

Nicholsons

E-SEALS

Designers and manufacturers of high temperature metal seals for the aerospace and associated industries.

This pdf details our standard range of E-Seals.

Although not shown in this pdf, we also produce E-Seals to suit standard aerospace flange and ducting systems. For further details of these E-Seals or help with the E-Seals shown, please consult us.

Other Seal types available include:

Corruseal

Corruplus

Ellipseal

Sigma Seal

Throughout these pages imperial dimensions are in inches, metric dimensions are in millimetres and are shown on a pale blue background (see below), except where otherwise stated.

INCHES .006

MILLIMETRES .152

There are various factors which have an effect on the performance of an E-Seal; these should be taken into account when specifying a seal and are discussed below.

The flange should apply load as near as possible to the sealing line of the seal.

The flange surface finish should ideally have circular lay and be N6 (32 microinches, 0.8 micrometres) or smoother. The smoother the finish, the better the sealing. High temperature/high pressure applications and vacuum applications require smoother flange surface finishes. Plating or coating can help by filling the voids and irregularities in the flange sealing surfaces.

Standard material for E Seals is Inconel 718, other materials are available (see seal specification section).

The resilience or 'springback' of an E-Seal allows the seal to accommodate flange separation during operation. Generally, the larger the free height, the greater the seal resilience.


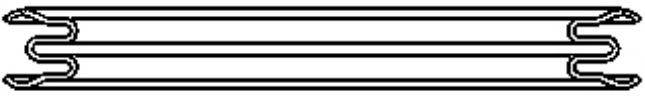

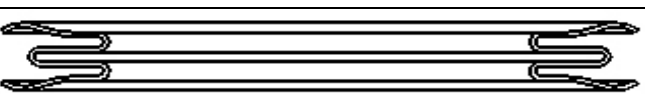
The seating load is dependent on the free height, material type and thickness, heat treatment and cavity depth.

Seating loads are given in table A. These figures are for guidance only; tolerances and variations in material thickness, properties, coatings and platings along with seal diameter will have a significant effect on these values.

TABLE A

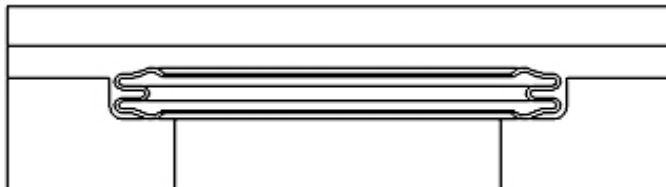
NOMINAL SEAL FREE HEIGHT		SEAL TYPE	SEATING LOAD	
			lbf/in of circumference	N/mm of circumference
3/32	2.36	SHORT LEG	100 - 150	17.5 – 26.3
1/8	3.18	SHORT LEG	100 - 150	17.5 – 26.3
3/16	4.75	SHORT LEG	100 - 150	17.5 – 26.3
3/32	2.36	LONG LEG	25 - 80	4.4 – 14.0
1/8	3.18	LONG LEG	25 - 60	4.4 – 10.5

E-SEAL TYPES

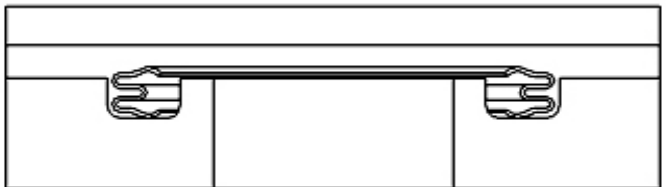
EIS SERIES INTERNAL PRESSURE SHORT LEG	
EES SERIES EXTERNAL PRESSURE SHORT LEG	
EIL SERIES INTERNAL PRESSURE LONG LEG	
EEL SERIES INTERNAL PRESSURE LONG LEG	

E-Seals can be used in:

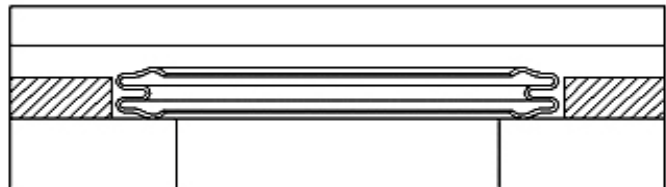
(i) Counterbore



(ii) Groove



(iii) Retaining Plate



SEAL SPECIFICATIONS

The part number system enables the selection of the correct seal for each application and installation using the permutations of size, material, plating etc.

PART NUMBER

1	2	3	4	5	6
EIS 0020	06	14	4	SP	A

- 1 Seal Type and Diameter
- 2 Free Height and Material Thickness
- 3 Material Type
- 4 Heat Treatment
- 5 Plating or Coating
- 6 Plating or Coating Thickness

SEAL TYPE AND DIAMETER

EIS 0020	06	14	4	SP	A
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The first seven characters of the part number give the seal type along with the seal and cavity diameters for each available free height.

Four types of E-Seal are available:

- (I) Internal pressure short leg seal ([EIS Series](#))
- (II) External pressure short leg seal ([EES Series](#))
- (III) Internal pressure long leg seal ([EIL Series](#))
- (IV) External pressure long leg seal ([EEL Series](#))

FREE HEIGHT AND MATERIAL THICKNESS

EIS 0020	06	14	4	SP	A
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The eighth and ninth digits give the seal free height and material thickness.

Table 1 lists seal free heights, cavity depths and material thickness.

Table 1

PART NO. CODE	SEAL TYPE	NOMINAL SEAL FREE HEIGHT	ACTUAL SEAL FREE HEIGHT		CAVITY DEPTH		CAVITY CORNER RADIUS R (MAX)		MATERIAL THICKNESS		
03	Short leg	3/32	2.36	.104	2.642	.088	2.235	.020	0.508	.010	0.254
				.100	2.540	.086	2.184				
06	Short leg	1/8	3.18	.135	3.429	.120	3.048	.030	0.762	.015	0.381
				.129	3.277	.116	2.946				
08	Short leg	3/16	4.75	.223	5.664	.183	4.648	.030	0.762	0.15	0.381
				.213	5.410	.179	4.547				
13	Long leg	3/32	2.36	.113	2.870	.088	2.235	.020	0.508	.010	0.254
				.103	2.616	.086	2.184				
16	Long leg	1/8	3.18	.145	3.683	.120	3.048	.030	0.762	.012	0.305
				.135	3.429	.116	2.946				

MATERIAL TYPE

EIS 0020	06	14	4	SP	A
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The tenth and eleventh digits give the material type used to manufacture the seal.

Table 2 lists material types

Table 2	PART NO. CODE	MATERIAL	COMMENTS
	12	Inconel X750	
	14	Inconel 718	Standard material for E-Seals

HEAT TREATMENT

EIS 0020	06	14	4	SP	A
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The twelfth digit gives the heat treatment applied to the seal.

All E-Seals have a solution and long cycle precipitation heat treatment as standard. This is specified as a "4" in the part number.

PLATING OR COATING

EIS 0020	06	14	4	SP	A
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The thirteenth and fourteenth digits give the plating or coating applied to the seal.
Table 3 lists platings and coatings.

Table 3

PART NO. CODE	PLATING OR COATING	COMMENTS
OP	None	
SP	Silver	Suitable for most applications*
NP	Nickel	
CP	Copper	
GP	Gold	Very Expensive
LP	Lead	Soft, Max temp 150°C / 300°F
PP	PTFE	Max temp 220°C / 340°F
IP	Indium	Very soft, Low temp only

Plating may be incomplete away from sealing surfaces.

* A special silver plating is available for high temperature/difficult applications, please consult us.

PLATING OR COATING THICKNESS

EIS 0020	06	14	4	SP	A
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The fifteenth digit gives the plating or coating thickness.

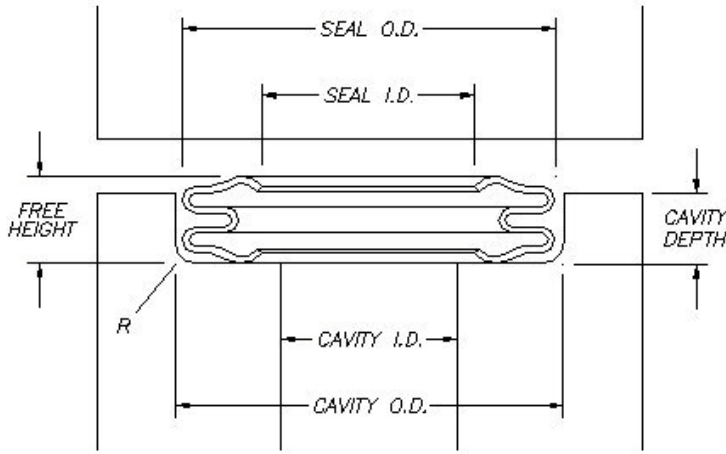
Table 4 lists thickness of plating or coating.

Table 4

PART NO. CODE	PLATING OR COATING THICKNESS		COMMENTS
A	.0010	.0254	Standard for silver
	.0005	.0127	
B	.0015	.0381	
	.0010	.0254	
C	.0025	.0635	
	.0015	.0381	
D	.0030	.0762	
	.0020	.0508	
O	NONE		Use with unplated seals

All sizes in this brochure are prior to plating or coating. For plated or coated seals the OD and free height of the seal will increase by twice the plating or coating thickness. The ID will decrease by twice the plating or coating thickness. Do not change the cavity depth.

EIS SERIES – INTERNAL PRESSURE SHORT LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEAL DIAMETERS CAN BE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.003 -0.000	MIN	+0.000 -0.003	MAX	+0.003 -0.000	MIN	+0.000 -0.003	MAX	+0.003 -0.000	MIN	+0.000 -0.003
EIS 0030	1.875	2.062	1.878	2.059	1.875	2.125	1.878	2.122	-	-	-	-
EIS 0031	1.937	2.125	1.940	2.122	1.937	2.187	1.940	2.184	-	-	-	-
EIS 0032	2.000	2.187	2.003	2.184	2.000	2.250	2.003	2.247	-	-	-	-
EIS 0033	2.062	2.250	2.065	2.247	2.062	2.312	2.065	2.309	-	-	-	-
EIS 0034	2.125	2.312	2.128	2.309	2.125	2.375	2.128	2.372	-	-	-	-
EIS 0035	2.187	2.375	2.190	2.372	2.187	2.437	2.190	2.434	-	-	-	-
EIS 0036	2.250	2.437	2.253	2.434	2.250	2.500	2.253	2.497	-	-	-	-
EIS 0037	2.312	2.500	2.315	2.497	2.312	2.562	2.315	2.559	-	-	-	-
EIS 0038	2.375	2.562	2.378	2.559	2.375	2.625	2.378	2.622	-	-	-	-
EIS 0039	2.437	2.625	2.440	2.622	2.437	2.687	2.440	2.684	-	-	-	-
EIS 0040	2.500	2.687	2.503	2.684	2.500	2.750	2.503	2.747	-	-	-	-
EIS 0041	2.562	2.750	2.565	2.747	2.562	2.812	2.565	2.809	-	-	-	-
EIS 0042	2.625	2.812	2.628	2.809	2.625	2.875	2.628	2.872	-	-	-	-
EIS 0043	2.687	2.875	2.690	2.872	2.687	2.937	2.690	2.934	-	-	-	-
EIS 0044	2.750	2.937	2.753	2.934	2.750	3.000	2.753	2.997	-	-	-	-
EIS 0045	2.812	3.000	2.815	2.997	2.812	3.062	2.815	3.059	-	-	-	-
EIS 0046	2.875	3.062	2.878	3.059	2.875	3.125	2.878	3.122	-	-	-	-
EIS 0047	2.937	3.125	2.940	3.122	2.937	3.187	2.940	3.184	-	-	-	-
EIS 0048	3.000	3.187	3.003	3.184	3.000	3.250	3.003	3.247	3.000	3.375	3.003	3.372
EIS 0049	3.062	3.250	3.065	3.247	3.062	3.312	3.065	3.309	3.062	3.437	3.065	3.434

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.004 -0.000	MIN	+0.000 -0.004	MAX	+0.004 -0.000	MIN	+0.000 -0.004	MAX	+0.004 -0.000	MIN	+0.000 -0.004
EIS 0050	3.125	3.312	3.128	3.309	3.125	3.375	3.128	3.372	3.125	3.500	3.128	3.497
EIS 0051	3.187	3.375	3.190	3.372	3.187	3.437	3.190	3.434	3.187	3.562	3.190	3.559
EIS 0052	3.250	3.437	3.253	3.434	3.250	3.500	3.253	3.497	3.250	3.625	3.253	3.622
EIS 0053	3.312	3.500	3.315	3.497	3.312	3.562	3.315	3.559	3.312	3.687	3.315	3.684
EIS 0054	3.375	3.562	3.378	3.559	3.375	3.625	3.378	3.622	3.375	3.750	3.378	3.747
EIS 0055	3.437	3.625	3.440	3.622	3.437	3.687	3.440	3.684	3.437	3.812	3.440	3.809
EIS 0056	3.500	3.687	3.503	3.684	3.500	3.750	3.503	3.747	3.500	3.875	3.503	3.872
EIS 0057	3.562	3.750	3.565	3.747	3.562	3.812	3.565	3.809	3.562	3.937	3.565	3.934
EIS 0058	3.625	3.812	3.628	3.809	3.625	3.875	3.628	3.872	3.625	4.000	3.628	3.997
EIS 0059	3.687	3.875	3.690	3.872	3.687	3.937	3.690	3.934	3.687	4.062	3.690	4.059
EIS 0060	3.750	3.937	3.753	3.934	3.750	4.000	3.753	3.997	3.750	4.125	3.753	4.122
EIS 0061	3.812	4.000	3.815	3.997	3.812	4.062	3.815	4.059	3.812	4.187	3.815	4.184
EIS 0062	3.875	4.062	3.878	4.059	3.875	4.125	3.878	4.122	3.875	4.250	3.878	4.247
EIS 0063	3.937	4.125	3.940	4.122	3.937	4.187	3.940	4.184	3.937	4.312	3.940	4.309
EIS 0064	4.000	4.187	4.003	4.184	4.000	4.250	4.003	4.247	4.000	4.375	4.003	4.372
EIS 0065	4.062	4.250	4.065	4.247	4.062	4.312	4.065	4.309	4.062	4.437	4.065	4.434
EIS 0066	4.125	4.312	4.128	4.309	4.125	4.375	4.128	4.372	4.125	4.500	4.128	4.497
EIS 0067	4.187	4.375	4.190	4.372	4.187	4.437	4.190	4.434	4.187	4.562	4.190	4.559
EIS 0068	4.250	4.437	4.253	4.434	4.250	4.500	4.253	4.497	4.250	4.625	4.253	4.622
EIS 0069	4.312	4.500	4.315	4.497	4.312	4.562	4.315	4.559	4.312	4.687	4.315	4.684
EIS 0070	4.375	4.562	4.378	4.559	4.375	4.625	4.378	4.622	4.375	4.750	4.378	4.747
EIS 0071	4.437	4.625	4.440	4.622	4.437	4.687	4.440	4.684	4.437	4.812	4.440	4.809
EIS 0072	4.500	4.687	4.503	4.684	4.500	4.750	4.503	4.747	4.500	4.875	4.503	4.872
EIS 0073	4.562	4.750	4.565	4.747	4.562	4.812	4.565	4.809	4.562	4.937	4.565	4.934
EIS 0074	4.625	4.812	4.628	4.809	4.625	4.875	4.628	4.872	4.625	5.000	4.628	4.997
EIS 0075	4.687	4.875	4.690	4.872	4.687	4.937	4.690	4.934	4.687	5.062	4.690	5.059
EIS 0076	4.750	4.937	4.753	4.934	4.750	5.000	4.753	4.997	4.750	5.125	4.753	5.122
EIS 0077	4.812	5.000	4.815	4.997	4.812	5.062	4.815	5.059	4.812	5.187	4.815	5.184
EIS 0078	4.875	5.062	4.878	5.059	4.875	5.125	4.878	5.122	4.875	5.250	4.878	5.247
EIS 0079	4.937	5.125	4.940	5.122	4.937	5.187	4.940	5.184	4.937	5.312	4.940	5.309
EIS 0080	5.000	5.187	5.003	5.184	5.000	5.250	5.003	5.247	5.000	5.375	5.003	5.372
EIS 0081	5.062	5.250	5.065	5.247	5.062	5.312	5.065	5.309	5.062	5.347	5.065	5.434

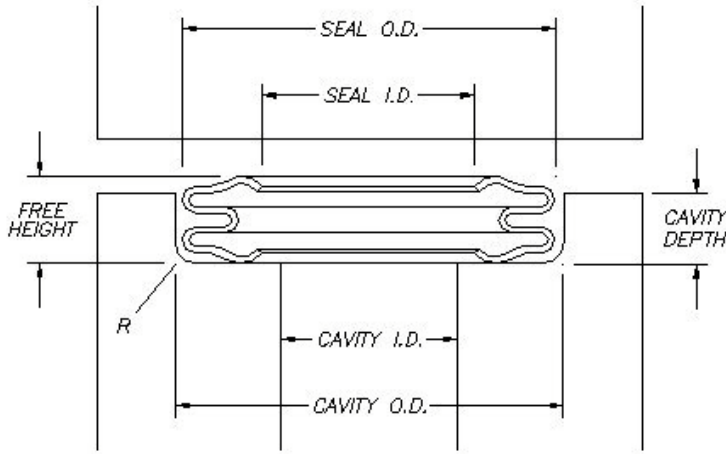
Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.006 -0.000	MIN	+0.000 -0.006	MAX	+0.006 -0.000	MIN	+0.000 -0.006	MAX	+0.006 -0.000	MIN	+0.000 -0.006
EIS 0082	5.125	5.312	5.128	5.309	5.125	5.375	5.128	5.372	5.125	5.500	5.128	5.497
EIS 0083	5.187	5.375	5.190	5.372	5.187	5.437	5.190	5.434	5.187	5.562	5.190	5.559
EIS 0084	5.250	5.437	5.253	5.434	5.250	5.500	5.253	5.497	5.250	5.625	5.253	5.622
EIS 0085	5.312	5.500	5.315	5.497	5.312	5.562	5.315	5.559	5.312	5.687	5.315	5.684
EIS 0086	5.375	5.562	5.378	5.559	5.375	5.625	5.378	5.622	5.375	5.750	5.378	5.747
EIS 0087	5.437	5.625	5.440	5.622	5.437	5.687	5.440	5.684	5.437	5.812	5.440	5.809
EIS 0088	5.500	5.687	5.503	5.684	5.500	5.750	5.503	5.747	5.500	5.875	5.503	5.872
EIS 0089	5.562	5.750	5.565	5.747	5.562	5.812	5.565	5.809	5.562	5.937	5.565	5.934
EIS 0090	5.625	5.812	5.628	5.809	5.625	5.875	5.628	5.872	5.625	6.000	5.628	5.997
EIS 0092	5.750	5.937	5.753	5.934	5.750	6.000	5.753	5.997	5.750	6.125	5.753	6.122
EIS 0094	5.875	6.062	5.878	6.059	5.875	6.125	5.878	6.122	5.875	6.250	5.878	6.247
EIS 0096	6.000	6.187	6.003	6.184	6.000	6.250	6.003	6.247	6.000	6.375	6.003	6.372
EIS 0098	-	-	-	-	6.125	6.375	6.128	6.372	6.125	6.500	6.128	6.497
EIS 0100	-	-	-	-	6.250	6.500	6.253	6.497	6.250	6.625	6.253	6.622
EIS 0102	-	-	-	-	6.375	6.625	6.378	6.622	6.375	6.750	6.378	6.747
EIS 0104	-	-	-	-	6.500	6.750	6.503	6.747	6.500	6.875	6.503	6.872
EIS 0106	-	-	-	-	6.625	6.875	6.628	6.872	6.625	7.000	6.628	6.997
EIS 0108	-	-	-	-	6.750	7.000	6.753	6.997	6.750	7.125	6.753	7.122
EIS 0110	-	-	-	-	6.875	7.125	6.878	7.122	6.875	7.250	6.878	7.247
EIS 0112	-	-	-	-	7.000	7.250	7.003	7.247	7.000	7.375	7.003	7.372
	MAX	+0.008 -0.000	MIN	+0.000 -0.008	MAX	+0.008 -0.000	MIN	+0.000 -0.008	MAX	+0.008 -0.000	MIN	+0.000 -0.008
EIS 0114	-	-	-	-	7.125	7.375	7.128	7.372	7.125	7.500	7.128	7.497
EIS 0116	-	-	-	-	7.250	7.500	7.253	7.497	7.250	7.625	7.253	7.622
EIS 0118	-	-	-	-	7.375	7.625	7.378	7.622	7.375	7.750	7.378	7.747
EIS 0120	-	-	-	-	7.500	7.750	7.503	7.747	7.500	7.875	7.503	7.872
EIS 0122	-	-	-	-	7.625	7.875	7.628	7.872	7.625	8.000	7.628	7.997
EIS 0124	-	-	-	-	7.750	8.000	7.753	7.997	7.750	8.125	7.753	8.122
EIS 0126	-	-	-	-	7.875	8.125	7.878	8.122	7.875	8.250	7.878	8.247
EIS 0128	-	-	-	-	8.000	8.250	8.003	8.247	8.000	8.375	8.003	8.372
EIS 0130	-	-	-	-	-	-	-	-	8.125	8.500	8.128	8.497
EIS 0132	-	-	-	-	-	-	-	-	8.250	8.625	8.253	8.622

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.008 -0.000	MIN	+0.000 -0.008	MAX	+0.008 -0.000	MIN	+0.000 -0.008	MAX	+0.008 -0.000	MIN	+0.000 -0.008
EIS 0134	-	-	-	-	-	-	-	-	8.375	8.750	8.378	8.747
EIS 0136	-	-	-	-	-	-	-	-	8.500	8.875	8.503	8.872
EIS 0138	-	-	-	-	-	-	-	-	8.625	9.000	8.628	8.997
EIS 0140	-	-	-	-	-	-	-	-	8.750	9.125	8.753	9.122
EIS 0142	-	-	-	-	-	-	-	-	8.875	9.250	8.878	9.247
EIS 0144	-	-	-	-	-	-	-	-	9.000	9.375	9.003	9.372
EIS 0146	-	-	-	-	-	-	-	-	9.125	9.500	9.128	9.497
EIS 0148	-	-	-	-	-	-	-	-	9.250	9.625	9.253	9.622
EIS 0150	-	-	-	-	-	-	-	-	9.375	9.750	9.378	9.747
EIS 0152	-	-	-	-	-	-	-	-	9.500	9.875	9.503	9.872
EIS 0154	-	-	-	-	-	-	-	-	9.625	10.000	9.628	9.997
EIS 0156	-	-	-	-	-	-	-	-	9.750	10.125	9.753	10.122
EIS 0158	-	-	-	-	-	-	-	-	9.875	10.250	9.878	10.247
EIS 0160	-	-	-	-	-	-	-	-	10.000	10.375	10.003	10.372
	MAX	+0.012 -0.000	MIN	+0.000 -0.012	MAX	+0.012 -0.000	MIN	+0.000 -0.012	MAX	+0.012 -0.000	MIN	+0.000 -0.012
EIS 0162	-	-	-	-	-	-	-	-	10.125	10.500	10.128	10.497
EIS 0164	-	-	-	-	-	-	-	-	10.250	10.625	10.253	10.622
EIS 0166	-	-	-	-	-	-	-	-	10.375	10.750	10.378	10.747
EIS 0168	-	-	-	-	-	-	-	-	10.500	10.875	10.503	10.872
EIS 0170	-	-	-	-	-	-	-	-	10.625	11.000	10.628	10.997
EIS 0172	-	-	-	-	-	-	-	-	10.750	11.125	10.753	11.122
EIS 0174	-	-	-	-	-	-	-	-	10.875	11.250	10.878	11.247
EIS 0176	-	-	-	-	-	-	-	-	11.000	11.375	11.003	11.372
EIS 0178	-	-	-	-	-	-	-	-	11.125	11.500	11.128	11.497
EIS 0180	-	-	-	-	-	-	-	-	11.250	11.625	11.253	11.622
EIS 0182	-	-	-	-	-	-	-	-	11.375	11.750	11.378	11.747
EIS 0184	-	-	-	-	-	-	-	-	11.500	11.875	11.503	11.872
EIS 0186	-	-	-	-	-	-	-	-	11.625	12.000	11.628	11.997
EIS 0188	-	-	-	-	-	-	-	-	11.750	12.125	11.753	12.122
EIS 0190	-	-	-	-	-	-	-	-	11.875	12.250	11.878	12.247
EIS 0192	-	-	-	-	-	-	-	-	12.000	12.375	12.003	12.372
EIS 0194	-	-	-	-	-	-	-	-	12.125	12.500	12.128	12.497

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.12 -0.000	MIN	+0.000 -0.012	MAX	+0.12 -0.000	MIN	+0.000 -0.012	MAX	+0.12 -0.000	MIN	+0.000 -0.012
EIS 0196	-	-	-	-	-	-	-	-	12.250	12.625	12.253	12.622
EIS 0198	-	-	-	-	-	-	-	-	12.375	12.750	12.378	12.747

SEAL DIMENSIONS ARE IN INCHES AND ARE PRIOR TO PLATING OR COATING

EIS SERIES – INTERNAL PRESSURE SHORT LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEAL DIAMETERS CAN BE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.076 -0.000	MIN	+0.000 -0.076	MAX	+0.076 -0.000	MIN	+0.000 -0.076	MAX	+0.076 -0.000	MIN	+0.000 -0.076
EIS 0030	47.625	52.375	47.701	52.299	47.625	53.975	47.701	53.899	-	-	-	-
EIS 0031	49.200	53.975	49.276	53.899	49.200	55.550	49.276	55.474	-	-	-	-
EIS 0032	50.800	55.550	50.876	55.474	50.800	57.150	50.876	57.074	-	-	-	-
EIS 0033	52.375	57.150	52.451	57.074	52.375	58.725	52.451	58.649	-	-	-	-
EIS 0034	53.975	58.725	54.051	58.649	53.975	60.325	54.051	60.249	-	-	-	-
EIS 0035	55.550	60.325	55.626	60.249	55.550	61.900	55.626	61.824	-	-	-	-
EIS 0036	57.150	61.900	57.226	61.824	57.150	63.500	57.226	63.424	-	-	-	-
EIS 0037	58.725	63.500	58.801	63.424	58.725	65.075	58.801	64.999	-	-	-	-
EIS 0038	60.325	65.075	60.401	64.999	60.325	66.675	60.401	66.599	-	-	-	-
EIS 0039	61.900	66.675	61.976	66.599	61.900	68.250	61.976	68.174	-	-	-	-
EIS 0040	63.500	68.250	63.576	68.174	63.500	69.850	63.576	69.774	-	-	-	-
EIS 0041	65.075	69.850	65.151	69.774	65.075	71.425	65.151	71.349	-	-	-	-
EIS 0042	66.675	71.425	66.751	71.349	66.675	73.025	66.751	72.949	-	-	-	-
EIS 0043	68.250	73.025	68.326	72.949	68.250	74.600	68.326	74.524	-	-	-	-
EIS 0044	69.850	74.600	69.926	74.524	69.850	76.200	69.926	76.124	-	-	-	-
EIS 0045	71.425	76.200	71.501	76.124	71.425	77.775	71.501	77.699	-	-	-	-
EIS 0046	73.025	77.775	73.101	77.699	73.025	79.375	73.101	79.299	-	-	-	-
EIS 0047	74.600	79.375	74.676	79.299	74.600	80.950	74.676	80.874	-	-	-	-
EIS 0048	76.200	80.950	76.276	80.874	76.200	82.550	76.276	82.474	76.200	85.725	76.276	85.649
EIS 0049	77.775	82.550	77.851	82.474	77.775	84.125	77.851	84.049	77.775	87.300	77.851	87.224

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+ .102 - .000	MIN	+ .000 - .102	MAX	+ .102 - .000	MIN	+ .000 - .102	MAX	+ .102 - .000	MIN	+ .000 - .102
EIS 0050	79.375	84.125	79.451	84.049	79.375	85.725	79.451	85.649	79.375	88.900	79.451	88.824
EIS 0051	80.950	85.725	81.026	85.649	80.950	87.300	81.026	87.224	80.950	90.475	81.026	90.399
EIS 0052	82.550	87.300	82.626	87.224	82.550	88.900	82.626	88.824	82.550	92.075	82.626	91.999
EIS 0053	84.125	88.900	84.201	88.824	84.125	90.475	84.201	90.399	84.125	93.650	84.201	93.574
EIS 0054	85.725	90.475	85.801	90.399	85.725	92.075	85.801	91.999	85.725	95.250	85.801	95.174
EIS 0055	87.300	92.075	87.376	91.999	87.300	93.650	87.376	93.574	87.300	96.825	87.376	96.749
EIS 0056	88.900	93.650	88.976	93.574	88.900	95.250	88.976	95.174	88.900	98.425	88.976	98.349
EIS 0057	90.475	95.250	90.551	95.174	90.475	96.825	90.551	96.749	90.475	100.000	90.551	99.924
EIS 0058	92.075	96.825	92.151	96.749	92.075	98.425	92.151	98.349	92.075	101.600	92.151	101.524
EIS 0059	93.650	98.425	93.726	98.349	93.650	100.000	93.726	99.924	93.650	103.175	93.726	103.099
EIS 0060	95.250	100.000	95.326	99.924	95.250	101.600	95.326	101.524	95.250	104.775	95.326	104.699
EIS 0061	96.825	101.600	96.901	101.524	96.825	103.175	96.901	103.099	96.825	106.350	96.901	106.274
EIS 0062	98.425	103.175	98.501	103.099	98.425	104.775	98.501	104.699	98.425	107.950	98.501	107.874
EIS 0063	100.000	104.775	100.076	104.699	100.000	106.350	100.076	106.274	100.000	109.525	100.076	109.449
EIS 0064	101.600	106.350	101.676	106.274	101.600	107.950	101.676	107.874	101.600	111.125	101.676	111.049
EIS 0065	103.175	107.950	103.251	107.874	103.175	109.525	103.251	109.449	103.175	112.700	103.251	112.624
EIS 0066	104.775	109.525	104.851	109.449	104.775	111.125	104.851	111.049	104.775	114.300	104.851	114.224
EIS 0067	106.350	111.125	106.426	111.049	106.350	112.700	106.426	112.624	106.350	115.875	106.426	115.799
EIS 0068	107.950	112.700	108.026	112.624	107.950	114.300	108.026	114.224	107.950	117.475	108.026	117.399
EIS 0069	109.525	114.300	109.601	114.224	109.525	115.875	109.601	115.799	109.525	119.050	109.601	118.974
EIS 0070	111.125	115.875	111.201	115.799	111.125	117.475	111.201	117.399	111.125	120.650	111.201	120.574
EIS 0071	112.700	117.475	112.776	117.399	112.700	119.050	112.776	118.974	112.700	122.225	112.776	122.149
EIS 0072	114.300	119.050	114.376	118.974	114.300	120.650	114.376	120.574	114.300	123.825	114.376	123.749
EIS 0073	115.875	120.650	115.951	120.574	115.875	122.225	115.951	122.149	115.875	125.400	115.951	125.324
EIS 0074	117.475	122.225	117.551	122.149	117.475	123.825	117.551	123.749	117.475	127.000	117.551	126.924
EIS 0075	119.050	123.825	119.126	123.749	119.050	125.400	119.126	125.324	119.050	128.575	119.126	128.499
EIS 0076	120.650	125.400	120.726	125.324	120.650	127.000	120.726	126.924	120.650	130.175	120.726	130.099
EIS 0077	122.225	127.000	122.301	126.924	122.225	128.575	122.301	128.499	122.225	131.750	122.301	131.674
EIS 0078	123.825	128.575	123.901	128.499	123.825	130.175	123.901	130.099	123.825	133.350	123.901	133.274
EIS 0079	125.400	130.175	125.476	130.099	125.400	131.750	125.476	131.674	125.400	134.925	125.476	134.849
EIS 0080	127.000	131.750	127.076	131.674	127.000	133.350	127.076	133.274	127.000	136.525	127.076	136.449

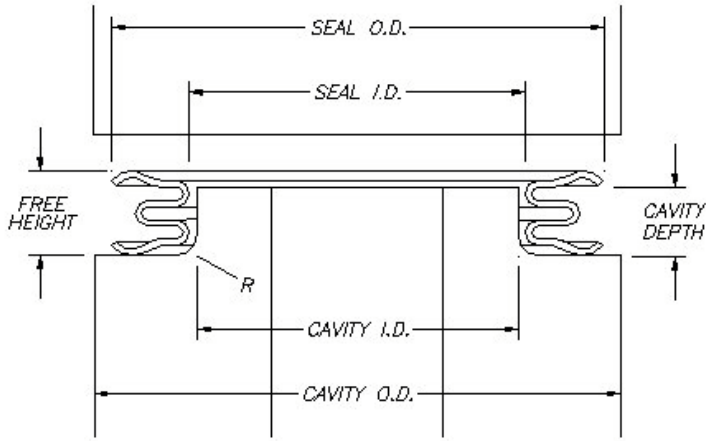
Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+ .152 - .000	MIN	+ .000 - .152	MAX	+ .152 - .000	MIN	+ .000 - .152	MAX	+ .152 - .000	MIN	+ .000 - .152
EIS 0081	128.575	133.350	128.651	133.274	128.575	134.925	128.651	134.849	128.575	138.100	128.651	138.024
EIS 0082	130.175	134.925	130.251	134.849	130.175	136.525	130.251	136.449	130.175	139.700	130.251	139.624
EIS 0083	131.750	136.525	131.826	136.449	131.750	138.100	131.826	138.024	131.750	141.275	131.826	141.199
EIS 0084	133.350	138.100	133.426	138.024	133.350	139.700	133.426	139.624	133.350	142.875	133.426	142.799
EIS 0085	134.925	139.700	135.001	139.624	134.925	141.275	135.001	141.199	134.925	144.450	135.001	144.374
EIS 0086	136.525	141.275	136.601	141.199	136.525	142.875	136.601	142.799	136.525	146.050	136.601	145.974
EIS 0087	138.100	142.875	138.176	142.799	138.100	144.450	138.176	144.374	138.100	147.625	138.176	147.549
EIS 0088	139.700	144.450	139.776	144.374	139.700	146.050	139.776	145.974	139.700	149.225	139.776	149.149
EIS 0089	141.275	146.050	141.351	145.974	141.275	147.625	141.351	147.549	141.275	150.800	141.351	150.724
EIS 0090	142.875	147.625	142.951	147.549	142.875	149.225	142.951	149.149	142.875	152.400	142.951	152.324
EIS 0092	146.050	150.800	146.126	150.724	146.050	152.400	146.126	152.324	146.050	155.575	146.126	155.499
EIS 0094	149.225	153.975	149.301	153.899	149.225	155.575	149.301	155.499	149.225	158.750	149.301	158.674
EIS 0096	152.400	157.150	152.476	157.074	152.400	158.750	152.476	158.674	152.400	161.925	152.476	161.849
EIS 0098	-	-	-	-	155.575	161.925	155.651	161.849	155.575	165.100	155.651	165.024
EIS 0100	-	-	-	-	158.750	165.100	158.826	165.024	158.750	168.275	158.826	168.199
EIS 0102	-	-	-	-	161.925	168.275	162.001	168.199	161.925	171.450	162.001	171.374
EIS 0104	-	-	-	-	165.100	171.450	165.176	171.374	165.100	174.625	165.176	174.549
EIS 0106	-	-	-	-	168.275	174.625	168.351	174.549	168.275	177.800	168.351	177.724
EIS 0108	-	-	-	-	171.450	177.800	171.526	177.724	171.450	180.975	171.526	180.899
EIS 0110	-	-	-	-	174.625	180.975	174.701	180.899	174.625	184.150	174.701	184.074
EIS 0112	-	-	-	-	177.800	184.150	177.876	184.074	177.800	187.325	177.876	187.249
	MAX	+ .203 - .000	MIN	+ .000 - .203	MAX	+ .203 - .000	MIN	+ .000 - .203	MAX	+ .203 - .000	MIN	+ .000 - .203
EIS 0114	-	-	-	-	180.975	187.325	181.051	187.249	180.975	190.500	181.051	190.424
EIS 0116	-	-	-	-	184.150	190.500	184.226	190.424	184.150	193.675	184.226	193.599
EIS 0118	-	-	-	-	187.325	193.675	187.401	193.599	187.325	196.850	187.401	196.774
EIS 0120	-	-	-	-	190.500	196.850	190.576	196.774	190.500	200.025	190.576	199.949
EIS 0122	-	-	-	-	193.675	200.025	193.751	199.949	193.675	203.200	193.751	203.124
EIS 0124	-	-	-	-	196.850	203.200	196.926	203.124	196.850	206.375	196.926	206.299
EIS 0126	-	-	-	-	200.025	206.375	200.101	206.299	200.025	209.550	200.101	209.474
EIS 0128	-	-	-	-	203.200	209.550	203.276	209.474	203.200	212.725	203.276	212.649
EIS 0130	-	-	-	-	-	-	-	-	206.375	215.900	206.451	215.824

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+203 -.000	MIN	+000 -.203	MAX	+203 -.000	MIN	+000 -.203	MAX	+203 -.000	MIN	+000 -.203
EIS 0132	-	-	-	-	-	-	-	-	209.550	219.075	209.626	218.999
EIS 0134	-	-	-	-	-	-	-	-	212.725	222.250	212.801	222.174
EIS 0136	-	-	-	-	-	-	-	-	215.900	225.425	215.976	225.349
EIS 0138	-	-	-	-	-	-	-	-	219.075	228.600	219.151	228.524
EIS 0140	-	-	-	-	-	-	-	-	222.250	231.775	222.326	231.699
EIS 0142	-	-	-	-	-	-	-	-	225.425	234.950	225.501	234.874
EIS 0144	-	-	-	-	-	-	-	-	228.600	238.125	228.676	238.049
EIS 0146	-	-	-	-	-	-	-	-	231.775	241.300	231.851	241.224
EIS 0148	-	-	-	-	-	-	-	-	234.950	244.475	235.026	244.399
EIS 0150	-	-	-	-	-	-	-	-	238.125	247.650	238.201	247.574
EIS 0152	-	-	-	-	-	-	-	-	241.300	250.825	241.376	250.749
EIS 0154	-	-	-	-	-	-	-	-	244.475	254.000	244.551	253.924
EIS 0156	-	-	-	-	-	-	-	-	247.650	257.175	247.726	257.099
EIS 0158	-	-	-	-	-	-	-	-	250.825	260.350	250.901	260.274
EIS 0160	-	-	-	-	-	-	-	-	254.000	263.525	254.076	263.449
	MAX	+305 -.000	MIN	+000 -.305	MAX	+305 -.000	MIN	+000 -.305	MAX	+305 -.000	MIN	+000 -.305
EIS 0162	-	-	-	-	-	-	-	-	257.175	266.700	257.251	266.624
EIS 0164	-	-	-	-	-	-	-	-	260.350	269.875	260.426	269.799
EIS 0166	-	-	-	-	-	-	-	-	263.525	273.050	263.601	272.974
EIS 0168	-	-	-	-	-	-	-	-	266.700	276.225	266.776	276.149
EIS 0170	-	-	-	-	-	-	-	-	269.875	279.400	269.951	279.324
EIS 0172	-	-	-	-	-	-	-	-	273.050	282.575	273.126	282.499
EIS 0174	-	-	-	-	-	-	-	-	276.225	285.750	276.301	285.674
EIS 0176	-	-	-	-	-	-	-	-	279.400	288.925	279.476	288.849
EIS 0178	-	-	-	-	-	-	-	-	282.575	292.100	282.651	292.024
EIS 0180	-	-	-	-	-	-	-	-	285.750	295.275	285.826	295.199
EIS 0182	-	-	-	-	-	-	-	-	288.925	298.450	289.001	298.374
EIS 0184	-	-	-	-	-	-	-	-	292.100	301.625	292.176	301.549
EIS 0186	-	-	-	-	-	-	-	-	295.275	304.800	295.351	304.724
EIS 0188	-	-	-	-	-	-	-	-	298.450	307.975	298.526	307.899
EIS 0190	-	-	-	-	-	-	-	-	301.625	311.150	301.701	311.074

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.305 -0.000	MIN	+0.000 -0.305	MAX	+0.305 -0.000	MIN	+0.000 -0.305	MAX	+0.305 -0.000	MIN	+0.000 -0.305
EIS 0192	-	-	-	-	--	-	-	-	304.800	314.325	304.876	314.249
EIS 0194	-	-	-	-	-	-	-	-	307.975	317.500	308.051	317.424
EIS 0196	-	-	-	-	-	-	-	-	311.150	320.675	311.226	320.599
EIS 0198	-	-	-	-	-	-	-	-	314.325	323.850	314.401	323.774

SEAL DIMENSIONS ARE IN MILLIMETRES AND ARE PRIOR TO PLATING OR COATING

EES SERIES – EXTERNAL PRESSURE SHORT LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEAL DIAMETERS CAN BE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.003	MIN.	+0.003 -0.000	MAX.	+0.000 -0.003	MIN.	+0.003 -0.000	MAX.	+0.000 -0.003	MIN.	+0.003 -0.000	MAX.
EES 0030	1.875	2.062	1.878	2.059	1.875	2.125	1.878	2.122	-	-	-	-
EES 0031	1.937	2.125	1.940	2.122	1.937	2.187	1.940	2.184	-	-	-	-
EES 0032	2.000	2.187	2.003	2.184	2.000	2.250	2.003	2.247	-	-	-	-
EES 0033	2.062	2.250	2.065	2.247	2.062	2.312	2.065	2.309	-	-	-	-
EES 0034	2.125	2.312	2.128	2.309	2.125	2.375	2.128	2.372	-	-	-	-
EES 0035	2.187	2.375	2.190	2.372	2.187	2.437	2.190	2.434	-	-	-	-
EES 0036	2.250	2.437	2.253	2.434	2.250	2.500	2.253	2.497	-	-	-	-
EES 0037	2.312	2.500	2.315	2.497	2.312	2.562	2.315	2.559	-	-	-	-
EES 0038	2.375	2.562	2.378	2.559	2.375	2.625	2.378	2.622	-	-	-	-
EES 0039	2.437	2.625	2.440	2.622	2.437	2.687	2.440	2.684	-	-	-	-
EES 0040	2.500	2.687	2.503	2.684	2.500	2.750	2.503	2.747	-	-	-	-
EES 0041	2.562	2.750	2.565	2.747	2.562	2.812	2.565	2.809	-	-	-	-
EES 0042	2.625	2.812	2.628	2.809	2.625	2.875	2.628	2.872	-	-	-	-
EES 0043	2.687	2.875	2.690	2.872	2.687	2.937	2.690	2.934	-	-	-	-
EES 0044	2.750	2.937	2.753	2.934	2.750	3.000	2.753	2.997	-	-	-	-
EES 0045	2.812	3.000	2.815	2.997	2.812	3.062	2.815	3.059	-	-	-	-
EES 0046	2.875	3.062	2.878	3.059	2.875	3.125	2.878	3.122	-	-	-	-
EES 0047	2.937	3.125	2.940	3.122	2.937	3.187	2.940	3.184	-	-	-	-
EES 0048	3.000	3.187	3.003	3.184	3.000	3.250	3.003	3.247	3.000	3.375	3.003	3.372

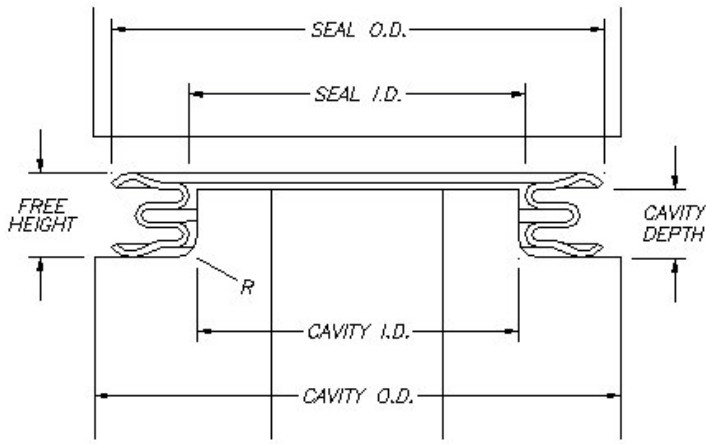
Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.004	MIN.	+0.004 -0.000	MAX.	+0.000 -0.004	MIN.	+0.004 -0.000	MAX.	+0.000 -0.004	MIN.	+0.004 -0.000	MAX.
EES 0049	3.062	3.250	3.065	3.247	3.062	3.312	3.065	3.309	3.062	3.437	3.065	3.434
EES 0050	3.125	3.312	3.128	3.309	3.125	3.375	3.128	3.372	3.125	3.500	3.128	3.497
EES 0051	3.187	3.375	3.190	3.372	3.187	3.437	3.190	3.434	3.187	3.562	3.190	3.559
EES 0052	3.250	3.437	3.253	3.434	3.250	3.500	3.253	3.497	3.250	3.625	3.253	3.622
EES 0053	3.312	3.500	3.315	3.497	3.312	3.562	3.315	3.559	3.312	3.687	3.315	3.684
EES 0054	3.375	3.562	3.378	3.559	3.375	3.625	3.378	3.622	3.375	3.750	3.378	3.747
EES 0055	3.437	3.625	3.440	3.622	3.437	3.687	3.440	3.684	3.437	3.812	3.440	3.809
EES 0056	3.500	3.687	3.503	3.684	3.500	3.750	3.503	3.747	3.500	3.875	3.503	3.872
EES 0057	3.562	3.750	3.565	3.747	3.562	3.812	3.565	3.809	3.562	3.937	3.565	3.934
EES 0058	3.625	3.812	3.628	3.809	3.625	3.875	3.628	3.872	3.625	4.000	3.628	3.997
EES 0059	3.687	3.875	3.690	3.872	3.687	3.937	3.690	3.934	3.687	4.062	3.690	4.059
EES 0060	3.750	3.937	3.753	3.934	3.750	4.000	3.753	3.997	3.750	4.125	3.753	4.122
EES 0061	3.812	4.000	3.815	3.997	3.812	4.062	3.815	4.059	3.812	4.187	3.815	4.184
EES 0062	3.875	4.062	3.878	4.059	3.875	4.125	3.878	4.122	3.875	4.250	3.878	4.247
EES 0063	3.937	4.125	3.940	4.122	3.937	4.187	3.940	4.184	3.937	4.312	3.940	4.309
EES 0064	4.000	4.187	4.003	4.184	4.000	4.250	4.003	4.247	4.000	4.375	4.003	4.372
EES 0065	4.062	4.250	4.065	4.247	4.062	4.312	4.065	4.309	4.062	4.437	4.065	4.434
EES 0066	4.125	4.312	4.128	4.309	4.125	4.375	4.128	4.372	4.125	4.500	4.128	4.497
EES 0067	4.187	4.375	4.190	4.372	4.187	4.437	4.190	4.434	4.187	4.562	4.190	4.559
EES 0068	4.250	4.437	4.253	4.434	4.250	4.500	4.253	4.497	4.250	4.625	4.253	4.622
EES 0069	4.312	4.500	4.315	4.497	4.312	4.562	4.315	4.559	4.312	4.687	4.315	4.684
EES 0070	4.375	4.562	4.378	4.559	4.375	4.625	4.378	4.622	4.375	4.750	4.378	4.747
EES 0071	4.437	4.625	4.440	4.622	4.437	4.687	4.440	4.684	4.437	4.812	4.440	4.809
EES 0072	4.500	4.687	4.503	4.684	4.500	4.750	4.503	4.747	4.500	4.875	4.503	4.872
EES 0073	4.562	4.750	4.565	4.747	4.562	4.812	4.565	4.809	4.562	4.937	4.565	4.934
EES 0074	4.625	4.812	4.628	4.809	4.625	4.875	4.628	4.872	4.625	5.000	4.628	4.997
EES 0075	4.687	4.875	4.690	4.872	4.687	4.937	4.690	4.934	4.687	5.062	4.690	5.059
EES 0076	4.750	4.937	4.753	4.934	4.750	5.000	4.753	4.997	4.750	5.125	4.753	5.122
EES 0077	4.812	5.000	4.815	4.997	4.812	5.062	4.815	5.059	4.812	5.187	4.815	5.184
EES 0078	4.875	5.062	4.878	5.059	4.875	5.125	4.878	5.122	4.875	5.250	4.878	5.247
EES 0079	4.937	5.125	4.940	5.122	4.937	5.187	4.940	5.184	4.937	5.312	4.940	5.309
EES 0080	5.000	5.187	5.003	5.184	5.000	5.250	5.003	5.247	5.000	5.375	5.003	5.372

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.006	MIN.	+0.006 -0.000	MAX.	+0.000 -0.006	MIN.	+0.006 -0.000	MAX.	+0.000 -0.006	MIN.	+0.006 -0.000	MAX.
EES 0081	5.062	5.250	5.065	5.247	5.062	5.312	5.065	5.309	5.062	5.437	5.065	5.434
EES 0082	5.125	5.312	5.128	5.309	5.125	5.375	5.128	5.372	5.125	5.500	5.128	5.497
EES 0083	5.187	5.375	5.190	5.372	5.187	5.437	5.190	5.434	5.187	5.562	5.190	5.559
EES 0084	5.250	5.437	5.253	5.434	5.250	5.500	5.253	5.497	5.250	5.625	5.253	5.622
EES 0085	5.312	5.500	5.315	5.497	5.312	5.562	5.315	5.559	5.312	5.687	5.315	5.684
EES 0086	5.375	5.562	5.378	5.559	5.375	5.625	5.378	5.622	5.375	5.750	5.378	5.747
ES 0087	5.437	5.625	5.440	5.622	5.437	5.687	5.440	5.684	5.437	5.812	5.440	5.809
EES 0088	5.500	5.687	5.503	5.684	5.500	5.750	5.503	5.747	5.500	5.875	5.503	5.872
EES 0089	5.562	5.750	5.565	5.747	5.562	5.812	5.565	5.809	5.562	5.937	5.565	5.934
EES 0090	5.625	5.812	5.628	5.809	5.625	5.875	5.628	5.872	5.625	6.000	5.628	5.997
EES 0092	5.750	5.937	5.753	5.934	5.750	6.000	5.753	5.997	5.750	6.125	5.753	6.122
EES 0094	5.875	6.062	5.878	6.059	5.875	6.125	5.878	6.122	5.875	6.250	5.878	6.247
EES 0096	6.000	6.187	6.003	6.184	6.000	6.250	6.003	6.247	6.000	6.375	6.003	6.372
EES 0098	-	-	-	-	6.125	6.375	6.128	6.372	6.125	6.500	6.128	6.497
EES 0100	-	-	-	-	6.250	6.500	6.253	6.497	6.250	6.625	6.253	6.622
EES 0102	-	-	-	-	6.375	6.625	6.378	6.622	6.375	6.750	6.378	6.747
EES 0104	-	-	-	-	6.500	6.750	6.503	6.747	6.500	6.875	6.503	6.872
EES 0106	-	-	-	-	6.625	6.875	6.628	6.872	6.625	7.000	6.628	6.997
EES 0108	-	-	-	-	6.750	7.000	6.753	6.997	6.750	7.125	6.753	7.122
EES 0110	-	-	-	-	6.875	7.125	6.878	7.122	6.875	7.250	6.878	7.247
EES 0112	-	-	-	-	7.000	7.250	7.003	7.247	7.000	7.375	7.003	7.372
	+0.000 -0.008	MIN.	+0.008 -0.000	MAX.	+0.000 -0.008	MIN.	+0.008 -0.000	MAX.	+0.000 -0.008	MIN.	+0.008 -0.000	MAX.
EES 0114	-	-	-	-	7.125	7.375	7.128	7.372	7.125	7.500	7.128	7.497
EES 0116	-	-	-	-	7.250	7.500	7.253	7.497	7.250	7.625	7.253	7.622
EES 0118	-	-	-	-	7.375	7.625	7.378	7.622	7.375	7.750	7.378	7.747
EES 0120	-	-	-	-	7.500	7.750	7.503	7.747	7.500	7.875	7.503	7.872
EES 0122	-	-	-	-	7.625	7.875	7.628	7.872	7.625	8.000	7.628	7.997
EES 0124	-	-	-	-	7.750	8.000	7.753	7.997	7.750	8.125	7.753	8.122
EES 0126	-	-	-	-	7.875	8.125	7.878	8.122	7.875	8.250	7.878	8.247
EES 0128	-	-	-	-	8.000	8.250	8.003	8.247	8.000	8.375	8.003	8.372
EES 0130	-	-	-	-	-	-	-	-	8.125	8.500	8.128	8.497
EES 0132	-	-	-	-	-	-	-	-	8.250	8.625	8.253	8.622

Seal Type & Diameter	Free Height 3/32				Free Height 1/8				Free Height 3/16			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.008	MIN.	+0.008 -0.000	MAX.	+0.000 -0.008	MIN.	+0.008 -0.000	MAX.	+0.000 -0.008	MIN.	+0.008 -0.000	MAX.
EES 0134	-	-	-	-	-	-	-	-	8.375	8.750	8.378	8.747
EES 0136	-	-	-	-	-	-	-	-	8.500	8.875	8.503	8.872
EES 0138	-	-	-	-	-	-	-	-	8.625	9.000	8.628	8.997
EES 0140	-	-	-	-	-	-	-	-	8.750	9.125	8.753	9.122
EES 0142	-	-	-	-	-	-	-	-	8.875	9.250	8.878	9.247
EES 0144	-	-	-	-	-	-	-	-	9.000	9.375	9.003	9.372
EES 0146	-	-	-	-	-	-	-	-	9.125	9.500	9.128	9.497
EES 0148	-	-	-	-	-	-	-	-	9.250	9.625	9.253	9.622
EES 0150	-	-	-	-	-	-	-	-	9.375	9.750	9.378	9.747
EES 0152	-	-	-	-	-	-	-	-	9.500	9.875	9.503	9.872
EES 0154	-	-	-	-	-	-	-	-	9.625	10.000	9.628	9.997
EES 0156	-	-	-	-	-	-	-	-	9.750	10.125	9.753	10.122
EES 0158	-	-	-	-	-	-	-	-	9.875	10.250	9.878	10.247
EES 0160	-	-	-	-	-	-	-	-	10.000	10.375	10.003	10.372
	+0.000 -0.012	MIN.	+0.012 -0.000	MAX.	+0.000 -0.012	MIN.	+0.012 -0.000	MAX.	+0.000 -0.012	MIN.	+0.012 -0.000	MAX.
EES 0162	-	-	-	-	-	-	-	-	10.125	10.500	10.128	10.497
EES 0164	-	-	-	-	-	-	-	-	10.250	10.625	10.253	10.622
EES 0166	-	-	-	-	-	-	-	-	10.375	10.750	10.378	10.747
EES 0168	-	-	-	-	-	-	-	-	10.500	10.875	10.503	10.872
EES 0170	-	-	-	-	-	-	-	-	10.625	11.000	10.628	10.997
EES 0172	-	-	-	-	-	-	-	-	10.750	11.125	10.753	11.122
EES 0174	-	-	-	-	-	-	-	-	10.875	11.250	10.878	11.247
EES 0176	-	-	-	-	-	-	-	-	11.000	11.375	11.003	11.372
EES 0178	-	-	-	-	-	-	-	-	11.125	11.500	11.128	11.497
EES 0180	-	-	-	-	-	-	-	-	11.250	11.625	11.253	11.622
EES 0182	-	-	-	-	-	-	-	-	11.375	11.750	11.378	11.747
EES 0184	-	-	-	-	-	-	-	-	11.500	11.875	11.503	11.872
EES 0186	-	-	-	-	-	-	-	-	11.625	12.000	11.628	11.997
EES 0188	-	-	-	-	-	-	-	-	11.750	12.125	11.753	12.122
EES 0190	-	-	-	-	-	-	-	-	11.875	12.250	11.878	12.247
EES 0192	-	-	-	-	-	-	-	-	12.000	12.375	12.003	12.372

SEAL DIMENSIONS ARE IN INCHES AND ARE PRIOR TO PLATING OR COATING

EES SERIES – EXTERNAL PRESSURE SHORT LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEAL DIAMETERS CAN BE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.076	MIN.	+0.076 -0.000	MAX.	+0.000 -0.076	MIN.	+0.076 -0.000	MAX.	+0.000 -0.076	MIN.	+0.076 -0.000	MAX.
EES 0030	47.625	52.375	47.701	52.299	47.625	53.975	47.701	53.899	-	-	-	-
EES 0031	49.200	53.975	49.276	53.899	49.200	55.500	49.276	55.474	-	-	-	-
EES 0032	50.800	55.500	50.876	55.474	50.800	57.150	50.876	57.074	-	-	-	-
EES 0033	52.375	57.150	52.451	57.074	52.375	58.725	52.451	58.649	-	-	-	-
EES 0034	53.975	58.725	54.051	58.649	53.975	60.325	54.051	60.249	-	-	-	-
EES 0035	55.550	60.325	55.626	60.249	55.550	61.900	55.626	61.824	-	-	-	-
EES 0036	57.150	61.900	57.226	61.824	57.150	63.500	57.226	63.424	-	-	-	-
EES 0037	58.725	63.500	58.801	63.424	58.725	65.075	58.801	64.999	-	-	-	-
EES 0038	60.325	65.075	60.401	64.999	60.325	66.675	60.401	66.599	-	-	-	-
EES 0039	61.900	66.675	61.976	66.599	61.900	68.250	61.976	68.174	-	-	-	-
EES 0040	63.500	68.250	63.576	68.174	63.500	69.850	63.576	69.774	-	-	-	-
EES 0041	65.075	69.850	65.151	69.774	65.075	71.425	65.151	71.349	-	-	-	-
EES 0042	66.675	71.425	66.751	71.349	66.675	73.025	66.751	72.949	-	-	-	-
EES 0043	68.250	73.025	68.326	72.949	68.250	74.600	68.326	74.524	-	-	-	-
EES 0044	69.850	74.600	69.926	74.524	69.850	76.200	69.926	76.124	-	-	-	-
EES 0045	71.425	76.200	71.501	76.124	71.425	77.775	71.501	77.699	-	-	-	-
EES 0046	73.025	77.775	73.101	77.699	73.025	79.375	73.101	79.299	-	-	-	-
EES 0047	74.600	79.375	74.676	79.299	74.600	80.950	74.676	80.874	-	-	-	-
EES 0048	76.200	80.950	76.276	80.874	76.200	82.550	76.276	82.474	76.200	85.725	76.276	85.649
	+0.000 -0.102	MIN.	+0.102 -0.000	MAX.	+0.000 -0.102	MIN.	+0.102 -0.000	MAX.	+0.000 -0.102	MIN.	+0.102 -0.000	MAX.
EES 0049	77.775	82.550	77.851	82.474	77.775	84.125	77.851	84.049	77.775	87.300	77.851	87.224
EES 0050	79.375	84.125	79.451	84.049	79.375	85.725	79.451	85.649	79.375	88.900	79.451	88.824

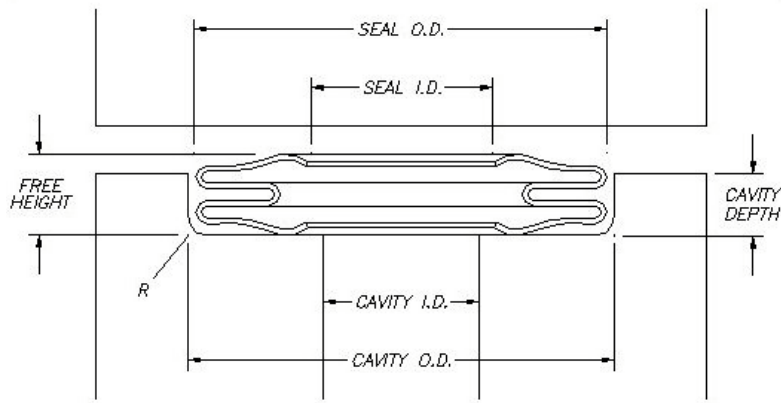
Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.102	MIN.	+0.102 -0.000	MAX.	+0.000 -0.102	MIN.	+0.102 -0.000	MAX.	+0.000 -0.102	MIN.	+0.102 -0.000	MAX.
EES 0051	80.950	85.725	81.026	85.649	80.950	87.300	81.026	87.224	80.950	90.475	81.026	90.399
EES 0052	82.550	87.300	82.626	87.224	82.550	88.900	82.626	88.824	82.550	92.075	82.626	91.999
EES 0053	84.125	88.900	84.201	88.824	84.125	90.475	84.201	90.399	84.125	93.650	84.201	93.574
EES 0054	85.725	90.475	85.801	90.399	85.725	92.075	85.801	91.999	85.725	95.250	85.801	95.174
EES 0055	87.300	92.075	87.376	91.999	87.300	93.650	87.376	93.574	87.300	96.825	87.376	96.749
EES 0056	88.900	93.650	88.976	93.574	88.900	95.250	88.976	95.174	88.900	98.425	88.976	98.349
EES 0057	90.475	95.250	90.551	95.174	90.475	96.825	90.551	96.749	90.475	100.000	90.551	99.924
EES 0058	92.075	96.825	92.151	96.749	92.075	98.425	92.151	98.349	92.075	101.600	92.151	101.524
EES 0059	93.650	98.425	93.726	98.349	93.650	100.000	93.726	99.924	93.650	103.175	93.726	103.099
EES 0060	92.250	100.000	95.326	99.924	95.250	101.600	95.326	101.524	95.250	104.775	95.326	104.699
EES 0061	98.825	101.600	96.901	101.524	96.825	103.175	96.901	103.099	96.825	106.350	96.901	106.274
EES 0062	98.425	103.175	98.501	103.099	98.425	104.775	98.501	104.699	98.425	107.950	98.501	107.874
EES 0063	100.000	104.775	100.076	104.699	100.000	106.350	100.076	106.274	100.000	109.525	100.076	109.449
EES 0064	101.600	106.350	101.676	106.274	101.600	107.950	101.676	107.874	101.600	111.125	101.676	111.049
EES 0065	103.175	107.950	103.251	107.874	103.175	109.525	103.251	109.449	103.175	112.700	103.251	112.624
EES 0066	104.775	109.525	104.851	109.449	104.775	111.125	104.851	111.049	104.775	114.300	104.851	114.224
EES 0067	106.350	111.125	106.426	111.049	106.350	112.700	106.426	112.624	106.350	115.875	106.426	115.799
EES 0068	107.950	112.700	108.026	112.624	107.950	114.300	108.026	114.224	107.950	117.475	108.026	117.399
EES 0069	109.525	114.300	109.601	114.224	109.525	115.875	109.601	115.799	109.525	119.050	109.601	118.974
EES 0070	111.125	115.875	111.201	115.799	111.125	117.475	111.201	117.399	111.125	120.650	111.201	120.574
EES 0071	112.700	117.475	112.776	117.399	112.700	119.050	112.776	118.974	112.700	122.225	112.776	122.149
EES 0072	114.300	119.050	114.376	118.974	114.300	120.650	114.376	120.574	114.300	123.825	114.376	123.749
EES 0073	115.875	120.650	115.951	120.574	115.875	122.225	115.951	122.149	115.875	125.400	115.951	125.324
EES 0074	117.475	122.225	117.551	122.149	117.475	123.825	117.551	123.749	117.475	127.000	117.551	126.924
EES 0075	119.050	123.825	119.126	123.749	119.050	125.400	119.126	125.324	119.050	128.575	119.126	128.499
EES 0076	120.650	125.400	120.726	125.324	120.650	127.000	120.726	126.924	120.650	130.175	120.726	130.099
EES 0077	122.225	127.000	122.301	126.924	122.225	128.575	122.301	128.499	122.225	131.750	122.301	131.674
EES 0078	123.825	128.575	123.901	128.499	123.825	130.175	123.901	130.099	123.825	133.350	123.901	133.274
EES 0079	125.400	130.175	125.476	130.099	125.400	131.750	125.476	131.674	125.400	134.925	125.476	134.849
EES 0080	127.000	131.750	127.076	131.674	127.000	133.350	127.076	133.274	127.000	136.525	127.076	136.449
EES 0081	128.575	133.350	128.651	133.274	128.575	134.925	128.651	134.849	128.575	138.100	128.651	138.024

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.152	MIN.	+0.152 -0.000	MAX.	+0.000 -0.152	MIN.	+0.152 -0.000	MAX.	+0.000 -0.152	MIN.	+0.152 -0.000	MAX.
EES 0082	130.175	134.925	130.251	134.849	130.175	136.525	130.251	136.449	130.175	139.700	130.251	139.624
EES 0083	131.750	136.525	131.826	136.449	131.750	138.100	131.826	138.024	131.750	141.275	131.826	141.199
EES 0084	133.350	138.100	133.426	138.024	133.350	139.700	133.426	139.624	133.350	142.875	133.426	142.799
EES 0085	134.925	139.700	135.001	139.624	134.925	141.275	135.001	141.199	134.925	144.450	135.001	144.374
EES 0086	136.525	141.275	136.601	141.199	136.525	142.875	136.601	142.799	136.525	146.050	136.601	145.974
EES 0087	138.100	142.875	138.176	142.799	138.100	144.450	138.176	144.374	138.100	147.625	138.176	147.549
EES 0088	139.700	144.450	139.776	144.374	139.700	146.050	139.776	145.974	139.700	149.225	139.776	149.149
EES 0089	141.275	146.050	141.351	145.974	141.275	147.625	141.351	147.549	141.275	150.800	141.351	150.724
EES 0090	142.875	147.625	142.951	147.549	142.875	149.225	142.951	149.149	142.875	152.400	142.951	152.324
EES 0092	146.050	150.800	146.126	150.724	146.050	152.400	146.126	152.324	146.050	155.575	146.126	155.499
EES 0094	149.225	153.975	149.301	153.899	149.225	155.575	149.301	155.499	149.225	158.750	149.301	158.674
EES 0096	152.400	157.150	152.476	157.074	152.400	158.750	152.476	158.674	152.400	161.925	152.476	161.849
EES 0098	-	-	-	-	155.575	161.925	155.651	161.849	155.575	165.100	155.651	165.024
EES 0100	-	-	-	-	158.750	165.100	158.826	165.024	158.750	168.275	158.826	168.199
EES 0102	-	-	-	-	161.925	168.275	162.001	168.199	161.925	171.450	162.001	171.374
EES 0104	-	-	-	-	165.100	171.450	165.176	171.374	165.100	174.625	165.176	174.549
EES 0106	-	-	-	-	168.275	174.625	168.351	174.549	168.275	177.800	168.351	177.724
EES 0108	-	-	-	-	171.450	177.800	171.526	177.724	171.450	180.975	171.526	180.899
EES 0110	-	-	-	-	174.625	180.975	174.701	180.899	174.625	184.150	174.701	184.074
EES 0112	-	-	-	-	177.800	184.150	177.876	184.074	177.800	187.325	177.876	187.249
	+0.000 -0.203	MIN.	+0.203 -0.000	MAX.	+0.000 -0.203	MIN.	+0.203 -0.000	MAX.	+0.000 -0.203	MIN.	+0.203 -0.000	MAX.
EES 0114	-	-	-	-	180.975	187.325	181.051	187.249	180.975	190.500	181.051	190.424
EES 0116	-	-	-	-	184.150	190.500	184.226	190.424	184.150	193.675	184.226	193.599
EES 0118	-	-	-	-	187.325	193.675	187.401	193.599	187.325	196.850	187.401	196.774
EES 0120	-	-	-	-	190.500	196.850	190.576	196.774	190.500	200.025	190.576	199.949
EES 0122	-	-	-	-	193.675	200.025	193.751	199.949	193.675	203.200	193.751	203.124
EES 0124	-	-	-	-	196.850	203.200	196.926	203.124	196.850	206.375	196.926	206.299
EES 0126	-	-	-	-	200.025	206.375	200.101	206.299	200.025	209.550	200.101	209.474
EES 0128	-	-	-	-	203.200	209.550	203.276	209.474	203.200	212.725	203.276	212.649
EES 0130	-	-	-	-	-	-	-	-	206.375	215.900	206.451	215.824
EES 0132	-	-	-	-	-	-	-	-	209.550	219.075	209.626	218.999

Seal Type & Diameter	Free Height 2.36				Free Height 3.18				Free Height 4.75			
	Cavity		Seal		Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.203	MIN.	+0.203 -0.000	MAX.	+0.000 -0.203	MIN.	+0.203 -0.000	MAX.	+0.000 -0.203	MIN.	+0.203 -0.000	MAX.
EES 0134	-	-	-	-	-	-	-	-	212.725	222.250	212.801	222.174
EES 0136	-	-	-	-	-	-	-	-	215.900	225.425	215.976	225.349
EES 0138	-	-	-	-	-	-	-	-	219.075	228.600	219.151	228.524
EES 0140	-	-	-	-	-	-	-	-	222.250	231.775	222.326	231.699
EES 0142	-	-	-	-	-	-	-	-	225.425	234.950	225.501	234.874
EES 0144	-	-	-	-	-	-	-	-	228.600	238.125	228.676	238.049
EES 0146	-	-	-	-	-	-	-	-	231.775	241.300	231.851	241.224
EES 0148	-	-	-	-	-	-	-	-	234.950	244.475	235.026	244.399
EES 0150	-	-	-	-	-	-	-	-	238.125	247.650	238.201	247.574
EES 0152	-	-	-	-	-	-	-	-	241.300	250.825	241.376	250.749
EES 0154	-	-	-	-	-	-	-	-	244.475	254.000	244.551	253.924
EES 0156	-	-	-	-	-	-	-	-	247.650	257.175	247.726	257.099
EES 0158	-	-	-	-	-	-	-	-	250.825	260.350	250.901	260.274
EES 0160	-	-	-	-	-	-	-	-	254.000	263.525	254.076	263.449
	+0.000 -0.305	MIN.	+0.305 -0.000	MAX.	+0.000 -0.305	MIN.	+0.305 -0.000	MAX.	+0.000 -0.305	MIN.	+0.305 -0.000	MAX.
EES 0162	-	-	-	-	-	-	-	-	257.175	266.700	257.251	266.624
EES 0164	-	-	-	-	-	-	-	-	260.350	269.875	260.426	269.799
EES 0166	-	-	-	-	-	-	-	-	263.525	273.050	263.601	272.974
EES 0168	-	-	-	-	-	-	-	-	266.700	276.225	266.776	276.149
EES 0170	-	-	-	-	-	-	-	-	269.875	279.400	269.951	279.324
EES 0172	-	-	-	-	-	-	-	-	273.050	282.575	273.126	282.499
EES 0174	-	-	-	-	-	-	-	-	276.225	285.750	276.301	285.674
EES 0176	-	-	-	-	-	-	-	-	279.400	288.925	279.476	288.849
EES 0178	-	-	-	-	-	-	-	-	282.575	292.100	282.651	292.024
EES 0180	-	-	-	-	-	-	-	-	285.750	295.275	285.826	295.199
EES 0182	-	-	-	-	-	-	-	-	288.925	298.450	289.001	298.374
EES 0184	-	-	-	-	-	-	-	-	292.100	301.625	292.176	301.549
EES 0186	-	-	-	-	-	-	-	-	295.275	304.800	295.351	304.724
EES 0188	-	-	-	-	-	-	-	-	298.450	307.975	298.526	307.899
EES 0190	-	-	-	-	-	-	-	-	301.625	311.150	301.701	311.074
EES 0192	-	-	-	-	-	-	-	-	304.800	314.325	304.876	314.249

SEAL DIMENSIONS ARE IN MILLIMETRES AND ARE PRIOR TO PLATING OR COATING

EIL SERIES – INTERNAL PRESSURE LONG LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEALS ARE MANUFACTURED SO THEY ARE A SNAP FIT IN THEIR CAVITIES. THEREFORE SEAL DIAMETERS ARE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.003 -0.000	MIN	+0.000 -0.006	MAX	+0.003 -0.000	MIN	+0.000 -0.006
EIL 0033	2.062	2.372	2.076	2.367	2.062	2.469	2.076	2.464
EIL 0034	2.125	2.435	2.139	2.430	2.125	2.532	2.139	2.527
EIL 0035	2.187	2.497	2.201	2.492	2.187	2.594	2.201	2.589
EIL 4261	2.212	2.522	2.226	2.517	2.212	2.619	2.226	2.614
EIL 0036	2.250	2.560	2.264	2.555	2.250	2.657	2.264	2.652
EIL 0037	2.312	2.622	2.326	2.617	2.312	2.719	2.326	2.714
EIL 0038	2.375	2.685	2.389	2.680	2.375	2.782	2.389	2.777
EIL 0039	2.437	2.747	2.451	2.742	2.437	2.844	2.451	2.839
EIL 3274	2.444	2.754	2.458	2.749	2.444	2.851	2.458	2.846
EIL 4286	2.462	2.772	2.476	2.767	2.462	2.869	2.476	2.864
EIL 0040	2.500	2.810	2.514	2.805	2.500	2.907	2.514	2.902
EIL 0041	2.562	2.872	2.576	2.867	2.562	2.969	2.576	2.964
EIL 0042	2.625	2.935	2.639	2.930	2.625	3.032	2.639	3.027
EIL 0043	2.687	2.997	2.701	2.992	2.687	3.094	2.701	3.089
EIL 4311	2.712	3.022	2.726	3.017	2.712	3.119	2.726	3.114
EIL 0044	2.750	3.060	2.764	3.055	2.750	3.157	2.764	3.152
EIL 0045	2.812	3.122	2.826	3.117	2.812	3.219	2.826	3.214
EIL 0046	2.875	3.185	2.889	3.180	2.875	3.282	2.889	3.277
EIL 0047	2.937	3.247	2.951	3.242	2.937	3.344	2.951	3.339
EIL 4336	2.962	3.272	2.976	3.267	2.962	3.369	2.976	3.364
EIL 0048	3.000	3.312	3.016	3.307	3.000	3.409	3.016	3.404
EIL 0049	3.062	3.374	3.078	3.369	3.062	3.471	3.078	3.466

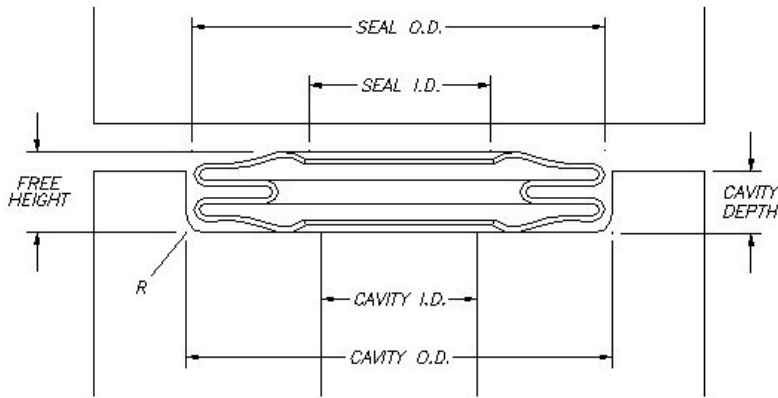
Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.004 -0.000	MIN	+0.000 -0.008	MAX	+0.004 -0.000	MIN	+0.000 -0.008
EIL 0050	3.125	3.437	3.141	3.432	3.125	3.534	3.141	3.529
EIL 0051	3.187	3.499	3.203	3.494	3.187	3.596	3.203	3.591
EIL 4361	3.210	3.522	3.226	3.517	3.210	3.619	3.226	3.614
EIL 0052	3.250	3.562	3.266	3.557	3.250	3.659	3.266	3.654
EIL 0053	3.312	3.624	3.328	3.619	3.312	3.721	3.328	3.716
EIL 0054	3.375	3.687	3.391	3.682	3.375	3.784	3.391	3.779
EIL 0055	3.437	3.749	3.453	3.744	3.437	3.846	3.453	3.841
EIL 4386	3.461	3.773	3.477	3.768	3.461	3.870	3.477	3.865
EIL 0056	3.500	3.812	3.516	3.807	3.500	3.909	3.516	3.904
EIL 3386	3.558	3.870	3.574	3.865	3.558	3.967	3.574	3.962
EIL 0057	3.562	3.874	3.578	3.869	3.562	3.971	3.578	3.966
EIL 0058	3.625	3.937	3.641	3.932	3.625	4.034	3.641	4.029
EIL 0059	3.687	3.999	3.703	3.994	3.687	4.096	3.703	4.091
EIL 0060	3.750	4.062	3.766	4.057	3.750	4.159	3.766	4.154
EIL 0061	3.812	4.124	3.828	4.119	3.812	4.221	3.828	4.216
EIL 0062	3.875	4.187	3.891	4.182	3.875	4.284	3.891	4.279
EIL 0063	3.937	4.249	3.953	4.244	3.937	4.346	3.953	4.341
EIL 4436	3.961	4.273	3.977	4.268	3.961	4.370	3.977	4.365
EIL 0064	4.000	4.314	4.018	4.309	4.000	4.411	4.018	4.406
EIL 0065	4.062	4.376	4.080	4.371	4.062	4.473	4.080	4.468
	MAX	+0.005 -0.000	MIN	+0.000 -0.010	MAX	+0.005 -0.000	MIN	+0.000 -0.010
EIL 0066	4.125	4.439	4.143	4.434	4.125	4.536	4.143	4.531
EIL 0067	4.187	4.501	4.205	4.496	4.187	4.598	4.205	4.593
EIL 0068	4.250	4.564	4.268	4.559	4.250	4.661	4.268	4.656
EIL 0069	4.312	4.626	4.330	4.621	4.312	4.723	4.330	4.718
EIL 0070	4.375	4.689	4.393	4.684	4.375	4.786	4.393	4.781
EIL 0071	4.437	4.751	4.455	4.746	4.437	4.848	4.455	4.843
EIL 4486	4.459	4.773	4.477	4.768	4.459	4.870	4.477	4.865
EIL 0072	4.500	4.814	4.518	4.809	4.500	4.911	4.518	4.906
EIL 0073	4.562	4.876	4.580	4.871	4.562	4.973	4.580	4.968
EIL 0074	4.625	4.939	4.643	4.934	4.625	5.036	4.643	5.031
EIL 0075	4.687	5.001	4.705	4.996	4.687	5.098	4.705	5.093

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.005 -0.000	MIN	+0.000 -0.010	MAX	+0.005 -0.000	MIN	+0.000 -0.010
EIL 0076	4.750	5.064	4.768	5.059	4.750	5.161	5.768	5.156
EIL 0077	4.812	5.126	4.830	5.121	4.812	5.223	4.830	5.218
EIL 0078	4.875	5.189	4.893	5.184	4.875	5.286	4.893	5.281
EIL 0079	4.937	5.251	4.955	5.246	4.937	5.348	4.955	5.343
EIL 4536	4.961	5.275	4.979	5.270	4.961	5.372	4.979	5.367
	MAX	+0.006 -0.000	MIN	+0.000 -0.012	MAX	+0.006 -0.000	MIN	+0.000 -0.012
EIL 0080	5.000	5.316	5.020	5.311	5.000	5.413	5.020	5.408
EIL 0081	5.062	5.378	5.082	5.373	5.062	5.475	5.082	5.470
EIL 0082	5.125	5.441	5.145	5.436	5.125	5.538	5.145	5.533
EIL 0083	5.187	5.503	5.207	5.498	5.187	5.600	5.207	5.595
EIL 0084	5.250	5.566	5.270	5.561	5.250	5.663	5.270	5.658
EIL 0085	5.312	5.628	5.332	5.623	5.312	5.725	5.332	5.720
EIL 0086	5.375	5.691	5.395	5.686	5.375	5.788	5.395	5.783
EIL 0087	5.437	5.753	5.457	5.748	5.437	5.850	5.457	5.845
EIL 4586	5.459	5.775	5.479	5.770	5.459	5.872	5.479	5.867
EIL 0088	5.500	5.816	5.520	5.811	5.500	5.913	5.520	5.908
EIL 0089	5.562	5.878	5.582	5.873	5.562	5.975	5.582	5.970
EIL 0090	5.625	5.941	5.645	5.936	5.625	6.038	5.645	6.033
EIL 0092	5.750	6.066	5.770	6.061	5.750	6.163	5.770	6.158
EIL 0094	5.875	6.191	5.895	6.186	5.875	6.288	5.895	6.283
EIL 4636	5.959	6.275	5.979	6.270	5.959	6.372	5.979	6.367
EIL 0096	6.000	6.318	6.022	6.313	6.000	6.415	6.022	6.410
	MAX	+0.007 -0.000	MIN	+0.000 -0.014	MAX	+0.007 -0.000	MIN	+0.000 -0.014
EIL 4646	-	-	-	-	6.059	6.474	6.081	6.469
EIL 0098	-	-	-	-	6.125	6.540	6.147	6.535
EIL 0100	-	-	-	-	6.250	6.665	6.272	6.660
EIL 0102	-	-	-	-	6.375	6.790	6.397	6.785
EIL 0104	-	-	-	-	6.500	6.915	6.522	6.910
EIL 0106	-	-	-	-	6.625	7.040	6.647	7.035
EIL 0105	-	-	-	-	6.750	7.165	6.772	7.160
EIL 0110	-	-	-	-	6.875	7.290	6.897	7.285
EIL 0112	-	-	-	-	7.000	7.417	7.024	7.412

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.008 -0.000	MIN	+0.000 -0.016	MAX	+0.008 -0.000	MIN	+0.000 -0.016
EIL 0114	-	-	-	-	7.125	7.542	7.149	7.537
EIL 0116	-	-	-	-	7.250	7.667	7.274	7.662
EIL 0118	-	-	-	-	7.375	7.792	7.399	7.787
EIL 0120	-	-	-	-	7.500	7.917	7.524	7.912
EIL 0122	-	-	-	-	7.625	8.042	7.649	8.037
EIL 0124	-	-	-	-	7.750	8.167	8.774	8.162
EIL 0126	-	-	-	-	7.875	8.292	7.899	8.287
EIL 0128	-	-	-	-	8.000	8.419	8.026	8.414
	MAX	+0.009 -0.000	MIN	+0.000 -0.018	MAX	+0.009 -0.000	MIN	+0.000 -0.018
EIL 0130	-	-	-	-	8.125	8.544	8.151	8.539
EIL 0132	-	-	-	-	8.250	8.669	8.276	8.664
EIL 0134	-	-	-	-	8.375	8.794	8.401	8.789
EIL 0136	-	-	-	-	8.500	8.919	8.526	8.914
EIL 0138	-	-	-	-	8.625	9.044	8.651	9.039
EIL 0140	-	-	-	-	8.750	9.169	8.776	9.164
EIL 0142	-	-	-	-	8.875	9.294	8.901	9.289
EIL 0144	-	-	-	-	9.000	9.421	9.028	9.416
	MAX	+0.010 -0.000	MIN	+0.000 -0.020	MAX	+0.010 -0.000	MIN	+0.000 -0.020
EIL 0146	-	-	-	-	9.125	9.546	9.153	9.541
EIL 0148	-	-	-	-	9.250	9.671	9.278	9.666
EIL 0150	-	-	-	-	9.375	9.796	9.403	9.791
EIL 0152	-	-	-	-	9.500	9.921	9.528	9.916
EIL 0154	-	-	-	-	9.625	10.046	9.653	10.041
EIL 0156	-	-	-	-	9.750	10.171	9.778	10.166
EIL 0158	-	-	-	-	9.875	10.296	9.903	10.291
EIL 0160	-	-	-	-	10.000	10.423	10.030	10.418
EIL 0162	-	-	-	-	10.125	10.548	10.155	10.543
EIL 0164	-	-	-	-	10.250	10.673	10.280	10.668
EIL 0166	-	-	-	-	10.375	10.798	10.405	10.793

SEAL DIMENSIONS ARE IN INCHES AND ARE PRIOR TO PLATING OR COATING

EIL SERIES – INTERNAL PRESSURE LONG LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEALS ARE MANUFACTURED SO THEY ARE A SNAP FIT IN THEIR CAVITIES. THEREFORE SEAL DIAMETERS ARE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.076 -0.000	MIN	+0.000 -0.152	MAX	+0.076 -0.000	MIN	+0.000 -0.152
EIL 0033	52.375	60.249	52.730	60.122	52.375	62.713	52.730	62.586
EIL 0034	53.975	61.849	54.331	61.722	53.975	64.313	54.331	64.186
EIL 0035	55.550	63.424	55.905	63.297	55.550	65.888	55.905	65.761
EIL 4261	56.185	64.059	56.540	63.932	56.185	66.523	56.540	66.396
EIL 0036	57.150	65.024	57.506	64.897	57.150	67.488	57.506	67.361
EIL 0037	58.275	66.599	59.080	66.472	58.275	69.063	59.080	68.936
EIL 0038	60.325	68.199	60.681	68.072	60.325	70.663	60.681	70.536
EIL 0039	61.900	69.774	62.255	69.647	61.900	72.238	62.255	72.111
EIL 3274	62.078	69.952	62.433	69.825	62.078	72.415	62.433	72.288
EIL 4286	62.535	70.409	62.890	70.282	62.535	72.873	62.890	72.746
EIL 0040	63.500	71.374	63.856	71.247	63.500	73.838	63.856	73.711
EIL 0041	65.075	72.949	65.430	72.822	65.075	75.413	65.430	72.286
EIL 0042	66.675	74.549	67.031	74.422	66.675	77.013	67.031	76.886
EIL 0043	68.250	76.124	68.605	75.997	68.250	78.588	68.605	78.461
EIL 4311	68.885	76.759	69.240	76.632	68.885	79.223	69.240	79.096
EIL 0044	69.850	77.724	70.206	77.597	69.850	80.188	70.206	80.061
EIL 0045	71.425	79.299	71.780	79.172	71.425	81.763	71.780	81.636
EIL 0046	73.025	80.899	73.381	80.772	73.025	83.363	73.381	82.236
EIL 0047	74.600	82.474	74.955	82.347	74.600	84.938	74.955	84.811
EIL 4336	75.235	83.109	75.590	82.982	75.235	85.573	75.590	85.446
EIL 0048	76.200	84.125	76.606	83.998	76.200	86.589	76.606	86.462
EIL 0049	77.775	85.700	78.181	85.573	77.775	88.163	78.181	88.036

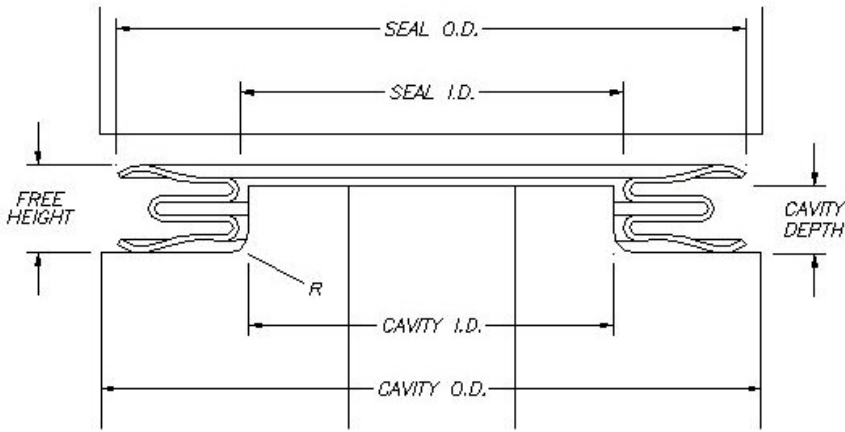
Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+0.076 -0.000	MIN	+0.000 -0.152	MAX	+0.076 -0.000	MIN	+0.000 -0.152
EIL 0050	79.375	87.300	79.781	87.173	79.375	89.764	79.781	89.637
	MAX	+0.102 -0.000	MIN	+0.000 -0.203	MAX	+0.102 -0.000	MIN	+0.000 -0.203
EIL 0051	80.950	88.875	81.356	88.748	80.950	91.338	81.356	91.211
EIL 4361	81.534	89.459	81.940	89.332	81.534	91.923	81.940	91.796
EIL 0052	82.550	90.475	82.956	90.348	82.550	92.939	82.956	92.812
EIL 0053	84.125	92.050	84.531	91.923	84.125	94.513	84.531	94.386
EIL 0054	85.725	93.650	86.131	93.523	85.725	96.114	86.131	95.987
EIL 0055	87.300	95.225	87.706	95.098	87.300	97.688	87.706	97.561
EIL 4386	87.909	95.834	88.316	95.707	87.909	98.298	88.316	98.171
EIL 0056	88.900	96.825	89.306	96.698	88.900	99.289	89.306	99.162
EIL 3386	90.373	98.298	90.780	98.171	90.373	100.762	90.780	100.635
EIL 0057	90.475	98.400	90.881	98.273	90.475	100.863	90.881	100.736
EIL 0058	92.075	100.000	92.481	99.873	92.075	102.464	92.481	102.337
EIL 0059	93.650	101.575	94.056	101.448	93.650	104.038	94.056	103.911
EIL 0060	95.250	103.175	95.656	103.048	92.250	105.639	95.656	105.512
EIL 0061	96.825	104.750	97.231	104.623	96.825	107.213	97.231	107.086
EIL 0062	98.425	106.350	98.831	106.223	98.425	108.814	98.831	108.687
EIL 0063	100.000	107.925	100.406	107.798	100.000	110.388	100.406	110.261
EIL 4436	100.609	108.534	101.016	108.407	100.609	110.998	101.016	110.871
EIL 0064	101.600	109.576	102.057	109.449	101.600	112.039	102.057	111.912
EIL 0065	103.175	111.150	103.632	111.023	103.175	113.614	103.632	113.487
	MAX	+0.127 -0.000	MIN	+0.000 -0.254	MAX	+0.127 -0.000	MIN	+0.000 -0.254
EIL 0066	104.775	112.751	105.232	112.624	104.775	115.214	105.232	115.087
EIL 0067	106.350	114.325	106.807	114.198	106.350	116.789	106.807	116.662
EIL 0068	107.950	115.926	108.407	115.799	107.950	118.389	108.407	118.262
EIL 0069	109.525	117.500	109.982	117.373	109.525	119.964	109.982	119.837
EIL 0070	111.125	119.101	111.582	118.974	111.125	121.564	111.582	121.437
EIL 0071	112.700	120.675	113.157	120.548	112.700	123.139	113.157	123.012
EIL 4486	113.259	121.234	113.716	121.107	113.259	123.698	113.716	123.571
EIL 0072	114.300	122.276	114.757	122.149	114.300	124.739	114.757	124.612
EIL 0073	115.875	123.850	116.332	123.723	115.875	126.314	116.332	126.187
EIL 0074	117.475	125.451	117.932	125.324	117.475	127.914	117.932	127.787
EIL 0075	119.050	127.025	119.507	126.898	119.050	129.489	119.507	129.362

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+ .127 - .000	MIN	+ .000 - .254	MAX	+ .127 - .000	MIN	+ .000 - .254
EIL 0076	120.650	128.626	121.107	128.499	120.650	131.089	121.107	130.962
EIL 0077	122.225	130.200	122.682	130.073	122.225	132.664	122.682	132.537
EIL 0078	123.825	131.801	124.282	131.674	123.825	134.264	124.282	134.137
EIL 0079	125.400	133.375	125.857	133.248	125.400	135.839	125.857	135.712
EIL 4536	126.009	133.985	126.467	133.858	126.009	136.449	126.467	136.322
	MAX	+ .152 - .000	MIN	+ .000 - .305	MAX	+ .152 - .000	MIN	+ .000 - .305
EIL 0080	127.000	135.026	127.508	134.899	127.000	137.490	127.508	137.363
EIL 0081	128.575	136.601	129.083	136.474	128.575	139.065	129.083	138.938
EIL 0082	130.175	138.201	130.683	138.074	130.175	140.665	130.683	140.538
EIL 0083	131.750	139.776	132.258	139.649	131.750	142.240	132.258	142.113
EIL 0084	133.350	141.376	133.858	141.249	133.350	143.840	133.858	143.713
EIL 0085	134.925	142.951	135.433	142.824	134.925	145.415	135.433	145.288
EIL 0086	136.525	144.551	137.033	144.424	136.525	147.015	137.033	146.888
EIL 0087	138.100	146.126	138.608	145.999	138.100	148.590	138.608	148.463
EIL 4586	138.659	146.685	139.167	146.558	138.659	149.149	139.167	149.022
EIL 0088	139.700	147.726	140.208	147.599	139.700	150.190	140.208	150.063
EIL 0089	141.275	149.301	141.783	149.174	141.275	151.765	141.783	151.638
EIL 0090	142.875	150.901	143.383	150.774	142.875	153.365	143.383	153.238
EIL 0092	146.050	154.076	146.558	153.949	146.050	156.540	146.558	156.413
EIL 0094	149.225	157.251	149.733	157.124	149.225	159.715	149.733	159.588
EIL 4636	151.359	159.385	151.867	159.258	151.359	161.849	151.867	161.722
EIL 0096	152.400	160.447	152.959	160.350	152.400	162.941	152.959	162.814
	MAX	+ .178 - .000	MIN	+ .000 - .356	MAX	+ .178 - .000	MIN	+ .000 - .356
EIL 4646	-	-	-	-	153.899	164.440	154.457	164.313
EIL 0098	-	-	-	-	155.575	166.116	156.134	165.989
EIL 0100	-	-	-	-	158.750	169.291	159.309	169.164
EIL 0102	-	-	-	-	161.925	172.466	162.484	172.339
EIL 0104	-	-	-	-	165.100	175.641	165.659	175.514
EIL 0106	-	-	-	-	168.275	178.816	168.834	178.689
EIL 0108	-	-	-	-	171.450	181.991	172.009	181.864
EIL 0110	-	-	-	-	174.625	185.166	175.184	185.039
EIL 0112	-	-	-	-	177.800	188.392	178.410	188.265

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	MAX	+ .203 - .000	MIN	+ .000 - .406	MAX	+ .203 - .000	MIN	+ .000 - .406
EIL 0114	-	-	-	-	180.975	191.567	181.585	191.440
EIL 0116	-	-	-	-	184.150	194.742	184.760	194.615
EIL 0118	-	-	-	-	187.325	197.917	187.935	197.790
EIL 0120	-	-	-	-	190.500	201.092	191.110	200.965
EIL 0122	-	-	-	-	193.675	204.267	194.285	204.140
EIL 0124	-	-	-	-	196.850	207.442	197.460	207.315
EIL 0126	-	-	-	-	200.025	210.617	200.635	210.490
EIL 0128	-	-	-	-	203.200	213.843	203.860	213.716
	MAX	+ .229 - .000	MIN	+ .000 - .457	MAX	+ .229 - .000	MIN	+ .000 - .457
EIL 0130	-	-	-	-	206.375	217.018	207.035	216.891
EIL 0132	-	-	-	-	209.550	220.193	210.210	220.066
EIL 0134	-	-	-	-	212.725	223.368	213.385	223.241
EIL 0136	-	-	-	-	215.900	226.543	216.560	226.416
EIL 0138	-	-	-	-	219.075	229.718	219.735	229.591
EIL 0140	-	-	-	-	222.250	232.893	222.910	232.766
EIL 0142	-	-	-	-	225.425	236.068	226.085	235.941
EIL 0144	-	-	-	-	228.600	239.293	229.311	239.166
	MAX	+ .254 - .000	MIN	+ .000 - .508	MAX	+ .254 - .000	MIN	+ .000 - .508
EIL 0146	-	-	-	-	231.775	242.468	232.486	242.341
EIL 0148	-	-	-	-	234.950	245.643	235.661	245.516
EIL 0150	-	-	-	-	238.125	248.818	238.836	248.691
EIL 0152	-	-	-	-	241.300	251.993	242.011	251.866
EIL 0154	-	-	-	-	244.475	255.168	245.186	255.041
EIL 0156	-	-	-	-	247.650	258.343	248.361	258.216
EIL 0158	-	-	-	-	250.825	261.518	251.536	261.391
EIL 0160	-	-	-	-	254.000	264.744	254.762	264.617
EIL 0162	-	-	-	-	257.175	267.919	257.937	267.792
EIL 0164	-	-	-	-	260.350	271.094	261.112	270.967
EIL 0166	-	-	-	-	263.525	274.269	264.287	274.142

SEAL DIMENSIONS ARE IN MILLIMETRES AND ARE PRIOR TO PLATING OR COATING

EEL SERIES – EXTERNAL PRESSURE LONG LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEALS ARE MANUFACTURED SO THEY ARE A SNAP FIT IN THEIR CAVITIES. THEREFORE SEAL DIAMETERS ARE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D. +.000 -.003	O.D. MIN.	I.D. +.006 -.000	O.D. MAX.	I.D. +.000 -.003	O.D. MIN.	I.D. +.006 -.000	O.D. MAX.
EEL 0032	2.000	2.310	2.005	2.296	2.000	2.407	2.005	2.393
EEL 0033	2.062	2.372	2.067	2.358	2.062	2.469	2.067	2.455
EEL 0034	2.125	2.435	2.130	2.421	2.125	2.532	2.130	2.518
EEL 0035	2.187	2.497	2.192	2.483	2.187	2.594	2.192	2.580
EEL 0036	2.250	2.560	2.255	2.546	2.250	2.657	2.255	2.643
EEL 0037	2.312	2.622	2.317	2.608	2.312	2.719	2.317	2.705
EEL 0038	2.375	2.685	2.380	2.671	2.375	2.782	2.380	2.768
EEL 0039	2.437	2.747	2.442	2.733	2.437	2.844	2.442	2.830
EEL 0040	2.500	2.810	2.505	2.796	2.500	2.907	2.505	2.893
EEL 0041	2.562	2.872	2.567	2.858	2.562	2.969	2.567	2.955
EEL 0042	2.625	2.935	2.630	2.921	2.625	3.032	2.630	3.018
EEL 0043	2.687	2.997	2.692	2.983	2.687	3.094	2.692	3.080
EEL 0044	2.750	3.060	2.755	3.046	2.750	3.157	2.755	3.143
EEL 0045	2.812	3.122	2.817	3.108	2.812	3.219	2.817	3.205
EEL 0046	2.875	3.185	2.880	3.171	2.875	3.282	2.880	3.268
EEL 0047	2.937	3.247	2.942	3.233	2.937	3.344	2.942	3.330
EEL 0048	3.000	3.312	3.005	3.296	3.000	3.409	3.005	3.393
EEL 0049	3.062	3.374	3.067	3.358	3.062	3.471	3.067	3.455
EEL 0050	3.125	3.437	3.130	3.421	3.125	3.534	3.130	3.518
EEL 0051	3.187	3.499	3.192	3.483	3.187	3.596	3.192	3.580

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.004	MIN.	+0.008 -0.000	MAX.	+0.000 -0.004	MIN.	+0.008 -0.000	MAX.
EEL 0052	3.250	3.562	3.255	3.546	3.250	3.659	3.255	3.643
EEL 0053	3.312	3.624	3.317	3.608	3.312	3.721	3.317	3.705
EEL 0054	3.375	3.687	3.380	3.671	3.375	3.784	3.380	3.768
EEL 0055	3.437	3.749	3.442	3.733	3.437	3.846	3.442	3.830
EEL 0056	3.500	3.812	3.505	3.796	3.500	3.909	3.505	3.893
EEL 0057	3.562	3.874	3.567	3.858	3.562	3.971	3.567	3.955
EEL 0058	3.625	3.937	3.630	3.921	3.625	4.034	3.630	4.018
EEL 0059	3.687	3.999	3.692	3.983	3.687	4.096	3.692	4.080
EEL 0060	3.750	4.062	3.755	4.046	3.750	4.159	3.755	4.143
EEL 0061	3.812	4.124	3.817	4.108	3.812	4.221	3.817	4.205
EEL 0062	3.875	4.187	3.880	4.171	3.875	4.284	3.880	4.268
EEL 0063	3.937	4.249	3.942	4.233	3.937	4.346	3.942	4.330
EEL 0064	4.000	4.314	4.005	4.296	4.000	4.411	4.005	4.393
EEL 0065	4.062	4.376	4.067	4.358	4.062	4.473	4.067	4.455
EEL 0066	4.125	4.439	4.130	4.421	4.125	4.536	4.130	4.518
EEL 0067	4.187	4.501	4.192	4.483	4.187	4.598	4.192	4.580
	+0.000 -0.005	MIN.	+0.010 -0.000	MAX.	+0.000 -0.005	MIN.	+0.010 -0.000	MAX.
EEL 0068	4.250	4.564	4.255	4.546	4.250	4.661	4.255	4.643
EEL 0069	4.312	4.626	4.317	4.608	4.312	4.723	4.317	4.705
EEL 0070	4.375	4.689	4.380	4.671	4.375	4.786	4.380	4.768
EEL 0071	4.437	4.751	4.442	4.733	4.437	4.848	4.442	4.830
EEL 0072	4.500	4.814	4.505	4.796	4.500	4.911	4.505	4.893
EEL 0073	5.562	4.876	4.567	4.858	4.562	4.973	4.567	4.955
EEL 0074	4.625	4.939	4.630	4.921	4.625	5.036	4.630	5.018
EEL 0075	4.687	5.001	4.692	4.983	4.687	5.098	4.692	5.080
EEL 0076	4.750	5.064	4.755	5.046	4.750	5.161	4.755	5.143
EEL 0077	4.812	5.126	4.817	5.108	4.812	5.223	4.817	5.205
EEL 0078	4.875	5.189	4.880	5.171	4.875	5.286	4.880	5.268
EEL 0079	4.937	5.251	4.942	5.233	4.937	5.348	4.942	5.330
EEL 0080	5.000	5.316	5.005	5.296	5.000	5.413	5.005	5.393
EEL 0081	5.062	5.378	5.067	5.358	5.062	5.475	5.067	5.455
EEL 0082	5.125	5.441	5.130	5.421	5.125	5.538	5.130	5.518

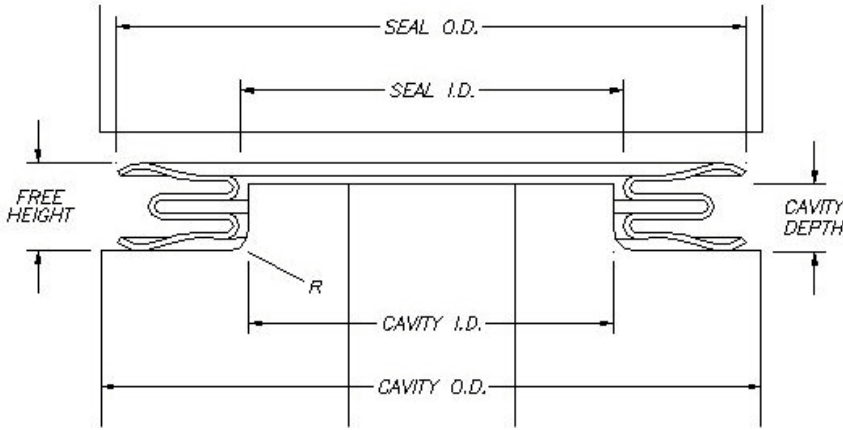
Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.006	MIN.	+0.012 -0.000	MAX.	+0.000 -0.006	MIN.	+0.012 -0.000	MAX.
EEL 0083	5.187	5.503	5.192	5.483	5.187	5.600	5.192	5.580
EEL 0084	5.250	5.566	5.255	5.546	5.250	5.663	5.255	5.643
EEL 0085	5.312	5.628	5.317	5.608	5.312	5.725	5.317	5.705
EEL 0086	5.375	5.691	5.380	5.671	5.375	5.788	5.380	5.768
EEL 0087	5.437	5.753	5.442	5.733	5.437	5.850	5.442	5.830
EEL 0088	5.500	5.816	5.505	5.796	5.500	5.913	5.505	5.893
EEL 0089	5.562	5.878	5.567	5.858	5.562	5.975	5.567	5.955
EEL 0090	5.625	5.941	5.630	5.921	5.625	6.038	5.630	6.018
EEL 0092	5.750	6.066	5.755	6.046	5.750	6.163	5.755	6.143
EEL 0094	5.875	6.191	5.880	6.171	5.875	6.288	5.880	6.268
EEL 0096	6.000	6.318	6.005	6.296	6.000	6.415	6.005	6.393
	+0.000 -0.007	MIN.	+0.014 -0.000	MAX.	+0.000 -0.007	MIN.	+0.014 -0.000	MAX.
EEL 0098	-	-	-	-	6.125	6.540	6.130	6.518
EEL 0100	-	-	-	-	6.250	6.665	6.255	6.643
EEL 0102	-	-	-	-	6.375	6.790	6.380	6.768
EEL 0104	-	-	-	-	6.500	6.915	6.505	6.893
EEL 0106	-	-	-	-	6.625	7.040	6.630	7.018
EEL 0108	-	-	-	-	6.750	7.165	6.755	7.143
EEL 0110	-	-	-	-	6.875	7.290	6.880	7.268
EEL 0112	-	-	-	-	7.000	7.417	7.005	7.393
	+0.000 -0.008	MIN.	+0.0016 -0.000	MAX.	+0.000 -0.008	MIN.	+0.016 -0.000	MAX.
EEL 0114	-	-	-	-	7.125	7.542	7.130	7.518
EEL 0116	-	-	-	-	7.250	7.667	7.255	7.643
EEL 0118	-	-	-	-	7.375	7.792	7.380	7.768
EEL 0120	-	-	-	-	7.500	7.917	7.505	7.893
EEL 0122	-	-	-	-	7.625	8.042	7.630	8.018
EEL 0124	-	-	-	-	7.750	8.167	7.755	8.143
EEL 0126	-	-	-	-	7.875	8.292	7.880	8.268
EEL 0128	-	-	-	-	8.000	8.419	8.005	8.393

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.009	MIN.	+0.018 -0.000	MAX.	+0.000 -0.009	MIN.	+0.018 -0.000	MAX.
EEL 0130	-	-	-	-	8.125	8.544	8.130	8.518
EEL 0132	-	-	-	-	8.250	8.669	8.255	8.643
EEL 0134	-	-	-	-	8.375	8.794	8.380	8.768
EEL 0136	-	-	-	-	8.500	8.919	8.505	8.893
EEL 0138	-	-	-	-	8.625	9.044	8.630	9.018
EEL 0140	-	-	-	-	8.750	9.169	8.755	9.143
EEL 0142	-	-	-	-	8.875	9.294	8.880	9.268
EEL 0144	-	-	-	-	9.000	9.421	9.005	9.393
	+0.000 -0.010	MIN.	+0.020 -0.000	MAX.	+0.000 -0.010	MIN.	+0.020 -0.000	MAX.
EEL 0146	-	-	-	-	9.125	9.546	9.130	9.518
EEL 0148	-	-	-	-	9.250	9.671	9.255	9.643
EEL 0150	-	-	-	-	9.375	9.796	9.380	9.768
EEL 0152	-	-	-	-	9.500	9.921	9.505	9.893
EEL 0154	-	-	-	-	9.625	10.046	9.630	10.018
EEL 0156	-	-	-	-	9.750	10.171	9.755	10.143
EEL 0158	-	-	-	-	9.875	10.296	9.880	10.268
EEL 0160	-	-	-	-	10.000	10.423	10.005	10.393
	+0.000 -0.011	MIN.	+0.022 -0.000	MAX.	+0.000 -0.011	MIN.	+0.022 -0.000	MAX.
EEL 0162	-	-	-	-	10.125	10.548	10.130	10.518
EEL 0164	-	-	-	-	10.250	10.673	10.255	10.643
EEL 0166	-	-	-	-	10.375	10.798	10.380	10.768
EEL 0168	-	-	-	-	10.500	10.923	10.505	10.893
EEL 0170	-	-	-	-	10.625	11.048	10.630	11.018
EEL 0172	-	-	-	-	10.750	11.173	10.755	11.143
EEL 0174	-	-	-	-	10.875	11.298	10.880	11.268
EEL 0176	-	-	-	-	11.000	11.425	11.005	11.393
	+0.000 -0.012	MIN.	+0.024 -0.000	MAX.	+0.000 -0.012	MIN.	+0.024 -0.000	MAX.
EEL 0178	-	-	-	-	11.125	11.550	11.130	11.518
EEL 0180	-	-	-	-	11.250	11.675	11.255	11.643
EEL 0182	-	-	-	-	11.375	11.800	11.380	11.768
EEL 0184	-	-	-	-	11.500	11.925	11.505	11.893

Seal Type & Diameter	Free Height 3/32				Free Height 1/8			
	Cavity		Seal		Cavity		Seal	
	I.D. +.000 -.012	O.D. MIN.	I.D. +.024 -.000	O.D. MAX.	I.D. +.000 -.012	O.D. MIN.	I.D. +.024 -.000	O.D. MAX.
EEL 0186	-	-	-	-	11.625	12.050	11.630	12.018
EEL 0188	-	-	-	-	11.750	12.175	11.755	12.143
EEL 0190	-	-	-	-	11.875	12.300	11.880	12.268
EEL 0192	-	-	-	-	12.000	12.427	12.005	12.393
	+.000 -.013	MIN.	+.026 -.000	MAX.	+.000 -.013	MIN.	+.026 -.000	MAX.
EEL 0194	-	-	-	-	12.125	12.552	12.130	12.518
EEL 0196	-	-	-	-	12.250	12.677	12.255	12.643
EEL 0198	-	-	-	-	12.375	12.802	12.380	12.768
EEL 0200	-	-	-	-	12.500	12.927	12.505	12.893
EEL 0202	-	-	-	-	12.625	13.052	12.630	13.018
EEL 0204	-	-	-	-	12.750	13.177	12.755	13.143
EEL 0206	-	-	-	-	12.875	13.302	12.880	13.268
EEL 0208	-	-	-	-	13.000	13.427	13.005	13.393
EEL 0210	-	-	-	-	13.125	13.552	13.130	13.518

SEAL DIMENSIONS ARE IN INCHES AND ARE PRIOR TO PLATING OR COATING

EEL SERIES – EXTERNAL PRESSURE LONG LEG TYPE E-SEAL



WELD PERMITTED

PLATING MAY BE INCOMPLETE AWAY FROM SEALING SURFACES

SEALS ARE MANUFACTURED SO THEY ARE A SNAP FIT IN THEIR CAVITIES. THEREFORE SEAL DIAMETERS ARE OUT OF ROUND IN EXCESS OF TOLERANCES

SEE TABLE 1 PAGE 3 FOR DETAILS OF SEAL FREE HEIGHT, CAVITY DEPTH AND RADIUS R

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.076	MIN.	+0.152 -0.000	MAX.	+0.000 -0.076	MIN.	+0.152 -0.000	MAX.
EEL 0032	50.800	58.674	50.927	58.318	50.800	61.138	50.927	60.782
EEL 0033	52.375	60.249	52.502	59.893	52.375	62.713	52.502	62.357
EEL 0034	53.975	61.849	54.102	61.493	53.975	64.313	54.102	63.957
EEL 0035	55.550	63.424	55.677	63.068	55.550	65.888	55.677	65.532
EEL 0036	57.150	65.024	57.277	64.668	57.150	67.488	57.277	67.132
EEL 0037	58.725	66.599	58.852	66.243	58.725	69.063	58.852	68.707
EEL 0038	60.325	68.199	60.452	67.843	60.325	70.663	60.452	70.307
EEL 0039	61.900	69.774	62.027	69.418	61.900	72.238	62.027	71.882
EEL 0040	63.500	71.374	63.627	71.018	63.500	73.838	63.627	73.482
EEL 0041	65.075	72.949	65.202	72.593	65.075	75.413	65.202	75.057
EEL 0042	66.675	74.549	66.802	74.193	66.675	77.013	66.802	76.657
EEL 0043	68.250	76.124	68.377	75.768	68.250	78.588	68.377	78.232
EEL 0044	69.850	77.724	69.977	77.368	69.850	80.188	69.977	79.832
EEL 0045	71.425	79.299	71.552	78.943	71.425	81.763	71.552	81.407
EEL 0046	73.025	80.899	73.152	80.543	73.025	83.363	73.152	83.007
EEL 0047	74.600	82.474	74.727	82.118	74.600	84.938	74.727	84.582
EEL 0048	76.200	84.125	76.327	83.718	76.200	86.589	76.327	86.182
EEL 0049	77.775	85.700	77.902	85.293	77.775	88.163	77.902	87.757
EEL 0050	79.375	87.300	79.502	86.893	79.375	89.764	79.502	89.357
EEL 0051	80.950	88.875	81.077	88.468	80.950	91.338	81.077	90.932

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+ .000 - .076	MIN.	+ .152 - .000	MAX.	+ .000 - .076	MIN.	+ .152 - .000	MAX.
EEL 0052	82.550	90.475	82.677	90.068	82.550	92.939	82.677	92.532
EEL 0053	84.125	92.050	84.252	91.643	84.125	94.513	84.252	94.107
EEL 0054	85.725	93.650	85.852	93.243	85.725	96.114	85.852	95.707
EEL 0055	87.300	95.225	87.427	94.818	87.300	97.688	87.427	97.282
EEL 0056	88.900	96.825	89.027	96.418	88.900	99.289	89.027	98.882
EEL 0057	90.475	98.400	90.602	97.993	90.475	100.863	90.602	100.457
EEL 0058	92.075	100.000	92.202	99.593	92.075	102.464	92.202	102.057
EEL 0059	93.650	101.575	93.777	101.168	93.650	104.038	93.777	103.632
EEL 0060	95.250	103.175	95.377	102.768	95.250	105.639	95.377	105.232
EEL 0061	96.825	104.750	96.952	104.343	96.825	107.213	96.952	106.807
EEL 0062	98.425	106.350	98.552	105.943	98.425	108.814	98.552	108.407
EEL 0063	100.000	107.925	100.127	107.518	100.000	110.388	100.127	109.982
EEL 0064	101.600	109.576	101.727	109.118	101.600	112.039	101.727	111.582
EEL 0065	103.175	111.150	103.302	110.693	103.175	113.614	103.302	113.157
EEL 0066	104.775	112.751	104.902	112.293	107.775	115.214	104.902	114.757
EEL 0067	106.350	114.325	106.477	113.868	106.350	116.789	106.477	116.332
	+ .000 - .127	MIN.	+ .254 - .000	MAX.	+ .000 - .127	MIN.	+ .254 - .000	MAX.
EEL 0068	107.950	115.926	108.077	115.468	107.950	118.389	108.077	117.932
EEL 0069	109.525	117.500	109.652	117.043	109.525	119.964	109.652	119.507
EEL 0070	111.125	119.101	111.252	118.643	111.125	121.564	111.252	121.107
EEL 0071	112.700	120.675	112.827	120.218	112.700	123.139	112.827	122.682
EEL 0072	114.300	122.276	114.427	121.818	114.300	124.739	114.427	124.282
EEL 0073	115.875	123.850	116.002	123.393	115.875	126.314	116.002	125.857
EEL 0074	117.475	125.451	117.602	124.993	117.475	127.914	117.602	127.457
EEL 0075	119.050	127.025	119.177	126.568	119.050	129.489	119.177	129.032
EEL 0076	120.650	128.626	120.777	128.168	120.650	131.089	120.777	130.632
EEL 0077	122.225	130.200	122.352	129.743	122.225	132.664	122.352	132.207
EEL 0078	123.825	131.801	123.952	131.343	123.825	134.264	123.952	133.807
EEL 0079	125.400	133.375	125.527	132.918	125.400	135.839	125.527	135.382
EEL 0080	127.000	135.026	127.127	134.518	127.000	137.490	127.127	136.982
EEL 0081	128.575	136.601	128.702	136.093	128.575	139.065	128.702	138.557
EEL 0082	130.175	138.201	130.302	137.693	130.175	140.665	130.302	140.157

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+ .000 - .152	MIN.	+ .305 - .000	MAX.	+ .000 - .152	MIN.	+ .305 - .000	MAX.
EEL 0083	131.750	139.776	131.877	139.268	131.750	142.240	131.877	141.732
EEL 0084	133.350	141.376	133.477	140.868	133.350	143.840	133.477	143.332
EEL 0084	134.925	142.951	135.052	142.443	134.925	145.415	135.052	144.907
EEL 0086	136.525	144.551	136.652	144.043	136.525	147.015	136.652	146.507
EEL 0087	138.100	146.126	138.227	145.618	138.100	148.590	138.227	148.082
EEL 0088	139.700	147.726	139.827	147.218	139.700	150.190	139.827	149.682
EEL 0089	141.275	149.301	141.402	148.793	141.275	151.765	141.402	151.257
EEL 0090	142.875	150.901	143.002	150.393	142.875	153.365	143.002	152.857
EEL 0092	146.050	154.076	146.177	153.568	146.050	156.540	145.177	156.032
EEL 0094	149.225	157.251	149.352	156.743	149.225	159.715	149.352	159.207
EEL 0096	152.400	160.477	152.527	159.918	152.400	162.941	152.527	162.382
	+ .000 - .178	MIN.	+ .356 - .000	MAX.	+ .000 - .178	MIN.	+ .356 - .000	MAX.
EEL 0098	-	-	-	-	155.575	166.116	155.702	165.557
EEL 0100	-	-	-	-	158.750	169.291	158.877	168.732
EEL 0102	-	-	-	-	161.925	172.466	162.052	171.907
EEL 0104	-	-	-	-	165.100	175.641	165.227	175.082
EEL 0106	-	-	-	-	168.275	178.816	168.402	178.257
EEL 0108	-	-	-	-	171.450	181.991	171.577	181.432
EEL 0110	-	-	-	-	174.625	185.166	174.752	184.607
EEL 0112	-	-	-	-	177.800	188.392	177.927	187.782
	+ .000 - .203	MIN.	+ .406 - .000	MAX.	+ .000 - .203	MIN.	+ .406 - .000	MAX.
EEL 0114	-	-	-	-	180.975	191.567	181.102	190.957
EEL 0116	-	-	-	-	184.150	194.742	184.277	194.132
EEL 0118	-	-	-	-	187.325	197.917	187.452	197.307
EEL 0120	-	-	-	-	190.500	201.092	190.627	200.482
EEL 0122	-	-	-	-	193.675	204.267	193.802	203.657
EEL 0124	-	-	-	-	196.850	207.442	196.977	206.832
EEL 0126	-	-	-	-	200.025	210.617	200.152	210.007
EEL 0128	-	-	-	-	203.200	213.843	203.327	213.182

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.229	MIN.	+0.457 -0.000	MAX.	+0.000 -0.229	MIN.	+0.457 -0.000	MAX.
EEL 0130	-	-	-	-	206.375	217.018	206.502	216.357
EEL 0132	-	-	-	-	209.550	220.193	209.677	219.532
EEL 0134	-	-	-	-	212.725	223.368	212.852	222.707
EEL 0136	-	-	-	-	215.900	226.543	216.027	225.882
EEL 0138	-	-	-	-	219.075	229.718	219.202	229.057
EEL 0140	-	-	-	-	222.250	232.893	222.377	232.232
EEL 0142	-	-	-	-	225.425	236.068	225.552	235.407
EEL 0144	-	-	-	-	228.600	239.293	228.727	238.582
	+0.000 -0.254	MIN.	+0.508 -0.000	MAX.	+0.000 -0.254	MIN.	+0.508 -0.000	MAX.
EEL 0146	-	-	-	-	231.775	241.468	231.902	241.757
EEL 0148	-	-	-	-	234.950	245.643	235.077	244.932
EEL 0150	-	-	-	-	238.125	248.818	238.252	248.107
EEL 0152	-	-	-	-	241.300	254.993	241.427	251.282
EEL 0154	-	-	-	-	244.475	255.168	244.602	254.457
EEL 0156	-	-	-	-	247.650	258.343	247.777	257.632
EEL 0158	-	-	-	-	250.825	261.518	250.952	260.807
EEL 0160	-	-	-	-	254.000	264.744	254.127	263.982
	+0.000 -0.279	MIN.	+0.559 -0.000	MAX.	+0.000 -0.279	MIN.	+0.559 -0.000	MAX.
EEL 0162	-	-	-	-	257.175	267.919	257.302	267.157
EEL 0164	-	-	-	-	260.350	271.094	260.477	270.332
EEL 0166	-	-	-	-	263.525	274.269	263.652	273.507
EEL 0168	-	-	-	-	266.700	277.444	266.827	276.682
EEL 0170	-	-	-	-	269.875	280.619	270.002	279.857
EEL 0172	-	-	-	-	273.050	283.794	273.177	283.032
EEL 0174	-	-	-	-	276.225	286.969	276.352	286.207
EEL 0176	-	-	-	-	279.400	290.195	279.527	289.382
	+0.000 -0.305	MIN.	+0.610 -0.000	MAX.	+0.000 -0.305	MIN.	+0.610 -0.000	MAX.
EEL 0178	-	-	-	-	282.575	293.370	282.702	292.557
EEL 0180	-	-	-	-	285.750	296.545	285.877	295.732
EEL 0182	-	-	-	-	288.925	299.720	289.052	298.907
EEL 0184	-	-	-	-	292.100	302.895	292.227	302.082
EEL 0186	-	-	-	-	295.275	306.070	295.402	305.257

Seal Type & Diameter	Free Height 2.36				Free Height 3.18			
	Cavity		Seal		Cavity		Seal	
	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.	I.D.	O.D.
	+0.000 -0.305	MIN.	+0.610 -0.000	MAX.	+0.000 -0.305	MIN.	+0.610 -0.000	MAX.
EEL 0188	-	-	-	-	298.450	309.245	298.577	308.432
EEL 0190	-	-	-	-	301.625	312.420	301.752	311.607
EEL 0192	-	-	-	-	304.800	315.646	304.927	314.782
	+0.000 -0.330	MIN.	+0.660 -0.000	MAX.	+0.000 -0.330	MIN.	+0.660 -0.000	MAX.
EEL 0194	-	-	-	-	307.975	318.821	308.102	317.957
EEL 0196	-	-	-	-	311.150	321.996	311.277	321.132
EEL 0198	-	-	-	-	314.325	325.171	314.452	324.307
EEL 0200	-	-	-	-	317.500	328.346	317.627	327.482
EEL 0202	-	-	-	-	320.675	331.521	320.802	330.657
EEL 0204	-	-	-	-	323.850	334.696	323.977	333.832
EEL 0206	-	-	-	-	327.025	337.871	327.152	337.007
EEL 0208	-	-	-	-	330.200	341.046	330.327	340.182
EEL 0210	-	-	-	-	333.375	344.221	333.502	343.357

SEAL DIMENSIONS ARE IN MILLIMETRES AND ARE PRIOR TO PLATING OR COATING