

# Metal-Lok Ultra™ Penetrator System for SAGD



## Next Generation for Higher Temperature Applications

**New k-PaC™ technology, internal elastomers, and insulators designed for high temperature.**

Suitable for use in applications with an ambient temperature of up to 500° F (260°C).

This new, higher temperature penetrator system is suitable for steam injection applications, such as SAGD, where temperatures up to 260°C are encountered.

The system consists of a completely re-designed penetrator and an advanced design downhole connector. It is totally compatible with BIW's existing high temperature surface connectors.

The new penetrator relies on improved high performance insulators and sealing elements, and it is suitable for higher continuous use temperatures at pressures up to 3,000 psi. The new downhole connector is field attachable to cable, and it uses an advanced concept design featuring BIW's k-PaC™ pressure balanced technology. With pressure balanced technology, there is no differential pressure which can force well fluids into the connector body.



BIW Metal-Lok Ultra™ Penetrator System

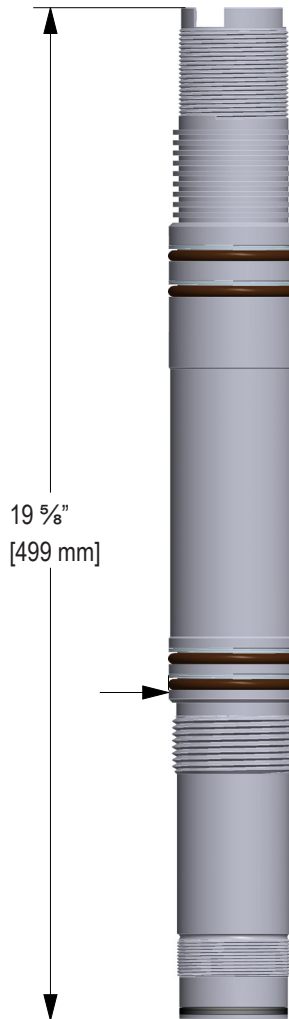
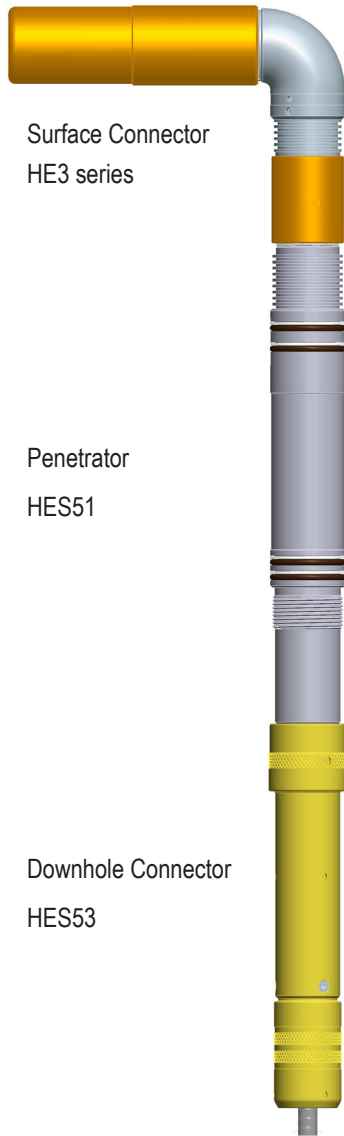
### Available Part Numbers

Surface	HE3 XXXXX-XXX
Penetrator	HES 51001-1
Lower Connector #2 Cable	HES 53223-KIT
Lower Connector #4 Cable	HES 53423-KIT

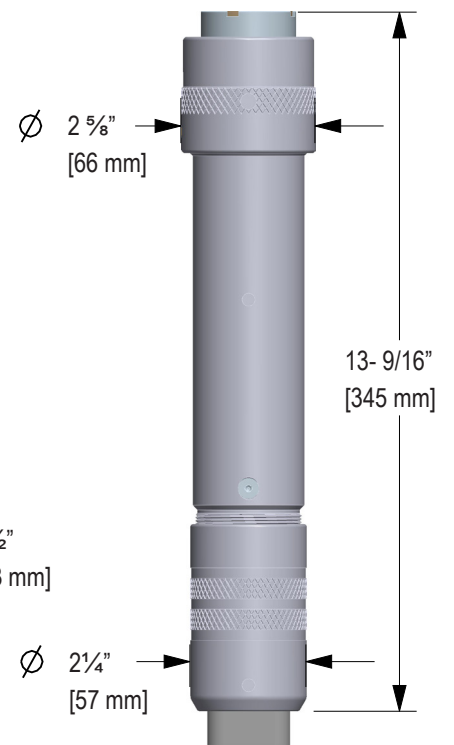
### Specification Chart

Environmental	500°F (260°C), 3000 psi
Electrical	5000 VAC
Approvals	CSA approval for Hazardous Location installation, Class I, Division 1

# Metal-Lok Ultra™ Penetrator System for SAGD



260° C Rated Penetrator  
with Metal-Lok Key



260° C Rated Field Attachable  
Downhole Connector