



**MICROFLEX INDUSTRIAL**

**ROUND METAL  
EXPANSION JOINTS**

## DESIGN

Microflex round metal expansion joints are designed in accordance with the latest edition of the Standards of the Expansion Joint Manufacturers Association (E.J.M.A.).

## FEATURES

### 1 BELLOWS

- Designed for 800°F
- Material STD. for 2"-144" A-240 304 SST
- Minimum cycle life = 1000
- Non-Concurrent Movements

### 2 EXPANSION JOINTS

- 25 psi - Plate Flanges A-36 CST
- 75 psi - Plate Flanges A-36 CST
- 150 psi - Forged Flanges A-105 CST
- 300 psi - Forged Flanges A-105 CST

For more Information, refer to Flange Chart on pages 10-11.

### 3 PIPE

- Sch. 40 STD CST
- A-53 Gr.B CST (Standard)
- A-106 CST (Optional)
- API 5L or A-36 CST (For Large Sizes)

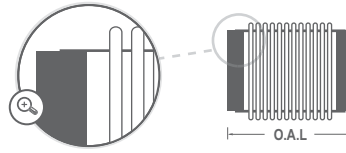
### 4 END FITTINGS

- A: Angle Flange
- C: Collar
- E: Elbow
- F: Fixed Flange
- V: Vanstone Flange
- W: Weld End

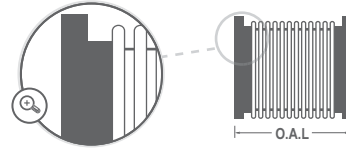
### 5 STYLES

- S: Single Expansion Joint
- ST: Single Tied Expansion Joint
- U: Universal Expansion Joint
- UT: Universal Tied Expansion Joint
- H: Hinged Expansion Joint
- HU: Hinged Universal Expansion Joint
- G: Gimbal Expansion Joint
- GU: Gimbal Universal Expansion Joint
- PBS: Pressure Balance Single Expansion Joint
- PBU: Pressure Balance Universal Expansion Joint
- IPB: In-Line Pressure Balanced Expansion Joint

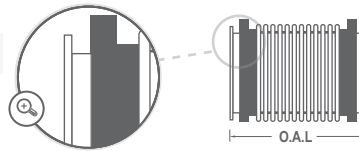
## WELD ENDS (WW)



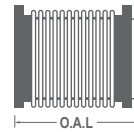
## FIXED FLANGES (FF)



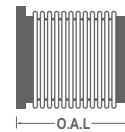
## VANSTONE FLANGE (VV)



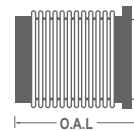
## FIXED / VANSTONE (FV)



## FIXED / WELD (FW)



## WELD / VANSTONE (WV)



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ROUND METAL

TECHNICAL DATA SHEET > STANDARD FLANGE DATA

NOM. SIZE	FLANGE SPECIFICATIONS					150 LBS. FORGED			50 LBS. & 75 LBS. AWWA CI. D PLATE A36		25 LBS. PLATE A36 CST	
	INCHES	OD	ID	# OF HOLES	BOLT HOLE DIA.	BOLT CIRCLE	LENGTH THRU HUB	FLANGE THICKNESS	FLANGE WEIGHT	FLANGE THICKNESS	FLANGE WEIGHT	FLANGE THICKNESS
2	6	2.44	4	0.75	4.75	1	0.75	5	-	-	-	-
2 1/2	7	2.94	4	0.75	5.5	1.125	0.875	8	0.625	5.4	-	-
3	7.5	3.57	4	0.75	6	1.188	0.938	9	0.625	5.9	-	-
3 1/2	8.5	4.07	8	0.75	7	1.25	0.938	11	0.625	7	-	-
4	9	4.57	8	0.75	7.5	1.313	0.938	12	0.625	8.1	-	-
5	10	5.66	8	0.875	8.5	1.438	0.938	13	0.75	10.4	-	-
6	11	6.72	8	0.875	9.5	1.563	1	18	0.75	11.4	-	-
8	13.5	8.72	8	0.875	11.75	1.75	1.125	28	1	22	-	-
10	16	10.88	12	1	14.25	1.938	1.188	37	1	28.5	1	28.5
12	19	12.88	12	1	17	2.188	1.25	60	1	41.5	1	41.5
14	21	14.14	12	1.125	18.75	2.25	1.375	77	1	50.5	1	50.5
16	23.5	16.16	16	1.125	21.25	2.5	1.438	93	1	60.8	1	60.8
18	25	18.18	16	1.25	22.75	2.688	1.562	120	1.062	65.2	1.062	65.2
20	27.5	20.2	20	1.25	25	2.875	1.688	155	1.125	81.2	1.125	81.2
22	29.5	22.22	20	1.375	27.25	3.125	1.813	195	1.188	90.8	1.188	90.8
24	32	24.25	20	1.375	29.5	3.25	1.875	210	1.25	112	1.25	112
26	34.25	24.25	24	1.375	31.75	3.375	2	233	1.312	128	0.75	82.5
28	36.5	26.25	28	1.375	34	3.438	2.063	275	1.312	140.5	0.75	90
30	38.75	28.25	28	1.375	36	3.5	2.125	300	1.375	163.3	0.75	105
32	41.75	30.25	28	1.625	38.5	3.625	2.25	370	1.5	210.1	0.75	115
34	43.75	34.25	32	1.625	40.5	3.688	2.313	410	1.5	219.1	0.75	125
36	46	36.25	32	1.625	42.75	3.75	2.375	460	1.625	259.4	0.75	135
38	48.75	38.25	32	1.625	45.25	3.75	2.375	520	1.625	299.8	0.75	141.5
40	50.75	40.25	36	1.625	47.25	3.875	2.5	580	1.625	311.1	1	197.4
42	53	42.25	36	1.625	49.5	4	2.625	650	1.75	361.7	1	206
44	55.25	44.25	40	1.625	51.75	4	2.625	700	1.75	385	1	218.7
46	57.25	46.25	40	1.625	53.75	4.06	2.68	750	1.75	410	1	231.4
48	59.5	48.25	44	1.625	56	4.125	2.75	800	1.75	457.3	1	244

NOM. SIZE	FLANGE SPECIFICATIONS					300 LBS. FORGED		
	INCHES	OD	ID	# OF HOLES	BOLT HOLE DIA.	BOLT CIRCLE	LENGTH THRU HUB	FLANGE THICKNESS
2	6.5	2.44	8	0.75	5	1.313	0.875	7
2 1/2	7.5	2.94	8	0.875	5.875	1.5	1	10
3	8.25	3.57	8	0.875	6.625	1.688	1.125	13
3 1/2	9	4.07	8	0.875	7.25	1.75	1.188	16
4	10	4.57	8	0.875	7.875	1.875	1.25	21
5	11	5.66	8	0.875	9.25	2	1.375	26
6	12.5	6.72	12	0.875	10.625	2.063	1.438	35
8	15	8.72	12	1	13	2.438	1.625	54
10	17.5	10.88	16	1.125	15.25	2.625	1.875	77
12	20.5	12.88	16	1.25	17.75	2.875	2	110
14	23	14.14	20	1.25	20.25	3	2.125	164
16	25.5	16.16	20	1.375	22.5	3.25	2.25	220
18	28	18.18	24	1.375	24.75	3.5	2.375	280
20	30.5	20.2	24	1.375	27	3.75	2.5	325
22	33	22.22	24	1.625	29.25	4	2.625	400
24	36	24.25	24	1.625	32	4.188	2.75	490
26	38.25	26.25	28	1.75	34.5	7.25	3.125	550
28	40.25	28.25	28	1.75	37	7.75	3.375	710
30	43	30.25	28	1.875	39.25	8.25	3.625	800
32	45.25	32.25	28	2	41.5	8.75	3.875	875
34	47.5	34.25	28	2	43.5	9.125	4	1075
36	50	36.25	32	2.125	46	9.5	4.125	1200

NOTE: All data shown has been consolidated from current standards for easier reference.

ROUND METAL

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# TECHNICAL DATA SHEET > STANDARD FLANGE DATA

NOM. SIZE	FLANGE SPECIFICATIONS					CLASS 125 LW FORGED STEEL MAT'L A-105			
INCHES	OD	ID	# OF HOLES	BOLT HOLE DIA.	BOLT CIRCLE	LENGTH THRU HUB	FLANGE THICKNESS	FLANGE WEIGHT	PSI
26	34.25	24.25	24	1.375	31.75	1.75	1	125	FOR 50 PSI & 75 PSI EJ
28	36.5	26.25	28	1.375	34	1.75	1	140	
30	38.75	28.25	28	1.375	36	1.75	1	150	
32	41.75	30.25	28	1.625	38.5	1.75	1.125	205	
34	43.75	34.25	32	1.625	40.5	1.75	1.125	215	
36	46	36.25	32	1.625	42.75	1.75	1.125	235	
38	48.75	38.25	32	1.625	45.25	1.75	1.125	260	
40	50.75	40.25	36	1.625	47.25	1.75	1.125	280	
42	53	42.25	36	1.625	49.5	1.75	1.25	330	
44	55.25	44.25	40	1.625	51.75	2.25	1.25	360	
46	57.25	46.25	40	1.625	53.75	2.25	1.25	390	
48	59.5	48.25	44	1.625	56	2.50	1.375	425	
50	61.75	50.25	44	1.875	58.25	2.50	1.375	450	
52	64	52.25	44	1.875	60.5	2.50	1.375	475	
54	66.25	54.25	44	1.875	62.75	2.50	1.375	500	
60	73	60.25	52	1.875	69.25	2.75	1.5	640	
66	80	66.25	52	1.875	76	2.75	1.5	750	
72	86.5	72.25	60	1.875	82.5	2.75	1.5	850	
78	93	78.25	64	2.125	89	3.00	1.75	925	
84	99.75	84.25	64	2.125	95.5	3.00	1.75	1000	
90	106.5	90.25	68	2.375	102	3.25	2	1325	
96	113.25	96.25	68	2.375	108.5	3.25	2	1650	

NOM. SIZE	FLANGE SPECIFICATIONS					PLATE FLANGE 125 LW, OD & DRILLING, MAT'L A36 CST			
INCHES	OD	ID	# OF HOLES	BOLT HOLE DIA.	BOLT CIRCLE	LENGTH THRU HUB	FLANGE THICKNESS	FLANGE WEIGHT	PSI
102	120	102.25	72	2.688	114.5	3.5	1.5	1152	FOR 15 PSI EJ
108	126.75	108.25	72	2.688	120.75	3.5	1.5	1286	
120	140.25	120.25	76	2.938	132.75	3.75	1.5	1530	
132	153.75	132.25	80	3.188	145.75	4	1.5	1792	
138	160.5	138.25	84	3.438	152	4.5	1.75	2216	
144	167.25	144.25	84	3.438	158.25	4.5	1.75	2418	

WORKING PRESSURE RATING(PSIG) AT TEMPERATURE (DEG. F)									
SLIP ON FLANGES	NOM. ID	-20°F TO 100°F	200°F	300°F	400°F	500°F	600°F	700°F	800°F
CL. 150 FORG. ST. ANSI B16.5 MAT'L A105	1" – 24"	285	260	230	200	170	140	110	80
CL. 125 FORG. ST. TO B16.1 MAT'L A105	26" – 96"	275	240	210	180	150	130	110	80
CL. 300 FORG. ST. ANSI B16.5 MAT'L A105	1" – 24"	740	675	655	635	600	550	535	410
CL. 400 FORG. ST. ANSI B16.5 MAT'L A105	1" – 24"	990	900	875	845	800	730	710	550
CL. 125 LW PLATE MAT'L A36 CST	102" – 144"	30	29	28	26	24	21	18	15
AWWA TABLE 1 CL. D PLATE A36 CST	2" – 48"	148	143	138	129	121	110	100	75
PLATE 3/4" THK MAT'L A36 CST	12" – 18"	85	82	79	74	69	62	56	43
	20" – 28"	51	49	46	44	41	37	33	23
	30" – 38"	34	32	30	28	27	25	22	17
	40" – 48"	29	27	25	23	22	19	17	12
PLATE 1" THK MAT'L A36 CST	12" – 18"	148	143	138	129	121	110	100	75
	20" – 28"	118	114	110	103	96	88	80	60
	30" – 32"	88	85	82	77	72	66	59	44
	34" – 38"	59	55	48	44	38	31	27	23
	40" – 48"	44	42	38	34	30	26	22	18

NOTE: All data shown has been consolidated from current standards for easier reference.

Microflex, Inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
2"	50	5	.600	.11	10	707	2096	12	8	3	-	-	-	-
		10	1.20	.47	10	353	262	6	10	3	-	-	-	-
		15	1.30	.92	10	542	178	9	12	3	-	-	-	-
		20	1.73	1.64	10	406	75	7	14	3	-	-	-	-
	150	5	.570	.11	10	707	2096	12	8	3	4	11	6	7
		10	.840	.39	10	812	602	14	10	3	6	11	8	7
		15	1.17	.83	10	1271	419	22	12	4	8	12	10	8
		20	1.56	1.48	5.6	953	177	16	14	5	10	13	12	9
	300	5	.400	.09	10	1625	4819	28	8	3	4.5	15	6.25	7
		10	.760	.36	10	1906	1413	33	10	3	6.5	16	8.25	8
		15	-	-	-	-	-	-	-	-	-	-	-	-
		20	-	-	-	-	-	-	-	-	-	-	-	-
2 1/2"	50	5	.580	.1	10	827	3403	20	8	4	4.25	12	6.25	8
		10	1.17	.4	10	414	425	10	10	4	6.25	12	8.25	8
		15	1.76	.9	6.8	276	126	7	12	4	8.25	12	10.25	8
		20	1.66	1.34	10	483	124	12	14	5	10.25	13	12.25	9
	150	5	.560	.1	10	827	3403	20	8	4	4.25	17	6.25	10
		10	.810	.32	10	965	993	23	10	4	6.25	17	8.25	11
		15	.930	.56	10	1262	577	30	12	5	8.25	18	10.25	11
		20	1.50	1.21	9.8	1131	291	27	14	6	10.25	19	12.25	13
	300	5	.380	.07	10	1931	7945	46	8	4	5	15	6.5	9
		10	.770	.31	6.2	965	993	23	10	4	7	15	8.5	10
		15	-	-	-	-	-	-	-	-	-	-	-	-
		20	-	-	-	-	-	-	-	-	-	-	-	-
3"	50	5	.560	.08	10	983	5717	33	8	5	4.5	13	6.25	9
		10	1.13	.33	10	492	715	17	10	5	6.5	13	8.25	9
		15	1.70	.76	9.5	328	212	11	12	5	8.5	13	10.25	9
		20	1.61	1.09	10	577	210	20	14	6	10.5	14	12.25	10
	150	5	.530	.08	10	983	5717	33	8	5	4.5	19	6.25	12
		10	.780	.26	10	1155	1678	39	10	5	6.5	19	8.25	12
		15	1.17	.59	6.6	770	497	26	12	6	8.5	20	10.25	13
		20	1.22	.82	9.4	1151	418	39	14	6	10.5	21	12.25	13
	300	5	.290	.05	7.7	4603	26764	156	8	5	5.5	21	6.75	13
		10	.590	.2	10	2302	3345	78	10	5	7.5	21	8.75	13
		15	.890	.45	10	1534	991	52	12	6	9.5	22	10.75	14
		20	1.08	.73	10	2811	1022	95	14	8	11.5	24	12.75	16

ROUND METAL

Microflex inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
3 1/2"	50	5	.970	.11	10	551	2750	25	8.5	6	5	15	6.75	10
		10	1.94	.45	6.9	275	344	13	11	6	7.5	15	9.25	11
		15	2.10	1.02	10	422	234	19	13.5	7	10	16	11.75	12
		20	2.14	1.57	10	613	192	28	16	8	12.5	18	14.25	13
	150	5	.660	.11	10	1266	6323	57	8.5	6	5	23	6.75	14
		10	1.33	.45	5.2	633	790	29	11	6	7.5	24	9.25	15
		15	1.27	.69	10	1425	791	65	13.5	8	10	25	11.75	17
		20	1.94	1.42	9.3	1430	447	65	16	11	12.5	28	14.25	20
	300	5	.490	.09	10	2454	12259	111	8.5	6	6	33	7.25	20
		10	.990	.36	5.4	1227	1532	56	11	7	8.5	34	9.75	20
		15	1.42	.78	5.3	1907	1058	87	13.5	11	11	38	12.25	25
		20	-	-	-	-	-	-	-	-	-	-	-	-
4"	50	5	.950	.10	10	607	3734	34	8.5	6	5	17	6.75	12
		10	1.91	.41	7.9	304	467	17	11	7	7.5	18	9.25	12
		15	2.05	.92	10	469	320	26	13.5	8	10	19	11.75	13
		20	2.10	1.38	10	683	263	38	16	9	12.5	20	14.25	15
	150	5	.650	.1	10	1407	8652	79	8.5	7	5	25	6.75	16
		10	1.30	.41	6.5	703	1082	39	11	7	7.5	26	9.25	17
		15	1.25	.62	10	1601	1094	90	13.5	9	10	28	11.75	18
		20	1.90	1.25	10	1592	612	89	16	13	12.5	31	14.25	22
	300	5	.400	.06	8.1	4804	29551	269	8.5	7	6.25	43	7.5	25
		10	.810	.26	10	2402	3694	134	11	8	8.75	44	10	26
		15	1.39	.69	9.5	2123	1451	119	13.5	11	11.25	48	12.5	29
		20	1.49	.98	10	2893	1112	162	16	13	13.75	49	15	31
5"	50	5	1.00	.08	10	627	5701	52	8.5	9	5.5	22	7	15
		10	2.01	.33	9	313	713	26	11	9	8	23	9.5	16
		15	2.17	.76	10	488	493	40	13.5	11	10.5	24	12	17
		20	2.26	1.22	10	722	410	60	16	12	13	26	14.5	19
	150	5	.680	.08	10	1463	13303	121	8.5	9	5.5	27	7	18
		10	1.37	.33	10	731	1663	60	11	10	8	28	9.5	19
		15	1.64	.66	6	963	973	80	13.5	11	10.5	30	12	21
		20	1.80	.97	6.2	1269	721	105	16	13	13	32	14.5	23
	300	5	.640	.08	10	3279	29825	271	8.5	9	6.5	54	7.5	31
		10	1.28	.33	10	1639	3728	136	11	11	9	55	10	33
		15	1.51	.61	10	2225	2249	184	13.5	12	11.5	57	12.5	34
		20	1.62	.87	10	3027	1721	250	16	13	14	58	15	35

Microflex inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
6"	50	5	1.35	.1	10	488	4345	57	9	11	6	24	7.5	18
		10	2.02	.41	10	563	1254	66	12	12	9	26	10.5	19
		15	2.34	.92	10	726	719	85	15	15	12	28	13.5	21
		20	3.13	1.64	5.9	545	303	64	18	16	15	30	16.5	23
	150	5	.740	.1	10	2179	19416	254	9	12	6	38	7.5	25
		10	1.49	.4	10	1089	2427	127	12	13	9	40	10.5	26
		15	1.85	.76	7.9	1269	1257	148	15	16	12	42	13.5	29
		20	1.81	.99	10	2328	1297	272	18	20	15	46	16.5	33
	300	5	.440	.06	6.3	9314	83005	1087	9	12	7	73	8	43
		10	.880	.24	10	4657	10376	543	12	15	10	75	11	45
		15	1.32	.54	10	3105	3074	362	15	17	13	78	14	48
		20	1.37	.75	10	4724	2631	551	18	22	16	83	17	52
8"	50	5	1.57	.10	10	387	4220	75	9.5	16	7	46	8.25	31
		10	2.81	.43	8.9	444	1212	86	13	19	10.5	48	11.75	34
		15	3.28	.97	6.8	571	692	111	16.5	22	14	52	15.25	37
		20	3.58	1.73	8.6	743	507	144	20	26	17.5	56	18.75	41
	150	5	.850	.1	9.2	2973	32425	578	9.5	18	7	59	8.25	39
		10	1.71	.42	10	1487	4053	289	13	21	10.5	62	11.75	41
		15	1.90	.7	10	2404	2913	467	16.5	26	14	68	15.25	47
		20	2.53	1.25	7.4	1803	1229	350	20	30	17.5	72	18.75	51
	300	5	.480	.05	5.5	14507	158213	2819	9.5	19	8.5	112	9	65
		10	.960	.23	9.2	7253	19777	1409	13	22	12	116	12.5	69
		15	1.45	.53	10	4836	5860	940	16.5	29	15.5	123	16	76
		20	1.93	.95	9.1	3627	2472	705	20	34	19	127	19.5	80
10"	25	5	1.80	.11	10	264	3411	79	10	23	8	60	9	41
		10	3.60	.45	8.4	302	976	91	14	27	12	63	13	45
		15	4.98	1.02	9.2	386	556	116	18	32	16	68	17	50
		20	5.42	1.81	10	500	404	151	22	38	20	75	21	57
	50	5	1.80	.11	10	603	7807	182	10	24	8	60	9	42
		10	3.24	.45	10	579	1875	175	14	28	12	65	13	47
		15	3.99	1.02	6.6	666	958	201	18	34	16	71	17	52
		20	3.90	1.77	10	1202	973	362	22	44	20	81	21	62
	75	5	1.57	.11	10	1159	15001	349	10	24	8	61	9	43
		10	2.61	.45	10	999	3234	301	14	30	12	66	13	48
		15	2.90	.98	10	1603	2306	483	18	38	16	75	17	57
		20	3.86	1.75	6.7	1202	973	362	22	44	20	81	21	62
	150	5	.930	.1	8.4	4809	62249	1449	10	27	8	80	9	53
		10	1.87	.42	10	2405	7781	724	14	32	12	86	13	59
		15	2.81	.95	6.7	1603	2306	483	18	38	16	92	17	65
		20	2.96	1.34	10	2399	1941	723	22	49	20	103	21	76
	300	5	.710	.08	6.3	9596	124199	2890	10	28	9.25	162	9.5	95
		10	1.42	.32	9.6	4798	15525	1445	14	35	13.25	169	13.5	102
		15	2.60	.88	10	3680	5292	1108	18	54	17.25	188	17.5	121
		20	2.67	1.21	10	5716	4624	1722	22	75	21.25	209	21.5	142

ROUND METAL

Microflex inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
12"	25	3	1.35	.05	10	332	10761	141	9	27	7.5	85	8.25	56
		5	2.25	.14	6.4	199	2324	85	11	28	9.5	87	10.25	58
		10	4.50	.59	10	416	1212	176	16	36	14.5	94	15.25	65
		15	6.03	1.34	9.3	472	611	200	21	44	19.5	102	20.25	73
	50	3	1.35	.05	10	1387	44899	588	9	28	7.5	87	8.25	58
		5	2.25	.14	10	832	9698	353	11	31	9.5	89	10.25	60
		10	3.92	.59	10	708	2063	300	16	38	14.5	96	15.25	67
		15	4.29	1.34	10	1112	1440	471	21	50	19.5	108	20.25	79
	75	3	1.15	.05	8.9	2360	76396	1000	9	29	7.5	87	8.25	58
		5	1.91	.14	10	1416	16501	600	11	32	9.5	90	10.25	61
		10	2.82	.59	10	1668	4861	707	16	42	14.5	100	15.25	71
		15	4.23	1.34	6.8	1112	1440	471	21	50	19.5	108	20.25	79
	150	3	.810	.05	6.3	5561	180055	2357	9	30	7.5	125	8.25	78
		5	1.35	.14	9.6	3337	38892	1414	11	34	9.5	129	10.25	81
		10	2.71	.59	10	1668	4861	707	16	42	14.5	137	15.25	89
		15	3.24	1.16	10	2202	2852	933	21	56	19.5	151	20.25	104
	300	3	.760	.05	5.9	12467	403639	5284	9	35	9	230	9	132
		5	1.27	.14	9.1	7480	87186	3170	11	41	11	237	11	139
		10	2.54	.59	10	3740	10898	1585	16	57	16	253	16	155
		15	2.98	1.07	10	5089	6591	2157	21	84	21	280	21	182
14"	25	3	1.35	.04	4.7	307	11886	156	9	30	6	104	7.5	67
		5	2.25	.13	5.1	184	2567	93	11	31	7.5	105	9.25	68
		10	4.50	.54	8.6	391	1364	198	16	40	12.5	113	14.25	77
		15	6.47	1.22	7.4	445	689	226	21	49	17.5	123	19.25	86
	50	3	1.35	.04	10	1303	50520	661	9	31	6	105	7.5	68
		5	2.25	.13	10	782	10912	397	11	34	7.5	107	9.25	72
		10	4.20	.54	8.6	667	2326	338	16	42	12.5	116	14.25	79
		15	4.65	1.22	10	1055	1635	535	21	56	17.5	130	19.25	93
	75	3	1.22	.04	8.6	2223	86145	1128	9	32	6	106	7.5	69
		5	2.04	.13	10	1334	18607	677	11	35	7.5	109	9.25	72
		10	3.05	.54	10	1582	5518	803	16	47	12.5	120	14.25	84
		15	4.58	1.22	5.1	1055	1635	535	21	56	17.5	130	19.25	93
	150	3	.870	.04	6.2	5273	204375	2675	9	33	7.5	160	8.25	97
		5	1.45	.13	9.4	3164	44145	1605	11	37	9.5	164	10.25	101
		10	2.91	.54	10	1582	5518	803	16	47	14.5	173	15.25	110
		15	3.51	1.15	10	2087	3235	1059	21	63	19.5	190	20.25	127
	300	3	.820	.04	5.8	11756	455681	5965	9	39	9	339	9	189
		5	1.37	.13	8.9	7054	98427	3579	11	46	11	347	11	197
		10	2.74	.54	10	3527	12303	1789	16	65	16	365	16	215
		15	3.24	1.06	10	4789	7425	2430	21	96	21	396	21	246

Microflex<sup>®</sup> inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WV	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
16"	25	3	1.35	.04	4.6	768	38085	499	9	35	6	125	7.5	80
		5	2.25	.12	10	461	8226	299	11	37	7.5	128	9.25	82
		10	4.50	.48	10	441	1967	286	16	45	12.5	136	14.25	91
		15	6.36	1.08	10	503	998	327	21	56	17.5	147	19.25	101
	50	3	1.35	.04	4.6	1469	72857	954	9	36	9	126	7.5	81
		5	2.25	.12	10	881	15737	572	11	39	7.5	129	9.25	84
		10	4.13	.48	10	755	3369	490	16	48	12.5	138	14.25	93
		15	4.59	1.05	10	1202	2384	780	21	64	17.5	155	19.25	109
	75	3	1.20	.04	4.6	2516	124772	1633	9	37	6	127	7.5	82
		5	2.00	.12	10	1510	26951	980	11	40	7.5	130	9.25	85
		10	4.01	.48	7.9	755	3369	490	16	48	12.5	138	14.25	93
		15	4.52	1.08	7.4	1202	2384	780	21	64	17.5	154	19.25	109
	150	3	.860	.04	4.7	6008	297953	3900	9	38	8	193	8.5	116
		5	1.44	.12	8.3	3605	64358	2340	11	43	10	197	10.5	120
		10	2.88	.48	10	1802	8045	1170	16	53	15	208	15.5	131
		15	3.47	1	10	2380	4721	1545	21	72	20	227	20.5	149
	300	3	.810	.04	4.7	13395	664299	8696	9	44	9.5	453	9.25	249
		5	1.35	.12	7.9	8037	143489	5217	11	53	11.5	461	11.25	257
		10	2.71	.48	10	4018	17936	2609	16	74	16.5	482	16.25	278
		15	3.20	.93	10	5462	10835	3546	21	109	21.5	518	21.25	313
18"	25	3	1.35	.03	4.2	852	52621	689	9	39	6.5	135	7.75	87
		5	2.25	.10	10	511	11366	413	11	42	7.5	137	9.25	90
		10	4.50	.43	10	490	2724	396	16	51	12.5	146	14.25	99
		15	6.30	.97	9.5	564	1393	456	21	63	17.5	158	19.25	111
	50	3	1.35	.03	4.1	1634	100902	1321	9	40	6.5	135	7.75	88
		5	2.25	.10	10	980	21795	792	11	43	7.5	139	9.25	91
		10	4.09	.43	10	846	4701	684	16	54	12.5	149	14.25	102
		15	4.55	.97	10	1348	3330	1090	21	72	17.5	167	19.25	120
	75	3	1.19	.03	4.2	2819	174124	2279	9	41	6.5	136	7.75	89
		5	1.98	.1	10	1692	37611	1368	11	45	7.5	140	9.25	93
		10	3.97	.43	10	846	4701	684	16	54	12.5	149	14.25	102
		15	4.48	.97	10	1348	3330	1090	21	72	17.5	167	19.25	120
	150	3	.680	.03	4	13360	825104	10801	9	45	8.5	249	8.75	147
		5	1.14	.09	6.4	8016	178222	6480	11	51	10.5	255	10.75	153
		10	2.29	.39	10	4008	22278	3240	16	66	15.5	270	15.75	168
		15	3.44	.89	10	2672	6601	2160	21	81	20.5	285	20.75	183
	300	3	.800	.03	4.2	15028	928122	12149	9	50	10	575	9.5	312
		5	1.34	.1	7.1	9017	200474	7289	11	59	12	584	11.5	322
		10	2.69	.43	10	4508	25059	3645	16	83	17	607	16.5	345
		15	3.18	.82	10	6132	15150	4958	21	122	22	647	21.5	385

ROUND METAL

Microflex inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
20"	25	3	1.35	.03	3.8	936	70417	922	9	44	6.5	167	7.75	105
		5	2.25	.09	10	561	15210	553	11	47	7.5	170	9.25	108
		10	4.50	.39	10	541	3668	533	16	57	12.25	180	14.25	118
		15	6.25	.88	10	624	1880	615	21	70	17.25	193	19.25	132
	50	3	1.35	.03	3.8	1805	135840	1778	9	45	6.5	168	7.75	106
		5	2.25	.09	10	1083	29341	1067	11	48	7.5	171	9.25	110
		10	4.50	.39	10	541	3668	533	16	57	12.25	180	14.25	118
		15	4.52	.88	10	1494	4498	1472	21	80	17.25	203	19.25	142
	75	3	1.18	.03	3.8	3122	234950	3075	9	46	6.5	169	7.75	107
		5	1.97	.09	9.4	1873	50749	1845	11	50	7.5	173	9.25	111
		10	3.94	.39	10	937	6344	923	16	60	12.5	183	14.25	122
		15	4.45	.88	10	1494	4498	1472	21	80	17.5	203	19.25	142
	150	3	.680	.03	3.6	14817	1115170	14598	9	50	9	320	9	185
		5	1.14	.08	5.8	8890	240877	8759	11	56	11	327	11	192
		10	2.28	.35	9.8	4445	30110	4379	16	73	16	344	16	208
		15	3.42	.8	10	2963	8921	2920	21	90	21	360	21	225
	300	3	.630	.02	3.3	34007	2559386	33502	9	59	10.5	670	9.75	364
		5	1.05	.08	5.3	20404	552827	20101	11	72	12.5	682	11.75	377
		10	2.10	.33	9.2	10202	69103	10051	16	104	17.5	714	16.75	409
		15	3.16	.74	10	6801	20475	6700	21	135	22.5	746	21.75	441
22"	25	3	1.35	.03	3.5	1019	91793	1202	9	48	7	187	8	117
		5	2.25	.08	10	611	19827	721	11	51	8.5	190	9.75	120
		10	4.50	.35	10	593	4812	700	16	59	13.5	197	14.75	128
		15	6.20	.8	10	685	2467	807	21	77	18.5	215	19.75	146
	50	3	1.35	.03	3.5	1978	178213	2333	9	49	7	188	8	119
		5	2.25	.08	10	1187	38494	1400	11	53	8.5	191	9.75	122
		10	4.50	.35	10	593	4812	700	16	62	13.5	201	14.75	132
		15	4.49	.8	10	1640	5910	1934	21	88	18.5	226	19.75	157
	75	3	1.17	.03	3.5	3423	308432	4037	9	51	7	189	8	120
		5	1.95	.08	8.6	2054	66621	2422	11	55	8.5	193	9.75	124
		10	3.91	.35	10	1027	8328	1211	16	66	13.5	204	14.75	135
		15	4.42	.8	10	1640	5910	1934	21	88	18.5	226	19.75	157
	150	3	.680	.02	3.2	16265	1465378	19182	9	55	9.25	401	9.25	228
		5	1.13	.08	5.3	9759	316522	11509	11	62	11.25	409	11.25	235
		10	2.27	.32	9	4880	39565	5755	16	80	16.25	427	16.25	254
		15	3.40	.73	10	3253	11723	3836	21	99	21.25	445	21.25	272
	300	3	.620	.02	3	37327	3362944	44021	9	65	11	821	10	443
		5	1.04	.07	4.9	22396	726396	26413	11	79	13	835	12	457
		10	2.09	.3	8.5	11198	90799	13206	16	114	18	870	17	492
		15	3.14	.67	10	7465	26904	8804	21	149	23	905	22	527

Microlflex<sup>®</sup> inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WV		
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT	
24"	25	3	1.35	.02	3.2	1103	117258	1535	9	53	7	229	8	141	
		5	2.25	.08	10	662	25328	921	11	56	8.5	233	9.75	144	
		10	4.50	.33	9.4	331	3166	460	16	64	13.5	241	14.75	152	
		15	6.75	.74	5.9	430	1828	598	21	78	18.5	255	19.75	167	
	50	3	1.35	.02	3.2	2151	228543	2992	9	54	7	231	8	142	
		5	2.25	.08	4.9	1290	49365	1795	11	58	8.5	235	9.75	146	
		10	4.50	.33	10	645	6171	897	16	68	13.5	245	14.75	156	
		15	6.00	.74	6.9	745	3166	1036	21	84	18.5	261	19.75	172	
	75	3	1.16	.02	3.2	3724	395751	5180	9	55	7	232	8	143	
		5	1.94	.08	8	2235	85482	3108	11	60	8.5	237	9.75	148	
		10	3.89	.33	10	1117	10685	1554	16	72	13.5	249	14.75	160	
		15	4.40	.74	10	1785	7589	2483	21	96	18.5	272	19.75	184	
	150	3	.670	.02	3	17704	1881203	24625	9	60	9.5	432	9.25	246	
		5	1.13	.07	4.8	10622	406340	14775	11	68	11.5	440	11.25	254	
		10	2.26	.29	8.4	5311	50792	7387	16	88	16.5	460	16.25	274	
		15	3.39	.67	10	3541	15050	4925	21	107	21.5	480	21.25	294	
	300	3	.620	.02	2.8	40626	4316911	56508	9	71	11.5	1003	10.25	537	
		5	1.04	.06	4.5	24375	932453	33905	11	86	13.5	1019	12.25	552	
		10	2.09	.27	7.9	12188	116557	16952	16	124	18.5	1057	17.25	590	
		15	3.13	.62	9.7	8125	34535	11302	21	162	23.5	1095	22.25	628	
	26"	25	3	1.35	.02	2.9	915	114295	1496	9	57	7	171	8	114
			5	2.25	.07	4.5	549	24688	898	11	61	8.5	175	9.75	118
			10	4.50	.3	10	535	6014	875	16	71	13.5	185	14.75	128
			14	6.30	.59	10	662	3794	1082	20	78	17.5	192	18.75	135
50		3	1.35	.02	3	3087	385588	5047	9	60	7	265	8	163	
		5	2.25	.07	4.7	1852	83287	3028	11	66	8.5	271	9.75	168	
		10	4.50	.3	10	926	10411	1514	16	80	13.5	285	14.75	183	
		14	4.86	.59	10	1584	9082	2589	20	104	17.5	309	18.75	207	
75		3	1.02	.02	3	7390	923033	12082	9	63	7	268	8	165	
		5	1.70	.07	4.9	4434	199375	7249	11	71	8.5	275	9.75	173	
		10	3.41	.3	10	2217	24922	3625	16	89	13.5	294	14.75	192	
		14	4.77	.59	10	1584	9082	2589	20	104	17.5	309	18.75	207	
150		3	.780	.02	3	14623	1826443	23908	9	66	10	480	9.5	273	
		5	1.31	.07	4.9	8774	394512	14345	11	75	12	490	11.5	282	
		10	2.63	.3	8.8	4387	49314	7172	16	98	17	513	16.5	306	
		14	3.68	.59	10	3134	17972	5123	20	117	21	532	20.5	325	

ROUND METAL

Microflex Inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
28"	25	3	1.35	.02	2.7	983	141308	1850	9	62	7	187	8	124
		5	2.25	.07	4.2	590	30523	1110	11	66	8.5	191	9.75	128
		10	4.50	.28	10	575	7440	1082	16	81	13.5	206	14.75	144
		14	6.30	.55	10	711	4695	1338	20	99	17.5	223	18.75	161
	50	3	1.35	.02	2.8	3318	477176	6246	9	65	7	292	8	178
		5	2.25	.07	4.4	1991	103070	3748	11	71	8.5	297	9.75	184
		10	4.50	.28	10	995	12884	1874	16	86	13.5	312	14.75	199
		14	6.30	.55	9.2	711	4695	1338	20	99	17.5	324	18.75	211
	75	3	1.02	.02	2.8	7943	1142327	14953	9	68	7	294	8	181
		5	1.70	.07	4.6	4766	246743	8972	11	76	8.5	302	9.75	189
		10	3.40	.28	10	2383	30843	4486	16	96	13.5	322	14.75	209
		14	4.76	.55	10	1702	11240	3204	20	112	17.5	338	18.75	225
150	3	.780	.02	2.8	15723	2261196	29599	9	71	10	566	9.5	318	
	5	1.31	.07	4.6	9434	488418	17759	11	81	12	576	11.5	328	
	10	2.62	.28	8.3	4717	61052	8880	16	106	17	601	16.5	353	
	14	3.67	.55	9.7	3369	22249	6343	20	126	21	621	20.5	373	
30"	25	3	1.35	.02	2.6	1050	172251	2255	9	66	7	217	8	142
		5	2.25	.06	4	630	37206	1353	11	71	8.5	221	9.75	146
		10	4.50	.26	10	315	4651	676	16	82	13.5	232	14.75	157
		14	6.30	.52	5.2	439	3307	943	20	89	17.5	240	18.75	164
	50	3	1.35	.02	2.6	3548	582163	7620	9	70	7	337	8	203
		5	2.25	.06	4.2	2129	125747	4572	11	76	8.5	343	9.75	210
		10	4.50	.26	10	1065	15718	2286	16	92	13.5	360	14.75	226
		14	6.30	.52	10	760	5728	1633	20	106	17.5	373	18.75	239
	75	3	1.01	.02	2.6	8494	1393627	18243	9	73	7	340	8	206
		5	1.69	.06	4.3	5097	301023	10946	11	81	8.5	349	9.75	215
		10	3.39	.26	10	2548	37628	5473	16	103	13.5	370	14.75	237
		14	4.75	.52	10	1820	13713	3909	20	120	17.5	388	18.75	254
	150	3	.780	.02	2.6	16821	2759707	36124	9	76	10	617	9.5	346
		5	1.31	.06	4.3	10092	596097	21675	11	87	12	627	11.5	357
		10	2.62	.26	7.9	5046	74512	10837	16	113	17	654	16.5	384
		14	3.66	.52	9.3	3604	27155	7741	20	135	21	676	20.5	405

Microlflex<sup>®</sup> inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WV	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
32"	25	3	1.35	.02	2.4	1117	207388	2715	9	71	7	237	8	157
		5	2.25	.06	3.7	670	44796	1629	11	76	8.5	242	9.75	163
		10	4.50	.24	10	335	5599	814	16	87	13.5	254	14.75	177
		14	6.30	.48	9.7	467	3983	1135	20	105	17.5	271	18.75	189
	50	3	1.35	.02	2.5	3778	701455	9182	9	74	7	337	8	255
		5	2.25	.06	3.9	2267	151514	5509	11	81	8.5	344	9.75	262
		10	4.50	.24	10	1134	18939	2755	16	99	13.5	362	14.75	280
		14	6.30	.48	10	810	6902	1968	20	113	17.5	376	18.75	310
	75	3	1.01	.02	2.5	9045	1679162	21980	9	78	7	341	8	259
		5	1.69	.06	4	5427	362699	13188	11	87	8.5	350	9.75	268
		10	3.38	.24	9.8	2713	45337	6594	16	110	13.5	373	14.75	291
		14	4.74	.48	10	1938	16522	4710	20	128	17.5	392	18.75	310
150	3	.960	.02	2.5	19965	3706458	48517	9	91	10.5	767	9.75	433	
	5	1.60	.06	4.1	11979	800595	29110	11	108	12.5	785	11.75	451	
	10	3.20	.24	9.4	5989	100074	14555	16	153	17.5	830	16.75	497	
	14	4.48	.48	10	4278	36470	10397	20	189	21.5	866	20.75	538	
34"	25	3	1.35	.02	2.3	1184	246982	3233	9	75	7	258	8	167
		5	2.25	.05	3.6	711	533484	1940	11	80	8.5	263	9.75	172
		10	4.50	.23	10	355	6669	970	16	93	13.5	275	14.75	184
		14	6.30	.46	10	496	4745	1353	20	111	17.5	294	18.75	202
	50	3	1.35	.02	2.3	4008	835957	10943	9	79	7	450	8	264
		5	2.25	.05	3.7	2405	180567	6566	11	86	8.5	457	9.75	272
		10	4.50	.23	10	1202	2571	3283	16	105	13.5	476	14.75	290
		14	6.30	.46	10	859	8226	2345	20	119	17.5	490	18.75	305
	75	3	1.01	.02	2.3	9595	2001096	26194	9	83	7	453	8	268
		5	1.69	.05	3.8	5757	432237	15717	11	92	8.5	463	9.75	278
		10	3.38	.23	9.3	2878	54030	7858	16	117	13.5	488	14.75	302
		14	4.73	.46	10	2056	19690	5613	20	136	17.5	507	18.75	322
150	3	.950	.02	2.3	21178	4416928	57817	9	83	10.5	835	9.75	459	
	5	1.59	.05	3.8	12707	954056	34690	11	96	12.5	849	11.75	473	
	10	3.19	.23	8.9	6353	119257	17345	16	163	17.5	915	16.75	539	
	14	4.47	.46	10	4538	43461	12389	20	201	21.5	953	20.75	577	

ROUND METAL

Microflex Inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
36"	25	3	1.35	.02	2.2	1251	291295	3813	9	80	7	278	8	179
		5	2.25	.05	3.4	751	62920	2288	11	85	8.5	284	9.75	184
		10	4.50	.22	10	375	7865	1144	16	98	13.5	297	14.75	197
		14	6.30	.43	10	524	5599	1596	20	118	17.5	316	18.75	217
	50	3	1.35	.02	2.2	4237	986394	12912	9	84	7	531	8	307
		5	2.25	.05	3.5	2542	213061	7747	11	91	8.5	539	9.75	315
		10	4.50	.22	10	1271	26633	3874	16	111	13.5	558	14.75	335
		14	6.30	.43	10	908	9706	2767	20	126	17.5	574	18.75	350
	75	3	1.01	.02	2.2	10144	2361592	30913	9	87	7	535	8	311
		5	1.68	.05	3.6	6086	510104	18548	11	98	8.5	545	9.75	321
		10	3.37	.22	8.9	3043	63763	9274	16	123	13.5	571	14.75	347
		14	4.72	.43	10	2174	23237	6624	20	144	17.5	592	18.75	368
150	3	.950	.02	2.2	22389	5212479	68231	9	102	10.5	951	9.75	526	
	5	1.59	.05	3.6	13433	1125895	40939	11	122	12.5	971	11.75	546	
	10	3.19	.22	8.5	6717	140737	20469	16	172	17.5	1021	16.75	597	
	14	4.46	.43	10	4798	51289	14621	20	212	21.5	1061	20.75	637	
38"	25	3	1.35	.01	2.1	1318	340591	4458	9	84	7	292	8	188
		5	2.25	.05	3.2	791	73568	2675	11	90	8.5	297	9.75	193
		10	4.50	.21	4.8	395	9196	1337	16	103	13.5	311	14.75	207
		14	6.30	.41	10	552	6549	1867	20	124	17.5	332	18.75	228
	50	3	1.35	.01	2.1	4464	1153515	15099	9	88	7	612	8	350
		5	2.25	.05	3.4	2678	249159	9060	11	96	8.5	621	9.75	359
		10	4.50	.21	10	1339	31145	4530	16	117	13.5	641	14.75	379
		14	6.30	.41	10	957	11350	3236	20	133	17.5	658	18.75	396
	75	3	1.01	.01	2.1	10692	2762810	36165	9	92	7	616	8	354
		5	1.68	.05	3.4	6415	596767	21699	11	103	8.5	627	9.75	365
		10	3.37	.21	8.5	3208	74596	10850	16	130	13.5	655	14.75	393
		14	4.72	.41	10	2291	27185	7750	20	152	17.5	676	18.75	414
150	3	.950	.01	2.1	23599	6097877	79821	9	108	10.5	1072	9.75	590	
	5	1.59	.05	3.5	14159	1317141	47893	11	129	12.5	1093	11.75	611	
	10	3.18	.21	8.1	7080	164643	23946	16	182	17.5	1146	16.75	664	
	14	4.46	.41	10	5057	60001	17105	20	224	21.5	1189	20.75	706	

Microflex<sup>®</sup> inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WV	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
40"	25	3	1.35	.01	2	1385	395132	5172	9	89	7	404	8	246
		5	2.25	.05	3.1	831	85349	3103	11	94	8.5	410	9.75	252
		10	4.50	.2	4.7	415	10669	1552	16	109	13.5	424	14.75	267
		14	6.30	.39	10	580	7600	2166	20	131	17.5	446	18.75	288
	50	3	1.35	.01	2	4691	1338441	17520	9	93	7	636	8	364
		5	2.25	.05	3.2	2815	289103	10512	11	101	8.5	644	9.75	373
		10	4.50	.2	10	1407	36138	5256	16	123	13.5	666	14.75	395
		14	6.30	.39	10	1005	13170	3754	20	140	17.5	683	18.75	412
	75	3	1.01	.01	2	11240	3206910	41978	9	97	7	640	8	368
		5	1.68	.05	3.3	6744	692692	25187	11	108	8.5	651	9.75	380
		10	3.36	.2	8.1	3372	86587	12594	16	137	13.5	680	14.75	409
		14	4.71	.39	10	2409	31555	8995	20	160	17.5	703	18.75	432
150	3	.950	.01	2	24807	7077884	92649	9	113	11	1194	10	654	
	5	1.59	.05	3.3	14884	1528823	55590	11	135	13	1216	12	676	
	10	3.18	.2	7.7	7442	191103	27795	16	191	18	1272	17	731	
	14	4.45	.39	9.7	5316	69644	19853	20	236	22	1316	21	776	
42"	25	3	1.35	.01	1.9	1452	455181	5958	9	93	7	422	8	257
		5	2.25	.04	3	871	98319	3575	11	99	8.5	428	9.75	263
		10	4.50	.19	4.5	435	12290	1787	16	114	13.5	443	14.75	279
		14	6.30	.37	10	608	8757	2496	20	137	17.5	466	18.75	301
	50	3	1.35	.01	1.9	4918	1542065	20186	9	97	7	738	8	417
		5	2.25	.04	3.1	2951	333086	12111	11	107	8.5	747	9.75	427
		10	4.50	.19	9.9	1475	41636	6056	16	129	13.5	769	14.75	449
		14	6.30	.37	10	1054	15173	4325	20	148	17.5	788	18.75	468
	75	3	1.00	.01	1.9	11787	3696049	48381	9	102	7	742	8	422
		5	1.68	.04	3.1	7072	798347	29029	11	114	8.5	754	9.75	434
		10	3.36	.19	7.8	3536	99793	14514	16	144	13.5	784	14.75	464
		14	4.70	.37	9.7	2526	36368	10367	20	168	17.5	808	18.75	488
150	3	.950	.01	1.9	26015	8157260	106778	9	119	11	1335	10	727	
	5	1.58	.04	3.1	15609	1761968	64067	11	142	13	1359	12	751	
	10	3.17	.19	7.4	7804	220246	32033	16	201	18	1417	17	809	
	14	4.44	.37	9.3	5575	80265	22881	20	247	22	1464	21	856	

ROUND METAL

Microflex Inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
44"	25	3	1.35	.01	1.8	1518	521000	6820	9	97	8	447	8.5	272
		5	2.25	.04	2.8	911	112536	4092	11	104	9.5	454	10.25	279
		10	4.50	.18	4.4	455	14067	2046	16	120	14.5	470	15.25	295
		14	6.30	.35	10	636	10023	2857	20	144	18.5	494	19.25	319
	50	3	1.35	.01	1.8	5144	1765278	23107	9	102	8	785	8.5	443
		5	2.25	.04	2.9	3087	381300	13864	11	112	9.5	794	10.25	453
		10	4.50	.18	9.5	1543	47662	6932	16	135	14.5	818	15.25	477
		14	6.30	.35	10	1102	17370	4952	20	155	18.5	837	19.25	496
	75	3	1.00	.01	1.8	12334	4232384	55402	9	111	8	794	8.5	453
		5	1.68	.04	3	7400	914195	33241	11	127	9.5	810	10.25	468
		10	3.36	.18	7.5	3700	114274	16621	16	166	14.5	849	15.25	507
		14	4.70	.35	9.4	2643	41645	11872	20	197	18.5	880	19.25	539
150	3	.950	.01	1.8	27221	9340762	122270	9	133	11	1446	10	789	
	5	1.58	.04	3	16332	2017605	73362	11	163	13	1476	12	819	
	10	3.17	.18	7.1	8166	252201	36681	16	238	18	1551	17	895	
	14	4.44	.35	9	5833	91910	26201	20	299	22	1611	21	955	
46"	25	3	1.35	.01	1.7	1585	592850	7760	9	102	8	473	8.5	288
		5	2.25	.04	2.7	951	128056	4656	11	109	9.5	480	10.25	294
		10	4.50	.17	4.3	475	16007	2328	16	125	14.5	497	15.25	311
		14	6.30	.34	4.5	340	5833	1663	20	139	18.5	510	19.25	324
	50	3	1.35	.01	1.7	5371	2008970	26297	9	107	8	835	8.5	471
		5	2.25	.04	2.8	3222	433938	15778	11	117	9.5	845	10.25	481
		10	4.50	.17	4.9	1611	54242	7889	16	142	14.5	870	15.25	506
		14	6.30	.34	10	1151	19768	5635	20	161	18.5	890	19.25	526
	75	3	1.00	.01	1.7	12880	4818071	63068	9	112	8	840	8.5	476
		5	1.67	.04	2.9	7728	1040703	37841	11	125	9.5	853	10.25	489
		10	3.35	.17	7.2	3864	130088	18921	16	158	14.5	886	15.25	522
		14	4.70	.34	9	2760	47408	13515	20	184	18.5	913	19.25	548
	150	3	.950	.01	1.7	28426	10633143	139188	9	130	11	1539	10	834
		5	1.58	.04	2.9	17056	2296759	83513	11	156	13	1564	12	860
		10	3.17	.17	6.8	8528	287095	41756	16	220	18	1628	17	924
		14	4.44	.34	8.7	6091	104626	29826	20	271	22	1679	21	975

Microflex, Inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
48"	25	3	1.35	.01	1.6	1651	670994	8783	9	106	8	499	8.5	303
		5	2.25	.04	2.6	991	144935	5270	11	113	10	506	10.5	310
		10	4.50	.16	4.2	495	18117	2635	16	131	15	523	15.5	327
		14	6.30	.33	4.4	354	6602	1882	20	145	19	537	19.5	341
	50	3	1.35	.01	1.7	5597	2274033	29767	9	111	8	931	8.5	521
		5	2.25	.04	2.7	3358	491191	17860	11	122	10	941	10.5	531
		10	4.50	.16	4.7	1679	61399	8930	16	148	15	967	15.5	557
		14	6.30	.33	10	1199	22376	6379	20	168	19	988	19.5	578
	75	3	1.00	.01	1.7	13426	5455263	71409	9	116	8	936	8.5	526
		5	1.67	.04	2.9	8056	1178337	42846	11	130	10	949	10.5	540
		10	3.35	.16	6.9	4028	147292	21423	16	165	15	984	15.5	574
		14	4.69	.33	8.7	2877	53678	15302	20	192	19	1011	19.5	602
150	3	.950	.01	1.7	29630	12039156	157592	9	136	11.5	1640	10.25	888	
	5	1.58	.04	2.8	17778	2600458	94555	11	162	13.5	1667	12.25	915	
	10	3.16	.16	6.6	8889	325057	47278	16	229	18.5	1734	17.25	981	
	14	4.43	.33	8.4	6349	118461	33770	20	282	22.5	1787	21.25	1035	
50"	25	2	1.80	.025	2.1	5192	1328802	30923	10	133	9	933	9.5	533
		3	2.70	.05	3.1	3461	393719	20615	12	148	11	948	11.5	548
		4	3.60	.10	4.1	2596	166100	15461	14	163	13	963	13.5	563
		5	4.50	.15	10	2077	85043	12369	16	178	15	978	15.5	578
		6	5.40	.22	10	1731	49215	10308	18	193	17	993	17.5	593
		7	6.30	.31	10	1483	30992	8835	20	208	19	1008	19.5	608
		8	7.20	.40	10	1298	20763	7731	22	223	21	1023	21.5	623
		52"	25	2	1.80	.024	2.0	5390	1487046	34605	10	139	9	985
3	2.70			.05	3	3593	440606	23070	12	154	11	1000	11.5	577
4	3.60			.095	4	2695	185881	17303	14	170	13	1016	13.5	593
5	4.50			.15	4.8	2156	95171	13842	16	185	15	1031	15.5	608
6	5.40			.22	10	1797	55076	11535	18	201	17	1047	17.5	624
7	6.30			.30	10	1540	34683	9887	20	217	19	1063	19.5	640
8	7.20			.39	10	1347	23235	8651	22	232	21	1078	21.5	655

ROUND METAL

Microflex Inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
54"	25	2	1.80	.023	2.0	5587	1657314	38567	10	144	9	1036	9.5	590
		3	2.70	.05	2.9	3725	491056	25712	12	160	11	1052	11.5	606
		4	3.60	.094	3.8	2794	207164	19284	14	176	13	1068	13.5	622
		5	4.50	.14	4.7	2235	106068	15427	16	192	15	1084	15.5	638
		6	5.40	.21	10	1862	61382	12856	18	209	17	1101	17.5	655
		7	6.30	.28	10	1596	38655	11019	20	225	19	1117	19.5	671
		8	7.20	.37	10	1397	25896	9642	22	241	21	1133	21.5	687
		60"	25	2	1.80	.021	1.8	6179	2244598	52234	10	160	9.5	1320
3	2.70			.048	2.6	4119	665066	34823	12	178	11.5	1338	11.75	758
4	3.60			.085	3.5	3089	280575	26117	14	196	13.5	1356	13.75	776
5	4.50			.13	4.3	2471	143654	20894	16	214	15.5	1374	15.75	794
6	5.40			.19	10	2060	83133	17411	18	232	17.5	1392	17.75	812
7	6.30			.26	10	1765	52352	14924	20	250	19.5	1410	19.75	830
8	7.20			.34	10	1545	35072	13059	22	268	21.5	1428	21.75	848
66"	25			2	1.80	.019	1.6	6768	2955717	68783	10	176	9.5	1544
		3	2.70	.043	2.4	4512	875768	45855	12	196	11.5	1564	11.75	880
		4	3.60	.078	3.2	3384	369465	34391	14	215	13.5	1583	13.75	899
		5	4.50	.12	3.9	2707	189166	27513	16	235	15.5	1603	15.75	919
		6	5.40	.17	4.6	2256	109471	22928	18	255	17.5	1623	17.75	939
		7	6.30	.23	10	1934	68938	19652	20	275	19.5	1643	19.75	959
		8	7.20	.31	10	1692	46183	17196	22	295	21.5	1663	21.75	979
		72"	25	2	1.80	.017	1.5	7357	3802369	88485	10	192	9.5	1748
3	2.70			.04	2.2	4905	1126628	58990	12	213	11.5	1769	11.75	991
4	3.60			.071	2.9	3678	475296	44243	14	235	13.5	1791	13.75	1013
5	4.50			.11	3.6	2943	243352	35394	16	257	15.5	1813	15.75	1035
6	5.40			.16	4.2	2452	140828	29495	18	278	17.5	1834	17.75	1056
7	6.30			.21	4.8	2102	88685	25281	20	300	19.5	1856	19.75	1078
8	7.20			.28	10	1839	59412	22121	22	321	21.5	1877	21.75	1099
78"	25			2	1.80	.016	1.4	7944	4796235	111613	10	208	10	1902
		3	2.70	.035	2.1	5296	1421107	74409	12	231	12	1925	12	1078
		4	3.60	.066	2.7	3972	599529	55807	14	255	14	1949	14	1102
		5	4.50	.103	3.3	3178	306959	44645	16	278	16	1972	16	1125
		6	5.40	.145	3.9	2648	177638	37204	18	301	18	1995	18	1148
		7	6.30	.20	4.5	2270	111866	31890	20	325	20	2019	20	1172
		8	7.20	.26	9.9	1986	74941	27903	22	348	22	2042	22	1195

Microlflex<sup>®</sup> inc.

ROUND METAL

TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WW	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
84"	25	2	1.80	.015	1.3	8530	5948983	138439	10	224	10	2056	10	1140
		3	2.70	.03	1.9	5687	1762662	92293	12	249	12	2081	12	1165
		4	3.60	.061	2.5	4265	743623	69220	14	274	14	2106	14	1190
		5	4.50	.096	3.1	3412	380735	55376	16	299	16	2131	16	1215
		6	5.40	.13	3.7	2843	220333	46146	18	325	18	2157	18	1241
		7	6.30	.18	4.2	2437	138752	39554	20	350	20	2182	20	1266
		8	7.20	.24	4.6	2133	92953	34610	22	375	22	2207	22	1291
		90"	25	2	1.80	.014	1.2	9115	7272266	169233	10	240	10.5	2710
3	2.70			.03	1.8	6077	2154745	112822	12	267	12.5	2737	12.25	1502
4	3.60			.057	2.4	4558	909033	84617	14	294	14.5	2764	14.25	1529
5	4.50			.09	2.9	3646	465425	67693	16	321	16.5	2791	16.25	1556
6	5.40			.13	3.4	3038	269343	56411	18	348	18.5	2818	18.25	1583
7	6.30			.17	3.9	2604	169616	48352	20	375	20.5	2845	20.25	1610
8	7.20			.23	4.4	2279	113629	42308	22	402	22.5	2872	22.25	1637
96"	25			2	1.80	.013	1.1	9699	8777725	204267	10	256	10.5	3364
		3	2.70	.03	1.7	6466	2600807	136178	12	285	12.5	3393	12.25	1839
		4	3.60	.054	2.2	4850	1097216	102133	14	313	14.5	3421	14.25	1867
		5	4.50	.084	2.7	3880	561774	81707	16	342	16.5	3450	16.25	1896
		6	5.40	.12	3.2	3233	325101	68089	18	371	18.5	3479	18.25	1925
		7	6.30	.16	3.7	2771	204728	58362	20	400	20.5	3508	20.25	1954
		8	7.20	.21	4.1	2425	137152	51067	22	428	22.5	3536	22.25	1982
		102"	25	2	1.80	.012	1.0	10283	10476992	243811	10	272	11	2372
3	2.70			.028	1.6	6855	3104294	162540	12	302	13	2402	12.5	1352
4	3.60			.051	2.1	5141	1309624	121905	14	333	15	2433	14.5	1383
5	4.50			.079	2.6	4113	670527	97524	16	364	17	2464	16.5	1414
6	5.40			.11	3.1	3428	388037	81270	18	394	19	2494	18.5	1444
7	6.30			.15	3.5	2938	244361	69660	20	425	21	2525	20.5	1475
8	7.20			.20	3.9	2571	163703	60953	22	455	23	2555	22.5	1505

ROUND METAL

Microflex Inc.

# TECHNICAL DATA SHEET

SIZE	PSI	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			WW		FF / VV / FV		FW / WV	
			AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT
120"	25	2	1.80	.01	.9	12011	16828218	391610	10	320	11	3140	10.5	1730
		3	2.70	.024	1.3	8007	4986139	261074	12	356	13	3176	12.5	1766
		4	3.60	.043	1.8	6005	2103527	195805	14	392	15	3212	14.5	1802
		5	4.50	.068	2.2	4804	1077006	156644	16	428	17	3248	16.5	1838
		6	5.40	.097	2.6	4004	623267	130537	18	464	19	3284	18.5	1874
		7	6.30	.13	3	3432	392495	111889	20	500	21	3320	20.5	1910
		8	7.20	.17	3.4	3003	262941	97903	22	536	23	3356	22.5	1946
		132"	25	2	1.80	.009	.8	13159	22234448	517419	10	396	12	3672
3	2.70			.02	1.2	8773	6587985	344946	12	435	14	3711	13	2073
4	3.60			.039	1.6	6580	2779306	258710	14	475	16	3751	15	2113
5	4.50			.062	2	5264	1423005	206968	16	514	18	3790	17	2152
6	5.40			.089	2.4	4386	823498	172473	18	554	20	3830	19	2192
7	6.30			.12	2.8	3760	518588	147834	20	594	22	3870	21	2232
8	7.20			.15	3.1	3290	347413	129355	22	633	24	3909	23	2271
138"	25			2	1.80	.009	.8	13732	25323526	589305	10	460	13	4524
		3	2.70	.02	1.2	9155	7503267	392870	12	501	15	4565	13.5	2533
		4	3.60	.038	1.6	6866	3165441	294653	14	543	17	4607	15.5	2575
		5	4.50	.059	1.9	5493	1620706	235722	16	584	19	4648	17.5	2616
		6	5.40	.085	2.3	4577	937908	196435	18	625	21	4689	19.5	2657
		7	6.30	.11	2.6	3924	590636	168373	20	667	23	4731	21.5	2699
		8	7.20	.15	3	3433	395680	147326	22	708	25	4772	23.5	2740
		144"	25	2	1.80	.009	.7	14305	28685139	667533	10	480	13	4932
3	2.70			.02	1.1	9537	8499300	445022	12	523	15	4975	13.5	2749
4	3.60			.036	1.5	7153	3585642	333767	14	566	17	5018	15.5	2792
5	4.50			.057	1.9	5722	1835849	267013	16	609	19	5061	17.5	2835
6	5.40			.08	2.2	4768	1062413	222511	18	652	21	5104	19.5	2878
7	6.30			.11	2.5	4087	669041	190724	20	696	23	5148	21.5	2922
8	7.20			.14	2.9	3576	448205	166883	22	739	25	5191	23.5	2965

Microlflex Inc.

ROUND METAL



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