



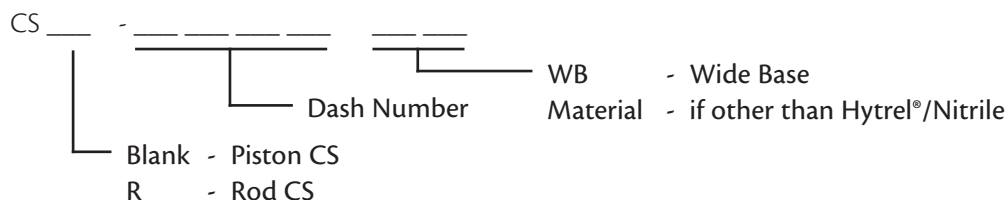
Crown Seal Materials:		Temp. Range	
Fluorotrel®/Hytrel®	-54°C	to	135°C
Polyurethane	-54°C	to	105°C
PTFE	-200°C	to	250°C
Loader Materials:			
Nitrile	-40°C	to	120°C
Fluorocarbon	-26°C	to	204°C
Ethylene Propylene	-54°C	to	149°C
Neoprene	-40°C	to	121°C

Product Description:

The Crown Seal® is a double acting piston squeeze-type seal. The seal inserts into a groove on the piston with the exposed O-ring resting on the static surface of the piston. Due to its narrow single line seal contact, the sealing point creates a positive seal for both a vacuum and high pressure applications. The Crown Seal® side legs act as an anti-extrusion device for the O-ring and the legs provides additional stability to the seal.

Hi-Tech Seals' standard Crown Seal® material is Fluorotrel®, however, we stock a large amount of Polyurethane in common sizes. The Crown Seal® can be directly interchanged with T-seals, O-rings and Quad O-rings. To promote the longevity of the Crown Seal® we commonly see a wear ring used on the piston. The wear ring helps keep the piston centered which allows for even wear and pressure distribution on the Crown Seals® sealing surface; a close tolerance wear ring will also help reduce bending of the rod.

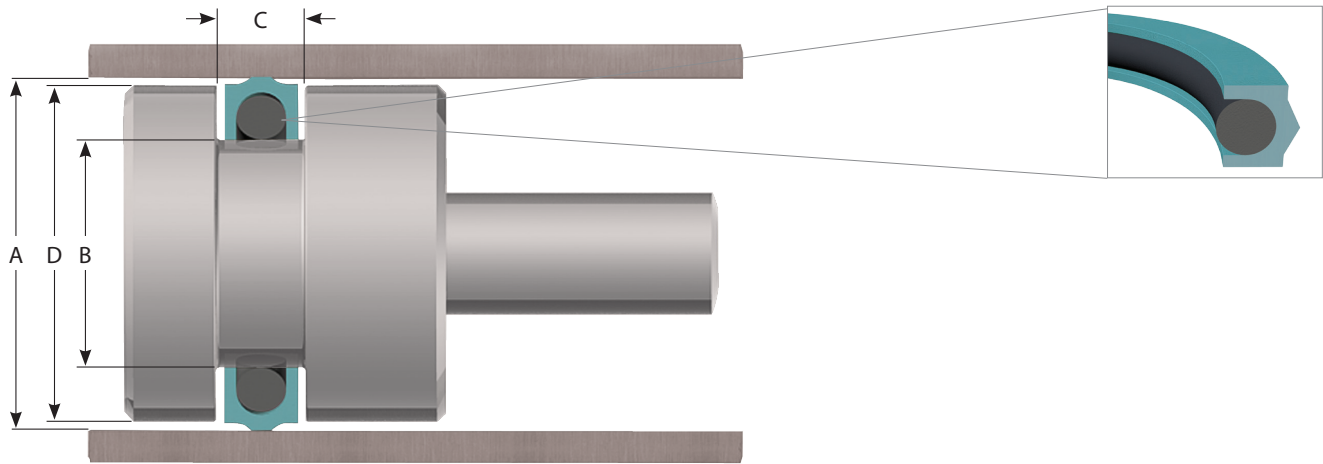
Part Numbers:



Example: CS 214 - Fluorotrel® Crown Seal™ with a Nitrile loader - 1" Nom. I.D., 1 - 1/4" Nom. O.D., 1/8" Nom. C/S

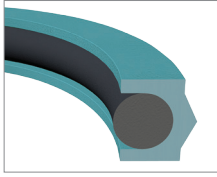
Crown Rod Seal dimension information is available through a Hi-Tech Seals' Sales representative. The rod version of the Crown Seal® follows the same nominal reference sizing, but contains different gland information.

Piston Style



Part Number	Nominal Reference Sizes			A		B		C		D	
	I.D.	O.D.	C/S	Bore Diameter		Groove Diameter		Groove Length		Piston Diameter	
CS 106	3/16	3/8	3/32	0.374	+0.002/-0.000	0.188	+0.000/-0.002	0.150	+0.005/-0.000	0.372	+0.000/-0.002
CS 108	1/4	7/16	3/32	0.436	+0.002/-0.000	0.250	+0.000/-0.002	0.150	+0.005/-0.000	0.434	+0.000/-0.002
CS 109	5/16	1/2	3/32	0.499	+0.002/-0.000	0.313	+0.000/-0.002	0.150	+0.005/-0.000	0.497	+0.000/-0.002
CS 203	5/16	9/16	1/8	0.561	+0.002/-0.000	0.315	+0.000/-0.002	0.185	+0.005/-0.000	0.559	+0.000/-0.002
CS 204	3/8	5/8	1/8	0.624	+0.002/-0.000	0.378	+0.000/-0.002	0.185	+0.005/-0.000	0.622	+0.000/-0.002
CS 205	7/16	11/16	1/8	0.686	+0.002/-0.000	0.440	+0.000/-0.002	0.185	+0.005/-0.000	0.684	+0.000/-0.002
CS 206	1/2	3/4	1/8	0.749	+0.002/-0.000	0.503	+0.000/-0.002	0.185	+0.005/-0.000	0.747	+0.000/-0.002
CS 207	9/16	13/16	1/8	0.811	+0.002/-0.000	0.565	+0.000/-0.002	0.185	+0.005/-0.000	0.809	+0.000/-0.002
CS 208	5/8	7/8	1/8	0.874	+0.002/-0.000	0.628	+0.000/-0.002	0.185	+0.005/-0.000	0.872	+0.000/-0.002
CS 209	11/16	15/16	1/8	0.936	+0.002/-0.000	0.690	+0.000/-0.002	0.185	+0.005/-0.000	0.934	+0.000/-0.002
CS 210	3/4	1	1/8	1.000	+0.002/-0.000	0.754	+0.000/-0.002	0.185	+0.005/-0.000	0.998	+0.000/-0.002
CS 211	13/16	1 - 1/16	1/8	1.062	+0.002/-0.000	0.816	+0.000/-0.002	0.185	+0.005/-0.000	1.060	+0.000/-0.002
CS 212	7/8	1 - 1/8	1/8	1.125	+0.002/-0.000	0.879	+0.000/-0.002	0.185	+0.005/-0.000	1.123	+0.000/-0.002
CS 213	15/16	1 - 3/16	1/8	1.187	+0.002/-0.000	0.941	+0.000/-0.002	0.185	+0.005/-0.000	1.185	+0.000/-0.002
CS 214	1	1 - 1/4	1/8	1.250	+0.002/-0.000	1.004	+0.000/-0.002	0.185	+0.005/-0.000	1.248	+0.000/-0.002
CS 215	1 - 1/16	1 - 5/16	1/8	1.312	+0.002/-0.000	1.066	+0.000/-0.002	0.185	+0.005/-0.000	1.310	+0.000/-0.002
CS 216	1 - 1/8	1 - 3/8	1/8	1.375	+0.002/-0.000	1.129	+0.000/-0.002	0.185	+0.005/-0.000	1.373	+0.000/-0.002
CS 217	1 - 3/16	1 - 7/16	1/8	1.437	+0.002/-0.000	1.191	+0.000/-0.002	0.185	+0.005/-0.000	1.435	+0.000/-0.002
CS 218	1 - 1/4	1 - 1/2	1/8	1.500	+0.002/-0.000	1.254	+0.000/-0.002	0.185	+0.005/-0.000	1.498	+0.000/-0.002
CS 219	1 - 5/16	1 - 9/16	1/8	1.562	+0.002/-0.000	1.316	+0.000/-0.002	0.185	+0.005/-0.000	1.560	+0.000/-0.002
CS 220	1 - 3/8	1 - 5/8	1/8	1.625	+0.002/-0.000	1.379	+0.000/-0.002	0.185	+0.005/-0.000	1.623	+0.000/-0.002
CS 222	1 - 1/2	1 - 3/4	1/8	1.750	+0.002/-0.000	1.504	+0.000/-0.002	0.185	+0.005/-0.000	1.748	+0.000/-0.002
CS 222WB	1 - 1/2	1 - 3/4	1/8	1.750	+0.002/-0.000	1.504	+0.000/-0.002	0.304	+0.005/-0.000	1.748	+0.000/-0.002
CS 325	1 - 1/2	1 - 7/8	3/16	1.875	+0.002/-0.000	1.500	+0.000/-0.002	0.280	+0.005/-0.000	1.873	+0.000/-0.002
CS 326	1 - 5/8	2	3/16	2.000	+0.002/-0.000	1.625	+0.000/-0.002	0.280	+0.005/-0.000	1.998	+0.000/-0.002
CS 326WB	1 - 5/8	2	3/16	2.000	+0.002/-0.000	1.625	+0.000/-0.002	0.424	+0.005/-0.000	1.998	+0.000/-0.002
CS 327	1 - 3/4	2 - 1/8	3/16	2.125	+0.002/-0.000	1.750	+0.000/-0.002	0.280	+0.005/-0.000	2.123	+0.000/-0.002

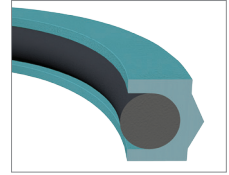
Piston Style



Nominal Reference Sizes									
Part Numbers	I.D.	O.D.	C/S	A Bore Diameter	B Groove Diameter	C Groove Length	D Piston Diameter		
CS 328	1 - 7/8	2 - 1/4	3/16	2.250 +0.002/-0.000	1.875 +0.000/-0.002	0.280 +0.005/-0.000	2.248 +0.000/-0.002		
CS 329	2	2 - 3/8	3/16	2.375 +0.002/-0.000	2.000 +0.000/-0.002	0.280 +0.005/-0.000	2.373 +0.000/-0.002		
CS 330	2 - 1/8	2 - 1/2	3/16	2.500 +0.002/-0.000	2.125 +0.000/-0.002	0.280 +0.005/-0.000	2.498 +0.000/-0.002		
CS 330WB	2 - 1/8	2 - 1/2	3/16	2.500 +0.002/-0.000	2.125 +0.000/-0.002	0.424 +0.005/-0.000	2.498 +0.000/-0.002		
CS 331	2 - 1/4	2 - 5/8	3/16	2.625 +0.002/-0.000	2.250 +0.000/-0.002	0.280 +0.005/-0.000	2.622 +0.000/-0.002		
CS 332	2 - 3/8	2 - 3/4	3/16	2.749 +0.004/-0.000	2.374 +0.000/-0.004	0.280 +0.005/-0.000	2.747 +0.000/-0.004		
CS 333	2 - 1/2	2 - 7/8	3/16	2.874 +0.004/-0.000	2.499 +0.000/-0.004	0.280 +0.005/-0.000	2.872 +0.000/-0.004		
CS 334	2 - 5/8	3	3/16	2.999 +0.004/-0.000	2.624 +0.000/-0.002	0.280 +0.005/-0.000	2.997 +0.000/-0.004		
CS 335	2 - 3/4	3 - 1/8	3/16	3.124 +0.004/-0.000	2.749 +0.000/-0.004	0.280 +0.005/-0.000	3.122 +0.000/-0.004		
CS 336	2 - 7/8	3 - 1/4	3/16	3.249 +0.004/-0.000	2.874 +0.000/-0.004	0.280 +0.005/-0.000	3.247 +0.000/-0.004		
CS 337	3	3 - 3/8	3/16	3.375 +0.004/-0.000	3.000 +0.000/-0.004	0.280 +0.005/-0.000	3.373 +0.000/-0.004		
CS 338	3 - 1/8	3 - 1/2	3/16	3.500 +0.004/-0.000	3.125 +0.000/-0.004	0.280 +0.005/-0.000	3.498 +0.000/-0.004		
CS 338WB	3 - 1/8	3 - 1/2	3/16	3.500 +0.004/-0.000	3.125 +0.000/-0.004	0.424 +0.005/-0.000	3.498 +0.000/-0.004		
CS 339	3 - 1/4	3 - 5/8	3/16	3.625 +0.004/-0.000	3.250 +0.000/-0.004	0.280 +0.005/-0.000	3.623 +0.000/-0.004		
CS 340	3 - 3/8	3 - 3/4	3/16	3.750 +0.004/-0.000	3.375 +0.000/-0.004	0.280 +0.005/-0.000	3.748 +0.000/-0.004		
CS 341	3 - 1/2	3 - 7/8	3/16	3.875 +0.004/-0.000	3.500 +0.000/-0.004	0.280 +0.005/-0.000	3.873 +0.000/-0.004		
CS 341WB	3 - 1/2	3 - 7/8	3/16	3.875 +0.004/-0.000	3.500 +0.000/-0.004	0.424 +0.005/-0.000	3.873 +0.000/-0.004		
CS 342	3 - 5/8	4	3/16	4.000 +0.004/-0.000	3.625 +0.000/-0.004	0.280 +0.005/-0.000	3.998 +0.000/-0.004		
CS 342WB	3 - 5/8	4	3/16	4.000 +0.004/-0.000	3.625 +0.000/-0.004	0.424 +0.005/-0.000	3.998 +0.000/-0.004		
CS 343	3 - 3/4	4 - 1/8	3/16	4.125 +0.004/-0.000	3.750 +0.000/-0.004	0.280 +0.005/-0.000	4.123 +0.000/-0.004		
CS 344	3 - 7/8	4 - 1/4	3/16	4.250 +0.004/-0.000	3.875 +0.000/-0.004	0.280 +0.005/-0.000	4.248 +0.000/-0.004		
CS 344WB	3 - 7/8	4 - 1/4	3/16	4.250 +0.004/-0.000	3.875 +0.000/-0.004	0.424 +0.005/-0.000	4.248 +0.000/-0.004		
CS 345	4	4 - 3/8	3/16	4.375 +0.004/-0.000	4.000 +0.000/-0.004	0.280 +0.005/-0.000	4.373 +0.000/-0.004		
CS 346	4 - 1/8	4 - 1/2	3/16	4.500 +0.004/-0.000	4.125 +0.000/-0.004	0.280 +0.005/-0.000	4.498 +0.000/-0.004		
CS 346WB	4 - 1/8	4 - 1/2	3/16	4.500 +0.004/-0.000	4.125 +0.000/-0.004	0.424 +0.005/-0.000	4.498 +0.000/-0.004		
CS 347	4 - 1/4	4 - 5/8	3/16	4.625 +0.004/-0.000	4.250 +0.000/-0.004	0.280 +0.005/-0.000	4.623 +0.000/-0.004		
CS 348	4 - 3/8	4 - 3/4	3/16	4.750 +0.004/-0.000	4.375 +0.000/-0.004	0.280 +0.005/-0.000	4.748 +0.000/-0.004		
CS 348WB	4 - 3/8	4 - 3/4	3/16	4.750 +0.004/-0.000	4.375 +0.000/-0.004	0.424 +0.005/-0.000	4.748 +0.000/-0.004		
CS 349	4 - 1/2	4 - 7/8	3/16	4.875 +0.004/-0.000	4.500 +0.000/-0.004	0.280 +0.005/-0.000	4.873 +0.000/-0.004		
CS 350	4 - 5/8	5	3/16	5.001 +0.004/-0.000	4.626 +0.000/-0.004	0.280 +0.005/-0.000	4.999 +0.000/-0.004		
CS 350WB	4 - 5/8	5	3/16	5.001 +0.004/-0.000	4.626 +0.000/-0.004	0.424 +0.005/-0.000	4.999 +0.000/-0.004		
CS 425WB	4 - 1/2	5	1/4	5.000 +0.004/-0.000	4.524 +0.000/-0.004	0.579 +0.006/-0.000	4.998 +0.000/-0.004		
CS 426	4 - 5/8	5 - 1/8	1/4	5.125 +0.004/-0.000	4.646 +0.000/-0.004	0.365 +0.006/-0.000	5.124 +0.000/-0.004		
CS 427	4 - 3/4	5 - 1/4	1/4	5.251 +0.004/-0.000	4.770 +0.000/-0.004	0.365 +0.006/-0.000	5.249 +0.000/-0.004		
CS 428	4 - 7/8	5 - 3/8	1/4	5.376 +0.004/-0.000	4.896 +0.000/-0.004	0.365 +0.006/-0.000	5.374 +0.000/-0.004		
CS 429	5	5 - 1/2	1/4	5.501 +0.004/-0.000	5.021 +0.000/-0.004	0.365 +0.006/-0.000	4.499 +0.000/-0.004		
CS 430	5 - 1/8	5 - 5/8	1/4	5.626 +0.004/-0.000	5.146 +0.000/-0.004	0.365 +0.006/-0.000	5.624 +0.000/-0.004		



Piston Style



Part Number	Nominal Reference Sizes			A		B		C		D	
	I.D.	O.D.	C/S	Bore Diameter		Groove Diameter		Groove Length		Piston Diameter	
CS 431	5 - 1/4	5 - 3/4	1/4	5.751	+0.004/ -0.000	5.271	+0.000/ -0.004	0.365	+0.006/ -0.000	5.749	+0.000/ -0.004
CS 432	5 - 3/8	5 - 7/8	1/4	5.876	+0.004/ -0.000	5.396	+0.000/ -0.004	0.365	+0.006/ -0.000	5.874	+0.000/ -0.004
CS 433	5 - 1/2	6	1/4	6.001	+0.004/ -0.000	5.521	+0.000/ -0.004	0.365	+0.006/ -0.000	5.999	+0.000/ -0.004
CS 433WB	5 - 1/2	6	1/4	6.001	+0.004/ -0.000	5.521	+0.000/ -0.004	0.579	+0.006/ -0.000	5.999	+0.000/ -0.004
CS 434	5 - 5/8	6 - 1/8	1/4	6.126	+0.004/ -0.000	5.646	+0.000/ -0.004	0.365	+0.006/ -0.000	6.124	+0.000/ -0.004
CS 435	5 - 3/4	6 - 1/4	1/4	6.251	+0.004/ -0.000	5.771	+0.000/ -0.004	0.365	+0.006/ -0.000	6.249	+0.000/ -0.004
CS 437	6	6 - 1/2	1/4	6.500	+0.006/ -0.000	6.020	+0.000/ -0.006	0.365	+0.006/ -0.000	6.498	+0.000/ -0.006
CS 438	6 - 1/4	6 - 3/4	1/4	6.750	+0.006/ -0.000	6.270	+0.000/ -0.006	0.365	+0.006/ -0.000	6.748	+0.000/ -0.006
CS 439	6 - 1/2	7	1/4	7.000	+0.006/ -0.000	6.520	+0.000/ -0.006	0.365	+0.006/ -0.000	6.998	+0.000/ -0.006
CS 440	6 - 3/4	7 - 1/4	1/4	7.250	+0.006/ -0.000	6.770	+0.000/ -0.006	0.365	+0.006/ -0.000	7.248	+0.000/ -0.006
CS 441	7	7 - 1/2	1/4	7.500	+0.006/ -0.000	7.020	+0.000/ -0.006	0.365	+0.006/ -0.000	7.498	+0.000/ -0.006
CS 442	7 - 1/4	7 - 3/4	1/4	7.750	+0.006/ -0.000	7.270	+0.000/ -0.006	0.365	+0.006/ -0.000	7.748	+0.000/ -0.006
CS 443	7 - 1/2	8	1/4	8.000	+0.006/ -0.000	7.520	+0.000/ -0.006	0.365	+0.006/ -0.000	7.998	+0.000/ -0.006
CS 443WB	7 - 1/2	8	1/4	8.000	+0.006/ -0.000	7.520	+0.000/ -0.006	0.579	+0.006/ -0.000	7.998	+0.000/ -0.006
CS 444	7 - 3/4	8 - 1/4	1/4	8.250	+0.006/ -0.000	7.770	+0.000/ -0.006	0.365	+0.006/ -0.000	8.248	+0.000/ -0.006
CS 445	8	8 - 1/2	1/4	8.500	+0.006/ -0.000	8.020	+0.000/ -0.006	0.365	+0.006/ -0.000	8.498	+0.000/ -0.006
CS 446	8 - 1/2	9	1/4	9.000	+0.006/ -0.000	8.520	+0.000/ -0.006	0.365	+0.006/ -0.000	8.998	+0.000/ -0.006
CS 447	9	9 - 1/2	1/4	9.500	+0.006/ -0.000	9.020	+0.000/ -0.006	0.365	+0.006/ -0.000	9.498	+0.000/ -0.006
CS 448	9 - 1/2	10	1/4	10.000	+0.006/ -0.000	9.520	+0.000/ -0.006	0.365	+0.006/ -0.000	9.998	+0.000/ -0.006
CS 449	10	10 - 1/2	1/4	10.500	+0.006/ -0.000	10.020	+0.000/ -0.006	0.365	+0.006/ -0.000	10.498	+0.000/ -0.006
CS 450	10 - 1/2	11	1/4	11.000	+0.006/ -0.000	10.520	+0.000/ -0.006	0.365	+0.006/ -0.000	10.998	+0.000/ -0.006
CS 451	11	11 - 1/2	1/4	11.500	+0.006/ -0.000	11.020	+0.000/ -0.006	0.365	+0.006/ -0.000	11.498	+0.000/ -0.006
CS 452	11 - 1/2	12	1/4	12.000	+0.006/ -0.000	11.520	+0.000/ -0.006	0.365	+0.006/ -0.000	11.998	+0.000/ -0.006