

# Instrumentation Tube Fittings

for Large Size Application



## How to Order

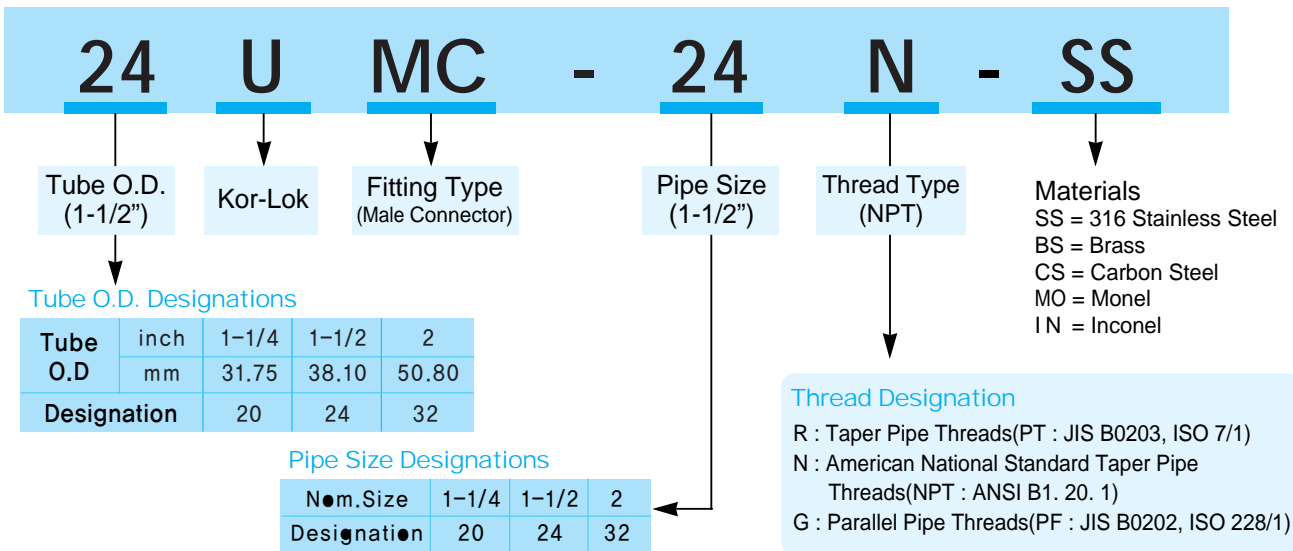
Kor-Lok Tube Fittings are ordered by part number as shown Index.

Size : Tube and pipe thread size are designated by the number of sixteenths of an inch and metric size.

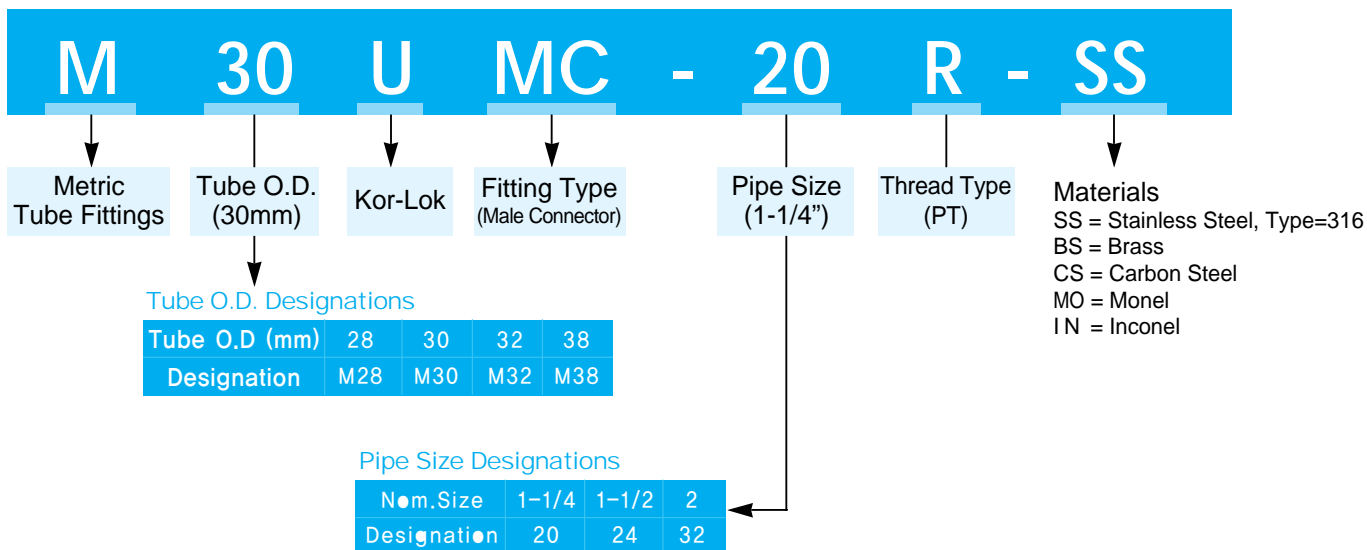
Type : A letter or combination of letters and numbers are used to designate the type of fittings.

Material : Basic material types(SS = 316SS, B=Brass).

### Nomenclature for Fractional Tube

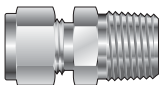
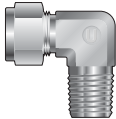


### Nomenclature for Metric Tube

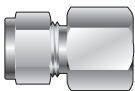


## INDEX

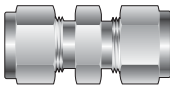
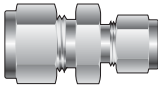
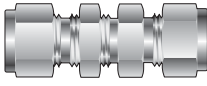
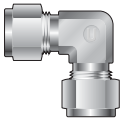
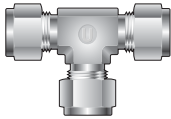
### ■ Tube to Male Pipe

PART	ITEM	Page
Male Connector <b>UMC</b>		4
Male Elbow <b>UME</b>		4

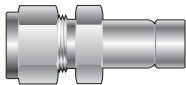
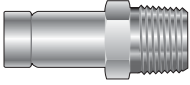
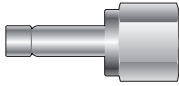
### ■ Tube to Female Pipe

PART	ITEM	Page
Female Connector <b>UFC</b>		5

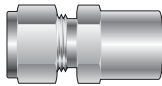
### ■ Tube to Tube

PART	ITEM	Page
Union <b>UU</b>		5
Reducing Union <b>URU</b>		6
Bulkhead Union <b>UBU</b>		6
Union Elbow <b>UEU</b>		7
Union Tee <b>UUT</b>		7

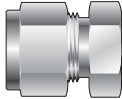




### ■ Stub Tube Connector

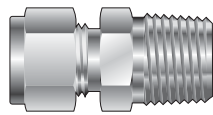
PART	ITEM	Page
Reducer <b>UR</b>		8
Male Adapter <b>UMA</b>		8
Female Adapter <b>UFA</b>		9

### ■ Tube to Welded Systems

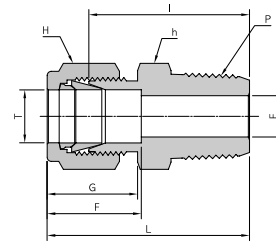
PART	ITEM	Page
Male Pipe Weld Connector <b>UPCW</b>		9

### ■ Components

PART	ITEM	Page
Tube Cap <b>UC</b>		10
Tube Plug <b>UP</b>		10
Nut <b>UN</b>		11
Front Ferrule <b>UFF</b>		11
Back Ferrule <b>UBF</b>		11



**Male Connector**  
**UMC**



Connects Fractional Tube to Female NPT Thread

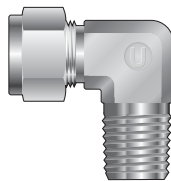
Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	l	L
	in	mm			in	mm	in	mm				
20UMC-16N	1-1/4	31.75	1	22	1-3/4	44.44	1-7/8	47.63	41.1	38.8	55.1	77.2
20UMC-20N	1-1/4	31.75	1-1/4	27	1-3/4	44.44	1-7/8	47.63	41.1	38.8	55.1	77.2
24UMC-24N	1-1/2	38.10	1-1/2	34	2-1/8	53.98	2-1/4	57.15	50.0	45.2	61.7	88.9
32UMC-32N	2	50.80	2	46	2-3/4	69.85	3	76.20	67.7	62.7	76.2	113.5

Male ISO Tapered Threads are available for all fractional UMC. Add "R" as a suffix instead of "N".

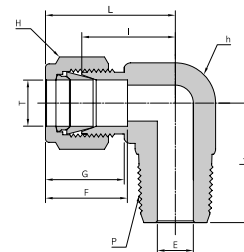
Connects Metric Tube to ISO Tapered Thread

Part No.	Tube O.D. T(mm)	P (PT)	E Min	h	H	F	G	l	L
M28UMC-16R	28.0	1	22.0	41.27	46.04	36.6	36.6	51.6	72.4
M28UMC-20R	28.0	1-1/4	22.0	46.04	46.04	36.6	36.6	52.3	73.1
M30UMC-20R	30.0	1-1/4	26.0	46.04	49.21	39.6	39.2	55.6	77.2
M32UMC-20R	32.0	1-1/4	28.0	46.04	49.21	42.0	41.6	56.6	79.6
M38UMC-24R	38.0	1-1/2	33.0	55.56	60.32	49.4	47.9	64.0	91.6

Male NPT Threads are available for all metric UMC. Add "N" as a suffix instead of "R".



**Male Elbow**  
**UME**



Connects Fractional Tube to Female NPT Thread

Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	l	L	L <sub>1</sub>
	in	mm			in	mm	in	mm					
20UME-20N	1-1/4	31.75	1-1/4	27	1-11/16	42.86	1-7/8	47.63	41.1	38.8	44.4	66.5	47.7
24UME-24N	1-1/2	38.10	1-1/2	34	2	50.80	2-1/4	57.15	50.0	45.2	50.8	77.9	60.4
32UME-32N	2	50.80	2	46	2-3/4	69.85	3	76.20	62.7	63.7	69.8	107.1	70.6

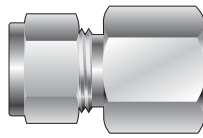
Male ISO Tapered Threads are available for all fractional UME. Add "R" as a suffix instead of "N".

Connects Metric Tube to Female ISO Tapered Thread

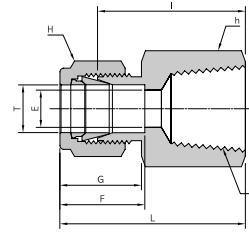
Part No.	Tube O.D. T(mm)	P (PT)	E Min	h (mm)	H (mm)	F	G	l	L	L <sub>1</sub>
M30UME-20R	30.00	1-1/4	26	46.04	49.21	39.6	39.2	48.3	69.9	53.1
M32UME-20R	32.00	1-1/4	27	46.04	49.21	42.0	41.6	49.3	72.3	53.1
M38UME-32R	38.00	1-1/2	33	55.56	60.32	49.4	47.9	56.4	84.0	60.4

Male NPT Threads are available for all metric UME. Add "N" as a suffix instead of "R".

Note : Dimensions are reference only, subject to change without prior notice. F, G and L are typical finger tight.



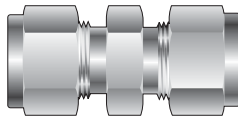
*Female Connector*  
**UFC**



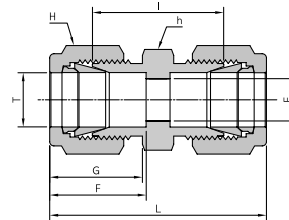
Connects Fractional Tube to Male NPT Thread

Part No.	Tube O.D. T		P (NPT)	E Min	h		H		F	G	l	L
	in	mm			in	mm	in	mm				
20UFC-20N	1-1/4	31.75	1-1/4	27	2-1/8	53.98	1-7/8	47.63	41.1	38.8	52.5	74.6
24UFC-24N	1-1/2	38.10	1-1/2	34	2-3/8	60.33	2-1/4	57.15	50.0	45.2	56.1	83.3
32UFC-32N	2	50.80	2	46	2-7/8	73.03	3	76.20	67.5	62.7	64.2	101.6

Female ISO Tapered Threads are available for all fractional UFC. Add "R" as a suffix instead of "N".



*Union*  
**UU**



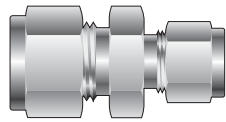
Connects Fractional Tube

Part No.	Tube O.D. T		E Min	h		H		F	G	l	L
	in	mm		in	mm	in	mm				
20UU	1-1/4	31.75	27	1-3/4	44.44	1-7/8	47.63	41.1	38.8	48.0	92.2
24UU	1-1/2	38.10	34	2-1/8	53.97	2-1/4	57.15	50.0	45.2	53.6	107.9
32UU	2	50.80	46	2-3/4	69.85	3	76.20	67.5	62.7	74.6	149.3

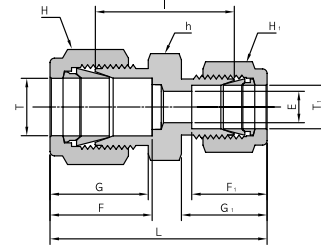
Connects Metric Tube

Part No.	Tube O.D. T(mm)	E Min	h		H		F	G	l	L
			in	mm	in	mm				
M28UU	28.0	22	1-5/8	41.27	1-13/16	46.04	36.6	36.6	43.4	85.0
M30UU	30.0	26	1-13/16	46.04	1-15/16	49.21	39.6	39.2	49.5	92.7
M32UU	32.0	28	1-13/16	46.04	1-15/16	49.21	42.0	41.6	51.3	97.3
M38UU	38.0	33	2-3/16	55.56	2-3/8	60.32	49.4	47.9	58.4	113.6

Note : Dimensions are reference only, subject to change without prior notice. F,G and L are typical finger tight.

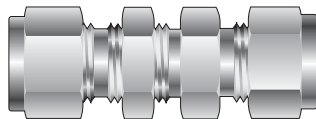


**Reducing Union**  
**URU**

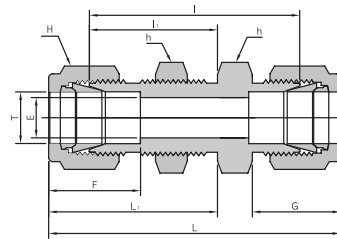


Connects Metric Tube

Part No.	Tube O.D.		E Min	Width across flat			F	F <sub>1</sub>	G	G <sub>1</sub>	l	L
	T(mm)	T <sub>1</sub> (mm)		h	H	H <sub>1</sub>						
M30URU-M18	30.0	18.0	15	46.04	49.21	30.16	39.6	24.4	39.2	22.0	43.7	75.4
M30URU-M20	30.0	20.0	16	46.04	49.21	31.75	39.6	26.0	39.2	22.0	43.7	75.4
M30URU-M25	30.0	25.0	22	46.04	49.21	38.10	39.6	31.3	39.2	26.5	46.2	80.1
M32URU-M18	32.0	18.0	24	46.04	49.21	30.16	42.0	24.4	41.6	22.0	44.7	77.8
M32URU-M20	32.0	20.0	26	46.04	49.21	31.75	42.0	26.0	41.6	22.0	44.7	77.8
M32URU-M25	32.0	25.0	31	46.04	49.21	38.10	42.0	31.3	41.6	26.5	47.0	82.3
M38URU-M20	38.0	20.0	26	55.56	60.32	31.75	49.4	26.0	47.9	22.0	49.8	87.5
M38URU-M25	38.0	25.0	30	55.56	60.32	38.10	49.4	31.3	47.9	26.5	52.1	92.0
M38URU-M30	38.0	30.0	40	55.56	60.32	50.80	49.4	39.6	47.9	39.2	55.4	104.6



**Bulkhead Union**  
**UBU**



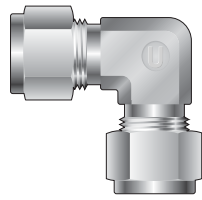
Connects Fractional Tube

Part No.	Tube O.D.		E min	h		H		F	G	l	l <sub>1</sub>	L	L <sub>1</sub>	Panel Hole Drill Size	Max Panel Thickness
	in	mm		in	mm	in	mm								
20UBU	1-1/4	31.75	27	1-7/8	47.63	1-7/8	47.63	41.1	38.8	78.9	47.7	123.1	69.8	42.0	20.0
24UBU	1-1/2	38.10	34	1-1/4	57.15	2-1/4	57.15	50.0	45.2	84.8	49.2	139.1	76.5	50.0	20.0
32UBU	2	50.82	46	2-3/4	69.85	3	76.20	67.5	62.7	105.6	56.3	180.3	93.7	58.0	20.0

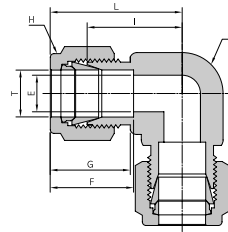
Connects Metric Tube

Part No.	Tube O.D. T(mm)	E min	h		H		F	G	l	l <sub>1</sub>	L	L <sub>1</sub>	Panel Hole Drill Size	Max Panel Thickness
			in	mm	in	mm								
M30UBU	30.0	26	1-15/16	49.21	1-15/16	49.21	39.6	39.2	80.5	48.6	123.7	69.8	40.0	20.0
M32UBU	32.0	28	1-15/16	49.21	1/15/16	49.21	42.0	41.6	82.3	49.5	128.3	72.5	42.0	20.0
M38UBU	38.0	33	2-3/8	60.32	2-3/8	60.32	49.4	47.9	89.4	51.5	144.6	79.1	50.0	20.0

Note : Dimensions are reference only, subject to change without prior notice. F, G and L are typical finger tight.



*Union Elbow*  
**UEU**

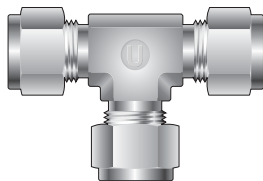


Connects Fractional Tube

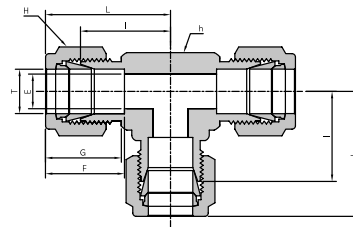
Part No.	Tube O.D. T		E Min	h		H		F	G	l	L
	in	mm		in	mm	in	mm				
20UEU	1-1/4	31.75	27	1-11/16	42.86	1-7/8	47.63	41.1	38.8	44.4	66.5
24UEU	1-1/2	38.10	34	2	50.80	2-1/4	57.15	50.0	45.2	50.8	77.9
32UEU	2	50.80	46	2-3/4	69.85	3	76.20	67.5	62.7	69.8	107.1

Connects Metric Tube

Part No.	Tube O.D. T(mm)	E Min	h		H		F	G	l	L
			in	mm	in	mm				
M28UEU	28.0	22	1-5/8	41.27	1-13/16	46.04	36.6	36.6	43.2	64.0
M30UEU	30.0	26	1-13/16	46.04	1-15/16	49.21	39.6	39.2	48.3	69.9
M32UEU	32.0	27	1-13/16	46.04	1-15/16	49.21	42.0	41.6	49.3	72.3
M38UEU	38.0	33	2-3/16	55.56	2-3/8	60.32	49.4	47.9	56.4	84.0



*Union Tee*  
**UUT**



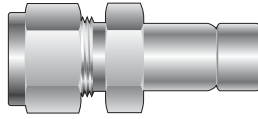
Connects Fractional Tube

Part No.	Tube O.D. T		E Min	h		H		F	G	l	L
	in	mm		in	mm	in	mm				
20UUT	1-1/4	31.75	27	1-11/16	42.86	1-7/8	47.63	41.1	38.8	44.4	66.5
24UUT	1-1/2	38.10	34	2	50.80	2-1/4	57.15	50.0	45.2	50.8	77.9
32UUT	2	50.80	46	2-3/4	69.85	3	76.20	67.5	62.7	69.8	107.1

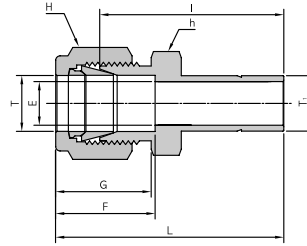
Connects Metric Tube

Part No.	Tube O.D. T(mm)	E Min	h		H		F	G	l	L
			in	mm	in	mm				
M28UUT	28.0	22	1-5/8	41.27	1-13/16	46.04	36.6	36.6	43.2	64.0
M30UUT	30.0	26	1-13/16	46.04	1-15/16	49.21	39.6	39.2	48.3	69.9
M32UUT	32.0	27	1-13/16	46.04	1-15/16	49.21	42.0	41.6	49.3	72.3
M38UUT	38.0	33	2-3/16	55.56	2-3/8	60.32	49.4	47.9	56.4	84.0

Note : Dimensions are reference only, subject to change without prior notice. F,G and L are typical finger tight.

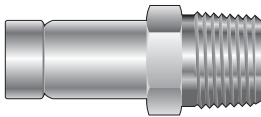


**Reducer**  
**UR**

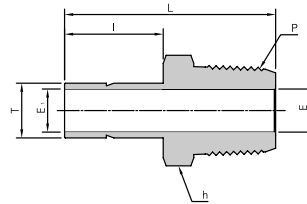


Connects Fractional Tube to Fractional Kor-Lok Port

Part No.	Tube O.D.				E Min	h		H		F	G	l	L
	T		T <sub>1</sub>			in	mm	in	mm				
	in	mm	in	mm									
20UR-24	1-1/4	31.75	1-1/2	38.10	27	1-7/8	47.63	2-1/4	57.15	41.1	38.8	82.0	104.1
20UR-32	1-1/4	31.75	2	50.80	27	1-7/8	47.63	3	76.20	41.1	38.8	103.1	125.2
24UR-32	1-1/4	38.10	2	50.80	34	2-1/4	57.15	3	76.20	50.0	45.2	104.1	131.3



**Male Adapter**  
**UMA**



Connects Fractional Kor-Lok Port to Female NPT Thread

Part No.	Tube O.D. T		P (NPT)	E min	h		l	L
	in	mm			in	mm		
20UMA-20N	1-1/4	31.75	1-1/4	27	1-3/4	44.45	40.0	80.2
24UMA-24N	1-1/2	38.10	1-1/2	33	2-1/8	53.98	51.5	94.4
32UMA-32N	2	50.80	2	45	2-3/4	69.85	68.4	119.3

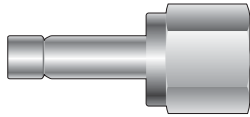
Female ISO Tapered Threads are available for all fractional UMA. Add "R" as a suffix instead of "N".

Connects Metric Kor-Lok Port to Female ISO Tapered Thread

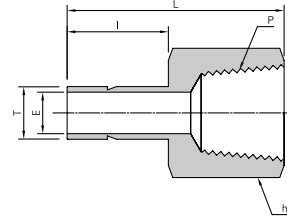
Part No.	Tube O.D. T (mm)	P (PT)	E	h		l	L
				in	mm		
M28UMA-16R	28.0	1	23	1-3/8	34.92	31.7	74.7
M28UMA-20R	28.0	1-1/4	23	1-13/16	46.04	31.7	76.2
M30UMA-20R	30.0	1-1/4	25	1-13/16	46.04	40.0	80.0
M32UMA-20R	32.0	1-1/4	27	1-13/16	46.04	40.0	81.0
M38UMA-24R	38.0	1-1/2	33	2-3/16	55.56	51.5	92.2

Female NPT Threads are available for all metric UMA. Add "N" as a suffix instead of "R".

Note : Dimensions are reference only, subject to change without prior notice. F,G and L are typical finger tight.



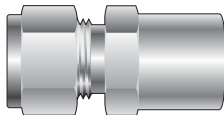
**Female Adapter**  
**UFA**



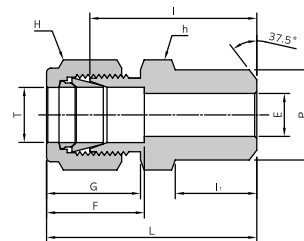
Connects Fractional Kor-Lok Port to Male NPT Thread

Part No.	Tube O.D. T		P (NPT)	E Min	h		l	L
	in	mm			in	mm		
20UFA-20N	1-1/4	31.75	1-1/4	27	2-1/8	53.9	40.0	77.7
24UFA-24N	1-1/2	38.10	1-1/2	33	2-3/8	60.3	51.5	88.9
32UFA-32N	2	50.80	2	45	2-7/8	73.0	68.4	107.4

Female ISO Tapered Threads are available for all fractional UFA. Add "R" as a suffix instead of "N".



**Male Pipe Weld Connector**  
**UPCW**



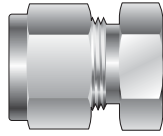
Connects Fractional Tube to Pipe

Part No.	Tube O.D. T		Pipe Weld size P		E Min	h		H		F	G	l	l <sub>1</sub>	L
	in	mm	Nom	O.D.		in	mm	in	mm					
20UPCW-20P	1-1/4	31.75	1-1/4	42.16	27	1-3/4	44.45	2	50.80	41.1	38.8	55.1	23.9	77.2
24UPCW-24P	1-1/2	38.10	1-1/2	48.26	34	2-1/8	53.98	2-1/4	57.15	50.0	45.2	61.7	26.2	88.9
32UPCW-32P	2	50.80	2	60.33	47	2-3/4	69.85	3	76.20	67.5	62.7	76.2	26.9	113.5

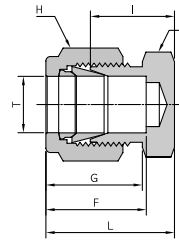
Connects Metric Tube to Pipe

Part No.	Tube O.D. T(mm)	Pipe Weld size P	E Min	h	H	F	G	l	l <sub>1</sub>	L
M30UPCW-20P	30.0	1-1/4	26.0	46.04	49.21	39.6	39.2	55.6	23.9	77.2
M32UPCW-20P	32.0	1-1/4	28.0	46.04	49.21	42.0	41.6	56.6	23.9	79.6
M38UPCW-24P	38.0	1-1/2	33.0	55.56	60.32	49.4	47.9	64.0	26.2	91.6

Note : Dimensions are reference only, subject to change without prior notice. F,G and L are typical finger tight.



**Tube Cap**  
**UC**

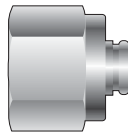


Connects Fractional Tube

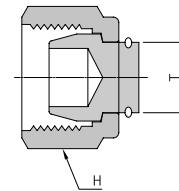
Part No.	Tube O.D. T		h		H		F	G	l	L
	in	mm	in	mm	in	mm				
20UC	1-1/4	31.75	1-3/4	44.45	1-7/8	47.63	41.1	38.8	31.2	53.3
24UC	1-1/2	37.10	2-1/8	53.98	2-1/4	57.15	50.0	45.2	37.3	64.5
32UC	2	50.80	2-3/4	69.85	3	76.20	67.5	62.7	49.2	86.6

Connects Metric Tube

Part No.	Tube O.D. T(mm)	h	H	F	G	l	L
M28UC	28.0	41.27	46.04	36.6	36.6	27.7	48.5
M30UC	30.0	46.04	49.21	39.6	39.2	31.8	53.4
M32UC	32.0	46.04	49.21	42.0	41.6	32.8	55.8
M38UC	38.0	55.56	60.32	49.4	47.9	37.8	65.4



**Tube Plug**  
**UP**



Connects Fractional Tube

Part No.	Tube O.D. T		H	
	in	mm	in	mm
20UP	1-1/4	31.75	1-7/8	47.63
24UP	1-1/2	38.10	2-1/4	57.15
32UP	2	50.80	3	76.20

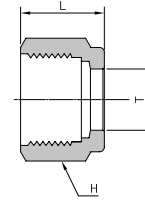
Connects Metric Tube

Part No.	Tube O.D. T(mm)	H
M28UP	28.0	46.04
M30UP	30.0	49.21
M32UP	32.0	49.21
M38UP	38.0	60.32

Note : Dimensions are reference only, subject to change without prior notice. F,G and L are typical finger tight.



*Nut*  
**UN**



Connects Fractional Tube

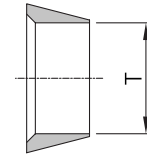
Part No.	Tube O.D. T		H		L
	in	mm	in	mm	
20UN	1-1/4	31.75	1-7/8	47.63	31.7
24UN	1-1/2	38.10	2-1/4	57.15	38.1
32UN	2	50.80	3	76.20	52.3

Connects Metric Tube

Part No.	Tube O.D. T(mm)	H	L
M28UN	28.0	46.04	30.6
M30UN	30.0	49.21	23.7
M32UN	32.0	49.21	34.4
M38UN	38.0	60.32	40.6



*Front Ferrule*  
**UFF**



Connects Fractional Tube

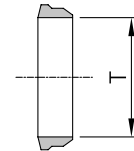
Part No.	Tube O.D. T	
	in	mm
20UFF	1-1/4	31.75
24UFF	1-1/2	37.10
32UFF	2	50.80

Connects Metric Tube

Part No.	Tube O.D. T (mm)
M28UFF	28.0
M30UFF	31.0
M32UFF	32.0
M38UFF	38.0



*Back Ferrule*  
**UBF**



Connects Fractional Tube

Part No.	Tube O.D. T	
	in	mm
20UBF	1-1/4	31.75
24UBF	1-1/2	38.10
32UBF	2	50.80

Connects Metric Tube

Part No.	Tube O.D. T (mm)
M28UBF	28.0
M30UBF	30.0
M32UBF	32.0
M38UBF	38.0

Note : Dimensions are reference only, subject to change without prior notice. F,G and L are typical finger tight.



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