GASKET, PIPE END SEPARATION & DEFLECTION

Gaskets

A complete coupling assembly consists of coupling housing pair, nuts, bolts, and gasket. The coupling housing contains and compresses the gasket, which effects proper sealing of the joint. Piedmont gaskets are designed for a tight seal in high pressure industrial applications

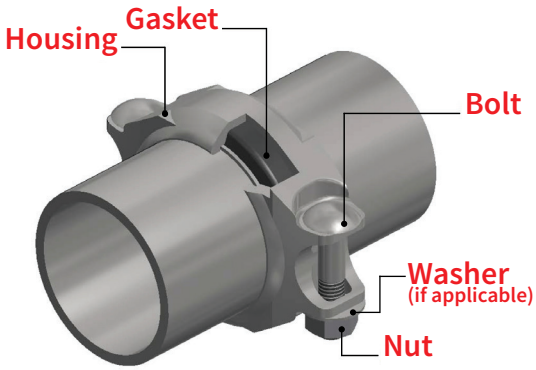
Gasket materials: Piedmont gaskets are EPDM (Ethylene Propylene Diene Monomer) rubber based. NSF (ANSI 61) approved for potable water or equivalent.

Temperature range: -20° F to 230° F (-29° C to 110° C)

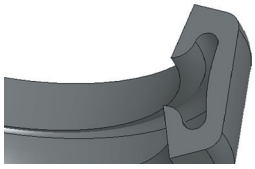
Service recommendations: Hot water service within the temperature range, seawater, and brinewater, dilute acids, oil-free air and many chemical services. Potable water.

NOT SUITABLE FOR PETROLEUM SERVICES
For other services, please contact Piedmont.

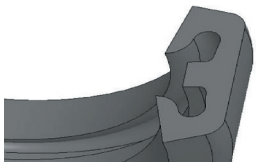
Piedmont offers two different shapes of gaskets: C-Shaped and Flush-fit. The Flush-fit type is recommended for vacuum services. The inner lip minimzes turbulence in high-velocity applications.



Coupling Assembly

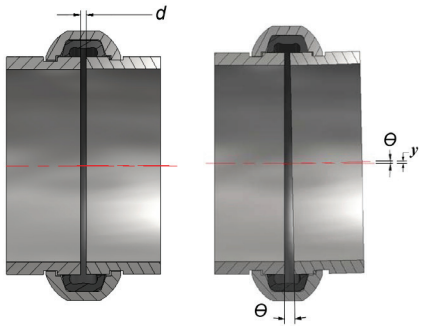


C-Shaped gasket



Flush-fit gasket

Pipe End Separation & Deflection



Allowable Pipe End Separations and Deflections

NPS (inch) DN (mm)	Maximum allowable pipe end separation (inch) (mm)		Maximum deflection	
	Cut grooves	Roll grooves	Θ (degree)	*y* (inch/ft) (mm/m)
3/4 20	0.10 2.53	0.06 1.60	3.44 °	0.72 60
1 25	0.12 2.94	0.06 1.60	2.72 °	0.57 48
1 1/4 32	0.10 2.53	0.06 1.60	2.15 °	0.45 38
1 1/2 40	0.10 2.53	0.06 1.60	1.91 °	0.40 33
2 50	0.10 2.53	0.06 1.60	1.53 °	0.32 27
2 1/2 65	0.10 2.53	0.06 1.60	1.24 °	0.26 22
3 80	0.10 2.53	0.06 1.60	1.05 °	0.22 18
4 100	0.25 6.40	0.13 3.20	1.62 °	0.34 28
5 125	0.25 6.34	0.13 3.20	1.32 °	0.27 22
6 150	0.25 6.40	0.13 3.20	1.10 °	0.23 19
8 200	0.25 6.40	0.13 3.20	0.86 °	0.18 15
10 250	0.25 6.40	0.13 3.20	0.62 °	0.13 11
12 300	0.25 6.40	0.13 3.20	0.53 °	0.11 9
14 350	0.25 6.40	0.13 3.20	0.74 °	0.15 13
16 400	0.294 7.44	0.18 4.57	0.64 °	0.14 11

NOTE:

- End separation gaps presented in the table above are applicable for nominal values of pipe gasket seat dimension and coupling key-to-key distance. Contact Piedmont for details.
- The angular deflections are calculated based on maximum al lowable separation gaps for roll grooves. Consult with Piedmont for details.