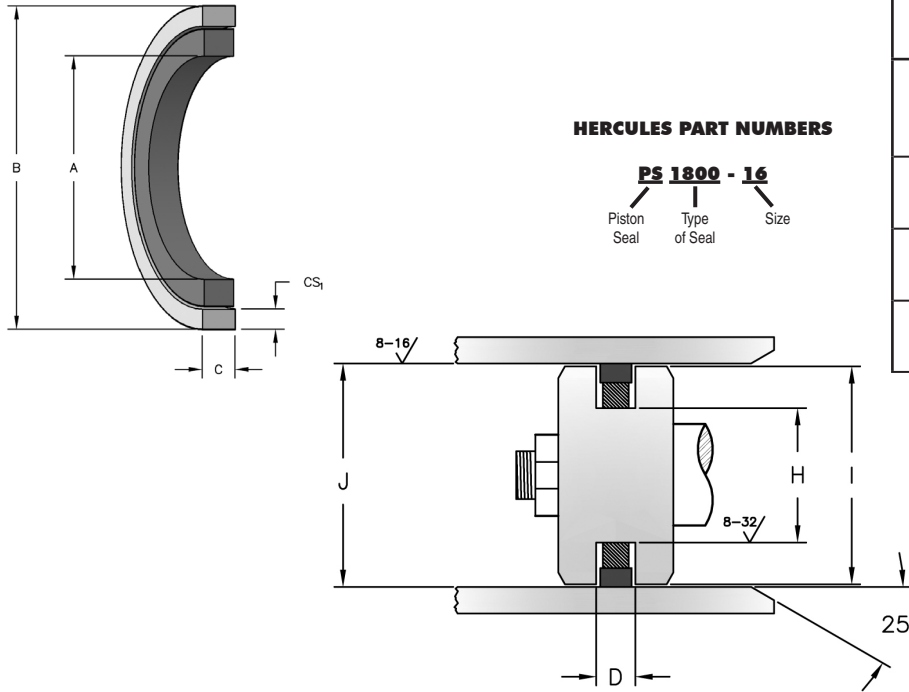


STYLE PS1800 GLASS FILLED PTFE PISTON SEALS

The PS1800 provides low friction, high strength piston sealing. The PS1800 also provides double-acting piston sealing in a compact design that meets the requirements of ANSI/B93-32-1973. **NOTE:** Piston diameter "I" dimensions are given for pistons without wear rings.



SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
SPEED	12 FT/SEC

Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	D GROOVE WIDTH	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER	C HEIGHT	CS ₁ RING CROSS SECTION	List Price
PS1800-16	11/16	1	.121	.129 ±.002	.690 ±.002	.999 ^{+.000} _{-.005}	1.000 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	\$6.65
PS1800-20	15/16	1-1/4	.121	.129 ±.002	.940 ±.002	1.249 ^{+.000} _{-.005}	1.250 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	6.75
PS1800-24	1-3/16	1-1/2	.121	.129 ±.002	1.190 ±.002	1.499 ^{+.000} _{-.005}	1.500 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	6.98
PS1800-28	1-7/16	1-3/4	.121	.129 ±.002	1.440 ±.002	1.749 ^{+.000} _{-.005}	1.750 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	7.69
PS1800-32	1-11/16	2	.121	.129 ±.002	1.690 ±.002	1.999 ^{+.000} _{-.005}	2.000 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	9.33
PS1800-36	1-15/16	2-1/4	.121	.129 ±.002	1.940 ±.002	2.249 ^{+.000} _{-.005}	2.250 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	10.42
PS1800-40	2-3/16	2-1/2	.121	.129 ±.002	2.190 ±.002	2.499 ^{+.000} _{-.005}	2.500 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	10.50
PS1800-44A	2-3/16	2-3/4	.274	.284 ±.002	2.190 ±.002	2.749 ^{+.000} _{-.005}	2.750 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	13.21
PS1800-44	2-7/16	2-3/4	.121	.129 ±.002	2.440 ±.002	2.749 ^{+.000} _{-.005}	2.750 ^{+.002} _{+.000}	.121 ^{+.000} _{-.005}	.073 ^{+.000} _{-.006}	12.64
PS1800-48	2-7/16	3	.274	.284 ±.002	2.440 ±.002	2.999 ^{+.000} _{-.006}	3.000 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	13.56
PS1800-52	2-11/16	3-1/4	.274	.284 ±.002	2.690 ±.002	3.249 ^{+.000} _{-.006}	3.250 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	16.09
PS1800-56	2-15/16	3-1/2	.274	.284 ±.002	2.940 ±.002	3.499 ^{+.000} _{-.006}	3.500 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	17.73
PS1800-60	3-3/16	3-3/4	.274	.284 ±.002	3.190 ±.002	3.749 ^{+.000} _{-.006}	3.750 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	20.15
PS1800-64	3-7/16	4	.274	.284 ±.002	3.440 ±.002	3.999 ^{+.000} _{-.006}	4.000 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	22.40
PS1800-68	3-11/16	4-1/4	.274	.284 ±.002	3.690 ±.002	4.249 ^{+.000} _{-.006}	4.250 ^{+.002} _{+.000}	.274 ^{+.000} _{-.005}	.093 ^{+.000} _{-.006}	25.86

STYLE PS1800 GLASS FILLED PTFE PISTON SEALS

Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	D GROOVE WIDTH	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER	C HEIGHT	CS ₁ RING CROSS SECTION	List Price
PS1800-72	3-15/16	4-1/2	.274	.284 ±.002	3.940 ±.002	4.499 +.000 -.006	4.500 +.002 +.000	.274 +.000 -.005	.093 +.000 -.006	27.14
PS1800-74	4-5/64	4-5/8	.274	.284 ±.002	4.078 ±.002	4.624 +.000 -.007	4.625 +.002 +.000	.274 +.000 -.005	.093 +.000 -.006	38.62
PS1800-76	4-3/16	4-3/4	.274	.284 ±.002	4.190 ±.002	4.749 +.000 -.006	4.750 +.002 +.000	.274 +.000 -.005	.093 +.000 -.006	27.98
PS1800-80	4-7/16	5	.274	.284 ±.002	4.440 ±.002	4.999 +.000 -.006	5.000 +.002 +.000	.274 +.000 -.005	.093 +.000 -.006	29.31
PS1800-84	4-1/2	5-1/4	.367	.379 ±.002	4.488 ±.002	5.249 +.000 -.007	5.250 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	34.52
PS1800-88	4-3/4	5-1/2	.367	.379 ±.002	4.738 ±.002	5.499 +.000 -.007	5.500 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	38.61
PS1800-90	4-7/8	5-5/8	.367	.379 ±.002	4.863 ±.002	5.624 +.000 -.007	5.625 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	47.91
PS1800-92	5	5-3/4	.367	.379 ±.002	4.988 ±.002	5.749 +.000 -.007	5.750 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	41.70
PS1800-96	5-1/4	6	.367	.379 ±.002	5.238 ±.002	5.999 +.000 -.007	6.000 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	44.76
PS1800-100	5-1/2	6-1/4	.367	.379 ±.002	5.488 ±.002	6.249 +.000 -.007	6.250 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	45.20
PS1800-104	5-3/4	6-1/2	.367	.379 ±.002	5.738 ±.002	6.499 +.000 -.007	6.500 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	45.20
PS1800-112	6-1/4	7	.367	.379 ±.002	6.238 ±.002	6.999 +.000 -.007	7.000 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	46.01
PS1800-116	6-1/2	7-1/4	.367	.379 ±.002	6.488 ±.002	7.249 +.000 -.007	7.250 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	49.98
PS1800-120	6-3/4	7-1/2	.367	.379 ±.002	6.738 ±.002	7.499 +.000 -.007	7.500 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	46.14
PS1800-128	7-1/4	8	.367	.379 ±.002	7.238 ±.002	7.999 +.000 -.007	8.000 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	51.41
PS1800-132	7-1/2	8-1/4	.367	.379 ±.002	7.488 ±.002	8.249 +.000 -.007	8.250 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	54.73
PS1800-136	7-3/4	8-1/2	.367	.379 ±.002	7.738 ±.002	8.499 +.000 -.007	8.500 +.002 +.000	.367 +.000 -.005	.147 +.000 -.010	58.15
PS1800-144	8-1/8	9	.367	.379 ±.002	8.122 ±.002	8.999 +.000 -.008	9.000 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	68.78
PS1800-152	8-5/8	9-1/2	.367	.379 ±.002	8.622 ±.002	9.499 +.000 -.008	9.500 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	78.28
PS1800-160	9-1/8	10	.367	.379 ±.002	9.122 ±.002	9.999 +.000 -.008	10.000 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	76.55
PS1800-168	9-5/8	10-1/2	.367	.379 ±.002	9.622 ±.002	10.499 +.000 -.008	10.500 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	100.28
PS1800-176	10-1/8	11	.367	.379 ±.002	10.122 ±.002	10.999 +.000 -.008	11.000 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	114.18
PS1800-192	11-1/8	12	.367	.379 ±.002	11.122 ±.002	11.999 +.000 -.008	12.000 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	122.54
PS1800-208	12-1/8	13	.367	.379 ±.002	12.122 ±.002	12.999 +.000 -.008	13.000 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	119.73
PS1800-224	13-1/8	14	.367	.379 ±.002	13.122 ±.002	13.999 +.000 -.008	14.000 +.002 +.000	.367 +.000 -.005	.210 +.000 -.015	132.73

*Note - PS1800-208 and PS1800-224 use round energizer.

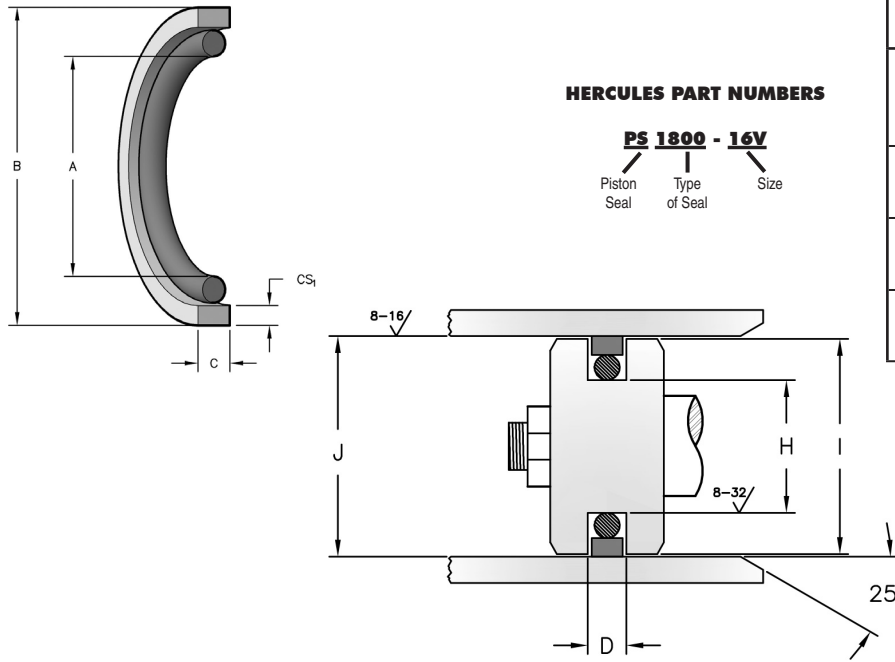
INSTALLATION OF PTFE PISTON SEALS

Installing PTFE piston seals is not always an easy task. The use of installation tools is recommended but often not convenient when working with a wide variety of sizes and applications. Finger installations are practical with rings of smaller cross-sections. Using fingers or a rounded plastic stick, knead the ring over the piston into the groove. With rings of larger cross-sections it may be necessary to heat the ring. Warming the ring in water or oil at 130° F or 140° F for about 5 minutes will soften the material for easier installation. Always avoid inconsistent stretching or overstretching of the PTFE seal. To prevent the PTFE ring from snapping into the wrong groove, cover wear ring grooves with plastic tape. After seal installation, assembly of the cylinder may be difficult if the piston seal is loose on the piston or the cylinder has an inadequate leading edge chamfer. In such cases, compress the piston seal with belting or a suitable hose clamp. If the piston seal must pass threads or any other sharp edges during the cylinder assembly, cover the edges with plastic tape or wrap.

STYLE PS1800-V GLASS FILLED PTFE PISTON SEALS

The PS1800-V provides low friction, high strength piston sealing. The PS1800 also provides double-acting piston sealing in a compact design that meets the requirements of ANSI/B93-32-1973.

NOTE: Piston diameter "I" dimensions are given for pistons without wear rings.



SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL FKM ENERGIZER
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	0 TO 5,000 PSI
SPEED	12 FT/SEC

PISTON SEAL ASSEMBLIES

Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	D GROOVE WIDTH	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER	C HEIGHT	CS ₁ RING CROSS SECTION	List Price
PS1800-16V	11/16	1	.121	.129 ±.002	.690 ±.002	.999 ^{+0.00} / _{-.005}	1.000 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	\$7.31
PS1800-20V	15/16	1-1/4	.121	.129 ±.002	.940 ±.002	1.249 ^{+0.00} / _{-.005}	1.250 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	7.42
PS1800-24V	1-3/16	1-1/2	.121	.129 ±.002	1.190 ±.002	1.499 ^{+0.00} / _{-.005}	1.500 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	7.69
PS1800-28V	1-7/16	1-3/4	.121	.129 ±.002	1.440 ±.002	1.749 ^{+0.00} / _{-.005}	1.750 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	8.45
PS1800-32V	1-11/16	2	.121	.129 ±.002	1.690 ±.002	1.999 ^{+0.00} / _{-.005}	2.000 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	10.27
PS1800-36V	1-15/16	2-1/4	.121	.129 ±.002	1.940 ±.002	2.249 ^{+0.00} / _{-.005}	2.250 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	11.46
PS1800-40V	2-3/16	2-1/2	.121	.129 ±.002	2.190 ±.002	2.499 ^{+0.00} / _{-.005}	2.500 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	11.55
PS1800-44AV	2-3/16	2-3/4	.274	.284 ±.002	2.190 ±.002	2.749 ^{+0.00} / _{-.005}	2.750 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	14.53
PS1800-44V	2-7/16	2-3/4	.121	.129 ±.002	2.440 ±.002	2.749 ^{+0.00} / _{-.005}	2.750 ^{+0.002} / _{+0.00}	.121 ^{+0.00} / _{-.005}	.073 ^{+0.00} / _{-.006}	14.53
PS1800-48V	2-7/16	3	.274	.284 ±.002	2.440 ±.002	2.999 ^{+0.00} / _{-.006}	3.000 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	14.91
PS1800-52V	2-11/16	3-1/4	.274	.284 ±.002	2.690 ±.002	3.249 ^{+0.00} / _{-.006}	3.250 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	17.69
PS1800-56V	2-15/16	3-1/2	.274	.284 ±.002	2.940 ±.002	3.499 ^{+0.00} / _{-.006}	3.500 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	19.51
PS1800-60V	3-3/16	3-3/4	.274	.284 ±.002	3.190 ±.002	3.749 ^{+0.00} / _{-.006}	3.750 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	22.17
PS1800-64V	3-7/16	4	.274	.284 ±.002	3.440 ±.002	3.999 ^{+0.00} / _{-.006}	4.000 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	24.63
PS1800-68V	3-11/16	4-1/4	.274	.284 ±.002	3.690 ±.002	4.249 ^{+0.00} / _{-.006}	4.250 ^{+0.002} / _{+0.00}	.274 ^{+0.00} / _{-.005}	.093 ^{+0.00} / _{-.006}	28.44

STYLE PS1800-V GLASS FILLED PTFE PISTON SEALS

Part Number	A Nom. ID	B Nom. OD	C Nom. Ht	D GROOVE WIDTH	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER	C HEIGHT	CS ₁ RING CROSS SECTION	List Price
PS1800-72V	3-15/16	4-1/2	.274	.284 ±.002	3.940 ±.002	4.499 ^{+0.000} _{-.006}	4.500 ^{+0.002} _{+0.000}	.274 ^{+0.000} _{-.005}	.093 ^{+0.000} _{-.006}	29.86
PS1800-74V	4-5/64	4-5/8	.274	.284 ±.002	4.078 ±.002	4.624 ^{+0.000} _{-.007}	4.625 ^{+0.002} _{+0.000}	.274 ^{+0.000} _{-.005}	.093 ^{+0.000} _{-.006}	42.48
PS1800-76V	4-3/16	4-3/4	.274	.284 ±.002	4.190 ±.002	4.749 ^{+0.000} _{-.006}	4.750 ^{+0.002} _{+0.000}	.274 ^{+0.000} _{-.005}	.093 ^{+0.000} _{-.006}	30.79
PS1800-80V	4-7/16	5	.274	.284 ±.002	4.440 ±.002	4.999 ^{+0.000} _{-.006}	5.000 ^{+0.002} _{+0.000}	.274 ^{+0.000} _{-.005}	.093 ^{+0.000} _{-.006}	32.24
PS1800-84V	4-1/2	5-1/4	.367	.379 ±.002	4.488 ±.002	5.249 ^{+0.000} _{-.007}	5.250 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	37.98
PS1800-88V	4-3/4	5-1/2	.367	.379 ±.002	4.738 ±.002	5.499 ^{+0.000} _{-.007}	5.500 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	42.47
PS1800-90V	4-7/8	5-5/8	.367	.379 ±.002	4.863 ±.002	5.624 ^{+0.000} _{-.007}	5.625 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	52.70
PS1800-92V	5	5-3/4	.367	.379 ±.002	4.988 ±.002	5.749 ^{+0.000} _{-.007}	5.750 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	45.86
PS1800-96V	5-1/4	6	.367	.379 ±.002	5.238 ±.002	5.999 ^{+0.000} _{-.007}	6.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	49.23
PS1800-100V	5-1/2	6-1/4	.367	.379 ±.002	5.488 ±.002	6.249 ^{+0.000} _{-.007}	6.250 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	49.73
PS1800-104V	5-3/4	6-1/2	.367	.379 ±.002	5.738 ±.002	6.499 ^{+0.000} _{-.007}	6.500 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	49.73
PS1800-112V	6-1/4	7	.367	.379 ±.002	6.238 ±.002	6.999 ^{+0.000} _{-.007}	7.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	50.61
PS1800-116V	6-1/2	7-1/4	.367	.379 ±.002	6.488 ±.002	7.249 ^{+0.000} _{-.007}	7.250 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	54.98
PS1800-120V	6-3/4	7-1/2	.367	.379 ±.002	6.738 ±.002	7.499 ^{+0.000} _{-.007}	7.500 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	50.75
PS1800-128V	7-1/4	8	.367	.379 ±.002	7.238 ±.002	7.999 ^{+0.000} _{-.007}	8.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	56.55
PS1800-132V	7-1/2	8-1/4	.367	.379 ±.002	7.488 ±.002	8.249 ^{+0.000} _{-.007}	8.250 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	60.20
PS1800-136V	7-3/4	8-1/2	.367	.379 ±.002	7.738 ±.002	8.499 ^{+0.000} _{-.007}	8.500 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.147 ^{+0.000} _{-.010}	63.97
PS1800-144V	8-1/8	9	.367	.379 ±.002	8.122 ±.002	8.999 ^{+0.000} _{-.008}	9.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	75.65
PS1800-152V	8-5/8	9-1/2	.367	.379 ±.002	8.622 ±.002	9.499 ^{+0.000} _{-.008}	9.500 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	86.11
PS1800-160V	9-1/8	10	.367	.379 ±.002	9.122 ±.002	9.999 ^{+0.000} _{-.008}	10.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	84.20
PS1800-168V	9-5/8	10-1/2	.367	.379 ±.002	9.622 ±.002	10.499 ^{+0.000} _{-.008}	10.500 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	112.62
PS1800-176V	10-1/8	11	.367	.379 ±.002	10.122 ±.002	10.999 ^{+0.000} _{-.008}	11.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	125.59
PS1800-192V	11-1/8	12	.367	.379 ±.002	11.122 ±.002	11.999 ^{+0.000} _{-.008}	12.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	134.79
PS1800-208V	12-1/8	13	.367	.379 ±.002	12.122 ±.002	12.999 ^{+0.000} _{-.008}	13.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	131.70
PS1800-224V	13-1/8	14	.367	.379 ±.002	13.122 ±.002	13.999 ^{+0.000} _{-.008}	14.000 ^{+0.002} _{+0.000}	.367 ^{+0.000} _{-.005}	.210 ^{+0.000} _{-.015}	146.00

PISTON SEAL ASSEMBLIES