



400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE MATERIAL SPECIFICATION



AMS-P-83461/1

Issued

JUN 1999

Packing, Preformed, Petroleum Hydraulic Fluid Resistant
Improved Performance at 275°F (135°C) Sizes and Tolerances

NOTICE

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The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-P-83461.

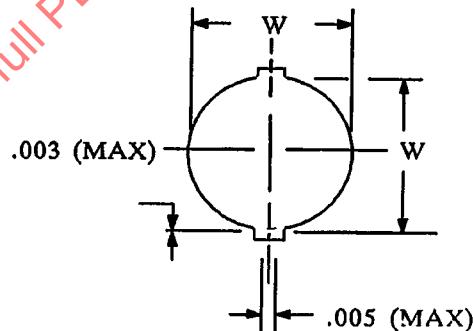
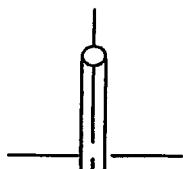
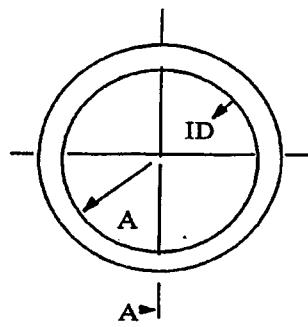
PURPOSE: The purpose of this specification sheet is to set up a standardized part numbering system for O-rings procured to MIL-P-83461.

APPLICABLE DOCUMENT

AS 568 Aerospace Size Standard for O-Rings

(Applications for copies should be addressed to Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096).

DIMENSIONS AND TOLERANCES



**ALL DIAMETERS OF CROSS-SECTION
SHALL EQUAL W
SECTION A - A**

PART NUMBERS. When this document is used for procurement of O-rings, part numbers shall consist of the following:

- The letter M and the specification sheet number.
- A dash followed by the appropriate dash number from table I or table II.

Example 1 (table I)

M83461/1-214

Example 2 (table II)

M83461/1-337

INTENDED USE: O-rings listed in table I are recommended for use in packing glands as specified in MIL-G-5514. O-rings listed in table II are the remainder of those listed in AS568, however, the applicable gland sizes for these O-rings are not specified in MIL-G-5514. The table II sizes are not recommended for hydraulic applications.

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PREPARED UNDER THE JURISDICTION OF AMS COMMITTEE "CE"

TABLE I. Sizes listed in MIL-G-5514

DASH NO. 1/	ACTUAL SIZE		DASH NO. 1/	ACTUAL SIZE	
	WIDTH	INSIDE DIAMETER		WIDTH	INSIDE DIAMETER
001	0.040	± 0.003	0.029	± 0.004	118
002	0.050		0.042		119
003	0.060		0.056		120
004	0.070	± 0.003	0.070	± 0.005	121
005			0.101		122
006			0.114		123
007			0.145		124
008			0.176		125
009			0.208		126
010			0.239		127
011			0.301		128
012			0.364		129
013			0.426		130
014			0.489		131
015			0.551	± 0.007	132
016			0.614	± 0.009	133
017			0.676		134
018			0.739		135
019			0.801		136
020			0.864		137
021			0.926		138
022			0.989	± 0.010	139
023			1.051		140
024			1.114		141
025			1.176	± 0.011	142
026			1.239		143
027			1.301		144
028			1.364	± 0.013	145
					146
110	0.103	± 0.003	0.362	± 0.005	147
111			0.424		148
112			0.487		149
113			0.549	± 0.007	
114			0.612	± 0.009	210
115			0.674		211
116			0.737		212
117			0.799	± 0.010	213

1/ All dash numbers conform with the uniform dash system of AS568.

TABLE I. Sizes listed in MIL-G-5514 (Continued)

DASH NO. 1/	ACTUAL SIZE		DASH NO. 1/	ACTUAL SIZE	
	WIDTH	INSIDE DIAMETER		WIDTH	INSIDE DIAMETER
214	0.139	± 0.004	0.984	± 0.010	325
215			1.046		326
216			1.109	± 0.012	327
217			1.171		328
218			1.234		329
219			1.296		330
220			1.359		331
221			1.421		332
222			1.484	± 0.015	333
223			1.609		334
224			1.734		335
225			1.859	± 0.018	336
226			1.984		337
227			2.109		338
228			2.234	± 0.020	339
229			2.359		340
230			2.484		341
231			2.609		342
232			2.734	± 0.024	343
233			2.859		344
234			2.984		345
235			3.109		346
236			3.234		347
237			3.359		348
238			3.484		349
239			3.609	± 0.028	
240			3.734		425
241			3.859		426
242			3.984		427
243			4.109		428
244			4.234	± 0.030	429
245			4.359		430
246			4.484		431
247			4.609		432

NOTE: O-ring sizes -013 through -028, -117 through -149 and -223 through -247 are intended only for use as static seals, and are not to be used in applications involving reciprocating or rotary movement.

TABLE I. Sizes listed in MIL-G-5514 (Continued)

DASH NO. 1/	ACTUAL SIZE		
	WIDTH	INSIDE DIAMETER	
433	0.275	5.475	±0.037
434		5.600	
435		5.725	
436		5.850	
437		5.975	
438		6.225	±0.040
439		6.475	
440		6.725	
441		6.975	
442		7.225	±0.045
443		7.475	
444		7.725	
445		7.975	
446		8.475	±0.055
447		8.975	
448		9.475	
449		9.975	
450		10.475	±0.060
451		10.975	
452		11.475	
453		11.975	
454		12.475	
455		12.975	
456		13.475	
457		13.975	
458		14.475	
459		14.975	
460		15.475	

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TABLE I. Sizes listed in MIL-G-5514 (Continued)

DASH NO. 1/	ACTUAL SIZE			DASH NO. 1/	ACTUAL SIZE		
	WIDTH	INSIDE DIAMETER	±0.013		WIDTH	INSIDE DIAMETER	±0.028
029	0.070	±0.003	1.489	155	0.103	±0.003	3.987
030			1.614	156			4.237
031			1.739	157			4.487
032			1.864	158			4.737
033			1.989	159			4.987
034			2.114	160			5.237
035			2.239	161			5.487
036			2.364	162			5.737
037			2.489	163			5.987
038			2.614	164			6.237
039			2.739	165			6.487
040			2.864	166			6.737
041			2.989	167			6.987
042			3.239	168			7.237
043			3.489	169			7.487
044			3.739	170			7.737
045			3.989	171			7.987
046			4.239	172			8.237
047			4.489	173			8.487
048			4.739	174			8.737
049			4.989	175			8.987
050			5.239	176			9.237
				177			9.487
102	0.103	0.049	±0.005	178			9.737
103		0.081					
104		0.112		201	0.139	±0.004	0.171
105		0.143		202			0.234
106		0.174		203			0.296
107		0.206		204			0.359
108		0.237		205			0.421
109		0.299		206			0.484
				207			0.546
150		2.862	±0.022	208			0.609
151		2.987	±0.024	209			0.671
152		3.237		248			
153		3.487		249			
154		3.737	±0.028				