/8 3/8 3/8 3/8	1/8 ¼ 3/8 ½	35.3 39.8 39.8 41.2	9.6 14.3 14.3 19.1	19.3 19.3 19.3 19.3	16.8 16.8 16.8 16.8	4.8 7.1 7.1 7.1	16 16 19 22	17 17 17 17	27.9 32.5 32.5 38.9	IMC-6-2N IMC-6-4N IMC-6-6N IMC-6-8N
½ ½ ½ ½ ½	¼ 3/8 ½ ¾ 1	43.4 43.4 49.0 50.5 57.1	14.3 14.3 19.1 19.1 23.8	21.8 21.8 21.8 21.8 21.8	22.9 22.9 22.9 22.9 22.9	7.1 9.6 10.4 10.4 10.4	22 22 22 27 35	22 22 22 22 22	33.3 33.3 38.9 40.4 47.0	IMC-8-4N IMC-8-6N IMC-8-8N IMC-8-12N IMC-8-16N
5/8 5/8	3/8 ½	44.2 49.0	14.3 19.1	21.8 21.8	24.4 24.4	9.6 10.4	24 24	25 25	34.0 38.9	IMC-10-6N IMC-10-8N
¾ ¾ ¾	½ ¾ 1	50.5 50.5 57.1	19.1 19.1 23.8	21.8 21.8 21.8	24.4 24.4 24.4	10.0 15.8 15.8	27 27 35	28.5 28.5 28.5	40.4 40.4 47.0	IMC-12-8N IMC-12-12N IMC-12-16N
7/8	¾	50.5	19.1	21.8	26.0	15.8	30	32	40.4	IMC-14-12N
1 1 1	½ ¾ 1	57.4 57.4 62.2	19.1 19.1 23.8	26.4 26.4 26.4	31.2 31.2 31.2	10.4 15.8 22.3	35 35 35	38 38 38	45.2 45.2 50.0	IMC-16-8N IMC-16-12N IMC-16-16N
1.1/4 1.1/4	1 1.1/4	77.2 77.2	23.8 23.8	38.9 38.9	41.2 41.2	22.3 27.6	46 46	50 50	55.2 55.2	IMC-20-16N IMC-20-20N
1.1/2	1.1/2	88.9	26.2	45.2	50.0	34.0	55	57	61.7	IMC-24-24N



INCH OD TUBES X MALE ISO*TAPERED PIPE THREADS

T TUBE OD	P ISO1 MALE	A	B	C	D	E MIN.	F A/F	G A/F	H	IMPORLOK PART NO.
1/8 1/8	1/8 1/4	30.5 35.6	9.6 14.3	15.3 15.3	12.7 12.7	2.4 2.4	11 14	11 11	23.9 29.0	IMC-2-2RX IMC-2-4RX
¼ ¼ ¼ ¼	1/8 ¼ 3/8 ½	32.8 37.8 38.4 44.7	9.6 14.3 14.3 19.1	17.8 17.8 17.8 17.8	15.3 15.3 15.3 15.3	4.8 4.8 4.8 4.8	14 14 19 22	14 14 14 14	25.4 30.1 31.0 37.4	IMC-4-2RX IMC-4-4RX IMC-4-6RX IMC-4-8RX
3/8 3/8 3/8 3/8	1/8 ¼ 3/8 ½	35.3 39.8 39.8 41.2	9.6 14.3 14.3 19.1	19.3 19.3 19.3 19.3	16.8 16.8 16.8 16.8	4.8 7.1 7.1 7.1	16 16 19 22	17 17 17 17	27.9 32.5 32.5 38.9	IMC-6-2RX IMC-6-4RX IMC-6-6RX IMC-6-8RX
½ ½ ½	¼ 3/8 ½	43.4 43.4 49.0	14.3 14.3 19.1	21.8 21.8 21.8	22.9 22.9 22.9	7.1 9.6 10.4	22 22 22	22 22 22	33.3 33.3 38.9	IMC-8-4RX IMC-8-6RX IMC-8-8RX
¾	¾	50.5	19.1	21.8	24.4	15.8	27	28.5	40.4	IMC-12-12RX
1	1	62.2	23.8	26.4	31.2	22.3	35	38	50.0	IMC-16-16RX
1.1/4 1.1/4	1 1.1/4	77.2 77.2	23.8 23.8	38.9 38.9	41.2 41.2	22.3 27.6	46 46	50 50	55.2 55.2	IMC-20-16RX IMC-20-20RX
1.1/2	1.1/2	88.9	26.2	45.2	50.0	34.0	55	57	61.7	IMC-24-24RX



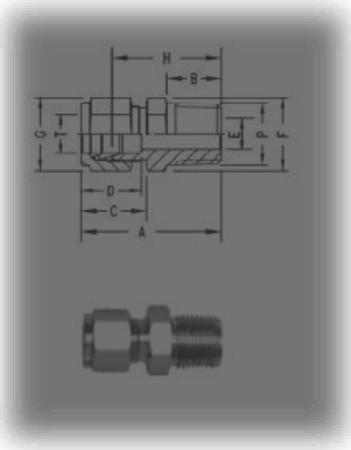
*Reference Specification: BS21 : ISO 7/1 : JISB 0203: DIN 2999 : IS 554

NOTE: The combinationof tube OD and male threads are indicative of popular sizes, Other combinations, not shown, are available, please consult us.

BORED – THROUGH CONNECTORS available in all these sizes. Add suffix, “BT” to the above part numbers to designate bored – trough male connector.

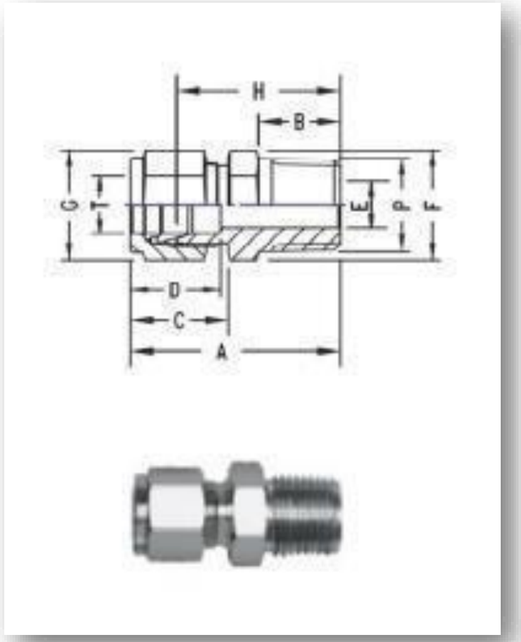
MALE CONNECTOR METRIC OD TUBES X MALE NPT THREADS

T TUBE OD	P NPT MALE	A	B	C	D	E MIN.	F A/F	G A/F	H	IMPORLOK PART NO.
3	1/8	30.5	9.6	15.3	12.9	2.4	11	11	23.9	IMC-3-2N
3	¼	35.6	14.3	15.3	12.9	2.4	14	11	23.0	IMC-3-4N
6	1/8	32.8	9.6	17.7	15.3	4.8	14	14	25.4	IMC-6-2N
6	¼	37.9	14.3	17.7	15.3	4.8	14	14	30.5	IMC-6-4N
6	3/8	38.4	14.3	17.7	15.3	4.8	19	14	31.0	IMC-6-6N
6	½	44.7	19.1	17.7	15.3	4.8	22	14	37.3	IMC-6-8N
8	1/8	34.2	9.6	18.6	16.2	4.8	14	16	26.7	IMC-8-2N
8	¼	38.7	14.3	18.6	16.2	6.3	14	16	31.2	IMC-8-4N
8	3/8	39.3	14.3	18.6	16.2	6.3	19	16	31.8	IMC-8-6N
8	½	45.6	19.1	18.6	16.2	6.3	22	16	38.8	IMC-8-8N
10	1/8	36.3	9.6	19.5	17.2	4.8	17	19	28.7	IMC-10-2N
10	¼	40.9	14.3	19.5	17.2	7.9	19	19	33.3	IMC-10-4N
10	3/8	40.9	14.3	19.5	17.2	7.9	19	19	33.3	IMC-10-6N
10	½	46.5	19.1	19.5	17.2	7.9	22	19	38.9	IMC-10-8N
12	¼	43.4	14.3	22.0	22.8	7.1	22	22	33.3	IMC-12-4N
12	3/8	43.4	14.3	22.0	22.8	9.5	22	22	33.3	IMC-12-6N
12	½	49.0	19.1	22.0	22.8	9.5	22	22	38.9	IMC-12-8N
12	¾	50.5	19.1	22.0	22.8	9.5	27	22	40.4	IMC-12-12N
12	1	57.1	23.6	22.0	22.8	9.5	35	22	47.0	IMC-12-16N
14	¼	44.1	14.3	22.0	24.4	7.1	24	25	34.0	IMC-14-4N
14	3/8	44.1	14.3	22.0	24.4	9.5	24	25	34.0	IMC-14-6N
14	½	49.0	19.1	22.0	24.4	11.1	24	25	38.9	IMC-14-8N
15	½	49.0	19.1	22.0	24.4	11.9	24	25	38.9	IMC-15-8N
16	3/8	44.1	14.3	22.0	24.4	9.5	24	25	34.0	IMC-16-6N
16	½	49.0	19.1	22.0	24.4	11.9	24	25	38.9	IMC-16-8N
16	¾	50.5	19.1	22.0	24.4	12.7	27	25	40.4	IMC-16-12N
18	½	50.5	19.1	22.0	24.4	11.9	27	30	40.4	IMC-18-8N
18	¾	50.5	19.1	22.0	24.4	15.1	27	30	40.4	IMC-18-12N
20	½	52.3	19.1	22.0	26.0	11.9	30	32	42.2	IMC-20-8N
20	¾	52.3	19.1	22.0	26.0	15.9	30	32	42.2	IMC-22-12N
22	¾	52.3	19.1	22.0	26.0	15.9	30	32	42.2	IMC-22-12N
22	1	57.1	23.8	22.0	26.0	18.3	35	32	47.0	IMC-25-8N
25	½	57.5	19.1	26.5	31.3	11.9	35	38	45.2	IMC-25-12N
25	¾	57.5	19.1	26.5	31.3	15.8	35	38	45.2	IMC-25-16N
25	1	62.3	23.8	26.5	31.3	21.8	35	38	50.0	IMC-28-16N
28	1	72.4	23.8	36.6	36.6	21.8	41	46	51.6	IMC-28-16N
28	1.1/4	73.1	23.8	36.6	36.6	21.8	46	46	52.3	IMC-28-20N
30	1.1/4	77.2	23.8	39.2	39.6	26.2	46	50	55.6	IMC-30-20N
32	1.1/4	69.6	23.8	41.6	42.0	28.6	46	50	55.6	IMC-32-20N
38	1.1/2	69.6	26.2	47.9	49.4	33.7	55	57	64.0	IMC-38-24N



MALE CONNECTOR METRIC OD TUBES X MALE ISO TAPERED PIPE THREAD

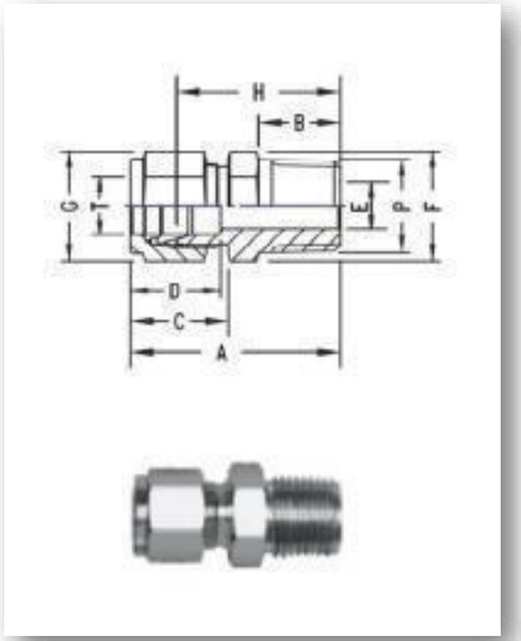
T TUBE OD	P ISO MALE	A	B	C	D	E MIN.	F A/F	G A/F	H	IMPORLO KPART NO.
3	1/8	30.5	9.6	15.3	12.9	2.4	11	11	23.9	IMC-3-2N
3	¼	35.6	14.3	15.3	12.9	2.4	14	11	29.0	IMC-3-4N
6	1/8	32.8	9.6	17.7	15.3	4.8	14	14	25.4	IMC-6-2N
6	¼	37.9	14.3	17.7	15.3	4.8	14	14	30.4	IMC-6-4N
6	3/8	38.4	14.3	17.7	15.3	4.8	19	14	31.0	IMC-6-6N
6	½	44.7	19.1	17.7	15.3	4.8	22	14	37.3	IMC-6-8N
8	1/8	34.2	9.6	18.6	16.2	4.8	14	16	26.7	IMC-8-2N
8	¼	38.7	14.3	18.6	16.2	6.3	14	16	31.2	IMC-8-4N
8	3/8	39.3	14.3	18.6	16.2	6.3	19	16	31.8	IMC-8-6N
8	½	45.6	19.1	18.6	16.2	6.3	22	16	38.1	IMC-8-8N
10	1/8	36.3	9.6	19.5	17.2	4.8	17	19	28.7	IMC-10-2N
10	¼	40.9	14.3	19.5	17.2	7.9	19	19	33.3	IMC-10-4N
10	3/8	40.9	14.3	19.5	17.2	7.9	19	19	33.3	IMC-10-6N
10	½	46.5	19.1	19.5	17.2	7.9	22	19	38.9	IMC-10-8N
12	¼	43.4	14.3	22.0	22.8	7.1	22	22	33.3	IMC-12-4N
12	3/8	43.4	14.3	22.0	22.8	9.5	22	22	33.3	IMC-12-6N
12	½	49.0	19.1	22.0	22.8	9.5	22	22	38.9	IMC-12-8N
12	¾	50.5	19.1	22.0	22.8	9.5	27	22	40.4	IMC-12-12N
12	1	57.1	23.8	22.0	22.8	9.5	35	22	47.0	IMC-12-16N
14	1/4	44.1	14.3	22	24.4	7.1	24	25	34.0	IMC-14-4N
14	3/8	44.1	14.3	22.0	24.4	9.5	24	25	34.0	IMC-14-6N
14	½	49.0	19.1	22.0	24.4	11.1	24	25	38.9	IMC-14-8N
15	½	49.0	19.1	22.0	24.4	11.9	24	25	38.9	IMC-15-8N
16	3/8	44.1	14.3	22.0	24.4	9.5	24	25	34.0	IMC-16-6N
16	½	49.0	19.1	22.0	24.4	11.9	24	25	38.9	IMC-16-8N
16	¾	50.5	19.1	22.0	24.4	12.7	27	25	40.4	IMC-16-12N
18	½	50.5	19.1	22.0	24.4	11.9	27	30	40.4	IMC-18-8N
18	¾	50.5	19.1	22.0	24.4	15.1	27	30	40.4	IMC-18-12N
20	½	52.3	19.1	22.0	26.0	11.9	30	32	42.2	IMC-20-8N
20	¾	52.3	19.1	22.0	26.0	15.9	30	32	42.2	IMC-20-12N
22	¾	52.3	19.1	22.0	26.0	15.9	30	32	42.2	IMC-22-12N
22	1	57.1	23.8	22.0	26.0	18.3	35	32	47.0	IMC-22-16N
25	½	57.5	19.1	26.5	31.3	11.9	35	38	45.2	IMC-25-8N
25	¾	57.5	19.1	26.5	31.3	15.8	35	38	45.2	IMC-25-12N
25	1	62.3	23.8	26.5	31.3	21.8	35	38	50.0	IMC-25-16N
28	1	72.4	23.8	36.6	36.6	21.8	41	46	51.6	IMC-28-16N
28	1.1/4	73.1	23.8	36.6	36.6	21.8	46	46	52.3	IMC-28-16N
30	1.1/4	77.2	23.8	39.2	39.6	26.2	46	50	55.6	IMC-28-20N
32	1.1/4	79.6	23.8	41.6	42.0	28.6	46	50	56.6	IMC-30-20N
38	1.1/2	96.6	26.2	47.9	49.4	33.7	55	57	64.0	IMC-32-20N



MALE CONNECTOR

Inch OD Tubes x Male ISO* Parallel Threads-RS

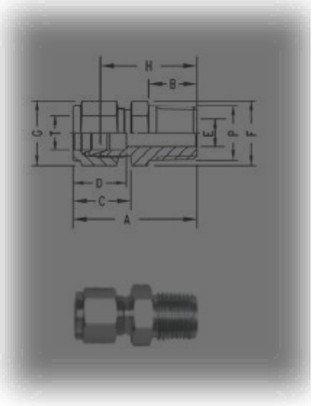
T TUBE OD	P ISO MALE	A	B	C	D	E MIN.	F A/F	Fd	G A/F	H (22PAGE)	IMPORLOK PART NO.
1/8	1/8”	30.0	7.1	15.3	12.7	2.4	14	13.7	11	23.4	IMC-2-2-Rs
1/8	1/4	35.3	11.2	15.3	12.7	2.4	19	18.0	11	28.7	IMC-2-4Rs
1/4	1/8	32.3	7.1	17.8	15.3	2.4	14	13.7	14	24.9	IMC-4-2Rs
1/4	1/4	37.6	11.2	17.8	15.3	4.8	19	18.0	14	30.2	IMC-4-4Rs
1/4	3/8	38.9	11.2	17.8	15.3	4.8	22	21.8	14	31.5	IMC-4-6Rs
1/4	1/2	44.7	14.2	17.8	15.3	4.8	27	26.0	14	37.4	IMC-4-8Rs
3/8	1/4	39.2	11.2	19.3	16.8	5.8	19	18.0	17	21.8	IMC-6-4Rs
3/8	3/8	40.4	11.2	19.3	16.8	7.1	22	21.8	17	33.0	IMC-6-6Rs
3/8	1/2	46.3	14.2	19.3	16.8	7.1	27	26.0	17	38.9	IMC-6-8Rs
1/2	1/4	42.7	11.2	21.8	22.9	5.8	22	18.0	22	32.5	IMC-8-4Rs
1/2	3/8	43.2	11.2	21.8	22.9	7.9	22	21.8	22	33.0	IMC-8-6Rs
1/2	1/2	49.0	14.2	21.8	22.9	10.4	27	26.0	22	38.9	IMC-8-8Rs
1/2	3/4	52.8	15.7	21.8	22.9	10.4	35	32.0	22	42.7	IMC-8-12Rs
3/4	1/2	49.0	14.2	21.8	24.4	11.9	27	26.0	28.5	38.9	IMC-12-8Rs
3/4	3/4	52.8	15.7	21.8	24.4	15.8	35	32.0	28.5	42.7	IMC-12-12Rs
3/4	1	55.4	18.7	21.8	24.4	15.8	41	39.0	28.5	45.6	IMC-12-16Rs
1	1/2	55.9	14.2	26.4	31.2	11.9	35	26.0	38	43.7	IMC-16-8Rs
1	3/4	57.5	15.7	26.4	31.2	15.8	35	32.0	38	45.2	IMC-16-12Rs
1	1	60.0	18.3	26.4	31.2	19.8	41	39.0	38	47.8	IMC-16-16Rs
1.1/4	1.1/4	78.9	19.8	28.9	41.2	25.0	50	49.0	50	55.9	IMC-20-20Rs
1.1/2	1.1/2	90.8	22.1	45.2	50.0	31.8	60	54.7	57	63.2	IMC-24-24Rs



MALE CONNECTOR
MATRIC OD Tube x male ISO* Parallel Threads-RS

T TUBE OD	P ISO MALE	A	B	C	D	E min	F A/F	Fd	G A/F	H	IMPORLOK PART NO.
3 3	1/8 1/4	30.0 35.3	7.1 11.2	15.3 15.3	12.9 12.9	2.4 2.4	14 19	13.8 18.2	11 11	23.4 28.7	IMC-3-2RS IMC-3-4RS
6 6 6 6	1/8 1/4 3/8 1/2	32.3 37.6 38.9 44.7	7.1 11.2 11.2 14.2	17.7 17.7 17.7 17.7	15.3 15.3 15.3 15.3	4.8 4.8 4.8 4.8	14 19 22 27	13.8 18.0 21.8 26.0	14 14 14 14	24.9 30.2 31.5 37.3	IMC-6-2RS IMC-6-4RS IMC-6-6RS IMC-6-8RS
8 8 8 8	1/8 1/4 3/8 1/2	33.2 38.5 39.8 35.6	7.1 11.2 11.2 14.2	18.6 18.6 18.6 18.6	16.2 16.2 16.2 16.2	4.0 6.4 6.4 6.4	14 19 22 27	13.8 18.0 21.8 26.0	16 16 16 16	25.7 31.0 32.3 38.1	IMC-8-2RS IMC-8-4RS IMC-8-6RS IMC-8-8RS
10 10 10	1/4 3/8 1/2	39.4 40.6 46.5	11.2 11.2 14.2	19.5 19.5 19.5	17.2 17.2 17.2	5.9 7.6 7.9	19 22 27	18.0 21.8 26.0	19 19 19	31.8 33.0 38.9	IMC-10-4RS IMC-10-6RS IMC-10-8RS
12 12 12 12	1/4 3/8 ½ 3/4	42.6 43.1 49.0 42.8	11.2 11.2 14.2 15.7	22.0 22.0 22.0 22.0	22.8 22.8 22.8 22.8	5.9 7.9 9.5 9.5	22 22 27 35	18.0 21.8 26.0 32.0	22 22 22 22	32.5 33.0 38.9 42.7	IMC-12-4RS IMC-12-6RS IMC-12-8RS IMC-12-12RS
16 16	3/8 1/2	43.9 49.0	11.2 14.2	22.0 22.0	24.4 24.4	7.9 11.9	24 27	21.8 26.0	25 25	33.8 38.9	IMC-16-6RS IMC-16-8RS
20 20	½ 3/4	59.5 52.3	14.2 15.7	22.0 22.0	26.0 26.0	11.9 15.9	30 35	26.0 32.0	28.5 28.5	40.4 42.7	IMC-20-8RS IMC-22-12RS
22 22	¾ 1	52.3 55.3	15.7 15.7	22.0 22.0	26.0 26.0	15.9 18.3	35 41	32.0 39.0	32 32	42.7 45.2	IMC-20-16RS IMC-25-12RS
25 25	¾ 1	57.5 60.1	18.3 15.7	26.5 26.5	31.3 31.3	15.9 19.8	35 41	32.0 39.0	38 38	45.2 47.8	IMC-20-16RS IMC-20-12RS
28	1	70.1	18.3	36.6	36.6	19.8	41	39.0	46	49.3	IMC-28-16RS
30	1.1/4	76.5	19.8	39.2	39.6	25.0	50	49.0	50	54.9	IMC-30-20RS
32	1.1/4	78.9	19.8	41.6	42.0	25.0	50	49.0	50	55.9	IMC-32-20RS
38	1.1/2	90.8	22.1	47.9	49.4	31.8	55	54.7	57	63.2	IMC-38-24RS

NOTE: The ISO Parallel Thread system shown on this page does note create pressure tight seal against the threads.
The seal is made by a bounded washer seal between the fitting and female part face. A soft metal (Copper) Gasket way also be used.

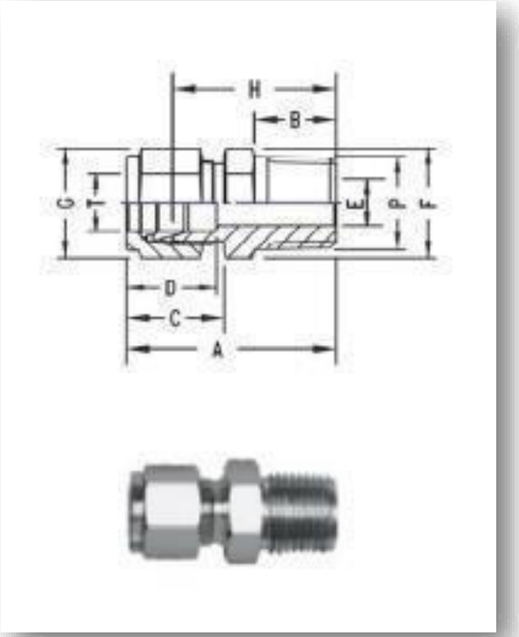


Reference Specification: BS 2779: ISO 228/1 : JIS B0202 : DIN-ISO 228/1

MALE CONNECTOR
METRIC OD TUBES X MALE ISO* TAPERED PIPE THREADS

T Tube OD	ISO MALE	A	B	C	D	E Min.	F A/F	G A/F	H	IMPORLOK PART NO.
3	1/8	30.0	9.6	15.3	12.9	2.4	11	11	23.4	IMC - 3 - 2RS
3	1/4	35.3	14.3	15.3	12.9	2.4	14	11	29.0	IMC - 3 - 4RS
6	1/8	32.3	9.6	17.7	15.3	4.8	14	14	25.4	IMC 6-2Rx
6	1/4	37.6	14.3	17.7	15.3	4.8	14	14	30.5	IMC 6-4Rx
6	3/8	38.9	14.3	17.7	15.3	4.8	19	14	31.0	IMC 6 Rx
6	1/2	44.7	19.1	17.7	15.3	4.8	22	14	37.3	IMC 6-8Rx
8	1/8	34.2	9.6	18.6	16.2	4.0	14	16	26.7	IMC 8-2Rx
8	1/4	38.5	14.3	18.6	16.2	6.4	14	16	31.2	IMC 8-4Rx
8	3/8	39.8	14.3	18.6	16.2	6.4	19	16	31.8	IMC 8-6Rx
8	1/2	45.6	19.1	18.6	16.2	6.4	22	16	38.1	IMC 8-8Rx
10	1/8	36.6	9.6	19.5	17.2	4.8	17	19	28.7	IMC 10-2Rx
10	1/4	40.9	14.3	19.5	17.2	7.9	19	19	33.3	IMC 10-4Rx
10	3/8	40.9	14.3	19.5	17.2	7.9	19	19	33.3	IMC 10-6Rx
10	1/2	46.5	19.1	19.5	17.2	7.9	22	19	38.9	IMC 10-8Rx
12	1/4	43.4	14.3	22.0	22.8	7.1	22	22	33.3	IMC 12-4Rx
12	3/8	43.4	14.3	22.0	22.8	9.5	22	22	33.3	IMC 12-6Rx
12	1/2	49.0	19.1	22.0	22.8	9.5	22	22	38.9	IMC 12-8Rx
12	3/4	50.5	19.1	22.0	22.8	9.5	27	22	40.4	IMC 12-12Rx
12	1	57.1	23.8	22.0	22.8	9.5	35	22	47.0	IMC 12-16Rx
14	3/8	44.1	14.3	22.0	24.4	9.5	24	25	34.0	IMC 14-6Rx
14	1/2	49.0	19.1	22.0	24.4	11.1	24	25	38.9	IMC 14-8Rx
15	1/2	49.0	19.1	22.0	24.4	11.9	24	25	38.9	IMC 15-8Rx
16	3/8	43.9	14.3	22.0	24.4	9.5	24	25	34.0	IMC 16-6Rx
16	1/2	49.0	19.1	22.0	24.4	11.9	24	25	38.9	IMC 16-8Rx
16	3/4	50.5	19.1	22.0	24.4	127.0	27	25	40.4	IMC 16-12Rx
18	1/2	50.5	19.1	22.0	24.4	11.9	27	30	40.4	IMC 18-8Rx
18	3/4	50.5	19.1	22.0	24.4	15.1	27	30	40.4	IMC 18-12Rx
20	1/2	52.3	19.1	22.0	26.0	11.9	30	32.0	42.2	IMC 20-8Rx
20	3/4	52.3	19.1	22.0	26.0	15.9	30	32.0	42.2	IMC 20-12Rx
22	3/4	52.3	19.1	22.0	26.0	15.9	30	32	42.2	IMC 22-12Rx
22	1	55.3	23.8	22.0	26.0	18.3	35	32	47.0	IMC 22-16Rx
25	1/2	57.5	19.1	26.5	31.3	11.9	35	38	45.2	IMC 25-8Rx
25	3/4	57.5	19.1	26.5	31.3	15.9	35	38	45.2	IMC 25-12Rx
25	1	62.3	23.8	26.5	31.3	21.8	35	38	50.0	IMC 25-16Rx
28	1	72.4	23.8	36.6	36.6	21.8	41	46	51.6	IMC 28-16Rx
28	1.1/4	73.1	23.8	36.6	36.6	21.8	46	46	52.3	IMC 28-20Rx
30	1.1/4	76.5	23.8	39.2	39.6	26.2	46	50	55.6	IMC 30-20Rx
32	1.1/4	78.9	23.8	41.6	42.0	28.6	46	50	56.6	IMC 32-20Rx
38	1.1/2	90.8	26.2	47.9	49.4	33.7	55	57	64.0	IMC 38-24Rx

*Reference Specification : BS21 : ISO 7/1 : JIS B 0203 : DIN 2999 : IS 554

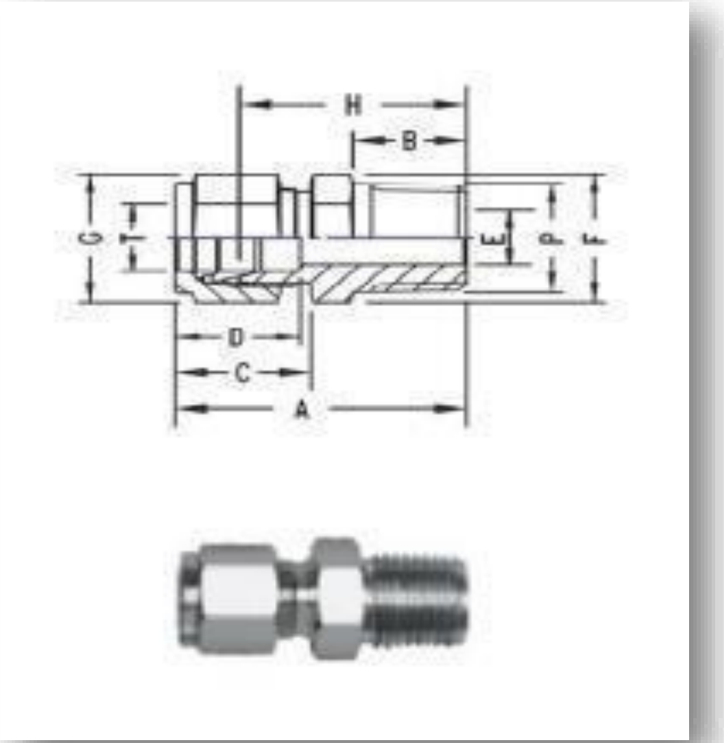


BORED- THROUGH FITTINGFORTHERMOCOUPLES

TO ORDER ADD BT TO DESIRED VENUS ENGINEERS MALE CONNECTOR PART NUMBER VMC-8-N-BT EXAMPLE: BORED THROUGH CONNECTION ½" OD X ½" NPT (M) WITH ½" OD THROUGH BORE HAS PART NUMBER

MALE CONNECTOR
INCH OD TUBES X MALE ISO* PARELLEL THREADS - RS

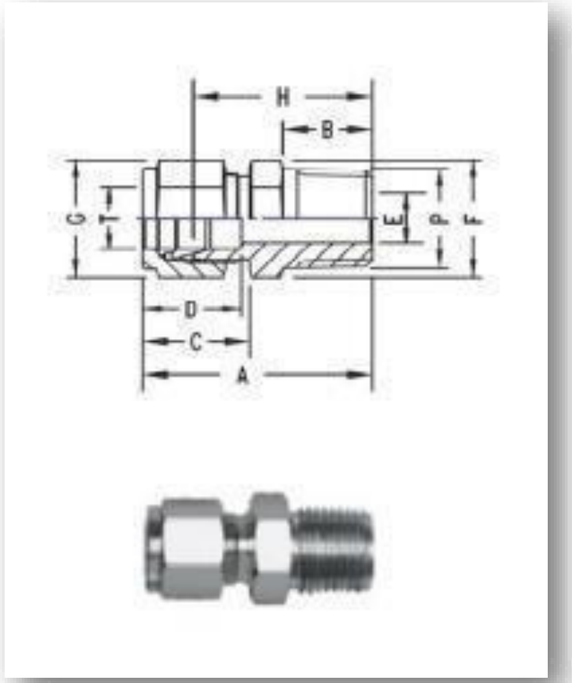
T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	Fd	G A/F	H	IMPORLOK PART NO.
1/8	1/8	30.0	7.1	15.3	12.7	2.4	14	13.7	11	23.4	IMC- 2 - 2RS
1/8	1/4	35.3	11.2	15.3	12.7	2.4	19	18.0	11	28.7	IMC- 2 - 4RS
1/4	1/8	32.3	7.1	17.8	15.3	4.8	14	13.7	14	24.9	IMC-4 - 2RS
1/4	1/4	37.6	11.2	17.8	15.3	4.8	19	18.0	14	30.2	IMC- 4- 4RS
1/4	3/8	38.9	11.2	17.8	15.3	4.8	22	21.8	14	31.5	IMC - 4-6RS
1/4	1/2	44.7	14.2	17.8	15.3	4.8	27	26.0	14	37.4	IMC- 4 - 8RS
3/8	1/4	39.2	11.2	19.3	16.8	5.8	19	18.0	17	31.8	IMC- 6 - 4RS
3/8	3/8	40.4	11.2	19.3	16.8	7.1	22	21.8	17	33.0	IMC- 6 - 6 RS
3/8	1/2	46.3	14.2	19.3	16.8	7.1	27	26.0	17	38.9	IMC- 6 - 8RS
1/2	1/4	42.7	11.2	21.8	22.9	5.8	22	18.0	22	32.5	IMC- 8 - 4RS
1/2	3/8	43.2	11.2	21.8	22.9	7.9	22	21.8	22	33.0	IMC- 8 - 6RS
1/2	1/2	49	14.2	21.8	22.9	10.4	27	26.0	22	38.9	IMC- 8 - 8RS
1/2	3/4	52.8	15.7	21.8	22.9	10.4	35	32.0	22	42.7	IMC- 8 - 12RS
3/4	1/2	49	14.2	21.8	24.4	11.9	27	26.0	28.5	38.9	IMC- 12 - 8RS
3/4	3/4	52.8	15.7	21.8	24.4	15.8	35	32.0	28.5	42.7	IMC- 12 - 12RS
3/4	1	55.4	18.3	21.8	24.4	15.8	41	39.0	28.5	45.6	IMC- 12 - 16RS
1	1/2	55.9	14.2	26.4	31.2	11.9	35	26.0	38	43.7	IMC- 16 - 8RS
1	3/4	57.5	15.7	26.4	31.2	15.8	35	32.0	38	45.2	IMC- 16 - 12RS
1	1	60	18.3	26.4	31.2	19.8	41	39.0	38	47.8	IMC- 16 - 16RS
1.1/4	1.1/4	78.9	19.8	38.9	41.2	25.0	50	49.0	50	55.9	IMC- 20 - 20RS
1.1/2	1.1/2	90.8	22.1	45.2	50.0	31.8	60	54.7	57	63.2	IMC- 24 - 24RS



METRIC OD Tube X Male ISO* Parallel Threads - RS

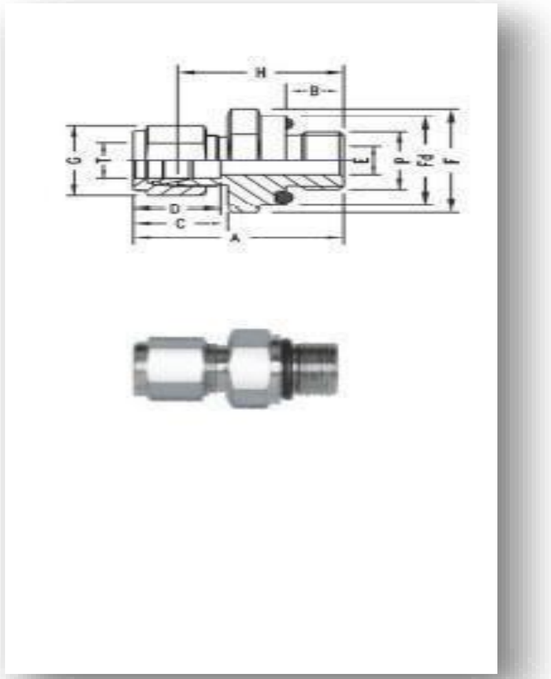
METRIC ODTube X Male ISO* Parallel Threads - RS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	Fd	G A/F	H	IMPORLOK PART NO.
3	1/8	30.0	7.1	15.3	12.9	2.4	14	13.8	11	23.4	IMC - 3 - 2RS
3	1/4	35.3	11.2	15.3	12.9	2.4	19	18.0	11	28.7	IMC - 3 - 4RS
6	1/8	32.3	7.1	17.7	15.3	4.8	14	13.8	14	24.9	IMC - 6 - 2RS
6	1/4	37.6	11.2	17.7	15.3	4.8	19	18.0	14	30.2	IMC - 6 - 4RS
6	3/8	38.9	11.2	17.7	15.3	4.8	22	21.8	14	31.5	IMC - 6 - 6RS
6	1/2	44.7	14.2	17.7	15.3	4.8	27	26.0	14	37.3	IMC - 6 - 8RS
8	1/8	33.2	7.1	18.6	16.2	4.0	14	13.8	16	25.7	IMC - 8 -2RS
8	1/4	38.5	11.2	18.6	16.2	6.4	19	18.0	16	31.0	IMC - 8 -4RS
8	3/8	39.8	11.2	18.6	16.2	6.4	22	21.8	16	32.3	IMC - 8 - 6RS
8	1/2	45.6	14.2	18.6	16.2	6.4	27	26.0	16	38.1	IMC - 8 - 8RS
10	1/4	39.4	11.2	19.5	17.2	5.9	19	18.0	19	31.8	IMC - 10 - 4RS
10	3/8	40.5	11.2	19.5	17.2	7.6	22	21.8	19	33.0	IMC - 10 - 6RS
10	1/2	46.5	14.2	19.5	17.2	7.9	27	26.0	19	0.0	IMC - 10 - 8RS
12	1/4	42.6	11.2	22.0	22.8	5.9	22	18.0	22	32.5	IMC - 12 - 4RS
12	3/8	43.1	11.2	22.0	22.8	7.9	22	21.8	22	33.0	IMC - 12 - 6RS
12	1/2	49.0	14.2	22.0	22.8	9.5	27	26.0	22	38.9	IMC - 12 - 8RS
12	3/4	52.8	15.7	22.0	22.8	9.5	35	32.0	22	42.7	IMC - 12 - 12RS
16	3/8	43.9	11.2	22.0	24.4	7.9	24	21.8	25	33.8	IMC - 16 - 6RS
16	1/2	49.0	14.2	22.0	24.4	11.9	27	26.0	25	38.9	IMC - 16 - 8RS
20	1/2	50.5	14.2	22.0	26.0	11.9	30	26.0	28.5	40.4	IMC - 20 - 8RS
20	3/4	52.3	15.7	22.0	26.0	15.9	35	32.0	28.5	42.7	IMC - 22 - 12RS
22	3/4	52.3	15.7	22.0	26.0	15.9	35	32.0	32	42.7	IMC - 20 - 16RS
22	1	55.3	18.3	22.0	26.0	18.3	41	39.0	32	45.2	IMC - 25 - 12RS
25	3/4	57.5	15.7	26.5	31.3	15.9	35	32.0	38	45.2	IMC - 20 - 16RS
25	1	60.1	18.3	26.5	31.3	19.8	41	39.0	38	47.8	IMC - 20 - 12RS
28	1	70.1	18.3	36.6	36.6	19.8	41	39.0	46	49.3	IMC - 28 - 16RS
30	1.1/4	76.5	19.8	39.2	39.6	25.0	50	49.0	50	54.9	IMC - 30 - 20RS
32	1.1/4	78.9	19.8	41.6	42.0	25.0	50	49.0	50	55.9	IMC - 32 - 20RS
38	1.1/2	90.8	22.1	47.9	49.4	31.8	55	54.7	57	63.2	IMC - 38 - 24RS



O SEAL MALE CONNECTOR
INCH OD TUBES X MALE ISO* PARELLEL THREADS - RS

Tube OD	ISO Male	A	B	C	D	E min	F A/F	Fd	G A/F	H	O Ring Part No.	IMPORLOK PART NO.
1/8	1/8	32.8	7.1	15.3	12.7	2.4	19	18.8	11	26.2	2 OPN	IOC - 2 - 2R
1/4	1/8	35.0	7.1	17.8	15.3	4.8	19	18.8	14	27.7	2 OPN	IOC - 4 - 2R
1/4	1/4	40.0	11.2	17.8	15.3	7.1	24	23.6	14	32.6	4OPN	IOC - 4 - 4R
3/8	1/4	41.5	11.2	19.3	16.8	7.1	24	23.6	17	34.1	4 OPN	IOC - 6 - 4R
3/8	3/8	42.2	11.2	19.3	16.8	7.1	30	29.8	17	34.8	6 OPN	IOC - 6 -6R
3/8	1/2	47.7	14.2	19.3	16.8	9.6	32	31.8	17	40.3	8 OPN	IOC - 6 - 8R
1/2	3/8	44.5	10.4	21.8	22.9	10.4	30	29.8	22	34.4	6 OPN	IOC - 8 - 6R
1/2	1/2	50.4	14.2	21.8	22.9	11.9	32	31.8	22	40.3	8 OPN	IOC - 8 - 8R
5/8	1/2	50.4	14.2	21.8	24.4	11.9	32	31.8	22	40.3	8 OPN	IOC - 10 -8R
3/4	1/2	50.4	14.2	21.8	24.4	15.8	32	31.8	28.5	40.3	8 OPN	IOC - 12 -8R
3/4	3/4	53.5	15.7	21.8	24.4	15.8	38	37.8	28.5	43.4	12 OPN	IOC - 12 -12R
1	3/4	58.2	15.7	26.4	31.2	22.3	38	37.8	38	46.0	12 OPN	IOC - 16 -12R
1	1	62.2	18.0	26.4	31.2	27.6	45	44.0	38	50.0	16 OPN	IOC - 16 -16R
1.1/4	1.1/4	77.6	12.0	38.9	41.4	27.6	55	54.0	50	55.6	20 OPN	IOC - 20 -20R
1.1/2	1.1/2	88.9	12.0	45.2	50.0	34.0	60	58.0	57	61.7	24 OPN	IOC - 24 -24R

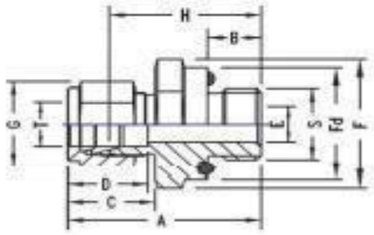


***Reference Specification : BS 2779 : ISO 228/1 : JIS B0202 : DIN - ISO 228/1**

INCH OD TUBE X MALE STRAIGHT THREADS - UNF

METRIC OD TUBES X MALE ISO* THREADS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	Fd	G A/F	H	O Ring	IMPORLOK PART NO.
3	1/8	32.8	7.1	15.3	12.9	2.4	19	18.8	11	26.2	2 OPN	IOC - 3 - 2R
3	1/4	37.6	11.2	15.3	12.9	2.4	24	23.8	11	31.0	4 OPN	IOC - 3 -4R
6	1/4	40.1	11.2	17.7	15.3	4.8	24	23.8	14	32.7	4 OPN	IOC - 6 - 4R
6	3/8	40.8	11.2	17.7	15.3	4.8	30	29.8	14	33.4	6 OPN	IOC - 6 - 6R
8	1/4	40.9	11.2	18.6	16.2	6.3	24	23.8	16	33.4	4 OPN	IOC - 8 - 4R
10	1/4	41.0	11.2	19.5	17.2	7.1	24	23.8	17	33.4	4 OPN	IOC - 10 - 4R
10	3/8	42.6	11.2	19.5	17.2	7.1	30	29.8	17	35.0	6 OPN	IOC - 10 - 6R
10	1/2	48.0	14.2	19.5	17.2	7.9	32	31.8	17	40.4	8 OPN	IOC - 10 - 8R
12	1/4	44.3	11.2	22.0	22.8	7.1	24	21.8	22	34.2	4 OPN	IOC - 12 - 4R
12	3/8	45.1	11.2	22.0	22.8	7.9	30	29.8	22	34.0	6 OPN	IOC - 12 - 6R
12	1/2	50.5	14.3	22.0	22.8	9.5	32	31.8	22	40.4	8 OPN	IOC - 12 - 8R
16	1/2	50.5	14.3	22.0	24.4	11.9	32	31.8	25	40.4	8 OPN	IOC - 16 - 8R
20	3/4	55.1	15.7	22.0	26.0	15.8	38	37.0	32	45.0	12 OPN	IOC - 20 -12R
25	3/4	58.1	15.7	26.5	31.3	15.8	38	37.0	38	45.8	12 OPN	IOC - 20 -12R
25	1	62.3	18.3	26.5	31.3	19.8	45	44.0	38	50.0	16 OPN	IOC - 25 -16R

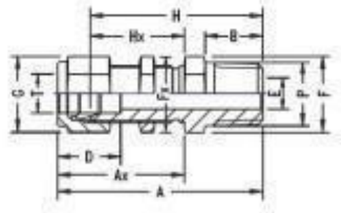


METRIC OD TUBES X MALEISO* THREADS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	Fd	G A/F	H	O Ring	IMPORLOK PART NO.
1/8	5/16-24	32.8	8.6	15.3	12.7	2.4	14	13.8	11	26.2	1 OPU	IOC - 2 - U
1/4	7/16-20	38.4	10.4	17.8	15.3	4.8	19	18.8	14	31.0	2 OPU	IOC - 4 - U
1/3	1/2.20	40.6	11.2	18.5	16.3	6.3	22	21.8	16	33.3	3 OPU	IOC - 5 - U
3/8	9/16-18	42.4	12.0	19.3	16.8	7.1	24	23.6	17	35.0	4 OPU	IOC - 6 - U
1/2	3/4 . 16	46.0	12.0	21.8	22.9	10.4	28.5	28.0	22	35.8	6 OPU	IOC - 8 - U
3/4	11/16-12	52.4	14.3	21.8	24.4	15.8	38	37.8	28.5	42.2	12 OPU	IOC - 12 - U
1	15/16-12	58.2	14.3	26.4	31.2	22.3	45	44.0	38	46.0	16 OPU	IOC - 16 - U
1.1/4	15/8.12	76.0	18.3	38.9	41.4	27.6	55	54.0	50	54.1	20OPU	IOC - 20 - U
1.1/2	17/8.12	86.6	19.8	45.2	50.0	34.0	60	58.0	57	59.4	24 OPU	IOC - 24 - U

BULKHEAD MALE CONNECTOR

T Tube OD	NPT MALE	A	AX	B	D	E MIN.	F A/F	G A/F	H	HX	HOLE DRILL SIZE	PANEL THICK NESS	IMPORLOK PART NO.
1/8	1/8	46.4	31.2	9.6	12.7	2.4	14	11	39.8	24.6	8.3	12.7	IBC - 2 - 2N
1/4	1/8	49.5	33.5	9.6	15.3	4.8	16	14	42.2	26.2	11.5	10.2	IBC - 4 - 2N
1/4	1/4	54.1	33.5	14.3	15.3	4.8	16	14	46.7	26.2	11.5	10.2	IBC - 4 - 4N
3/8	1/4	57.4	36.8	14.3	16.8	7.1	19	17	50.0	29.5	14.7	11.2	IBC - 6 - 4N
3/8	3/8	57.4	36.8	14.3	16.8	7.1	19	17	50.0	29.5	14.7	11.2	IBC - 6 - 6N
3/8	1/2	637.0	36.8	19.1	16.8	7.1	22	17	56.5	29.5	14.7	11.2	IBC - 6 - 8N
1/2	3/8	63.3	41.9	14.3	22.9	9.6	24	22	53.0	31.8	19.5	12.7	IBC - 8 - 6N
1/2	1/2	68.8	41.9	19.1	22.9	10.4	24	22	56.8	31.8	19.5	12.7	IBC - 8 - 8N
3/4	3/4	76.2	47.5	19.1	24.4	15.8	30	28.5	66.9	37.4	25.8	16.8	IBC - 12 - 12N
1	1	93.2	57.4	23.9	31.2	22.3	41	38	81.0	45.2	33.7	19.0	IBC - 16 - 16N
1.1/4	1.1/4	110.5	72.5	23.9	41.2	27.6	50	50	87.5	49.5	42.5	19.0	IBC - 20 - 20N
1.1/2	1.1/2	122.8	79.1	26.2	50.0	34.0	60	57	95.5	51.5	50.5	19.0	IBC - 24 - 24N



METRIC OD TUBES X MALE NPT THREADS

T Tube OD	ISO MALE	A	AX	B	D	E MIN.	F A/F	G A/F	H	HX	HOLE DRILL SIZE	PANEL THICK NESS	IMPORLOK PART NO.
3	1/8	46.4	31.2	9.6	12.9	2.4	11	11	39.8	24.6	8.3	12.7	IBC - 3 - 2N
6	1/8	49.5	33.5	9.6	15.3	4.8	16	14	42.2	26.2	11.5	10.2	IBC - 6 - 2N
10	1/4	57.4	36.8	14.3	17.2	7.1	19	17	50	29.5	14.7	11.2	IBC - 10 - 4N
10	3/8	57.4	36.8	14.3	17.2	7.1	19	17	50	29.5	14.7	11.2	IBC - 10 - 6N
12	3/8	63.3	41.9	14.3	22.0	9.6	24	22	53	31.8	19.5	12.7	IBC - 12 - 6N
12	1/2	68.8	41.9	19.1	22.0	10.4	24	22	58.8	31.8	19.5	12.7	IBC - 12 - 8N
16	1/2	69.6	42.6	19.1	24.4	11.9	27	25	59.5	32.5	22.8	12.7	IBC - 16 - 8N
22	3/4	83.3	53	19.1	26.0	15.8	35	25	73.2	42.9	29	19.0	IBC - 22 - 12N
25	1	93.2	57.4	23.9	31.3	22.3	41	38	81	45.2	33.7	19.0	IBC - 25 - 16N
32	1.1/4	110.5	72.5	23.9	42.0	28.6	50	50	87.5	49.5	42.5	19.0	IBC - 32 - 20N
38	1.1/2	122.8	79.1	26.2	49.4	33.7	60	57	95.5	51.5	50.5	19.0	IBC - 38 - 24N

NOTE: Bulkhead Male Connectors are also available with ISO Taper Male Threads, ISO Parallel Male Parallel Male Threads, ISO Parallel Male Threads - RP and Rs and UNEF Threads, please consult us for details .

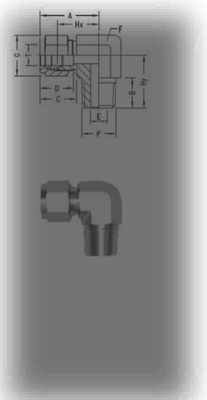
MALE ELBOW
INCH OD TUBES X MALE NPT THREAD

T Tube OD	NPT MALE	A	B	C	D	E MIN.	F A/F	G A/F	HX	HY	IMPORLOK PART NO.
1/16	1/16	19.0	9.6	10.9	8.6	1.3	11	11	15.3	17.8	IME - 1 - 1N
1/16	1/8	19.0	9.6	10.9	8.6	1.3	11	11	15.3	17.8	IME - 1 -2N
1/8	1/8	23.6	9.6	15.3	12.7	2.4	11	11	17.0	17.8	IME - 2 - 2N
1/8	1/4	24.6	14.3	15.3	12.7	2.4	14	11	18.0	23.4	IME - 2 - 4N
1/4	1/8	26.9	9.6	17.8	5.3	4.8	14	14	19.6	18.8	IME - 4 - 2N
1/4	1/4	26.9	14.3	17.8	15.3	4.8	14	14	19.6	23.4	IME - 4 - 4N
1/4	3/8	29.7	14.3	17.8	15.3	4.8	19	14	22.4	26.2	IME - 4 - 6N
1/4	1/2	31.8	19.1	17.8	15.3	4.8	22	14	24.4	33.0	IME - 4 - 8N
5/16	1/4	28.7	9.6	18.5	16.3	6.3	14	16	21.3	24.4	IME - 5 - 4N
3/8	1/8	30.5	9.6	19.3	16.8	4.8	14	17	23.1	20.9	IME - 6 - 2N
3/8	1/4	30.5	14.3	19.3	16.8	7.1	17	17	23.1	25.4	IME - 6 - 4N
3/8	3/8	31.2	14.3	19.3	16.8	7.1	19	17	23.9	26.2	IME - 6 - 6N
3/8	1/2	33.3	19.1	19.3	16.8	7.1	22	17	25.9	33.0	IME - 6 - 8N
1/2	1/4	36.0	14.3	21.8	22.9	4.8	22	22	25.9	28.2	IME - 8 - 4N
1/2	3/8	36.0	14.3	21.8	22.9	9.6	22	22	25.9	28.2	IME - 8 - 6N
1/2	1/2	36.0	19.1	21.8	22.9	10.4	22	22	25.9	33.0	IME - 8 - 8N
1/2	3/4	39.9	19.1	21.8	22.9	10.4	27	22	29.7	36.8	IME - 8 - 12N
5/8	1/2	38.1	19.1	21.8	24.4	11.9	24	25	27.9	35.0	IME - 10 - 8N
3/4	1/2	39.9	19.1	21.8	24.4	11.9	27	28.5	29.7	36.8	IME - 12 - 8N
3/4	3/4	39.9	19.1	21.8	24.4	15.8	27	28.5	29.7	36.8	IME - 12 -12N
7/8	3/4	44.7	19.1	21.8	25.9	15.8	35	32	34.5	41.6	IME - 14 -12N
1	3/4	49.0	19.1	26.4	31.2	15.8	35	38	36.8	41.6	IME - 16 -12N
1	1	49.0	23.8	26.4	31.2	22.3	35	38	36.8	46.5	IME - 16 -16N
1.1/4	1.1/4	66.5	23.8	38.8	41.1	27.6	46	50	44.5	47.8	IME - 20 -20N
1.1/2	1.1/2	78.0	26.2	45.2	50.0	34.0	55	57	50.8	60.4	IME - 24 -24N
2	2	107.2	26.9	62.7	67.6	46.0	70	76	69.9	70.6	IME - 32 -32N

Reference Specification : BS 21 : ISO 7/1 : JIS B 0203 : DIN 2999 : IS 554

NOTE: the combination of tube OD and male threads are indicative of popular sizes. Other combinations, not shown, are available, please consult us.

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	G A/F	HX	HY	IMPORLOK PART NO.
1/8	1/8	23.6	9.6	15.3	12.7	2.4	11	11	17.0	17.8	IME - 2 - 2RX
1/8	1/4	24.6	14.3	15.3	12.7	2.4	14	11	18.0	23.4	IME - 2 - 4RX
1/4	1/8	26.9	9.6	17.8	5.3	4.8	14	14	19.6	18.8	IME - 4 - 2RX
1/4	1/4	26.9	14.3	17.8	15.3	4.8	14	14	19.6	23.4	IME - 4 - 4RX
1/4	3/8	29.7	14.3	17.8	15.3	4.8	19	14	22.4	26.2	IME - 4 - 6RX
1/4	1/2	31.8	19.1	17.8	15.3	4.8	22	14	24.4	33.0	IME - 4 - 8RX
3/8	1/8	30.5	9.6	19.3	16.8	4.8	14	17	23.1	20.9	IME - 6 - 2RX
3/8	1/4	30.5	14.3	19.3	16.8	7.1	17	17	23.1	25.4	IME - 6 - 4RX
3/8	3/8	31.2	14.3	19.3	16.8	7.1	19	17	23.9	26.2	IME - 6 - 6RX
3/8	1/2	33.3	19.1	19.3	16.8	7.1	22	17	25.9	33.0	IME - 6 - 8RX
1/2	1/4	36	14.3	21.8	22.9	4.8	22	22	25.9	28.2	IME - 8 - 4RX
1/2	3/8	36	14.3	21.8	22.9	9.6	22	22	25.9	28.2	IME - 8 - 6RX
1/2	1/2	36	19.1	21.8	22.9	10.4	22	22	25.9	33.0	IME - 8 - 8RX
1/2	3/4	39.9	19.1	21.8	22.9	10.4	27	22	29.7	36.8	IME - 8 - 12RX
3/4	1/2	39.9	19.1	21.8	24.4	11.9	27	28.5	29.7	36.8	IME - 12 - 8RX
3/4	3/4	39.9	19.1	21.8	24.4	15.8	27	28.5	29.7	36.8	IME - 12 - 12RX
1	3/4	49	19.1	26.4	31.2	15.8	35	38	36.8	41.6	IME - 16 - 12RX
1	1	49	23.8	26.4	31.2	22.3	35	38	36.8	46.5	IME - 16 - 16RX
1.1/4	1.1/4	66.5	23.8	38.8	41.1	27.6	46	50	44.5	47.8	IME - 20 - 20RX
1.1/2	1.1/2	78	26.2	45.2	50.0	34.0	55	57	50.8	60.4	IME - 24 - 24RX



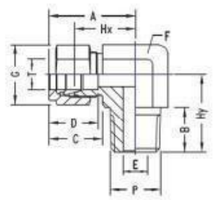
MALE ELBOW

METRIC OD TUBES X MALE NPT THREADS

T Tube OD	NPT MALE	A	B	C	D	E MIN.	F A/F	G A/F	HX	HY	IMPORLOK PART NO.
3	1/8	23.6	9.6	15.3	12.9	2.4	11	11	17.0	17.8	IME - 3-2N
3	¼	24.6	14.3	15.3	12.9	2.4	14	11	18.0	23.4	IME-3-4N
6	1/8	27.0	9.6	17.7	15.3	4.8	14	14	19.6	18.8	IME -6-2N
6	¼	27.0	14.3	17.7	15.3	4.8	14	14	19.6	23.4	IME-6-4N
6	3/8	29.8	14.3	17.7	15.3	4.8	19	14	22.4	26.2	IME-6-6N
6	1/2	31.8	19.1	17.7	15.3	4.8	22	14	24.4	33.0	IME-6-8N
8	1/8	28.8	9.6	18.6	16.2	4.8	14	16	21.3	19.8	IME-8-2N
8	1/4	28.8	14.3	18.6	16.2	6.3	14	16	21.3	24.4	IME -8-4N
8	3/8	30.6	14.3	18.6	16.2	6.3	19	16	23.1	26.2	IME-8-6N
8	1/2	32.6	19.1	18.6	16.2	6.3	22	16	25.1	33.0	IME-8-8N
10	1/8	31.5	9.6	19.5	17.2	4.8	17	19	23.9	21.6	IME-10-2N
10	1/4	31.5	14.3	19.5	17.2	7.1	17	19	23.9	26.2	IME-10-4N
10	3/8	31.5	19.1	19.5	17.2	7.9	19	19	23.9	26.2	IME-10-6N
10	1/2	33	14.3	19.5	17.2	7.9	22	19	25.9	33.0	IME-10-8N
12	1/4	36.0	14.3	22.0	22.8	7.1	22	22	25.9	26.2	IME-12-4N
12	3/8	36.0	19.1	22.0	22.8	9.5	22	22	25.9	38.2	IME-12-6N
12	1/2	36.0	19.1	22.0	22.8	9.5	22	22	25.9	33.0	IME-12-8N
12	3/4	39.8	19.1	22.0	22.8	9.5	27	22	29.7	36.8	IME-12-12N
15	1/2	38.0	19.1	22.0	24.4	11.9	24	25	27.9	35.1	IME-15-8N
16	1/2	38.0	19.1	22.0	24.4	11.9	24	25	27.9	35.1	IME-16-8N
16	3/4	39.8	19.1	22.0	24.4	27.7	27	25	29.7	36.8	IME-16-12N
18	1/2	39.8	19.1	22.0	24.4	11.9	27	30	29.7	36.8	IME-18-12N
18	3/4	39.8	19.1	22.0	24.4	15.1	27	30	29.7	36.8	IME-18-12N
20	1/2	44.6	19.1	22.0	26.0	11.9	35	32	34.5	41.7	IME-20-8N
20	3/4	44.6	19.1	22.0	26.0	15.9	35	32	34.5	41.7	IME-20-12N
22	3/4	44.6	19.1	22.0	26.0	15.9	35	32	34.5	41.7	IME-22-12N
22	1	44.6	23.9	22.0	26.0	18.3	35	32	34.5	46.5	IME-22-16N
25	3/4	49.1	19.1	26.5	31.3	59.9	35	38	36.8	41.7	IME-25-12N
25	1	41.1	23.9	26.5	31.3	21.8	35	38	36.8	46.5	IME-25-16N
30	1.1/4	69.9	23.9	39.2	39.6	26.2	45	50	48.3	53.1	IME-30-20N
32	1.1/4	72.3	23.9	41.6	42.0	27.6	45	50	49.3	53.1	IME-32-20N
38	1.1/2	84.0	26.2	47.9	49.0	33.7	55	57	56.4	60.4	IME-38-24N

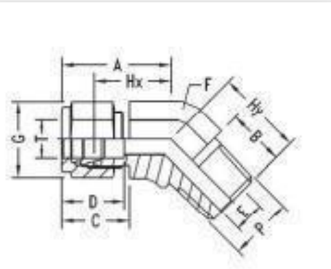
METRIC OD TUBES X MALEISO* TAPERED PIPE THREADS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	G A/F	HX	HY	IMPORLOK PART NO.
3	1/8	23.6	9.6	15.3	12.9	2.4	11	11	17.0	17.8	IME-3-2RX
3	1/4	24.6	14.3	15.3	12.9	2.4	14	11	18.0	23.4	IME-3-4RX
6	1/8	27.0	9.6	17.7	15.3	4.8	14	14	19.6	18.8	IME-6-2RX
6	1/4	27.0	14.3	17.7	15.3	4.8	14	14	19.6	23.4	IME-6-4RX
6	3/8	29.8	14.3	17.7	15.3	4.8	19	14	22.4	26.2	IME-6-6RX
6	1/2	31.8	19.1	17.7	15.3	4.8	22	14	22.4	33.0	IME-6-8RX
8	1/4	28.8	14.3	18.6	16.2	6.3	14	16	21.3	24.4	IME-8-4RX
8	3/8	30.6	14.3	18.6	16.2	6.3	19	16	23.1	26.2	IME-8-6RX
8	1/2	32.6	19.1	18.6	16.2	6.3	22	16	25.1	33.0	IME-8-8RX
10	1/4	31.5	14.3	19.5	17.2	7.1	17	19	23.9	26.2	IME-10-4RX
10	3/8	31.5	14.3	19.5	17.2	7.9	19	19	23.9	26.2	IME-10-6RX
10	1/2	33.0	19.1	19.5	17.2	7.9	22	19	25.9	33.0	IME-10-8RX
12	1/4	36.0	14.3	22.0	22.8	7.1	22	22	25.9	26.2	IME-12-4RX
12	3/8	36.0	14.3	22.0	22.8	9.5	22	22	25.9	38.2	IME-12-6RX
12	1/2	36.0	19.1	22.0	22.8	9.5	22	22	25.9	33.0	IME-12-8RX
15	1/2	38.0	19.1	22.0	24.4	11.9	24	25	27.9	35.1	IME-15-8RX
16	1/2	38.0	19.1	22.0	24.4	11.9	24	25	27.9	35.1	IME-16-8RX
16	3/4	39.0	19.1	22.0	24.4	27.7	27	25	29.7	36.8	IME-16-12RX
22	3/4	44.6	19.1	22.0	26.0	15.9	35	32	34.5	41.7	IME-22-12RX
22	1	44.6	23.9	22.0	26.0	18.3	35	32	34.5	46.5	IME-22-16RX
25	3/4	49.1	19.1	26.5	31.3	59.9	35	38	36.8	41.7	IME-25-12RX
25	1	41.1	23.9	26.5	31.3	21.8	35	38	36.8	46.5	IME-25-16RX
30	1.1/4	69.6	23.9	39.2	39.6	26.2	45	50	48.3	53.1	IME-30-20RX
32	1.1/4	72.3	23.9	41.6	42.0	27.6	45	50	49.3	53.1	IME-32-20RX
38	1.1/2	84.0	26.2	47.9	49.4	33.7	55	57	56.4	60.4	IME-38-24RX



45 DEG. MALE ELBOW
INCH OD TUBES X MALE NPT THREADS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F A/F	G A/F	HX	HY	IMPORLOK PART NO.
¼	1/8	24.6	9.6	17.8	15.3	4.8	14	14	17.3	16.5	IME/45-4-2N
1/4	1/4	24.6	14.3	17.8	15.3	4.8	14	14	17.3	21.0	IME/45-4-4N
3/8	1/8	27.9	9.6	19.3	16.8	4.8	14	17	20.6	18.3	IME/45-6-2N
3/8	1/4	27.9	14.3	19.3	16.8	7.1	17	17	20.6	22.9	IME/45-6-4N
3/8	3/8	29.2	14.3	19.3	16.8	7.1	19	17	21.8	24.1	IME/45-6-6N
1/2	3/8	32.0	14.3	21.8	22.9	9.6	22	22	21.8	24.1	IME/45-8-6N
1/2	1/2	32.0	19.1	21.8	22.9	10.4	22	22	21.8	29.0	IME/45-8-8N
3/4	3/4	34.0	19.1	21.8	24.4	15.8	27	28.5	23.9	31.8	IME/45-12-12N
1	1	40.4	23.8	26.4	31.2	22.3	35	38	26.2	37.8	IME/45-16-16N



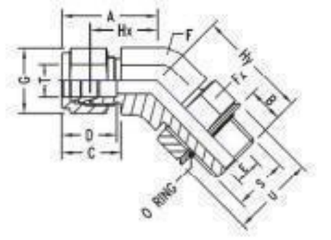
45 DEG. POSITIONABLEMALEELBOW
INCH OD TUBE / SAE/MS STRAIGHT THREADS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F	FX A/F	G A/F	HX A/F	HY	U	O RING	IMPORLOK PART NO.
1/4	7/16-20	25.7	9.9	17.8	15.3	4.8	14	14	14	18.3	25.6	16.5	4 OPU	IME/45-4-U
3/8	9/16-18	27.9	11.2	19.3	16.8	7.1	16	17	17	20.6	28.2	20	6OPU	IME/45-6-U
1/2	3/4.16	32	12.7	21.8	22.9	10.4	22	22	22	21.8	32.3	25.7	8OPU	IME/45-8-U
3/4	11/16-12	39.9	16.8	21.8	24.4	15.8	27	32	28.5	29.7	47.3	36.6	12 OPU	IME/45-12U
1	15/16-12	47.5	16.8	26.4	31.2	19.8	35	38	38	35.5	50.6	44	16 OPU	IME/45-16U

ReferenceSpecification: SAE screwthread standard conforms to american standard B1.1.Unitied screwthreads.

INCH OD TUBE X MALE ISO* PARALLELTHREADS

T Tube OD	ISO MALE	A	B	C	D	E MIN.	F	FX A/F	G A/F	HX A/F	HY	U	O RING	IMPORLOK PART NO.
1/4	1/4	25.7	9.9	17.8	15.3	4.8	14	14	14	18.3	25.6	16.5	4 OPU	IME/45-4-R
3/8	3/8	27.9	11.2	19.3	16.8	7.1	16	17	17	20.6	28.2	20.0	6 OPU	IME/45-6-R
1/2	1/2	32.0	12.7	21.8	22.9	10.4	22	22	22	21.8	32.3	25.7	8OPU	IME/45-8-R
3/4	3/4	39.9	16.8	21.8	24.4	15.8	27	32	28.5	29.7	47.3	36.6	12 OPU	IME/45-12R
1	1	47.5	16.8	26.4	31.2	19.8	35	38	3	35.3	50.6	44.0	16 OPU	IME/45-16R



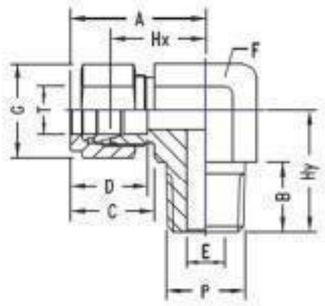
***referencespecification:BS 2779 : ISO 228/1 : JIS B0202 : DIN - ISO 228/1**

POSITIONABLE MALE ELBOW
INCH OD TUBES X MALE ISO* PARALLELTHREADS

T Tube OD	P ISO Male	A	B	C	D	E min.	F	FX A/F	G A/F	HX A/F	HY	U	O RING PART NO.	IMPORLOK PART NO.
¼	1/8	27.0	8.2	17.8	15.3	4.0	14	14	14	26.4	17.3	17.3	2 OPN	IMESW – 4 – 2R
1/4	1/4	29.0	9.2	17.8	15.3	4.8	16	19	14	32.3	22.9	22.9	4OPN	IMESW – 4 – 4R
3/8	1/4	30.5	9.2	19.3	16.8	5.8	16	19	17	32.3	22.9	22.9	4OPN	IMESW – 6 – 4R
3/8	3/8	33.0	9.2	19.3	16.8	7.1	22	22	17	37.0	26.4	26.4	6OPN	IMESW – 6 – 6R
1/2	1/4	36.0	9.2	21.8	22.9	5.8	22	19	22	35.0	22.9	22.9	4 OPN	IMESW – 8 – 4R
1/2	3/8	36.0	9.4	21.8	22.9	7.8	22	22	22	37.0	26.4	26.4	6 OPN	IMESW – 8 – 6R
1/2	1/2	38.1	13.0	21.8	24.4	10.4	24	27	22	43.4	32.0	32.0	8 OPN	IMESW – 8 – 8R
5/8	1/	38.1	13.0	21.8	24.4	10.4	24	27	25	43.4	32.0	32.0	8 OPN	IMESW – 10 – 8R
3/4	1/2	39.9	13.0	21.8	24.4	10.4	27	27	28.5	45.2	32.0	32.0	8 OPN	IMESW – 12 – 8R
3/4	3/4	39.9	13.0	21.8	24.4	15.8	27	35	28.5	48.8	41.2	41.2	12 OPN	IMESW – 12 – 12R
1	3/4	49.0	13.0	26.4	31.2	15.8	35	35	38	53.3	41.2	41.2	12 OPN	IMESW – 16 – 12R
1	1	49.0	14.0	26.4	31.2	19.8	35	41	38	53.6	48.5	48.5	16 OPN	IMESW – 16 – 16R

METRIC OD TUBES X MALE ISO* PARALLELTHREADS

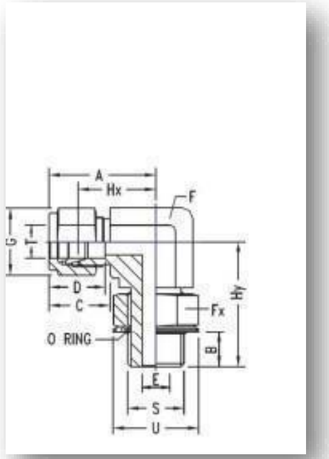
T Tube OD	P ISO Male	A	B	C	D	E min.	F	FX A/F	G A/F	HX A/F	HY	U	O RING PART NO.	IMPORLOK PART NO.
6	1/8	27.0	8.1	17.7	15.3	4.0	14	14	14	19.6	26.4	17.3	2 OPN	IMESW – 6 -2R
6	1/4	29.0	9.1	17.7	15.3	4.8	16	19	14	21.6	32.3	22.9	4OPN	IMESW – 6 -4R
8	1/8	28.8	8.1	18.6	16.2	4.0	14	14	16	21.3	27.4	17.3	2OPN	IMESW – 8 -2R
8	1/4	29.9	9.1	18.6	16.2	5.9	16	19	16	22.4	32.2	22.9	4OPN	IMESW – 8 -4R
10	1/4	33.5	9.1	19.5	17.2	5.9	19	19	19	25.9	35.0	22.9	4 OPN	IMESW – 10 -4R
10	3/8	33.5	9.4	19.5	17.2	7.9	19	22	19	25.9	37.1	26.4	6 OPN	IMESW – 10 -6R
12	3/8	36.0	9.4	22.0	22.8	7.9	22	22	22	25.9	37.1	26.4	6 OPN	IMESW – 12 -6R
12	1/2	38.0	13.0	22.0	22.8	9.5	24	27	22	27.9	43.4	32.0	8 OPN	IMESW – 12 -8R
12	3/4	39.8	13.0	22.0	22.8	9.5	27	35	22	29.7	48.8	41.1	12 OPN	IMESW – 12 -12R
16	1/2	38.1	13.0	22.0	24.4	11.9	27	27	28.5	29.7	45.2	32.0	8 OPN	IMESW – 16 -8R
22	3/4	44.6	13.0	22.0	26.0	15.8	27	35	28.5	34.5	48.8	41.2	12 OPN	IMESW – 22 -12R
25	3/4	49.0	13.0	26.5	31.3	15.8	35	35	38	36.8	53.3	41.2	12 OPN	IMESW – 25 -12R
25	1	49.0	14.0	26.5	31.3	21.8	35	41	38	36.8	53.6	48.5	16OPN	IMESW – 25 -16R

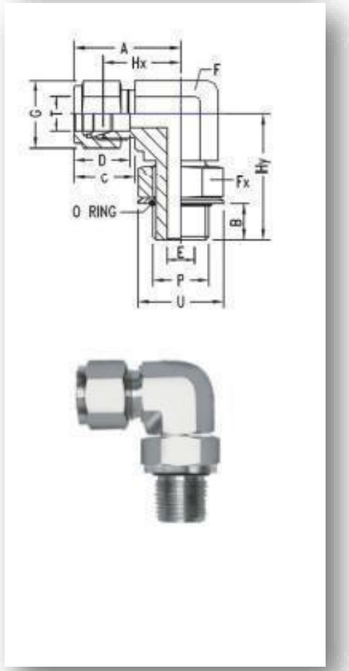


*referencespecification:BS 2779 : ISO 228/1 : JIS B0202 : DIN - ISO 228/1

INCH OD TUBE X SAE/MS STRAIGHT THREADS

T Tube OD	P ISO Male	A	B	C	D	E min.	F	FX A/F	G A/F	HX A/F	HY	U	O RING PART NO.	IMPORLOK PART NO.
1/4	7/16-20	28.5	9.9	17.8	15.3	4.8	14	14	14	21.0	28.5	16.5	4 OPN	IMESE – 4 – U
1/4	9/16-18	30.5	11.2	17.8	15.3	4.8	16	17	14	23.1	32.3	20.0	6OPN	IMESE – 4 – U
3/8	9/16-18	32.0	11.2	19.3	16.8	7.1	16	17	17	24.6	32.3	20.0	6OPN	IMESE – 6 – U
3/8	3/4.16	34.8	12.7	19.3	16.8	7.1	22	22	17	27.4	37.8	25.6	8OPN	IMESE – 6 – U
1/2	3/4.16	37.6	12.7	21.8	22.9	10.4	22	22	22	27.4	37.8	25.6	8OPN	IMESE – 8 – U
5/8	7/16-14	39.6	14.3	21.8	24.4	12.7	24	25	25	29.5	43.4	29.5	10 OPN	IMESE – 10 – U
3/4	11/16-12	41.4	16.8	21.8	24.4	15.8	27	32	28.5	31.2	48.8	36.6	12 OPN	IMESE – 12– U
7/8	11/16-12	43.2	16.8	21.8	25.9	18.3	30	32	32	33.0	50.5	40.4	14 OPN	IMESE – 14 – U
1	15/16-12	50.5	16.8	26.4	31.2	22.3	35	35	38	38.4	53.6	44.0	16 OPN	IMESE – 16 – U
1.1/4	15/8.12	67.8	16.8	38.9	41.2	27.6	46	50	50	45.7	58.2	54.9	20 OPN	IMESE – 20 – U
1.1/2	17/8.12	79.0	16.8	45.2	50.0	34.0	50	55	60	50.8	60.4	62.5	24 OPN	IMESE – 24 – U





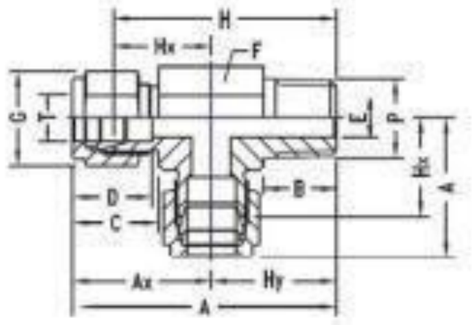
Reference Specification: SAE screw thread standard conforms to american standard B1.1.Unitied screw threads.

MALE RUN TEE INCH OD TUBES X MALE NPT THREADS

T Tube OD	ISO MALE	A	AX	B	C	D	E MIN.	F	G A/F	H A/F	HX	HY	IMPORLOK PART NO.
1/8	1/8	41.4	23.6	9.6	15.3	12.7	2.4	11	11	34.8	17.0	17.8	IMRTV– 2 – 2N
1/8	¼	48.0	24.6	14.3	15.3	12.7	2.4	14	11	41.4	18.0	23.4	IMRTV– 2 – 4N
1/4	1/8	45.7	26.9	9.6	17.8	15.3	4.8	14	14	38.4	19.6	18.8	IMRTV –4–2N
1/4	¼	50.3	26.9	14.3	17.8	15.3	4.8	14	14	43	19.6	23.4	IMRTV –4–4N
1/4	3/8	55.9	29.7	14.3	17.8	15.3	4.8	19	14	48.8	22.4	26.2	IMRTV –4–6N
1/4	½	64.8	31.8	19.1	17.8	15.3	4.8	22	14	57.4	24.4	33.0	IMRTV –4–8N
3/8	*JI4*	55.9	30.5	14.3	19.3	16.8	7.1	17	17	48.5	23.1	25.4	IMRTV –6–4N
3/8	3/8	57.4	31.2	14.3	19.3	16.8	7.1	19	17	50.1	23.9	26.2	IMRTV –6–6N
3/8	½	66.0	33.0	19.1	19.3	16.8	7.1	22	17	58.9	25.9	33.0	IMRTV –6–8N
1/2	¼	64.2	36.0	14.3	21.8	22.9	4.8	22	22	S4.1	25.9	28.2	IMRTV –8–4N
1/2	3/8	64.2	36.0	14.3	21.8	22.9	9.6	22	22	54.1	25.9	28.2	IMRTV –8–6N
1/2	1/2	69.0	36.0	19.1	21.8	22.9	10.4	22	22	58.9	25.9	33.0	IMRTV –8–8N
5/8	1/2	73.1	38.1	19.1	21.8	24.4	11.9	22	25	62.9	27.9	35.0	IMRTV –10–8N
3/4	1/2	76.7	39.9	19.1	21.8	24.4	11.9	27	29	66.5	29.7	36.8	IMRTV –12–8N
3/4	3/4	76.7	39.9	19.1	21.8	24.4	15.8	27	29	66.5	29.7	36.8	IMRTV–12–12N
1	3/4	90.6	49.0	19.1	26.4	31.2	15.8	35	38	78.4	36.8	41.6	IMRTV–16–12N
1	1	95.5	49.0	23.8	26.4	31.2	22.3	35	38	83.3	36.8	46.5	IMRTV–16–16N
1.1/4	1.1/4	114.1	66.5	23.8	38.8	41.1	27.6	46	50	92.1	44.5	47.6	IMRTV–20–20N
1.1/2	1.1/2	138.4	78.0	26.	45.2	50.0	34.0	55	57	111.2	50.8	60.4	IMRTV–24–24N

METRIC OD TUBE X MALE NPT THREADS

T Tube OD	ISO MALE	A	AX	B	C	D	E MIN.	F	G A/F	H A/F	HX	HY	IMPORLOK PART NO.
3	1/8	41.4	23.6	9.6	15.3	12.9	2.4	11	11	34.8	17.0	17.8	IMRTV –3–2N
3	1/4	48.0	24.6	14.3	15.3	12.9	2.4	14	11	41.4	18.0	23.4	IMRTV –3–4N
6	1/8	45.8	27	9.6	17.7	15.3	4.8	14	14	38.9	19.6	18.8	IMRTV –6–2N
6	1/4	50.4	27	14.3	17.7	15.3	4.8	14	14	43.0	19.6	23.4	IMRTV –6–4N
6	3/8	56.0	29.8	14.3	17.7	15.3	4.8	19	14	48.6	22.4	26.2	IMRTV –6–6N
8	1/4	53.2	28.8	14.3	18.6	16.2	6.3	14	16	45.7	21.3	24.4	IMRTV –8–4N
8	3/8	56.8	30.6	14.3	18.6	16.2	6.3	19	16	48.3	23.1	26.2	IMRTV –8–6N
8	1/2	65.6	32.6	19.1	18.6	16.2	6.3	22	16	58.1	25.1	33.0	IMRTV –8–8N
10	1/4	57.7	31.5	14.3	19.5	17.2	7.1	17	19	50.1	23.9	26.2	IMRTV –10–4N
10	3/8	57.7	31.5	14.3	19.5	17.2	7.9	19	19	50.1	23.9	26.2	IMRTV –10–6N
10	1/2	66.5	33.5	19.1	19.5	17.2 9	7.9	22	19	58.9	25.0	33.0	IMRTV –10–8N
12	1/4	62.2	36	14.3	22	22.8	7.1	22	22	52.1	25.9	26.2	IMRTV –12–4N
12	3/8	62.2	36	14.3	22	22.8	9.5	22	22	52.1	25.9	28.2	IMRTV –12–6N
12	1/2	69.0	36	19.1	22	22.8	9.5	22	22	58.9	25.9	33.0	IMRTV –12–8N
16	1/2	73.1	38	19.1	22	24	11.9	24	25	64.0	27.9	35.1	IMRTV –16–8N
25	3/4	90.8	49.1	19.1	26.5	31.3	15.8	35	38	78.5	36.8	41.7	IMRTV–25–12N
25	1	95.6	49.1	23.8	26.5	31.3	21.8	35	38	83.3	36.8	46.5	IMRTV–25–16N
30	1.1/4	120.0	66.9	23.8	39.2	39.6	26.2	45	50	101.4	48.3	53.1	IMRTV–30–20N
32	1.1/4	125.4	72.3	23.8	41.6	42	27.6	45	50	102.4	49.3	53.1	IMRTV–32–20N
38	1.1/2	144.4	84.0	26.2	47.9	50.0	33.7	55	S7	116.8	56.4	60.4	IMRTV–38–24N



NOTE: The combination of tube OD and malethreads are indicative of popular sizes. Other combinations, not shown, are available. Please Consult us.

MALE BRANCH TEE
INCH OD TUBE X MALE NPT THREADS

T Tube OD	ISO MALE	A	AX	B	C	D	E MIN.	F	G A/F	H A/F	HX	HY	IMPORLOK PART NO.
1/8	1/8	47.2	23.6	9.6	15.3	12.7	2.4	11	11	34	17,0	17.8	IMBT-2-2N
1/8	1/4	49.2	24.6	14.3	15.3	12.7	2.4	14	11	36.0	18	23.4	IMBT-2-4N
1/4	1/8	53.8	26.9	9.6	17.8	5.3	4.8	14	14	39.2	19.6	18.8	IMBT-4-2N
1/4	1/4	53.8	26.9	14.3 17.8	17.8	15.3	4.8	14	14	39.2	19.6	23.4	IMBT-4-4N
1/4	3/8	59.4	29.7	14.3	17.8	15.3	4.8	19	14	44.8	22.4	26.2	IMBT-4-6N
1/4	1/2	63.6	31.8	19.1	17.8	15.3	4.8	22	14	44.8	24.4	33.0	IMBT-4-8N
3/8	1/4	61	30.5	14.3	19.3	16.8	7,1	17	17	46.2	23.1	25.4	IMBT-6-4N
3/8	3/8	62.4	31.2	14.3	19.3	16.8	7.1	19	17	47.8	23.9	26.2	IMBT-6-6N
3/8	1/2	66	33	19.1	19.3	16.8	7.1	22	17	51.8	25.9	33.0	IMBT-6-8N
1/2	1/4	72	36	14.3	21.8	22.9	4.8	22	22	51.8	25.9	28.2	IMBT-8-4N
1/2	3/8	72	36	14.3	21.8	22.9	9.6	22	22	51.8	25.9	28.2	IMBT-8-6N
1/2	1/2	72.0	36.0	19.1	21.8	22.9	10.4	22	22	51.8	25.9	33.0	IMBT-8-8N
5/8	1/2	76.2	38.1	19.1	21.8	24.4	11.9	22	25	55.8	27.9	35.0	IMBT-10-8N
3/4	1/2	79.8	39.9	19.1	21.8	24.4	11.9	27	29	59.4	29.7	36.8	IMBT-12-8N
3/4	3/4	79.8	39.9	19.1	21.8	24.4	15.8	27	29	59.4	29.7	36.8	IMBT-12-12N
1	3/4	98	49	19.1	26.4	31	15.8	35	38	73.6	36.8	41.6	IMBT-16-12N
1	1	98	49	23.8	26.4	31	22.3	35	38	73.6	36.8	46.5	IMBT-16-16N
1.1/4	1.1/4	133	66.5	23.8	38.8	41.1	27.6	46	50	89	44.5	47.6	IMBT-20-20N
1.1/2	1.1/2	156.0	78.0	26.2	45.2	50.0	34.0	55	57	101.6	50.8	60.4	IMBT-24-24N

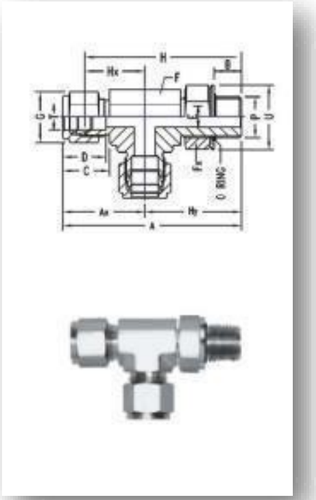
METRIC OD TUBES X MALE NPT THREADS

T Tube OD	ISO MALE	A	AX	B	C	D	E MIN.	F	G A/F	H A/F	HX	HY	IMPORLOK PART NO.
3	1/8	47.2	23.6	9.6	15.3	12.9	2.4	11	11	34.0	17.0	17.8	IMBT-3-2N
3	1/4	49.2	24.6	14.3	15.3	12.9	2.'4	14	11	36.0	18.0	23.4	IMBT-3-4N
6	1/8	54.0	27.0	9.6	17.7	15.3	4.8	14	14	39.2	19.6	18.8	IMBT-6-2N
6	1/4	54.0	27.0	14.3	17.7	15.3	4.8	14	14	39.2	19.6	23.4	IMBT-6-4N
6	3/8	59.6	29.8	14.3	17.7	15.3	4.8	19	14	44.8	22.4	26.2	IMBT-6-6N
8	1/4	57.§	20.8	14.3	18.6	16.2	6.3	14	16	42.6	21.3	24.4	IMBT-8-4N
8	3/8	61.2	80.6	14.3	18.6	16.2	6.3	19	16	46.2	23.1	26.2	IMBT-8-6N
8	1/2	65.2	82.6	19.1	18.6	16.2	6.3	22	16	50.2	25.1	33.0	IMBT-8-8N
10	3/8	63.0	21.5	14.3	19.5	17.2	7.1	17	19	47.8	23.9	26.2	IMBT-10-4N
10	1/2	68.0	31.5	14.3	19.5	17.2	7.9	19	19	47.8	23.9	26.2	IMBT-10-6N
10	1/2	67.0	33.5	19.1	19.5	17.2	7.9	22	19	51.8	25,9	33.0	IMBT-10-8N
12	1/4	72.0	36	14.3	22.0	22.8	7.1	22	22	51.8	25.9	26.2	IMBT-12-4N
12	3/8	72.0	36	14.3	22.0	22.8	9.5	22	22	51.8	25.9	28.2	IMBT-12-6N
12	1/2	72.0	36	19.1	22.0	22.8	9.5	22	22	51.8	25.9	33.0	IMBT-12-8N
16	1/2	76.0	38	19.1	22.0	24.0	11.9	24	25	5s.8	2.9	35.1	IMBT-16-8N
25	3/4	98.2	49.1	19.1	26.5	31.3	15.8	35	38	73.6	36.8	41.7	IMBT-25-12N
25	1	98.2	49.1	23.8	26.5	31.3	21.8	35	38	73.6	36.8	46.5	IMBT-25-16N
30	1.1/4	138.8	66.9	23.8	39.2	39.6	26.2	40	50	46.6	48.3	53.1	IMBT-30-20N
32	1.1/4	144.6	72.3	23.6	41.6	42.0	27.6	45	50	96.6	49.3	53.1	IMBT-32-20N
38	1.1/2	168.0	84.0	26.2	47.9	50.0	33.7	50	57	112.8	56.4	60.4	IMBT-38-24N

NOTE: The combination of tube OD and male threads are indicative of popular sizes. Other combinations, not shown, are available. Please Consult vs.

POSITIONABLE MALERUN TEE
INCH OD TUBES X MALE ISO* THREADS

T Tube OD	ISO Male	A	AX	B	C	D	E min.	F A/F	FX A/F	G A/F	H A/F	HX	HY	U	O RING PART NO	IMPORLOK Part No.
1/4	1/8	53.4	27.0	8.2	17.8	15.3	4.0	14	14	14	46.0	19.6	46.0	26.4	2 OPN	IMRTSW-4-2R.
1/4	1/4	61.3	29.0	9.2	17.8	15.3	4.8	16	19	14	53.9	21.6	53.9	32.3	4OPN	IMRTSW-4-4R
3/8	1/4	62.8	30.5	9.2	19.3	16.8	5.8	16	19	17	55.5	23.2	55.5	32.3	4OPN	IMRTSW-6-4R
1/2	3/8	73.0	36.0	9.4	21.8	22.9	7.8	22	22	22	62.9	25.9	62.9	37.0	6OPN	IMRTSW-8-6R
1/2	1/2	81.5	38.1	13.0	21.8	24.4	10.4	24	27	22	71.3	27.9	71.3	43.4	8OPN	IMRTSW-8-8R
5/8	1/2	81.5	38.1	13.0	21.8	24.4	10.4	24	27	25	71.3	27.9	71.3	43.4	8OPN	IMRTSW-10-8R
3/4	1/2	85.1	39.9	13.0	21.8	24.4	10.4	27	27	28.5	74.9	29.7	74.9	45.2	8OPN	IMRTSW-12-8R
3/4	3/4	88.7	39.9	13.0	21.8	24.4	15.8	27	35	28.5	78.5	29.7	78.5	48.8	12OPN	IMRTSW-12-12R
1	1	102.6	49.0	14.0	26.4	31.2	19.8	35	41	38	90.4	36.8	90.4	53.6	16OPN	IMRTSW-16-16R

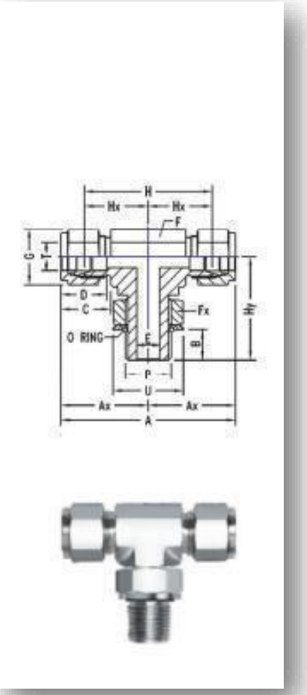


METRIC OD TUBES X MALE ISO* PARALLELTHREADS

T Tube OD	ISO Male	A	AX	B	C	D	E min.	F A/F	FX A/F	G A/F	H A/F	HX	HY	U	O RING PART NO.	IMPORLOK Part No.
6	1/8	53.4	27.0	8.1	17.7	15.3	4.0	14	14	14	46.0	19.6	26.4	17.3	2OPN	IMRTSW-6-2R
6	1/4	61.3	29.0	9.1	17.7	15.3	4.8	16	19	14	53.9	21.6	32.3	22.9	4OPN	IMRTSW-6-4R
8	1/8	56.2	28.8	8.1	18.6	16.2	4.0	14	14	16	48.7	21.3	27.4	17.3	2OPN	IMRTSW-8-2R
8	1/4	62.1	29.9	9.1	18.6	16.2	5.9	16	19	16	54.6	22.4	32.2	22.9	4OPN	IMRTSW-8-4R
10	1/4	68.5	33.5	9.1	19.5	17.2	5.9	19	19	19	61.9	25.9	35.0	22.9	4OPN	IMRTSW-10-4R
12	3/8	73.1	36.0	9.4	22.0	22.8	7.9	22	22	22	63.0	25.9	37.1	26.4	6OPN	IMRTSW-12-6R
12	1/2	81.4	38.0	13.0	22.0	23.0	9.5	24	27	22	71.3	27.9	43.4	32.0	8OPN	IMRTSW-12-8R
16	3/4	83.3	38.1	13.0	22.0	24.4	11.9	27	27	28.5	74.9	29.7	45.2	32.0	8OPN	IMRTSW-16-8R
22	3/4	93.4	44.6	13.0	22.0	26.0	15.8	27	35	28.fi	83.3	34.5	48.8	41.2	12OPN	IMRTSW-22-12R
25	3/4	102.3	49.0	13.0	26.5	31.3	15.8	35	35	38	90.1	36.8	53.3	41.2	12OPN	IMRTSW-25-12R
25	1	102.6	49.0	14.0	26.5	31.3	21.8	35	41	38	90.4	36.8	53.6	48.5	16 Opn	IMRTSW-25-16R

Reference Specification :BS 2779/1 : JIS BO202: DIN - ISO 228/1
POSITIONABLE BRANCHTEE

T Tube	ISO	A	AX	B	C	D	E	F	FX	G	H	HX	HY	U	O RING	IMPORLOK
OD	Male						min.	A/F	A/F	A/F	A/F				PART NO	Part No.
1/4	1/8	53.4	27.0	8.2	17.8	15.3	4.0	14	14	14	46.0	19.6	26.4	17.3	2OPN	IMRTSW-4-2R
1/4	1/4	61.3	29.0	9.2	17.8	16.3	4.8	16	19	14	53.9	21.6	32.3	22.9	4OPN	IMRTSW-4-4R
3/8	1/4	62.8	30.5	9.2	19.3	16.8	5.8	16	19	17	55.5	23.2	32.3	22.9	4OPN	IMRTSW-6-4R
1/2	3/8	73.0	36.0	9.4	21.8	22.9	7.8	22	22	22	62.9	25.9	37.0	26.4	6OPN	IMRTSW-8-6R
1/2	1/2	81.5	38.1	13.0	21.8	24.4	10.4	24	27	22	71.3	27.9	43.4	32.0	8OPN	IMRTSW-8-8R
5/8	1/2	81.5	38.1	13.0	21.8	24.4	10.4	24	27	25	71.3	27.9	43.4	32.0	8OPN	IMRTSW-10-8R
3/4	1/2	85.1	39.9	13.0	21.8	24.4	10.4	27	27	28.5	74.9	29.7	45.2	32.0	8OPN	IMRTSW-12-8R
3/4	3/4	88.7	39.9	13.0	21.8	24.4	15.8	27	35	28.5	78.5	29.7	48.8	41.2	12OPN	IMRTSW-12-12R
1	1	102.6	49.0	14.0	26.4	31.2	19.8	35	41	38	90.4	36.	53.6	48.5	16OPN	IMRTSW-16-16R



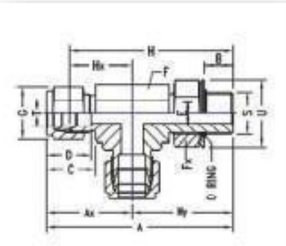
METRIC OD TUBES X MALE ISO* PARALLELTHREADS

T Tube	ISO	A	AX	B	C	D	E	F	FX	G	H	HX	HY	U	O RING	IMPORLOK
OD	Male						min.		A/F	A/F	A/F				PART NO.	Part No.
6	1/8	53.4	27.0	8.1	17.7	15.3	4.0	14	14	14	46.0	19.6	26.4	17.3	2OPN	IMRTSW-6-2R
6	1/4	61.3	29.0	9.1	17.7	15.3	4.8	16	19	14	53.9	21.6	32.3	22.9	4OPN	IMRTSW-6-4R
8	1/8	56.2	28.8	8.1	18.6	16.2	4.0	14	14	16	48.7	21.3	27.4	17.3	2OPN	IMRTSW-8-2R
8	1/4	62.1	29.9	9.1	18.6	16.2	5.9	16	19	16	54.6	22.4	32.2	22.9	4OPN	IMRTSW-8-4R
10	1/4	68.5	33.5	9.1	19.5	17.2	5.9	19	19	19	61.9	25.9	35.0	22.9	4OPN	IMRTSW-10-4R
12	3/8	73.1	36.0	9.4	22.0	22.8	7.9	22	22	22	63.0	25.9	37.1	26.4	6OPN	IMRTSW-12-6R
12	1/2	81.4	38.0	13.0	22.0	23.0	9.5	24	27	22	71.3	27.9	43.4	32.0	8OPN	IMRTSW-12-8R
16	1/2	83.3	38.1	13.0	22.0	24.4	11.9	27	27	28.5	47.9	29.7	45.2	32.0	8OPN	IMRTSW-16-8R
22	3/4	93.4	44.6	13.0	22.0	26.0	15.8	27	35	28.5	83.3	34.5	48.8	41.2	12OPN	IMRTSW-22-12R
25	3/4	102.3	49.0	13.0	26.5	31.3	15.8	35	35	38	90.1	36.8	53.3	41.2	12OPN	IMRTSW-25-12R
25	1	102.6	49.0	14.0	26.5	31.3	21.8	35	41	38	90.4	36.8	53.6	48.5	16OPN	IMRTSW-25-16R

ReferenceSpecification :BS 2779/1: JIS BO202: DIN - ISO 228/1

POSITIONABLE MALE RUN TEE
INCH OD TUBE X SAE/MS* STRAIGHT THREADS

T Tube	SAE/MS	A	AX	B	C	D	E	F	FX	G	H	HX	HY	U	O RING	IMPORLOK
OD	Male						min.	A/F	A/F	A/F					PART NO.	Part No.
1/4	7/16-20	57.0	28.5	9.9	17.8	15.3	4.8	14	14	14	49.5	21	28.5	16.5	40PU	IMRTSW-4-U
3/8	9/16-18	64.3	32	11.2	19.3	16.8	7.1	16	17	17	56.9	24.6	32.3	20	60PU	IMRTSW-6-U
1/2	3/4-16	75.4	37.6	12.7	21.8	22.9	10.4	22	22	22	65.2	27.4	37.8	25.6	80PU	IMRTSW-8-U
3/4	11/16-12	90.2	41.4	16.8	21.8	24.4	15.8	27	32	28.5	80.0	31.2	48.8	36.6	120PU	IMRTSW-12-U
1	15/16-12	104.1	50.5	16.8	26.4	31.2	22.3	35	35	38	92.0	38.4	53.6	44.0	160PU	IMRTSW-16-U
1.1/4	15/8.12	126	67.8	16.8	38.9	41.2	27.6	46	50	50	103.9	45.7	58.2	54.9	200PU	IMRTSW-20-U
1.1/2	17/8.12	138.4	78.0	16.8	45.2	50.0	34.0	50	55	60	111.2	50.8	60.4	62.5	240PU	IMRTSW-24-U



METRIC OD TUBES X SAE/MS* STRAIGHT THREADS

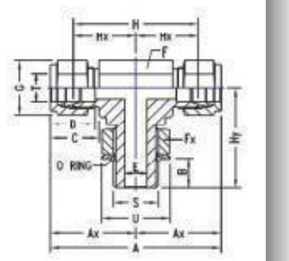
T Tube	SAE/MS	A	AX	B	C	D	E	F	FX	G	H	HX	HY	U	O RING	IMPORLOK
OD	Male						min.	A/F	A/F	A/F					PART NO.	Part No.
6	7/16-20	57.0	28.5	9.9	17.8	15.3	4.8	14	14	14	49.5	21	28.5	16.5	40PU	IMRTSW-6-U
10	9/16-18	64.3	32	11.2	19.3	16.8	7.1	16	17	17	56.9	24.6	32.3	20	60PU	IMRTSW-10-U
12	3/4-16	75.4	37.6	12.7	21.8	22.9	10.4	22	22	22	65.2	27.4	37.8	25.6	80PU	IMRTSW-12-U
20	11/16-12	90.2	41.4	16.8	21.8	24.4	15.8	27	32	28.5	80.0	31.2	48.8	36.6	120PU	IMRTSW-20-U
25	15/16-12	104.1	50.5	16.8	26.4	31.2	22.3	35	35	38	92.0	38.4	53.6	44.0	160PU	IMRTSW-25-U
2	15/8.12	126	67.8	16.8	38.9	41.2	27.6	46	50	50	103.9	45.7	58.2	54.9	200PU	IMRTSW-32-U
38	17/8.12	138.4	78.0	16.8	45.2	50.0	34.0	50	55	60	111.2	50.8	60.4	62.5	240PU	IMRTSW-38-U

POSITIONABLE MALE RUN TEE
INCH OD TUBE X SAE/MS* STRAIGHT THREADS

T Tube	SAE/MS	A	AX	B	C	D	E	F	FX	G	H	HX	HY	U	O RING	IMPORLOK
OD	Male						min.	A/F	A/F	A/F					PART NO.	Part No.
1/4	7/16-20	57.0	28.5	9.9	17.8	15.3	4.8	14	14	14	49.5	21	28.5	16.5	40PU	IMRTSW-4-U
3/8	9/16-18	64.3	32.0	11.2	19.3	16.8	7.1	16	17	17	56.9	24.6	32.3	20	60PU	IMRTSW-6-U
1/2	3/4-16	75.4	37.6	12.7	21.8	22.9	10.4	22	22	22	65.2	27.4	37.8	25.6	80PU	IMRTSW-8-U
3/4	11/16-12	82.8	41.4	16.8	21.8	24.4	15.8	27	32	28.5	80.0	31.2	48.8	36.6	120PU	IMRTSW-12-U
1	15/16-12	101.0	50.5	16.8	26.4	31.2	22.3	35	35	38	92.0	38.4	53.6	44.0	160PU	IMRTSW-16-U
1.1/4	15/8.12	135.6	68	16.8	38.9	41.2	27.6	46	50	50	103.9	45.7	58.2	54.9	200PU	IMRTSW-20-U
1.1/2	17/8.12	156.0	78.0	16.8	45.2	50.0	34.0	50	55	60	111.2	50.8	60.4	62.5	240PU	IMRTSW-24-U

METRIC OD TUBES X SAE/MS* STRAIGHT THREADS

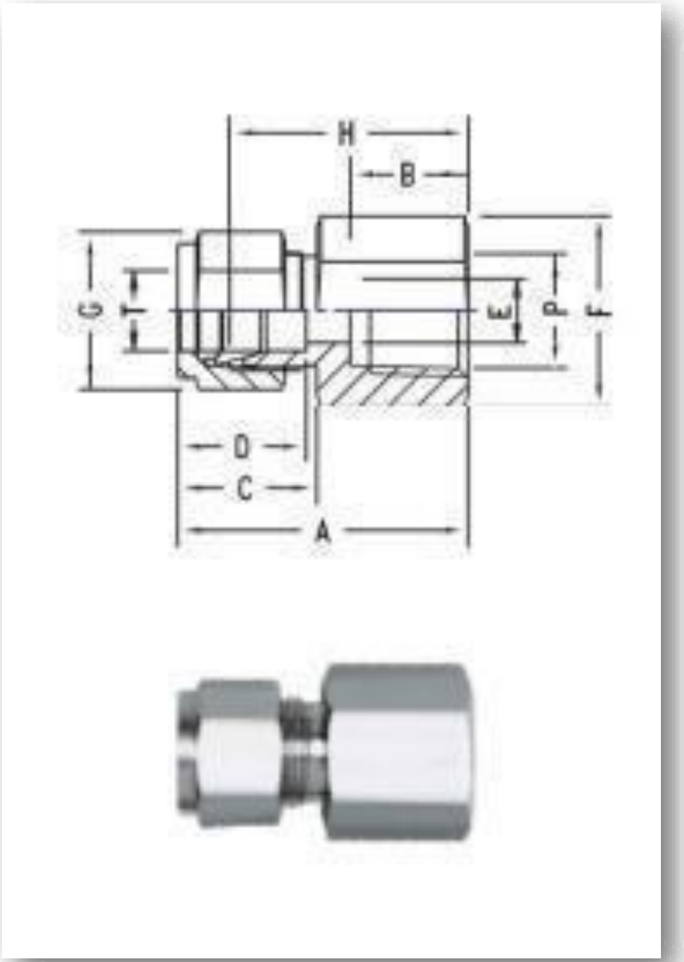
T Tube	SAE/MS	A	AX	B	C	D	E	F	FX	G	H	HX	HY	U	O RING	IMPORLOK
OD	Male						min.	A/F	A/F	A/F					PART NO.	Part No.
6	7/16-20	57.0	28.5	9.9	17.7	15.3	4.8	14	14	14	42.0	21.0	28.5	16.5	40PU	IMRTSW-6-U
10	9/16-18	64.3	32.0	11.2	19.5	17.2	7.1	16	17	17	49.2	24.6	32.3	20.0	60PU	IMRTSW-10-U
12	3/4-16	75.4	37.6	12.7	22.0	22.8	10.4	22	22	22	54.8	27.4	37.8	25.6	80PU	IMRTSW-12-U
20	11/16-12	82.8	41.4	16.8	22.0	26.0	15.8	27	32	28.5	62.4	31.2	48.8	36.6	120PU	IMRTSW-20-U
25	15/16-12	101.0	50.5	16.8	26.5	31.3	22.3	35	35	38	76.8	38.4	53.6	44.0	160PU	IMRTSW-25-U
2	15/8.12	135.6	67.8	16.8	41.6	42.0	27.6	46	50	50	91.4	46.0	58.2	55.0	200PU	IMRTSW-32-U
38	17/8.12	156.0	78.0	16.8	47.6	49.4	34.0	50	55	60	101.6	51.0	60.0	63.0	240PU	IMRTSW-38-U



Reference Specification: SAE screw thread standardconforms to american standard B1.1. UNIFIED SCREW THREADS.

FEMALE CONNECTOR
INCH OD TUBEX FEMALE NPT THREADS

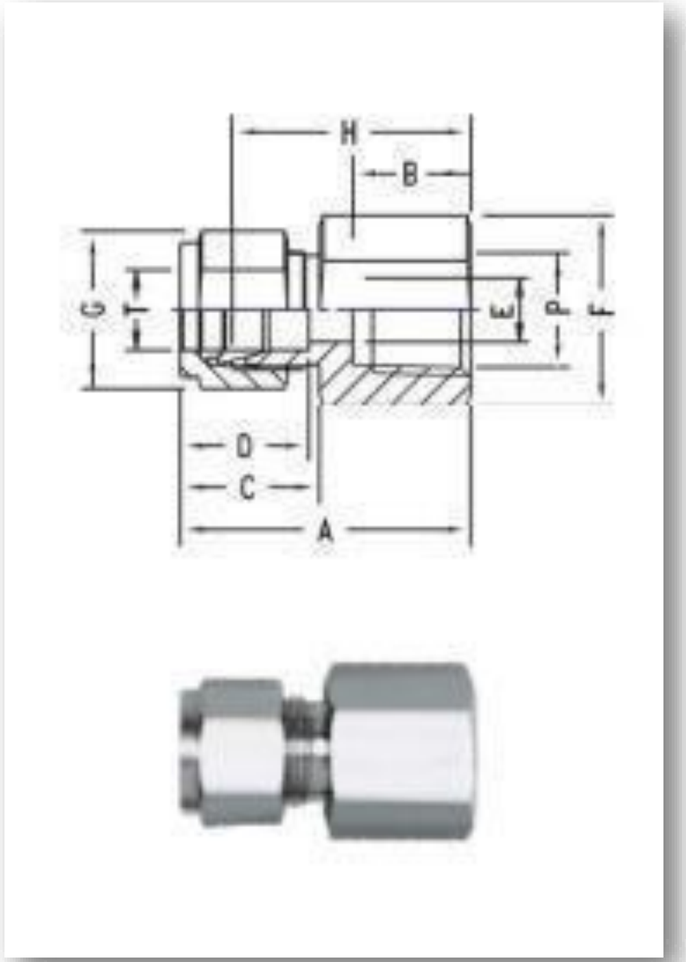
Tube OD	NPT FEMALE	A	B	C	D	E min.	F A/F	G A/F	H	IMPORLOK Part No.
1/16	1/16	23.6	9.9	11.0	8.6	1.3	11	8	19.8	IFC-1-1N
1/16	18	24.4	10.4	11.0	8.6	1.3	14	8	20.6	IFC-1-2N
1/8	1/8	28.7	10.4	15.3	12.7	2.4	14	11	22.1	IFC-2-2N
1/8	1/4	33.6	15.0	15.3	12.7	2.4	19	11	26.9	IFC-2-4N
1/4	1/8	31.2	9.9	17.8	15.3	4.8	14	14	23.9	IFC-4-2N
1/4	1/4	35.8	15.0	17.8	15.3	4.8	19	14	28.5	IFC-4-4N
1/4	3/8	37.6	15.0	17.8	15.3	4.8	22	14	30.2	IFC-4-6N
1/4	1/2	42.4	19.8	17.8	15.3	4.8	27	14	35.0	IFC-4-8N
5/16	1/8	32.0	10.4	18.5	16.3	6.3	14	16	24.6	IFC-5-2N
5/16	1/4	36.8	15.0	18.5	16.3	6.3	19	16	29.5	IFC-5-4N
3/8	1/8	32.8	10.4	19.3	16.8	7.1	16	17	24.4	IFC-6-2N
3/8	1/4	37.6	15.0	19.3	16.8	7.1	19	17	30.2	IFC-6-4N
3/8	3/8	39.1	15.0	19.3	16.8	7.1	22	17	31.8	IFC-6-6N
3/8	1/2	43.9	19.8	19.3	16.8	7.1	27	17	36.6	IFC-6-8N
1/2	1/4	40.4	15.0	19.3	22.9	10.4	22	22	40.4	IFC-8-4N
1/2	3/8	41.9	15.0	21.8	22.9	10.4	22	22	30.2	IFC-8-6N
1/2	1/2	46.7	19.8	21.8	22.9	10.4	22	22	31.8	IFC-8-8N
1/2	3/4	48.3	20.6	21.8	22.9	10.4	32	22	38.1	IFC-8-12N
5/8	3/8	41.9	15.0	21.8	24.4	12.7	24	25	31.8	IFC-10-6N
5/8	1/2	46.7	19.8	21.8	24.4	12.7	27	25	36.6	IFC-10-8N
3/4	1/2	46.7	19.8	21.8	24.4	15.8	27	28.5	36.6	IFC-12-8N
3/4	3/4	48.3	20.6	21.8	24.4	15.8	35	28.5	38.1	IFC-12-12N
7/8	3/4	49.8	20.6	21.8	25.9	18.3	35	32	39.6	IFC-14-12N
1	3/4	53.4	20.6	26.4	31.2	22.3	35	38	41.2	IFC-16-12N
1	1	62.3	25.4	26.4	31.2	22.3	41	38	50.0	IFC-16-16N
1.1/4	1.1/4	74.6	25.4	38.9	41.2	27.6	55	50	52.6	IFC-20-20N
1.1/2	1.1/2	B3.3	27.6	45.2	50.0	34.0	60	60	56.2	IFC-24-24N



INCH OD TUBEX FEMALE IS* TAPERED PIPE THREADS

Tube OD	IS0 FEMALE	A	B	C	D	E min.	F A/F	G A/F	H	IMPORLOK Part No.
1/16	1/16	23.6	9.9	11.0	8.6	1.3	11	8	19.8	IFC-1-1N
1/8	1/8	28.7	10.4	15.3	12.7	2.4	14	11	22.1	IFC-2-2N
1/8	1/4	33.6	15.0	15.3	12.7	2.4	19	11	26.9	IFC-2-4N
1/4	1/8	31.2	9.9	17.8	15.3	4.8	14	14	23.9	IFC-4-2N
1/4	1/4	35.8	15.0	17.8	15.3	4.8	19	14	28.5	IFC-4-4N
1/4	3/8	37.6	15.0	17.8	15.3	4.8	22	14	30.2	IFC-4-6N
1/4	1/2	42.4	19.8	17.8	15.3	4.8	27	14	35.0	IFC-4-8N
3/8	1/4	37.6	15.0	19.3	16.8	7.1	19	17	30.2	IFC-6-4N
3/8	3/8	39.1	15.0	19.3	16.8	7.1	22	17	31.8	IFC-6-6N
3/8	1/2	43.9	19.8	19.3	16.8	7.1	27	17	36.6	IFC-6-8N
1/2	1/4	40.4	15.0	19.3	22.9	10.4	22	22	40.4	IFC-8-4N
1/2	3/8	41.9	15.0	21.8	22.9	10.4	22	22	30.2	IFC-8-6N
1/2	1/2	46.7	19.8	21.8	22.9	10.4	22	22	31.8	IFC-8-8N
3/4	1/2	46.7	19.8	21.8	24.4	15.8	27	28.5	36.6	IFC-12-8N
3/4	3/4	48.3	20.6	21.8	24.4	15.8	35	28.5	38.1	IFC-12-12N
1	3/4	53.4	20.6	26.4	31.2	22.3	35	38	41.2	IFC-16-12N
1	1	62.3	25.4	26.4	31.2	22.3	41	38	50.0	IFC-16-16N
1.1/4	1.1/4	74.6	25.4	38.9	41.2	27.6	55	50	52.6	IFC-20-20N
1.1/2	1.1/2	B3.3	27.6	45.2	50.0	34.0	60	60	56.2	IFC-24-24N

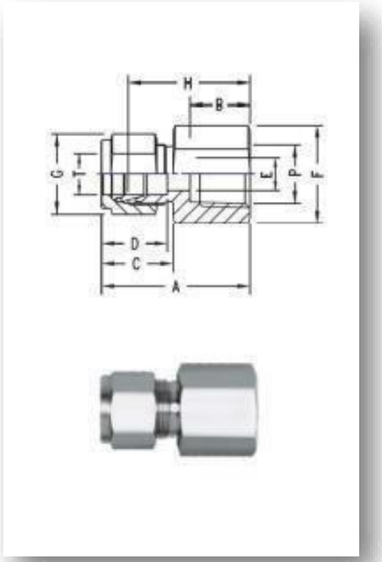
NOTE: The comäinations shown ztb0Ve arerepFeS0rltdtiVe OI VdnOMS p0SSibilitieS. Other G0rfIbirI‹tti0rIS not shown are also available.



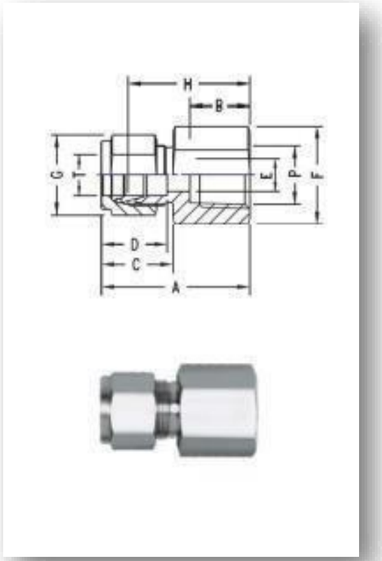
FEMALE CONNECTOR

INCH OD TUBE X FEMALE NPT THREADS

Tube OD	NPT FEMALE	A	B	C	D	E min.	F A/F	G A/F	H	IMPORLOK Part No.
3	1/8	28.7	10.4	15.3	12.9	2.4	14	11	22.1	IFC-3-2N
3	1/4	33.5	15	15.3	12.9	2.4	19	11	26.9	IFC-3-4N
6	1/8	31.3	10.4	17.7	15.3	4.8	14	14	23.9	IFC-6-2N
6	1/4	35.8	15	17.7	15.3	4.8	19	14	28.4	IFC-6-4N
6	3/8	37.6	15	17.7	15.3	4.8	22	14	30.2	IFC-6-6N
6	1/2	42.5	19.8	17.7	15.3	4.8	27	14	35.1	IFC-6-8N
8	1/8	32.1	10.4	18.6	16.2	6.3	14	16	24.6	IFC-8-2N
8	1/4	37	10	18.6	16.2	6.3	19	16	29.5	IFC-8-4N
8	3/8	38.5	15	18.6	16.2	6.3	22	16	31	IFC-8-6N
8	1/2	43.3	19.8	18.6	16.2	6.3	27	16	35.8	IFC-8-8N
10	1/4	37.8	15	19.5	17.2	7.9	19	19	30.2	IFC-10-4N
10	3/8	39.4	15	19.5	17.2	7.9	22	18	3J.8	IFC-10-6N
10	1/2	44.2	19.8	19.5	17.2	7.9	27	19	36.6	IFC-10-8N
12	1/4	40.3	15	22	22.8	9.5	22	22	30.2	IFC-12-4N
12	3/8	41.9	15	22	22.8	9.5	22	22	31.8	IFC-12-6N
12	1/2	46.7	19.8	22	22.8	9.5	27	22	36.6	IFC-12-8N
15	1/2	46.7	19.8	22	24.4	11.9	27	25	36.6	IFC-15-8N
16	1/2	46.9	19.8	22	24.4	12.7	27	25	36.8	IFC-16-8N
20	1/2	47.9	19.8	22	26	15.9	30	32	37.8	IFC-20-8N
20	3/4	49.7	20.6	22	26	15.9	35	32	39.6	IFC-20-12N
22	3/4	49.7	20.6	22	26	18.3	35	32	39.6	IFC-22-12N
22	1	57.9	25.4	22	26	18.3	41	32	47.8	IFC-22-16N
25	3/4	53.4	20.6	26.5	31.3	21.8	35	38	41.1	IFC-15-12N
25	1	62.3	25.4	26.5	31.3	21.8	41	38	50	IFC-25-16N
32	1.1/4	74.6	25.4	41.6	42	27.6	55	50	52.6	IFC-32-20N
38	1.1/2	83.3	27.6	47.9	49.4	34	60	60	56.2	IFC-38-24N



INCH OD TUBEX FEMALE IS* TAPERED PIPE THREADS

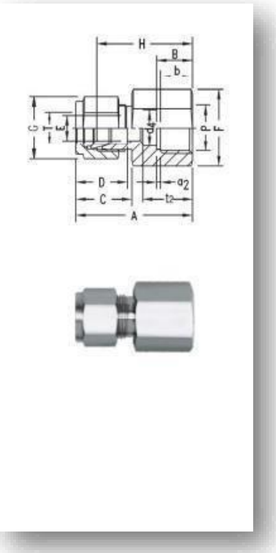


*ReferenceSpecification :BS 21 : ISO 7/1 : JIS B 0203 : DIN 2999 : IS 554 : IS 554

T Tube OD	ISO FEMALE	A	B	C	D	E min.	F A/F	G A/F	H	IMPORLOK Part No.
3	1/8	28.7	10.4	15.3	12.9	2.4	14	11	22.1	IFC-3-2N
3	1/4	33.5	15.0	15.3	12.9	2.4	19	11	26.9	IFC-3-4N
6	1/8	31.3	10.4	17.7	15.3	4.8	14	14	23.9	IFC-6-2N
6	1/4	35.8	15.0	17.7	15.3	4.8	19	14	28.4	IFC-6-4N
6	3/8	37.6	15.0	17.7	15.3	4.8	22	14	30.2	IFC-6-6N
6	1/2	42.5	19.8	17.7	15.3	4.8	27	14	35.1	IFC-6-8N
8	1/8	32.1	10.4	18.6	16.2	6.3	14	16	24.6	IFC-8-2N
8	1/4	37.0	10.0	18.6	16.2	6.3	19	16	29.5	IFC-8-4N
8	3/8	38.5	15.0	18.6	16.2	6.3	22	16	31	IFC-8-6N
8	1/2	43.3	19.8	18.6	16.2	6.3	27	16	35.8	IFC-8-8N
10	1/4	37.8	15.0	19.5	17.2	7.9	19	19	30.2	IFC-10-4N
10	3/8	39.4	15.0	19.5	17.2	7.9	22	18	3J.8	IFC-10-6N
10	1/2	44.2	19.8	19.5	17.2	7.9	27	19	36.6	IFC-10-8N
12	1/4	40.3	15.0	22.0	22.8	9.5	22	22	30.2	IFC-12-4N
12	3/8	41.9	15.0	22.0	22.8	9.5	22	22	31.8	IFC-12-6N
12	1/2	46.7	19.8	22.0	22.8	9.5	27	22	36.6	IFC-12-8N
15	1/2	46.7	19.8	22.0	24.4	11.9	27	25	36.6	IFC-15-8N
16	1/2	46.9	19.8	22.0	24.4	12.7	27	25	36.8	IFC-16-8N
22	3/4	49.7	20.6	22.0	26.0	18.3	35	32	39.6	IFC-22-12N
22	1	57.9	25.4	22.0	26.0	18.3	41	32	47.8	IFC-22-16N
25	3/4	53.4	20.6	26.5	31.3	21.8	35	38	41.1	IFC-15-12N
25	1	62.3	25.4	26.5	31.3	21.8	41	38	50	IFC-25-16N
32	1.1/4	74.6	25.4	41.6	42.0	27.6	55	50	52.6	IFC-32-20N
38	1.1/2	83.3	27.6	47.9	49.4	34.0	60	60	56.2	IFC-38-24N

FEMALE MANOMETER CONNECTOR
INCH OD TUBE X FEMALE ISO* PARALLEL THREADS (GAGE)

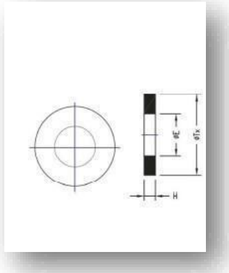
T Tube	ISO	A	B	C	D	E	F	G	H	a2	d4	b	t2	IMPORLOK
OD	FEMALE					min.	A/F	A/F		Minm.	Minm.			Part No.
1/4	1/4	37.6	13.0	17.8	15.3	4.8	19.0	14.0	30.2	1.6	5.6	9.4	17.0	IFC-MAN-4-4
1/4	3/8	37.6	14.2	17.8	15.3	4.8	24.0	14.0	30.2	1.6	6.6	9.9	20.3	IFC-MAN-4-6
1/4	1/2	43.4	18.8	17.8	15.3	4.8	27	14	36.0	1.6	6.6	14.5	24.9	IFC-MAN-4-8
5/1	1/4	38.4	13.0	18.5	16.3	6.0	19.0	16.0	31.0	1.6	-	9.4	-	IFC-MAN-5-4
5/1	1/2	40.9	18.8	18.5	16.3	7.1	27	16	33.6	1.6	-	14.5	-	IFC-MAN-5-8
3/	1/4	39.2	13.0	19.3	16.8	6.0	19.0	17.0	31.8	1.6	-	9.4	-	IFC-MAN-6-4
3/	3/8	38.6	14.2	19.3	16.8	6.6	24.0	17.0	31.2	1.6	-	9.9	-	IFC-MAN-6-6
3/	1/2	41.9	18.8	19.3	16.8	7.1	27.0	17.0	34.5	1.6	-	14.5	-	IFC-MAN-6-8
1/	3/8	44.5	14.2	21.8	22.9	6.6	24.0	22.0	34.3	1.6	-	9.9	-	IFC-MAN-8-6
1/	1/2	48.3	18.8	21.8	22.9	7.1	27.0	22.0	38.1	1.6	-	14.5	-	IFC-MAN-8-8



METRIC OD TUBES X FEMALE ISO* PARALLEL THREAD (GAGE)

T Tube	ISO	A	B	C	D	E	F	G	H	a2	d4	b	t2	IMPORLOK
OD	FEMALE					min.	A/F	A/F		Minm.	Minm.			Part No.
3	1/4	35.3	12.9	15.3	12.9	2.4	19	11	28.7	1.6	9.5	5.5	17.0	IFC-MAN-3-4
6	1/4	37.6	12.9	17.7	15.3	4.8	19	14	30.2	1.6	9.5	5.5	17.0	IFC-MAN-6-4
6	3/8	37.6	14.1	17.7	15.3	4.8	24	14	30.2	1.6	10.0	6.5	20.3	IFC-MAN-6-6
6	1/2	43.5	18.9	17.7	15.3	4.8	27	14	36.1	1.6	14.5	7.0	24.9	IFC-MAN-6-8
8	1/4	38.5	12.9	18.6	16.2	5.5	19	16	31.0	1.6	9.5	5.5	–	IFC-MAN-8-4
8	3/8	36.2	14.1	18.6	16.2	6.5	24	16	28.7	1.6	10.0	6.5	–	IFC-MAN-8-6
8	1/2	41.0	18.9	18.6	16.2	7.1	27	16	33.5	1.6	14.5	7.0		IFC-MAN-8-8
10	1/4	39.4	19.5	19.5	17.2	S.5	19	19	31.8	1.6	9.5	5.5		IFC-MAN-10-4
10	3/8	38.8	19.5	19.5	17.2	6.5	24	19	31.2	1.6	10.0	6.5	–	IFC-MAN-10-6
10	1/2	42.1	19.5	19.5	17.2	7.1	27	19	34.5	1.6	14.5	7.0	–	IFC-MAN-10-8
12	1/4	41.9	12.9	22.0	22.8	S.5	22	22	31.8	1.6	9.5	5.5		IFC-MAN-12-4
12	3/8	'44.4	14.1	22.0	22.8	6.5	24	22	34.3	1.6	10.0	6.5		IFC-MAN-12-6
12	1/2	48.2	18.9	22.0	22.8	7.1	27	22	38.1	1.6	14.5	7.0	.	IFC-MAN-12-8

P				PART	
ISO	E	H	TX	COPPER	PTFE
FEMALE					
1/4"	7.6	1.	10.7	4MG—Cu	4MG-PTFE
3/8"	8.6	2.	14.2	6MG-Cu	6MG-PTFE
1/2"	9.1	2.	17.8	8MG-Cu	8MG-PTFE



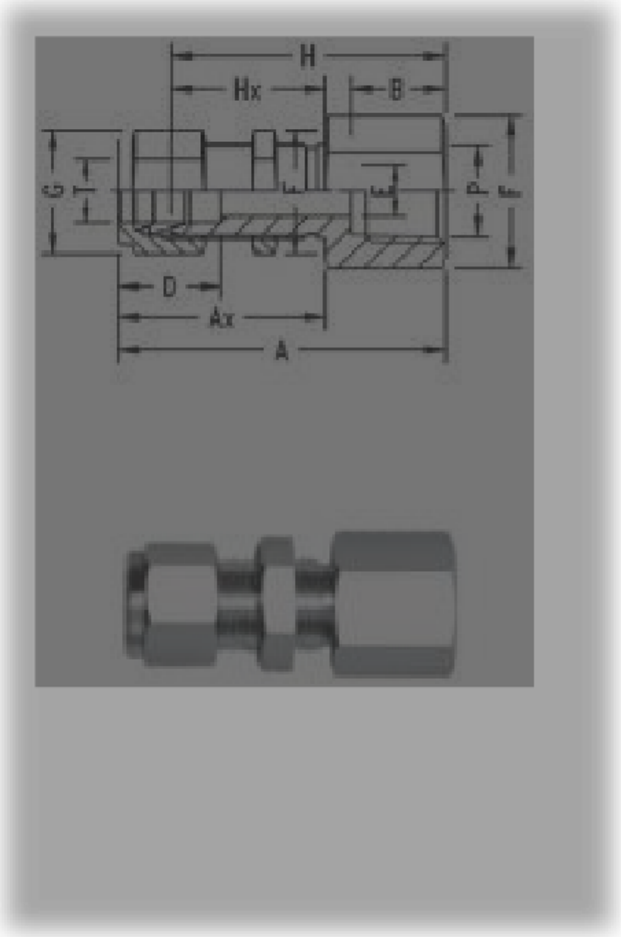
No seal is made around the male thread. instead, a gasket is dropped into the flat bottom in the female thread, and the end of the iti8le threadedend exerts a load on the gasket to seal. Details of gasket given below.

*Reference Specification :BS 2779 : ISO 228/1 : JIS B0202 : DIN - 259

MANOMETER CONNECTOR GASKET FOR FENALE ISO PARALLEL THREADS

BULKHEADFEMALE CONNECTOR
INCH OD TUBESX FEMALE NPT THREADS

T Tube	NPT	A	AX	B	D	E	F	G	H	HX	Hole	Panel	IMPORLOK PART NO.
OD	MALE					min.	A/F	A/F			Thickness	Thickness	
1/8	1/8	44.	31.	10.	12.7	2.	14	11	38.1	24.6	8.3	12.7	IFBC-2-2N
1/4	1/8	47.	33.	10.	15.3	4.	16	14	39.7	26.2	11.5	10.2	IFBC-4-2N
1/4	1/4	51.	33.	15.	15.3	4.	19	14	44.2	26.2	11.5	10.2	IFBC-4-4N
3/8	1/4	54.	36.	15.	16.8	7.	19	17	47.5	29.5	14.7	11.2	IFBC-6-4N
1/2	3/8	61.	41.	15.	22.9	10.4	22	22	51.6	31.0	19.5	12.7	IFBC-8-6N
1/2	1/2	66.	41.	19.	22.9	10.4	27	22	56.6	31.0	19.5	12.7	IFBC-8-8N
5/8	1/2	67.	42.	19.	22.9	12.7	27	25	57.4	32.5	22.6	12.7	IFBC-10-8N
3/4	1/2	72.	47.	19.	24.4	16.0	35	28.5	62.3	37.4	25.8	16.8	IFBC-12-8N
3/4	3/4	74.	47.	20.	24.4	16.0	35	28.5	64.3	37.4	25.8	16.8	IFBC-12-12N
1	3/4	84.	57.	20.	31.2	16.0	35	38	72.1	45.2	33.7	19.0	IFBC-16-12N
1	1	93.	57.	25.	31.2	22.2	35	38	81.0	45.2	33.7	19.0	IFBC-16-16N
1.1/4	1.1/4	105.7	69.	25.	41.2	27.6	50	50	83.5	47.7	41.6	19.0	IFBC-20-20N
1.1/2	1.1/2	144.5	76.	27.	50.0	34.0	60	57	87.4	49.3	49.6	19.0	IFBC-24-24N



METRIC OD TUBESX FEMALE NPT THREADS

T Tube	NPT	A	AX	B	D	E	F	G	H	HX	Hole	Panel	IMPORLOK PART NO.
OD	MALE					min.	A/F	A/F			Thickness	Thickness	
3	1/8	44.	31.	10.	12.	2.	1	1	38.	24.	8.	12.7	IFBC-3-2N
6	¼	51.	33.	15.	15.	4.	1	1	44.	26.	11.5	10.2	IFBC-6-4N
10	3/8	56.	37.	15.	17.	7.	2	1	49.	29.	16.3	11.2	IFBC-10-4N
12	3/8	61.	41.	15.	22.	10.	2	2	51.	31.	19.5	12.7	IFBC-12-6N
12	½	66.	41.	19.	22.	10.	2	2	56.	31.	19.5	12.7	IFBC-12-8N
16	½	67.	42.	19.	22.	12.	2	2	57.	32.	22.6	12.7	IFBC-16-8N
22	¾	79.	53.	20.	26.	15.	3	3	69.	42.	29.0	19.0	IFBC-22-12N
25	¾	84.	57.	20.	31.	16.	3	3	72.	45.	33.7	19.0	IFBC-25-12N
25	1	93.	57.	25.	31.	22.	3	3	81.	45.	33.7	19.0	IFBC-25-16N
32	1.1/4	105.7	69.	25.	41.	27.	5	5	83.	47.	41.6	19.0	IFBC-32-20N
38	1.1/2	144.5	76.	27.	50.	34.	6	5	87.	49.	49.6	19.0	IFBC-38-24N

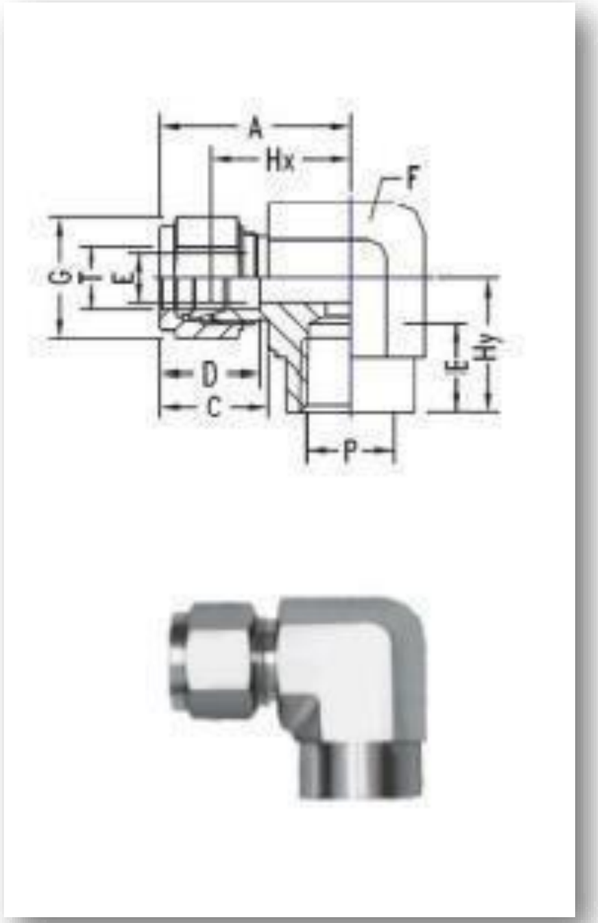
NOTE: Bulkhead female connectorsare also available with ISO taper female , ISO parallel female threads and ISO female micrometer connection. Please consult us.

FEMALE ELBOW
INCH OD Tubes x Femal NPT Threads

T TUBE OD	P NPT FEMALE	A	B	C	D	E min	F A/F	G A/F	Hx	Hy	IMPORLOK PART NO.
1/8	1/8	24.6	10.4	15.3	12.7	2.	1	1	18.0	19.0	IFE-2-2N
1/8	1/4	27.4	15.0	15.3	12.7	2.	1	1	20.8	22.4	IFE-2-4N
1/4	1/8	26.9	10.4	17.8	15.3	4.	1	1	19.6	19.0	IFE-4-2N
1/4	1/4	29.7	15.0	17.8	15.3	4.	1	1	22.4	22.4	IFE-4-4N
1/4	3/8	31.8	15.0	17.8	15.3	4.	2	1	24.4	22.4	IFE-4-6N
1/4	1/2	34.6	19.8	17.8	15.3	4.	2	1	27.2	28.5	IFE-4-8N
5/16	1/8	28.7	10.4	17.8	15.3	6.	1	1	21.4	19.1	IFE-5-2N
5/16	1/4	30.5	15.0	18.5	16.3	6.	2	1	23.2	22.4	IFE-5-4N
3/8	1/8	30.5	10.4	19.3	16.8	7.	1	1	23.2	19.1	IFE-6-2N
3/8	1/4	31.2	15.0	19.3	16.8	7.	1	1	23.9	22.4	IFE-6-4N
3/8	3/8	33.3	15.0	19.3	16.8	7.	2	1	25.9	22.4	IFE-6-6N
3/8	1/2	36.0	19.8	19.3	16.8	7.	2	1	28.7	28.5	IFE-6-8N
1/2	1/4	36.0	15.0	21.8	22.9	7.	2	2	25.9	22.4	IFE-8-4N
1/2	3/8	36.0	15.0	21.8	22.9	10.4	2	2	25.9	22.4	IFE-8-6N
1/2	1/2	38.9	19.8	21.8	22.9	10.4	2	2	28.7	28.5	IFE-8-8N
5/8	3/8	38.1	15.0	21.8	22.9	12.7	2	2	28.0	22.4	IFE-16-6N
5/8	1/2	39.9	19.8	21.8	24.4	12.7	2	2	29.7	28.5	IFE-10-8N
3/4	1/2	39.9	19.8	21.8	24.4	15.8	2	2	29.7	28.5	IFE-12-8N
3/4	3/4	44.7	20.6	21.8	24.4	15.8	3	2	34.6	31.8	IFE-12-12N
7/8	3/4	44.7	20.6	21.8	25.9	18.2	35.0	3	34.6	31.8	IFE-14-12N
1	3/4	49.0	20.6	26.4	31.2	22.3	3	3	36.8	31.8	IFE-16-12N
1	1	53.6	25.4	26.4	31.2	22.3	4	3	41.4	38.1	IFE-16-16N

metric OD Tubes x Femal NPT Threads

T TUBE OD	P NPT FEMALE	A	B	C	D	E min	F A/F	G A/F	Hx	Hy	IMPORLOK PART NO.
3	1/8	24.6	10.4	15.3	12.9	2.4	1	11	18.0	19.0	IFE-3-2N
3	1/4	27.4	15.0	15.3	12.9	2.4	1	11	20.8	22.4	IFE-3-4N
6	1/8	27.0	10.4	17.7	15.3	4.	1	14	19.6	19.0	IFE-6-2N
6	1/4	29.8	15.0	17.7	15.3	4.8	1	14	22.4	22.4	IFE-6-4N
6	1/2	34.6	19.8	17.7	15.3	4.8	2	14	27.2	28.5	IFE-6-8N
8	1/4	30.6	15.0	18.6	16.2	6.3	1	16	23.1	22.4	IFE-8-4N
8	3/8	32.6	15.0	18.6	16.2	6.3	2	16	25.1	22.4	IFE-8-6N
10	1/4	33.5	15.0	19.5	17.2	7.9	1	19	25.9	22.4	IFE-10-4N
10	3/8	33.5	15.0	19.5	17.2	7.9	2	19	25.9	22.4	IFE-10-6N
12	1/4	36.0	15.0	22.0	22.8	9.5	2	22	25.9	22.4	IFE-12-4N
12	3/8	36.0	15.0	2.	22.8	9.5	2	22	25.9	22.4	IFE-12-6N
12	1/2	38.8	19.8	22.0	22.8	9.5	2	22	28.7	28.5	IFE-12-8N
16	1/2	39.5	19.8	2.	24.4	12.7	2	25	29.7	28.5	IFE-16-8N
25	3/4	49.0	20.6	26.5	31.3	22.3	3	38	36.8	31.8	IFE-25-12N
25	1	53.6	25.4	26.5	31.3	22.3	4	38	41.4	38.1	IFE-25-16N



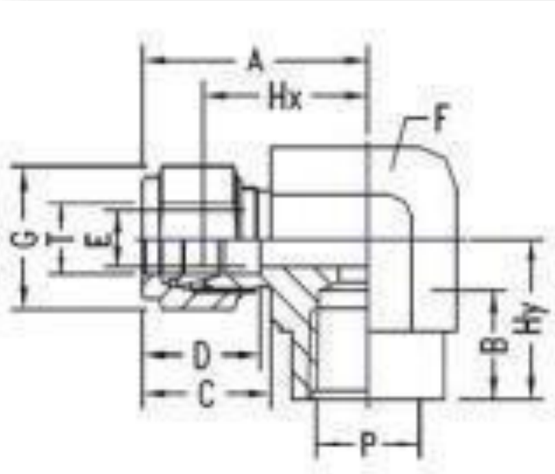
FEMALE ELBOW

INCH OD Tubes X Females ISO tapered plpe threads

T TUBE OD	P NPT FEMALE	A	B	C	D	E min	F A/F	G A/F	Hx	Hy	IMPORLOK PART NO.
1/8	1/8	24.6	10.4	15.3	12.7	2.4	14	11	18.0	19.0	IFE-2-2RX
1/8	1/4	27.4	15.0	15.3	12.7	2.4	19	11	20.8	22.4	IFE-2-4RX
1/4	1/8	26.9	10.4	17.8	15.3	4.8	14	14	19.6	19.0	IFE-4-2RX
1/4	1/4	29.7	15.0	17.8	15.3	4.8	19	14	22.4	22.4	IFE-4-4RX
1/4	3/8	31.8	15.0	17.8	15.3	4.8	22	14	24.4	22.4	IFE-4-6RX
1/4	1/2	34.6	19.8	17.8	15.3	4.8	27	14	27.2	28.5	IFE-4-8RX
5/16	1/8	28.7	10.4	17.8	15.3	6.3	19	14	21.4	19.1	IFE-5-2RX
5/16	1/4	30.5	15.0	18.5	1.3	6.3	22	16	23.2	22.4	IFE-5-4RX
3/8	1/8	30.5	10.4	19.3	16.8	7.1	17	17	23.2	19.1	IFE-6-2RX
3/8	1/4	31.2	15.0	19.3	16.8	7.1	19	17	23.9	22.4	IFE-6-4RX
3/8	3/8	33.3	15.0	19.3	16.8	7.1	22	17	25.9	22.4	IFE-6-6RX
3/8	1/2	36.0	19.8	19.3	16.8	7.1	27.0	17	28.7	28.5	IFE-6-8RX
1/2	1/4	36.0	15.0	21.8	22.9	7.1	22.0	22	25.9	22.4	IFE-8-4RX
1/2	3/8	36.0	15.0	21.8	22.9	10.4	22.0	22	25.9	22.4	IFE-8-6RX
1/2	1/2	38.9	19.8	21.8	22.9	10.4	27.0	22	28.7	28.5	IFE-8-8RX
5/8	3/8	38.1	15.0	21.8	22.9	12.7	24.0	22	28.0	22.4	IFE-16-6RX
5/8	1/2	39.9	19.8	21.8	24.4	12.7	27.0	25	30	28.5	IFE-10-8RX
3/4	1/2	39.9	19.8	21.8	24.4	15.8	27.0	29	30	28.5	IFE-12-8RX
3/4	3/4	44.7	20.6	21.8	24.4	15.8	35.0	29	35	31.8	IFE-12-12RX
7/8	3/4	44.7	20.6	21.8	25.9	18.2	35	32	34.6	31.8	IFE-14-12RX
1	3/4	49.0	20.6	26.4	31.2	22.3	35	38	36.8	31.8	IFE-16-12RX
1	1	53.6	25.4	26.4	31.2	22.3	41	38	41.4	38.1	IFE-16-16RX

METRIC OD Tubes x Females ISO tapered pipe threads

T TUBE OD	P NPT FEMALE	A	B	C	D	E min	F A/F	G A/F	Hx	Hy	IMPORLOK PART NO.
3	1/8	24.6	10.4	15.3	12.7	2.4	14	11	18.0	19.0	IFE-3-2RX
3	1/4	27.4	15.0	15.3	12.7	2.4	19	11	20.8	22.4	IFE-3-4RX
6	1/8	27.0	10.4	17.7	15.3	4.8	14	14	19.6	19.0	IFE-6-2RX
6	1/4	29.8	15.0	17.7	15.3	4.8	19	14	22.4	22.4	IFE-6-4RX
6	1/2	34.6	19.8	17.7	15.3	4.8	27	14	27.2	28.5	IFE-6-8RX
8	1/4	30.6	15.0	18.6	15.3	6.3	19	16	23.1	22.4	IFE-8-4RX
8	3/8	32.6	15.0	18.6	15.3	6.3	22	16	25.1	22.4	IFE-8-6RX
10	1/4	33.5	15.0	19.5	1.3	7.9	19	19	25.9	22.4	IFE-10-4RX
10	3/8	33.5	15.0	19.5	16.8	7.9	22	19	25.9	22.4	IFE-10-6RX
12	1/4	36.0	15.0	22.0	16.8	9.5	22	22	25.9	22.4	IFE-12-4RX
12	3/8	36.0	15.0	22.0	16.8	9.5	22	22	25.9	22.4	IFE-12-6RX
12	1/2	38.8	19.8	2.0	16.8	9.5	27.0	22	28.7	28.5	IFE-12-8RX
16	1/2	39.5	19.8	22.0	22.9	12.7	27.0	25	29.7	28.5	IFE-16-8RX
25	3/4	49.0	20.6	26.5	22.9	22.3	35.0	38	36.8	31.8	IFE-25-12RX
25	1	53.6	25.4	26.5	22.9	22.3	41.0	38	41.4	38.1	IFE-25-16RX

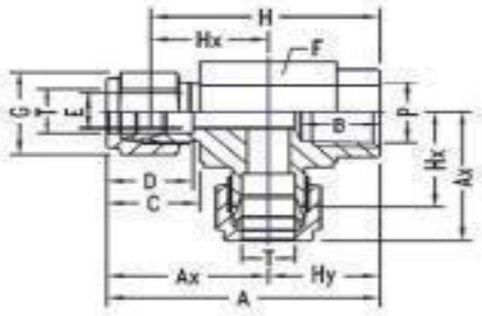


FEMALE RUN TEE
INCH OD TUBES X FEMALE NPT THREADS

T TUBE OD	P NPT FEMALE	A	Ax	B	C	D	E min	F A/F	G A/F	H	Hx	Hy	IMPORLOK PART NO.
1/8	1/8	43.6	24.6	10.4	15.3	12.7	2.4	1	11	37.0	18.0	19.0	IFRT-2-2N
1/4	1/8	45.9	26.9	10.4	17.8	15.3	4.8	1	14	38.6	19.6	19.0	IFRT-4-2N
1/4	1/4	52.1	29.7	15.0	17.8	15.3	4.8	1	14	44.8	22.4	22.4	IFRT-4-4N
3/8	1/4	53.6	31.2	15.0	19.3	16.8	7.1	1	17	46.3	23.9	22.4	IFRT-6-4N
3/8	3/8	55.7	33.3	15.0	19.3	16.8	7.1	2	17	48.3	25.9	22.4	IFRT-6-6N
1/2	3/8	58.4	36.0	15.0	21.8	22.9	10.4	2	22	48.3	25.9	22.4	IFRT-8-6N
1/2	1/2	67.4	38.9	19.8	21.8	22.9	10.4	2	22	57.2	28.7	28.5	IFRT-8-8N
3/4	3/4	76.5	44.7	20.6	21.8	24.4	15.8	3	29	66.4	34.6	31.8	IFRT-12-12N
1	3/4	80.8	49.0	20.6	26.4	31.0	22.3	3	38	68.6	36.8	31.8	IFRT-16-12N
1	1	91.7	53.6	25.4	26.4	31.0	22.3	4	38	79.5	41.4	38.1	IFRT-16-16N

METRIC OD TUBES X FEMALE NPT THREADS

T TUBE OD	P NPT FEMALE	A	Ax	B	C	D	E min	F A/F	G A/F	H	Hx	Hy	IMPORLOK PART NO.
3	1/8	43.6	24.6	10.4	15.3	12.9	2.4	14	11	37.0	18.0	19.0	IFRT-3-2N
6	1/8	46.0	27.0	10.4	17.7	15.3	4.8	14	14	38.6	19.6	19.0	IFRT-6-2N
6	1/4	52.2	29.8	15.0	17.7	15.3	4.8	19	14	44.8	22.4	22.4	IFRT-6-4N
8	1/8	48.9	29.9	10.4	18.6	16.2	6.3	16	16	46.3	22.4	19.0	IFRT-8-2N
8	1/4	53.0	30.6	15.0	18.6	16.2	6.3	19	16	48.3	23.1	22.4	IFRT-8-4N
10	1/4	55.9	33.5	15.0	19.5	17.2	7.9	19	19	48.3	25.9	22.4	IFRT-10-4N
12	3/8	58.4	36.0	15.0	22.0	22.8	9.5	22	22	57.2	25.9	22.4	IFRT-12-6N
12	1/2	67.3	38.8	19.8	22.0	22.8	9.5	27	22	25.0	28.7	28.5	IFRT-12-8N
16	1/2	68.0	39.5	19.8	22.0	24.0	12.7	27	25	38.0	29.7	28.5	IFRT-16-8N
25	1	91.7	53.6	25.4	26.5	31.3	22.3	41	38	79.5	41.4	38.1	IFRT-25-16N

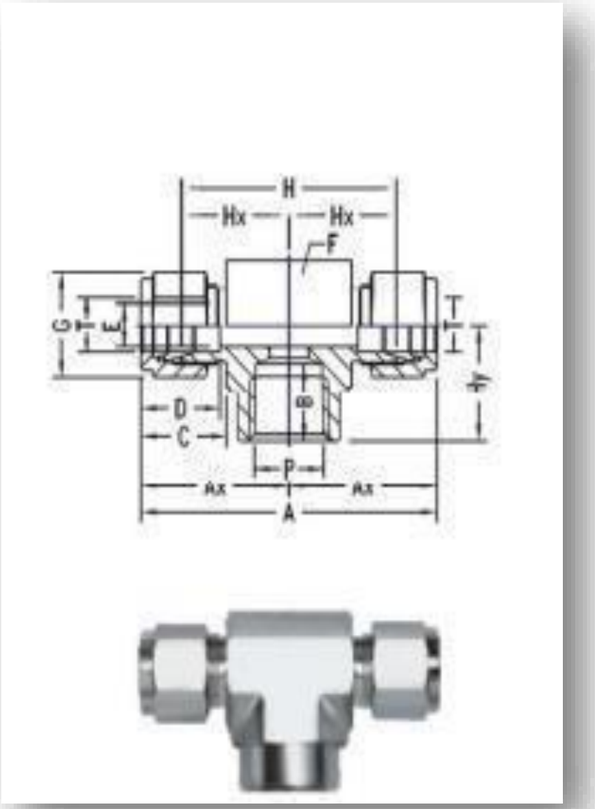


FEMALE BRANCH TEE
INCH OD TUBES X FEMALE NPT THREADS

T TUBE OD	P NPT FEMALE	A	Ax	B	C	D	E min	F A/F	G A/F	H	Hx	Hy	IMPORLOK PART NO.
1/8	1/8	49.2	24.6	10.4	15.3	12.7	2.4	14	11	36.0	18.0	19.0	IFBT-2-2N
1/4	1/8	53.8	26.9	10.4	17.8	15.3	4.8	14	14	39.2	19.6	19.0	IFBT-4-2N
1/4	1/4	59.4	27.9	15.0	17.8	15.3	4.8	19	14	44.8	22.4	22.4	IFBT-4-4N
3/8	1/4	62.4	31.2	15.0	17.8	16.8	7.1	16	16	47.8	23.9	22.4	IFBT-6-4N
3/8	3/8	66.6	33.3	15.0	19.3	16.8	7.1	19	16	51.8	25.9	22.4	IFBT-6-6N
1/2	3/8	72.0	36.0	15.0	19.3	22.9	10.4	19	19	51.8	25.9	22.4	IFBT-8-6N
1/2	1/2	77.8	38.9	19.8	21.8	22.9	10.4	22	22	57.4	28.7	28.5	IFBT-8-8N
3/4	3/4	89.4	44.7	20.6	21.8	24.4	15.8	35	22	69.2	34.6	31.8	IFBT-12-12N
1	3/4	98.0	49.0	20.6	26.4	31.2	22.3	35	25	73.6	36.8	31.8	IFBT-16-12N
1	1	107.2	53.6	25.4	26.4	31.2	22.3	41	38	82.8	41.4	38.1	IFBT-16-16N

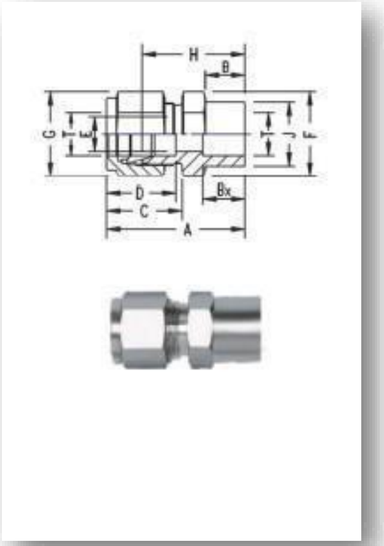
METRIC TUBES X FEMALE NPT THREADS

T TUBE OD	P NPT FEMALE	A	Ax	B	C	D	E min	F A/F	G A/F	H	Hx	Hy	IMPORLOK PART NO.
3	1/8	49.2	24.6	10.4	15.3	12.9	2.4	14	11	36.0	18.0	19.0	IFBT-3-2N
6	1/8	54.0	27.0	10.4	17.7	15.3	4.8	14	14	39.2	19.6	19.0	IFBT-6-2N
6	1/4	59.6	29.8	15.0	17.7	15.3	4.8	19	14	44.8	22.4	22.4	IFBT-6-4N
8	1/8	59.8	29.9	10.4	18.6	16.2	6.3	16	16	44.8	22.4	19.0	IFBT-8-2N
8	1/4	61.2	30.6	15.0	18.6	16.2	6.3	19	16	46.2	23.1	22.4	IFBT-8-4N
10	1/4	67.0	33.5	15.0	19.5	17.2	7.9	19	19	51.8	25.9	22.4	IFBT-10-4N
12	3/8	72.0	36.0	15.0	22.0	22.8	9.5	22	22	51.8	25.9	22.4	IFBT-12-6N
12	1/2	77.6	38.8	19.8	22.0	22.8	9.5	22	22	57.4	28.7	28.5	IFBT-12-8N
16	1/2	79.0	39.5	19.8	22.0	24.4	12.7	25	25	59.4	29.7	28.5	IFBT-16-8N
25	1	107.2	53.6	25.4	26.5	31.3	22.3	38	38	82.8	41.4	38.1	IFBT-25-16N



SOCKET WELDPIPE CONNECTOR
INCH OD TUBESTP PIPE

T TUBE OD	P NPT FEMALE	A	B	C	D	E min	F A/F	G A/F	H	J	IMPORLOK PART NO.
1/8	1/8	30.6	9.6	15.3	12.7	2.4	11	11	23.9	10.3	IMC-2-2NB
1/4	1/8	32.8	9.6	17.8	15.3	4.8	14	14	25.4	10.3	IMC-4-2NB
1/4	1/4	37.8	14.3	17.8	51.3	4.8	14	14	30.5	13.7	IMC-4-4NB
5/16	1/8	34.0	9.6	18.5	16.3	5.1	16	16	26.7	10.3	IMC-5-2NB
5/16	1/4	38.6	14.3	18.5	16.3	6.3	16	16	31.2	13.7	IMC-5-4NB
3/8	1/4	39.9	14.3	19.3	16.8	7.1	17	17	32.5	13.7	IMC-6-4NB
3/8	3/8	39.9	14.3	19.3	16.8	7.1	17	17	32.5	17.2	IMC-6-6NB
3/8	1/2	46.3	19.1	19.3	16.8	7.1	17	17	38.9	21.3	IMC-6-8NB
1/2	3/8	43.4	14.3	21.8	22.9	10.4	22	22	33.3	17.2	IMC-8-6NB
1/2	1/2	49.0	19.1	21.8	22.9	10.4	22	22	38.9	21.3	IMC-8-8NB
1/2	3/4	50.5	19.1	21.8	22.9	10.4	22	22	40.4	26.7	IMC-8-12NB
5/8	1/2	49.0	19.1	21.8	24.4	12.7	25.0	25	38.9	21.3	IMC-10-8NB
3/4	3/4	50.5	19.1	21.8	24.4	15.8	29.0	29	40.4	26.7	IMC-12-12NB
1	1	62.2	23.8	26.4	31.2	22.3	38.0	38	50.0	33.4	IMC-16-16NB
1.1/4	1.1/4	77.2	23.8	38.9	41.2	27.6	50.0	50	55.2	42.2	IMC-20-20NB
1.1/4	1.1/4	88.9	26.2	45.2	50.0	34.0	60.0	60	61.7	48.3	IMC-24-24NB



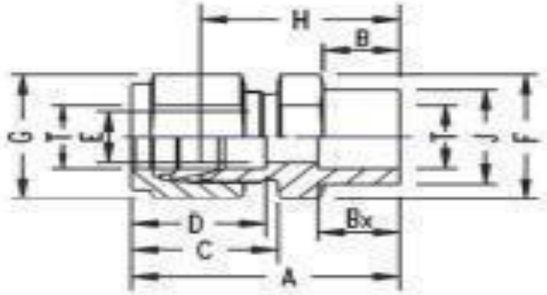
SOCKET WELD TUBE CONNECTOR

INCH OD Tubes

T TUBE OD	A	B	Bx	C	D	E min	F A/F	G A/F	H	J	IMPORLOK PART NO.
1/8	29.0	8.6	6.4	15.3	12.7	2.4	11	11	22.9	7.9	ISWC-2-2
1/4	33.5	10.4	7.9	17.8	5.3	4.8	14	14	26.2	11.2	ISWC-4-4
3/8	37.6	12.0	9.6	19.3	16.8	7.1	16	17	30.3	15.8	ISWC-6-6
1/2	41.2	12.0	12.7	21.8	22.9	10.4	22	22	31.0	19.1	ISWC-8-8
3/4	43.4	12.0	14.3	21.8	24.4	15.8	27	29	33.3	26.7	ISWC-12-12
1	52.6	14.3	19.1	26.4	31.2	22.3	35	38	40.4	33.3	ISWC-16-16
1.1/4	72.4	19.1	19.1	38.9	41.2	27.6	45	50	50.3	42.0	ISWC-20-20
1.1/2	81.8	19.1	23.6	45.2	50.0	34.0	55	57	54.6	50.0	ISWC-24-24

METRIC OD Tubes

T TUBE OD	A	B	Bx	C	D	E min	F A/F	G A/F	H	J	IMPORLOK PART NO.
3	29.0	8.6	6.4	15.3	12.9	2.4	11	11	22.9	7.9	ISWC-3-3
6	33.5	10.4	7.9	17.7	15.3	4.8	14	14	26.2	11.2	ISWC-6-6
10	37.6	12.0	9.6	19.5	17.2	7.1	16	17	30.3	15.8	ISWC-10-10
12	41.2	12.0	12.7	22.0	22.8	10.4	22	22	31.0	19.1	ISWC-12-12
20	43.4	12.0	14.3	22.0	26.0	15.8	27	29	33.3	26.7	ISWC-20-20
25	52.6	14.3	19.1	26.5	31.3	22.3	35	38	40.4	33.3	ISWC-25-25
32	72.4	19.1	19.1	41.6	42.0	27.6	45	50	50.3	42.0	ISWC-32-32
38	81.8	19.1	23.6	47.9	49.4	34.0	55	57	54.6	50.0	ISWC-38-38



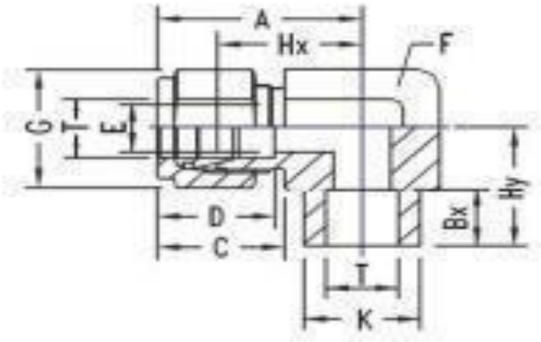
SOCKET WELD TUBE ELBOW

INCH OD Tubes

T TUBE OD	A	B	Bx	C	D	E min	F A/F	G A/F	H	J	IMPORLOK PART NO.
1/4	27.0	7.9	17.8	15.3	4.8	14	14	19.6	19.6	12.7	ISWE-4-4
3/8	30.5	9.6	19.3	16.8	7.1	16	17	23.1	23.1	15.8	ISWE-6-6
1/2	36.0	12.7	21.8	22.9	10.4	22	22	25.9	25.9	20.6	ISWE-8-8
34	39.9	14.3	21.8	24.4	15.8	27	29	29.7	29.7	27.0	ISWE-12-12
1	49.0	19.1	26.4	31.2	22.3	35	38	36.8	36.8	35.0	ISWE-16-16
1.1/4	66.5	19.1	33.9	41.2	27.6	45	50	44.5	47.8	43.0	ISWE-20-20
1.1/2	78.0	23.8	45.2	50.0	34.0	50	57	50.8	60.4	48.0	ISWE-24-24

METRIC OD Tubes

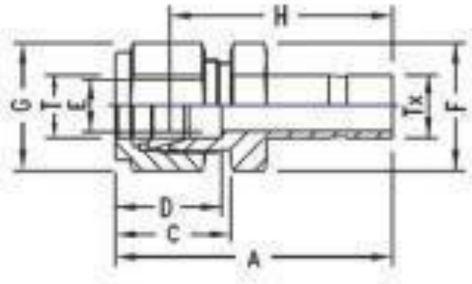
T TUBE OD	A	B	Bx	C	D	E min	F A/F	G A/F	H	J	IMPORLOK PART NO.
6	27.0	7.9	17.7	15.3	4.8	14	14	19.6	19.6	12.7	ISWE-6-6
10	30.5	9.6	19.5	17.2	7.1	16	17	23.1	23.1	15.8	ISWE-10-10
12	36.0	12.7	22.0	22.8	10.4	22	22	25.9	25.9	20.6	ISWE-12-12
20	39.9	14.3	22.0	26.0	15.8	27	29	29.7	29.7	27.0	ISWE-20-20
25	49.0	19.1	26.5	31.3	22.3	35	38	36.8	36.8	35.0	ISWE-25-25
32	66.5	19.1	41.6	42.0	27.6	45	50	44.5	47.8	43.0	ISWE-32-32
38	78.0	23.8	47.9	49.4	34.0	50	57	50.8	60.4	48.0	ISWE-38-38



REDUCER

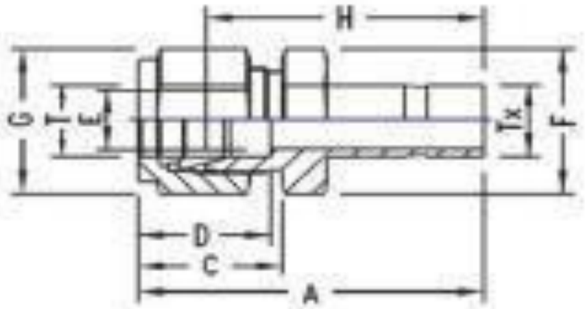
INCH OD Tubes To INCH OD Ports

T TUBE OD	Tx Tube OD	A	C	D	E min	F A/F	G A/F	H	IMPORLOK PART NO.
1/8	1/8	33.5	15.3	12.7	2.0	11	11	26.8	IMR-2-2
1/8	1/4	36.0	15.3	12.7	4.0	11	11	29.5	IMR-2-4
1/4	1/8	36.8	17.8	15.3	2.0	14	14	29.5	IMR-4-2
1/4	1/4	30.1	17.8	15.3	4.8	14	14	31.8	IMR-4-4
1/4	3/8	40.6	17.8	15.3	4.8	14	14	33.3	IMR-4-6
1/4	1/2	48.3	17.8	15.3	4.8	14	14	38.9	IMR-4-8
5/16	3/8	41.8	18.6	16.3	6.3	14	16	34.6	IMR-5-6
5/16	1/2	46.5	18.6	16.3	6.3	14	16	40.2	IMR-5-8
3/8	1/4	41.4	18.3	16.8	7.1	16	17	34.0	IMR-6-4
3/8	3/8	43.2	18.3	16.8	7.1	16	17	35.8	IMR-6-6
3/8	1/2	48.5	18.3	16.8	7.1	16	17	41.2	IMR-6-8
1/2	1/4	45.0	21.6	22.9	4.8	22	22	34.8	IMR-8-4
1/2	3/8	46.7	21.8	22.9	7.1	22	22	36.8	IMR-8-6
1/2	1/2	52.3	21.8	22.9	9.9	22	22	42.2	IMR-8-8
1/2	3/4	53.6	21.8	22.9	10.4	22	22	43.7	IMR-8-12
1/2	1	80.2	21.8	22.9	10.4	22	22	50.0	IMR-8-16
5/8	3/4	84.5	21.8	24.4	12.7	24	25	45	IMR-10-12
5/8	7/8	58.2	21.8	24.4	12.7	24	25	46	IMR-12-8
3/4	1/2	54.6	21.8	24.4	9.9	27	29	45	IMR-12-16
3/4	1	62.5	21.8	24.4	15.8	27	29	52	IMR-16-20
1	1.1/4	80.5	26.4	31.2	22.3	35	38	88.3	IMR-16-24
1	1.1/2	88.2	26.4	31.2	22.3	41	38	77.0	



METRIC OD TUBES TO METRIC OD PARTS

T TUBE OD	Tx Tube OD	A	C	D	E min	F A/F	G A/F	H	IMPORLOK PART NO.
3	6	36.1	15.3	12.9	2.4	11	11	29.5	IMR-3-6
3	10	38.4	15.3	12.9	2.4	14	11	31.8	IMR-3-10
6	3	36.9	17.8	15.3	1.8	14	14	29.5	IMR-6-3
6	8	39.9	17.8	15.3	4.8	14	14	32.5	IMR-6-8
6	10	40.7	17.8	15.3	4.8	14	14	33.3	IMR-6-10
6	12	16.3	17.8	15.3	4.8	14	14	38.9	IMR-6-12
8	6	40.3	18.6	16.2	4.6	14	16	32.8	IMR-8-6
8	10	42	18.6	16.2	6.4	14	16	34.5	IMR-8-10
8	12	47.6	18.6	16.2	6.4	14	16	40.1	IMR-8-12
10	6	42.4	19.5	17.2	4.6	17	17	34.8	IMR-10-6
10	8	43.4	19.5	17.2	6.2	17	17	35.8	IMR-10-8
10	12	49.8	19.5	17.2	7.9	17	17	42.2	IMR-10-12
12	6	44.9	22.0	22.8	4.6	22	22	34.8	IMR-12-6
12	8	45.9	22.0	22.8	6.2	22	22	35.8	IMR-12-8
12	10	46.7	22.0	22.8	7.7	22	22	36.6	IMR-12-10
12	16	53.8	22.0	22.8	9.5	22	22	43.7	IMR-12-16
12	20	56.1	22.0	22.8	9.5	22	22	46.0	IMR-12-20
12	22	56.1	22.0	22.8	9.5	24	22	46.0	IMR-12-22
12	25	62.4	22.0	22.8	9.5	27	22	53.3	IMR-12-25
16	12	53.0	22.0	22.8	9.1	24	25	42.9	IMR-16-12
18	12	54.6	22.0	24.4	9.1	27	30	44.5	IMR-18-12
18	16	56.1	22.0	24.4	12.7	27	30	46.0	IMR-18-16
20	16	57.9	22.0	26.0	12.7	30	32	47.8	IMR-20-16
20	25	64.2	22.0	26.0	15.8	30	32	54.1	IMR-20-25
22	20	59.4	22.0	26.0	15.1	30	32	49.3	IMR-20-20
22	25	64.2	22.0	26.0	18.3	30	32	54.1	IMR-22-25
25	18	63.1	26.5	31.3	13.9	35	38	50.8	IMR-25-18
25	20	64.6	26.5	31.3	15.1	35	38	52.3	IMR-25-20

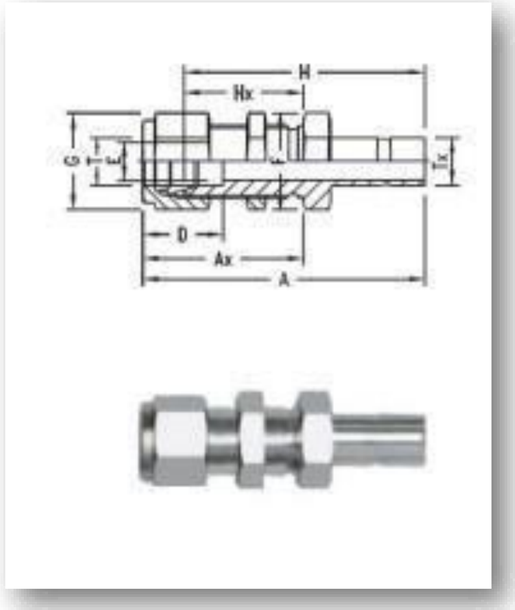


BULKHEAD REDUCER

T Tube OD	Tube OD	A	AX	D	E min.	F A/F	G A/F	H D	HX	Hole Thickness	Panel Thickness	IMPORLOK PART NO.
1/8	1/8	49.5	31.3	12.7	2	11	11	43	24.6	8.3	12.7	IMBR-2-2
1/4	1/4	55.9	33.5	15.3	4.8	16	14	48.5	26.2	11.5	10.2	IMBR-4-4
3/8	3/8	60.8	36.8	16.8	7.1	19	17	53.8	29.5	14.7	11.2	IMBR-6-6
0.5	1/2	72.9	41.9	22.9	9.9	24	22	62.7	31.8	19.5	12.7	IMBR-8-8
5/8	5/8	75.2	42.7	23.6	12.7	27	25	65	32.5	22.6	12.7	IMBR-10-10
1	1	100.4	57.4	31.2	20.3	35	38	88.1	45.2	33.7	19.1	IMBR-16-16
1.1/4	1.1/4	l20.7	69.9	4t.2	27.4	50	50	89.9	47.7	41.6	19.1	IMBR-20-20
1.1/2	1.l4	12?.2	76.4	50	33	60	60	l00.l	49.3	49.6	19.1	

METRIC OD TUBES

T Tube OD	Tube OD	A	AX	D	E min.	F A/F	G A/F	H D	HX	Hole Thickness	Panel Thickness	IMPORLOK PART NO.
6	3	47.1	33.6	15.3	2	16	14	39.7	26.2	11.5	10.2	IMBR-6-3
6	12	56.6	33.6	15.3	9.1	16	14	49.2	26.2	11.5	10.2	IMBR-6-12
8	6	51.8	36.1	16.2	4.6	17	16	44.3	28.6	13.1	11.2	IMBR-8-6
8	12	59.1	36.1	16.2	9.1	17	16	51.6	28.6	13.1	11.2	IMBR-8-12
10	8	53.7	37	17.2	8.2	22	19	46.1	29.4	16.3	11.2	IMBR-10-8
10	12	60	37	17.2	9.1	22	19	52.4	29.4	16.3	11.2	IMBR-10-12
12	6	57.6	41.9	22.8	4.6	24	22	47.5	3l.8	19.5	12.7	IMBR-12-6
12	10	59.4	41.9	22.8	8.2	24	22	49.3	31.8	19.5	12.7	IMBR-12-10
16	12	65.6	42.6	24.4	9.1	27	25	55.5	32.5	22.8	12.7	IMBR-16-12
20	16	77.6	53	26	12.7	35	32	67.5	42.9	29	19.J	IMBR-20-16
22	18	77.6	53	26	13.9	35	32	67.5	42.9	29	19.1	IMBR-22-18
25	20	84.3	57.4	31.2	15.1	35	38	72.1	45.2	33.7	19.1	IMBR-25-20
25	22	84.3	57.4	31.2	17.1	35	38	72.1	45.2	33.7	J9.1	IMBR-25-22
32	32	120.7	69.9	42	27.4	50	50	89.9	47.7	41.6	19.1	IMBR-32-32
38	38	127.2	78.4	49.4	33	60	60	100.1	49.3	49.6	19.1	IMBR-38-38



NOTE: The REDUCER « Please consultus.

BuLnirAD REDUCER shown on page 43 and 44 respectively are only indicative. Other combinations are alsoavailable.

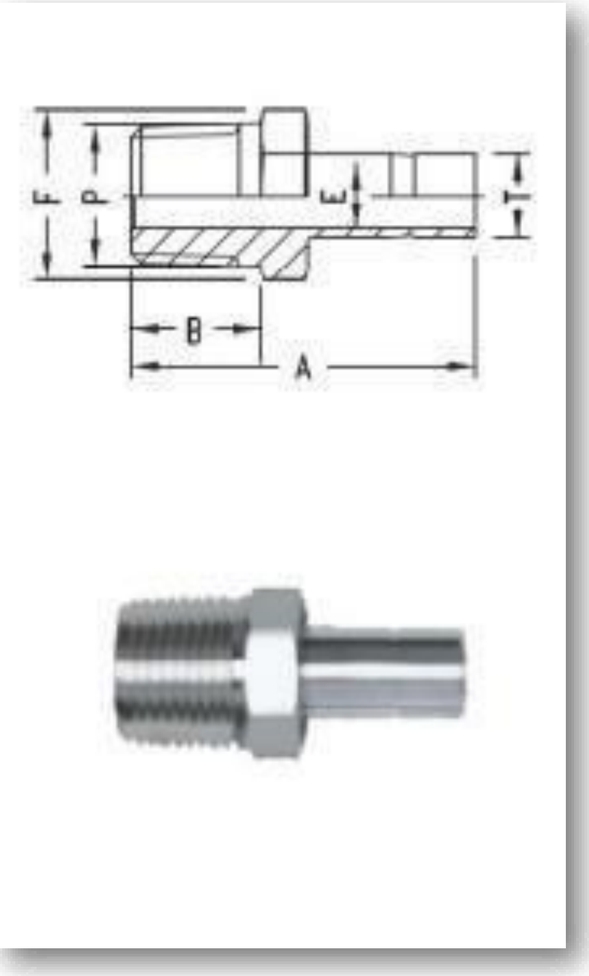
MALE ADAPTER

INCH OD TUBE X MALE NPT THREADS

T TUBE OD	NPT MALE	A	B	E min	F A/F	IMPORLOK PART NO.
1/8	1/8	29.5	9.6	4.8	11	IMA-2-2N
1/8	1/4	34.8	14.4	7.1	14	IMA-2-2N
1/4	1/8	31.8	9.6	4.8	11	IMA-4-2N
1/4	\/4	37.0	14.3	4.8	14	IMA-4-4N
1/4	3/g	37.8	14.3	4.8	19	IMA-4-6N
1/4	1/2	43,4	19.1	4.8	22	IMA-4-8N
5/I 6	1/4	38.1	14.3	6.3	14	IMA-5-4N
3/8	1/4	38.9	14.3	7.1	14	IMA-6-4N
3/8	3/8	39.6	14.3	7.1	19	IMA-6-6N
3/8	1/2	452.0	19.1	71.0	32	IMA-6-8N
1/2	1/4	44.5	14.3	7.1	14	IMA-8-4N
1/2	3/8	45.2	14.3	9.9	19	IMA-8-6N
1/2	I/2	50.8	19.1	9.9	Z2	IMA-8-8N
5/8	1/3	52.3	19.1	11.9	32	IMA-10-8N
3/4	\/2	523.0	19.1	11.9	32	IMA-12-8N
3/4	3/4	523.0	19.1	15.0	27	IMA-12-12N
1	3/4	53.7	19.1	15.7	Z7	IMA-16-16N
1	1	66.0	23.8	203.0	35	IMA-16-12N
1.1/4	1.1/4	80.3	Z3.8	27.6	45	IMA-20-20N
1.1/2	1.1/2	94.5	26.2	33.2	55	IMA-24-24N

INCH OD TUBES X MALE ISO* TAPERED PIPE THREADS

T TUBE OD	P NPT MALE	A	B	E min	F A/F	IMPORLOK PART NO.
1/8	1/8	29.5	9.6	4.8	11	IMA-2-2RX
1/8	1/4	34.8	14.4	71	14	IMA-2-4RX
1/4	1/4	31.8	9.6	48	11	IMA-4-2RX
1/4	1/4	310	14.3	48	14	IMA-4-4RX
1/4	3/8	378	14.3	4.8	19	IMA-4-6RX
1/4	1/2	43.4	19.1	4.8	22	IMA-4-8RX
3/8	1/4	38.9	14.3	7.1	14	IMA-6-4RX
3/8	3/8	39.6	14.3	7.1	19	IMA-6-6RX
3/8	1/2	412	19.1	7.1	32	IMA-6-8RX
1/2	1/4	44.5	14.3	7.1	14	IMA-8-4RX
1/2	3/8	452	14.3	9.9	19	IMA-8-6RX
1/2	1/3	50.8	19.1	9.9	32	IMA-8-8RX
3/4	3/4	52.3	19.1	15	37	IMA-12-12RX
1	1	66	23.8	20.3	35	IMA-16-12RX
1.1/4	1.1/4	80.3	23.8	216	45	IMA-20-20RX
1.1/4	1.1/4	94.5	262	33.2	55	IMA-24-24RX



*** Reference Specifications : BS 21 : 150 7/1 : JIS B 0203 : DIN 2999 : IS 554**

MALE ADAPTER

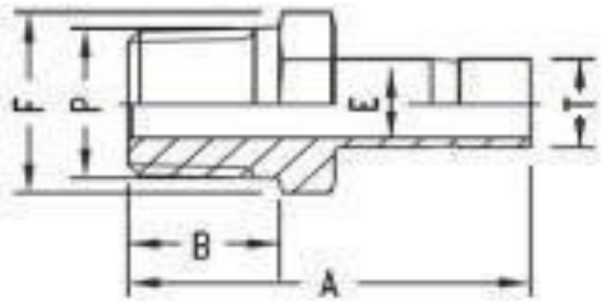
INCH OD TUBEX MALE NPT THREADS

T TUBE OD	NPT MALE	A	B	E min	F A/F	IMPORLOK PART NO.
3	1/4	34.8	9.6	7.1	14	IMA-3-2N
6	1/8	32.8	14.3	4.6	14	IMA-6-2N
6	1/4	38.1	14.3	4.6	14	IMA-6-4N
3	1/4	39.1	14.3	6.2	14	IMA-8-4N
10	1/4	39.9	14.3	7.1	14	IMA-10-4N
10	3/8	40.6	14.3	7.7	19	IMA-10-6N
12	1/4	46.5	14.3	7.1	14	IMA-12-4N
12	3/8	46.5	14.3	9.1	19	IMA-12-6N
12	1/2	52	14.3	9.1	Z2	IMA-12-8N
25	3/4	62	19.1	15.7	27	IMA-25-12N
25	1	66.8	23.8	15.7	35	IMA-25-16N
30	1	79.2	23.8	22.2	41	IMA-30-16N
30	1.1/4	80	23.8	24.6	45	IMA-30-20N
32	1.1/4	81	23.8	27.4	46	IMA-32-20N
38	1.1/2	922	26.2	33.3	55	IMA-38-24N

METRIC OD TUBEX MALE ISO* TAPEREDTHREADS

T TUBE OD	NPT MALE	A	B	E min	F A/F	IMPORLOK PART NO.
3	1/4	34.8	9.6	7.1	14	IMA-3-2RX
6	1/8	32.8	14.3	4.6	14	IMA-6-2RX
6	1/4	38.1	14.3	4.6	14	IMA-6-4RX
3	1/4	39.1	14.3	6.2	14	IMA-8-4RX
10	1/4	39.9	14.3	7.1	14	IMA-10-4RX
10	3/8	40.6	14.3	7.7	19	IMA-10-6RX
12	1/4	46.5	14.3	7.1	14	IMA-12-4RX
12	3/8	46.5	14.3	9.1	19	IMA-12-6RX
12	1/2	52	14.3	9.1	Z2	IMA-12-8RX
25	3/4	62	19.1	15.7	27	IMA-25-12RX
25	1	66.8	23.8	15.7	35	IMA-25-16RX
30	1	79.2	23.8	22.2	41	IMA-30-16RX
30	1.1/4	80	23.8	24.6	45	IMA-30-20RX
32	1.1/4	81	23.8	27.4	46	IMA-32-20RX
38	1.1/2	922	26.2	33.3	55	IMA-38-24RX

REFERENCE SPECIFICATION: BS 21 : ISO 7/1 : JISB 0203 : DIN 2999 : IS 554



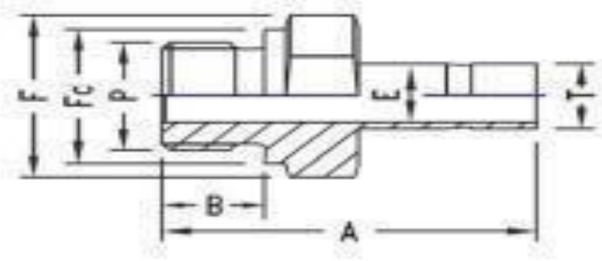
MALE ADAPTER

INCH OD TUBEX MALE ISO* PARALLEL THREADS - RS

TUBE OD	ISO MALE	A	B	E min	F A/F	FD	IMPORLOK PART NO.
1/8	1/8	31	7.1	2.4	14	13.7	IMA-2-2RS
1/8	1/4	35.8	11.2	2.4	19	17.8	IMA-2-4RS
1/4	1/8	33.3	7.1	4	14	13.7	IMA-4-2RS
1/4	1/4	38.1	11.2	4.8	19	17.8	IMA-4-4RS
3/8	1/4	39.9	112	5.8	19	17.8	IMA-4-6RS
3/8	3/8	40.6	112	7.1	22	27.8	IMA-4-8RS
1/2	1/4	455	112	5.8	19	17.8	IMA-6-4RS
1/2	3/8	46.3	112	7.9	22	27.6	IMA-6-6RS
1/2	**1/2**	49.3	142	9.9	27	26	IMA-8-4RS
3/4	3/4	54.9	157	15	32	31.8	IMA-8-6RS
1	1	64.5	182	79.8	41	38.8	IMA-8-8RS
1.1/4	1.14	79.5	198	27.4	50	49	IMA-12-12RS
1.1/2	1.1/2	93.7	22.1	33.3	55	54.7	IMA-24-24RS

METRIC 0D Tubes x Male 150“ Parallel Threads RS

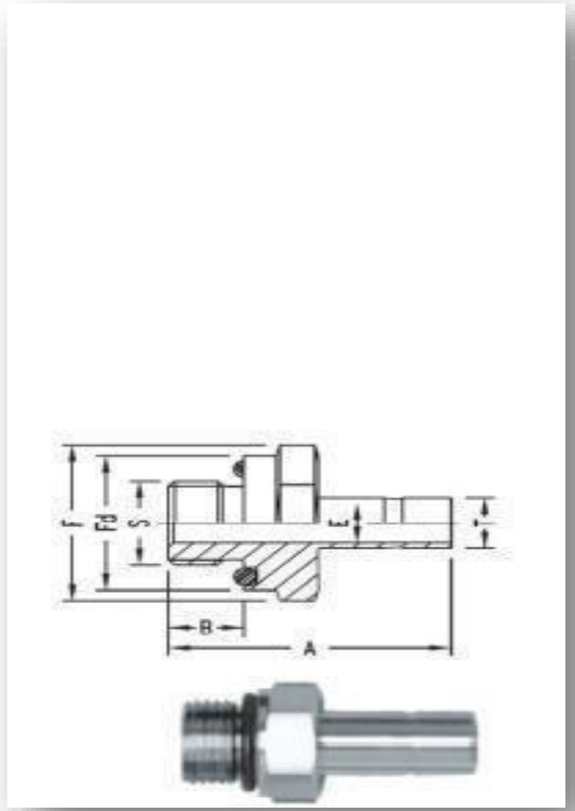
TUBE OD	ISO MALE	A	B	E min	F A/F	FD	IMPORLOK PART NO.
3	1/8	31.0	7.1	2.4	14	13.7	IMA-3-2RS
3	1/4	358	112	22	19	17.8	IMA-3-4RS
6	1/8	34.3	7.1	4	14	13.7	IMA-6-2RS
6	1/4	39.1	112	4.6	19	17.8	IMA-6-4RS
8	1/4	40.1	112	5.8	19	17.8	IMA-8-4RS
10	1/4	40.9	11.2	5.8	19	17.8	IMA-10-4RS
10	3/8	41.7	11.2	7.7	22	2T.7	IMA-10-6RS
10	1/2	44.7	14.2	7.7	27	25.9	IMA-10-8RS
12	1/4	46.7	11.2	5.8	19	17.8	IMA-12-4RS
12	3/8	47.2	11.2	7.9	2Z	21.7	IMA-12-6RS
12	1/2	50.5	14.2	91	27	25.9	IMA-12-8RS
16	1/2	50.5	14.2	117	27	25.9	IMA-16-8RS
22	3/4	5£2	15.7	15.8	35	32	IMA-22-12RS
22	1	64.5	18.3	19.8	41	39	IMA-22-16RS
25	1.1/4	79.5	19.8	27.4	50	49	IMA-25-20RS
25	1.1/2	93.7	22.1	33.3	55	54.7	IMA-25-24RS



* Reference Specification: BS 2779 : 150 228 /1 : JISB0202 : DIN-ISO 228/1
NOTE : 1. F0r use with soft metal gasket(usuallycopper) between fitting and female part face
2. Also available ii 150 Parallel Threads RP series for beaded metal gaskets. Seepage 2Z/23 lor explanation.

0 SEAL MALE ADAPTER
INCH 0D Tubes x Male Straight Threads- UNF

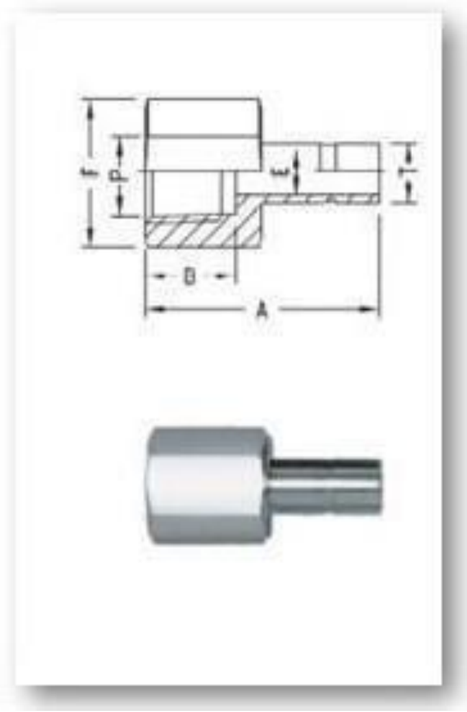
T TUBE OD	UNFMALE	A	B	E min	F	FD A/F	O Ring Part No.	IMPORLOK PART NO.
1/8	5/16-24	32.5	8.6	2.4	14	13.8	10PU	IOA-2-U
1/4	7/16-24	39.2	10.4	4.8	19	18.8	20PU	IOA-4-U
5/16	1/2.24	41.7	11.2	6.3	22	21.8	30PU	IOA-5-U
5/16	9/16.21	43.2	T2.0	7.1	24	23.6	40PU	IOA-6-U
1/2	3/4.24	49.5	î2.0	9.9	27	26.8	60PU	IOA-8-U
3/4	11/16-12	55.0	14.8	15.0	38	37.8	t20PU	IOA-12-U
1	15/16-12	62.5	î4.3	19.8	45	44.0	T60PU	IOA-16-U
1.1/4	15/8.12	79.5	t8.8	27.4	55	54.0	200PU	IOA-20-U
1.1/2	17/8.12	92.2	T9.8	33.3	60	58.0	240PU	IOA-24-U



FEMALE ADAPTER

INCH OD TUBES X FEMALE NPT THREADS

TUBE OD	NPT FEMALE	A	B	E min	F A/F	IMPORLOK PART NO.
1/8	1/8	31.5	10.4	2.4	14	IFA-2-2N
1/8	1/4	35.3	15.0	2.4	19	IFA-2-4N
1/4	1/8	33.0	10.4	4.8	14	IFA-4-2N
1/4	1/4	37.0	15.0	4.8	19	IFA-4-4N
1/4	3/8	39.4	15.0	4.8	22	IFA-4-6N
1/4	1/2	45.5	19.8	4.8	27	IFA-4-8N
5/16	1/4	37.6	15.0	6.3	19	IFA-5-4N
3/8	1/4	38.1	15.0	7.1	I 9	IFA-6-4N
3/8	3/8	40.4	15.0	7.1	22	IFA-6-6N
3/8	1/2	46.7	19.8	7.1	27	IFA-6-8N
1/2	1/4	43.5	15.0	9.9	I 9	IFA-8-4N
1/2	3/8	45.5	15.0	9.9	22	IFA-8-6N
1/2	1/2	51.8	19.8	9.9	27	IFA-8-8N
5/8	1/2	53.0	19.8	12.7	27	IFA-10-8N
3/4	J/2	52.8	19.8	15.0	27	IFA-12-8N
3/4	3/4	52.8	20.6	15.0	35	IFA-12-12N
3/4	1	58.4	25.4	15.0	41	IFA-12-16N
1	3/4	60.7	20.6	20.3	35	IFA-16-16N
1	1	64.3	25.4	20.3	41	IFA-16-12N
1.1/4	1.J/4	77.7	25.4	27.6	55	IFA-20-20N
I.1A	1.1/2	88.9	27.6	332.0	60	IFA-24-24N



INCH 0D Tubes X Female ISO* Tapered Pipe Threads

TUBE OD	NPT FEMALE	A	B	E min	F A/F	IMPORLOK PART NO.
1/4	1/4	37.0	15.0	4.8	19	IFA-4-4RX
1/4	3/8	39.4	15.0	4.8	22	IFA-4-6RX
1/4	1/2	45.5	19.8	4.8	27	IFA-4-8RX
3/8	1/4	38.1	15.0	7.1	19	IFA-6-4RX
3/8	3/8	40.4	15.0	7.1	22	IFA-6-6RX
1/2	1/4	43.5	15.0	9.9	19	IFA-8-4RX
1/2	3/8	45.5	15.0	9.9	22	IFA-8-6RX
1/2	1/2	51.8	19.8	9.9	27	IFA-8-8RX
3/4	3/4	52.8	20.6	15.0	35	IFA-12-12RX
3/4	1	58.4	25.4	15.0	41	IFA-12-16RX
1	3/4	60.7	20.6	20.3	35	IFA-16-16RX
1	1	64.3	25.4	20.3	41	IFA-16-12RX
1.1/4	1.1/4	77.7	25.4	27.6	55	IFA-20-20RX
1.1/2	1.1/2	88.9	27.6	33.2	60	IFA-24-24RX

* Reference Specifications : BS 21: IS0 7/1 : JIS B 0203 : DIN 2999 : IS 5fi4

NOTE: Female adapl0rs are also available with 150 parallel Female Pipe Threads similar combination of tube and150 Taper Pipe Threads. Please consult us.

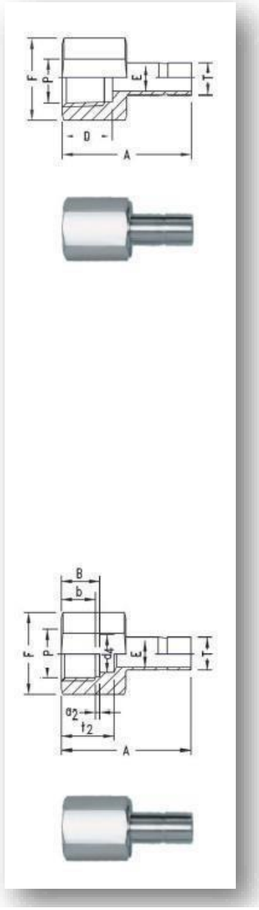
FEMALE ADAPTER
INCH OD TUBES X FEMALE NPT THREADS

T TUBE OD	P NPT FEMALE	A	B	E min	F A/F	IMPORLOK PART NO.
3	1/4	31.7	15.0	2.4	14	IFA-3-4N
6	1/8	32.5	9.9	4.6	14	IFA-6-2N
6	1/4	37.1	15.0	4.6	19	IFA-6-4N
8	1/4	37.6	15.0	6.4	19	IFA-8-4N
10	1/4	38.1	15.0	7.7	19	IFA-10-4N
10	3/8	40.1	15.0	7.7	22	IFA-10-6N
10	1/2	46.5	19.8	7.7	27	IFA-10-8N
12	1/4	43.7	15.0	9.1	19	IFA-12-4N
12	1/2	52.3	19.8	9.1	27	IFA-12-8N
16	1/2	47.7	19.8	9.1	27	IFA-16-8N
22	3/4	52.0	20.6	15.0	35	IFA-22-12N
25	3/4	51.2	20.6	15.0	35	IFA-25-12N
25	1	66.5	25.4	19.8	41	IFA-25-16N
32	1.1/4	78.0	25.4	27.4	55	IFA-32-20N
38	1.1/2	88.9	27.6	33.3	60	IFA-38-24N

METRIC OD TUBES X FEMALE ISO* TAPERED PIPE THREADS

T TUBE OD	P NPT FEMALE	A	B	E min	F A/F	IMPORLOK PART NO.
6	1/8	32.5	9.9	4.6	14	IFA-6-2RX
6	1/4	37.1	15.0	4.6	19	IFA-6-4RX
8	1/4	37.6	15.0	6.4	19	IFA-8-4RX
10	1/4	38.1	15.0	7.7	19	IFA-10-4RX
10	3/8	40.1	15.0	7.7	22	IFA-10-6RX
12	1/4	43.7	15.0	9.1	19	IFA-12-4RX
12	1/2	52.3	19.8	9.1	27	IFA-12-8RX
16	1/2	47.7	19.8	9.1	27	IFA-16-8RX
22	3/4	52.0	20.6	15.0	35	IFA-22-12RX
25	3/4	51.2	20.6	15.0	35	IFA-25-12RX
25	1	66.5	25.4	19.8	41	IFA-25-16RX
32	1.1/4	78.0	25.4	27.4	55	IFA-32-20RX
38	1.1/2	88.9	27.6	33.3	60	IFA-38-24RX

T TUBE OD	P ISO FEMALE	A	B	E min	F A/F	a2	d4	b min.	t2	IMPORLOK PART NO.
1/4	1/4	35.3	13.0	4.8	19	1.6	5.8	9.4	17.0	IEAMAN-4
3/8	3/8	39.4	41.2	6.6	24	1.6	-	9.9	-	IEAMAN-6
1/2	1/2	45.7	18.8	7.1	27	1.6	.	14.5	-	IEAMAN-8

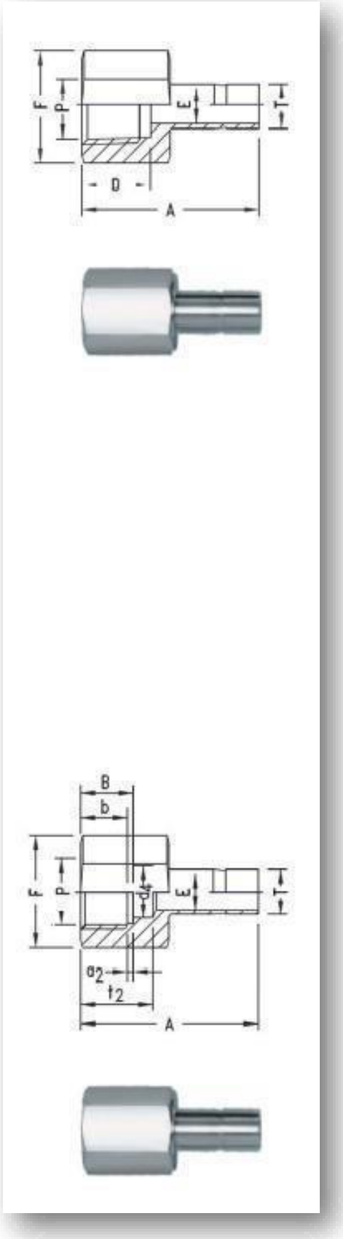


*ReferenceSpecification : BS 21 : ISO 7/1 : JIS B 0203 : DIN 2999 : IS 554

FEMALE ADAPTER
INCH OD PORTS X FEMALE ISO* PARALLEL THREADS (GAG)

METRIC OD PORTS X FEMALE ISO* PARALLEDL THREADS (GAGE)

T TUBE OD	P ISO FEMALE	A	B	E min	F A/F	a2	d4	b min.	t2	IMPORLOK PART NO.
6	1/4	35.3	12.9	4.6	19	1.6	5.5	9.5	17.0	IEAMAN-6-4
6	3/8	38.4	14.1	4.6	24	1.6	6.5	10.0	20.3	IEAMAN-6-6
6	1/2	42.9	18.9	4.6	27	1.6	7.0	14.5	24.9	IEAMAN-6-8
8	1/4	33.0	12.9	5.5	19	1.6	-	9.5	-	IEAMAN-8-4
8	1/2	43.7	18.9	6.2	27	1.6	7.0	14.5	24.9	IEAMAN-8-8
10	1/4	34.5	12.9	5.5	19	1.6	-	9.5	-	IEAMAN-10-4
10	1/2	40.1	18.9	7.0	27	1.6	-	14.5	-	IEAMAN-10-8
12	1/4	40.1	12.9	5.5	19	1.6	-	9.5	-	IEAMAN-12-4
12	1/2	48.8	18.9	7.0	27	1.6	-	14.5	-	IEAMAN-12-8



No seal is made around the male thread. Instead, a gasket is dropped into the flat bottom in the female thread, and the end of the male threaded and exerts a loan on the gasket to seal.

*ReferenceSpecification : BS 2779 : ISO 228/1 : JIS B0203 : DIN-ISO 228/1

Imporlok

DISTRIBUIDOR AUTORIZADO PARA AMERICA COMERCIALIZADORA IMPORVAL SAS

Cra 38 No. 12ª -47 local 103 Bogotá Colombia

TELEFONO: 3124871169

EMAIL: imporval@hotmail.com **www.imporval.com.co**

Fabrica V. Engineers (IMPORLOK)5- Mumba Devi bhavan, HP gas godown gali, goddev fatak road, Opp. Shiv Sai mandir, Bhayander (E) Mumbai –INDIA