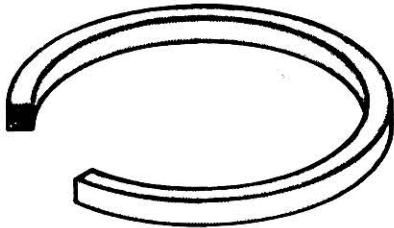


NORTH AMERICAN SEAL

& Packing Company

530 Van Ness Ave. Fresno, CA 93721
(559) 264-7325 - Fax: (559) 268-5207



PISTON RINGS

TYPE PR U

STYLE 77 (INCH SIZES)

CHARACTEREISTICS

North American Seal's Polyurethane Piston Rings were developed specifically to be totally interchangeable with the TFE piston rings currently available. Manufactured from Unithane 460 D material with an outer wear layer containing a concentration of Molybdenum Disulfide (MSO/2). The purpose being to provide a low friction surface during the initial break-in period of the hydraulic cylinder.

Style 77 Piston Rings expand readily to fit over the major piston diameter and recover quickly to permit immediate installation of the piston into the cylinder bore. The superior cut strength of Unithane 460 D material in combination with an ultimate elongation of 430% insures that fewer rings are scrapped during assembly.

MATERIAL

- TYPE: Unithane 460 D, Liquid Cast Polyurethane
- HARDNESS: Durometer 60 D
- FLUID COMPATIBILITY: See Material Specifications Technical Bulletin

ORDERING INFORMATION

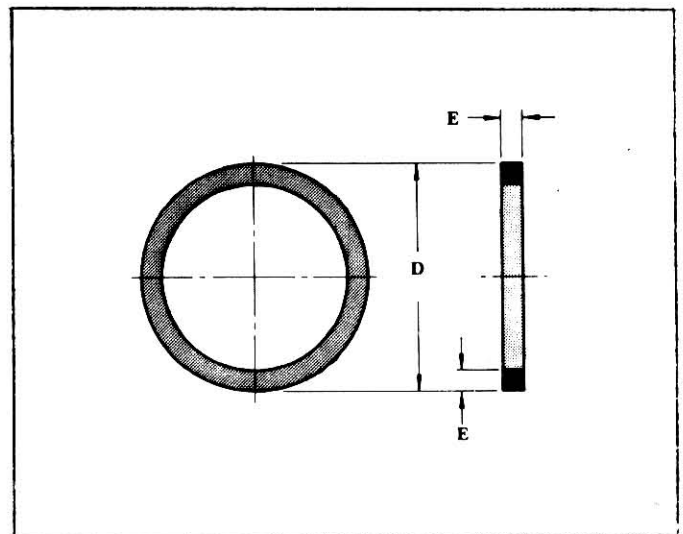
Please review current price list for tooling availability before ordering. A nominal tooling charge may be required for some non-tooled sizes.

Add Prefix PR U to signify a Urethane Piston Ring.

e.g. A Urethane Piston Ring 3 1/2 O.D. X .271 HT, is Part No: PR U 0350-027

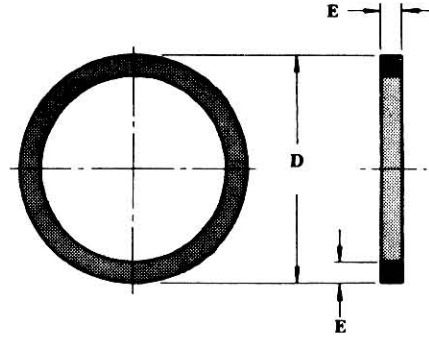
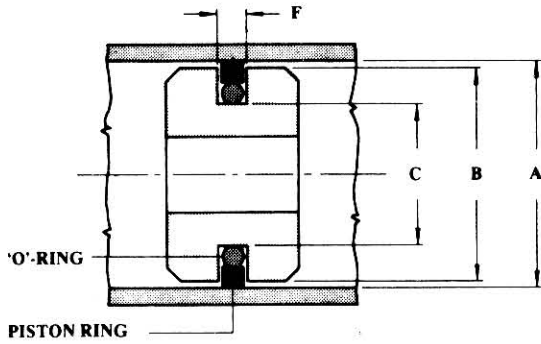
NAS Piston Rings resist field failures attributed to minor scoring or galling of the cylinder bore which will cause rapid failure of piston rings made from other less abrasion and cut resistant materials. The inherent elastic memory exhibited by Urethane Piston Rings insures instantaneous response to rapidly varying system pressures and eliminates the objectionable compression set or "cold flow" characteristic commonly associated with TFE materials.

Urethane Piston Rings will operate effectively in hydraulic cylinders with pressures up to 3000 P.S.I. and with radial clearances as great as .008 inches.



PISTON RINGS

TYPE PR U STYLE 77 (INCH SIZES)



O RING AS-	BORE DIA. A	PISTON DIA. B	GROOVE DIA. C	GROOVE WIDTH F	RING DIA. D	RING C/S E	
-009	.500 ± .001	.497 ± .001	.241 ± .002	.083 ± .002	.515	.070 ± .005	.009
-011	.625	.622	.366		.640		-.011
-013	.750	.747	.491		.765		.013
-015	.875	.872	.616		.890		-.015
-017	1.000	.997	.741		1.015		-.017
-019	1.125	1.122	.866		1.140		-.019
-021	1.250	1.247	.991		1.265		-.021
-023	1.375	1.372	1.116		1.390		-.023
-025	1.500 ± .001	1.497 ± .001	1.241 ± .002	.083 ± .002	1.515	.070 ± .005	-.025
-122	1.562 ± .001	1.599 ± .001	1.172 ± .002	.122 ± .002	1.577	.109 ± .005	-122
-123	1.625	1.622	1.235		1.640		-123
-124	1.687	1.684	1.297		1.702		-124
-125	1.750	1.747	1.360		1.765		-125
-126	1.812	1.809	1.422		1.827		-126
-127	1.875	1.872	1.485		1.890		-127
-128	1.938 ± .001	1.935 ± .001	1.548 ± .002	.122 ± .002	1.953	.109 ± .005	-128
-129	2.000 + .004	1.996 ± .002	1.606 ± .002	.129 ± .002	2.015	.115 ± .006	-129
-131	2.125 - .000	2.121	1.731		2.140		-131
-133	2.250	2.246	1.856		2.265		-133
-135	2.375	2.371	1.981		2.390		-135
-137	2.500	2.496	2.106		2.515		-137
-141	2.750	2.746	2.356		2.765		-141
-145	3.000	2.996	2.606		3.015		-145
-149	3.250	3.246	2.856		3.265		-149
-151	3.500	3.496	3.106		3.515		-151
-152	3.750	3.746	3.356		3.765		-152
-153	4.000	3.996	3.606		4.015		-153
-154	4.250	4.246	3.856		4.265		-154
-155	4.500	4.496	4.106		4.515		-155
-156	4.750	4.746	4.356		4.765		-156
-157	5.000	4.996	4.606		5.015		-157
-158	5.250 + .004	5.246	4.856		5.265		-158
-159	5.500 - .000	5.496 ± .002	5.106 ± .001	.129 ± .002	5.515	.115 ± .006	-159
-251	5.750 + .004	5.746 ± .002	5.232 ± .002	.159 ± .003	5.765	.143 ± .007	-251
-253	6.000 - .000	5.996	5.482		6.015		-253
-255	6.250	6.246	5.732		6.265		-255
-257	6.500	6.496	5.982		6.515		-257
-258	6.750	6.746	6.232		6.765		-258
-259	7.000	6.996	6.482		7.015		-259
-260	7.250	7.245	6.732		7.265		-260
-261	7.500	7.495	6.982		7.515		-261
-262	7.750	7.745	7.232		7.765		-262
-263	8.000	7.995	7.482		8.015		-263
-264	8.250	8.245	7.732		8.265		-264
-265	8.500	8.494	7.982		8.515		-265
-267	9.000	8.994	8.482		9.015		-267
-271	10.000	9.994	9.482		10.015		-271
-274	11.000 + .004	10.994	10.482		11.015		-274
-276	12.000 - .000	11.994 ± .002	11.482 ± .002	.159 ± .003	12.015	.143 ± .007	-276