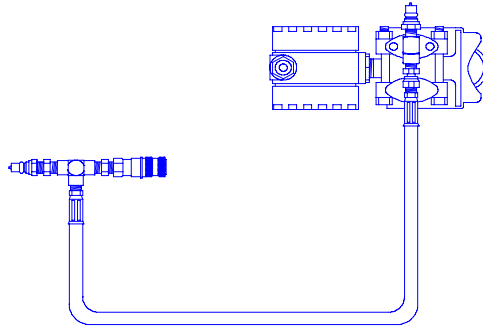


PUMP AND CASING PRESSURE

The pump pressure sensor and casing pressure sensor are directly connected to the kelly or casing. These sensors provide very rapid response time. Alternatively, Datalog can provide hydraulic sensors quick connect coupling for fast installation and Datalog can supply a hydraulic isolator if the drilling rig does not have an isolator installed. The accuracy is $\pm 0.5\%$, full scale is 35,000 KPa, 70,000 KPa or 140,000 KPa.



Pump Pressure Sensor



Casing Pressure (Choke Line)