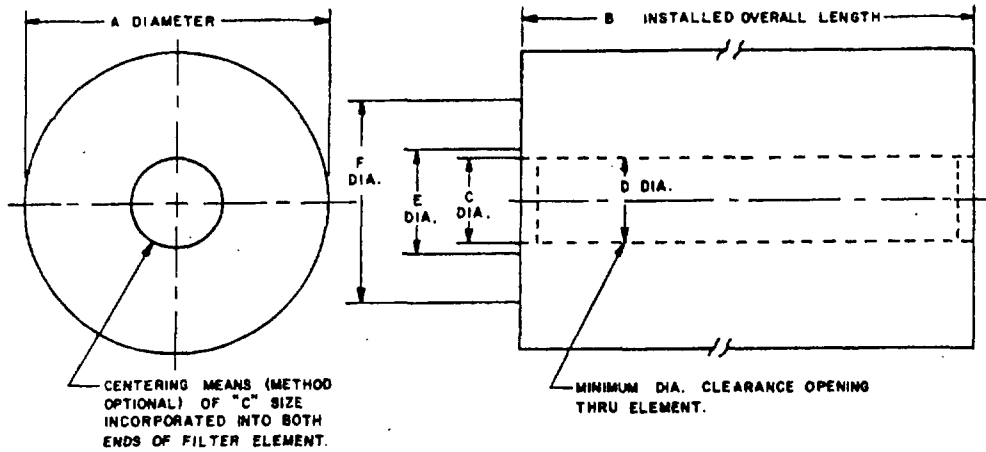


FED. SUP CLASS  
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User activities  
Navy - YD

Review activity:  
Army - AT  
DSA - CS

Dash No.	Class	Rated Flow For Test Purposes (GPM)	Dimensions								
			A		B		C		D	E	F
			Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
-1	1	2.0	3.00	3.88	4.00	.76	.80	.80	1.00	2.00	
-2	2	6.0	4.00	4.75	4.88	.76	.80	.80	1.00	2.50	
-3	3	12.0	4.56	8.90	9.04	1.41	1.44	1.44	1.63	3.60	
-4	4	40.0	7.31	17.94	18.06	2.50	2.56	2.56	3.00	4.00	

ⓐ

\* PER SPECIFICATION F-F-351

NOTES:

- Both ends of element must be provided with a flat resilient sealing surface integral with element or mechanically attached thereto and with dimensions of "E" inside diameter and "F" outside diameter. No part of the element protrudes axially beyond the effective sealing surfaces.
- One each of the appropriate flat-type and trapped-type housing cover gaskets (see Page No. 2) shall be packaged with each Class 1, 2, or 3 element. Each element package shall include an instruction card with inscription as follows:

For Class 1 and 2 Elements

"Two housing gaskets (a flat and a trapped type) are provided. Use only the one gasket that is appropriate for the installation."

For Class 3 Elements

"Three housing gaskets (a flat and two trapped type with one each ID of 5.020-5.050 and 4.762-4.787) are provided. Use only the one gasket that is appropriate for the installation."

- Gasket material for housing cover gaskets shall conform to requirements specified on Page 3 of this standard.  
(Notes cont'd on Page 2)

ⓐ DENOTES CHANGES

This library standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

PA ARMY - ME Other Cost	TITLE Filter elements, fluid, pressure-oil, full-flow	MILITARY STANDARD MS 35802
NAVY - SM AIR FORCE - 99	PROCESSED BY F-F-351	PAGE 1 OF 4

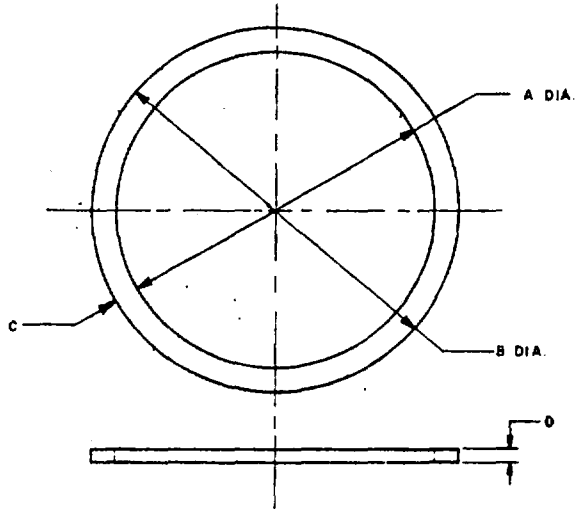
DD FORM 672-1

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2940-0101

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For Element Class	Housing Cover Gasket Dimensions											
	Flat Type						Trapped Type					
	A		B		D		A		C		D	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1	3.24	3.26	3.73	3.74	0.063	0.083	3.307	3.317	0.130	0.140	0.117	0.133
2	4.39	4.40	4.95	4.98	0.055	0.065	4.280	4.320	0.095	0.105	0.109	0.141
* 3	4.68	4.69	5.12	5.13	0.055	0.065	5.020	5.050	0.174	0.183	0.125	0.139
**							4.762	4.787	0.108	0.118	0.109	0.140

Housing cover gaskets for Class 1, 2, and 3 full flow filter elements.

- \* See Note 2, Page 1.
- \*\* The Class 3, trapped-type, 5.020-5.050 ID gasket must be used only in a completely captive type groove.

NOTES: (Cont'd from Page 1)

4. One each of oil filter bolt gasket (see Page 4) shall be packaged with each Class 1 element.
5. Gasket and material for oil filter bolt gasket shall conform to requirements on Page 4 of this standard.
6. All dimensions are in inches.
7. Referenced documents shall be of the issue in effect on date of invitations for bid.
8. For design feature purposes, this standard takes precedence over procurement documents referenced herein.

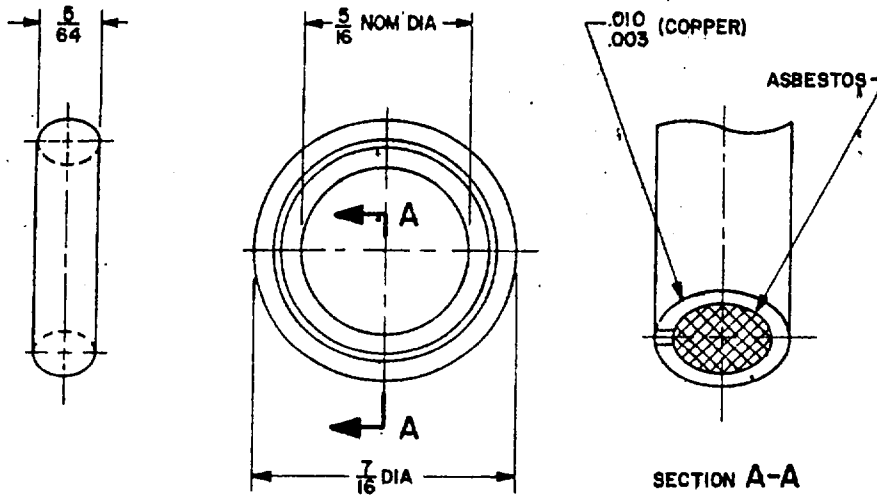
APPROVED 30 DEC 1957 REVISED FOR CHANGES SEE PAGE 1

P.A. ARMY - ME Other Cust  NAVY - SH AIR FORCE - 99	TITLE	MILITARY STANDARD
	Filter elements, fluid, pressure-oil, full-flow	MS 35802
PROCUREMENT SPECIFICATIONS F-F-351	SUPERSEDES:	PAGE 2 OF 4

Gasket Materials For Full Flow Filter Cover Gaskets		FED. SUP CLASS 2940
For All Flat Type Gaskets:		
The material for all flat type gaskets shall conform to the following requirements when tested in accordance with either MIL-G-12803 (Type I) or MIL-STD-417.		
Specification MIL-G-12803 (Type I)		
Original Properties:		
Test Load, PSI		5000
Compressibility, %		7-50
Recovery, Min., %		20-40
Tensile Strength, Min., PSI		1000-2000
Flexibility (Flexibility Factor F):		
Original		12
After 6 Hours at -40° F		16
After 70 Hours at 212° F in Air		16
After 5 Hours at 302° F in ASTM Oil Nr. 1		16
After Aging 5 Hours at 302° F in ASTM Oil Nr. 3:		
Compressibility, Max., %		35
Loss in Tensile Strength, Max., %		50
Thickness Increase, %		0-30
After Aging 5 Hours at 70-85° F in ASTM Fuel Nr. 2:		
Weight Increase, Max., %		55
Thickness Increase, %		0-25
Standard MIL-STD-417		
Basic Properties:		
Durometer Hardness Number		80-85
Tensile Strength, Min., PSI		1500
Ultimate Elongation, Min., %		100
Volume Change (%) After Aging 70 Hours at 212° F in ASTM Oil Nr. 3		0 to +40
Compression Set After 70 Hours at 212° F, Max., %		60
After Heat Aging for 70 Hours at 212° F:		
Hardness Change, Max., %		+15
Tensile Change, Max., %		-20
Elongation Change, Max., %		-50
Compression Set After 70 Hours at 212° F, Max., %		35
After Aging 70 Hours at 212° F in ASTM Oil Nr. 1:		
Tensile Change, Max., %		-15
Elongation Change, Max., %		-40
Volume Change, %		-5 to +15
Change in Durometer Hardness		-5 to +10
After Aging 70 Hours at 212° F in ASTM Oil Nr. 3:		
Tensile Change, Max., %		-40
Elongation Change, Max., %		-45
Volume Change, %		0 to +30
Change in Durometer Hardness		-20 to +5
For All Trapped-Type Gaskets Except Class 3, 5.020-5.050 ID:		
Gasket material for all trapped-type gaskets, except the Class 3, 5.020-5.050 ID, shall conform to Grade Number SB915 A <sub>1</sub> B <sub>1</sub> E <sub>3</sub> Z of MIL-R-3065. The Z suffix in above grade number indicates a low-temperature test of 2 hours at -20° F, after which, the sample shall show no evidence of cracking when wrapped around a 2-inch mandrel.		
For Class 3, 5.020-5.050 ID, Trapped-Type Gasket:		
Gasket material for the Class 3, 5.020-5.050 ID, trapped-type gasket shall conform to Grade Number SB620 A <sub>1</sub> B <sub>1</sub> E <sub>3</sub> F <sub>1</sub> of MIL-R-3095.		
P.A. Other: Cust	ARMY - ME NAVY - 5H AIR FORCE - 99	TITLE <b>Filter elements, fluid, pressure-oil, full-flow</b>
PROCUREMENT SPECIFICATIONS F-F-351		SUPERSEDES:
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GASKET, BOLT, OIL FILTER COVER  
(SEE NOTE 4)

APPROVED 30 DEC 1957 REVISED © FOR CHANGES SEE PAGE 1

P.A. ARMY - ME Other Cust NAVY - SH AIR FORCE - 99	TITLE Filter elements, fluid, pressure-oil, full-flow	MILITARY STANDARD <b>MS 35802</b>
PROCUREMENT SPECIFICATIONS F-F-351	SUPERSEDES:	PAGE 4 OF 4