



**ULTRA HIGH PURITY**  
**METAL FACE SEAL**  
**& WELD FITTINGS**

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**UNILOK** 

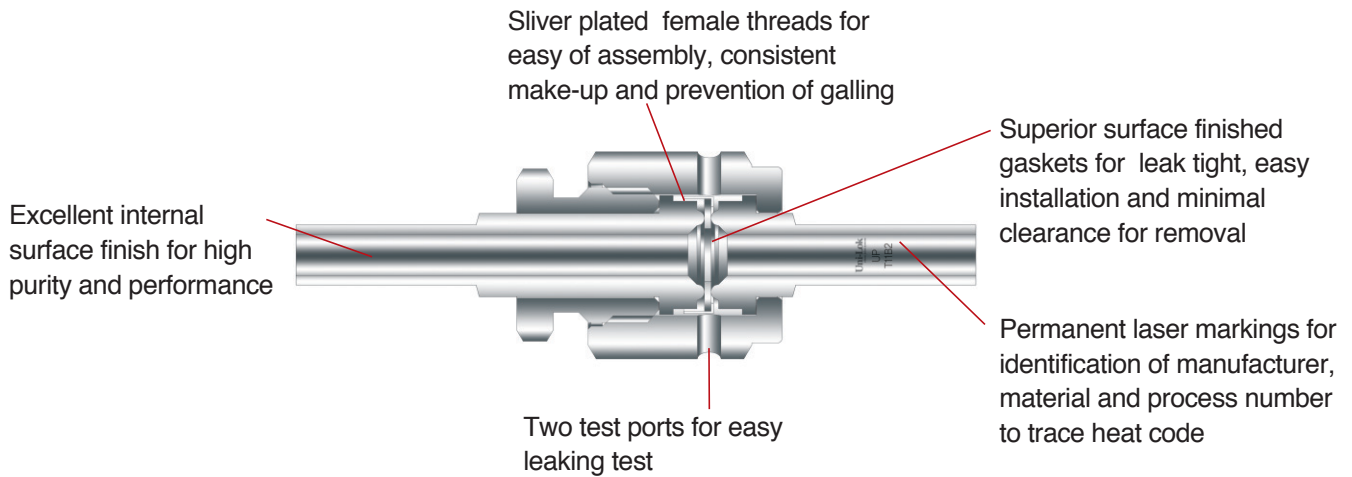
## Weld & Metal Face Seal Fittings

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.

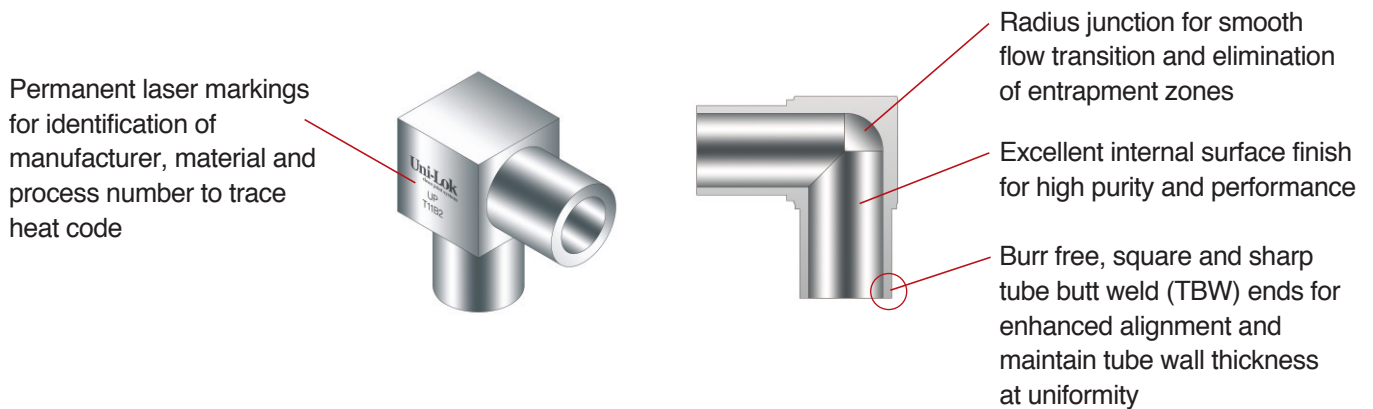
Uni-Lok® guarantees high quality butt welding between tube and fittings as well as leak free assembly for critical applications.

### Features

#### Metal Face Seal (UCR) Fittings



#### Weld Fittings



#### Internal Surface Finish Levels

Designator	Surface Finish( $\mu\text{m}$ )	
	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

Materials	Specification
<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

Both VCR/VAR and 316LSS are UHP(Ultra High Purity) 316LSS material with low Sulfur and Manganese in comply with SEMI F-20.

## 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  $1 \times 10^{-9}$  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

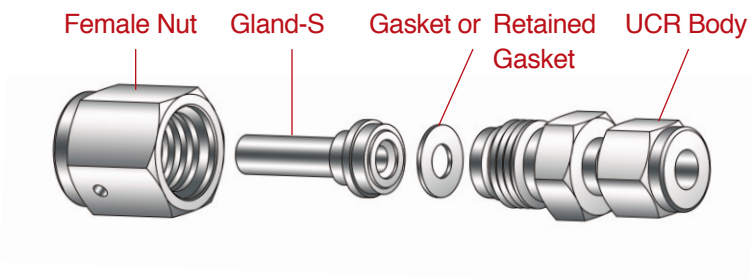
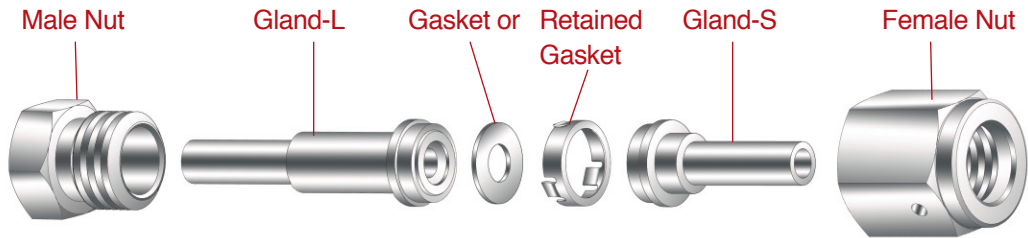
According to SEMI E49.6.

## Packaging

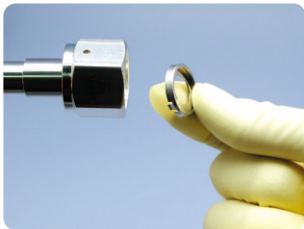
Each component is double bagged to ensure component cleanliness and to protect them from environmental contamination.

Referenced specification : SEMI E49.1.

**Typical Assemblies**



**Installation Instruction**



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

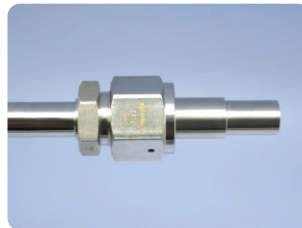


**Step C.**  
Tighten female nut 1/8 turn past finger tight holding the backup wrench stationary.

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.

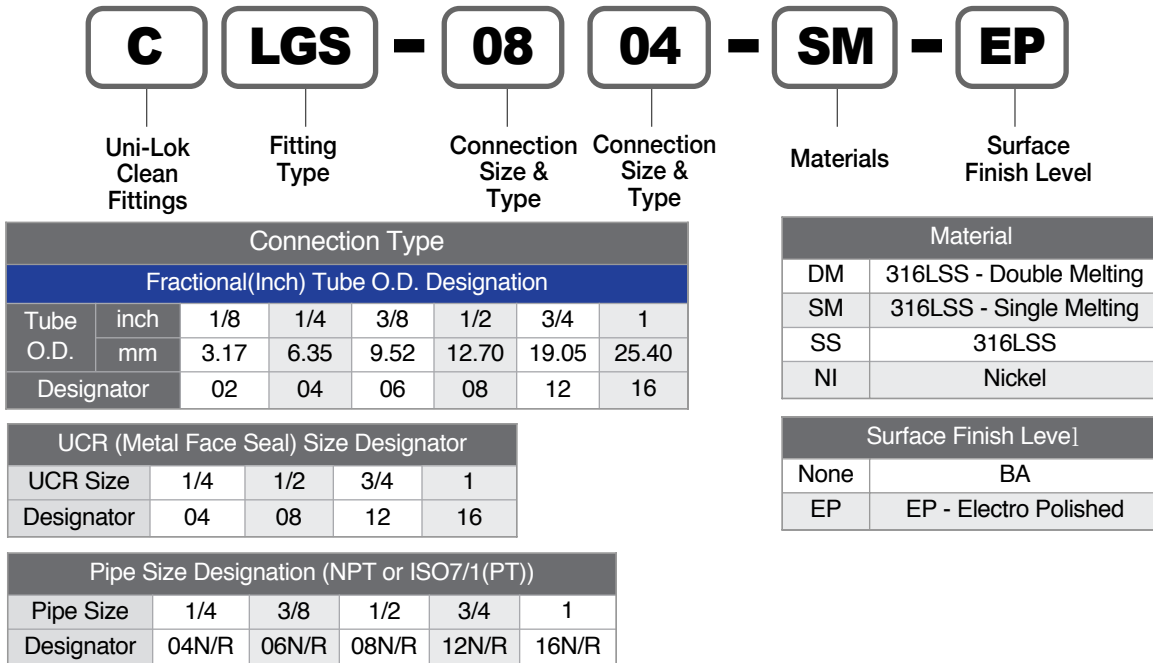
Metal face seal connections are remakeable only using new gasket for each remake.

## How To Order

### Weld Fittings

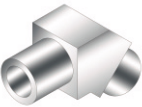









Uni-Lok weld fittings are ordered by part number as shown as below.


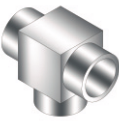
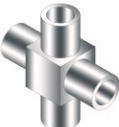





**Example :** The following part number, **CLGS-0804-SM-EP** is designated for Long Gland S, 1/2" UCR x 1/4" TBW", Single Melting 316LSS, EP.





Visual Index

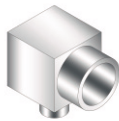
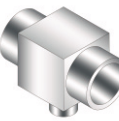


**Weld Fittings**

	Micro Elbow 45° <b>CMVE</b>	8
	Micro Tribow <b>CMTB</b>	9
	Long Elbow 90° <b>CLE</b>	10
	Reducing Long Tee <b>CLRT</b>	11
	Micro Gland-S <b>CMGS</b>	12
	Short Gland L <b>CSGL</b>	12
	Socket Weld Short Gland <b>CSGWS</b>	14
	Blind Gland <b>CBG</b>	14
	UCR Plug <b>CPG</b>	15
	UCR Gasket <b>CGT</b>	16

	Micro Elbow 90° <b>CME</b>	8
	Micro Tee <b>CMT</b>	8
	Micro Cross <b>CMC</b>	9
	Reducing Long Elbow 90° <b>CLRE</b>	10
	Reducing Long Union <b>CLRU</b>	11
	Micro Gland L <b>CMGL</b>	12
	Long Gland S <b>CLGS</b>	13
	Socket Weld Long Gland <b>CLGWS</b>	14

**- Caps, Plugs, Nuts & Gaskets**







	UCR Female Nut <b>CFN</b>	15
	UCR Gasket Retained <b>CGTR</b>	16

	Reducing Micro Elbow 90° <b>CMRE</b>	8
	Reducing Micro Tee <b>CMRT</b>	9
	Reducing Micro Union <b>CMRU</b>	9
	Long Tee <b>CLT</b>	10

**Metal Face Seal (UCR)**

**Fittings**

**- Glands**

	Short Gland S <b>CSGS</b>	12
	Long Gland L <b>CLGL</b>	13
	Reducing Socket Weld Long Gland <b>CLGRWS</b>	14
	UCR Cap <b>CCP</b>	15
	UCR Male Nut <b>CMN</b>	15
	UCR Gasket Blind <b>CGTB</b>	16



**- High Flow Components**



HR Bulkhead Adapter  
**CHBA**

17



HR Gland  
**CHG**

17



HR Adapter  
**CHA**

17



HR Female Nut  
**CHFN**

17



HR Male Nut  
**CHMN**

17

**UCR Threaded Fittings**

**- UCR to UCR**



Bulkhead Double Male Union  
**CBDMU**

18



Double Male Union  
**CDMU**

18



Reducing Double Male Union  
**CDMRU**

18



Union Cross  
**CUC**

19



Union Elbow  
**CEU**

18



Union Tee  
**CUT**

19



Reducing Bushing  
**CRB**

20



Reducing Double Female Union  
**CDFRU**

19



Reducing Adapter  
**CRA**

19

**- UCR to TBW**



TBW Adapter  
**CAWB**

21



Bulkhead TBW Adapter  
**CBAWB**

21

**- UCR to Uni-Lok**



Uni-Lok Connector  
**CULC**

21



Bulkhead Uni-Lok Connector  
**CBULC**

21

**- UCR to Thread**



Male Connector  
**CUMC**

22



Male Elbow  
**CUME**

22

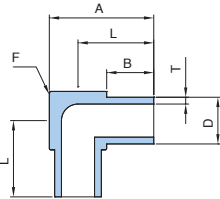


Female Connector  
**CUFC**

22

Micro Elbow 90°

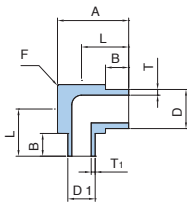
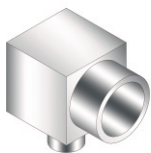
**CME**



Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	
CME-02-	1/8	3.17	0.028	0.71	14.29	6.35	10.32	7.94
CME-04-*A	1/4	6.35	0.035	0.89				
CME-04-	1/4	6.35	0.039	1.00	17.46		11.91	11.11
CME-06-	3/8	9.52		1.00	20.64		13.50	14.29
CME-08-	1/2	12.70	0.049	1.24	27.00		20.70	20.65
CME-12-	3/4	19.05	0.065	1.65				

Reducing Micro Elbow 90°

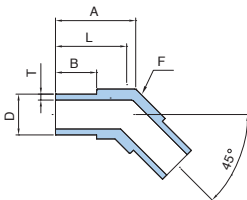
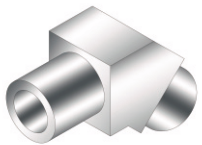
**CMRE**



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	A	B	L	
CMRE-0402-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	14.29	6.35	10.32	7.94
CMRE-0604-	3/8	9.52		1.00	1/4	6.35	1.00	1.00	17.46		11.91	11.11
CMRE-0804-	1/2	12.70	0.049	1.24	1/4	6.35	0.039	1.00	20.64		13.50	14.29
CMRE-0806-	1/2	12.70	0.049	1.24	3/8	9.52						

Micro Elbow 45°

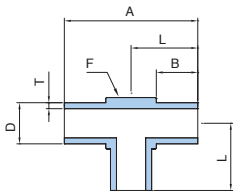
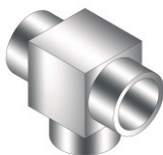
**CMVE**



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

Micro Tee

**CMT**



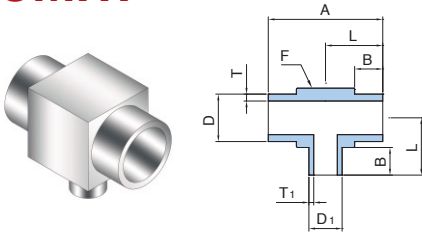
Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	
CMT-02-	1/8	3.17	0.028	0.71	20.64	6.35	10.32	7.94
CMT-04-*A	1/4	6.35	0.035	0.89				
CMT-04-	1/4	6.35	0.039	1.00	23.81		11.91	11.11
CMT-06-	3/8	9.52		1.00	26.99		13.50	14.29
CMT-12-	3/4	19.05	0.065	1.65	33.35		16.67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

Dimensions are for reference only and are subject to change without prior notice.



Reducing Micro Tee

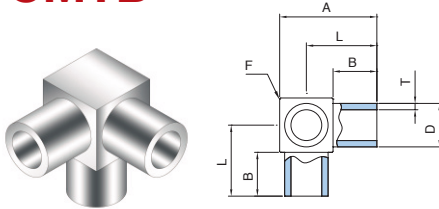
**CMRT**



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	A	B	L	F	
CMRT-0402-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	20.64	6.35	10.32	7.94	
CMRT-0604-	3/8	9.52		1.00	1/4	6.35		1.00	23.81		11.91	11.11	
CMRT-0804-	1/2	12.70	0.049	1.24	1/4	6.35	0.039	1.00	26.99		13.50	14.29	
CMRT-0806-	1/2	12.70	0.049	1.24	3/8	9.52		1.00					

Micro Tribow

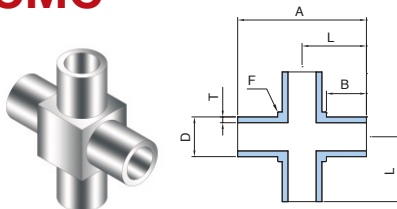
**CMTB**



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

Micro Cross

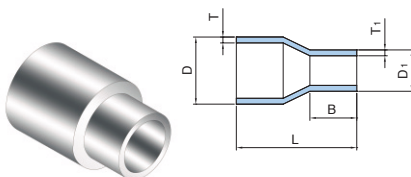
**CMC**



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

Reducing Micro Union

**CMRU**



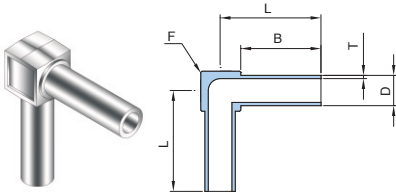
Part No.	Tube O.D. D		Tube W.T. T		Tube O.D. D <sub>1</sub>		Tube W.T. T <sub>1</sub>		Dimension (mm)	
	inch	mm	inch	mm	inch	mm	inch	mm	B	L
CMRU-0402-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	6.35	19.05
CMRU-0604-	3/8	9.52		1.00	1/4	6.35	1.00			
CMRU-0804-	1/2	12.70	0.049	1.24	1/4	6.35	1.00			
CMRU-0806-	1/2	12.70	0.049	1.24	3/8	9.52	0.039	1.00		
CMRU-1204-	3/4	19.05	0.065	1.65	1/4	6.35	1.00			
CMRU-1206-	3/4	19.05	0.065	1.65	3/8	9.52	1.00			
CMRU-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24		

Dimensions are for reference only and are subject to change without prior notice.

## Weld Fittings

### Long Elbow 90°

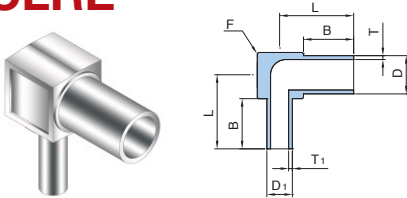
#### CLE



Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)		Body Cube	
	inch	mm	inch	mm	B	L	F	
CLE-04-	1/4	6.35	0.039	1.00	19.00	20.00	25.00	9.00
CLE-06-	3/8	9.53		1.00			11.00	
CLE-08-	1/2	12.7	0.049	1.24		27.00	15.00	
CLE-12-	3/4	19.05	0.065	1.65		31.50	22.00	
CLE-16-	1	25.4	0.065	1.65		34.00	30.00	

### Reducing Long Elbow 90°

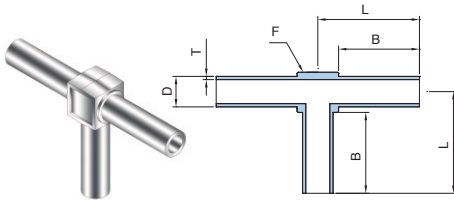
#### CLRE



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
CLRE-0604-	3/8	9.53	0.039	1.00	1/4	6.35	0.039	1.00	19.00	25.00	11.00
CLRE-0804-	1/2	12.70	0.049	1.24	1/4	6.35		1.00			
CLRE-0806-	1/2	12.70	0.049	1.24	3/8	9.53		1.00		31.50	22.00
CLRE-1204-	3/4	19.05	0.065	1.65	1/4	6.35		1.00			
CLRE-1206-	3/4	19.05	0.065	1.65	3/8	9.53		1.00			
CLRE-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24			

### Long Tee

#### CLT

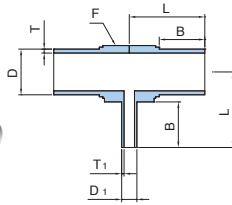
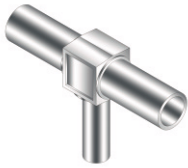


Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)		Body Cube	
	inch	mm	inch	mm	B	L	F	
CLT-04-	1/4	6.35	0.039	1.00	19.00	20.00	25.00	9.00
CLT-06-	3/8	9.53		1.00			11.00	
CLT-08-	1/2	12.7	0.049	1.24		27.00	15.00	
CLT-12-	3/4	19.05	0.065	1.65		31.50	22.00	
CLT-16-	1	25.4	0.065	1.65		34.00	30.00	

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Reducing Long Tee

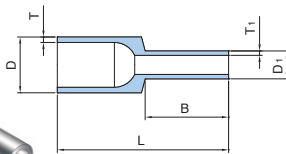
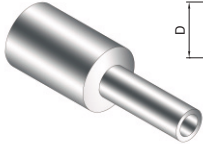
**CLRT**



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	
CLRT-0604-	3/8	9.53	0.039	1.00	1/4	6.35		1.00	19.00	25.00	11.00
CLRT-0804-	1/2	12.70	0.049	1.24	1/4	6.35		1.00		27.00	15.00
CLRT-0806-	1/2	12.70	0.049	1.24	3/8	9.53	0.039	1.00		31.50	22.00
CLRT-1204-	3/4	19.05	0.065	1.65	1/4	6.35		1.00			
CLRT-1206-	3/4	19.05	0.065	1.65	3/8	9.53		1.00			
CLRT-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24			

Reducing Long Union

**CLRU**



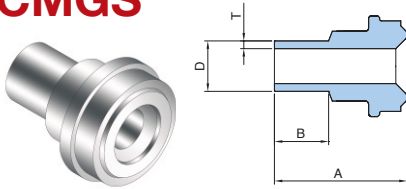
Part No.	Tube O.D. D		Tube W.T. T		Tube O.D. D <sub>1</sub>		Tube W.T. T <sub>1</sub>		Dimension (mm)	
	inch	mm	inch	mm	inch	mm	inch	mm	B	L
CLRU-0604-	3/8	9.53	0.039	1.00	1/4	6.35		1.00	19.00	39.00
CLRU-0804-	1/2	12.70	0.049	1.24	1/4	6.35		1.00		
CLRU-0806-	1/2	12.70	0.049	1.24	3/8	9.53	0.039	1.00		
CLRU-1204-	3/4	19.05	0.065	1.65	1/4	6.35		1.00		42.90
CLRU-1206-	3/4	19.05	0.065	1.65	3/8	9.53		1.00		
CLRU-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24		
CLRU-1604-	1	25.40	0.065	1.65	1/4	6.35		1.00	44.5	
CLRU-1606-	1	25.40	0.065	1.65	3/8	9.53	0.039	1.00		
CLRU-1608-	1	25.40	0.065	1.65	1/2	12.70	0.049	1.24		
CLRU-1612-	1	25.40	0.065	1.65	3/4	19.05	0.065	1.65		

Dimensions are for reference only and are subject to change without prior notice.

## Glands

### Micro Gland S

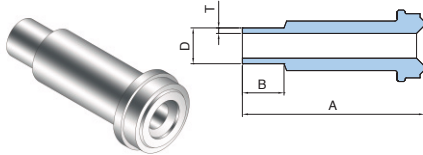
#### CMGS



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CMGS-04-	1/4	1/4	6.35	0.039	1.00	15.30	6.35
CMGS-0804-	1/2	1/4	6.35		1.00		
CMGS-0806-	1/2	3/8	9.53		1.00	15.80	
CMGS-08-	1/2	1/2	12.70	0.049	1.24		

### Micro Gland L

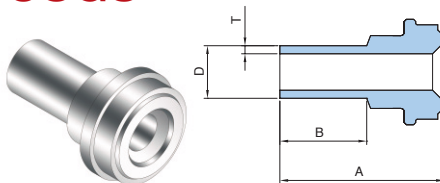
#### CMGL



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CMGL-04-	1/4	1/4	6.35	0.039	1.00	30.50	6.35
CMGL-0804-	1/2	1/4	6.35		1.00		
CMGL-0806-	1/2	3/8	9.53		1.00	32.80	
CMGL-08-	1/2	1/2	12.70	0.049	1.24		

### Short Gland S

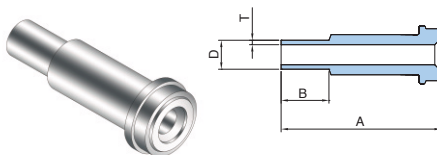
#### CSGS



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CSGS-04-	1/4	1/4	6.35	0.039	1.00	18.95	10.00
CSGS-0804-	1/2	1/4	6.35		1.00		
CSGS-0806-	1/2	3/8	9.53		1.00	19.45	
CSGS-08-	1/2	1/2	12.70	0.049	1.24		

### Short Gland L

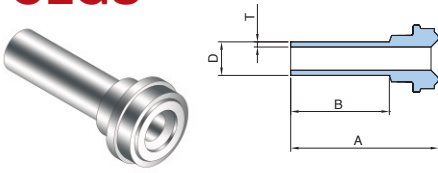
#### CSGL



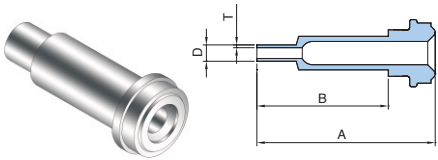
Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CSGL-0402-	1/4	1/8	3.17	0.028	0.71	28.00	10.00
CSGL-04-	1/4	1/4	6.35	0.039	1.00	34.15	
CSGL-0804-	1/2	1/4	6.35		1.00		
CSGL-0806-	1/2	3/8	9.53		1.00	28.50	
CSGL-08-	1/2	1/2	12.70	0.049	1.24		

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Long Gland S  
**CLGS**

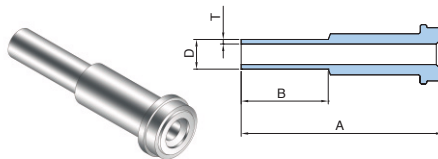


Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CLGS-0402-	1/4	1/8	3.17	0.028	0.71	28.00	19.05
CLGS-04-	1/4	1/4	6.35	0.039	1.00		
CLGS-0804-	1/2	1/4	6.35		1.00	28.50	
CLGS-0806-	1/2	3/8	9.53	1.00			
CLGS-08-	1/2	1/2	12.70	0.049	1.24		
CLGS-12-	3/4	3/4	19.05	0.065	1.65	32.00	20.60
CLGS-16-	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
CLGS-0402-33.5-	1/4	1/8	3.17	0.028	0.71	33.50	20.00

Long Gland L  
**CLGL**



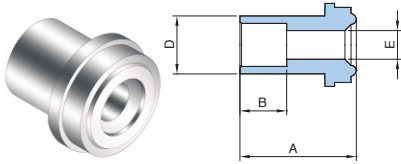
Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CLGL-04-	1/4	1/4	6.35	0.039	1.00	43.20	19.05
CLGL-0804-	1/2	1/4	6.35		1.00		
CLGL-0806-	1/2	3/8	9.53	1.00	45.50		
CLGL-08-	1/2	1/2	12.70	0.049		1.24	
CLGL-12-	3/4	3/4	19.05	0.065	1.65	52.00	20.60
CLGL-16-	1	1	25.40	0.065	1.65	58.90	19.05

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## Metal Face Seal (UCR) Fittings

Socket Weld  
Short Gland

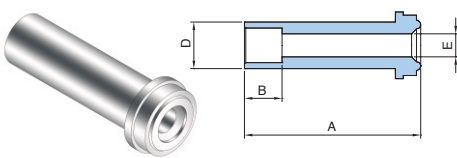
**CSGWS**



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

Socket Weld  
Long Gland

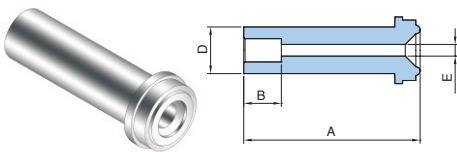
**CLGWS**



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
CLGWS-04-	1/4	1/4	6.35	0.039	1.00	33.30	7.10	4.35
CLGWS-0806-	1/2	3/8	9.53		1.00	38.10	7.90	7.53
CLGWS-08-	1/2	1/2	12.70	0.049	1.24		9.60	10.22
CLGWS-12-	3/4	3/4	19.05	0.065	1.65	50.80	11.20	15.75
CLGWS-16-	1	1	25.40	0.065	1.65	56.40	15.70	22.10

Reducing Socket Weld  
Long Gland

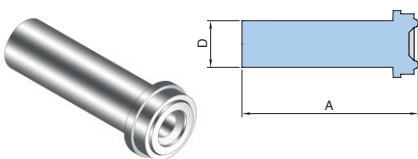
**CLGRWS**



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
CLGRWS-0402-	1/4	1/8	3.17	0.028	0.71	33.30	2.50	2.30
CLGRWS-0804-	1/2	1/4	6.35	0.039	1.00	38.10	7.10	4.35

Blind Gland

**CBG**



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

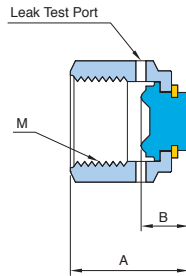
Dimensions are for reference only and are subject to change without prior notice.



## Caps, Plugs, Nuts & Gaskets

### UCR Cap

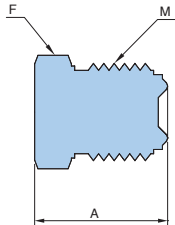
#### CCP



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

### UCR Plug

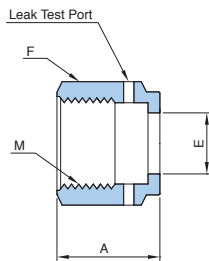
#### CPG



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

### UCR Female Nut

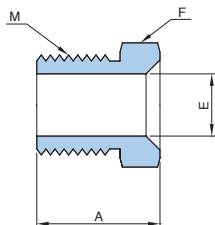
#### CFN



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

### UCR Male Nut

#### CMN



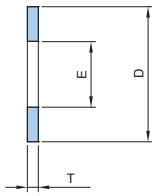
Part No.	UCR Size	Dimension (mm)			M
	inch	A	E	F	
CMN-04-	1/4	18.00	9.10	15.88	9/16-18UNF
CMN-08-	1/2	20.00	15.00	23.81	7/8-14UNF
CMN-12-	3/4	25.40	22.60	34.92	1 1/4-18UNF
CMN-16-	1	30.20	30.50	41.27	1 1/2-20UNF

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## Metal Face Seal (UCR) Fittings

### UCR Gasket

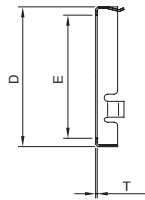
#### CGT



Part No.	UCR Size	Dimension (mm)		
	inch	E	D	T
CGT-04-	1/4	5.60	11.80	0.70
CGT-08-	1/2	11.00	19.30	
CGT-12-	3/4	17.00	28.10	
CGT-16-	1	22.60	34.80	

### UCR Gasket Retained

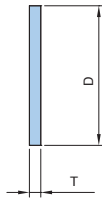
#### CGTR



Part No.	UCR Size	Dimension (mm)		
	inch	E	D	T
CGTR-04-	1/4	5.60	11.80	0.25
CGTR-08-	1/2	11.00	19.30	
CGTR-12-	3/4	17.00	28.10	0.30
CGTR-16-	1	22.60	34.80	

### UCR Gasket Blind

#### CGTB



Part No.	UCR Size	Dimension (mm)	
	inch	D	T
CGTB-04-	1/4	11.80	0.70
CGTB-08-	1/2	19.30	
CGTB-12-	3/4	28.10	
CGTB-16-	1	34.80	

## Retainer Color Coding

Easy identification of gasket materials before assembly or throughout the leak test port of Female Nut after assembly



316LSS



Nickel

## Materials of Gaskets

Every gaskets are available with Nickel and 316LSS. To order, add the material designator to the end of part number.

### Examples :

**CGT-04-NI** Gasket, 1/4", Nickel

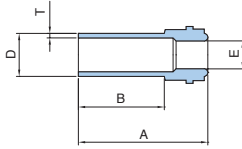
**CGTR-08-SS** Retained Gasket, 1/2", 316SS

Dimensions are for reference only and are subject to change without prior notice.

## High Flow Components

HR Gland

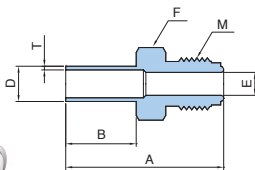
**CHG**



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
CHG-0406-	1/4	3/8	9.53	0.039	1.00	28.70	19.05	6.20
CHG-0406L-	1/4	3/8	9.53	0.039	1.00	33.30	19.05	6.20

HR Adapter

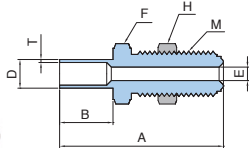
**CHA**



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)				M
	inch	inch	mm	inch	mm	A	B	E	F	
CHA-0406-	1/4	3/8	9.53	0.039	1.00	42.70	19.05	6.35	15.87	9/16-18UNF

HR Bulkhead Adapter

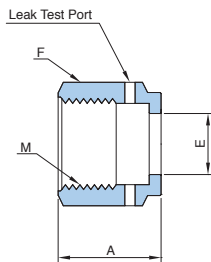
**CHBA**



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)					M	Panel Hole Size
	inch	inch	mm	inch	mm	A	B	E	F	H		
CHBA-0406-	1/4	3/8	9.53	0.039	1.00	59.80	19.05	6.30	19.05	19.05	9/16-18UNF	15.00

HR Female Nut

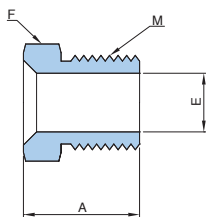
**CHFN**



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

HR Male Nut

**CHMN**



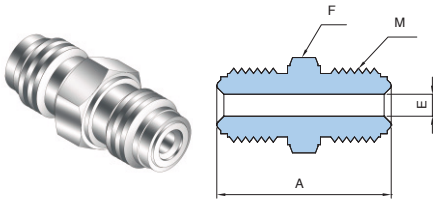
Part No.	UCR Size	Dimension (mm)			M
	inch	A	E	F	
CHMN-04-	1/4	18.00	9.90	15.88	9/16-18UNF

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## UCR to UCR

Double Male Union

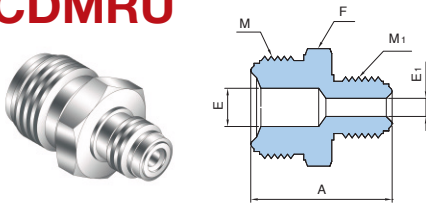
### CDMU



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

Reducing Double Male Union

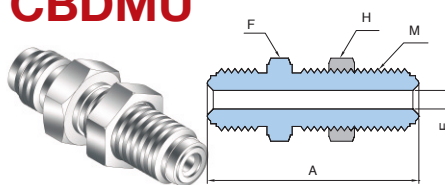
### CDMRU



Part No.	UCR Size	UCR Size	Dimension (mm)				M	M1
	inch	inch	A	E	E1	F		
CDMRU-0804-	1/2	1/4	43.40	10.22	4.57	23.80	7/8-14UNF	9/16-18UNF

Bulkhead Double Male Union

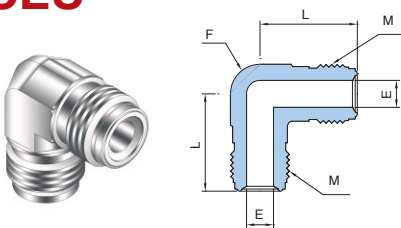
### CBDMU



Part No.	UCR Size	Dimension (mm)					M	Panel Hole Size
	inch	A	B	E	F	H		
CBDMU-04-	1/4	56.60	33.70	4.57	19.05	19.05	9/16-18UNF	15.00
CBDMU-08-	1/2	65.30	37.60	10.22	26.98	26.98	7/8-14UNF	23.00

Union Elbow

### CEU

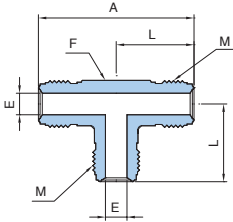


Part No.	UCR Size	Dimension (mm)			M
	inch	L	E	F	
CEU-04-	1/4	27.20	4.35	12.70	9/16-18UNF
CEU-08-	1/2	36.80	10.22	20.63	7/8-14UNF
CEU-12-	3/4	48.80	15.75	31.75	1 1/4-18UNF
CEU-16-	1	50.80	22.10	42.86	1 1/2-20UNF

Dimensions are for reference only and are subject to change without prior notice.

Union Tee

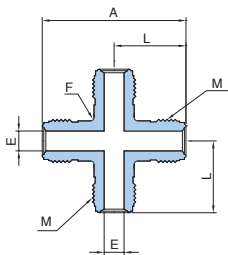
**CUT**



Part No.	UCR Size	Dimension (mm)				M
	inch	A	E	L	F	
CUT-04-	1/4	54.40	4.35	27.20	12.70	9/16-18UNF
CUT-08-	1/2	73.87	10.22	36.80	20.63	7/8-14UNF
CUT-12-	3/4	97.50	15.75	48.80	31.75	1 1/4-18UNF
CUT-16-	1	102.00	22.10	50.80	42.86	1 1/2-20UNF

Union Cross

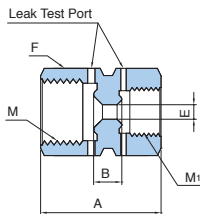
**CUC**



Part No.	UCR Size	Dimension (mm)				M
	inch	A	E	L	F	
CUC-04-	1/4	54.40	4.35	27.20	12.70	9/16-18UNF
CUC-08-	1/2	73.87	10.22	36.80	20.63	7/8-14UNF
CUC-12-	3/4	97.50	15.75	48.80	31.75	1 1/4-18UNF
CUC-16-	1	102.00	22.10	50.80	42.86	1 1/2-20UNF

Reducing Double Female Union

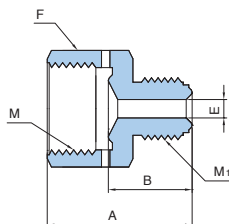
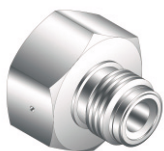
**CDFRU**



Part No.	UCR Size	UCR Size	Dimension (mm)				M	M <sub>1</sub>
	inch	inch	A	B	E	F		
CDFRU-0804-	1/2	1/4	34.60	6.00	4.35	26.98	7/8-14UNF	9/16-18UNF

Reducing Adapter

**CRA**

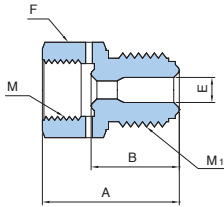


Part No.	UCR Size	UCR Size	Dimension (mm)				M (Female)	M <sub>1</sub> (Male)
	inch	inch	A	B	E	F		
CRA-0804-	1/2	1/4	35.80	21.60	4.35	26.98	7/8-14UNF	9/16-18UNF

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## Reducing Bushing

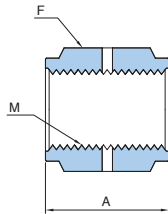
### CRB



Part No.	UCR Size	UCR Size	Dimension (mm)				M (Female)	M <sub>1</sub> (Male)
	inch	inch	A	B	E	F		
CRB-0804-	1/2	1/4	35.80	23.10	4.35	23.81	9/16-18UNF	7/8-14UNF

## Coupling

### CC



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

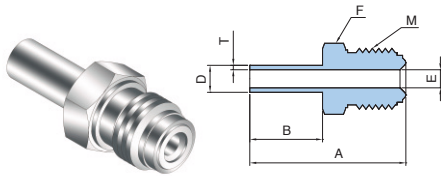
Dimensions are for reference only and are subject to change without prior notice.



## UCR to TBW (Tube Butt Weld)

TBW Adapter

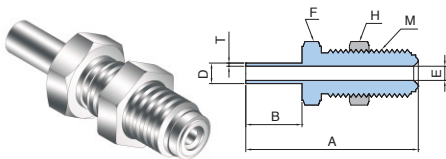
### CAWB



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)				M (Female)
	inch	inch	mm	inch	mm	A	B	E	H	
CAWB-04-	1/4	1/4	6.35	0.039	1.00	42.65		4.35	15.88	9/16-18UNF
CAWB-0804-	1/2	3/8	9.53		1.00	46.70	19.05	10.22	23.81	7/8-14UNF
CAWB-08-	1/2	1/2	12.70	0.049	1.24	46.70		10.22	23.81	1 1/4-18UNF

Bulkhead TBW Adapter

### CBAWB

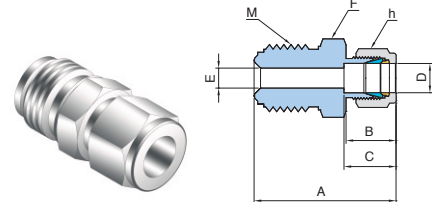


Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)				M (Female)	Panel Hole Size
	inch	inch	mm	inch	mm	A	B	F	H		
CBAWB-04-	1/2	1/4	6.35	0.039	1.00	59.85		19.05	19.05	9/16-18UNF	15.00
CBAWB-0804-	1/2	3/8	9.53		1.00	65.25	19.05	26.98	26.98	7/8-14UNF	23.00
CBAWB-08-	1/2	1/2	12.70	0.049	1.24	71.30		38.10	38.10	1 1/4-18UNF	32.00

## UCR to Uni-Lok

Uni-Lok Connector

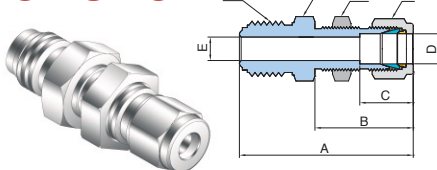
### CULC



Part No.	UCR Size	Tube O.D. D		Dimension (mm)						M
	inch	inch	mm	A	B	C	E	F	h	
CULC-0402-	1/4	1/8	3.17	38.90	15.20	12.70	2.30	15.87	11.11	9/16-18UNF
CULC-04-	1/4	1/4	6.35	41.10	17.80	15.20	4.60	15.87	14.28	9/16-18UNF
CULC-0806-	1/2	3/8	9.53	46.70	19.30	16.80	7.10	23.81	17.46	7/8-14UNF
CULC-08-	1/2	1/2	12.70	49.50	21.80	22.90	10.20	23.81	22.22	7/8-14UNF

Bulkhead Uni-Lok Connector

### CBULC



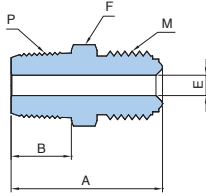
Part No.	UCR Size	Tube O.D. D		Dimension (mm)						M	Panel Hole Size	
	inch	inch	mm	A	B	C	E	F	H			h
CBULC-04	1/4	1/4	6.35	57.20	33.50	15.20	4.60	15.87	15.87	14.28	9/16-18UNF	15.00
CBULC-0806-	1/2	3/8	9.53	64.50	36.80	16.80	7.10	23.81	23.81	17.46	7/8-14UNF	23.00
CBULC-08-	1/2	1/2	12.70	69.60	41.90	22.90	10.20	23.81	23.81	22.22	7/8-14UNF	32.00

Dimensions are for reference only and are subject to change without prior notice.

## UCR to Thread

### Male Connector

#### CUMC

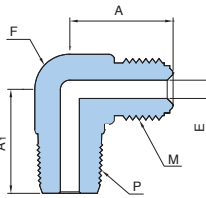


Part No.	UCR Size	Thread Size P-NPT	Dimension (mm)				M
	inch	inch	A	B	E	F	
CUMC-0402N-	1/4	1/8	33.30	9.60	4.35	15.90	9/16-18UNF
CUMC-0404N-	1/4	1/4	37.84	14.22	4.35	15.90	9/16-18UNF
CUMC-0804N-	1/2	1/4	41.87	14.22	10.22	23.80	7/8-14UNF
CUMC-0806N-	1/2	3/8	41.87	14.22	7.53	23.80	7/8-14UNF
CUMC-0808N-	1/2	1/2	46.74	19.05	10.22	23.80	7/8-14UNF
CUMC-1212N-	3/4	3/4	55.63	19.05	15.75	33.30	1 1/4-18UNF
CUMC-1616N-	1	1	62.74	23.88	22.10	42.40	1 1/2-20UNF

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of CUMC. Add "R" as a suffix instead of "N".

### Male Elbow

#### CUME

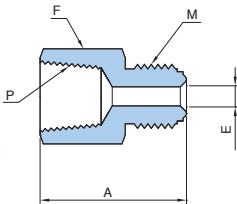


Part No.	UCR Size	Thread Size P-NPT	Dimension (mm)				M
	inch	inch	A	A <sub>1</sub>	E	F	
CUME-0404N-	1/4	1/4	27.18	27.18	4.35	15.95	9/16-18UNF
CUME-0806N-	1/2	3/8	36.83	32.00	10.22	23.80	9/16-18UNF
CUME-0808N-	1/2	1/2	36.83	36.83	10.22	23.80	7/8-14UNF
CUME-1212N-	3/4	3/4	48.80	43.50	15.75	33.30	7/8-14UNF

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of CUME. Add "R" as a suffix instead of "N".

### Female Connector

#### CUFC



Part No.	UCR Size	Thread Size P-NPT	Dimension (mm)			M
	inch	inch	A	B	F	
CUFC-0402N-	1/4	1/8	35.80	4.35	15.90	9/16-18UNF
CUFC-0404N-	1/4	1/4	39.10	4.35	19.05	9/16-18UNF
CUFC-0806N-	1/2	3/8	44.70	7.53	23.81	7/8-14UNF
CUFC-0808N-	1/2	1/2	50.50	10.22	26.98	7/8-14UNF
CUFC-1212N-	3/4	3/4	59.90	15.75	33.33	1 1/4-18UNF
CUFC-1616N-	1	1	63.80	22.10	41.27	1 1/2-20UNF

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of CUFC. Add "R" as a suffix instead of "N".

# Uni-Lok Line up

## Instrumentation

### Fittings



- Tube Fittings
- PTFE Fittings
- Hose & Push-On Connectors
- Precision Pipe Fittings
- Fusible Connectors
- Dielectric Fittings

### Valves



- VB1 series
  - VB2 series
  - VB3 series
  - VB6B series
  - VB6F series
  - VB6T series
  - VP series
  - VN5 series
  - VN6 series
  - VU6 series
  - VMT series
  - VM series
  - VG series
  - VL series
  - VD series
  - VC series
  - VR series
  - VE series
  - VF series
  - VPR series
  - VBR series
- Precision & Clean Ball Valves
  - Swing-Out Ball Valves
  - Instrumentation Ball Valves
  - High Pressure Bar Stock Ball Valves
  - High Pressure Forged Ball Valves
  - Trunnion Ball Valves
  - Plug Valves
  - Integral Bonnet Forged Needle Valves
  - High Pressure Bar Stock Needle Valves
  - Union Bonnet Valves
  - Metering Valves
  - Instrumentation Manifolds Valves
  - Gauge & Gauge Root Valves
  - Bleed Valves
  - Double Block and Bleed Valves
  - General & High Pressure Relief Valves
  - Low & High Pressure Relief Valves
  - Industrial Excess Flow Valves
  - T & In-Line Filters
  - Pressure Reducing Valves
  - Back Pressure Regulators

### Others

- Seamless & Welded Tubing
- Condensate Pots

## UHP(Ultra High Purity)

### Fittings



- Weld & Metal Face Seal Fittings
- Pipe & Tube Fittings
- Flanges
- Cylinder Connectors

### Valves



- VCD series
- VCB series
- VCC series
- Diaphragm Valves
- Bellows Valves
- Welded Check Valves

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