

# Closed Flowline Adaptor

For conventional and advanced mud-gas extractors

## APPLICATIONS

- Gas extraction in rigs with closed flowlines
- Fracture identification (helium)
- Bit wear indication (hydrogen)

## BENEFITS

- Enhances the measurement of highly volatile gases such as helium and hydrogen
- Improves the quantification of extracted hydrocarbons
- Functions universally in the industry's most-used gas extractors

## FEATURES

- Used in the FLAIR\* real-time fluid logging and analysis service and with hydrocarbon extractors for C<sub>1</sub>–C<sub>5</sub> gas
- Pressure certified to 10 bar [150 psi]
- Compliant with American Society of Mechanical Engineers and DNV GL standards
- Easy and rapid maintenance

The patent-pending design of the closed flowline adaptor enables proprietary hydrocarbon extractors from Geoservices, a Schlumberger company, to be placed as close as possible to the rig bell nipple to enhance their capacity to capture gas contained in the circulating mud. A gate valve mounted on the adaptor ensures that the system remains sealed at pressures up to 10 bar.

The hydrocarbon extractors—traditionally placed at the end of the flowline or at the shale shakers—are often separated by a relatively long distance from the bell nipple, which can lead to the escape of highly volatile gases (helium and hydrogen) and free-phase gases (methane) from circulating mud before reaching the extractors. This results in poor representation of these compounds in the analyzed gases and in, some cases, prevents proper quantification of hydrocarbons in mud.

Enhancing the measurement of helium and hydrogen also improves interpretational keys for important factors such as fracture identification (helium) and bit fatigue (hydrogen).



### Closed flowline adaptor specifications

Temperature rating, degC [degF]	0–150 [32–302]
Pressure rating, bar [psi]	10 [150]
pH rating	4–11
Chemical-resistant	Yes
Flowline size	Standard

*By enabling the placement of hydrocarbon extractors closer to the bell nipple, the closed flowline adaptor improves the measurement and quantification of gas contained in circulating mud.*