

REV.
A

AS6203™

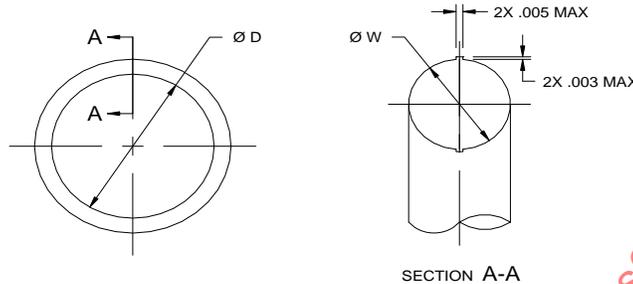
FEDERAL SUPPLY CLASS
5331

RATIONALE

THIS STANDARD HAS BEEN REVISED TO INCORPORATE MINOR TECHNICAL CHANGES.

FOREWORD

THIS STANDARD ESTABLISHES THE DIMENSIONAL AND VISUAL QUALITY REQUIREMENTS, LOT REQUIREMENTS AND PACKAGING AND LABELING REQUIREMENTS FOR O-RINGS MOLDED FROM AMS7379 RUBBER. IT SHALL BE USED FOR PROCUREMENT PURPOSES.



NOTE: DIMENSION AND TOLERANCING PER ASME Y14.5

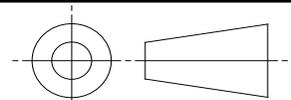
FIGURE 1 - BOSS O-RING DIMENSIONS FOR TABLE 1 WIDTH (ØW) AND INSIDE DIAMETER (ØD)

TABLE 1 - TUBE SIZES AND O-RING GASKETS FOR AS5202 PORTS

PART NUMBER	TUBE OUTSIDE DIAMETER		ØD		ØW		APPROX. MASS	
	(IN)	(MM)	(IN)	(MM)	(IN)	(MM)	(LB/100)	(KG/100)
AS6203-901	.094	2.388	.190 / .180	4.826 / 4.572	.059 / .053	1.499 / 1.346	.008	0.003
AS6203-902	.125	3.175	.244 / .234	6.198 / 5.944	.067 / .061	1.702 / 1.549	.010	0.005
AS6203-903	.188	4.775	.306 / .296	7.772 / 7.518	.067 / .061	1.702 / 1.549	.012	0.005
AS6203-904	.250	6.350	.356 / .346	9.042 / 8.788	.075 / .069	1.905 / 1.753	.015	0.007
AS6203-905	.312	7.925	.419 / .409	10.643 / 10.389	.075 / .069	1.905 / 1.753	.017	0.008
AS6203-906	.375	9.525	.473 / .463	12.014 / 11.760	.081 / .075	2.057 / 1.905	.020	0.009
AS6203-907	.438	11.125	.537 / .523	13.640 / 13.284	.085 / .079	2.159 / 2.007	.023	0.010
AS6203-908	.500	12.700	.653 / .635	16.586 / 16.129	.090 / .084	2.286 / 2.134	.027	0.012
AS6203-909	.562	14.275	.715 / .697	18.161 / 17.704	.100 / .094	2.540 / 2.388	.033	0.015
AS6203-910	.625	15.875	.764 / .746	19.406 / 18.948	.100 / .094	2.540 / 2.388	.034	0.016
AS6203-911	.688	17.475	.872 / .854	22.149 / 21.692	.120 / .112	3.048 / 2.845	.048	0.022
AS6203-912	.750	19.050	.933 / .915	23.698 / 23.241	.120 / .112	3.048 / 2.845	.050	0.023
AS6203-913	.812	20.625	.996 / .976	25.298 / 24.790	.120 / .112	3.048 / 2.845	.051	0.023
AS6203-914	.875	22.225	1.057 / 1.037	26.848 / 26.340	.120 / .112	3.048 / 2.845	.053	0.024
AS6203-916	1.000	25.400	1.181 / 1.161	29.997 / 29.489	.120 / .112	3.048 / 2.845	.056	0.025
AS6203-918	1.125	28.575	1.367 / 1.343	34.722 / 34.112	.120 / .112	3.048 / 2.845	.061	0.028
AS6203-920	1.250	31.750	1.489 / 1.461	37.821 / 37.109	.122 / .114	3.099 / 2.896	.065	0.030
AS6203-924	1.500	38.100	1.734 / 1.706	44.044 / 43.332	.122 / .114	3.099 / 2.896	.071	0.032
AS6203-928	1.750	44.450	2.108 / 2.072	53.543 / 52.629	.122 / .114	3.099 / 2.896	.081	0.037
AS6203-932	2.000	50.800	2.355 / 2.319	59.817 / 58.903	.122 / .114	3.099 / 2.896	.087	0.040

For more information on this standard, visit
<https://www.sae.org/standards/content/AS6203A>

THIRD ANGLE PROJECTION



CUSTODIAN: A-6/A-6C2

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

O-RING,
MOLDED FROM AMS7379 RUBBER
FOR USE WITH AS5202 PORTS

AS6203™
SHEET 1 OF 3

REV.
A

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ISSUED 2013-04 REVISED 2016-10 REAFFIRMED 2021-11

1. APPLICATION

THESE O-RINGS, USED AS SEALS FOR AS5202 PORTS IN AEROSPACE APPLICATIONS, HAVE RESISTANCE TO A VARIETY OF GAS TURBINE ENGINE OILS, INCLUDING HIGH THERMAL STABILITY (HTS) OILS, FUELS, AND HYDRAULIC FLUIDS, BUT USAGE IS NOT LIMITED TO SUCH APPLICATIONS. EACH APPLICATION SHOULD BE CONSIDERED SEPARATELY. THESE O-RINGS HAVE A TYPICAL SERVICE TEMPERATURE RANGE OF -60 TO +400 °F (-51 TO +204 °C) IN AIR.

2. APPLICABLE REFERENCES

2.1 SAE PUBLICATIONS

AVAILABLE FROM SAE INTERNATIONAL, 400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096-0001, TEL: 877-606-7323 (INSIDE USA AND CANADA) OR +1 724-776-4970 (OUTSIDE USA), www.sae.org.

AMS2817 PACKAGING AND IDENTIFICATION PREFORMED PACKINGS

AMS7379 RUBBER: FLUOROCARBON ELASTOMER (FKM) 70 TO 80 HARDNESS, LOW TEMPERATURE SEALING TG -40 °F (-40 °C) FOR ELASTOMERIC SEALS IN AIRCRAFT ENGINE OIL, FUEL AND HYDRAULICS SYSTEMS

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

2.2 ASME PUBLICATIONS

AVAILABLE FROM ASME, P.O. BOX 2900, 22 LAW DRIVE, FAIRFIELD, NJ 07007-2900, TEL: 800-843-2763 (U.S./CANADA), 001-800-843-2763 (MEXICO), 973-882-1170 (OUTSIDE NORTH AMERICA), www.asme.org.

Y 14.5 DIMENSIONING AND TOLERANCING

2.3 ASQ PUBLICATIONS

AVAILABLE FROM AMERICAN SOCIETY FOR QUALITY, 600 NORTH PLANKINTON AVENUE, MILWAUKEE, WI 53203, TEL: 800-248-1946 (UNITED STATES OR CANADA), 001-800-514-1564 (MEXICO) OR +1-414-272-8575 (ALL OTHER LOCATIONS), www.asq.org.

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

2.4 ISO PUBLICATIONS

COPIES OF THESE DOCUMENTS ARE AVAILABLE ONLINE AT <http://webstore.ansi.org/>.

ISO 3601-1 FLUID POWER SYSTEMS - O-RINGS - PART 1: INSIDE DIAMETERS, CROSS-SECTIONS, TOLERANCES AND DESIGNATION CODES

ISO 3601-3 FLUID POWER SYSTEMS - O-RINGS - PART 3: QUALITY ACCEPTANCE CRITERIA

3. REQUIREMENTS

3.1 DO NOT USE UNASSIGNED PART NUMBERS.

3.2 MATERIAL: THE MATERIAL SHALL BE IN ACCORDANCE WITH AMS7379.

3.3 DIMENSIONAL AND VISUAL INSPECTION: PRIOR TO INSPECTION, MOLD FLASH SHALL BE REMOVED FROM THE O-RINGS IN SUCH A MANNER THAT THEY CONFORM TO THE REQUIREMENTS SPECIFIED HEREIN. FOR END OF PROCESS INSPECTION, EACH INDIVIDUAL O-RING (100%) SHALL BE MANUALLY INSPECTED ACCORDING TO ISO 3601-3, GRADE S REQUIREMENTS UNDER 1X MAGNIFICATION. THE ENTIRE O-RING SURFACE SHALL BE INSPECTED.

3.4 FOR FINAL INSPECTION, THE SAMPLE SIZE SHALL BE IN ACCORDANCE WITH ANSI/ASQ Z1.4 SINGLE SAMPLING PLAN INSPECTION LEVEL II WITH AN AQL 1.0 EXCEPT THAT THE ACCEPTANCE NUMBER SHALL BE ZERO.

THE SAMPLE UNIT SHALL BE ONE O-RING. INSPECTION SHALL BE ACCORDING TO ISO 3601-3, GRADE S REQUIREMENTS UNDER 2X MAGNIFICATION. THE ENTIRE O-RING SURFACE SHALL BE MANUALLY INSPECTED. THE PROCEDURES OUTLINED IN ANNEX B OF ISO 3601-1 SHALL BE FOLLOWED FOR DIMENSIONAL INSPECTION. IF THE PURCHASER REQUIRES A DIFFERENT SAMPLING PLAN OR VISUAL INSPECTION CRITERIA, MANUFACTURER SHALL BE INFORMED PRIOR TO TIME OF ORDER.

	AEROSPACE STANDARD	AS6203™ SHEET 2 OF 3	REV. A
	O-RING, MOLDED FROM AMS7379 RUBBER FOR USE WITH AS5202 PORTS		