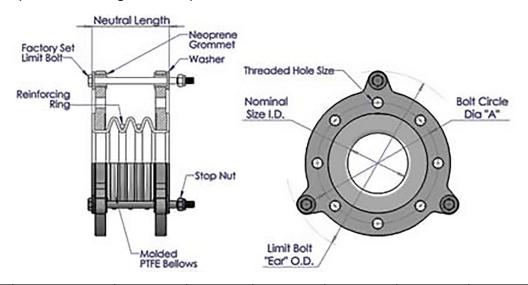


## **Teflex-C3 Expansion Joint**

The Teflex expansion joints are composed of unreinforced PTFE and come standard with iron 150# drill flanges. Stainless flanges are available as an option. They are available in 2, 3, or 5 convolutions of varying movements.

Note the change in pressure rating with temperature.



Diameter	Length	Compression	Lateral	Weight	Pressure at 70°F (PSI)	Pressure at 200°F (PSI)	Pressure at 300°F (PSI)	Pressure at 400°F (PSI)	Product Number
1"	1 3/4"	1/2"	1/4"	2 lbs.	145	105	70	45	TFLX3C0100
1 1/2"	2"	1/2"	1/4"	4 lbs.	145	105	70	45	TFLX3C0150
2"	2 3/4"	3/4"	3/8"	8 lbs.	140	105	70	45	TFLX3C0200
2 1/2"	3 1/16"	3/4"	3/8"	11 lbs.	140	100	65	40	TFLX3C0250
3"	3 5/8"	1"	1/2"	13 lbs.	135	100	65	40	TFLX3C0300
4"	3 5/8"	1"	1/2"	19 lbs.	130	95	60	35	TFLX3C0400
5"	4"	1"	1/2"	25 lbs.	130	90	60	35	TFLX3C0500
6"	4"	1 1/8"	9/16"	30 lbs.	125	90	60	35	TFLX3C0600
8"	6"	1 1/8"	9/16"	48 lbs.	120	85	55	32	TFLX3C0800
10"	7"	1 1/8"	3/8"	80 lbs.	120	85	55	30	TFLX3C1000
12"	7 7/8"	1 3/16"	5/16"	84 lbs.	115	80	50	30	TFLX3C1200

## **TEFLEX-C3 (Specification Wording)**

For pipe diameters 2" to 12". Provide or PTFE expansion joint with external stainless steel reinforcing rings, limit rods, and 150# ANSI standard drill ductile iron flanges. Shall be suitable for a maximum operating pressure, temperature, and movements noted, and shall be designed to the Fluid Sealing Association (FSA) design standard. Approved model Teflex C3.

## INSTALLATION INSTRUCTIONS - TEFLEX MOLDED TEFLON® EXPANSION JOINTS

SERVICE CONDITIONS: Make sure the expansion joint ratings for temperature, pressure, vacuum, and movements match the system requirements.

ALIGNMENT: Expansion joints are not designed to compensate for piping misalignment errors. Piping should be lined up within 1/8". Misalignment reduces the rated movements of the expansion joint. Pipe guides should be installed to keep the pipe aligned and to prevent undue displacement.

LIMIT ROD BOLTING: Limit bolts are factory set at the maximum allowable travel position to prevent overextension. Do not remove or alter nuts at any time. Damage or personal injury can result due to changes in limit rod nut settings.

*PIPE SUPPORT*: Proper anchoring should be used wherever the pipeline changes direction, and expansion joints should be located as close as possible to anchor points. Piping must be supported with proper pipe supports so expansion joints do not carry any pipe loads.

PERSONNEL PROTECTION: It is strongly recommended that safety shields be used for all hazardous service to protect against serious personal injury in the event of expansion joint failure.

*OPERATION*: After expansion joints are installed, it may be necessary to air blast the exterior to remove foreign debris, such as metal chips, from between the convolutions. The expansion joint should then be covered with a shield to protect from damage and foreign debris during operation. (Note: do not weld in immediate vicinity of expansion joint unless it is properly protected.)

STORAGE: Store expansion joint with wood flange covers in place to protect Teflon® flange surfaces from damage until ready to install.

INSTALLATION: Check to make sure Teflon® surfaces are clean and free of foreign sediment.

Install expansion joints to the prescribed neutral lengths as stated in table listings. If expansion joints are used in high temperature processes, it is recommended that units be installed at near extended values. For cold process installations, expansion joints should be installed in a nearly compressed length. These settings will enable the expansion joint to realize full travel capabilities.

Thread installation bolts from mating flange side to prevent possible damage to Teflon® elements. Extend bolts beyond the expansion joint flange by no more than 1-2 threads. Nuts are not necessary due to threaded flange holes.

Tighten flange bolts with a torque wrench. Tighten in an alternate crossing pattern in 20% increments until 80% of final bolt torques have been achieved. Tighten to final torque values (listed below) in a clockwise fashion around the flange to ensure bolts carry equal stress burdens.

*TORQUE VALUES*: 1"-1¼": 10ft-lb, 1½": 15ft-lb, 2": 25ft-lb, 2½": 30ft-lb, 3": 40ft-lb, 4": 30ft-lb, 5": 40ft-lb, 6": 45ft-lb, 8": 60ft-lb, 10": 50ft-lb, 12": 60ft-lb, 14": 70ft-lb, 16": 65ft-lb, 18": 90ft-lb, 20": 80 ft-lb, 24":90ft-lb.

WARNING: Teflon® expansion joints may operate in pipelines or equipment carrying fluids and/or gases at elevated temperatures and pressures, and may transport hazardous materials. Precautions should be taken to protect personnel in the event of leakage or splash. Expansion joints should not be installed in inaccessible areas where inspection is impossible. Make sure proper drainage is available in the event of leakage when operating personnel are not available.