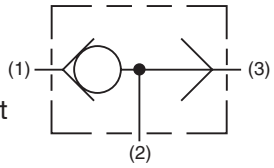
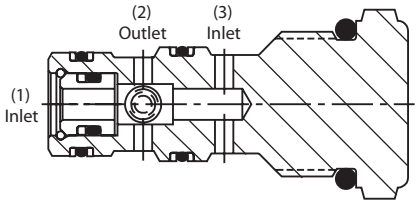
INTRODUCTION:

Shuttle valves accept flow from two different sources and divert the highest pressure to a single outlet port. Shuttle valves are commonly used in Load Sensing circuits as well as Brake circuits. Parker offers a selection of ball and spool type Shuttle valves. There are both cartridge and insert type configurations available.

Ball Type - Cartridge Style





The valve consists of a steel ball that can seal against one of two adjacent seats, providing a path from the highest pressure signal to another function. When one inlet port is pressurized, the ball or poppet is forced against the opposite seat, blocking that inlet and providing a flow path to the outlet port.

3 Way 2 Position Spool type shuttles are designed to direct flow in such a way as to allow higher pressure signals to open the lower pressure port and connect it to the common outlet port. These spring centered valves will shift when pressure at either end of the spool exceed the spring setting. These are typically used in transmission hot oil shuttle circuits.