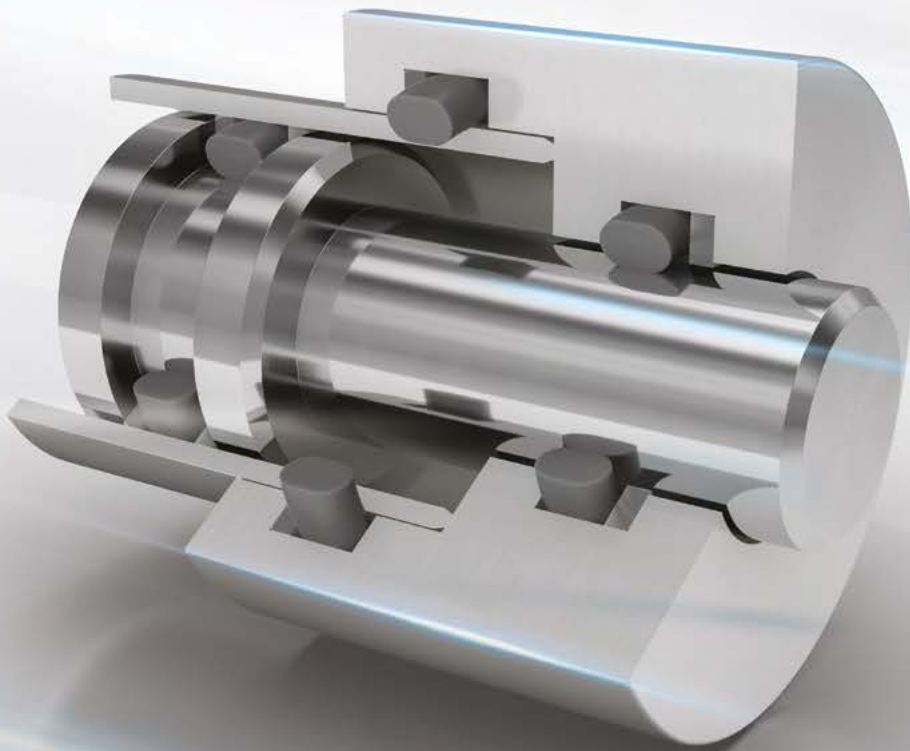


# AS568 O-Rings





## Your Partner for Sealing Technology

Trelleborg Sealing Solutions is a major international developer, manufacturer and supplier of seals, bearings and molded components in polymers. We are uniquely placed to offer dedicated design and development from our market-leading product and material portfolio: a one-stop-shop providing the best in elastomer, silicone, thermoplastic, PTFE and composite technologies for applications in aerospace, industrial and automotive industries.

With 50 years of experience, Trelleborg Sealing Solutions engineers support customers with design, prototyping, production, test and installation using state-of-the-art design tools. An international network of over 70 facilities worldwide includes over 20 manufacturing sites, strategically-positioned research and development centers, including materials and development laboratories and locations specializing in design and applications.

Developing and formulating materials in-house, we utilize the resource of our material database, including over 2,000

proprietary compounds and a range of unique products. Trelleborg Sealing Solutions fulfills challenging service requirements, supplying standard parts in volume or a single custom-manufactured component, through our integrated logistical support, which effectively delivers over 40,000 sealing products to customers worldwide.

Trelleborg Sealing Solutions facilities are certified according to current market-related quality standards. In addition to the established ISO 9001 standard, our facilities are certified to environmental, health and safety standards, as well as specific customer specifications. These certifications are in many cases prerequisites, allowing us to comply to all market segment requirements.

**ISO 9001**

The information in this catalog is intended for general reference only and not for specific applications. Application limits for pressure, temperature, speed and media are maximum values determined in laboratory conditions. In application, due to operating parameters, maximum values may not be achievable. Customers must satisfy themselves of a product and material's suitability for their individual applications. Any reliance on information is therefore at the user's own risk. In no event will Trelleborg Sealing Solutions be liable for any loss, damage, claim or expense directly or indirectly arising or resulting from the use of any information provided in this catalog. While every effort is made to ensure the accuracy of information contained herewith, Trelleborg Sealing Solutions cannot warrant the accuracy or completeness of information.

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## ■ General Information

### DESCRIPTION

O-Rings offer the designer an efficient and economical sealing element for a wide range of static or dynamic applications.

Inexpensive production methods and its ease of use have made the O-Ring the most widely used seal.

A broad range of elastomer materials for both standard and special applications allow the O-Ring to be used to seal practically all liquid and gaseous media.

O-Rings are vulcanized in molds and are characterized by their circular form with annular cross section. The dimensions of the O-Ring are defined by the inside diameter  $d_1$  and the cross section  $d_2$  (Figure 1).

AS568 O-Ring sizes are available with cross sections of approximately 0.040 inch / 1.02 mm to 0.275 inch / 6.99 mm and inside diameters up to 26.000 inch / 660.40 mm and more.

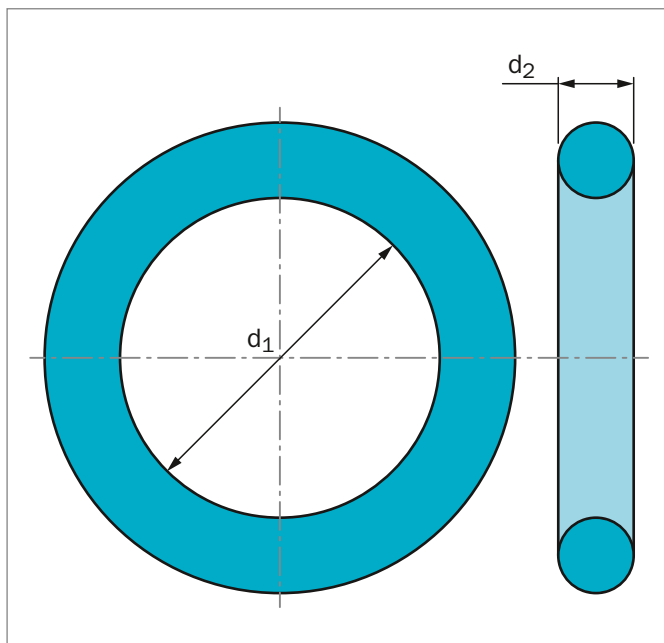


Figure 1: O-Ring dimensioning

### ADVANTAGES

Compared with other sealing elements, the O-Ring has a wide range of advantages:

- Simple, one-piece groove design reduces hardware and design costs
- Compact design allows smaller hardware
- Easy, failsafe installation reduces risk
- Applicable to a wide range of sealing applications: static, dynamic, single- or double-acting

### APPLICATIONS

O-Rings are used as sealing elements or energizing elements for hydraulic slipper seals and wipers and thus cover a large number of fields of application. There are no areas of industry where the O-Ring is not used. From an individual seal for repairs or maintenance, to a quality assured application in aerospace, automotive or general engineering.

The O-Ring is used predominantly for static sealing applications:

- As a radial static seal, e.g. for bushings, covers, pipes, cylinders
- As an axial static seal, e.g. for flanges, plates, caps.

O-Rings in dynamic applications are recommended **only for moderate service conditions**. They are limited by the speed and the pressure against which they are to seal:

- For low duty sealing of reciprocating pistons, rods, plungers, etc.
- For sealing of slowly pivoting, rotating or spiral movements on shafts, spindles, rotary transmissions leadthroughs, etc.



## METHOD OF OPERATION

O-Rings are double-acting sealing elements. The initial squeeze, which acts in a radial or axial direction depending on the installation, gives the O-Ring its initial sealing capability. This force is superimposed with the system pressure to create the total sealing force, which increases as the system pressure increases (Figure 2).

Under pressure, the O-Ring behaves in a similar way to a fluid with high surface tension. The pressure is transmitted uniformly in all directions.

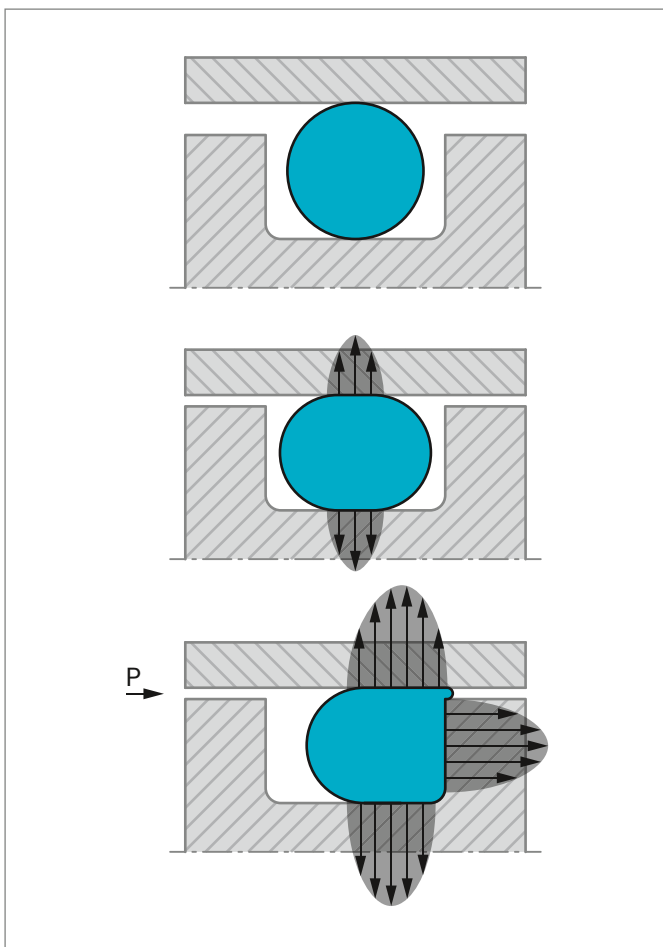


Figure 2: O-Ring sealing forces without and with system pressure



## MATERIALS

**Table 1: General field of application**

Material and Properties	Applications	Operating Temperature			
		Normal		Short period	
		°F	°C	°F	°C
<b>FKM (Fluorocarbon Rubber)</b> - Non-flammability, low gas permeability - Excellent resistance to ozone, weathering and aging	FKM is also often used with mineral based oils and greases at high temperatures	-4 to +392 (special types -40 to +392)	-20 to +200 (special types -40 to +200)	up to +446	up to +230
<b>NBR (Nitrile Butadiene Rubber)</b> - The properties of nitrile rubber depend mainly on the ACN content, which ranges between 18% and 50% - Good mechanical properties	NBR is mostly used with mineral based oils and greases	-22 to +212 (special types -76 to +194)	-30 to +100 (special types -60 to +90)	up to +248	up to +120

## QUALITY CRITERIA

O-Rings ordered using the material codes specified in Table 2 meet dimensional tolerances according to AS568 / ISO 3601-1 Class A.

### Features (Quality Index (Standard)):

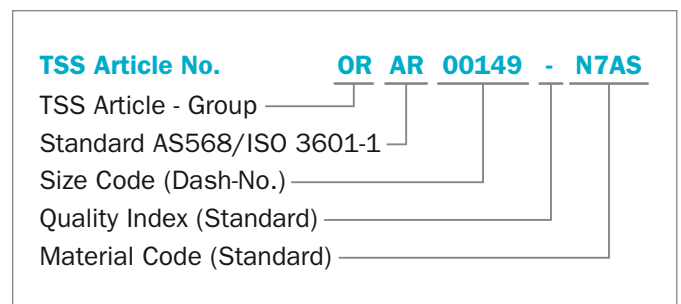
1. Individual material data sheets upon request
2. ID & CS tolerances: AS568 / ISO 3601-1 Class A
3. Surface quality: ISO 3601-1 Grade N. ISO 2859-1. AQL 1.0. general inspection level II. normal

**Table 2: Materials for AS568 / ISO 3601-1 Class A O-Rings**

Material Code	Type	Hardness Shore A	Color
N7AS	NBR	70	Black
N9AS	NBR	90	Black
VCAS	FKM	75	Brown
V9AS	FKM	90	Black

## ORDERING EXAMPLE

<b>Type:</b>	O-Ring, AS568 and ISO 3601-1 reference no. 149
<b>Dimensions:</b>	Inside diameter $d_1 = 2.800$ inch (71.12 mm) Cross section $d_2 = 0.103$ inch (2.62 mm)
<b>Material:</b>	NBR 70 (Nitrile-Butadiene Rubber 70 Shore A)



Other material codes for specific AS568 sizes available upon request. Contact your local Customer Solutions Center to obtain the best recommendation from Trelleborg Sealing Solutions.



## ■ Product Range

### O-RING DIMENSIONS IN ACCORDANCE WITH AS568 AND ISO 3601-1

The following tables show the preferred O-Ring dimensions in accordance with the American standard AS568 and the international standard ISO 3601-1, including appropriate reference numbers.

AS568 O-Rings are identical with the ISO 3601-1 Class A standard and available in the materials specified in Table 2.

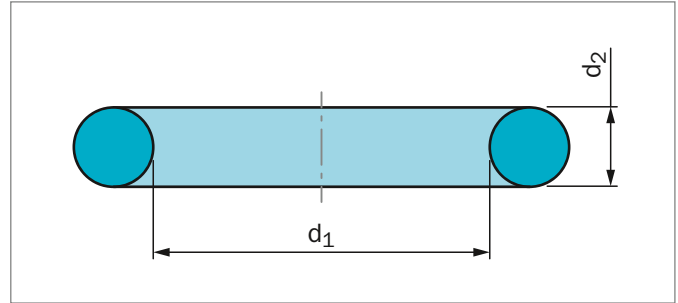


Figure 3: O-Ring dimensions

**Table 3: AS568 / ISO 3601-1 Class A O-Rings - Inch and Metric**

TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø		
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	
		inch				mm				
ORAR00001	001	0.029	0.004	0.040	0.003	0.74	0.10	1.02	0.08	
ORAR00002	002	0.042		0.050		1.07		1.27		
ORAR00003	003	0.056		0.060		1.42		1.52		
ORAR00004	004	0.070		0.070		1.78		1.78		
ORAR00005	005	0.101		0.070		2.57		1.78		
ORAR00006	006	0.114		0.070		2.90		1.78		
ORAR00007	007	0.145		0.070		3.68		1.78		
ORAR00008	008	0.176		0.070		4.47		1.78		
ORAR00009	009	0.208		0.070		5.28		0.13		1.78
ORAR00010	010	0.239		0.070		6.07		1.78		
ORAR00011	011	0.301	0.070	7.65	1.78					
ORAR00012	012	0.364	0.070	9.25	1.78					
ORAR00013	013	0.426	0.070	10.82	1.78					
ORAR00014	014	0.489	0.070	12.42	1.78					
ORAR00015	015	0.551	0.007	0.070	14.00	0.18	1.78			
ORAR00016	016	0.614	0.009	0.070	15.60	0.23	1.78			
ORAR00017	017	0.676		0.070	17.17		1.78			
ORAR00018	018	0.739		0.070	18.77		1.78			
ORAR00019	019	0.801		0.070	20.35		1.78			
ORAR00020	020	0.864		0.070	21.95		1.78			
ORAR00021	021	0.926		0.070	23.52		1.78			
ORAR00022	022	0.989		0.070	25.12		1.78			
ORAR00023	023	1.051	0.010	0.070	26.70	0.25	1.78			
ORAR00024	024	1.114	0.070	28.30	1.78					



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00025	025	1.176		0.070		29.87		1.78	
ORAR00026	026	1.239	0.011	0.070		31.47	0.28	1.78	
ORAR00027	027	1.301		0.070		33.05		1.78	
ORAR00028	028	1.364		0.070		34.65		1.78	
ORAR00029	029	1.489	0.013	0.070		37.82	0.33	1.78	
ORAR00030	030	1.614		0.070		41.00		1.78	
ORAR00031	031	1.739	0.015	0.070		44.17	0.38	1.78	
ORAR00032	032	1.864		0.070		47.35		1.78	
ORAR00033	033	1.989		0.070		50.52		1.78	
ORAR00034	034	2.114		0.070		53.70		1.78	
ORAR00035	035	2.239	0.018	0.070		56.87	0.46	1.78	
ORAR00036	036	2.364		0.070		60.05		1.78	
ORAR00037	037	2.489		0.070		63.22		1.78	
ORAR00038	038	2.614		0.070		66.40		1.78	
ORAR00039	039	2.739	0.020	0.070		69.57	0.51	1.78	
ORAR00040	040	2.864		0.070		72.75		1.78	
ORAR00041	041	2.989		0.070		75.92		1.78	
ORAR00042	042	3.239	0.024	0.070		82.27	0.61	1.78	
ORAR00043	043	3.489		0.070		88.62		1.78	
ORAR00044	044	3.739	0.027	0.070	0.003	94.97	0.69	1.78	0.08
ORAR00045	045	3.989		0.070		101.32		1.78	
ORAR00046	046	4.239		0.070		107.67		1.78	
ORAR00047	047	4.489	0.030	0.070		114.02	0.76	1.78	
ORAR00048	048	4.739		0.070		120.37		1.78	
ORAR00049	049	4.989	0.037	0.070		126.72	0.94	1.78	
ORAR00050	050	5.239		0.070		133.07		1.78	
ORAR00102	102	0.049		0.103		1.24		2.62	
ORAR00103	103	0.081		0.103		2.06		2.62	
ORAR00104	104	0.112		0.103		2.84		2.62	
ORAR00105	105	0.143		0.103		3.63		2.62	
ORAR00106	106	0.174		0.103		4.42		2.62	
ORAR00107	107	0.206	0.005	0.103		5.23	0.13	2.62	
ORAR00108	108	0.237		0.103		6.02		2.62	
ORAR00109	109	0.299		0.103		7.59		2.62	
ORAR00110	110	0.362		0.103		9.19		2.62	
ORAR00111	111	0.424		0.103		10.77		2.62	
ORAR00112	112	0.487		0.103		12.37		2.62	
ORAR00113	113	0.549	0.007	0.103		13.94	0.18	2.62	
ORAR00114	114	0.612		0.103		15.54		2.62	
ORAR00115	115	0.674	0.009	0.103		17.12	0.23	2.62	





TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00116	116	0.737	0.009	0.103	0.003	18.72	0.23	2.62	0.08
ORAR00117	117	0.799	0.010	0.103		20.29	0.25	2.62	
ORAR00118	118	0.862		0.103		21.89		2.62	
ORAR00119	119	0.924		0.103		23.47		2.62	
ORAR00120	120	0.987		0.103		25.07		2.62	
ORAR00121	121	1.049		0.103		26.64		2.62	
ORAR00122	122	1.112	0.103	28.24		2.62			
ORAR00123	123	1.174	0.012	0.103		29.82	0.30	2.62	
ORAR00124	124	1.237		0.103		31.42		2.62	
ORAR00125	125	1.299		0.103		32.99		2.62	
ORAR00126	126	1.362		0.103		34.59		2.62	
ORAR00127	127	1.424		0.103		36.17		2.62	
ORAR00128	128	1.487	0.103	37.77		2.62			
ORAR00129	129	1.549	0.015	0.103		39.34	0.38	2.62	
ORAR00130	130	1.612		0.103		40.94		2.62	
ORAR00131	131	1.674		0.103		42.52		2.62	
ORAR00132	132	1.737		0.103		44.12		2.62	
ORAR00133	133	1.799		0.103		45.69		2.62	
ORAR00134	134	1.862	0.103	47.29		2.62			
ORAR00135	135	1.925	0.017	0.103		48.90	0.43	2.62	
ORAR00136	136	1.987		0.103		50.47		2.62	
ORAR00137	137	2.050		0.103		52.07		2.62	
ORAR00138	138	2.112		0.103		53.64		2.62	
ORAR00139	139	2.175		0.103		55.25		2.62	
ORAR00140	140	2.237	0.020	0.103		56.82	0.51	2.62	
ORAR00141	141	2.300		0.103		58.42		2.62	
ORAR00142	142	2.362		0.103		59.99		2.62	
ORAR00143	143	2.425		0.103		61.60		2.62	
ORAR00144	144	2.487		0.103		63.17		2.62	
ORAR00145	145	2.550	0.022	0.103		64.77	0.56	2.62	
ORAR00146	146	2.612		0.103		66.34		2.62	
ORAR00147	147	2.675		0.103	67.95	2.62			
ORAR00148	148	2.737		0.103	69.52	2.62			
ORAR00149	149	2.800		0.103	71.12	2.62			
ORAR00150	150	2.862	0.024	0.103	72.69	0.61	2.62		
ORAR00151	151	2.987		0.103	75.87		2.62		
ORAR00152	152	3.237		0.103	82.22		2.62		
ORAR00153	153	3.487		0.103	88.57		2.62		
ORAR00154	154	3.737		0.028	0.103		94.92	0.71	2.62
ORAR00155	155	3.987	0.103		101.27	2.62			



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00156	156	4.237		0.103		107.62		2.62	
ORAR00157	157	4.487	0.030	0.103		113.97	0.76	2.62	
ORAR00158	158	4.737		0.103		120.32		2.62	
ORAR00159	159	4.987		0.103		126.67		2.62	
ORAR00160	160	5.237		0.103		133.02		2.62	
ORAR00161	161	5.487	0.035	0.103		139.37	0.89	2.62	
ORAR00162	162	5.737		0.103		145.72		2.62	
ORAR00163	163	5.987		0.103		152.07		2.62	
ORAR00164	164	6.237		0.103		158.42		2.62	
ORAR00165	165	6.487	0.040	0.103		164.77	1.02	2.62	
ORAR00166	166	6.737		0.103		171.12		2.62	
ORAR00167	167	6.987		0.103	0.003	177.47		2.62	0.08
ORAR00168	168	7.237		0.103		183.82		2.62	
ORAR00169	169	7.487	0.045	0.103		190.17	1.14	2.62	
ORAR00170	170	7.737		0.103		196.52		2.62	
ORAR00171	171	7.987		0.103		202.87		2.62	
ORAR00172	172	8.237		0.103		209.22		2.62	
ORAR00173	173	8.487	0.050	0.103		215.57	1.27	2.62	
ORAR00174	174	8.737		0.103		221.92		2.62	
ORAR00175	175	8.987		0.103		228.27		2.62	
ORAR00176	176	9.237		0.103		234.62		2.62	
ORAR00177	177	9.487	0.055	0.103		240.97	1.40	2.62	
ORAR00178	178	9.737		0.103		247.32		2.62	
ORAR00201	201	0.171		0.139		4.34		3.53	
ORAR00202	202	0.234		0.139		5.94		3.53	
ORAR00203	203	0.296	0.005	0.139		7.52	0.13	3.53	
ORAR00204	204	0.359		0.139		9.12		3.53	
ORAR00205	205	0.421		0.139		10.69		3.53	
ORAR00206	206	0.484		0.139		12.29		3.53	
ORAR00207	207	0.546	0.007	0.139		13.87	0.18	3.53	
ORAR00208	208	0.609	0.009	0.139		15.47	0.23	3.53	
ORAR00209	209	0.671		0.139	0.004	17.04		3.53	0.10
ORAR00210	210	0.734		0.139		18.64		3.53	
ORAR00211	211	0.796		0.139		20.22		3.53	
ORAR00212	212	0.859	0.010	0.139		21.82	0.25	3.53	
ORAR00213	213	0.921		0.139		23.39		3.53	
ORAR00214	214	0.984		0.139		24.99		3.53	
ORAR00215	215	1.046		0.139		26.57		3.53	
ORAR00216	216	1.109	0.012	0.139		28.17	0.30	3.53	
ORAR00217	217	1.171		0.139		29.74		3.53	



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00218	218	1.234	0.012	0.139	0.004	31.34	0.30	3.53	0.10
ORAR00219	219	1.296		0.139		32.92		3.53	
ORAR00220	220	1.359		0.139		34.52		3.53	
ORAR00221	221	1.421		0.139		36.09		3.53	
ORAR00222	222	1.484	0.015	0.139	0.004	37.69	0.38	3.53	0.10
ORAR00223	223	1.609		0.139		40.87		3.53	
ORAR00224	224	1.734		0.139		44.04		3.53	
ORAR00225	225	1.859	0.018	0.139	0.004	47.22	0.46	3.53	0.10
ORAR00226	226	1.984		0.139		50.39		3.53	
ORAR00227	227	2.109		0.139		53.57		3.53	
ORAR00228	228	2.234	0.020	0.139	0.004	56.74	0.51	3.53	0.10
ORAR00229	229	2.359		0.139		59.92		3.53	
ORAR00230	230	2.484		0.139		63.09		3.53	
ORAR00231	231	2.609		0.139		66.27		3.53	
ORAR00232	232	2.734	0.024	0.139	0.004	69.44	0.61	3.53	0.10
ORAR00233	233	2.859		0.139		72.62		3.53	
ORAR00234	234	2.984		0.139		75.79		3.53	
ORAR00235	235	3.109		0.139		78.97		3.53	
ORAR00236	236	3.234		0.139		82.14		3.53	
ORAR00237	237	3.359		0.139		85.32		3.53	
ORAR00238	238	3.484	0.028	0.139	0.004	88.49	0.71	3.53	0.10
ORAR00239	239	3.609		0.139		91.67		3.53	
ORAR00240	240	3.734		0.139		94.84		3.53	
ORAR00241	241	3.859		0.139		98.02		3.53	
ORAR00242	242	3.984	0.030	0.139	0.004	101.19	0.76	3.53	0.10
ORAR00243	243	4.109		0.139		104.37		3.53	
ORAR00244	244	4.234		0.139		107.54		3.53	
ORAR00245	245	4.359		0.139		110.72		3.53	
ORAR00246	246	4.484		0.139		113.89		3.53	
ORAR00247	247	4.609		0.139		117.07		3.53	
ORAR00248	248	4.734	0.035	0.139	0.004	120.24	0.89	3.53	0.10
ORAR00249	249	4.859		0.139		123.42		3.53	
ORAR00250	250	4.984		0.139		126.59		3.53	
ORAR00251	251	5.109		0.139		129.77		3.53	
ORAR00252	252	5.234	0.035	0.139	0.004	132.94	0.89	3.53	0.10
ORAR00253	253	5.359		0.139		136.12		3.53	
ORAR00254	254	5.484		0.139		139.29		3.53	
ORAR00255	255	5.609		0.139		142.47		3.53	
ORAR00256	256	5.734		0.139		145.64		3.53	
ORAR00257	257	5.859	0.139	148.82	3.53				



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00258	258	5.984	0.035	0.139	0.004	151.99	0.89	3.53	0.10
ORAR00259	259	6.234	0.040	0.139		158.34	1.02	3.53	
ORAR00260	260	6.484		0.139		164.69		3.53	
ORAR00261	261	6.734		0.139		171.04		3.53	
ORAR00262	262	6.984		0.139		177.39		3.53	
ORAR00263	263	7.234	0.045	0.139		183.74	1.14	3.53	
ORAR00264	264	7.484		0.139		190.09		3.53	
ORAR00265	265	7.734		0.139		196.44		3.53	
ORAR00266	266	7.984		0.139		202.79		3.53	
ORAR00267	267	8.234	0.050	0.139		209.14	1.27	3.53	
ORAR00268	268	8.484		0.139		215.49		3.53	
ORAR00269	269	8.734		0.139		221.84		3.53	
ORAR00270	270	8.984		0.139		228.19		3.53	
ORAR00271	271	9.234	0.055	0.139		234.54	1.40	3.53	
ORAR00272	272	9.484		0.139		240.89		3.53	
ORAR00273	273	9.734		0.139		247.24		3.53	
ORAR00274	274	9.984		0.139		253.59		3.53	
ORAR00275	275	10.484	0.065	0.139		266.29	1.65	3.53	
ORAR00276	276	10.984		0.139		278.99		3.53	
ORAR00277	277	11.484		0.139		291.69		3.53	
ORAR00278	278	11.984		0.139	304.39	3.53			
ORAR00279	279	12.984	0.075	0.139	329.79	1.91	3.53		
ORAR00280	280	13.984		0.139	355.19		3.53		
ORAR00281	281	14.984		0.139	380.59		3.53		
ORAR00282	282	15.955		0.080	405.26		3.53		
ORAR00283	283	16.955	0.085	0.139	430.66	2.03	3.53		
ORAR00284	284	17.955		0.139	456.06		3.53		
ORAR00309	309	0.412		0.005	0.210		10.46	0.13	5.33
ORAR00310	310	0.475			0.210		12.07		5.33
ORAR00311	311	0.537	0.210		13.64	5.33			
ORAR00312	312	0.600	0.210		15.24	5.33			
ORAR00313	313	0.662	0.009	0.210	16.81	0.23	5.33		
ORAR00314	314	0.725		0.210	18.42		5.33		
ORAR00315	315	0.787		0.210	19.99		5.33		
ORAR00316	316	0.850		0.210	21.59		5.33		
ORAR00317	317	0.912	0.010	0.210	23.16	0.25	5.33		
ORAR00318	318	0.975		0.210	24.77		5.33		
ORAR00319	319	1.037		0.210	26.34		5.33		
ORAR00320	320	1.100		0.210	27.94		5.33		
ORAR00321	321	1.162	0.012	0.210	29.51	0.30	5.33		



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00322	322	1.225	0.012	0.210	0.005	31.12	0.30	5.33	0.13
ORAR00323	323	1.287		0.210		32.69		5.33	
ORAR00324	324	1.350		0.210		34.29		5.33	
ORAR00325	325	1.475	0.015	0.210	0.005	37.47	0.38	5.33	0.13
ORAR00326	326	1.600		0.210		40.64		5.33	
ORAR00327	327	1.725		0.210		43.82		5.33	
ORAR00328	328	1.850	0.210	46.99	5.33	5.33			
ORAR00329	329	1.975	0.018	0.210	0.005	50.17	0.46	5.33	0.13
ORAR00330	330	2.100		0.210		53.34		5.33	
ORAR00331	331	2.225		0.210		56.52		5.33	
ORAR00332	332	2.350	0.210	59.69	5.33	5.33			
ORAR00333	333	2.475	0.020	0.210	0.005	62.87	0.51	5.33	0.13
ORAR00334	334	2.600		0.210		66.04		5.33	
ORAR00335	335	2.725		0.210		69.22		5.33	
ORAR00336	336	2.850	0.210	72.39	5.33	5.33			
ORAR00337	337	2.975	0.024	0.210	0.005	75.57	0.61	5.33	0.13
ORAR00338	338	3.100		0.210		78.74		5.33	
ORAR00339	339	3.225		0.210		81.92		5.33	
ORAR00340	340	3.350	0.210	85.09	5.33	5.33			
ORAR00341	341	3.475	0.210	88.27	5.33	5.33			
ORAR00342	342	3.600	0.028	0.210	0.005	91.44	0.71	5.33	0.13
ORAR00343	343	3.725		0.210		94.62		5.33	
ORAR00344	344	3.850		0.210		97.79		5.33	
ORAR00345	345	3.975	0.210	100.97	5.33	5.33			
ORAR00346	346	4.100	0.210	104.14	5.33	5.33			
ORAR00347	347	4.225	0.030	0.210	0.005	107.32	0.76	5.33	0.13
ORAR00348	348	4.350		0.210		110.49		5.33	
ORAR00349	349	4.475		0.210		113.67		5.33	
ORAR00350	350	4.600	0.210	116.84	5.33	5.33			
ORAR00351	351	4.725	0.210	120.02	5.33	5.33			
ORAR00352	352	4.850	0.210	123.19	5.33	5.33			
ORAR00353	353	4.975	0.037	0.210	0.005	126.37	0.94	5.33	0.13
ORAR00354	354	5.100		0.210		129.54		5.33	
ORAR00355	355	5.225		0.210		132.72		5.33	
ORAR00356	356	5.350	0.210	135.89	5.33	5.33			
ORAR00357	357	5.475	0.210	139.07	5.33	5.33			
ORAR00358	358	5.600	0.210	142.24	5.33	5.33			
ORAR00359	359	5.725	0.210	145.42	5.33	5.33			
ORAR00360	360	5.850	0.210	148.59	5.33	5.33			
ORAR00361	361	5.975	0.210	151.77	5.33	5.33			



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø			
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±		
		inch				mm					
ORAR00362	362	6.225	0.040	0.210	0.005	158.12	1.02	5.33	0.13		
ORAR00363	363	6.475		0.210		164.47		5.33			
ORAR00364	364	6.725		0.210		170.82		5.33			
ORAR00365	365	6.975		0.210		177.17		5.33			
ORAR00366	366	7.225	0.045	0.210	0.005	183.52	1.14	5.33	0.13		
ORAR00367	367	7.475		0.210		189.87		5.33			
ORAR00368	368	7.725		0.210		196.22		5.33			
ORAR00369	369	7.975		0.210		202.57		5.33			
ORAR00370	370	8.225	0.050	0.210	0.005	208.92	1.27	5.33	0.13		
ORAR00371	371	8.475		0.210		215.27		5.33			
ORAR00372	372	8.725		0.210		221.62		5.33			
ORAR00373	373	8.975		0.210		227.97		5.33			
ORAR00374	374	9.225	0.055	0.210	0.005	234.32	1.40	5.33	0.13		
ORAR00375	375	9.475		0.210		240.67		5.33			
ORAR00376	376	9.725		0.210		247.02		5.33			
ORAR00377	377	9.975		0.210		253.37		5.33			
ORAR00378	378	10.475	0.060	0.210	0.005	266.07	1.52	5.33	0.13		
ORAR00379	379	10.975		0.210		278.77		5.33			
ORAR00380	380	11.475		0.210		291.47		5.33			
ORAR00381	381	11.975		0.210		304.17		5.33			
ORAR00382	382	12.975	0.070	0.210	0.005	329.57	1.78	5.33	0.13		
ORAR00383	383	13.975		0.210		354.97		5.33			
ORAR00384	384	14.975		0.210		380.37		5.33			
ORAR00385	385	15.955		0.210		405.26		5.33			
ORAR00386	386	16.955	0.080	0.210	0.006	430.66	2.03	5.33	0.15		
ORAR00387	387	17.955	0.085	0.210		456.06	2.16	5.33			
ORAR00388	388	18.955	0.090	0.210		481.46	2.29	5.33			
ORAR00389	389	19.955	0.095	0.210		506.86	2.41	5.33			
ORAR00390	390	20.955	0.100	0.210	0.006	532.26	2.54	5.33	0.15		
ORAR00391	391	21.955		0.210		557.66		5.33			
ORAR00392	392	22.940		0.210		582.68		2.67		5.33	
ORAR00393	393	23.940		0.210		608.08		2.79		5.33	
ORAR00394	394	24.940	0.115	0.210	0.006	633.48	2.92	5.33	0.15		
ORAR00395	395	25.940	0.210	658.88		3.05	5.33				
ORAR00425	425	4.475	0.033	0.275		0.006	113.67	0.84		6.99	0.15
ORAR00426	426	4.600		0.275			116.84			6.99	
ORAR00427	427	4.725		0.275	120.02		6.99				
ORAR00428	428	4.850		0.275	123.19		6.99				
ORAR00429	429	4.975	0.037	0.275	0.006	126.37	0.94	6.99	0.15		
ORAR00430	430	5.100		0.275		129.54		6.99			



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø					
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±				
		inch				mm							
ORAR00431	431	5.225	0.037	0.275	0.006	132.72	0.94	6.99	0.15				
ORAR00432	432	5.350		0.275		135.89		6.99					
ORAR00433	433	5.475		0.275		139.07		6.99					
ORAR00434	434	5.600		0.275		142.24		6.99					
ORAR00435	435	5.725		0.275		145.42		6.99					
ORAR00436	436	5.850	0.040	0.275	0.006	148.59	1.02	6.99	0.15				
ORAR00437	437	5.975		0.275		151.77		6.99					
ORAR00438	438	6.225		0.275		158.12		6.99					
ORAR00439	439	6.475		0.275		164.47		6.99					
ORAR00440	440	6.725		0.275		170.82		6.99					
ORAR00441	441	6.975	0.045	0.275	0.006	177.17	1.14	6.99	0.15				
ORAR00442	442	7.225		0.275		183.52		6.99					
ORAR00443	443	7.475		0.275		189.87		6.99					
ORAR00444	444	7.725		0.275		196.22		6.99					
ORAR00445	445	7.975		0.275		202.57		6.99					
ORAR00446	446	8.475	0.055	0.275	0.006	215.27	1.40	6.99	0.15				
ORAR00447	447	8.975		0.275		227.97		6.99					
ORAR00448	448	9.475		0.275		240.67		6.99					
ORAR00449	449	9.975		0.275		253.37		6.99					
ORAR00450	450	10.475		0.060		0.275		0.006		266.07	1.52	6.99	0.15
ORAR00451	451	10.975	0.275		278.77	6.99							
ORAR00452	452	11.475	0.275		291.47	6.99							
ORAR00453	453	11.975	0.275		304.17	6.99							
ORAR00454	454	12.475	0.275		316.87	6.99							
ORAR00455	455	12.975	0.070	0.275	0.006	329.57	1.78	6.99	0.15				
ORAR00456	456	13.475		0.275		342.27		6.99					
ORAR00457	457	13.975		0.275		354.97		6.99					
ORAR00458	458	14.475		0.275		367.67		6.99					
ORAR00459	459	14.975		0.275		380.37		6.99					
ORAR00460	460	15.475	0.075	0.275	0.006	393.07	1.91	6.99	0.15				
ORAR00461	461	15.955		0.275		405.26		6.99					
ORAR00462	462	16.455		0.275		417.96		6.99					
ORAR00463	463	16.955		0.080		430.66		6.99					
ORAR00464	464	17.455		0.085		0.275		0.006		443.36	2.03	6.99	0.15
ORAR00465	465	17.955	0.275		456.06	6.99							
ORAR00466	466	18.455	0.275		468.76	6.99							
ORAR00467	467	18.955	0.090		0.275	0.006	481.46		2.16	6.99		0.15	
ORAR00468	468	19.455			0.275		494.16			6.99			
ORAR00469	469	19.955	0.095	0.275	0.006	506.86	2.29	6.99	0.15				
ORAR00470	470	20.955		0.275		532.26		6.99					



TSS Part No.	Dash No. AS568 ISO 3601-1	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø	
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±
		inch				mm			
ORAR00471	471	21.955	0.100	0.275	0.006	557.66	2.54	6.99	0.15
ORAR00472	472	22.940	0.105	0.275		582.68	2.67	6.99	
ORAR00473	473	23.940	0.110	0.275		608.08	2.79	6.99	
ORAR00474	474	24.940	0.115	0.275		633.48	2.92	6.99	
ORAR00475	475	25.940	0.120	0.275		658.88	3.05	6.99	

## O-RING DIMENSIONS FOR STRAIGHT THREAD TUBE FITTINGS

**Table 4: O-Ring dimensions for straight thread tube fittings in accordance with AS568 with valid tolerances in accordance with AS568 – Inch and Metric**

TSS Part No.	Dash No. AS568	Inside-Ø		Cross-Section-Ø		Inside-Ø		Cross-Section-Ø		Tube size		
		d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	d <sub>1</sub>	Tolerance ±	d <sub>2</sub>	Tolerance ±	Out-side-Ø (OD) inch		
		inch				mm						
ORAR00901	901	0.185	0.005	0.056	0.003	4.70	0.13	1.42	0.08	3/32		
ORAR00902	902	0.239		0.064		6.07		1.63		1/8		
ORAR00903	903	0.301		0.064		7.65		1.63		3/16		
ORAR00904	904	0.351		0.072		8.92		1.83		1/4		
ORAR00905	905	0.414		0.072		10.52		1.83		5/16		
ORAR00906	906	0.468	0.078	11.89	1.98	3/8						
ORAR00907	907	0.530	0.007	0.082	13.46	0.18	2.08	7/16				
ORAR00908	908	0.644	0.009	0.087	0.004	16.36	0.23	2.21	0.10	1/2		
ORAR00909	909	0.706		0.097		17.93		2.46		9/16		
ORAR00910	910	0.755		0.097		19.18		2.46		5/8		
ORAR00911	911	0.863		0.116		21.92		2.95		11/16		
ORAR00912	912	0.924		0.116		23.47		2.95		3/4		
ORAR00913	913	0.986	0.010	0.116	0.004	25.04	0.25	2.95	0.10	13/16		
ORAR00914	914	1.047		0.116		26.59		2.95		7/8		
ORAR00916	916	1.171		0.116		29.74		2.95		1		
ORAR00918	918	1.355		0.012		0.116		34.42		0.30	2.95	1 1/8
ORAR00920	920	1.475		0.014		0.118		0.004		37.47	0.36	3.00
ORAR00924	924	1.720	0.118		43.69	3.00	1 1/2					
ORAR00928	928	2.090	0.118		53.09	3.00	1 3/4					
ORAR00932	932	2.337	0.018		0.118	59.36	0.46		3.00	2		



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