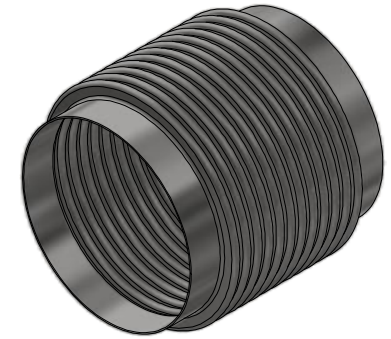
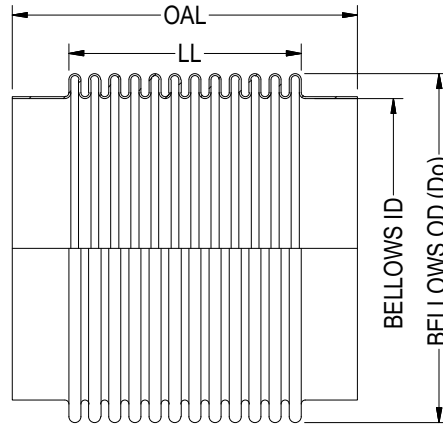




300 PSI HIGH PRESSURE BELLOWS
DATA SHEETS



300 PSI BELLOWS



ISOMETRIC VIEW

PART NUMBER	PIPE SIZE	BELLOWS ID	BELLOWS OD (Do)	LIVE LENGTH (LL)	OVERALL LENGTH (OAL)	AXIAL SPRING RATE (LBF/IN.)	LATERAL SPRING RATE (LBF/IN.)	ANGULAR SPRING RATE (FT. LBS/DEG.)	AXIAL MOVEMENT (IN.)	LATERAL MOVEMENT (IN.)	ANGULAR MOVEMENT (DEG.)	MAX. ALLOWABLE PRESSURE (PSIG)
959-300-0104	1	1.31	1.57	1.84	3.00	583	560	0.20	0.27	0.12	0.50	330
959-300-0106	1	1.29	1.50	3.48	4.50	1,551	381	0.50	0.24	0.20	4.88	470
959-300-1304	1.25	1.65	1.81	2.00	3.00	2,772	3,058	1.50	0.13	0.05	5.47	444
959-300-1306	1.25	1.65	1.81	3.79	5.00	1,484	469	0.80	0.23	0.17	1.96	412
959-300-1308	1.25	1.64	1.81	5.44	6.50	2,371	361	1.30	0.25	0.26	0.44	461
959-300-1504	1.5	2.00	2.50	1.57	3.00	1,620	4,780	1.50	0.27	0.07	9.85	484
959-300-1506	1.5	2.00	2.50	3.56	5.00	1,264	775	1.20	0.49	0.27	1.00	367
959-300-1508	1.5	2.00	2.50	5.52	7.00	1,999	509	1.80	0.52	0.44	3.00	379
959-300-0204	2	2.36	2.90	1.12	2.25	3,031	23,670	3.80	0.19	0.03	7.06	555
959-300-0206	2	2.36	2.80	3.31	4.50	1,985	1,836	2.40	0.37	0.16	8.24	622
959-300-0208	2	2.36	2.75	4.75	6.00	1,990	881	2.40	0.43	0.27	5.85	438
959-300-2506	2.5	2.85	3.60	2.63	4.00	2,323	5,139	4.40	0.44	0.13	10.50	540
959-300-2508	2.5	2.83	3.60	4.64	6.00	2,480	1,819	4.70	0.61	0.30	10.64	552
959-300-0306	3	3.48	4.20	2.43	4.00	2,688	10,065	7.20	0.39	0.09	8.51	533
959-300-0308	3	3.48	4.20	4.35	5.50	1,536	1,878	4.10	0.69	0.27	2.00	366
959-300-0312	3	3.46	4.13	6.93	8.00	2,573	1,198	6.70	0.73	0.45	3.00	390
959-300-3506	3.5	3.96	4.90	2.31	3.50	4,453	22,833	15.90	0.39	0.07	8.29	534
959-300-3508	3.5	3.96	4.80	4.02	5.00	2,632	4,857	9.20	0.61	0.19	9.38	609

NOTES:

- MATERIAL: ASTM A-240 GRADE 304.
- DESIGN TEMPERATURE: 300°F.
- ALL MOVEMENTS ARE RATED FOR 5000 CYCLES NON CONCURRENT AS PER EJMA.

C	UPDATED AS PER COMMENTS	10/21/2024	UG		
B	SHEET NO. 5 ADDED	10/18/2024	UG		
A	FOR REVIEW	10/10/2024	UG		
REV.	DESCRIPTION	DATE:	BY:	CHKD:	APPD:
THIS DRAWING AND ALL OF THE INFORMATION HEREIN ARE THE SOLE PROPERTY OF BELLOWS SYSTEMS, INC. AND MAY NOT BE REPRODUCED OR DISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF BELLOWS SYSTEMS, INC. (BSI).					
SHEET SIZE:			8.5" x 11"		



CAGE CODE: 22727

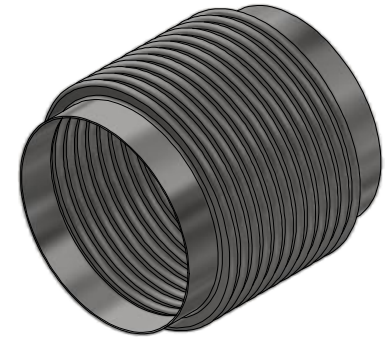
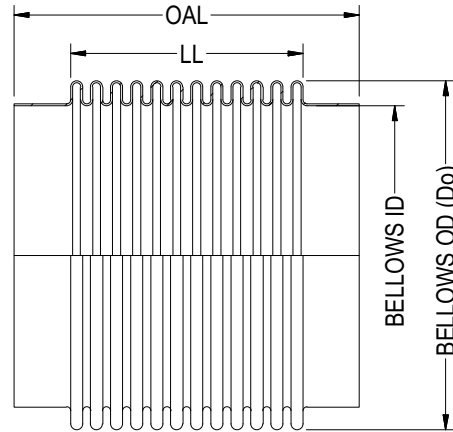
BELLOWS SYSTEMS, INC.

Houston, TX
www.bellows-systems.com

BELLOWS ELEMENT
300 PSIG

DRAWN BY:	DATE:	SCALE:	DRAWING NUMBER:	SHEET#:	REV.
U GULATI	10/10/2024	AS SHOWN	959-300-XXXX	1 OF 5	C

300 PSI BELLOWS



ISOMETRIC VIEW

PART NUMBER	PIPE SIZE	BELLOWS ID	BELLOWS OD (Do)	LIVE LENGTH (LL)	OVERALL LENGTH (OAL)	AXIAL SPRING RATE (LBF/IN.)	LATERAL SPRING RATE (LBF/IN.)	ANGULAR SPRING RATE (FT. LBS/DEG.)	AXIAL MOVEMENT (IN.)	LATERAL MOVEMENT (IN.)	ANGULAR MOVEMENT (DEG.)	MAX. ALLOWABLE PRESSURE (PSIG)
959-300-0406	4	4.48	5.40	1.98	3.50	3,515	29,353	15.60	0.39	0.06	7.47	362
959-300-0408	4	4.46	5.40	4.02	5.50	2,117	5,048	9.40	0.73	0.20	3.00	470
959-300-0412	4	4.44	5.40	8.04	9.50	2,849	1,649	12.50	0.98	0.55	1.00	369
959-300-0415	4	4.42	5.40	10.89	12.50	3,775	1,181	16.50	1.07	0.81	3.00	363
959-300-0506	5	5.56	6.40	1.83	3.00	4,276	64,252	27.80	0.33	0.04	5.40	390
959-300-0508	5	5.56	6.40	3.86	5.00	1,859	7,075	12.10	0.72	0.16	3.00	380
959-300-0512	5	5.55	6.40	7.64	9.00	2,473	2,345	16.10	0.98	0.43	1.00	337
959-300-0606	6	6.63	7.50	1.71	3.00	4,496	108,905	40.80	0.34	0.03	4.78	344
959-300-0608	6	6.63	7.50	3.44	5.00	2,456	15,907	22.30	0.63	0.11	6.44	346
959-300-0610	6	6.61	7.50	5.04	6.50	3,267	9,956	29.60	0.75	0.18	7.09	489
959-300-0612	6	6.59	7.60	7.65	9.00	3,550	4,753	32.50	0.99	0.36	5.00	484
959-300-0808	8	8.57	10.00	2.64	4.00	9,134	161,071	143.20	0.48	0.05	5.31	459
959-300-0812	8	8.57	10.00	6.66	8.00	3,805	11,625	59.60	1.15	0.28	5.00	459
959-300-0818	8	8.53	10.00	13.19	15.00	6,455	4,851	100.70	1.41	0.69	7.33	508
959-300-0824	8	8.49	10.10	18.14	20.00	7,430	2,994	116.70	1.70	1.12	6.53	429
959-300-1008	10	10.73	12.40	2.23	5.00	8,880	332,208	215.90	0.49	0.04	4.48	329
959-300-1012	10	10.73	12.40	6.52	8.00	3,778	18,329	91.90	1.23	0.24	3.00	346
959-300-1018	10	10.69	12.40	12.28	15.65	5,403	7,367	130.90	1.64	0.60	3.00	456

NOTES:

- MATERIAL: ASTM A-240 GRADE 304.
- DESIGN TEMPERATURE: 300°F.
- ALL MOVEMENTS ARE RATED FOR 5000 CYCLES NON CONCURRENT AS PER EJMA.

C	UPDATED AS PER COMMENTS	10/21/2024	UG		
B	SHEET NO. 5 ADDED	10/18/2024	UG		
A	FOR REVIEW	10/10/2024	UG		
REV.	DESCRIPTION	DATE:	BY:	CHKD:	APPD:
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**Bellows
Systems**

CAGE CODE: 22727

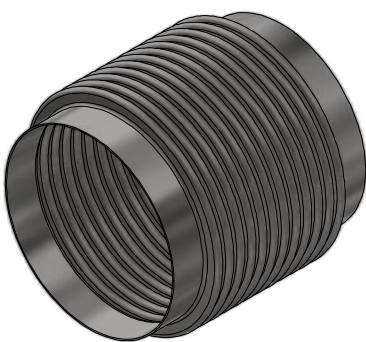
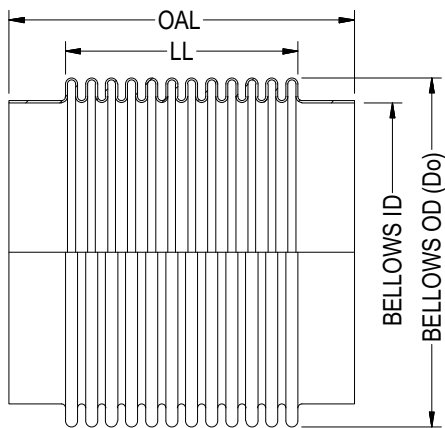
BELLOWS SYSTEMS, INC.

Houston, TX
www.bellows-systems.com

BELLOWS ELEMENT
300 PSIG

DRAWN BY: U GULATI	DATE: 10/10/2024	SCALE: AS SHOWN	DRAWING NUMBER: 959-300-XXXX	SHEET#: 2 OF 5	REV. C
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300 PSI BELLOWS



ISOMETRIC VIEW

PART NUMBER	PIPE SIZE	BELLOWS ID	BELLOWS OD (Do)	LIVE LENGTH (LL)	OVERALL LENGTH (OAL)	AXIAL SPRING RATE (LBF/IN.)	LATERAL SPRING RATE (LBF/IN.)	ANGULAR SPRING RATE (FT. LBS/DEG.)	AXIAL MOVEMENT (IN.)	LATERAL MOVEMENT (IN.)	ANGULAR MOVEMENT (DEG.)	MAX. ALLOWABLE PRESSURE (PSIG)
959-300-1024	10	10.65	12.50	18.14	21.50	6,070	3,851	147.90	2.11	1.12	1.00	350
959-300-1208	12	12.69	14.50	1.98	3.50	26,244	1,553,539	881.90	0.35	0.02	2.84	491
959-300-1212	12	12.69	14.50	5.79	9.00	12,310	96,304	413.70	0.82	0.13	5.79	456
959-300-1218	12	12.69	14.50	11.86	15.00	4,921	10,241	165.30	1.85	0.55	2.00	432
959-300-1224	12	12.65	14.50	17.77	21.00	7,487	6,777	250.80	2.01	0.89	3.00	441
959-300-1408	14	13.95	16.00	1.74	5.00	20,571	2,011,141	838.70	0.39	0.02	2.92	372
959-300-1410	14	13.95	16.00	3.50	7.00	11,984	316,835	488.60	0.70	0.06	4.84	386
959-300-1412	14	13.95	16.00	5.78	9.00	7,489	77,261	305.30	1.12	0.15	6.65	386
959-300-1418	14	13.95	16.00	11.11	14.50	3,994	11,710	162.80	2.10	0.53	1.00	374
959-300-1424	14	13.91	16.00	17.60	21.00	5,988	6,783	243.50	2.37	0.95	1.00	355
959-300-1608	16	15.95	17.90	1.23	5.50	26,211	5,681,833	1365.00	0.34	0.01	2.24	383
959-300-1612	16	15.95	17.90	5.24	9.50	6,697	111,991	348.80	1.28	0.14	6.86	374
959-300-1618	16	15.97	18.00	11.09	15.38	4,696	177,391	246.30	2.05	0.46	1.00	386
959-300-1620	16	15.97	17.80	12.62	15.00	5,615	15,971	291.00	1.98	0.50	3.00	442
959-300-1624	16	15.93	18.13	16.82	21.50	6,843	10,885	360.70	2.28	0.77	3.00	423
959-300-1812	18	17.99	20.00	4.77	9.00	10,629	263,250	697.20	0.99	0.09	5.16	376
959-300-1818	18	17.99	20.00	10.61	15.00	5,784	29,571	379.40	1.89	0.36	3.00	380
959-300-1824	18	17.95	20.00	16.19	20.60	9,035	19,238	591.40	2.05	0.60	6.27	467

- NOTES:
- MATERIAL: ASTM A-240 GRADE 304.
 - DESIGN TEMPERATURE: 300°F.
 - ALL MOVEMENTS ARE RATED FOR 5000 CYCLES NON CONCURRENT AS PER EJMA.

REV.	DESCRIPTION	DATE	BY	CHKD	APPD
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SHEET SIZE:		8.5" x 11"			



Bellows

Systems

CAGE CODE: 22727

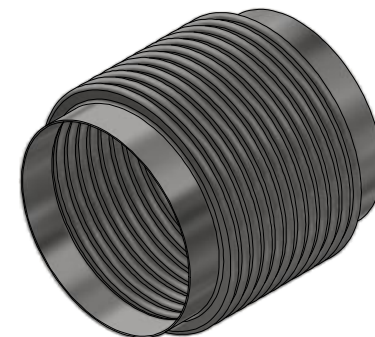
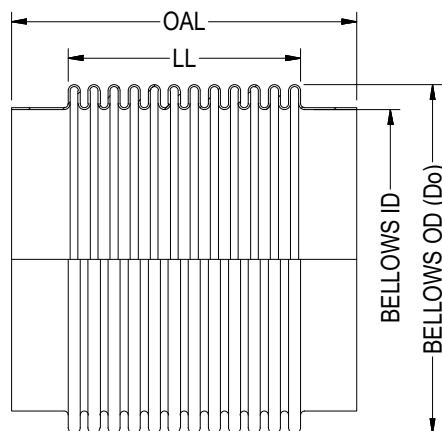
BELLOWS SYSTEMS, INC.

Houston, TX
www.bellows-systems.com

BELLOWS ELEMENT
300 PSIG

DRAWN BY:	DATE:	SCALE:	DRAWING NUMBER:	SHEET#:	REV.
U GULATI	10/10/2024	AS SHOWN	959-300-XXXX	3 OF 5	C

300 PSI BELLOWS



ISOMETRIC VIEW

PART NUMBER	PIPE SIZE	BELLOWS ID	BELLOWS OD (Do)	LIVE LENGTH (LL)	OVERALL LENGTH (OAL)	AXIAL SPRING RATE (LBF/IN.)	LATERAL SPRING RATE (LBF/IN.)	ANGULAR SPRING RATE (FT. LBS/DEG.)	AXIAL MOVEMENT (IN.)	LATERAL MOVEMENT (IN.)	ANGULAR MOVEMENT (DEG.)	MAX. ALLOWABLE PRESSURE (PSIG)
959-300-2012	20	20.01	21.40	4.01	6.00	37,038	1,469,562	2886.80	0.50	0.03	2.64	445
959-300-2018	20	20.01	22.13	10.34	15.00	5,562	37,254	448.90	2.01	0.34	3.00	342
959-300-2024	20	19.97	22.25	15.56	20.00	8,190	23,420	663.50	2.22	0.56	3.00	413
959-300-2412	24	24.03	26.00	3.52	7.00	18,599	1,394,199	2115.70	0.78	0.01	2.00	374
959-300-2418	24	23.98	26.50	8.85	12.50	10,409	131,226	1205.60	1.82	0.22	6.29	392
959-300-2424	24	23.98	26.50	15.21	19.75	6,731	29,459	779.60	2.90	0.25	3.00	382

NOTES:

1. MATERIAL: ASTM A-240 GRADE 304.
2. DESIGN TEMPERATURE: 300°F.
3. ALL MOVEMENTS ARE RATED FOR 5000 CYCLES NON CONCURRENT AS PER EJMA.

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Bellows Systems

CAGE CODE: 22727

BELLows SYSTEMS, INC.

Houston, TX
www.bellows-systems.com

BELLOWS ELEMENT
300 PSIG

DRAWING NUMBER: 959-300-XXXX

SHEET#:	REV.
4 OF 5	C

DRAWN BY:
U GULATI

DATE: 10/10/2024

SCALE: AS SHOWN

ADDITIONAL NOTES:

- FOR CONCURRENT MOVEMENTS:

$$\left(\frac{\text{AXIAL MOVEMENT}}{\text{ALLOWABLE AXIAL MOVEMENT}}\right) + \left(\frac{\text{LATERAL MOVEMENT}}{\text{ALLOWABLE LATERAL MOVEMENT}}\right) + \left(\frac{\text{ANGULAR MOVEMENT}}{\text{ALLOWABLE ANGULAR MOVEMENT}}\right) < 1$$

- OTHER MATERIAL (321 SS, 316 SS, IN625, IN718, ALLOY 825, C22, C276, ETC.) AVAILABLE ON REQUEST.
- A FATIGUE CORRECTION FACTOR OF 1 PER EJMA IS USED FOR CYCLE LIFE CALCULATION. FOR HIGHER FATIGUE SAFETY OR FATIGUE LIFE PER OTHER DESIGN CODES SUCH AS ASME PLEASE CONTACT BSI ENGINEERING.
- BELLOWS ARE OF MULTI PLY DESIGN WITH STANDARD "U" PROFILE CONVOLUTIONS.
- FOR HIGH TEMPERATURE PLEASE CONTACT BSI ENGINEERING.

						 Bellows Systems CAGE CODE: 22727	BELLOWS SYSTEMS, INC.				
							Houston, TX www.bellows-systems.com				
C	UPDATED AS PER COMMENTS	10/21/2024	UG				BELLOWS ELEMENT 300 PSIG				
B	SHEET NO. 5 ADDED	10/18/2024	UG								
A	FOR REVIEW	10/10/2024	UG								
REV.	DESCRIPTION	DATE:	BY:	CHKD:	APPD:		DRAWING NUMBER: 959-300-XXXX			SHEET#: 5 OF 5	REV. C
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SHEET SIZE: 8.5" x 11"											



Bellows
Systems



Bellows Systems Inc
10950 Brittmoore Park Dr,
Houston, TX 77041, United States

Sales
(800) 233-0623

For Sales Enquiries
sales@bellows-systems.com

www.bellows-systems.com

