





HPS UNLOADED LIP U-CUP FAMILY												
Nom Cross Section (inch)	Part Number	Nom I.D. (inch)	Nom O.D. (inch)	Nom Axial Length (inch)	Width "A" (inch)	Piston Application			Rod Application			
						Bore "B" (inch)	Piston "C" (inch)	Groove "D" (inch)	Rod "E" (inch)	Throat "F" (inch)	Groove "G" (inch)	
						[+0.010 -0.000]	[+0.005 -0.000]	[+0.000 -0.003]	[+0.000 -0.007]	[+0.000 -0.003]	[+0.005 -0.000]	[+0.007 -0.000]
1/2	XXX -5000 -8500 -XX	8 1/2	9 1/2	1/2	0.550	9.500	9.498	8.500	8.500	8.502	9.500	
	XXX -5000 -8500 -750 -XX			3/4	0.825							
	XXX -5000 -8750 -XX	8 3/4	9 3/4	1/2	0.550	9.750	9.748	8.750	8.750	8.752	9.750	
	XXX -5000 -8750 -750 -XX			3/4	0.825							
	XXX -5000 -9000 -XX	9	10	1/2	0.550	10.000	9.998	9.000	9.000	9.002	10.000	
	XXX -5000 -9000 -750 -XX			3/4	0.825							
	XXX -5000 -9250 -XX	9 1/4	10 1/4	1/2	0.550	10.250	10.248	9.250	9.250	9.252	10.250	
	XXX -5000 -9250 -750 -XX			3/4	0.825							
	XXX -5000 -9500 -XX	9 1/2	10 1/2	1/2	0.550	10.500	10.498	9.500	9.500	9.502	10.500	
	XXX -5000 -9500 -750 -XX			3/4	0.825							
	XXX -5000 -9750 -XX	9 3/4	10 3/4	1/2	0.550	10.750	10.748	9.750	9.750	9.752	10.750	
	XXX -5000 -9750 -750 -XX			3/4	0.825							
	XXX -5000 -10000 -XX	10	11	1/2	0.550	11.000	10.998	10.000	10.000	10.002	11.000	
	XXX -5000 -10000 -750 -XX			3/4	0.825							
	XXX -5000 -10500 -XX	10 1/2	11 1/2	1/2	0.550	11.500	11.498	10.500	10.500	10.502	11.500	
	XXX -5000 -10500 -750 -XX			3/4	0.825							
	XXX -5000 -11000 -XX	11	12	1/2	0.550	12.000	11.998	11.000	11.000	11.002	12.000	
	XXX -5000 -11000 -750 -XX			3/4	0.825							
	XXX -5000 -11500 -XX	11 1/2	12 1/2	1/2	0.550	12.500	12.498	11.500	11.500	11.502	12.500	
	XXX -5000 -11500 -750 -XX			3/4	0.825							
	XXX -5000 -12000 -XX	12	13	1/2	0.550	13.000	12.998	12.000	12.000	12.002	13.000	
	XXX -5000 -12000 -750 -XX			3/4	0.825							
	XXX -5000 -12500 -XX	12 1/2	13 1/2	1/2	0.550	13.500	13.498	12.500	12.500	12.502	13.500	
	XXX -5000 -12500 -750 -XX			3/4	0.825							
	XXX -5000 -13000 -XX	13	14	1/2	0.550	14.000	13.998	13.000	13.000	13.002	14.000	
	XXX -5000 -13000 -750 -XX			3/4	0.825							
	XXX -5000 -13500 -XX	13 1/2	14 1/2	1/2	0.550	14.500	14.498	13.500	13.500	13.502	14.500	
	XXX -5000 -13500 -750 -XX			3/4	0.825							
	XXX -5000 -14000 -XX	14	15	1/2	0.550	15.000	14.998	14.000	14.000	14.002	15.000	
	XXX -5000 -14000 -750 -XX			3/4	0.825							
	XXX -5000 -14500 -XX	14 1/2	15 1/2	1/2	0.550	15.500	15.498	14.500	14.500	14.502	15.500	
	XXX -5000 -14500 -750 -XX			3/4	0.825							
XXX -5000 -15000 -XX	15	16	1/2	0.550	16.000	15.998	15.000	15.000	15.002	16.000		
XXX -5000 -15000 -750 -XX			3/4	0.825								

Note:
 Not all sizes listed are tooled.
 Sizes not listed may be tooled.
 Please contact HPS for availability.