

REV.
A

SAE AS28772

FEDERAL SUPPLY CLASS
5330

RATIONALE

THIS PART STANDARD REPLACES MS28772 AND ADDS VISUAL QUALITY ASSURANCE, PACKAGING AND LABELING REQUIREMENTS FOR PROCUREMENT OF D - RINGS MOLDED FROM MIL-P-25732 NBR RUBBER. THE MS28772 PART NUMBERS HAVE BEEN RETAINED.

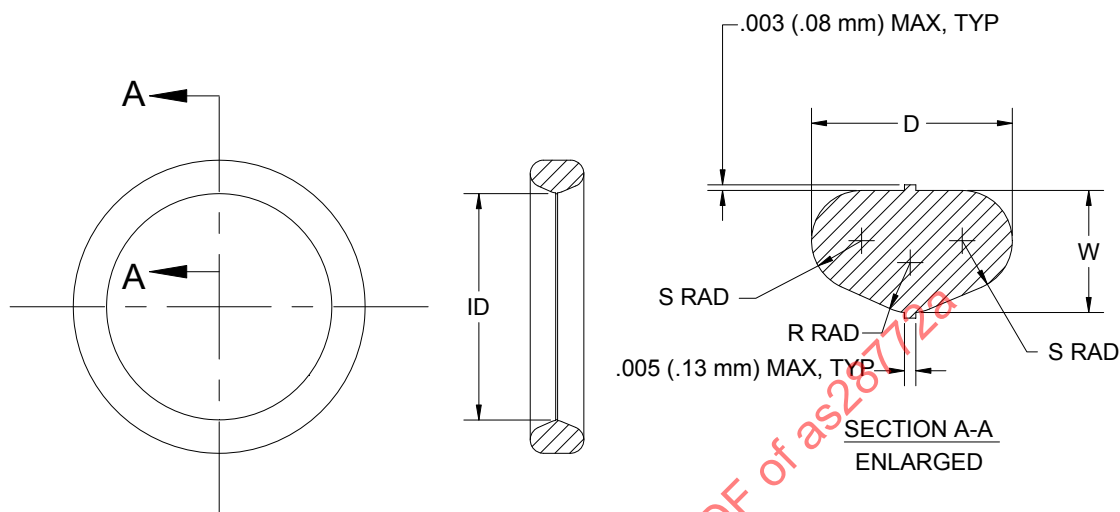
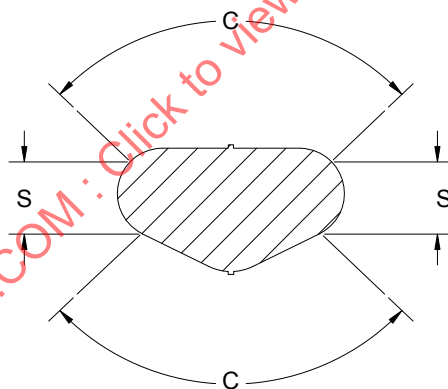


FIGURE 1 - D-RING

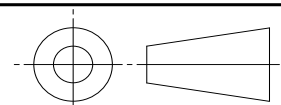


C – CRITICAL SURFACES
S – SECONDARY SURFACES

FIGURE 2 - SURFACES

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS28772A>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE A-6/A-6C2

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) PACKING, PREFORMED ("D" RING, SHOCK STRUT)

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TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NUMBER	ID				D		R RAD		S RAD		W		APPROX MASS			
	IN.		(mm)		IN.	(mm)	IN.	(mm)	IN.	(mm)	IN.	(mm)	LB/100	kg/100		
MS28772-335	2.725	±.015	69.215	±.381	±.005	±.127	±.010	±.254	±.010	±.254	±.005	±.127	1.670	.757		
MS28772-336	2.850		72.390											1.741	.790	
MS28772-337	2.975		75.565											1.812	.822	
MS28772-338	3.100		78.740											1.883	.855	
MS28772-339	3.225		81.915											1.954	.887	
MS28772-340	3.350		85.090											2.025	.918	
MS28772-341	3.475		88.265											2.097	.951	
MS28772-342	3.600		91.440				.375	9.525	.093	2.362	.078	1.981	.210	5.334	2.167	.983
MS28772-343	3.725		94.615												2.239	1.016
MS28772-344	3.850		97.790												2.310	1.048
MS28772-345	3.975		100.965												2.381	1.080
MS28772-346	4.100		104.140												2.452	1.112
MS28772-347	4.225		107.315												2.523	1.145
MS28772-348	4.350	110.490											2.594	1.176		
MS28772-349	4.475	113.665											2.665	1.209		

PART NUMBER	ID				D		R RAD		S RAD		W		APPROX MASS	
	IN.		(mm)		IN.	(mm)	IN.	(mm)	IN.	(mm)	IN.	(mm)	LB/100	kg/100
MS28772-425	4.475	±.015	113.665	±.381	.531	13.487	.125	3.175	.105	2.667	.275	6.985	4.634	2.102
MS28772-426	4.600		116.840										4.757	2.157
MS28772-427	4.725		120.015										4.878	2.213
MS28772-428	4.850		123.190										5.000	2.268
MS28772-429	4.975		126.365										5.122	2.323
MS28772-430	5.100	±.023	129.540	±.584	.531	13.487	.125	3.175	.105	2.667	.275	6.985	5.244	2.379
MS28772-431	5.225		132.715										5.366	2.433
MS28772-432	5.350		135.890										5.488	2.489
MS28772-433	5.475		139.065										5.609	2.545
MS28772-434	5.600		142.240										5.731	2.599
MS28772-435	5.725		145.415										5.853	2.655
MS28772-436	5.850		148.590										5.975	2.722
MS28772-437	5.975		151.765										6.097	2.765
MS28772-438	6.225		158.115										6.341	2.877
MS28772-439	6.475		164.465										6.585	2.987
MS28772-440	6.725		170.815										6.829	3.097
MS28772-441	6.975		177.165										7.073	3.209
MS28772-442	7.225		183.515										7.317	3.319
MS28772-443	7.475		189.865										7.561	3.429
MS28772-444	7.725		196.215										7.805	3.540
MS28772-445	7.975	201.295	8.048	3.651										
MS28772-446	8.475	215.265	8.536	3.872										
MS28772-447	8.975	227.965	9.025	4.094										
MS28772-448	9.475	240.665	9.512	4.315										
MS28772-449	9.975	253.365	10.000	4.536										
MS28772-450	10.475	266.065	10.487	4.757										
MS28772-451	10.975	±.030	278.765	±.762	.531	13.487	.125	3.175	.105	2.667	.275	6.985	10.975	4.978
MS28772-452	11.475	291.465	11.464	5.200										
MS28772-453	11.975	304.165	11.951	5.422										
MS28772-454	12.475	316.865	12.439	5.642										
MS28772-455	12.975	329.565	12.927	5.864										
MS28772-456	13.475	342.265	13.414	6.084										
MS28772-457	13.975	354.965	13.902	6.306										
MS28772-458	14.475	367.665	14.389	6.526										
MS28772-459	14.975	380.365	14.878	6.743										
MS28772-460	15.475	393.065	15.366	6.970										

APPLICATION

THESE D-RINGS TYPICALLY ARE USED AS ROD SEALS IN SHOCK STRUTS. THEY SHOULD NOT BE USED IN CONJUNCTION WITH ANY HYDRAULIC FLUID OTHER THAN THAT CONFORMING TO MIL-PRF-5606. THESE D-RINGS HAVE A SERVICE TEMPERATURE RANGE OF -65 TO +160 °F (-54 TO +71 °C).

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	(R) PACKING, PREFORMED ("D" RING, SHOCK STRUT)			

APPLICABLE REFERENCES:

SAE PUBLICATIONS:

AVAILABLE FROM SAE INTERNATIONAL, 400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096-0001, TEL: 877-606-7323 (INSIDE USA AND CANADA) OR 724-776-4970 (OUTSIDE USA), www.sae.org.

AMS2817 PACKAGING AND IDENTIFICATION, PREFORMED PACKINGS

ARP5316 STORAGE OF ELASTOMERS AND SEAL ASSEMBLIES WHICH INCLUDE AN ELASTOMER ELEMENT PRIOR TO HARDWARE ASSEMBLY

U.S. GOVERNMENT PUBLICATIONS

AVAILABLE FROM DODSSP, SUBSCRIPTION SERVICES DESK, BUILDING 4D, 700 ROBBINS AVENUE, PHILADELPHIA, PA 19111-5094 OR <http://assist.daps.dla.mil/quicksearch> OR www.daps.mil.

MIL-P-25732 PACKING, PREFORMED, PETROLEUM FLUID RESISTANT, LIMITED SERVICE AT 275 DEG. F (135 DEG. C)

MIL-PRF-5606 HYDRAULIC FLUID, PETROLEUM BASE; AIRCRAFT, MISSILE, AND ORDNANCE.

MIL-STD-413 VISUAL INSPECTION GUIDE FOR RUBBER O-RINGS.

ASQ PUBLICATIONS

AVAILABLE FROM AMERICAN SOCIETY FOR QUALITY, 600 NORTH PLANKINTON AVENUE, MILWAUKEE, WI 53203 OR www.asq.org.

ANSI/ASQ Z1.4 SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES

REQUIREMENTS

1. MATERIAL: THE MATERIAL SHALL BE IN ACCORDANCE WITH MIL-P-25732.
2. DIMENSIONAL AND VISUAL INSPECTION: PRIOR TO INSPECTION, MOLD FLASH SHALL BE REMOVED FROM THE D-RING IN SUCH A MANNER THAT THE D-RINGS CONFORM TO THE REQUIREMENTS SPECIFIED HEREIN. EXAMINATION FOR DEFECTS IN APPEARANCE AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH MIL-STD-413. THE SAMPLE SIZE SHALL BE IN ACCORDANCE WITH INSPECTION LEVEL II OF ANSI/ASQ Z1.4 WITH AQL OF 1.0 EXCEPT THAT THE ACCEPTANCE NUMBER SHALL BE ZERO. EXAMINATION FOR DIMENSIONAL DEFECTS SHALL BE MADE TO THE TOLERANCES SPECIFIED ABOVE. THE SAMPLE SIZE SHALL BE IN ACCORDANCE WITH INSPECTION LEVEL II OF ANSI/ASQ Z1.4 WITH AQL OF 1.0 EXCEPT THAT THE ACCEPTANCE NUMBER SHALL BE ZERO. IF THE PURCHASER REQUIRES A DIFFERENT SAMPLING PLAN OR VISUAL INSPECTION CRITERIA, PURCHASER AND MANUFACTURER SHALL AGREE PRIOR TO TIME OF ORDER.
3. LOT ACCEPTANCE: THE REQUIREMENTS ARE LISTED IN MIL-P-25732. THE LOT CERTIFICATION REPORT SHALL BE FURNISHED TO THE PURCHASER WHEN THE PRODUCT IS SHIPPED. THE MANUFACTURER OF THE D-RINGS SHALL BE RESPONSIBLE FOR THE REQUIRED INSPECTIONS AND LOT ACCEPTANCE TESTS. PURCHASER RESERVES THE RIGHT TO SAMPLE AND PERFORM ANY CONFIRMATORY INSPECTION DEEMED NECESSARY TO ENSURE THAT THE D-RINGS CONFORM TO THE SPECIFIED REQUIREMENTS.

PART NUMBER: THE D-RING PART NUMBERS ARE DESIGNATED AS MS28772-XXX, WHERE XXX INDICATES THE DASH SIZE.

4. IDENTIFICATION AND PACKAGING: PACKAGING SHALL BE IN ACCORDANCE WITH AMS2817 WITH THE EXCEPTION THAT, IF REQUESTED BY CONTRACT, EACH PACKAGE SHALL BEAR THE FOLLOWING IDENTIFICATION OF A RECOGNIZABLE SIZE:

- NATIONAL STOCK NUMBER

IF REQUIRED BY THE PURCHASER, THE MANUFACTURER SHALL INDIVIDUALLY PACKAGE ALL THE D-RINGS.

5. SHELF LIFE REQUIREMENTS OF ARP5316 APPLY TO THESE D-RINGS.

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	(R) PACKING, PREFORMED ("D" RING, SHOCK STRUT)		