

METAL FLEX® WELDED BELLOWS INC.

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www.metalflexbellows.com

ISO 9001

BUREAU VERITAS
Certification



HOW TO ORDER: CHOOSE THE SIZE, READ DIRECTLY ACROSS THE LINE
TO SELECT THE TYPE OF END FLANGES, DECIDE THE NUMBER OF SEGMENTS
NECESSARY TO ACHIEVE THE REQUIRED STROKE.

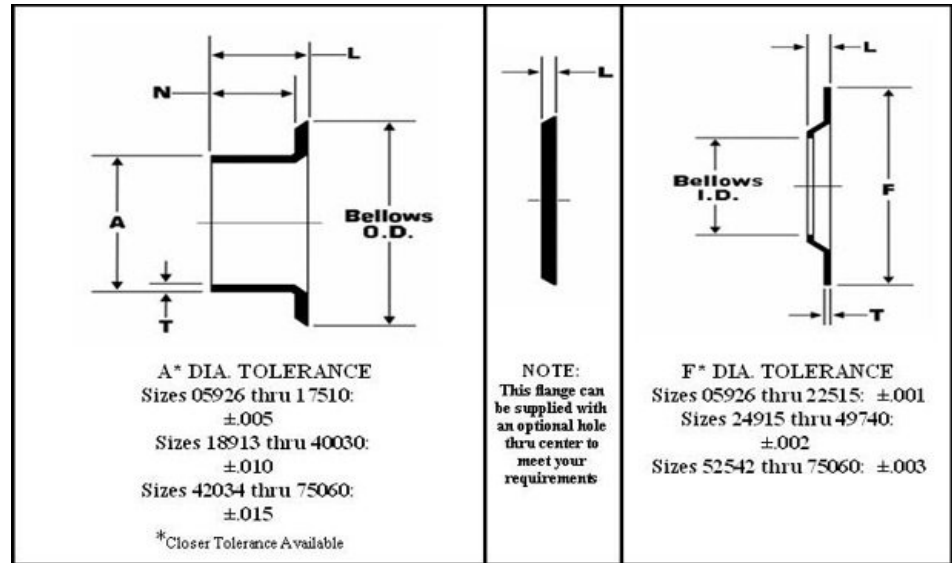
EXAMPLE: P/N 16275AF-12

NOTES:

- 1.) LIFE EXPECTANCY SHOULD BE 10,000 FULL STROKE CYCLES (MIN.), WHEN OPERATED WITH VACUUM INTERNAL AND ATMOSPHERIC PRESSURE EXTERNAL.
- 2.) SPRING RATE IS THE FORCE (LBS./IN.) REQUIRED TO MOVE THE BELLOWS ONE INCH IN AN AXIAL MOTION. THIS FIGURE IS INVERSLY RELATED TO THE NUMBER OF SEGMENTS IN THE BELLOWS. EXAMPLE: A BELLOWS CONSISTING OF TWO SEGMENTS WILL HAVE A SPRING RATE OF HALF THE LISTED VALUE.
- 3.) DUE TO COMMERCIAL MILL TOLERANCES FOR THIN STRIP MATERIAL, THE BELLOWS SPRING RATE AND/OR FREE LENGTH MAY VARY BY 10% BETWEEN MANUFACTURING LOTS.
- 4.) MEAN EFFECTIVE AREA IS FIGURED AS $(O.D. + I.D.)^2 \times .1963$

**DATA SHOWN APPLIES TO ONE SEGMENT.
ONE SEGMENT = 10 CONVOLUTIONS**

STOCK SIZES ARE HIGHLIGHTED IN BLUE



STAINLESS STEEL WELDED BELLOWS										FLANGE STYLES							
Part No.	O.D.	I.D.	Span	M.E.A.	Ext. Lgth.	Compr. Lgth.	Stroke	Free Lgth.	S/R	Style A				Style B	Style F		
										A*	T	N	L	L	F*	T	L
04520	0.450	0.200	0.1250	0.083	0.26	0.10	0.16	0.24	19	0.312	0.035	0.250	0.310	0.035	0.562	0.010	0.025
05926	0.595	0.258	0.1685	0.144	0.35	0.08	0.25	0.25	21	0.375	0.035	0.250	0.310	0.035	0.687	0.010	0.025
06333	0.638	0.338	0.1500	0.187	0.31	0.10	0.21	0.28	16	0.375	0.035	0.250	0.310	0.035	0.750	0.010	0.025
07525	0.750	0.250	0.2500	0.196	0.53	0.12	0.41	0.39	23	0.500	0.035	0.250	0.310	0.035	0.875	0.010	0.030
08452	0.840	0.520	0.1600	0.363	0.34	0.12	0.22	0.28	41	0.625	0.035	0.312	0.375	0.035	1.000	0.010	0.030
08959	0.892	0.592	0.1500	0.432	0.31	0.10	0.21	0.29	27	0.750	0.035	0.375	0.430	0.060	1.000	0.015	0.035
09237	0.925	0.370	0.2775	0.329	0.58	0.12	0.46	0.40	28	0.750	0.035	0.375	0.430	0.060	1.060	0.015	0.035
09565	0.950	0.650	0.1500	0.503	0.31	0.12	0.19	0.22	48	0.750	0.035	0.375	0.430	0.060	1.075	0.015	0.035
10355	1.030	0.550	0.2400	0.490	0.50	0.12	0.38	0.39	23	0.750	0.035	0.375	0.430	0.060	1.155	0.015	0.035
11557	1.158	0.575	0.2920	0.590	0.61	0.20	0.41	0.53	63	0.750	0.035	0.375	0.430	0.060	1.250	0.015	0.035
11775	1.176	0.750	0.2130	0.726	0.45	0.12	0.33	0.36	36	0.875	0.035	0.375	0.430	0.060	1.312	0.015	0.030
12562	1.250	0.625	0.3125	0.690	0.66	0.12	0.54	0.49	16	0.875	0.035	0.375	0.430	0.060	1.375	0.015	0.040
12575	1.250	0.750	0.2500	0.785	0.53	0.12	0.41	0.40	33	0.875	0.035	0.375	0.430	0.060	1.375	0.015	0.035
13554	1.350	0.540	0.4050	0.701	0.85	0.12	0.73	0.55	21	1.000	0.035	0.375	0.430	0.060	1.500	0.015	0.050

Part No.	O.D.	I.D.	Span	M.E.A.	Ext. Lgth.	Compr. Lgth.	Free Stroke	Free Lgth.	S/R	Style A				Style B	Style F		
										A*	T	N	L	L	F*	T	L
13783	1.375	0.830	0.2725	0.954	0.57	0.12	0.45	0.49	27	1.000	0.035	0.375	0.430	0.060	1.500	0.015	0.040
14040	1.400	0.400	0.5000	0.636	1.05	0.20	0.85	0.63	45	1.125	0.049	0.430	0.500	0.060	1.500	0.015	0.045
14393	1.437	0.937	0.2500	1.106	0.53	0.16	0.37	0.43	46	1.125	0.049	0.430	0.500	0.060	1.562	0.015	0.030
15054	1.500	0.540	0.4800	0.817	1.01	0.16	0.85	0.80	23	1.125	0.049	0.430	0.500	0.060	1.625	0.015	0.045
15075	1.500	0.750	0.3750	0.994	0.79	0.12	0.67	0.53	14	1.125	0.049	0.430	0.500	0.060	1.625	0.015	0.040
15010	1.500	1.000	0.2500	1.227	0.53	0.12	0.41	0.40	29	1.125	0.049	0.430	0.500	0.060	1.625	0.015	0.045
15311	1.530	1.180	0.1750	1.442	0.37	0.16	0.21	0.23	96	1.250	0.049	0.430	0.500	0.060	1.625	0.015	0.035
16275	1.625	0.750	0.4375	1.107	0.92	0.12	0.80	0.86	13	1.250	0.049	0.430	0.500	0.060	1.750	0.015	0.050
16281	1.625	0.815	0.4050	1.168	0.85	0.12	0.73	0.73	13	1.250	0.049	0.430	0.500	0.060	1.750	0.015	0.050
17412	1.740	1.220	0.2600	1.720	0.55	0.24	0.31	0.37	125	1.375	0.065	0.500	0.560	0.060	1.875	0.015	0.035
17575	1.750	0.750	0.5000	1.227	1.05	0.16	0.89	1.02	16	1.250	0.049	0.430	0.500	0.060	1.875	0.015	0.050
17510	1.750	1.000	0.3750	1.484	0.79	0.16	0.63	0.62	36	1.250	0.049	0.430	0.500	0.060	1.875	0.015	0.050
18711	1.875	1.125	0.3750	1.766	0.79	0.16	0.67	0.59	26	1.500	0.049	0.500	0.560	0.060	2.000	0.015	0.045
18715	1.875	1.500	0.1875	2.081	0.39	0.12	0.27	0.30	53	1.625	0.049	0.500	0.560	0.060	2.000	0.015	0.045
18913	1.890	1.390	0.2500	2.112	0.53	0.12	0.41	0.44	27	1.500	0.049	0.500	0.560	0.060	2.000	0.015	0.045
20010	2.000	1.070	0.4650	1.850	0.98	0.16	0.82	0.58	23	1.625	0.049	0.500	0.560	0.075	2.125	0.015	0.050
20012	2.000	1.250	0.3750	2.073	0.79	0.16	0.63	0.54	27	1.625	0.049	0.500	0.560	0.075	2.125	0.015	0.050
20615	2.062	1.562	0.2500	2.578	0.53	0.12	0.41	0.38	32	1.625	0.049	0.500	0.560	0.075	2.187	0.015	0.050
21016	2.100	1.600	0.2500	2.687	0.53	0.16	0.37	0.47	70	1.625	0.049	0.500	0.560	0.075	2.250	0.015	0.045
22010	2.200	1.040	0.5800	2.060	1.22	0.16	1.06	1.01	16	1.625	0.049	0.500	0.560	0.075	2.375	0.015	0.060
22014	2.200	1.400	0.4000	2.544	0.84	0.16	0.68	0.66	30	1.625	0.049	0.500	0.560	0.075	2.375	0.015	0.050
22016	2.200	1.600	0.3000	2.835	0.63	0.24	0.39	0.40	116	1.875	0.065	0.500	0.590	0.075	2.375	0.015	0.050
22515	2.250	1.500	0.3750	2.760	0.79	0.16	0.63	0.52	31	1.625	0.049	0.500	0.560	0.075	2.375	0.015	0.050
22517	2.250	1.750	0.2500	3.141	0.53	0.12	0.41	0.43	36	1.625	0.049	0.500	0.560	0.075	2.375	0.015	0.050
23016	2.300	1.660	0.3200	2.442	0.67	0.20	0.47	0.61	73	1.875	0.065	0.500	0.590	0.075	2.375	0.015	0.050
24516	2.450	1.645	0.4030	3.292	0.85	0.16	0.69	0.65	36	1.875	0.065	0.500	0.590	0.075	2.562	0.015	0.050
24915	2.490	1.530	0.4800	3.172	1.01	0.16	0.85	0.83	21	1.625	0.049	0.500	0.560	0.075	2.625	0.015	0.050
25017	2.500	1.750	0.3750	3.545	0.79	0.16	0.63	0.68	33	1.875	0.065	0.500	0.590	0.075	2.625	0.015	0.050
25018	2.500	1.800	0.3500	3.630	0.74	0.16	0.58	0.45	30	2.000	0.065	0.500	0.590	0.075	2.625	0.015	0.050
26218	2.625	1.875	0.3750	3.975	0.79	0.16	0.63	0.52	23	2.000	0.065	0.500	0.590	0.075	2.750	0.015	0.050
26820	2.680	2.010	0.3350	4.318	0.70	0.12	0.58	0.54	19	2.125	0.065	0.500	0.590	0.075	2.812	0.015	0.050
27517	2.750	1.750	0.5000	3.975	1.05	0.16	0.89	0.82	16	2.000	0.065	0.500	0.590	0.075	2.875	0.015	0.050
28722	2.875	2.250	0.3125	5.156	0.66	0.28	0.38	0.43	175	2.375	0.065	0.500	0.590	0.075	3.000	0.015	0.050
30020	3.000	2.000	0.5000	4.907	1.05	0.16	0.89	0.70	19	2.125	0.065	0.500	0.590	0.075	3.125	0.015	0.060
30021	3.000	2.150	0.4250	5.206	0.89	0.16	0.73	0.61	24	2.375	0.065	0.500	0.590	0.075	3.125	0.015	0.045
31625	3.165	2.583	0.2910	6.486	0.61	0.20	0.41	0.65	120	2.750	0.065	0.500	0.590	0.075	3.312	0.015	0.050
32522	3.250	2.250	0.5000	5.938	1.05	0.16	0.89	0.87	20	2.375	0.065	0.500	0.590	0.125	3.375	0.015	0.065
33128	3.310	2.810	0.2500	7.352	0.53	0.16	0.37	0.43	116	3.000	0.065	0.500	0.590	0.125	3.437	0.015	0.050
35017	3.500	1.785	0.8575	5.483	1.80	0.24	1.56	1.35	21	2.750	0.065	0.500	0.590	0.125	3.625	0.015	0.060
35020	3.500	2.000	0.7500	5.938	1.57	0.25	1.32	1.25	18	2.750	0.065	0.500	0.590	0.125	3.625	0.015	0.040
35025	3.500	2.500	0.5000	7.067	1.05	0.16	0.89	0.71	21	2.750	0.065	0.500	0.590	0.125	3.625	0.015	0.040

Part No.	O.D.	I.D.	Span	M.E.A.	Ext. Lgth.	Compr. Lgth.	Stroke	Free Lgth.	S/R	Style A				Style B	Style F		
										A*	T	N	L	L	F*	T	L
35028	3.500	2.850	0.3250	7.915	0.68	0.16	0.52	0.46	45	3.000	0.065	0.500	0.590	0.125	3.625	0.015	0.040
36227	3.620	2.750	0.4350	7.965	0.91	0.16	0.75	0.74	29	3.000	0.065	0.500	0.590	0.125	3.750	0.015	0.060
36426	3.640	2.640	0.5000	7.742	1.05	0.16	0.89	0.71	28	2.750	0.065	0.500	0.590	0.125	3.750	0.015	0.060
37226	3.720	2.640	0.5400	7.940	1.13	0.20	0.93	0.80	19	2.750	0.065	0.500	0.590	0.125	3.875	0.015	0.065
37530	3.750	3.090	0.3300	9.184	0.69	0.12	0.57	0.66	25	3.250	0.065	0.500	0.590	0.125	3.875	0.015	0.080
39926	3.990	2.690	0.6500	8.759	1.36	0.16	1.20	1.02	19	2.875	0.083	0.500	0.590	0.125	4.125	0.015	0.080
40030	4.000	3.000	0.5000	9.618	1.05	0.16	0.89	0.69	22	3.250	0.065	0.500	0.590	0.125	4.125	0.015	0.080
42034	4.200	3.400	0.4000	11.338	0.84	0.16	0.68	0.65	31	3.750	0.065	0.500	0.590	0.125	4.375	0.015	0.045
42532	4.250	3.200	0.5250	10.895	1.10	0.20	0.90	0.95	41	3.500	0.065	0.500	0.590	0.125	4.375	0.015	0.080
43536	4.350	3.640	0.3550	12.532	0.75	0.16	0.59	0.57	44	3.750	0.065	0.500	0.590	0.125	4.500	0.015	0.080
45035	4.500	3.500	0.5000	12.563	1.05	0.20	0.85	0.90	48	3.750	0.065	0.500	0.590	0.125	4.625	0.015	0.080
47530	4.750	3.000	0.8750	11.790	1.34	0.20	1.14	0.96	20	4.000	0.065	0.500	0.590	0.125	4.875	0.015	0.090
47535	4.750	3.500	0.6250	13.360	1.31	0.20	1.11	0.95	25	4.000	0.065	0.500	0.590	0.125	4.875	0.015	0.090
47537	4.750	3.750	0.5000	14.182	1.05	0.20	0.85	0.74	31	4.000	0.065	0.500	0.590	0.125	4.875	0.015	0.090
49730	4.970	3.030	0.9700	12.563	2.03	0.36	1.67	1.64	34	4.250	0.065	0.500	0.590	0.125	5.125	0.015	0.100
49740	4.970	4.000	0.4850	15.794	1.02	0.16	0.86	0.68	22	4.250	0.065	0.500	0.590	0.125	5.125	0.015	0.100
49742	4.970	4.260	0.3550	16.723	0.75	0.16	0.59	0.70	51	4.500	0.065	0.625	0.750	0.125	5.125	0.015	0.100
51746	5.170	4.630	0.2700	18.853	0.57	0.12	0.45	0.43	52	5.000	0.120	0.625	0.750	0.125	5.312	0.015	0.125
52535	5.250	3.530	0.8600	15.132	1.80	0.24	1.56	1.60	19	4.500	0.083	0.625	0.750	0.125	5.375	0.020	0.125
52542	5.250	4.200	0.5250	17.530	1.10	0.24	0.86	0.78	53	4.500	0.083	0.625	0.750	0.125	5.375	0.020	0.125
55045	5.500	4.500	0.5000	19.630	1.05	0.20	0.85	0.75	39	5.000	0.120	0.625	0.750	0.125	5.625	0.020	0.125
60040	6.000	4.030	0.9850	19.748	2.07	0.28	1.79	1.75	38	5.000	0.120	0.625	0.750	0.187	6.125	0.020	0.125
60045	6.000	4.500	0.7500	21.642	1.57	0.28	1.29	0.93	31	5.000	0.120	0.625	0.750	0.315	6.125	0.020	0.125
64454	6.440	5.400	0.5200	27.518	1.09	0.24	0.85	0.78	56	6.000	0.120	0.625	0.750	Available on request. Contact us for details.			
64458	6.440	5.830	0.3050	29.554	0.64	0.20	0.44	0.47	147	6.000	0.120	0.625	0.750	Available on request. Contact us for details.			
69849	6.980	4.980	1.0000	28.079	2.10	0.28	1.82	1.25	13	6.000	0.120	0.625	0.750	Available on request. Contact us for details.			
69858	6.980	5.880	0.5500	32.464	1.16	0.20	0.96	0.58	31	6.625	0.134	0.625	0.750	Available on request. Contact us for details.			
75060	7.500	6.000	0.7500	35.775	1.57	0.24	1.33	1.05	16	6.625	0.134	0.625	0.750	Available on request. Contact us for details.			
80063	8.000	6.300	0.8500	40.141	1.78	0.28	1.50	1.42	27	6.625	0.134	0.625	0.750	Available on request. Contact us for details.			
80068	8.000	6.800	0.6000	42.997	1.26	0.28	0.98	0.79	68	6.625	0.134	0.625	0.750	Available on request. Contact us for details.			
82562	8.250	6.250	1.0000	41.272	2.10	0.50	1.60	1.83	56	6.625	0.134	0.625	0.750	Available on request. Contact us for details.			
88078	8.800	7.800	0.5000	54.092	1.05	0.24	0.81	0.89	122	8.000	0.120	0.625	0.750	Available on request. Contact us for details.			
98078	9.800	7.800	1.0000	60.806	2.10	0.28	1.82	1.70	36	8.000	0.120	0.625	0.750	Available on request. Contact us for details.			
98088	9.800	8.800	0.5000	67.912	1.05	0.36	0.69	0.75	282	8.000	0.120	0.625	0.750	Available on request. Contact us for details.			
10193	10.175	9.375	0.4000	75.026	0.84	0.28	0.56	0.61	358	10.000	0.120	0.625	0.750	Available on request. Contact us for details.			
11095	11.000	9.500	0.7500	82.495	1.57	0.28	1.29	1.10	60	10.000	0.120	0.625	0.750	Available on request. Contact us for details.			
11010	11.000	10.000	0.5000	86.569	1.05	0.24	0.81	0.77	155	10.000	0.120	0.625	0.750	Available on request. Contact us for details.			
11298	11.250	9.812	0.7190	87.080	1.51	0.28	1.23	1.10	84	10.000	0.120	0.625	0.750	Available on request. Contact us for details.			
14012	14.000	12.000	1.0000	132.699	2.10	0.32	1.78	0.19	52	12.000	0.120	0.625	0.750	Available on request. Contact us for details.			