

Flanged NACE regulator for Sour Gas analysis

The LF311 is a single stage regulator with a solid disk seat design to allow various seating options, such as PCTFE and PEEK, for aggressive and high temperature applications. This specially adapted ANSI flanged pressure regulator has been developed for use on Sour Gas installations for Saudi Aramco. By removing the need for high pressure NPT instrumentation lines, and connecting directly to the process line, it crucially eliminates the potential for leak paths. The flanged LF311 shown, also includes a large piston sensed element for use with Hydrogen; it protects against the risk of Hydrogen embrittlement and provides excellent pressure control to the gas analyser system.

Benefits:

- Potential leak paths eliminated due to the flanged inlet connection straight to the process line.
- Unauthorized adjustment is prevented by the optional tamper-proof cover.
- Large sensitive piston element provides accurate and repeatable control whilst being exceptionally strong and safe on Hydrogen/H2S mix.

Features:

- 300 bar/4350psig supply pressure*
- 35 bar/500psig max outlet range
- NACE material MR0175
- All 316SS machined wetted parts and spring enclosure
- Non-venting
- Unbalanced main valve
- Port size: 1/4" NPT
- Optional anti-tamper cover
- 40 micron inlet filter
- ATEX/IECEx heated pressure regulator version also available

*Determined by flange rating

Saudi Aramco's application, H2 Recycle Gas Compressor, specifically required an inlet pressure of 2300-3300psig, with an outlet pressure of 60psig. Sampling a gas composed of Hydrogen 92%, H2S 2.5% and natural gas, the regulator was designed to NACE MR0175 with inlet connections of 1/2" ANSI 1500# RF and outlet 1/4" NPT.

