Hydraulic Operated Power Brake

Within the Parker Hannifin product range we can offer components for a hydraulic operated power brake system. The brake system onboard a vehicle is vital for the safety of the vehicle. It is therefore important that the design of the vehicle and the design of the brake system are co-ordinated to give an optimal safety and good performance and that complements other modern cab ergonomics to reduce operator fatigue and give good machine feel.

We are pleased to help you select the right components for a given application. Contact your local Parker Hannifin Office.

Brake Modulating Valve

The brake modulating valve is made for hydraulically actuated single or dual circuit brake systems where precise pressure modulation is required. These valves may be used in open centre, closed centre or load sense hydraulic systems. The high flow capabilities of the valve permit use with wet brakes that typically require more flow for action in order to give correct response.

Using the Parker Modulating Brake Valve can reduce mechanical power losses by allowing the wet brake discs to be further apart when not in operation.

Priority & Accumulator Charging Valve

The hydraulic circuit in a vehicle is depending on the different functions that have to be operated with hydraulic power. In some cases one common pump can be used for the power brake as well as for the other functions onboard the vehicle. It is also common that power brake and power steering has a common pump. In those case it is important that brake pressure always is available.

In order to maintain hydraulic pressure for the brake circuit under all running conditions a priority function is needed as well as charging of accumulators to maintain brake pressure even if the hydraulic pump stops or brake down during operation of the vehicle.

Depending on the design of the hydraulic brake circuit a single or dual accumulator charge valve will be used. A combination of Priority and accumulator valve can be used and in combination with a Parker pump unit this can be integrated into one unit.
Single Brake Modulating Valve with pedal.

Pump package complete with accumulator charge valve and accumulator.