

Compact
Lightweight
Valved
Piggable

MATE²™

MULTI-PORTED FLUID CONNECTOR



The MATE²™ valved, multiported fluid connector enables the simultaneous connection/disconnection of a number of piping runs.

The MATE²™ connector has been specifically designed for use in modular seabed installations for the vertical connection of removable modules, such as the System-Modules used in the AlphaPRIME™ CPU system. The connector simultaneously connects all the process fluid paths to/from a module, and also provides accurate alignment of the module to the receiving structure, during installation/docking.

The MATE²™ connector is sized to suit the number of bores required. Presently, the connector is sized to accommodate eight, 8-inch ports.

All ports are full-diameter, vertical through-bores to match the inside diameter of the mating piping, which provides the facility to pass pigs through the connector, if required. Individual bore sealing, between the connector halves, is achieved by the use of industry-standard metal ring gaskets that are mounted in the upper, retrievable, connector half. A seal integrity testing system is incorporated into the connector design, which is operated via an ROV interface.

Both halves of the connector (upper & lower) are internally valved, using Alpha Thames' AB3 Valves, so as to contain process fluids when the connector halves are separated. The AB3 Valve is a double block and bleed valve (see separate Data Sheet). One valve is located in each bore of each connector half. The valves are operated by an ROV, thereby eliminating the need for actuators. The connector incorporates additional ports within the upper connector half to allow for the connection of an external flushing system, to expel the small volume of hydrocarbon fluids trapped between the pairs of isolation valves once the connector assembly has been mated.

The upper and lower connector halves are clamped together by a mechanism comprising several long external tie bars, which ensure a reliable pre-load and a non-easing joint for the life of the connector assembly.

