



MICROFLEX INDUSTRIAL

**ROUND DUCT
EXPANSION JOINTS**

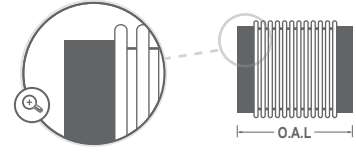
DESIGN

Microflex round duct expansion joints are designed in accordance with the latest edition of the Standards of the Expansion Joint Manufacturers Association (E.J.M.A.) to compensate for thermal expansion in duct expansion in duct systems to scrubbers, turbines, precipitators, condensers, boiler breeching and other gas systems.

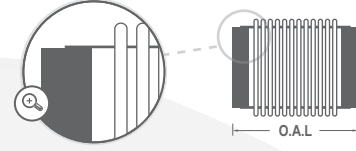
FEATURES

- Pressure: +/- 5 PSI, 1000°F
- Options: (C) Collar - CST
(W) Weld Ends - CST
(A) Angle Flanges - CST

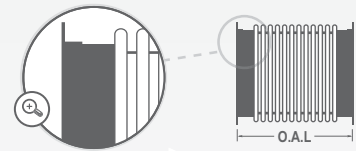
COLLAR ENDS (CC)



WELD ENDS (WW)



ANGLE FLANGES (AA)



TECHNICAL DATA SHEET

SIZE	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			CC		WW		AA		FLANGE DATA		
		AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT	BOLT CIRCLE	HOLE DIA.	HOLES
12"	3	1.35	0.05	10	332	10761	141	6	14	9	28	6	16	14 9/16	13/32	12
	5	2.25	0.14	6.4	199	2324	85	8	16	11	30	8	13			
	10	4.50	0.59	10	416	1212	176	13	22	16	36	13	22			
	15	6.03	1.34	9.3	472	611	200	18	27	21	41	18	27			
14"	3	1.35	0.04	4.7	307	11886	156	6	15	9	31	6	18	15 13/16	13/32	12
	5	2.25	0.13	5.1	184	2567	93	8	17	11	33	8	20			
	10	4.50	0.54	8.6	391	1364	198	13	24	16	40	13	26			
	15	6.47	1.22	7.4	445	689	226	18	30	21	46	18	31			
16"	3	1.35	0.04	4.6	768	38085	499	6	18	9	36	6.5	24	18 1/8	13/32	16
	5	2.25	0.12	10	461	8226	299	8	20	11	38	8.5	25			
	10	4.50	0.48	10	441	1967	286	13	28	16	46	13.5	32			
	15	6.36	1.08	10	503	998	327	18	35	21	53	18.5	35			
18"	3	1.35	0.03	4.2	852	52621	689	6	19	9	40	6.5	26	20 1/8	13/32	16
	5	2.25	0.10	10	511	11366	413	8	22	11	43	8.5	28			
	10	4.50	0.43	10	490	2724	396	13	31	16	52	13.5	36			
	15	6.30	0.97	9.5	564	1393	456	18	39	21	60	18.5	42			
20"	3	1.35	0.03	3.8	936	70417	922	6	22	9	45	6.5	29	22 1/8	13/32	20
	5	2.25	0.09	10	561	15210	553	8	24	11	47	8.5	31			
	10	4.50	0.39	10	541	3668	533	13	35	16	58	13.5	37			
	15	6.25	0.88	10	624	1880	615	18	43	21	66	18.5	47			
22"	3	1.35	0.03	3.5	1019	91793	1202	6	23	9	49	6.5	32	24 1/8	9/16	20
	5	2.25	0.08	10	611	18827	721	8	26	11	52	8.5	35			
	10	4.50	0.35	10	593	4812	700	13	38	16	64	13.5	41			
	15	6.20	0.08	10	685	2467	807	18	47	21	73	18.5	52			
24"	3	1.35	0.02	3.2	1103	117258	1535	6	26	9	54	6.5	35	26 1/8	9/16	20
	5	2.25	0.08	10	662	25328	921	8	29	11	57	8.5	37			
	10	4.50	0.33	9.4	331	3166	460	13	41	16	69	13.5	48			
	15	6.75	0.74	5.9	430	1828	598	18	52	21	80	18.5	56			

TECHNICAL DATA SHEET

SIZE	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			CC		WW		AA		FLANGE DATA		
		AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT	BOLT CIRCLE	HOLE DIA.	HOLES
26"	3	1.35	0.02	2.9	915	114295	1496	6	30	9	60	7	48	28 1/2	9/16	24
	5	2.25	0.07	4.5	549	24688	898	8	35	11	65	9	58			
	10	4.50	0.30	10	535	6014	875	13	47	16	77	14	68			
	14	6.30	0.59	10	662	3794	1082	17	56	20	86	18	78			
28"	3	1.35	0.02	2.7	983	141308	1850	6	32	9	65	7	51	30 1/2	9/16	24
	5	2.25	0.07	4.2	590	30523	1110	8	37	11	70	9	62			
	10	4.50	0.28	10	575	7440	1082	13	49	16	82	14	73			
	14	6.30	0.55	10	711	4695	1338	17	60	20	93	18	83			
30"	3	1.35	0.02	2.6	1050	172251	2255	6	34	9	69	7	55	32 1/2	9/16	28
	5	2.25	0.06	4	630	37206	1353	8	40	11	75	9	66			
	10	4.50	0.26	10	315	4651	676	13	53	16	88	14	78			
	14	6.30	0.52	5.2	439	3307	943	17	64	20	99	18	90			
32"	3	1.35	0.02	2.4	1117	207388	2715	6	37	9	74	7	59	34 1/2	9/16	28
	5	2.25	0.06	3.7	670	44796	1629	8	43	11	80	9	71			
	10	4.50	0.24	10	335	5599	814	13	57	16	94	14	84			
	14	6.30	0.48	9.7	467	3983	1135	17	69	20	106	18	96			
34"	3	1.35	0.02	2.3	1184	246982	3233	6	38	9	78	7	62	36 1/2	9/16	32
	5	2.25	0.05	3.6	711	533484	1940	8	45	11	85	9	75			
	10	4.50	0.23	10	355	6669	970	13	60	16	100	14	88			
	14	6.30	0.46	10	496	4745	1353	17	73	20	113	18	101			
36"	3	1.35	0.02	2.2	1251	291295	3813	6	41	9	83	7	66	38 1/2	9/16	32
	5	2.25	0.05	3.4	751	62920	2288	8	48	11	90	9	80			
	10	4.50	0.22	10	375	7865	1144	13	64	16	106	14	94			
	14	6.30	0.43	10	524	5599	1596	17	77	20	119	18	108			
38"	3	1.35	0.01	2.1	1318	340591	4458	6	43	9	88	7	68	40 1/2	9/16	36
	5	2.25	0.05	3.2	791	73568	2675	8	50	11	95	9	82			
	10	4.50	0.21	4.8	395	9196	1337	13	67	16	112	14	97			
	14	6.30	0.41	10	552	6549	1867	17	81	20	126	18	112			
40"	3	1.35	0.01	2	1385	395132	5172	6	45	9	92	7	74	42 1/2	9/16	36
	5	2.25	0.05	3.1	831	85349	3103	8	53	11	100	9	92			
	10	4.50	0.20	4.7	415	10669	1552	13	71	16	118	14	106			
	14	6.30	0.39	10	580	7600	2166	17	85	20	132	18	121			
42"	3	1.35	0.01	1.9	1452	455181	5958	6	48	9	97	7	77	44 1/2	9/16	40
	5	2.25	0.04	3	871	98319	3575	8	56	11	105	9	96			
	10	4.50	0.19	4.5	435	12290	1787	13	75	16	124	14	111			
	14	6.30	0.37	10	608	8757	2496	17	90	20	139	18	127			
44"	3	1.35	0.01	1.8	1518	521000	6820	6	51	9	102	7	81	46 1/2	9/16	40
	5	2.25	0.04	2.8	911	112536	4092	8	59	11	110	9	100			
	10	4.50	0.18	4.4	455	14067	2046	13	79	16	130	14	117			
	14	6.30	0.35	10	636	10023	2857	17	95	20	146	18	134			
46"	3	1.35	0.01	1.7	1585	592850	7760	6	52	9	106	7	84	48 1/2	9/16	44
	5	2.25	0.04	2.7	951	128056	4656	8	61	11	115	9	104			
	10	4.50	0.17	4.3	475	16007	2328	13	81	16	135	14	120			
	14	6.30	0.34	4.5	340	5833	1663	17	98	20	152	18	139			
48"	3	1.35	0.01	1.6	1651	670994	8783	6	59	9	115	7	87	50 1/2	9/16	44
	5	2.25	0.04	2.6	991	144935	5270	8	70	11	126	9	107			
	10	4.50	0.16	4.2	495	18117	2635	13	98	16	154	14	123			
	14	6.30	0.33	4.4	354	6602	1882	18	120	20	176	18	145			

Microflex Inc.

ROUND JOINT

TECHNICAL DATA SHEET

SIZE	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			CC		WW		AA		FLANGE DATA		
		AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT	BOLT CIRCLE	HOLE DIA.	HOLES
50"	2	1.80	0.025	2.1	5192	1328802	30923	8	89	10	133	10	137	53 1/2	11/16	48
	3	2.70	0.05	3.1	3461	393719	20615	10	104	12	148	12	149			
	4	3.60	0.10	4.1	2596	166100	15461	12	119	14	163	14	162			
	5	4.50	0.15	10	2077	85043	12369	14	134	16	178	16	174			
	6	5.40	0.22	10	1731	49215	10308	16	149	18	193	18	187			
	7	6.30	0.31	10	1483	30992	8835	18	164	20	208	20	200			
	8	7.20	0.40	10	1298	20763	7731	20	179	22	223	22	212			
	52"	2	1.80	0.024	2.0	5390	1487046	34605	8	93	10	139	10			
3		2.70	0.05	3.0	3593	440606	23070	10	108	12	154	12	157			
4		3.60	0.095	4.0	2695	185881	17303	12	124	14	170	14	170			
5		4.50	0.15	4.8	2156	95171	13842	14	139	16	185	16	183			
6		5.40	0.22	10	1797	55076	11535	16	155	18	201	18	196			
7		6.30	0.30	10	1540	34683	9887	18	171	20	217	20	209			
8		7.20	0.39	10	1347	23235	8651	20	186	22	232	22	222			
54"		2	1.80	0.023	2.0	5587	1657314	38567	8	96	10	144	10	151	57 1/2	11/16
	3	2.70	0.05	2.9	3725	491056	25712	10	112	12	160	12	165			
	4	3.60	0.094	3.8	2794	207164	19284	12	128	14	176	14	178			
	5	4.50	0.14	4.7	2235	106068	15427	14	144	16	192	16	192			
	6	5.40	0.21	10	1862	61382	12856	16	161	18	209	18	205			
	7	6.30	0.28	10	1596	38655	11019	18	177	20	225	20	219			
	8	7.20	0.37	10	1397	25896	9642	20	193	22	241	22	232			
	60"	2	1.80	0.021	1.8	6179	2244598	52234	8	107	10	160	10	173		
3		2.70	0.048	2.6	4119	665066	34823	10	125	12	178	12	188			
4		3.60	0.085	3.5	3089	280575	26117	12	143	14	196	14	203			
5		4.50	0.13	4.3	2471	143654	20894	14	161	16	214	16	218			
6		5.40	0.19	10	2060	83133	17411	16	179	18	232	18	233			
7		6.30	0.26	10	1765	52352	14924	18	197	20	250	20	248			
8		7.20	0.34	10	1545	35072	13059	20	215	22	268	22	263			
66"		2	1.80	0.019	1.6	6768	2955717	68783	8	117	10	176	10	192	69 1/2	11/16
	3	2.70	0.043	2.4	4512	875768	45855	10	137	12	196	12	208			
	4	3.60	0.078	3.2	3384	369465	34391	12	156	14	215	14	225			
	5	4.50	0.12	3.9	2707	189166	27513	14	176	16	235	16	242			
	6	5.40	0.17	4.6	2256	109471	22928	16	196	18	255	18	258			
	7	6.30	0.23	10	1934	68938	19652	18	216	20	275	20	275			
	8	7.20	0.31	10	1692	46183	17196	20	236	22	295	22	291			
	72"	2	1.80	0.017	1.5	7357	3802369	88485	8	128	10	192	10	281		
3		2.70	0.04	2.2	4905	1126628	58990	10	149	12	213	12	299			
4		3.60	0.071	2.9	3678	475296	44243	12	171	14	235	14	317			
5		4.50	0.11	3.6	2943	243352	35394	14	193	16	257	16	335			
6		5.40	0.16	4.2	2452	140828	29495	16	214	18	278	18	354			
7		6.30	0.21	4.8	2102	88685	25281	18	236	20	300	20	372			
8		7.20	0.28	10	1839	59412	22121	20	257	22	321	22	390			
78"		2	1.80	0.016	1.3	7944	4796235	111613	8	138	10	208	10	307	81 1/2	11/16
	3	2.70	0.035	2.1	5296	1421107	74409	10	161	12	231	12	326			
	4	3.60	0.066	2.7	3972	599529	55807	12	185	14	255	14	346			
	5	4.50	0.103	3.3	3178	306959	44645	14	208	16	278	16	365			
	6	5.40	0.145	3.9	2648	177638	37204	16	231	18	301	18	385			
	7	6.30	0.20	4.5	2270	111866	31890	18	255	20	325	20	405			
	8	7.20	0.26	9.9	1986	74941	27903	20	278	22	348	22	424			

ROUND DUCT

Microflex Inc.

TECHNICAL DATA SHEET

SIZE	# OF CONS	NON-CONCURRENT MOVEMENTS			SPRING RATE			CC		WW		AA		FLANGE DATA		
		AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	OAL	WGT	OAL	WGT	OAL	WGT	BOLT CIRCLE	HOLE DIA.	HOLES
84"	2	1.80	0.015	1.3	8530	5948983	138439	8	149	10	224	10	332	87 1/2	13/16	76
	3	2.70	0.03	1.9	5687	1762662	92293	10	174	12	249	12	353			
	4	3.60	0.061	2.5	4265	743623	69220	12	199	14	274	14	374			
	5	4.50	0.096	3.1	3412	380735	55376	14	224	16	299	16	395			
	6	5.40	0.13	3.7	2843	220333	46146	16	250	18	325	18	416			
	7	6.30	0.18	4.2	2437	138752	39554	18	275	20	350	20	437			
	8	7.20	0.24	4.6	2133	92953	34610	20	300	22	375	22	458			
	90"	2	1.80	0.014	1.2	9115	7272266	169233	8	159	10	240	10			
3		2.70	0.03	1.8	6077	2154745	112822	10	186	12	267	12	384			
4		3.60	0.057	2.4	4558	909033	84617	12	213	14	294	14	407			
5		4.50	0.09	2.9	3646	465425	67693	14	240	16	321	16	434			
6		5.40	0.13	3.4	3038	269343	56411	16	267	18	348	18	452			
7		6.30	0.17	3.9	2604	169616	48352	18	294	20	375	20	474			
8		7.20	0.23	4.4	2279	113629	42308	20	321	22	402	22	500			
96"		2	1.80	0.013	1.1	9699	8777725	204267	8	170	10	256	10	385	99 1/2	13/16
	3	2.70	0.03	1.7	6466	2600807	136178	10	199	12	285	12	409			
	4	3.60	0.054	2.2	4850	1097216	102133	12	227	14	313	14	433			
	5	4.50	0.084	2.7	3880	561774	81707	14	256	16	342	16	457			
	6	5.40	0.12	3.2	3233	325101	68089	16	285	18	371	18	481			
	7	6.30	0.16	3.7	2771	204728	58362	18	314	20	400	20	505			
	8	7.20	0.21	4.1	2425	137152	51067	20	342	22	428	22	529			
	108"	2	1.80	0.012	1.0	10860	12375011	287980	8	191	10	288	10	438		
3		2.70	0.027	1.5	7240	3666670	191986	10	223	12	320	12	475			
4		3.60	0.048	2.0	5430	1546876	143990	12	256	14	353	14	492			
5		4.50	0.075	2.4	4344	792001	115192	14	288	16	385	16	519			
6		5.40	0.10	2.9	3620	458334	95993	16	320	18	417	18	546			
7		6.30	0.14	3.3	3103	288630	82280	18	353	20	450	20	573			
8		7.20	0.19	3.7	2715	193360	71995	20	385	22	482	22	600			
120"		2	1.80	0.01	0.9	12011	16828218	391610	8	212	10	320	10	490	123 1/2	13/16
	3	2.70	0.024	1.3	8007	4986139	261074	10	248	12	356	12	520			
	4	3.60	0.043	1.8	6005	2103527	195805	12	284	14	392	14	550			
	5	4.50	0.068	2.2	4804	1077006	156644	14	320	16	428	16	580			
	6	5.40	0.097	2.6	4004	623267	130537	16	356	18	464	18	610			
	7	6.30	0.13	3.0	3432	392495	111889	18	392	20	500	20	640			
	8	7.20	0.17	3.4	3003	262941	97903	20	428	22	536	22	670			
	132"	2	1.80	0.009	0.8	13159	22234448	517419	8	233	10	352	10	540		
3		2.70	0.02	1.2	8773	6587985	344946	10	272	12	391	12	573			
4		3.60	0.038	1.6	6580	2779306	258710	12	312	14	431	14	607			
5		4.50	0.059	1.9	5264	1423005	206968	14	351	16	470	16	640			
6		5.40	0.085	2.3	4386	823498	172473	16	391	18	510	18	673			
7		6.30	0.11	2.6	3760	518588	147834	18	431	20	550	20	706			
8		7.20	0.15	3.0	3290	347413	129355	20	470	22	589	22	740			
144"		2	1.80	0.009	0.7	14305	28685139	667533	8	255	10	384	10	592	147 1/2	13/16
	3	2.70	0.02	1.1	9537	8499300	445022	10	298	12	427	12	628			
	4	3.60	0.036	1.5	7153	3585642	333767	12	341	14	470	14	664			
	5	4.50	0.057	1.9	5722	1835849	267013	14	384	16	513	16	700			
	6	5.40	0.08	2.2	4768	1062413	222511	16	427	18	556	18	737			
	7	6.30	0.11	2.5	4087	669041	190724	18	471	20	600	20	773			
	8	7.20	0.14	2.9	3576	448205	166883	20	514	22	643	22	810			

Microflex[®] inc.

ROUND JOINT



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