

## **Weld & Metal Face Seal Fittings**



# Weld & Metal Face Seal Fittings

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### Weld Fittings

<b>Weld Fittings</b>					
	<b>CME</b> 256 Micro Elbow 90°		<b>CLE</b> 256 Long Elbow 90°		<b>CSGL</b> 256 Short Gland L
	<b>CMRE</b> 256 Reducing Micro Elbow 90°		<b>CLRE</b> 256 Reducing Long Elbow 90°		<b>CLGS</b> 256 Long Gland S
	<b>CMVE</b> 256 Micro Elbow 45°		<b>CLT</b> 256 Long Tee		<b>CLGL</b> 256 Long Gland L
	<b>CMT</b> 256 Micro Tee		<b>CLRT</b> 256 Reducing Long Tee		<b>CSGWS</b> 256 Socket Weld Short Gland
	<b>CMRT</b> 256 Reducing Micro Tee		<b>CLRU</b> 256 Reducing Long Union		<b>CLGWS</b> 256 Socket Weld Long Gland
	<b>CMTB</b> 256 Micro Tribow	<b>Metal Face Seal (UCR) Fittings Glands</b>			
	<b>CMC</b> 256 Micro Cross		<b>CMGS</b> 256 Micro Gland S		<b>CBG</b> 256 Blind Gland
	<b>CMRU</b> 256 Reducing Micro Union		<b>CMGL</b> 256 Micro Gland L	<b>Metal Face Seal (UCR) Fittings Caps, Plugs, Nuts &amp; Gaskets</b>	
			<b>CSGS</b> 256 Short Gland S		<b>CCP</b> 256 UCR Cap



**CPG** 257  
UCR Plug



**CFN** 257  
UCR Female Nut



**CMN** 257  
UCR Male Nut



**CGT** 258  
UCR Gasket



**CGTR** 258  
UCR Gasket Retained



**CGTB** 258  
UCR Gasket Blind

### Metal Face Seal (UCR) Fittings High Flow Components



**CHG** 259  
HR Gland



**CHA** 259  
HR Adapter



**CHBA** 259  
HR Bulkhead Adapter



**CHFN** 259  
HR Female Nut



**CHMN** 259  
HR Male Nut



**CCR** 259  
Coupling



**CDMU** 259  
Double Male Union



**CDMRU** 259  
Reducing Double Male Union



**CBDMU** 259  
Bulkhead Double Male Union



**CEU** 259  
Union Elbow



**CUT** 259  
Union Tee



**CUC** 259  
Union Cross



**CDFRU** 259  
Reducing Double Female Union



**CRA** 259  
Reducing Adapter



**CRB** 259  
Reducing Bushing



**CAWB** 259  
TBW Adapter



**CBAWB** 259  
Bulkhead TBW Adapter



**CULC** 259  
UNILOK Connector



**CBULC** 259  
Bulkhead UNILOK Connector



**CUMC** 259  
Male Connector



**CUME** 259  
Male Elbow

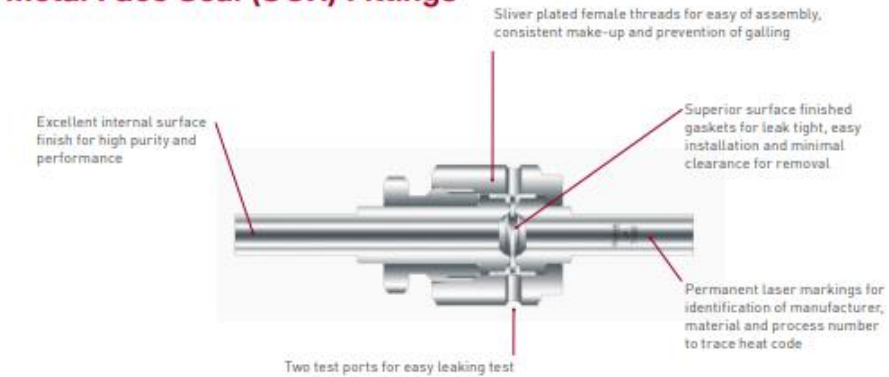


**CUFC** 259  
Female Connector

Weld & Metal Face Seal Fittings

UNILOK® 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. UNILOK® 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    Surface Analysis

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

Reference Specification :  
SEMA-90120400B

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
Glands, Unions, Weld Fittings	
VIM/VAR	Forging - ASTM A182 Bar Stock - ASTM SA479
VCR/VAR	
316LSS	
Nuts, Plugs, Caps, UCR Threaded Fittings	
316LSS	Forging - ASTM A182 Bar Stock - ASTM SA479
Gaskets	
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.

Temperature Ratings

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

Helium Leak Test

UNILOK fittings are rated to a helium leak rate of less than 1x10<sup>-3</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.

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.

Cleaning

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

Assembling

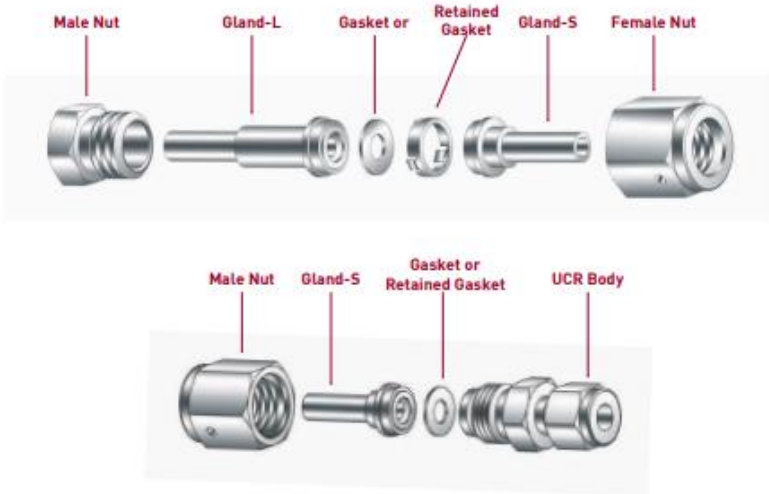
According to SEMI E49.6.

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.



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



**Step D.**  
Confirm metal 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

UNILOK weld fittings are ordered by part number as shown 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.

**C**

UNILOK  
Clean Fittings

**LGS**

Fitting  
Type

-

**08**

Connection  
Size & Type

**04**

Connection  
Size & Type

-

**SM**

Materials

-

**EP**

Surface  
Finish Level

Connection Size & Type							
Fractional(Inch) Tube O.D. Designation							
Tube O.D.	inch	1/8	1/4	3/8	1/2	3/4	1
	mm	3.17	6.35	9.52	12.70	19.05	25.40
Designator		02	04	06	08	12	16

Materials	
DM	316LSS - Double Melting
SM	316LSS - Single Melting
SL	316LSS
NI	Nickel

UCR (Metal Face Seal) Size Designator				
Pipe Size	1/4	1/2	3/4	1
Designator	04	08	12	16

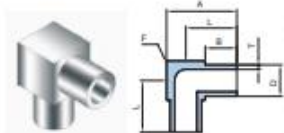
Surface Finish Level	
BA	BA - Bright Annealing
EP	EP - Electro Polished

Pipe Size Designation [NPT or ISO7/1[PT]]				
Pipe Size	1/4	3/8	1/2	3/4
Designator	04N/R	06N/R	08N/R	12N/R

	16N/R
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## CME

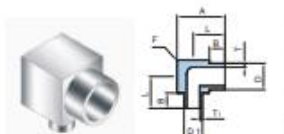
### Micro Elbow 90°



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				
CME-06-	3/8	9.52		1.00				
CME-08-	1/2	12.70		1.24				
CME-12-	3/4	19.05	0.065	1.65	27.00	16.67	20.65	

## CMRE

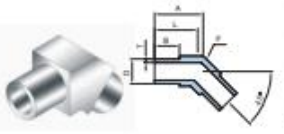
### Reducing Micro Elbow 90°



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	
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	0.049	1.00	1/4	6.35	0.039	1.00	17.46		11.91	11.11	
CMRE-0804-	1/2	12.70		1.24	1/4	6.35		1.00	20.64		13.50	14.29	
CMRE-0806-	1/2	12.70	0.049	1.24	3/8	9.52	1.00	1.00					

## CMVE

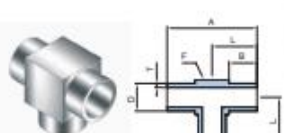
### Micro Elbow 45°



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				
CMVE-08-	1/2	12.70	0.049	1.24				

## CMT

### Micro Tee

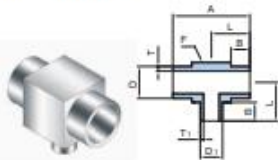


Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	
CMT-02-	1/8	3.17	0.028	0.71	20.64	6.35	10.32	7.94
CMT-04-*A	1/4	6.35	0.035	0.89				
CMT-04-	1/4	6.35	0.039	1.00				
CMT-06-	3/8	9.52		1.00				
CMT-08-	1/2	12.70		1.24				
CMT-12-	3/4	19.05	0.065	1.65	33.35	16.67	20.65	

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

## CMRT

### Reducing Micro 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	A	B	L	
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	0.069	1.24	3/8	9.52	1.00	1.00				

## CMTB

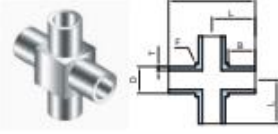
### Micro Tribow



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				
CMTB-08-	1/2	12.70	0.049	1.24				

## CMC

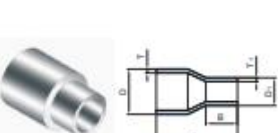
### Micro Cross



Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)			Body Cube
	inch	mm	inch	mm	A	B	L	
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				
CMC-08-	1/2	12.70	0.049	1.24				

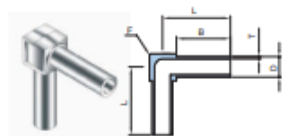
## CMRU

### Reducing Micro Union

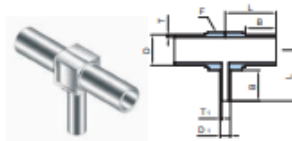


Part No.	Tube O.D. D		Tube W.T. T		Tube O.D. D <sub>1</sub>		Tube W.T. T <sub>1</sub>		Dimension (mm)		
	inch	mm	inch	mm	inch	mm	inch	mm	B	L	
CMRU-0402-	1/4	6.35	0.039	1.00	1/8	3.17	0.028	0.71	6.35	19.05	
CMRU-0604-	3/8	9.52		1.00	1/4	6.35	1.00	23.81			
CMRU-0804-	1/2	12.70	0.049	1.24	1/4	6.35	1.00	25.40			
CMRU-0806-	1/2	12.70	0.049	1.24	3/8	9.52	0.039	1.00			25.40
CMRU-1204-	3/4	19.05	0.065	1.65	1/4	6.35	1.00	25.40			
CMRU-1206-	3/4	19.05	0.065	1.65	3/8	9.52	1.00	25.40			
CMRU-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24			25.40

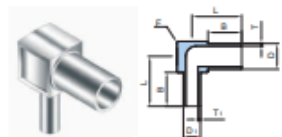
Dimensions are for reference only and are subject to change without prior notice.

**CLE****Long Elbow 90°**

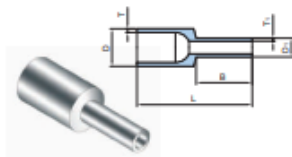
Part No.	Tube O.D. D		Tube W.T. T		Dimension (mm)			Body Cube
	inch	mm	inch	mm	B	L	F	
CLE-04-	1/4	6.35	0.039	1.00	20.00	25.00	9.00	
CLE-06-	3/8	9.52		1.00				
CLE-08-	1/2	12.7	0.049	1.24		27.00	15.00	
CLE-12-	3/4	19.05	0.065	1.65		31.50	22.00	
CLE-16-	1	25.4	0.049	1.65		34.00	30.00	

**CLRT****Reducing Long Tee**

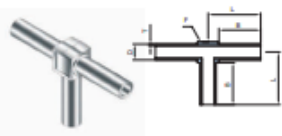
Part No.	Tube O.D. D		Tube W.T. T		Tube O.D. D <sub>1</sub>		Tube W.T. T <sub>1</sub>		Dimension (mm)			Body Cube
	inch	mm	inch	mm	inch	mm	inch	mm	B	L	F	
CLRT-0604-	3/8	9.52	0.039	1.00	1/4	6.35	0.039	1.00	19.00	25.00	11.00	
CLRT-0804-	1/2	12.70	0.049	1.24	1/4	6.35		1.00				
CLRT-0806-	1/2	12.70	0.049	1.24	3/8	9.52		1.00		27.00	15.00	
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	9.52		1.00				
CLRT-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24				

**CLRE****Reducing Long Elbow 90°**

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	9.52	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	9.52		1.00		27.00	15.00	
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	9.52		1.00		31.50	22.00	
CLRE-1208-	3/4	19.05	0.065	1.65	1/2	12.70	0.049	1.24				

**CLRU****Reducing Long 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)			Body Cube
	inch	mm	inch	mm	inch	mm	inch	mm	B	L	F	
CLRU-0604-	3/8	9.52	0.039	1.00	1/4	6.35	0.039	1.00	19.00	25.00	11.00	
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	9.52		1.00		27.00	15.00	
CLRU-1204-	3/4	19.05	0.065	1.65	1/4	6.35		1.00				
CLRU-1206-	3/4	19.05	0.065	1.65	3/8	9.52		1.00		31.50	22.00	
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	0.039	1.00	19.00	25.00	11.00	
CLRU-1606-	1	25.40	0.065	1.65	3/8	9.52		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				

**CLT****Long Tee**

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	20.00	25.00	9.00	
CLT-06-	3/8	9.52		1.00				
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	

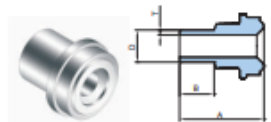
Dimensions are for reference only and are subject to change without prior notice.

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

## Glands

## CMGS

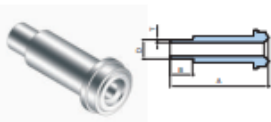
## Micro Gland S



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	15.80	
CMGS-0806-	1/2	3/8	9.52		1.00		
CMGS-08-	1/2	1/2	12.70	0.049	1.24		

## CMGL

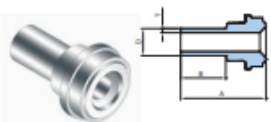
## Micro Gland L



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	32.80	
CMGL-0806-	1/2	3/8	9.52	1.00			
CMGL-08-	1/2	1/2	12.70	0.049	1.24		

## CSGS

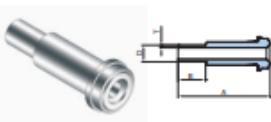
## Short Gland S



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	19.45	
CSGS-0806-	1/2	3/8	9.52	1.00			
CSGS-08-	1/2	1/2	12.70	0.049	1.24		

## CSGL

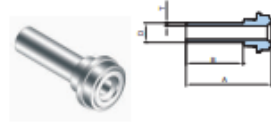
## Short Gland L



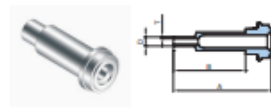
Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CSGL-0402-	1/4	1/8	3.17	0.028	0.71	28.00	10.00
CSGL-04-	1/4	1/4	6.35	0.039	1.00	34.15	
CSGL-0804-	1/2	1/4	6.35		1.00	36.45	
CSGL-0806-	1/2	3/8	9.52		1.00		
CSGL-08-	1/2	1/2	12.70	0.049	1.24		

## CLGS

## Long Gland S



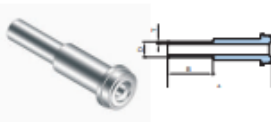
Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)	
	inch	inch	mm	inch	mm	A	B
CLGS-0402-	1/4	1/8	3.17	0.028	0.71	28.00	19.05
CLGS-04-	1/4	1/4	6.35	0.039	1.00		
CLGS-0804-	1/2	1/4	6.35		1.00		
CLGS-0806-	1/2	3/8	9.52		1.00		
CLGS-08-	1/2	1/2	12.70	0.049	1.24	28.50	
CLGS-12-	3/4	3/4	19.05	0.065	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

## CLGL

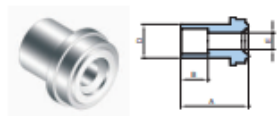
## Long Gland L



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	45.50	
CLGL-0806-	1/2	3/8	9.52		1.00		
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

## CSGWS

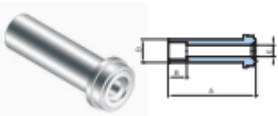
### Socket Weld Short Gland



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

## CLGWS

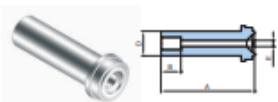
### Socket Weld Long Gland



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
CLGWS-04-	1/4	1/4	6.35	1.00	33.30	7.10	4.35	
CLGWS-0806-	1/2	3/8	9.52	0.039	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

## CLGRWS

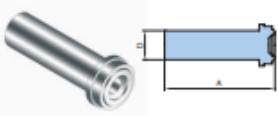
### Reducing Socket Weld Long Gland



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
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

## CBG

### Blind Gland



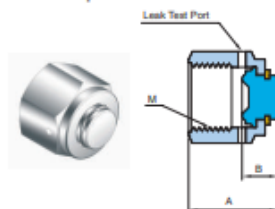
Part No.	UCR Size	Tube O.D. D		Dimension (mm)	
	inch	inch	mm	A	
CBG-04-	1/4	1/4	6.35	33.30	
CBG-08-	1/2	1/2	12.70	38.10	
CBG-12-	3/4	3/4	19.05	50.80	
CBG-16-	1	1	25.40	50.40	

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

## Caps, Plugs, Nuts & Gaskets

### CCP

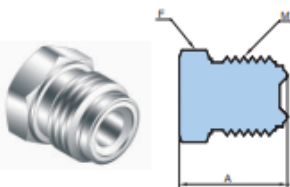
#### UCR Cap



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

### CPG

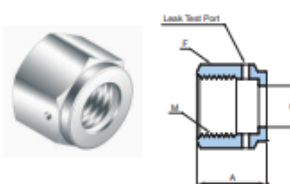
#### UCR Plug



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

### CFN

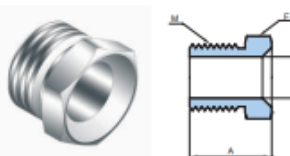
#### UCR Female Nut



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

### CMN

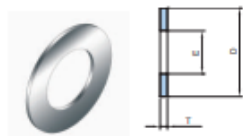
#### UCR Male Nut



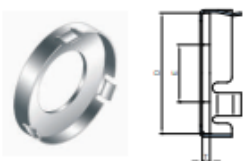
Part No.	UCR Size	Dimension (mm)			M
	inch	A	E	F	
CMN-04-	1/4	18.00	9.10	15.88	9/16-18UNF
CMN-08-	1/2	20.00	15.00	23.81	7/8-14UNF
CMN-12-	3/4	25.40	22.60	34.92	1 1/4-18UNF
CMN-16-	1	30.20	30.50	41.27	1 1/2-20UNF

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

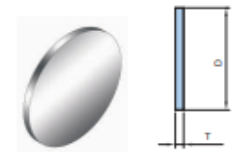


**CGT****UCR Gasket**

Part No.	UCR Size	Dimension (mm)		
	inch	E	D	T
CGT-04-	1/4	5.60	11.80	0.75
CGT-08-	1/2	11.00	19.30	
CGT-12-	3/4	17.00	28.10	
CGT-16-	1	22.60	34.80	

**CGTR****UCR Gasket Retained**

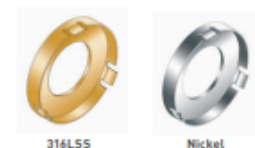
Part No.	UCR Size	Dimension (mm)		
	inch	E	D	T
CGTR-04-	1/4	5.60	11.80	0.75
CGTR-08-	1/2	11.00	19.30	
CGTR-12-	3/4	17.00	28.10	
CGTR-16-	1	22.60	34.80	

**CGTB****UCR Gasket Blind**

Part No.	UCR Size	Dimension (mm)	
	inch	D	T
CGTB-04-	1/4	11.80	0.75
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

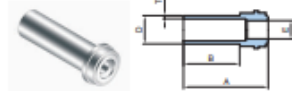
**Materials of Gaskets**

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

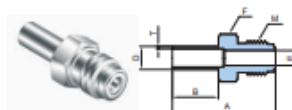
**Examples :**

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

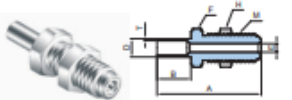
*CGTR-08-SL* Retained Gasket, 1/2", 316LSS

**High Flow Components****CHG****HR Gland**

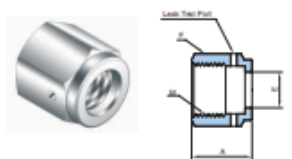
Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)		
	inch	inch	mm	inch	mm	A	B	E
CHG-0406B-	1/4	3/8	9.52	0.039	1.00	28.70	19.05	6.20
CHG-0406B-333-	1/4	3/8	9.52	0.039	1.00	33.30	28.50	6.20

**CHA****HR Adapter**

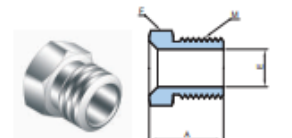
Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)				M
	inch	inch	mm	inch	mm	A	B	E	F	
CHA-0406-	1/4	3/8	9.52	0.039	1.00	42.70	19.05	6.35	17.46	9/16-18UNF

**CHBA****HR Bulkhead Adapter**

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	9.52	0.039	1.00	59.80	19.05	6.30	19.05	19.05	9/16-18UNF	15.00

**CHFN****HR Female Nut**

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

**CHMN****HR Male Nut**

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

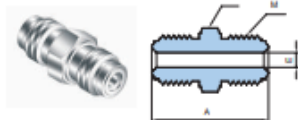
Dimensions are for reference only and are subject to change without prior notice.

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

## UCR to UCR

### CDMU

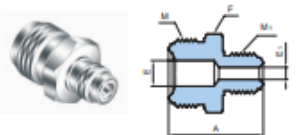
Double Male Union



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

### CDMRU

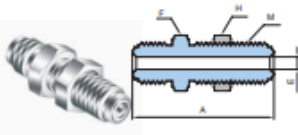
Reducing Double Male Union



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

### CBDMU

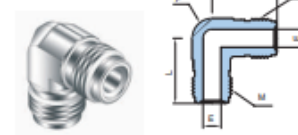
Bulkhead Double Male Union



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

### CEU

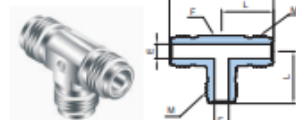
Union Elbow



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

### CUT

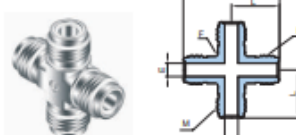
Union Tee



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

### CUC

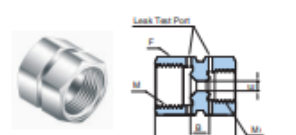
Union Cross



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

### CDFRU

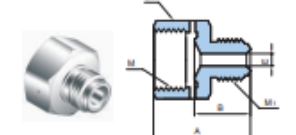
Reducing Double Female Union



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

### CRA

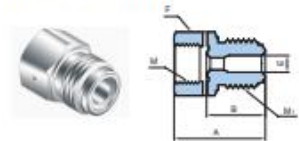
Reducing Adapter



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

**CRB**

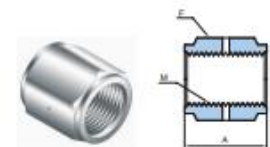
## Reducing Bushing



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

**CC**

## Coupling



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

**UCR to TBW (Tube Butt Weld)****CAWB**

## TBW Adapter



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)				M (Male)
	inch	inch	mm	inch	mm	A	B	E	H	
CAWB-04-	1/4	1/4	6.35	0.009	1.00	42.65	19.05	4.35	15.88	9/16-18UNF
CAWB-0806-	1/2	3/8	9.52	1.00	46.70	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	7/8-14UNF

**CBAWB**

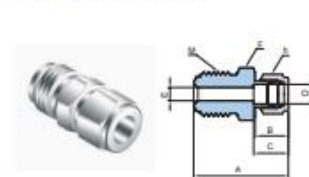
## Bulkhead TBW Adapter



Part No.	UCR Size	Tube O.D. D		Tube W.T. T		Dimension (mm)				M (Male)	Panel Hole Size
	inch	inch	mm	inch	mm	A	B	F	H		
CBAWB-04-	1/2	1/4	6.35	0.009	1.00	59.85	19.05	19.05	19.05	9/16-18UNF	15.00
CBAWB-0804-	1/2	3/8	9.52		1.00	65.25		26.98	26.98	7/8-14UNF	23.00
CBAWB-08-	1/2	1/2	12.70		1.24	71.30		38.10	38.10	1 1/4-18UNF	32.00

**CULC**

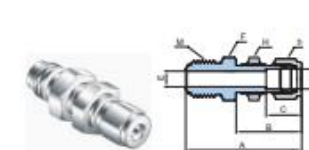
## UNILOK Connector



Part No.	UCR Size	Tube O.D. D	Dimension (mm)							M (Male)
	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	4.40	15.87	14.28	9/16-18UNF
CULC-0806-	1/2	3/8	9.52	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

**CBULC**

## Bulkhead UNILOK Connector

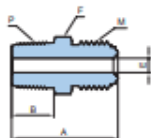


Part No.	UCR Size	Tube O.D. D	Dimension (mm)								M (Male)	Panel Hole Size
	inch	inch	mm	A	B	C	E	F	H	h		
CBULC-04	1/4	1/4	6.35	57.20	33.50	15.20	4.40	15.87	15.87	14.28	9/16-18UNF	11.50
CBULC-0806-	1/2	3/8	9.52	64.50	36.80	16.80	7.10	23.81	23.81	17.46	7/8-14UNF	14.70
CBULC-08-	1/2	1/2	12.70	69.60	41.90	22.90	10.20	23.81	23.81	22.22	7/8-14UNF	19.40

## UCR to Thread

### CUMC

#### Male Connector

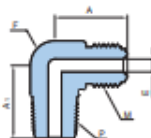


Part No.	UCR Size	Thread Size P-NPT	Dimension (mm)				M
	inch	inch	E	L	E	F	
CUMC-0402N-	1/4	1/8	33.30	9.60	4.35	15.90	9/16-18UNF
CUMC-0404N-	1/4	1/4	37.84	14.22	4.35	15.90	9/16-18UNF
CUMC-0804N-	1/2	1/4	41.87	14.22	10.22	23.80	7/8-14UNF
CUMC-0806N-	1/2	3/8	41.87	14.22	7.53	23.80	7/8-14UNF
CUMC-0808N-	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"

### CUME

#### Male Elbow

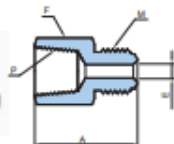


Part No.	UCR Size	Thread Size P-NPT	Dimension (mm)				M
	inch	inch	A	A <sub>1</sub>	E	F	
CUME-0404N-	1/4	1/4	27.18	27.18	4.35	15.95	9/16-18UNF
CUME-0806N-	1/2	3/8	36.83	32.00	10.22	23.80	9/16-18UNF
CUME-0808N-	1/2	1/2	36.83	36.83	10.22	23.80	7/8-14UNF
CUME-1212N-	3/4	3/4	48.80	43.50	15.75	33.30	7/8-14UNF

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

### CUFC

#### Female Connector



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"