



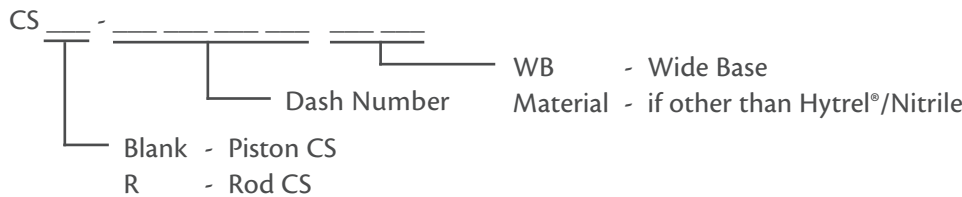
Crown Seal Materials	Temp. Range
Hytrel®	-54°C to 149°C
Urethane	-54°C to 105°C
PTFE	-268°C to 232°C
Loader Materials	
Nitrile	-40°C to 120°C
Viton™/Fluorocarbon	-26°C to 204°C
Ethylene Propylene	-54°C to 150°C
Chloroprene	-40°C to 121°C

## Product Description

Crown seals are a double acting piston squeeze-type seal. When inserted into a piston groove, the O-ring will rest on the static surface of the piston. Due to a crown seals narrow single seal, 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 provides additional stability to the seal.

Our standard crown seal material is Hytrel®, however, we stock a large amount of urethane in common sizes. The crown seal can be directly interchanged with T-seals, O-rings and quad rings. To promote the longevity of the crown seal we suggest a wear ring be used on the piston. The wear ring helps keep the piston centred 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.

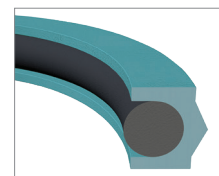
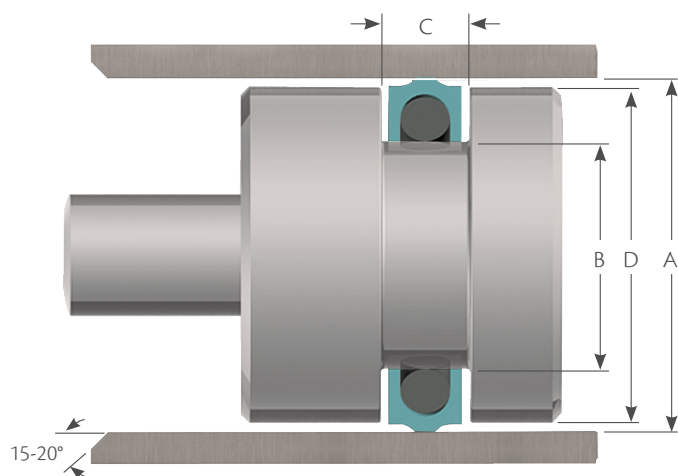
## Part Numbers:



Contact us for rod crown seal information. The rod version of the crown seal follows the same nominal reference sizing, but contains different gland information.

**Example:** CS 214 - Crown Seal, Hytrel®, Nitrile loader, 1” Nom. I.D., 1 - 1/4” Nom. O.D., 1/8” Nom. C/S

*Piston Style*



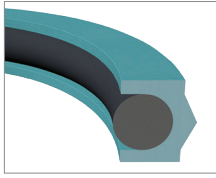
Crown Seals

Part Number	Nominal Reference Sizes			A		B		C		D	
	I.D.	O.D.	C/S	Bore Diameter		Groove Diameter		Groove Width		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

# Crown Seals

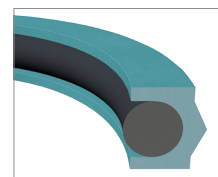
IMPERIAL SEALS

## Piston Style



Part Number	Nominal Reference Sizes			A		B		C		D	
	I.D.	O.D.	C/S	Bore Diameter		Groove Diameter		Groove Width		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 Width	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