

# Weld & Metal Face Seal Fittings

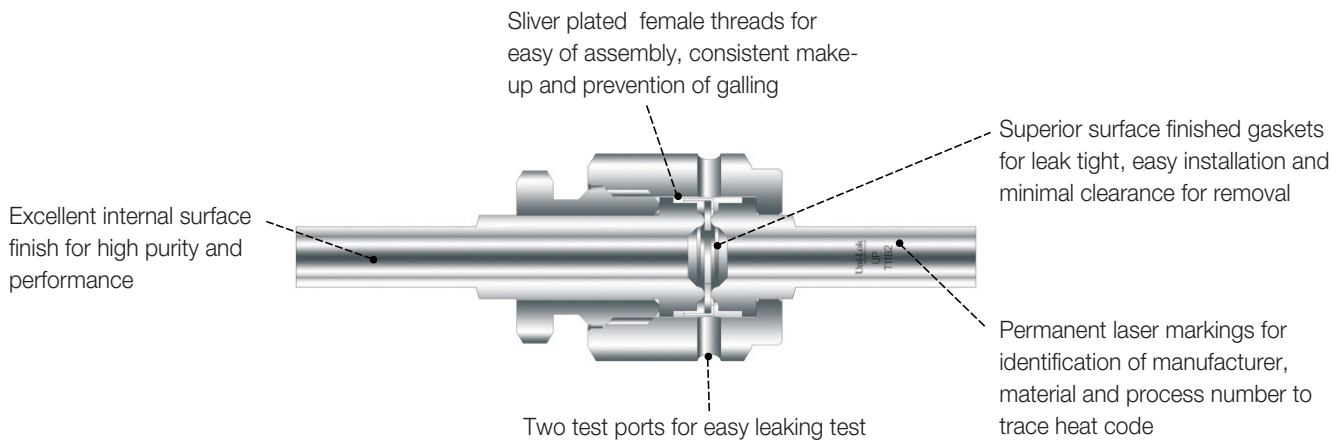


Uni-Lok® Weld & Metal Face Seal (UCR) Fittings are designed and manufactured as high performance and high purity components by our own know-how to be accumulated throughout the years.

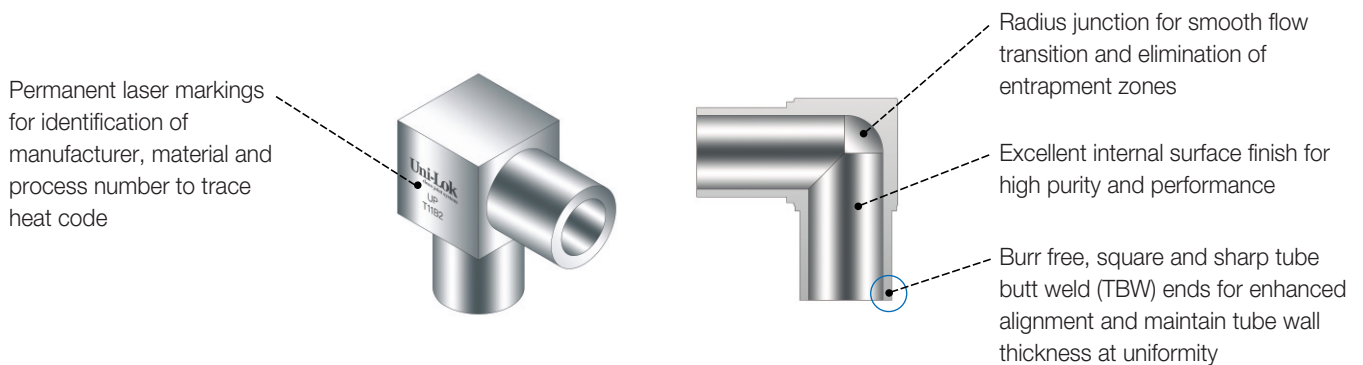
Uni-Lok® guarantees high quality butt welding between tubes and fittings as well as leak free assembly for critical applications.

## Features

### Metal Face Seal (UCR) Fittings



### Weld Fittings



### Internal Surface Finish Levels

Designator	Surface Finish(um)	
	Average	Maximum
BA	< 0.4	< 1.6
EP	< 0.125	< 0.4

Reference Specification :  
SEMA-90120400B

### Surface Analysis

SEM, ESCA/XPS, AES analysis for all electro polished products are used to measure surface cleanliness and anticorrosion requirements in accordance with SEMA specifications.

SEM – SEMA 90120401B-STD

ESCA/XPS – SEMA 90120403B-STD

AES – SEMA 91060573B-STD

## Plating

Female nuts are silver plated for easy of assembly, consistent make-up, prevention of galling and reduction of the torque required for fitting assembling.

## Materials

Designator	Surface Finish(um)
<b>Glands, Unions, Weld Fittings</b>	
VIM/VAR	Forging – ASTM A182 Bar Stock – ASTM SA479
VCR/VAR*	
316LSS	
<b>Nuts, Plugs, Caps, UCR Threaded Fittings</b>	
316LSS	Forging – ASTM A182 Bar Stock – ASTM SA479
<b>Gaskets</b>	
Nickel	ASTM B162
316LSS	ASTM A167

VCR/VAR is UHP(Ultra High Purity) 316LSS material with low Sulfur and Manganese in comply with SEMI F-20 and is Uni-Lok's standard material of Glands, Unions and Weld Fittings for 1/4" & 1/2" sizes.

## Pressure Ratings

Tube O.D.	Wall Thickness	Pressure Rating	
		psig	bar
1/4"	1.00mm	5200	359
	0.89mm		
3/8"	1.00mm	3350	231
	0.89mm		
1/2"	1.24mm	3750	259
3/4"	1.65mm	3350	231
1"	1.65mm	2400	265

0.89mm(0.035") wall thick fittings are available upon request..  
When ordering, be sure to add -A to the part number.

Pressure ratings are calculated in accordance with ANSI/ASME B31.3 for stainless steel pressure piping at room temperature.

## Temperature Ratings

Components	Materials	F	C
Fittings	VIM/VAR	1000	537
	VCR/VAR		
	316LSS		
Gaskets	316LSS	1000	537
	Nickel	600	315

## Helium Leak Test

Uni-Lok fittings are rated to a helium leak rate of less than 1x10<sup>-9</sup> mbar.l/sec and tested in accordance with SEMA-90120391B-STD and SEMI F1-96.

## Particle Contribution Test

According to ASTM F1394-92.

## Moisture Contribution Test

According to SEMA-90120397B-STD.

## Cleaning

All components are precisely cleaned with 18MΩ deionized water after the passivation procedure. Reference specification : SEMI E49.6.

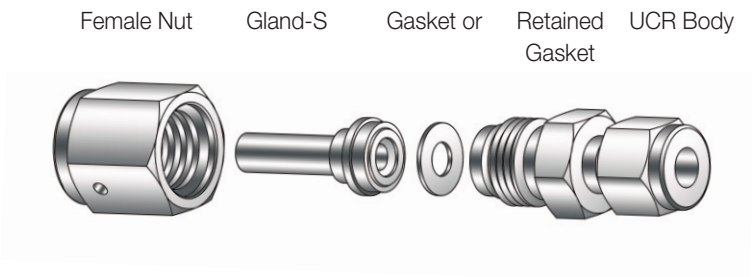
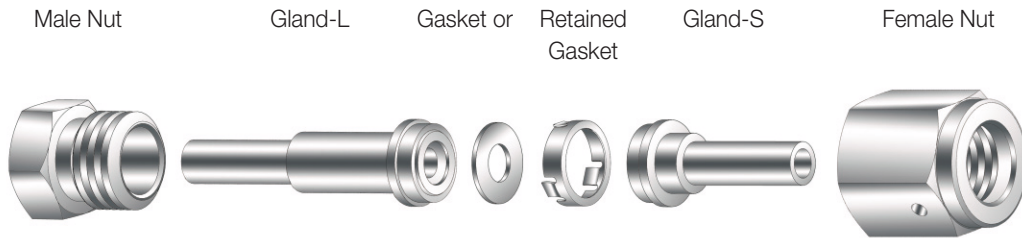
## Assembling

According to SEMI E49.6.

## Packaging

Each component is double bagged to ensure component cleanliness and to protect it from environmental contamination. Referenced specification : SEMI E49.1.

## Typical Assemblies



## Installation Instruction



**Step A.**  
Place gasket into female nut.

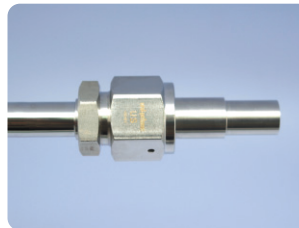


**Step C.**  
Tighten female nut 1/8 turn past finger tight holding the backup wrench stationary.

or



**Step AA.**  
Guide retained gasket over gland UCR face.



**Step D.**  
Confirm face seal and gasket's position again.



**Step B.**  
Tighten female nut to male nut or UCR body finger tight.

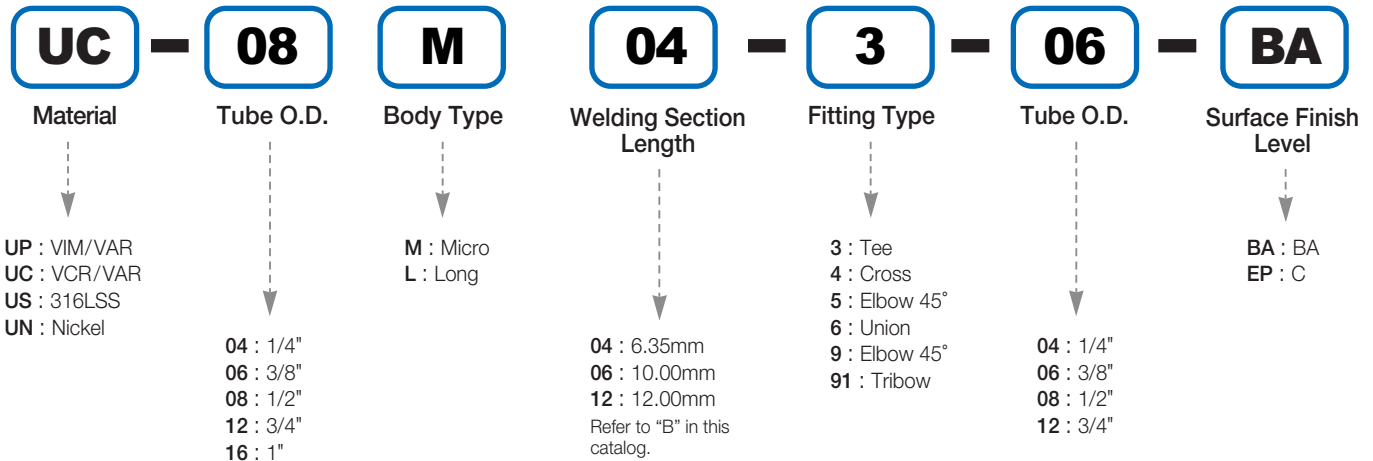
Metal face seal connections are remakable only using new gasket for each remake.

## How To Order

### Weld Fittings

Uni-Lok Weld Fittings are ordered by part number as shown as below.

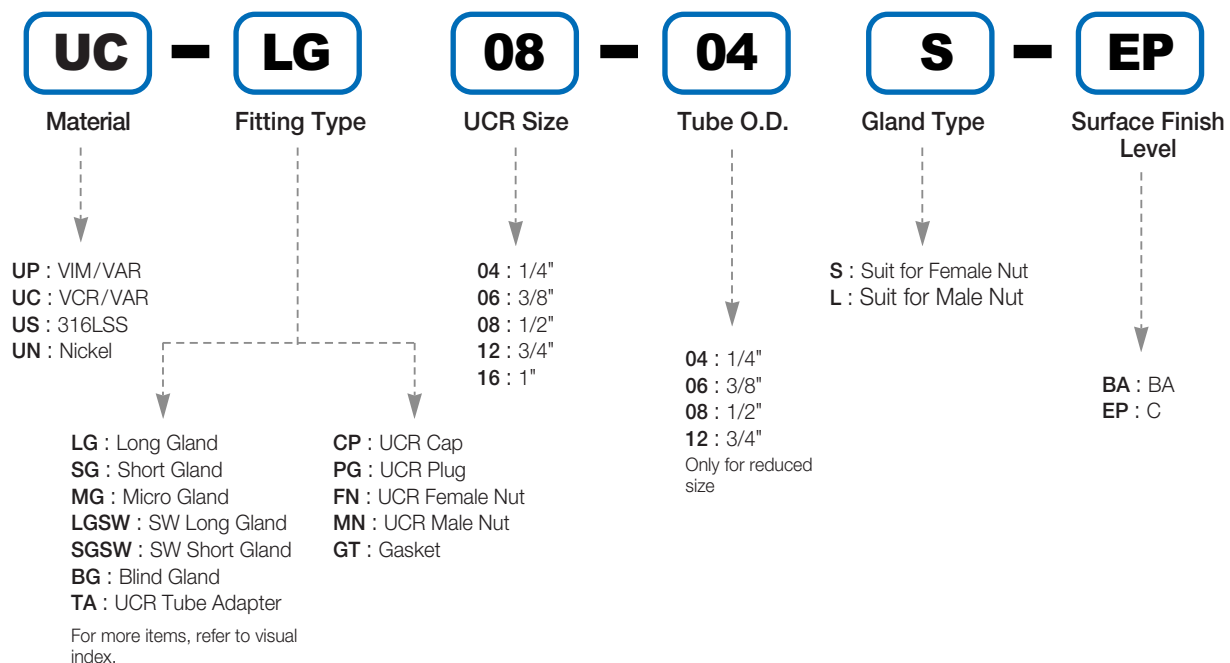
**Example :** The following part number, **UC-08-M04-3-06-BA**, is designated for Micro Reducing Tee, 1/2" TBW x 1/2" TBW" x 3/8" TBW, VCR/VAR, BA.



### Metal Face Seal (UCR) Fittings

Uni-Lok Metal Face Seal (UCR) Fittings are ordered by part number as shown as below.

**Example :** The following part number, **UC-LG08-04S-C**, is designated for Long Gland-S, 1/2" UCR x 1/4" TBW", VCR/VAR, EP.



## Visual Index

### Weld Fittings

	Micro 45° Elbow -M04-5	8		Micro 90° Elbow -M04-9	8		Reducing Micro 90° Elbow -M04-9-	8
	Micro Tee -M04-3	9		Micro Tee -M04-3	9		Reducing Micro Tee -M04-3-	9
	Micro Tribow -M04-91	9		Micro Cross -M04-4	10		Reducing Micro Union -M04-6-	10
	Long 90° Elbow -H12-9	10		Reducing Long 90° Elbow -H12-9-	11		Long Tee -H12-3	11
	Reducing Long Tee -H12-3-	11		Reducing Long Union -H12-6-	12	<h3>Metal Face Seal (UCR) Fittings</h3> <h4>- Glands</h4>		
	Micro Gland-S -MG-S	13		Micro Gland-L -MG-L	13			
	Short Gland-L -SG-L	14		Long Gland-S -LG-S	14		Long Gland-L -LG-L	15
	Socket Weld Short Gland -SG-SW-	15		Socket Weld Long Gland -LG-SW-	16		Reducing Socket Weld Long Gland -LG-SW-	16
	Blind Gland -BG-	16	<h4>- Caps, Plugs, Nuts &amp; Gaskets</h4>				UCR Cap -CP-	17
	UCR Plug -PG-	17					UCR Female Nut -FN-	17
	Gasket -GT-	18		Retained Gasket -GT-R	18		Blind Gasket -GT-B	18



**- High Flow Components**



**HR Bulkhead Adapter**  
-BBD-HR

19



**HR Long Gland**  
-HG-HR

19



**HR Adapter**  
-BD-HR

19



**HR Female Nut**  
-FN-HR

20



**HR Male Nut**  
-MN-HR

20

**UCR Threaded Fittings**

**- UCR to UCR**



**Bulkhead Union**  
-CBU-

21



**Double Male Union**  
-CMU-

21



**Reducing Double Male Union**  
-CMRU-

21



**Union Elbow**  
-CUE-

22



**Union Tee**  
-CUT-

22



**Union Cross**  
-CUC-

22



**Double Female Reducing Union**  
-CFRU-

23



**Reducing Adapter**  
-CRA-

23



**Reducing Bushing**  
-CRB-

23



**Coupling**  
-CPC-

23

**- UCR to TBW**



**TBW Adapter**  
-CTA-

24



**TBW Bulkhead Adapter**  
-CBTA-

24

**- UCR to Uni-Lok**



**Uni-Lok Connector**  
-CUC-

25



**Uni-Lok Bulkhead Connector**  
-CUBC-

25

**- UCR to Thread**



**Male Connector**  
-CMC-

26



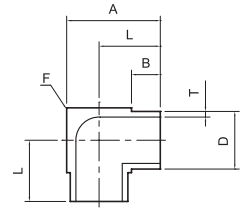
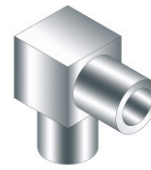
**Male Elbow**  
-CME-

26



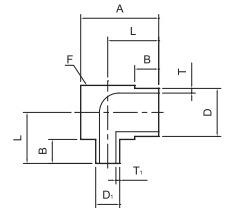
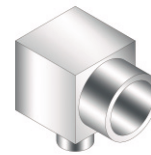
**Female Connector**  
-CFC-

27



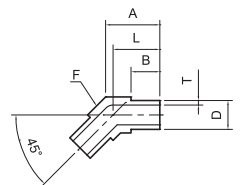
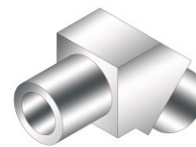
## Micro 90° Elbow

Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	F
UC-02-M04-9-	1/8	3.17	0.028	0.71	14.29	6.35	10.32	7.94
UC-04-M04-9-A-	1/4	6.35	0.035	0.89				
UC-04-M04-9-	1/4	6.35	0.039	1.00	17.46		11.91	11.11
UC-06-M04-9-	3/8	9.52		1.00			13.50	14.29
UC-08-M04-9-	1/2	12.70	0.049	1.24	20.64		16.67	20.65
UC-12-M04-9-	3/4	19.05	0.065	1.65	27.00			



## Reducing Micro 90° Elbow

Part No.	Tube O.D. (D)		Tube W.T. (T)		Tube O.D. (D <sub>i</sub> )		Tube W.T. (T <sub>i</sub> )		Dimension (mm)			Body Cube
	inch	mm	inch	mm	inch	mm	inch	mm	A	B	L	F
UC-04-M04-9-02-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	14.29	6.35	10.32	7.94
UC-06-M04-9-04-	3/8	9.52		1.00	1/4	6.35	0.039	1.00	17.46		11.91	11.11
UC-08-M04-9-04-	1/2	12.70	0.049	1.24	1/4	6.35		1.00	20.64		13.50	14.29
UC-08-M04-9-06-	1/2	12.70	0.049	1.24	3/8	9.52	1.00					

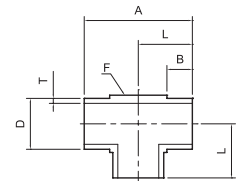
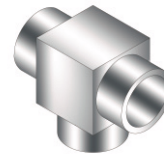


## Micro 45° Elbow

Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	F
UC-04-M04-5-A-	1/4	6.35	0.035	0.89	11.96	6.35	10.32	7.94
UC-04-M04-5-	1/4	6.35	0.039	1.00				
UC-06-M04-5-	3/8	9.52		1.00	14.21		11.91	11.11
UC-08-M04-5-	1/2	12.70	0.049	1.24	16.46		13.50	14.29

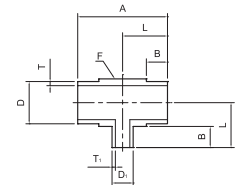
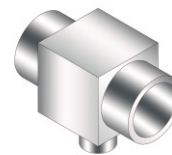
Uni-Lok® standard materials for each components are shown on the above part numbers.  
Dimensions are for reference only and are subject to change without prior notice.





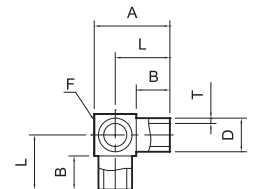
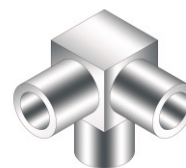
### Micro Tee

Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	F
UC-02-M04-3-	1/8	3.17	0.028	0.71	20.64	6.35	10.32	7.94
UC-04-M04-3-A-	1/4	6.35	0.035	0.89				
UC-04-M04-3-	1/4	6.35	0.039	1.00	23.81		11.91	11.11
UC-06-M04-3-	3/8	9.52		1.00			13.50	14.29
UC-08-M04-3-	1/2	12.70	0.049	1.24	26.99		16.67	20.65
UC-12-M04-3-	3/4	19.05	0.065	1.65	33.35			



### Reducing Micro Tee

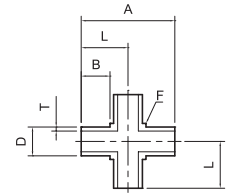
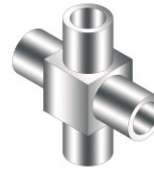
Part No.	Tube O.D. (D)		Tube W.T. (T)		Tube O.D. (D1)		Tube W.T. (T1)		Dimension (mm)			Body Cube
	inch	mm	inch	mm	inch	mm	inch	mm	A	B	L	F
UC-04-M04-3-02-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	20.64	6.35	10.32	7.94
UC-06-M04-3-04-	3/8	9.52		1.00	1/4	6.35	0.039	1.00	23.81		11.91	11.11
UC-08-M04-3-04-	1/2	12.70	0.049	1.24	1/4	6.35		1.00	26.99		13.5	14.29
UC-08-M04-3-06-	1/2	12.70	0.049	1.24	3/8	9.52	1.00					



### Micro Tribow

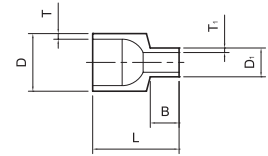
Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	F
UC-04-M04-91-A-	1/4	6.35	0.035	0.89	14.29	6.35	10.32	7.94
UC-04-M04-91-	1/4	6.35	0.039	1.00				
UC-06-M04-91-	3/8	9.52		1.00	17.46		11.91	11.11
UC-08-M04-91-	1/2	12.70	0.049	1.24	20.64		13.50	14.29

Uni-Lok' standard materials for each components are shown on the above part numbers.  
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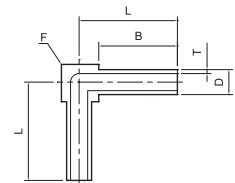
## Micro Cross

Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	F
UC-04-M04-4-A-	1/4	6.35	0.035	0.89	20.64	6.35	10.32	7.94
UC-04-M04-4-	1/4	6.35	0.039	1.00				
UC-06-M04-4-	3/8	9.52		1.00	23.81		11.91	11.11
UC-08-M04-4-	1/2	12.70	0.049	1.24	26.99		13.50	14.29



## Reducing Micro Union

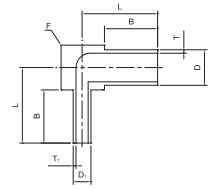
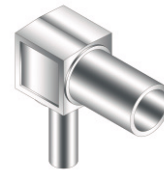
Part No.	Tube O.D. (D)		Tube W.T. (T)		Tube O.D. (D <sub>1</sub> )		Tube W.T. (T <sub>1</sub> )		Dimension (mm)	
	inch	mm	inch	mm	inch	mm	inch	mm	B	L
UC-04-M04-6-02-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	6.35	19.05
UC-06-M04-6-04-	3/8	9.52		1.00	1/4	6.35	1.00			
UC-08-M04-6-04-	1/2	12.70	0.049	1.24	1/4	6.35	1.00			
UC-08-M04-6-06-	1/2	12.70	0.049	1.24	3/8	9.52	1.00			
UC-12-M04-6-04-	3/4	19.05	0.065	1.65	1/4	6.35	1.00			
UC-12-M04-6-06-	3/4	19.05	0.065	1.65	3/8	9.52	1.00			
UC-12-M04-6-08-	3/4	19.05	0.065	1.65	1/2	12.7	0.049	1.24		



## Long 90° Elbow

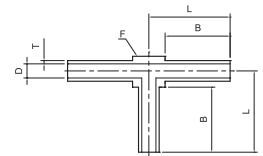
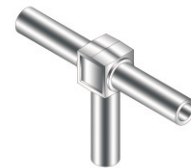
Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		Body Cube
	inch	mm	inch	mm	B	L	F
UC-04-H12-9-	1/4	6.35	0.039	1.00	20.00	25.00	9.00
UC-06-H12-9-	3/8	9.52		1.00	11.00		
UC-08-H12-9-	1/2	12.70	0.049	1.24	19.00	27.00	15.00
US-12-H12-9-	3/4	19.05	0.065	1.65	22.5	31.5	22.00
US-12-H12-9-A-	3/4	19.05	0.065	1.65		33.5	
US-16-H12-9-	1	25.40	0.065	1.65	19.00	34.0	30.00

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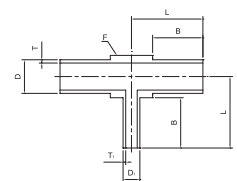
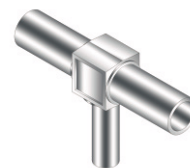
### Reducing Long 90° Elbow

Part No.	Tube O.D. (D)		Tube W.T. (T)		Tube O.D. (D <sub>1</sub> )		Tube W.T. (T <sub>1</sub> )		Dimension (mm)			Body Cube
	inch	mm	inch	mm	inch	mm	inch	mm	B	L	F	
UC-06-H12-9-04-	3/8	9.52	0.039	1.00	1/4	6.35	0.039	1.00	19.00	25.00	11.00	
UC-08-H12-9-04-	1/2	12.70	0.049	1.24	1/4	6.35		1.00				
UC-08-H12-9-06-	1/2	12.70	0.049	1.24	3/8	9.52		1.00		27.00	15.00	
US-12-H12-9-04-	3/4	19.05	0.065	1.65	1/4	6.35		1.00				
US-12-H12-9-06-	3/4	19.05	0.065	1.65	3/8	9.52		1.00				
US-12-H12-9-08-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24	31.5	22.00		



### Long Tee

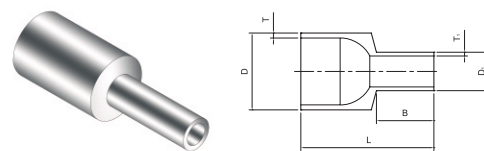
Part No.	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		Body Cube
	inch	mm	inch	mm	B	L	
UC-04-H12-3-	1/4	6.35	0.039	1	20.00	25.00	9.00
UC-06-H12-3-	3/8	9.52		1			11.00
UC-08-H12-3-	1/2	12.7	0.049	1.24	19.00	27.00	15.00
US-12-H12-3-	3/4	19.05	0.065	1.65			31.50
US-12-H12-3-A-	3/4	19.05	0.065	1.65	22.50	33.50	
US-16-H12-3-	1	25.4	0.065	1.65	19.00	34.00	30.00



### Reducing Long Tee

Part No.	Tube O.D. (D)		Tube W.T. (T)		Tube O.D. (D <sub>1</sub> )		Tube W.T. (T <sub>1</sub> )		Dimension (mm)			Body Cube
	inch	mm	inch	mm	inch	mm	inch	mm	B	L	F	
UC-06-H12-3-04-	3/8	9.52	0.039	1.00	1/4	6.35	0.039	1.00	19.00	25.00	11.00	
UC-08-H12-3-04-	1/2	12.70	0.049	1.24	1/4	6.35		1.00				
UC-08-H12-3-06-	1/2	12.70	0.049	1.24	3/8	9.52		1.00		27.00	15.00	
US-12-H12-3-04-	3/4	19.05	0.065	1.65	1/4	6.35		1.00				
US-12-H12-3-06-	3/4	19.05	0.065	1.65	3/8	9.52		1.00				
US-12-H12-3-08-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24	31.50	22.00		

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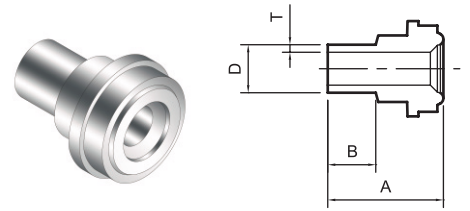


## Reducing Long Union

Part No.	Tube O.D. (D)		Tube W.T. (T)		Tube O.D. (D1)		Tube W.T. (T1)		Dimension (mm)	
	inch	mm	inch	mm	inch	mm	inch	mm	B	L
UC-06-H12-3-04-	3/8	9.52	0.039	1.00	1/4	6.35	0.039	1.00	19.00	39.00
UC-08-H12-3-04-	1/2	12.70	0.049	1.24	1/4	6.35		1.00		
UC-08-H12-3-06-	1/2	12.70	0.049	1.24	3/8	9.52		1.00		
US-12-H12-3-04-	3/4	19.05	0.065	1.65	1/4	6.35		1.00		
US-12-H12-3-06-	3/4	19.05	0.065	1.65	3/8	9.52	0.049	1.00	19.00	42.90
US-12-H12-3-08-	3/4	19.05	0.065	1.65	1/2	12.70		1.24		
US-16-H12-3-04-	1	25.40	0.065	1.65	1/4	6.35	0.039	1.00	19.00	44.5
US-16-H12-3-06-	1	25.40	0.065	1.65	3/8	9.52		1.00		
US-16-H12-3-08-	1	25.40	0.065	1.65	1/2	12.70	0.049	1.24		
US-16-H12-3-12-	1	25.40	0.065	1.65	3/4	19.05	0.065	1.65		

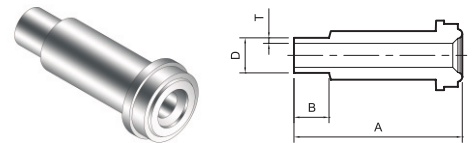
Uni-Lok' standard materials for each components are shown on the above part numbers.  
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## Glands



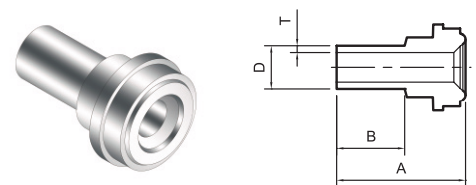
### Micro Gland-S

Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
UC-MG-04S-	1/4	1/4	6.35	0.039	1.00	15.30	6.35
UC-MG-08-04S-	1/2	1/4	6.35		1.00	15.80	
UC-MG-08-06S-	1/2	3/8	9.52		1.00		
UC-MG-08S-	1/2	1/2	12.70	0.049	1.24		



### Micro Gland-L

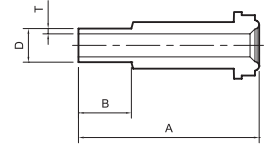
Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
UC-MG-04L-	1/4	1/4	6.35	0.039	1.00	30.50	6.35
UC-MG-08-04L-	1/2	1/4	6.35		1.00	32.80	
UC-MG-08-06L-	1/2	3/8	9.52		1.00		
UC-MG-08L-	1/2	1/2	12.70	0.049	1.24		



### Short Gland-S

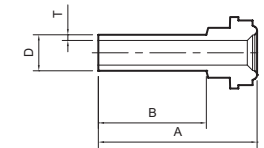
Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
UC-SG-04S-	1/4	1/4	6.35	0.039	1.00	18.95	1.00
UC-SG-08-04S-	1/2	1/4	6.35		1.00	19.45	
UC-SG-08-06S-	1/2	3/8	9.52		1.00		
UC-SG-08S-	1/2	1/2	12.70	0.049	1.24		

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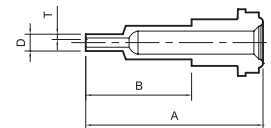
## Short Gland-L

Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
UC-SG-04-02L-	1/4	1/8	3.17	0.028	0.71	28.00	10.00
UC-SG-04L-	1/4	1/4	6.35	0.039	1.00	34.15	
UC-SG-08-04L-	1/2	1/4	6.35		1.00	36.45	
UC-SG-08-06L-	1/2	3/8	9.52		1.00		
UC-SG-08L-	1/2	1/2	12.70	0.049	1.24		



## Long Gland-S

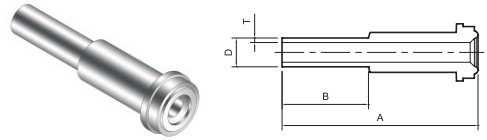
Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
UC-LG-04-02S-	1/4	1/8	3.17	0.028	0.71	28.00	19.05
UC-LG-04S-	1/4	1/4	6.35	0.039	1.00		
UC-LG-08-04S-	1/2	1/4	6.35		1.00	28.50	
UC-LG-08-06S-	1/2	3/8	9.52		1.00		
UC-LG-08S-	1/2	1/2	12.70	0.049	1.24		
US-LG-12S-	3/4	3/4	19.05	0.065	1.65	32.00	20.60
US-LG-16S-	1	1	25.40	0.065	1.65	38.60	19.05



Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
UC-LG-04-02S-33.5-	1/4	1/8	3.17	0.028	0.71	33.50	20.00

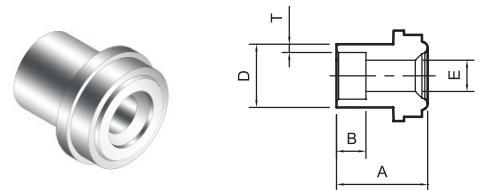
Uni-Lok' standard materials for each components are shown on the above part numbers.  
Dimensions are for reference only and are subject to change without prior notice.





**Long Gland-L**

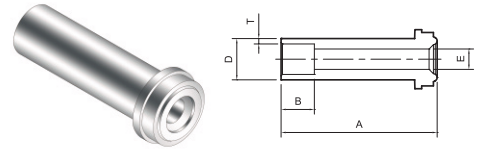
Part No.	UCR Size		Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B	
UC-LG-04L-	1/4	1/4	6.35	0.039	1.00	43.20	19.05	
UC-LG-08-04L-	1/2	1/4	6.35		1.00	45.50		
UC-LG-08-06L-	1/2	3/8	9.53		1.00			
UC-LG-08L-	1/2	1/2	12.70	0.049	1.24			
US-LG-12L-	3/4	3/4	19.05	0.065	1.65	52.00	20.60	
US-LG-16L-	1	1	25.40	0.065	1.65	58.90	19.05	



**Socket Weld Short Gland**

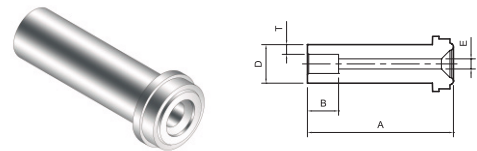
Part No.	UCR Size		Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E	
UC-SG-04SW-	1/4	1/4	6.35	0.039	1.00	12.70	7.10	4.35	

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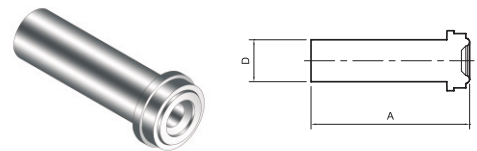
## Socket Weld Long Gland

Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
UC-LG-04SW-	1/4	1/4	6.35	0.039	1.00	33.30	7.10	4.35
UC-LG-08-06SW-	1/2	3/8	9.53		1.00	38.10	7.90	7.53
UC-LG-08SW-	1/2	1/2	12.70	0.049	1.24		50.80	9.60
US-LG-12SW-	3/4	3/4	19.05	0.065	1.65	50.80	11.20	15.75
US-LG-16SW-	1	1	25.40	0.065	1.65	56.40	15.70	22.10



## Reducing Socket Weld Long Gland

Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
UC-LG-04-02SW-	1/4	1/8	3.17	0.028	0.71	33.30	2.50	2.30
UC-LG-08-04SW-	1/2	1/4	6.35	0.039	1.00	38.10	7.10	4.35



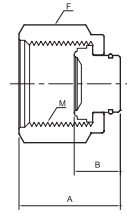
## Blind Gland

Part No.	UCR Size	Tube O.D. (D)		Dimension (mm)
	inch	inch	mm	A
UC-BG-04-	1/4	1/4	6.35	33.30
UC-BG-08-	1/2	1/2	12.70	38.10
US-BG-12-	3/4	3/4	19.05	50.80
US-BG-16-	1	1	25.40	50.40

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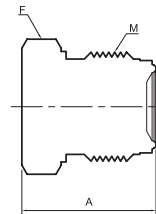
## Caps, Plugs, Nuts & Gaskets

### UCR Cap



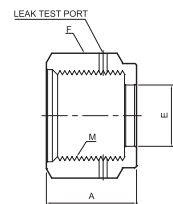
Part No.	UCR Size	Dimension (mm)		Hex Flat (mm)	M
	inch	A	B	F	
US-CP-04	1/4	22.90	11.30	19.05	9/16-18UNF
US-CP-08	1/2	25.60	12.20	26.98	7/8-14UNF
US-CP-12	3/4	32.80	13.70	38.10	1 1/4-18UNF
US-CP-16	1	39.40	16.00	46.04	1 1/2-20UNF

### UCR Plug



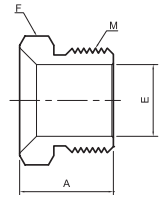
Part No.	UCR Size	Dimension (mm)	Hex Flat (mm)	M
	inch	A	F	
US-PG-04	1/4	23.20	17.46	9/16-18UNF
US-PG-08	1/2	27.30	23.81	7/8-14UNF
US-PG-12	3/4	36.30	34.92	1 1/4-18UNF
US-PG-16	1	38.60	47.68	1 1/2-20UNF

### UCR Female Nut



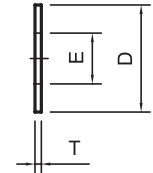
Part No.	UCR Size	Dimension (mm)		Hex Flat (mm)	M
	inch	A	E	F	
US-FN-04	1/4	20.50	9.00	19.05	9/16-18UNF
US-FN-08	1/2	22.50	15.30	26.98	7/8-14UNF
US-FN-12	3/4	28.40	22.60	38.10	1 1/4-18UNF
US-FN-16	1	34.00	30.50	46.04	1 1/2-20UNF

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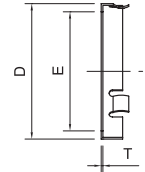
## UCR Male Nut

Part No.	UCR Size	Dimension (mm)		Hex Flat (mm)	M
	inch	A	E	F	
US-MN-04	1/4	18.00	9.10	15.88	9/16-18UNF
US-MN-08	1/2	20.00	15.0	23.81	7/8-14UNF
US-MN-12	3/4	25.40	22.60	34.92	1 1/4-18UNF
US-MN-16	1	30.20	30.50	41.27	1 1/2-20UNF



## Gasket

Part No.	UCR Size	Dimension (mm)		T
	inch	E	D	
UN-GT-04	1/4	5.60	11.80	0.7
UN-GT-08	1/2	11.00	19.30	
UN-GT-12	3/4	17.00	28.10	
UN-GT-16	1	22.60	34.80	



## Retained Gasket

Part No.	UCR Size	Dimension (mm)		
	inch	E	D	T
UN-GT-04R	1/4	5.60	11.9	0.25
UN-GT-08R	1/2	11.00	19.40	
UN-GT-12R	3/4	17.00	28.20	0.30
UN-GT-16R	1	22.60	34.00	

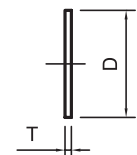
Color coding of retainer to identify the material of gaskets



316LSS



Nickel

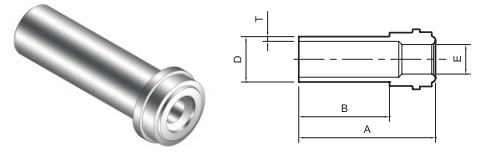


## Blind Gasket

Part No.	UCR Size	Dimension (mm)	
	inch	D	T
UN-GT-04B	1/4	11.80	0.7
UN-GT-08B	1/2	19.30	
UN-GT-12B	3/4	28.10	
UN-GT-16B	1	34.80	

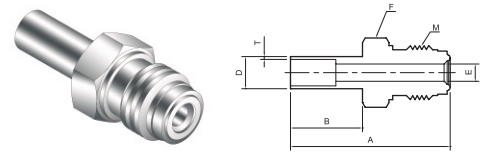
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## High Flow Components



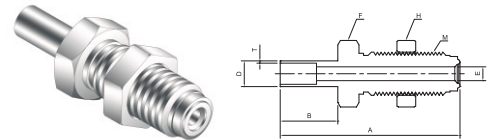
### HR Gland

Part No.	UCR Size		Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		
	inch		inch	mm	inch	mm	A	B	E
UC-HG-04-06HR-	1/4		3/8	9.53	0.039	1.00	28.70	19.05	6.20
UC-HG-04-06HR-L	1/4		3/8	9.53		1.00	33.30	19.05	



### HR Adapter

Part No.	UCR Size		Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Hex Flat (mm)	M
	inch		inch	mm	inch	mm	A	B	E	F	
UC-BD-04-06HR-	1/4		3/8	9.53	0.039	1.00	42.70	19.05	6.35	15.87	9/16-18UNF

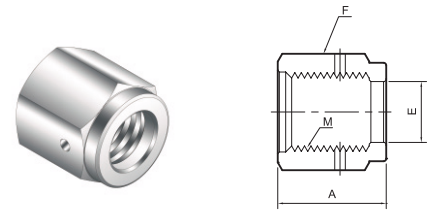


### HR Bulkhead Adapter

Part No.	UCR Size		Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Hex Flat (mm)	Hex Flat (mm)	M
	inch		inch	mm	inch	mm	A	B	E	F	H	
US-BBD-04-06HR-	1/4		3/8	9.53	0.039	1.00	59.80	19.05	6.35	19.05	19.05	9/16-18UNF

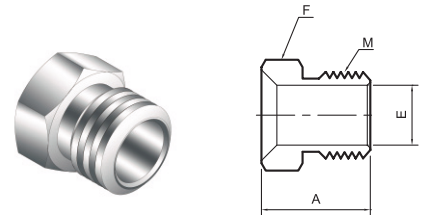
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## Metal Face Seal (UCR) Fittings



### HR Female Nut

Part No.	UCR Size	Dimension (mm)		Hex Flat (mm)	M
	inch	A	E	F	
US-FN-04HR	1/4	17.30	11.50	19.05	9/16-18UNF



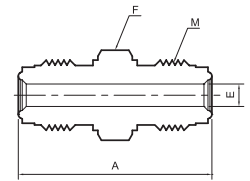
### HR Male Nut

Part No.	UCR Size	Dimension (mm)		Hex Flat (mm)	M
	inch	A	E	F	
US-MN-04HR	1/4	18.00	9.90	15.88	9/16-18UNF

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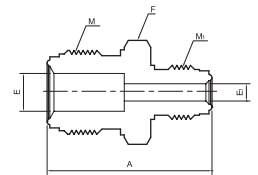


## UCR to UCR



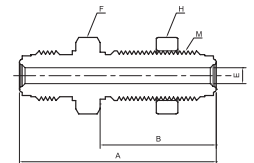
### Double Male Union

Part No.	UCR Size	Dimension (mm)		Hex Flat (mm)		M
	inch	A	E	F		
US-CMU-04-	1/4	39.40	4.57	15.87		9/16-18UNF
US-CMU-08-	1/2	47.20	10.22	23.80		7/8-14UNF
US-CMU-12-	3/4	62.00	15.70	33.33		1 1/4-18UNF
US-CMU-16-	1	65.80	22.10	41.27		1 1/2-20UNF



### Reducing Double Male Union

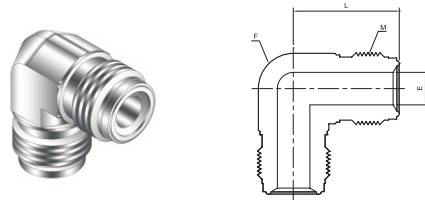
Part No.	UCR Size	UCR Size	Dimension (mm)			Hex Flat (mm)	M	M1
	inch	inch	A	E	E1	F		
US-CMRU-08-04-	1/2	1/4	43.4	10.22	4.57	23.80	7/8-14UNF	9/16-18UNF



### Bulkhead Double Male Union

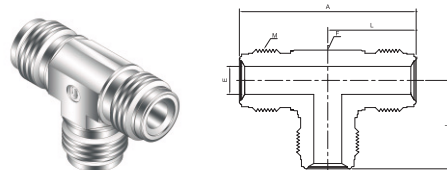
Part No.	UCR Size	Dimension (mm)			Hex Flat (mm)		M
	inch	A	B	E	F	H	
US-CMU-04-	1/4	56.6	33.7	4.57	19.05	19.05	9/16-18UNF
US-CMU-08-	1/2	65.3	37.6	10.22	26.98	26.98	7/8-14UNF

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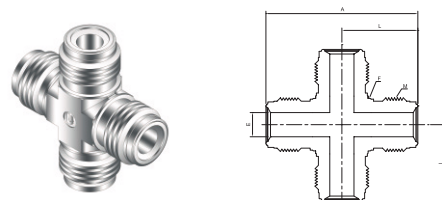
## Union Elbow

Part No.	UCR Size	Dimension (mm)		Body Cube	M
	inch	L	E	F	
US-CUE-04-	1/4	27.20	4.35	12.70	9/16-18UNF
US-CUE-08-	1/2	36.80	10.22	20.63	7/8-14UNF
US-CUE-12-	3/4	48.80	15.75	31.75	1 1/4-18UNF
US-CUE-16-	1	50.80	22.10	42.86	1 1/2-20UNF



## Union Tee

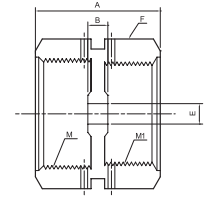
Part No.	UCR Size	Dimension (mm)			Body Cube	M
	inch	A	E	L	F	
US-CUE-04-	1/4	54.40	4.35	27.20	12.70	9/16-18UNF
US-CUE-08-	1/2	73.87	10.22	36.80	20.63	7/8-14UNF
US-CUE-12-	3/4	97.50	15.75	48.80	31.75	1 1/4-18UNF
US-CUE-16-	1	102.00	22.10	50.80	40.86	1 1/2-20UNF



## Union Cross

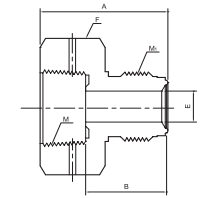
Part No.	UCR Size	Dimension (mm)			Body Cube	M
	inch	A	E	L	F	
US-CUC-04-	1/4	54.40	4.35	27.20	12.70	9/16-18UNF
US-CUC-08-	1/2	73.87	10.22	36.80	20.63	7/8-14UNF
US-CUC-12-	3/4	97.50	15.75	48.80	31.75	1 1/4-18UNF
US-CUC-16-	1	102.00	22.10	50.80	40.86	1 1/2-20UNF

Uni-Lok® standard materials for each components are shown on the above part numbers.  
Dimensions are for reference only and are subject to change without prior notice.



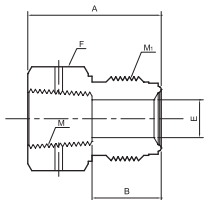
### Reducing Double Female Union

Part No.	UCR Size	UCR Size	Dimension (mm)			Hex Flat (mm)	M	M1
	inch	inch	A	B	E	F		
US-CFRU-08-04-	1/2	1/4	34.60	6.00	4.35	26.98	7/8-14UNF	9/16-18UNF



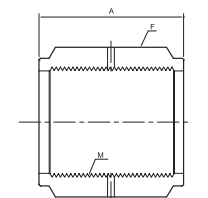
### Reducing Adapter

Part No.	UCR Size	UCR Size	Dimension (mm)			Hex Flat (mm)	M	M1
	inch	inch	A	B	E	F		
US-CRA-08-04-	1/2	1/4	35.80	21.60	4.35	26.98	7/8-14UNF	9/16-18UNF



### Reducing Bushing

Part No.	UCR Size	UCR Size	Dimension (mm)			Hex Flat (mm)	M	M1
	inch	inch	A	B	E	F		
US-CRB-08-04-	1/2	1/4	35.80	23.10	4.35	23.81	9/16-18UNF	7/8-14UNF

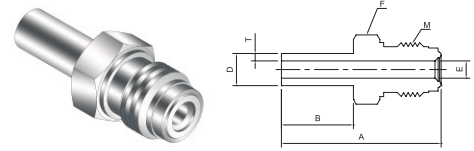


### Coupling

Part No.	UCR Size	Dimension (mm)	Hex Flat (mm)	M
	inch	A	F	
US-CPC-04	1/4	30.20	19.05	9/16-18UNF
US-CPC-08	1/2	33.30	26.98	7/8-14UNF
US-CPC-12	3/4	42.70	38.10	1 1/4-18UNF
US-CPC-16	1	51.80	44.45	1 1/2-20UNF

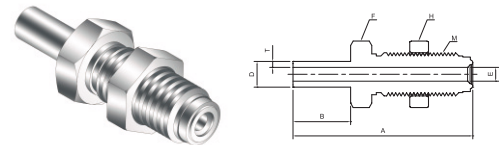
Uni-Lok' standard materials for each components are shown on the above part numbers. Dimensions are for reference only and are subject to change without prior notice.

## UCR to TBW (Tube Butt Weld)



### TBW Adapter

Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)			Hex Flat (mm)	M
	inch	inch	mm	inch	mm	A	B	E	F	
US-CTA-04-	1/2	1/4	6.35	0.039	1.00	42.65	19.05	4.35	15.88	9/16-18UNF
US-CTA-08-04-	1/2	3/8	9.53		1.00	46.70		10.22	23.81	7/8-14UNF
US-CTA-08-	1/2	1/2	12.70	0.049	1.24	46.70		10.22	23.81	1 1/4-18UNF

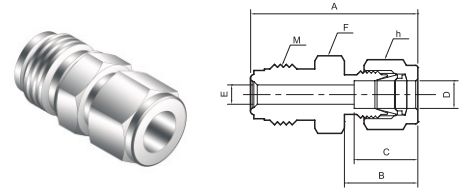


### TBW Bulkhead Adapter

Part No.	UCR Size	Tube O.D. (D)		Tube W.T. (T)		Dimension (mm)		Hex Flat (mm)		M
	inch	inch	mm	inch	mm	A	B	F	H	
US-CBTA-04-	1/2	1/4	6.35	0.039	1.00	59.85	19.05	19.05	19.05	9/16-18UNF
US-CBTA-08-04-	1/2	3/8	9.53		1.00	65.25		26.98	26.98	7/8-14UNF
US-CBTA-08-	1/2	1/2	12.70	0.049	1.24	71.30		38.10	38.10	1 1/4-18UNF

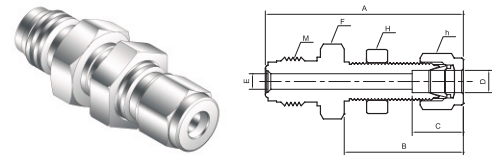
Uni-Lok' standard materials for each components are shown on the above part numbers.  
Dimensions are for reference only and are subject to change without prior notice.

## UCR to Uni-Lok



### Uni-Lok Connector

Part No.	UCR Size	Tube O.D. (D)		Dimension (mm)				Hex Flat (mm)			M
	inch	inch	mm	A	B	C	E	F	h		
US-CUTC-04-02-	1/4	1/8	3.17	38.90	15.20	12.70	2.30	15.87	11.11	9/16-18UNF	
US-CUTC-04-	1/4	1/4	6.35	41.10	17.80	15.20	4.60	15.87	14.28	9/16-18UNF	
US-CUTC-08-06-	1/2	3/8	9.53	46.70	19.30	16.80	7.10	23.81	17.46	7/8-14UNF	
US-CUTC-08-	1/2	1/2	12.70	49.50	21.80	22.90	10.20	23.81	22.22	7/8-14UNF	



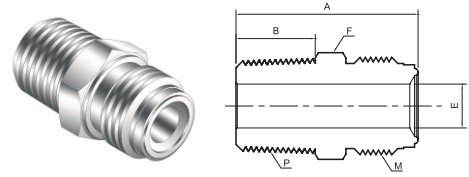
### Uni-Lok Bulkhead Connector

Part No.	UCR Size	Tube O.D. (D)		Dimension (mm)				Hex Flat (mm)			M
	inch	inch	mm	A	B	C	E	F	H	h	
US-CUTBC-04-	1/4	1/4	6.35	57.20	33.50	15.20	4.60	15.87	15.87	14.28	9/16-18UNF
US-CUTBC-08-06-	1/2	3/8	9.53	64.50	36.80	16.80	7.10	23.81	23.81	17.46	7/8-14UNF
US-CUTBC-08-	1/2	1/2	12.70	69.60	41.90	22.90	10.20	23.81	23.81	22.22	7/8-14UNF

Uni-Lok' standard materials for each components are shown on the above part numbers.  
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# UCR to Thread

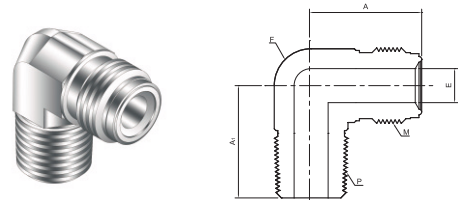
## Male Connector -NPT or BSPT



Part No.	UCR Size	Thread Size	Dimension (mm)			Hex Flat (mm)	M
	inch	P(NPT)	A	B	E	F	
US-CMC-04-02N-	1/4	1/8	33.30	9.60	4.35	15.90	9/16-18UNF
US-CMC-04-04N-	1/4	1/4	37.84	14.22			10.22
US-CMC-08-04N-	1/2	1/4	41.87		19.05	7.53	23.80
US-CMC-08-06N-	1/2	3/8		10.22		7/8-14UNF	
US-CMC-08-08N-	1/2	1/2	46.74	19.05	10.22	33.30	7/8-14UNF
US-CMC-12-12N-	3/4	3/4	55.63		15.75		1 1/4-18UNF
US-CMC-16-16N-	1	1	62.74	23.88	22.10	42.20	1 1/2-20UNF

Male ISO Tapered threads are available. Add "R" as a suffix instead of "N".

## Male Elbow -NPT or BSPT



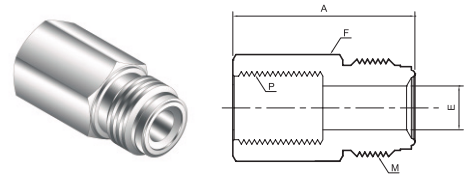
Part No.	UCR Size	Thread Size	Dimension (mm)			Body Cube	M
	inch	inch	A	A1	E	F	
US-CME-04-04N-	1/4	1/4	27.18	27.18	4.35	15.90	9/16-18UNF
US-CME-08-06N-	1/2	3/8	36.83	32.00	10.22	23.80	7/8-14UNF
US-CME-08-08N-	1/2	1/2		36.83			7/8-14UNF
US-CME-12-12N-	3/4	3/4	48.80	43.50	15.75	33.30	1 1/4-18UNF

Male ISO Tapered threads are available. Add "R" as a suffix instead of "N".

Uni-Lok' standard materials for each components are shown on the above part numbers.  
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**Female Connector**  
-NPT or BSPT



Part No.	UCR Size	Thread Size	Dimension (mm)		Hex Flat (mm)	M
	inch	P(NPT)	A	E	F	
US-CFC-04-02N-	1/4	1/8	35.80	4.35	15.90	9/16-18UNF
US-CFC-04-04N-	1/4	1/4	39.10		19.05	9/16-18UNF
US-CFC-08-06N-	1/2	3/8	44.70	7.53	23.81	7/8-14UNF
US-CFC-08-08N-	1/2	1/2	50.50	10.22	26.98	7/8-14UNF
US-CFC-12-12N-	3/4	3/4	59.90	15.75	33.33	1 1/4-18UNF
US-CFC-16-16N-	1	1	63.80	22.10	41.27	1 1/2-20UNF

Male ISO Tapered threads are available. Add "R" as a suffix instead of "N".

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