

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1077

DIMENSIONS OF ELASTOMERIC TOROIDAL SEALING RINGS
FOR PIPE-FITTINGS IN AIRCRAFT

(INCH SERIES — CLASS 1 TOLERANCES)

1st EDITION

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**DIMENSIONS OF ELASTOMERIC TOROIDAL SEALING RINGS
FOR PIPE-FITTINGS IN AIRCRAFT
(INCH SERIES — CLASS 1 TOLERANCES)**

1. SCOPE

This ISO Recommendation states the dimensions and a method of designation for a range of elastomeric toroidal sealing rings in inch sizes with Class 1 tolerances, suitable for use with pipe-fittings screwed into tapped bosses conforming to the dimensions stated in an ISO Recommendation at present in preparation. It does not make reference to materials to be used for the rings. Rings with Class 2 tolerances are the subject of ISO Recommendation R . . .*, *Dimensions of elastomeric toroidal sealing rings for pipe-fittings in aircraft (Inch series — Class 2 tolerances)*.

2. DIMENSIONS

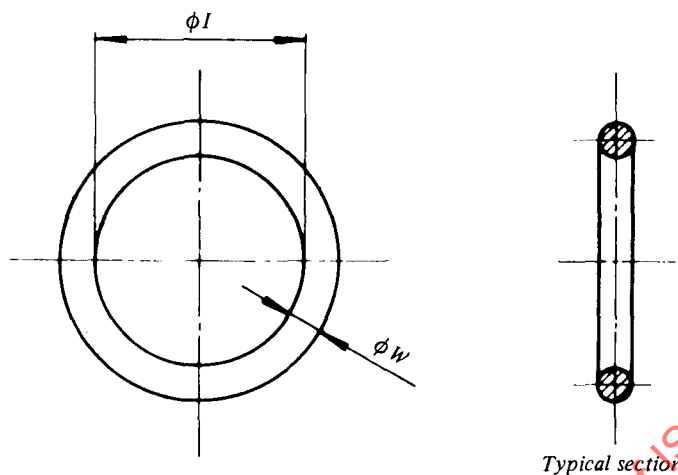
The dimensions of toroidal rings for use with pipe-fittings screwed into tapped bosses should comply with the Table opposite.

3. DESIGNATION

The sealing rings should be designated by the ring size numbers quoted in the Table opposite.

* At present Draft ISO Recommendation No. 1799.

TABLE – Dimensions of elastomeric toroidal sealing rings for pipe-fittings in aircraft
(Inch series – Class 1 tolerances)



Ring size	Nominal overall diameter of tubing		ϕW				ϕI			
			mm		in		mm		in	
	mm	in	max.	min.	max.	min.	max.	min.	max.	min.
901	2.383	0.0938	1.499	1.346	0.059	0.053	4.83	4.57	0.190	0.180
902	3.175	0.125	1.702	1.549	0.067	0.061	6.20	5.94	0.244	0.234
903	4.763	0.1875	1.702	1.549	0.067	0.061	7.77	7.52	0.306	0.296
904	6.350	0.250	1.905	1.753	0.075	0.069	9.04	8.79	0.356	0.346
905	7.938	0.3125	1.905	1.753	0.075	0.069	10.64	10.39	0.419	0.409
906	9.525	0.375	2.057	1.905	0.081	0.075	12.01	11.76	0.473	0.463
907	11.113	0.4375	2.159	2.007	0.085	0.079	13.59	13.34	0.535	0.525
908	12.700	0.500	2.286	2.134	0.090	0.084	16.48	16.23	0.649	0.639
909	14.288	0.5625	2.540	2.388	0.100	0.094	18.06	17.81	0.711	0.701
910	15.875	0.625	2.540	2.388	0.100	0.094	19.30	19.05	0.760	0.750
911	17.463	0.6875	3.048	2.845	0.120	0.112	22.05	21.79	0.868	0.858
912	19.050	0.750	3.048	2.845	0.120	0.112	23.62	23.32	0.930	0.918
913	20.638	0.8125	3.048	2.845	0.120	0.112	25.20	24.89	0.992	0.980
914	22.225	0.875	3.048	2.845	0.120	0.112	26.75	26.44	1.053	1.041
916	25.400	1.000	3.048	2.845	0.120	0.112	29.90	29.59	1.177	1.165
918	28.575	1.125	3.048	2.845	0.120	0.112	34.57	34.26	1.361	1.349
920	31.750	1.250	3.099	2.896	0.122	0.114	37.72	37.21	1.485	1.465
924	38.100	1.500	3.099	2.896	0.122	0.114	43.94	43.43	1.730	1.710
928	44.450	1.750	3.099	2.896	0.122	0.114	53.34	52.83	2.100	2.080
932	50.800	2.000	3.099	2.896	0.122	0.114	59.61	59.11	2.347	2.327