



FIRST DASH NUMBER (SIZE)	A SHAFT DIA (NOM)	B <sub>1</sub> SEAL O.D. (4)	B <sub>2</sub> HOUSING BORE (REF)	C WIDTH ± .020
11	1-9/16	2.546	2.542	3/4
12	1-5/8	3.504	3.500	1-1/16
13	1-11/16	2.987	2.983	47/64
14	1-7/8	3.110	3.105	25/32
15	1-7/8	3.502	3.497	27/32
16	2-1/4	3.255	3.250	47/64
17	2-1/4	4.013	4.008	27/32

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 BE ONE FELT, PLUS ONE OTHER MEMBER CONFORMING 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 O-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-4500S (FOR EXTREME OPERATING TEMPERATURE).

FELT SEALING MEMBER SHALL BE TYPE 1, CLASS 12R3, CONFORMING TO C-F-206.
- THE PART NUMBER SHALL CONSIST OF THE MS NUMBER AND 2 DASH NUMBERS. THE FIRST DASH NUMBER INDICATES THE SIZE THE SECOND DASH NUMBER INDICATES THE CLASS. EXAMPLE: MS51916-12-3 INDICATES SIZE NO. 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 UP TO 3.000; and +.004, -.002 FOR SEAL O.D. UP TO 7.000.
- MAXIMUM HOUSING FILLET RADIUS .030 FOR SEALS 1-5/8 UNDER 1-5/8 INCH O.D. AND .040 FOR SEALS OVER 1-5/8 INCH O.D.

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 BID.
- MARKING SHALL CONSIST OF THE MS NUMBER AND MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130.

(D) ENTIRE STANDARD REVISED

P. A. ARMY - AT Other Cust	INTERNATIONAL INTEREST	TITLE SEAL, PLAIN ENCASED: ONE FELT AND ONE LEATHER OR SYNTHETIC ELASTOMER SEALING MEMBERS, SPRING LOADED, SHOULDERED CASE	MILITARY STANDARD <b>MS51916</b>
PROCUREMENT SPECIFICATION MIL-S-45005	SUPERSEDES:	CLHX12	SHEET 1 OF 2

USER ACTIVITIES ARMY-AV, GL

REVIEWER ACTIVITIES ARMY-ME, WC; OSA-15

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

APPROVED 14 SEPTEMBER 1961 REVISED 10 27 OCT 86

INTERCHANGEABILITY TABLE

THE FOLLOWING MS DASH NUMBERS ARE CANCELLED AFTER 13 JUNE 1968.  
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
MS51916 - 1 - 1 - 1 - 2 - 1 - 3 - 1 - 4 - 1 - 5 - 1 - 6 - 1 - 7	MS51916 - 11 - 1 - 12 - 1 - 13 - 1 - 14 - 1 - 15 - 1 - 16 - 1 - 17 - 1
MS51916 - 2 - 1 - 2 - 2 - 2 - 3 - 2 - 4 - 2 - 5 - 2 - 6 - 2 - 7	MS51916 - 11 - 2 - 12 - 2 - 13 - 2 - 14 - 2 - 15 - 2 - 16 - 2 - 17 - 2
CLASS 3 ADDED	MS51916 - 11 - 3 - 12 - 3 - 13 - 3 - 14 - 3 - 15 - 3 - 16 - 3 - 17 - 3

USER ACTIVITIES: ARMY-AV, GL

REVIEWER ACTIVITIES: ARMY-HE, VC; DSA-IS

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P. A. ARMY-AT Other Cost	INTERNATIONAL INTEREST	TITLE SEAL, PLAIN ENCASED: ONE FELT AND ONE LEATHER OR SYNTHETIC ELASTOMER SEALING MEMBERS, SPRING LOADED, SHOULDERED CASE	MILITARY STANDARD <b>MS51916</b>
PROCURMENT SPECIFICATION MIL-S-45005	SUPERSEDES	CLHX12	SHEET 2 OF 2

APPROVED 14 SEPTEMBER 1961 REVISED Ⓚ 27 OCT 66