

ESTABLISHED 1841

E. B. Badger & Sons Co.

Manufacturers of Expansion Joints for High and Low Pressure

OFFICE AND WORKS

63-75 Pitts Street, BOSTON, MASS.

SALES OFFICE

101 Park Avenue, NEW YORK

Badger Self-Equalizing Expansion Joints

The Badger Self-Equalizing Expansion Joints are made from special seamless copper tubing, fitted with cast iron or steel rings to control the expansion and provide equal distribution over each corrugation.

The joint is made in Standard and Extra Heavy patterns, and unless otherwise specified will be furnished with standard flanges for pressure up to 125 pounds and extra heavy flanges for all pressures from 125 pounds to 200 pounds.

Monel metal sleeves can be furnished fitting inside of the corrugations, for use with super-heated steam and other high temperature fluids.

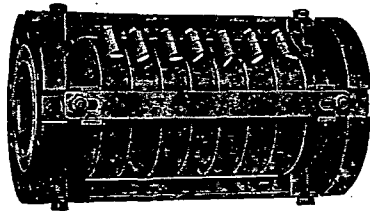


Fig. 1

This type of joint is furnished in 4 in. and 5 in. sizes, with four and eight corrugations to take 1 in. and 2 in. of expansion. For smaller sizes, we furnish a 4-in. joint with companion flanges, bolts and gaskets, tapped for the size required.

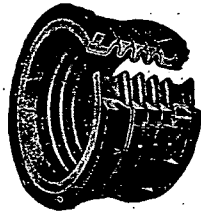


Fig. 2

This type of joint is made in sizes from 6 in. to 20 in. inclusive, with two, three, four or five corrugations, 2 1/4 in. deep, each corrugation taking 1/2 in. of expansion.

Specifications on Badger Expansion Joints

Fig. 1

Size Inches	FOUR-CORRUGATION			EIGHT-CORRUGATION			Add to List Prices for Extra Heavy Flanges
	Face to Face Inches	Finished Weight Pounds	Price Each	Face to Face Inches	Finished Weight Pounds	Price Each	
4	12 1/4	65	\$76.00	19 1/4	95	\$102.00	\$4.60
5	12 3/4	78	82.00	19 3/4	110	110.00	5.35

For sizes up to 3 1/4 in. inclusive, add \$4.00 net to price of 4-in. joint for American Standard 125 pound companion flanges, bolts and gaskets; and \$5.00 net for Extra Heavy American Standard flanges, bolts and gaskets, tapped to size required.

Fig. 2.

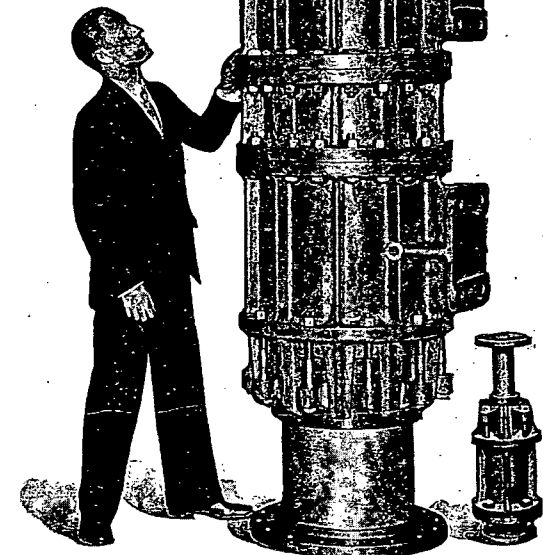
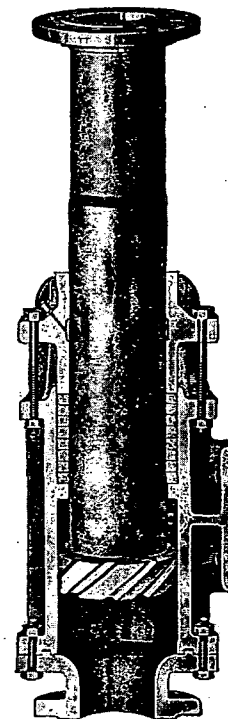
Size Inches	Two Corrugation			Three Corrugation			Four Corrugation			Five Corrugation			Add to List Prices for Ex. Hy. Flanges
	F/F Inches	Fin. wt. Pound	Price Each	F/F Inches	Fin. wt. Pounds	Price Each	F/F Inches	Fin. wt. Pounds	Price Each	F/F Inches	Fin. wt. Pounds	Price Each	
6	12 1/2	146	\$126.00	16	200	\$155.00	19	236	\$187.00	22 1/2	285	\$216.00	\$ 7.43
8	12 1/2	187	156.00	16	250	188.00	19	293	211.00	22 1/2	345	243.00	13.25
10	12 1/2	258	182.00	16	325	219.00	19	395	254.00	22 1/2	465	291.00	17.05
12	13	338	222.00	16 1/2	410	262.00	19 1/2	493	300.00	23	570	340.00	21.63
14	13 1/2	404	252.00	17	490	296.00	20	576	337.00	23 1/2	660	381.00	24.55
16	13 1/2	476	285.00	17	570	334.00	20	672	382.00	23 1/2	765	431.00	34.15
18	14	546	320.00	17 1/2	645	374.00	21	760	428.00	24	861	483.00	53.84
20	15	669	388.00	18 1/2	765	450.00	21 1/2	911	511.00	24 1/2	1010	573.00	56.48

Sizes larger than 20 in. can be furnished on special order.

MOGUL

Mogul Machine Company

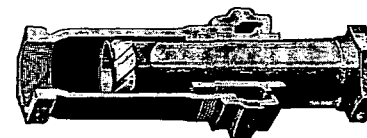
WITHERSPOON BUILDING
Philadelphia, Pa.



"MOGUL" DOUBLE-END-GUIDED, TYPE F. L. J. (FLANGED) EXPANSION JOINTS

Built in all pipe sizes from 1 1/2" to 6' diameters, for extremely high or low pressures and temperatures, for saturated steam, superheated steam, hot or cold water, oil or gas and other fluids.

They are Double-End-Guided, have extremely deep packing chambers and unusually long packing-gland take up. They have built-in Traverse Stops and large graphite lubricating chamber. They may be packed while the line is hot and in an expanded condition. Write for Bulletin with complete description and dimensions.



"MOGUL" DOUBLE-END-GUIDED, TYPE R. S. J. (RISER) EXPANSION JOINTS

Built with screwed ends, in all pipe sizes from 1/4" to 4" pipe diameters. Write for Bulletin and dimensions.