Pressure Balanced Full-Faced Rubber Flange

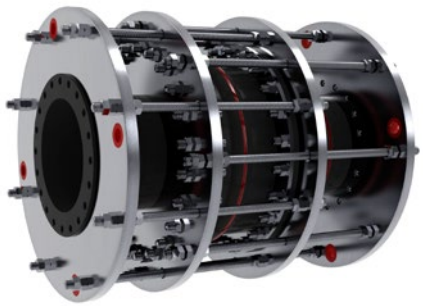
MAC-FB series (In-line and Elbow)

A pressure balanced expansion joint accommodates axial and lateral movements and counteracts the bellows pressure thrust. These expansion joints can be fabricated with single and multiple arches.

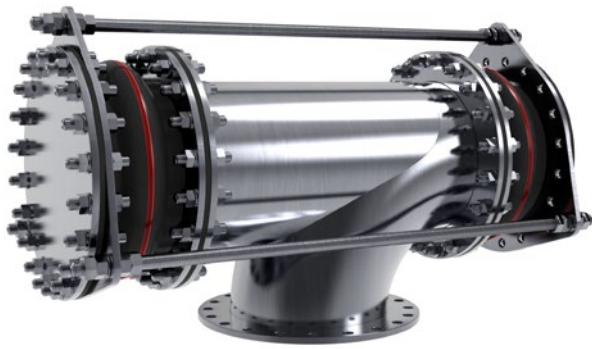
An additional bellows is incorporated into the unit and is subject to the line pressure to generate a force equal and opposite to that on the main bellows. Tying these bellows together neutralizes the pressure load on the unit. The Pressure Balanced Expansion Joints are used in situations similar to those described for the Axial and/or Lateral Expansions, although this particular type of Expansion Joint offers the additional advantage of not transferring the thrust caused by the internal pressure to the pipes or adjacent equipment.

This characteristic is especially important when it comes to joining the pipes to turbines or other delicate equipment which, by their nature, are unable to withstand these extra loads. The only loads on the equipment are the sum of the forces required to move the line bellows and balancing bellows of the expansion joint.

This type of Joint can be fitted between intermediate fixed points so main anchoring of the pipe or adjacent equipment is not required.



MAC-FB In-line



MAC-FB Elbow

More full-faced rubber flange expansion joints on www.macoga.com

Features

Type	Series				
Pressure balanced	MAC-FB (In-line and Elbow)				
Pressure thrust restraint	**Movements**				
✓	Axial		✓		Eliminates change in pressure Pressure forces remain in balance No main anchors required
	Lateral	Single-plane	✓		
		Multi-plane	✓		
	Angular	Single-plane	✓		
		Multi-plane	✓		

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