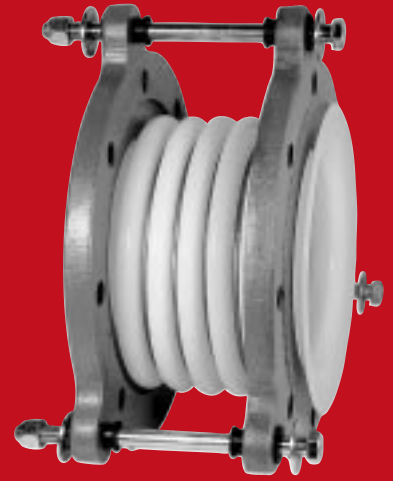


# PROCO™

## STYLE

# 445-BD

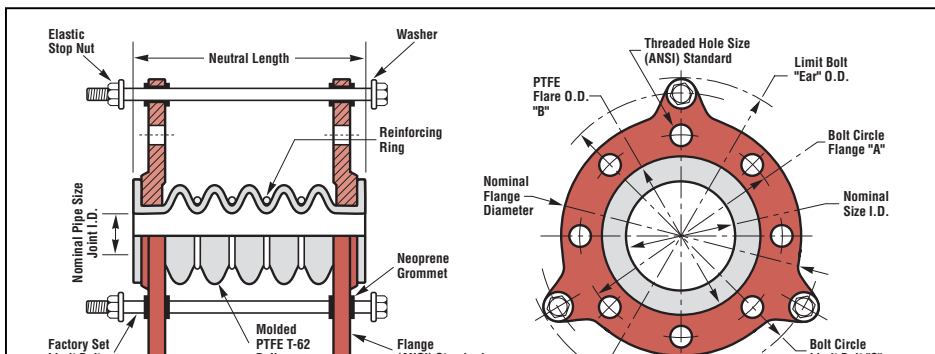


### molded PTFE expansion joints

**Table 5: Sizes • Movements • Spring Rates • Flange Standards • Temperatures • Vacuum • Weights**

NOMINAL SIZE I.D.	NEUTRAL LENGTH INCHES	MOVEMENT CAPABILITIES BASED ON FIVE CONVOLUTION DESIGN <sup>1</sup>			SPRING RATE CAPABILITY <sup>2</sup>			EXPANSION JOINT FLANGE DRILLING								PRESSURE AT TEMPERATURE (PSIG) @ °F								VACUUM RATING <sup>3</sup>	WEIGHT / LBS		
		± AXIAL (Δx) MOVEMENT	LATERAL (Δy) DEFLECTION	ANGULAR DEFLECTION	COMPRESSION SPRING RATE	EXTENSION SPRING RATE	LATERAL SPRING RATE	THRUST FACTOR	# HOLES	THREADED HOLE SIZE	BOLT CIRCLE FLANGE "A"	PTFE FLARE O.D. "B"	FLANGE THICKNESS	NOMINAL FLANGE O.D.	LIMIT BOLT DIAMETER	BOLT CIRCLE LIMIT BOLT "C"	LIMIT BOLT "EAR" O.D.										
																		IN	IN	DEG.	LB <sub>f</sub> /IN	LB <sub>f</sub> /IN	LB <sub>f</sub> /IN			70°	100°
1.00	3.000	0.500	.500	20	30	44	22	2.81	4	1/2-13	3.125	2.000	.313	4.250	.250	5.125	6.000	72	61	46	40	34	29	27	24	NOT	2
1.25	2.670	0.394	.470	20	36	114	171	2.25	4	1/2-13	3.500	2.520	.394	4.630	.250	5.196	6.850	62	56	42	36	30	26	22	22		5
1.50	3.500	0.750	.500	20	75	83	46	5.09	4	1/2-13	3.875	2.875	.344	5.000	.250	5.875	6.750	72	61	46	40	34	29	27	24		5
2.00	4.000	1.000	.500	20	60	47	50	9.11	4	5/8-11	4.750	3.625	.438	6.000	.375	6.875	8.125	72	61	46	40	34	29	27	24	DESIGNED	9
2.50	4.600	0.980	.510	20	116	319	285	10.08	4	5/8-11	5.500	4.125	.500	7.000	.375	8.125	9.375	62	56	42	36	30	26	22	22		11
3.00	5.000	1.000	.500	20	55	60	170	16.91	4	5/8-11	6.000	5.000	.500	7.500	.375	8.750	10.000	72	61	46	40	34	29	27	24		14
4.00	5.250	1.250	.625	20	72	60	80	25.40	8	5/8-11	7.500	6.188	.625	9.000	.375	9.875	11.125	72	61	46	40	34	29	27	24	FOR	20
5.00	6.000	1.250	.625	20	140	388	400	32.33	8	3/4-10	8.500	7.313	.750	10.000	.500	11.500	13.000	62	56	42	36	30	26	22	22		26
6.00	6.000	1.250	.625	20	190	130	195	50.24	8	3/4-10	9.500	8.500	.750	11.000	.500	12.500	14.000	72	61	46	40	34	29	27	24		31
8.00	8.000	1.250	.625	20	304	388	457	76.07	8	3/4-10	11.750	10.625	.938	13.500	.500	14.750	16.250	48	42	34	30	26	22	22	22	VACUUM	49
10.00	8.750	1.250	.625	20	458	388	457	128.55	12	7/8-9	14.250	12.750	1.000	16.000	.500	17.500	19.000	48	42	34	30	26	22	22	22		64
12.00	9.000	1.375	.688	20	529	445	457	144.72	12	7/8-9	17.000	15.000	1.000	19.000	.625	20.500	22.000	48	42	34	30	26	22	22	22		88
14.00	12.790	1.375	.688	20	203	371	514	233.59	12	1-8	18.750	16.250	1.188	21.000	1.420	24.172	27.313	48	42	34	30	26	22	22	22	SERVICE	143
16.00	13.500	1.625	1.000	20	180	383	514	259.68	16	1-8	21.250	18.500	1.188	23.500	1.420	27.563	31.500	48	42	34	30	26	22	22	22		179
20.00	20.470	1.625	1.000	20	185	371	571	374.57	20	1 1/8-8	25.000	23.000	1.188	27.500	1.420	31.500	35.438	48	42	34	30	26	22	22	22		243

NOTES: 1. Movements are non-concurrent and based from Neutral Length with Limit Bolts installed.  
 2. Spring Rate Capability is based on 1" of movement at zero pressure conditions.  
 3. Style 445-BD is not designed for Vacuum Service.



SERIES 445-BD MATERIALS OF CONSTRUCTION		
DESCRIPTION	1" THROUGH 12"	14" THROUGH 20"
BELLOWS	PTFE T-62	PTFE T-62
FLANGES	DUCTILE IRON	ZINC PLATED CARBON STEEL
REINFORCING RINGS	STAINLESS STEEL	STAINLESS STEEL
LIMIT BOLTS	CARBON STEEL	CARBON STEEL
NUTS	CARBON STEEL	CARBON STEEL
GROMMETS	NEOPRENE	NEOPRENE

**GOODYEAR**  
RUBBER PRODUCTS INC.

Call Toll Free: **1-866-711-4673**  
WebSales@GoodyearRubberProducts.com

**We Ship World Wide**