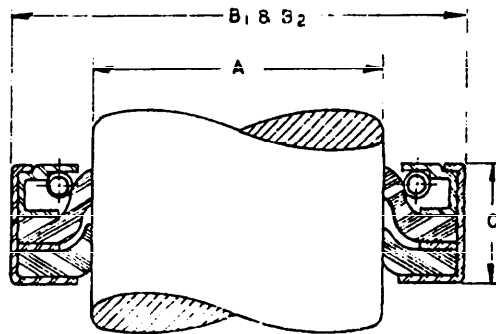


FED. SUP CLASS
5330

FIRST DASH NUMBER (SIZE)	A SHAFT DIA (NOM)	B ₁ SEAL O.D. (5)	B ₂ HOUSING BORE (REF)	C WIDTH +.015 -.002	FIRST DASH NUMBER (SIZE)	A SHAFT DIA (NOM)	B ₁ SEAL O.D. (5)	B ₂ HOUSING BORE (REF)	C WIDTH ± .020
31	3/4	1.254	1.250	17/32	43	2-1/2	3.505	3.500	5/8
32	13/16	1.379	1.375	17/32	44	2-1/2	3.548	3.543	5/8
33	1-3/8	2.441	2.437	19/32	45	2-3/4	3.880	3.875	5/8
34	1-1/2	2.129	2.125	9/16	46	2-7/8	3.756	3.751	41/64
35	1-1/2	2.506	2.502	21/32	47	2-15/16	3.880	3.875	11/16
36	1-3/4	2.504	2.500	5/8	48	2-15/16	4.008	4.003	5/8
37	1-7/8	2.754	2.750	21/32	49	2-15/16	4.254	4.249	3/4
38	1-7/8	2.879	2.875	21/32	50	3	4.008	4.003	5/8
39	1-15/16	3.005	3.000	5/8	51	3	4.254	4.249	21/32
40	2-1/4	3.355	3.350	19/32	52	3-1/4	4.505	4.500	19/32
41	2-1/4	3.628	3.623	39/64	53	4	5.004	4.999	19/32
42	2-3/8	3.355	3.350	45/64	54	5	6.255	6.249	7/8

REQUIREMENTS:

- THE ABOVE DESIGN IS FOR REFERENCE ONLY. OTHER DESIGNS WHICH MEET THE FUNCTIONAL REQUIREMENTS OF THIS TYPE OF SEAL ARE ACCEPTABLE.
- SEALING MEMBERS SHALL CONFORM TO ONE OF THE FOLLOWING CLASSES:
 - CLASS 1: POLYMER-IMPREGNATED LEATHER OR CHROME RETAINED LEATHER IN ACCORDANCE WITH KK-L-164 TANNAGE III. LEATHER SEALING MEMBERS SHALL BE MOLD-PROOFED IN ACCORDANCE WITH D-L-164 (FOR NORMAL OPERATING TEMPERATURE).
 - CLASS 2: OIL RESISTANT SYNTHETIC ELASTOMER (FOR NORMAL OPERATING TEMPERATURE).
 - CLASS 3: OIL RESISTANT ELASTOMER IN ACCORDANCE WITH HIGH AND LOW TEMPERATURE TESTS OF MIL-S-45005 (FOR EXTREME OPERATING TEMPERATURE).
- MARKING SHALL CONSIST OF THE MS NUMBER AND MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130.
- THE PART NUMBER CONSISTS OF THE MS NUMBER AND 2 DASH NUMBERS.
 - FIRST DASH NUMBER INDICATES THE SIZE.
 - SECOND DASH NUMBER INDICATES THE CLASS.
 - EXAMPLE: MS51910-12-3 INDICATES THE SIZE NUMBER 12 WITH CLASS 3 SEALING MEMBER.
- DIMENSIONS ARE IN INCHES. TOLERANCES ARE ± .002 FOR SEAL O.D. UP TO 2.000, + .003, -.002 FOR SEAL O.D. UP TO 3.000, AND + .004, -.002 FOR SEAL O.D. UP TO 7.000.

NOTES:

- THIS STANDARD IS NOT INTENDED TO LIMIT CONSTRUCTION TO FEATURES OTHER THAN AS SHOWN HEREON BY DIMENSIONS, NOTATIONS OR REFERENCED DOCUMENTS.
- FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
- REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS.
- THE USE OF RECYCLED MATERIALS WHICH MEET THE REQUIREMENTS OF THE APPLICABLE MATERIAL SPECIFICATION WITHOUT JEOPARDIZING THE INTENDED USE OF THE ITEM SHALL BE ENCOURAGED.

ENTIRE STANDARD REVISED

USER ACTIVITIES

REVIEWER ACTIVITIES: AM/CS - JC

its military standard is approved for use by the US Army Tank-Automotive Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense. AMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

P. A. ARMY-AT Other Cust	INTERNATIONAL INTEREST	TITLE SEAL, PLAIN ENCASED: DUAL SEAL, INTERNAL SEAL SPRING LOADED	MILITARY STANDARD MS51911
PROCUREMENT SPECIFICATION MIL-S-45005	SUPERSEDES:	CLHX9	SHEET 1 OF 2

DD FORM 672-1 FULLY COORDINATED

FORM 672-1

APPROVED 14 SEPTEMBER 1961 REVISED (C) 27 OCT 86

USER ACTIVITIES:

REVIEWER ACTIVITIES: ARMY - VC

This military standard is approved for use by the US Army Tank-Automotive Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense. JMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

INTERCHANGEABILITY TABLE

THE FOLLOWING MS DASH NUMBERS ARE CANCELLED AFTER 29 DECEMBER 1967
THE CANCELLED SEALS SHOULD BE USED FOR MAINTENANCE
PURPOSES UNTIL EXISTING STOCK IS EXHAUSTED. USE ONLY
THE SUPERSEDING SEAL DASH NUMBERS FOR NEW DESIGN AND
PROCUREMENT.

CANCELLED PART NUMBER -CLASS -SIZE	SUPERSEDING PART NUMBER -SIZE -CLASS	CANCELLED PART NUMBER -CLASS -SIZE	SUPERSEDING PART NUMBER - SIZE -CLASS	CANCELLED PART NUMBER -CLASS -SIZE	SUPERSEDING PART NUMBER - SIZE -CLASS	CANCELLED PART NUMBER -CLASS -SIZE	SUPERSEDING PART NUMBER -SIZE -CLASS
MS 51911 1 - 1	MS 51911 31 - 1	MS 51911 2 - 1	MS 51911 31 - 2	MS 51911 2 - 1	MS 51911 31 - 2	MS 51911 2 - 1	MS 51911 31 - 3
1 - 2	32 - 2	2 - 2	32 - 2	2 - 2	32 - 2	2 - 2	32 - 3
1 - 3	33 - 1	2 - 3	33 - 2	2 - 3	33 - 2	2 - 3	33 - 3
1 - 4	34 - 1	2 - 4	34 - 2	2 - 4	34 - 2	2 - 4	34 - 3
1 - 5	35 - 1	2 - 5	35 - 2	2 - 5	35 - 2	2 - 5	35 - 3
1 - 6	36 - 1	2 - 6	36 - 2	2 - 6	36 - 2	2 - 6	36 - 3
1 - 7	37 - 1	2 - 7	37 - 2	2 - 7	37 - 2	2 - 7	37 - 3
1 - 8	38 - 1	2 - 8	38 - 2	2 - 8	38 - 2	2 - 8	38 - 3
1 - 9	39 - 1	2 - 9	39 - 2	2 - 9	39 - 2	2 - 9	39 - 3
1 - 10	40 - 1	2 - 10	40 - 2	2 - 10	40 - 2	2 - 10	40 - 3
1 - 11	41 - 1	2 - 11	41 - 2	2 - 11	41 - 2	2 - 11	41 - 3
1 - 12	42 - 1	2 - 12	42 - 2	2 - 12	42 - 2	2 - 12	42 - 3
1 - 13	43 - 1	2 - 13	43 - 2	2 - 13	43 - 2	2 - 13	43 - 3
1 - 14	44 - 1	2 - 14	44 - 2	2 - 14	44 - 2	2 - 14	44 - 3
1 - 15	45 - 1	2 - 15	45 - 2	2 - 15	45 - 2	2 - 15	45 - 3
1 - 16	46 - 1	2 - 16	46 - 2	2 - 16	46 - 2	2 - 16	46 - 3
1 - 17	47 - 1	2 - 17	47 - 2	2 - 17	47 - 2	2 - 17	47 - 3
1 - 18	48 - 1	2 - 18	48 - 2	2 - 18	48 - 2	2 - 18	48 - 3
1 - 19	49 - 1	2 - 19	49 - 2	2 - 19	49 - 2	2 - 19	49 - 3
1 - 20	50 - 1	2 - 20	50 - 2	2 - 20	50 - 2	2 - 20	50 - 3
1 - 21	51 - 1	2 - 21	51 - 2	2 - 21	51 - 2	2 - 21	51 - 3
1 - 22	52 - 1	2 - 22	52 - 2	2 - 22	52 - 2	2 - 22	52 - 3
1 - 23	53 - 1	2 - 23	53 - 2	2 - 23	53 - 2	2 - 23	53 - 3
1 - 24	54 - 1	2 - 24	54 - 2	2 - 24	54 - 2	2 - 24	54 - 3

(C) ENTIRE STANDARD REVISED

P. A. ARMY - AT Other Cust	INTERNATIONAL INTEREST	TITLE SEAL, PLAIN ENCASED: DUAL SEAL, INTERNAL SEAL SPRING LOADED	MILITARY STANDARD MS51911
PROCUREMENT SPECIFICATION MIL-S-45005	SUPERSEDES: CLHX9	SHEET 2 OF 2	