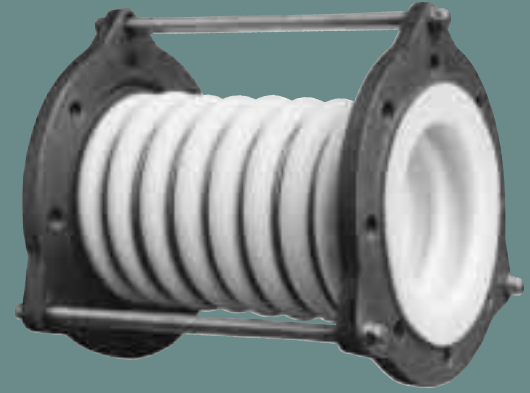


PROCO™

STYLE 4409



nine convolution heavy-duty molded PTFE bellows

TABLE 8

NOMINAL SIZE I.D.	NEUTRAL LENGTH INCHES	MOVEMENT CAPABILITIES BASED ON NINE CONVOLUTION DESIGN			SPRING RATE CAPABILITY BASED ON 1" OF MOVEMENT AT ZERO PRESSURE CONDITIONS			EXPANSION JOINT FLANGE DRILLING						PRESSURE AT TEMPERATURE (PSIG) @ °F								VACUUM	WEIGHT / LBS		
		± AXIAL (ΔX) MOVEMENT	LATERAL (ΔY) DEFLECTION	ANGULAR DEFLECTION	FORCE LBS PER 1" RATED EXTENSION	FORCE LBS PER 1" RATED COMPRESSION	FORCE LBS PER 1" RATED LATERAL DEFLECTION	# HOLES	THREADED HOLE SIZE	BOLT CIRCLE FLANGE "A"	FLANGE THICKNESS	NOMINAL FLANGE DIAMETER	LIMIT BOLT DIAMETER	BOLT CIRCLE LIMIT BOLT "B"	LIMIT BOLT "EAR" O.D.	All units are hydrostatically tested at 1.5 times rated pressure after manufacturing.									
																IN	IN	DEG.	LB/IN	LB/IN	LB/IN			70°	100°
1.00	4.921	1.535	.906	55	ENGINEERED	4	1/2-13	3.125	.551	4.250	.250	5.300	6.102	232	183	150	104	90	75	62	50	NOT	4		
1.25	6.300	1.654	1.220	52		4	1/2-13	3.500	.551	4.625	.250	6.700	7.480	232	183	150	104	90	75	62	50		6		
1.50	6.300	1.654	1.220	52		4	1/2-13	3.875	.630	5.000	.250	6.700	7.480	232	183	150	104	90	75	62	50		8		
2.00	6.496	1.811	1.260	50		4	5/8-11	4.750	.630	6.000	.250	7.300	8.071	232	183	150	104	90	75	62	50		10		
2.50	7.677	1.929	1.299	46		PER	4	5/8-11	5.500	.630	7.000	.250	8.100	8.858	232	183	150	104	90	75	62	50	DESIGNED	11	
3.00	9.055	2.087	1.378	41			4	5/8-11	6.000	.630	7.500	.250	8.700	9.449	232	183	150	104	90	75	62	50		13	
4.00	9.449	2.283	1.417	37			8	5/8-11	7.500	.630	9.000	.250	9.400	10.236	232	183	150	104	90	75	62	50	17		
5.00	10.236	2.362	1.457	35			8	3/4-10	8.500	.630	10.000	.375	11.000	11.417	232	183	150	104	90	75	62	50	32		
6.00	10.433	2.480	1.575	31			8	3/4-10	9.500	.709	11.000	.375	12.400	13.583	232	183	150	104	90	75	62	50	36		
8.00	11.417	2.598	1.614	26			8	3/4-10	11.750	.709	13.500	.375	14.600	15.748	232	183	150	104	90	75	62	50	40		
10.00	11.811	2.677	1.693	23			12	7/8-9	14.250	.709	16.000	.375	16.700	17.913	232	183	150	104	90	75	62	50	60		
12.00	11.811	2.756	1.732	22			12	7/8-9	17.000	.709	19.000	.375	19.700	21.260	232	183	150	104	90	75	62	50	74		
14.00	11.811	2.913	1.811	20	SPECIFICATIONS		12	1-8	18.750	.787	21.000	.375	22.200	22.244	232	183	150	104	90	75	62	50	91		
16.00	12.205	3.110	1.811	20			16	1-8	21.250	.787	23.500	.375	24.300	25.000	232	183	150	104	90	75	62	50	127		
18.00	12.205	3.307	1.850	18			16	1 1/8-7	22.750	.866	25.000	.375	25.800	27.362	232	183	150	104	90	75	62	50	152		
20.00	12.402	3.307	1.890	18			20	1 1/8-7	25.000	.866	27.500	.375	28.500	29.134	232	183	150	104	90	75	62	50	176		
22.00	12.402	3.346	1.890	16		20	1 1/4-7	27.250	.945	29.500	.375	30.500	31.890	232	183	150	104	90	75	62	50	212			
24.00	12.992	3.346	1.929	15		20	1 1/4-7	29.500	.945	32.000	.375	32.900	34.646	232	183	150	104	90	75	62	50	258			

Larger diameters, custom lengths, and performance requirements available upon request.

Pressure Rating Note:

316 Stainless Steel Anti-Squirm Flanges are available for higher pressure applications. (See Back Cover.)

MATERIALS OF CONSTRUCTION	
DESCRIPTION	STYLE 4409
BELLOWS	WHITE PTFE
FLANGES	DUCTILE IRON
REINFORCING RINGS	304 SS
LIMIT BOLTS	CARBON STEEL
NUTS	CARBON STEEL
INSULATING SLEEVES	POLYETHYLENE
WASHERS	CARBON STEEL / NYLON