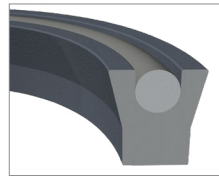
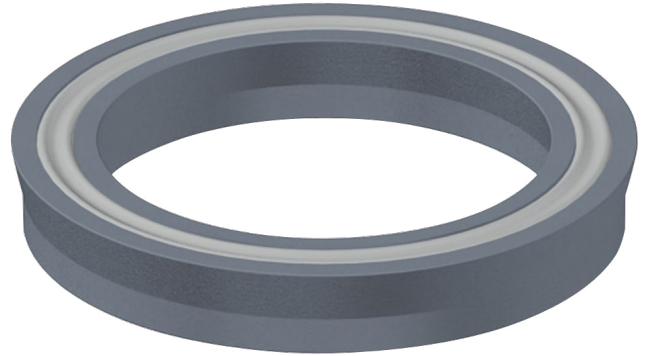
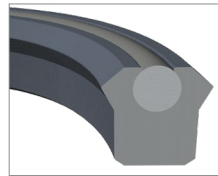


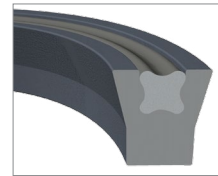
Seal Materials	Temp. Range		
Urethane (PU)	-54°C	to	105°C
Viton™/Fluorocarbon (FKM)	-26°C	to	204°C
Hytrel® /Fluorotrel™ (TPC-ET)	-54°C	to	149°C
Hydrogenated Nitrile (HNBR)	-40°C	to	160°C
Loader Materials			
Nitrile (NBR)	-40°C	to	120°C
Low Temp. Nitrile (LTN)	-54°C	to	116°C
Viton™/Fluorocarbon (FKM)	-26°C	to	204°C



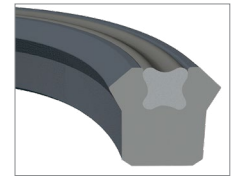
O-Ring Loaded w/ Straight Lip



O-Ring Loaded w/ Beveled Lip



Quad Loaded w/ Straight Lip

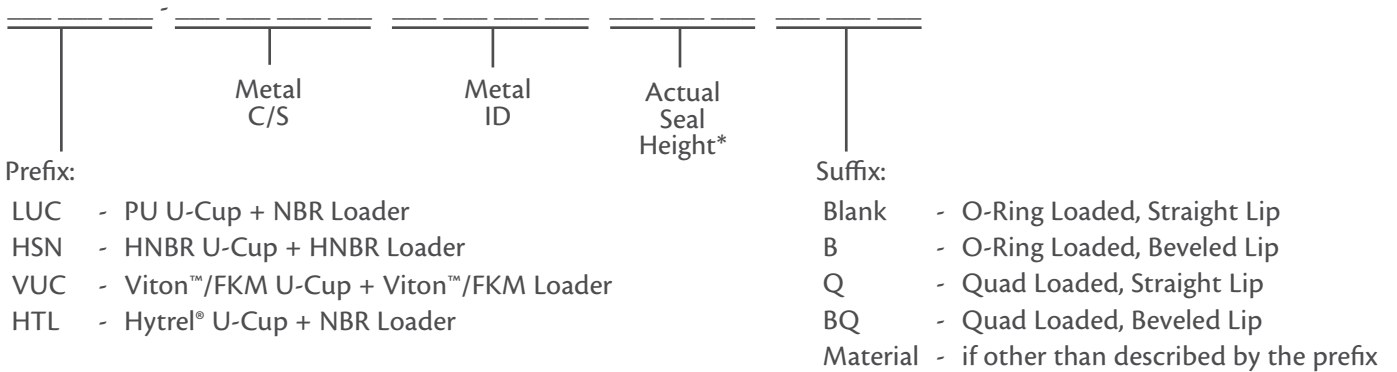


Quad Loaded w/ Beveled Lip

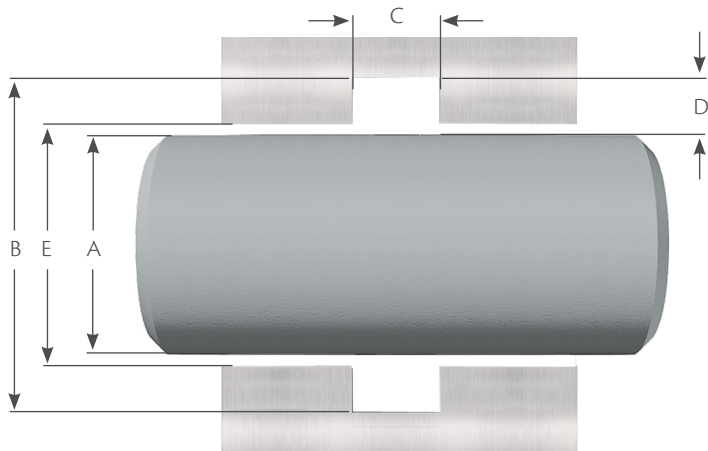
Product Description

U-cups are one of the most popular lip seals used today. Loaded U-cups are primarily intended for dynamic reciprocating applications. They are an excellent seal in low pressure rod or piston applications. As the system pressure increases, the loading lip force also increases, automatically compensating for the higher pressure while maintaining a positive seal. A variety of styles, materials, and sizes are available to suit specific requirements.

Part Numbers:



* Height is only listed if the axial height is greater than the cross-section.



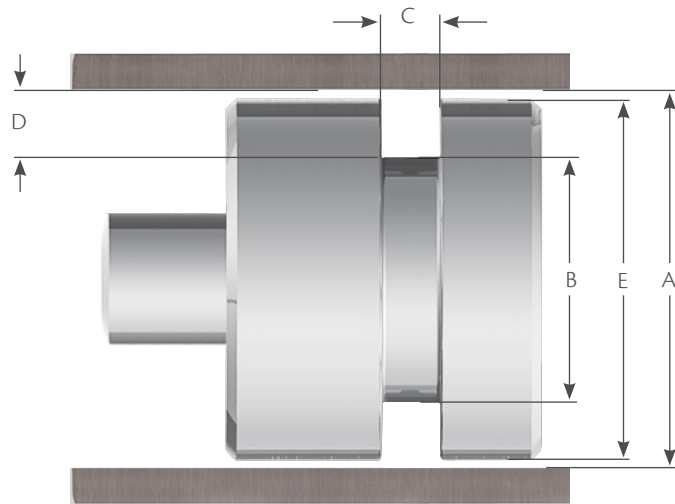
Rod Gland Application

The below tables show the recommended diameter ranges for the corresponding C/S. Other Diameter-C/S combinations are possible.

C/S Series	Metal C/S	A Rod Diameter		B Groove Diameter		E Throat Diameter		Actual Seal Height	C Groove Width +0.010/ -0.000
		Recommended Range	Tolerance	Calculation	Tolerance	Calculation	Tolerance		
1250	0.125 (1/8)	0.062 – 0.999	+0.000/ -0.001	Dia. A + 0.250	+0.002/ -0.000	Dia. A + 0.001	+0.002/ -0.000	0.125	0.138
								0.187	0.206
								0.250	0.275
1870	0.1875 (3/16)	1.000 – 1.999	+0.000/ -0.002	Dia. A + 0.375	+0.002/ -0.000	Dia. A + 0.001	+0.002/ -0.000	0.187	0.206
								0.250	0.275
								0.312	0.343
2500	0.250 (1/4)	2.000 – 3.499	+0.000/ -0.002	Dia. A + 0.500	+0.003/ -0.000	Dia. A + 0.001	+0.003/ -0.000	0.375	0.413
								0.250	0.275
								0.312	0.343
								0.375	0.413
3120	0.3125 (5/16)	3.500 – 4.999	+0.000/ -0.002	Dia. A + 0.625	+0.004/ -0.000	Dia. A + 0.002	+0.003/ -0.000	0.500	0.550
								0.250	0.275
								0.312	0.343
								0.375	0.413
3750	0.375 (3/8)	5.000 – 9.999	+0.000/ -0.002	Dia. A + 0.750	+0.005/ -0.000	Dia. A + 0.002	+0.004/ -0.000	0.562	0.618
								0.625	0.688
								0.375	0.413
								0.500	0.550
								0.562	0.618
								0.625	0.688

C/S Series	Metal C/S	A Rod Diameter		B Groove Diameter		E Throat Diameter		Actual Seal Height	C Groove Width +0.010/ -0.000
		Recommended Range	Tolerance	Calculation	Tolerance	Calculation	Tolerance		
5000	0.500 (1/2)	10.000 – 19.999	+0.000/ -0.003	Dia. A + 1.000	+0.007/ -0.000	Dia. A + 0.002	+0.005/ -0.000	0.500	0.550
								0.562	0.618
								0.625	0.688
								0.750	0.825
6250	0.625 (5/8)	20.000 – 29.999	+0.000/ -0.003	Dia. A + 1.250	+0.009/ -0.000	Dia. A + 0.002	+0.006/ -0.000	0.625	0.688
								0.750	0.825
								1.000	1.100
7500	0.750 (3/4)	30.000 – 39.999	+0.000/ -0.004	Dia. A + 1.500	+0.011/ -0.000	Dia. A + 0.002	+0.007/ -0.000	0.750	0.825
								1.000	1.100
								1.250	1.375
1000	1.000 (1)	40.000+	+0.000/ -0.005	Dia. A + 2.000	+0.015/ -0.000	Dia. A + 0.002	+0.009/ -0.000	1.000	1.100
								1.250	1.375
								1.500	1.650

Loaded U-Cups



Piston Gland Application

The below tables show the recommended diameter ranges for the corresponding C/S. Other Diameter-C/S combinations are possible.

C/S Series	Metal C/S	A Bore Diameter		B Groove Diameter		E Piston Diameter		Actual Seal Height	C Groove Width +0.010/ -0.000
		Recommended Range	Tolerance	Calculation	Tolerance	Calculation	Tolerance		
1250	0.125 (1/8)	0.312 - 1.499	+0.002/ -0.000	Dia. A - 0.250	+0.000/ -0.002	Dia. A - 0.001	+0.000/ -0.001	0.125	0.138
								0.187	0.206
								0.250	0.275
1870	0.1875 (3/16)	1.500 - 2.999	+0.002/ -0.000	Dia. A - 0.375	+0.000/ -0.002	Dia. A - 0.001	+0.000/ -0.002	0.187	0.206
								0.250	0.275
								0.312	0.343
2500	0.250 (1/4)	3.000 - 5.999	+0.003/ -0.000	Dia. A - 0.500	+0.000/ -0.003	Dia. A - 0.001	+0.000/ -0.002	0.375	0.413
								0.250	0.275
								0.312	0.343
								0.500	0.550
3120	0.3125 (5/16)	6.000 - 9.999	+0.003/ -0.000	Dia. A - 0.625	+0.000/ -0.004	Dia. A - 0.002	+0.000/ -0.002	0.562	0.618
								0.312	0.343
								0.375	0.413
								0.500	0.550
3750	0.375 (3/8)	10.000 - 19.999	+0.004/ -0.000	Dia. A - 0.750	+0.000/ -0.005	Dia. A - 0.002	+0.000/ -0.002	0.625	0.688
								0.375	0.413
								0.500	0.550
								0.562	0.618

Loaded U-Cups

C/S Series	Metal C/S	A Bore Diameter		B Groove Diameter		E Piston Diameter		Actual Seal Height	C Groove Width +0.010/ -0.000
		Recommended Range	Tolerance	Calculation	Tolerance	Calculation	Tolerance		
5000	0.500 (1/2)	20.000 - 29.999	+0.005/ -0.000	Dia. A - 1.000	+0.000/ -0.007	Dia. A - 0.002	+0.000/ -0.003	0.500	0.550
								0.562	0.618
								0.625	0.688
								0.750	0.825
6250	0.625 (5/8)	30.000 - 39.999	+0.006/ -0.000	Dia. A - 1.250	+0.000/ -0.009	Dia. A - 0.002	+0.000/ -0.003	0.625	0.688
								0.750	0.825
								1.000	1.100
7500	0.750 (3/4)	40.000 - 49.999	+0.007/ -0.000	Dia. A - 1.500	+0.000/ -0.010	Dia. A - 0.002	+0.000/ -0.004	0.750	0.825
								1.000	1.100
								1.250	1.375
1000	1.000 (1)	50.000+	+0.009/ -0.000	Dia. A - 2.000	+0.000/ -0.012	Dia. A - 0.002	+0.000/ -0.005	1.000	1.100
								1.250	1.375
								1.500	1.650