MIL-R-25988/1A(USAF)
10 July 1975
SUPERSEDING
MIL-R-25988/1(USAF)
27 January 1971

MILITARY SPECIFICATION SHEET

RUBBER, FLUOROSILICONE ELASTOMER, OIL-AND-FUEL-RESISTANT, O-RINGS, CLASS 1, GRADE 70

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the o-ring described herein shall consist of this document and the issue in effect of Specification MIL-R-25988(USAF)

Purpose. The purpose of this specification sheet is to set up a standardized part numbering system for o-rings procured to MIL-R-25988, Class 1, Grade 70.

Intended Use. These o-rings are recommended for use in packing glands as specified in MIL-G-5514.

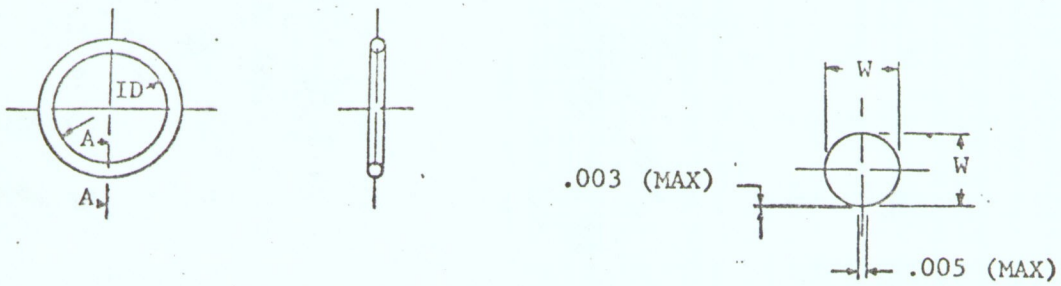
Part Numbers. When this document is used for procurement of o-rings, part numbers shall consist of the following:

1. The letter M and the specification sheet number.

2. A dash followed by the appropriate dash number from Table I or Table II

Example 1
M25988/1-178

Example 2
M25988/1-440



FSC 5330

Table I
O-Ring Sizes

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
001	.040	±.003	.029	±.004
002	.050		.042	
003	.060		.056	
004	.070	±.003	.070	±.005
005			.101	
006			.114	
007			.145	
008			.176	
009			.208	
010			.239	
011			.301	
012			.364	
013			.426	
014			.489	
015			.551	±.007
016			.614	±.009
017			.676	
018			.739	
019			.801	
020			.864	
021			.926	
022			.989	±.010
023			1.051	
024			1.114	
025			1.176	±.011
026			1.239	
027			1.301	
028			1.364	±.013
029			1.489	
030			1.614	
031			1.739	±.015
032			1.864	
033			1.989	±.018
034			2.114	
035			2.239	
036			2.364	
037			2.489	
038			2.614	±.020
039			2.739	
040			2.864	

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
041	.070	±.003	2.989	±.024
042			3.239	
043			3.489	
044			3.739	±.027
045			3.989	
046			4.239	±.030
047			4.489	
048			4.739	
049			4.989	±.037
050			5.239	
102	.103	±.003	.049	±.005
103			.081	
104			.112	
105			.143	
106			.174	
107			.206	
108			.237	
109			.299	
110			.362	
111			.424	
112			.487	
113			.549	±.007
114			.612	±.009
115			.674	
116			.737	
117			.799	±.010
118			.862	
119			.924	
120			.987	
121			1.049	
122			1.112	
123			1.174	±.012
124			1.237	
125			1.299	
126			1.362	
127			1.424	
128			1.487	
129			1.549	±.015
130			1.612	

Table I (Con't)
O-Ring Sizes

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
131	.103	±.003	1.674	±.015
132			1.737	
133			1.799	
134			1.862	
135			1.925	±.017
136			1.987	
137			2.050	
138			2.112	
139			2.175	
140			2.237	
141			2.300	±.020
142			2.362	
143			2.425	
144			2.487	
145			2.550	
146			2.612	
147			2.675	±.022
148			2.737	
149			2.800	
150			2.862	
151			2.987	±.024
152			3.237	
153			3.487	
154			3.737	±.028
155			3.987	
156			4.237	±.030
157			4.487	
158			4.737	
159			4.987	±.035
160			5.237	
161			5.487	
162			5.737	
163			5.987	
164			6.237	±.040
165			6.487	
166			6.737	
167			6.987	
168			7.237	±.045
169			7.487	
170			7.737	

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
171	.103	±.003	7.987	±.045
172			8.237	±.050
173			8.487	
174			8.737	
175			8.987	
176			9.237	±.055
177			9.487	
178			9.737	
201	.139	±.004	.171	±.005
202			.234	
203			.296	
204			.359	
205			.421	
206			.484	
207			.546	±.007
208			.609	±.009
209			.671	
210			.734	±.010
211			.796	
212			.859	
213			.921	
214			.984	
215			1.046	
216			1.109	±.012
217			1.171	
218			1.234	
219			1.296	
220			1.359	
221			1.421	
222			1.484	±.015
223			1.609	
224			1.734	
225	.139	±.004	1.859	±.018
226			1.984	
227			2.109	
228			2.234	±.020
229			2.359	
230			2.484	
231			2.609	

Table I (Con't)
O-Ring Sizes

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
232	.139	±.004	2.734	±.024
233			2.859	
234			2.984	
235			3.109	
236			3.234	
237			3.359	
238			3.484	
239			3.609	±.028
240			3.734	
241			3.859	
242			3.984	
243			4.109	
244			4.234	±.030
245			4.359	
246			4.484	
247			4.609	
248			4.734	
249			4.859	±.035
250			4.984	
251			5.109	
252			5.234	
253			5.359	
254			5.484	
255			5.609	
256			5.734	
257			5.859	
258			5.984	
259			6.234	±.040
260			6.484	
261			6.734	
262			6.984	
263			7.234	±.045
264			7.484	
265			7.734	
266			7.984	
267			8.234	±.050
268			8.484	
269			8.734	
270			8.984	
271			9.234	±.055
272			9.484	

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
273	.139	±.004	9.734	±.055
274			9.984	
275			10.484	
276			10.984	±.065
277			11.484	
278			11.984	
279			12.984	
280			13.984	
281			14.984	
282			15.955	±.075
283			16.955	±.080
284			17.955	±.085
309	.210	±.005	.412	±.005
310			.475	
311			.537	±.007
312			.600	±.009
313			.662	
314			.725	±.010
315			.787	
316			.850	
317			.912	
318			.975	±.010
319			1.037	
320			1.100	±.012
321			1.162	
322			1.225	
323			1.287	
324			1.350	
325			1.475	±.015
326			1.600	
327			1.725	
328			1.850	
329			1.975	±.018
330			2.100	
331			2.225	
332			2.350	
333			2.475	±.020
334			2.600	
335			2.725	
336			2.850	

Table I (Con't)
O-Ring Sizes

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
337	.210	±.005	2.975	±.024
338			3.100	
339			3.225	
340			3.350	
341			3.475	
342			3.600	±.028
343			3.725	
344			3.850	
345			3.975	
346			4.100	
347			4.225	±.030
348			4.350	
349			4.475	
350			4.600	
351			4.725	
352			4.850	
353			4.975	±.037
354			5.100	
355			5.225	
356			5.350	
357			5.475	
358			5.600	
359			5.725	
360			5.850	
361			5.975	
362			6.225	±.040
363			6.475	
364			6.725	
365			6.975	
366			7.225	±.045
367			7.475	
368			7.725	
369			7.975	
370			8.225	±.050
371			8.475	
372			8.725	
373			8.975	
374			9.225	±.055
375			9.475	
376			9.725	
377			9.975	

DASH NO.	ACTUAL SIZE W		ACTUAL SIZE ID	
378	.210	±.005	10.475	±.060
379			10.975	
380			11.475	±.065
381			11.975	
382			12.975	
383			13.975	±.070
384			14.975	
385			15.955	±.075
386			16.955	±.080
387			17.955	±.085
388			18.955	±.090
389			19.955	±.095
390			20.955	
391			21.955	±.100
392			22.940	±.105
393			23.940	±.110
394			24.940	±.115
395			25.940	±.120
425	.275	±.006	4.475	±.033
426			4.600	
427			4.725	
428			4.850	
429			4.975	±.037
430			5.100	
431			5.225	
432			5.350	
433			5.475	
434			5.600	
435			5.725	
436			5.850	
437			5.975	
438			6.225	±.040
439			6.475	
440			6.725	
441			6.975	
442			7.225	±.045
443			7.475	
444			7.725	
445			7.975	
446			8.475	±.055

Table I (Con't)
O-Ring Sizes

DASH NO.	ACTUAL SIZE W		ID	
447	.275	±.006	8.975	±.055
448	↓	↓	9.475	↓
449			9.975	
450			10.475	±.060
451			10.975	↓
452			11.475	
453			11.975	
454			12.475	
455			12.975	
456			13.475	±.070
457			13.975	↓
458			14.475	
459			14.975	
460			15.475	
461			15.955	±.075
462			16.455	↓
463			16.955	±.080
464			17.455	±.085
465			17.955	↓
466			18.455	
467			18.955	±.090
468			19.455	↓
469			19.955	±.095
470			20.955	↓
471			21.955	±.100
472			22.940	±.105
473			23.940	±.110
474			24.940	±.115
475			25.940	±.120

Table II
STRAIGHT THREAD TUBE FITTING BOSS GASKETS

DASH NO.	TUBE OUTSIDE DIAMETER	W CROSS-SECTION		I. D.	
901	.094	.056	±.003	.185	±.005
902	.125	.064		.239	
903	.188			.301	
904	.250	.072		.351	
905	.312			.414	
906	.375	.078		.468	
907	.438	.082		.530	±.007
908	.500	.087		.644	±.009
909	.562	.097		.706	
910	.625			.755	
911	.688	.116	±.004	.863	
912	.750			.924	
913	.812			.986	±.010
914	.875			1.047	
916	1.000			1.171	
918	1.125			1.355	±.012
920	1.250	.118		1.475	±.014
924	1.500			1.720	
928	1.750			2.090	±.018
932	2.000			2.337	

Custodian:
Air Force - 11

Preparing activity:
Air Force - 11

Project Number: 5330-F040