### Valves compatibility

Whether you want it in hydraulic or Electro-hydraulic Power brake valves on your tractor/trailer, you can pick and choose any of our products. The hereunder matrix should help you select the appropriate product for your needs.

#### Hydraulic option

<table>
<thead>
<tr>
<th>Valve Code</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VFR-00E</td>
<td>Electro-hydraulic Valve</td>
</tr>
<tr>
<td>VFR-200</td>
<td>Hydrostatic Valve</td>
</tr>
<tr>
<td>VFR-0HX</td>
<td>Hydrostatic Valve</td>
</tr>
<tr>
<td>VB-00E</td>
<td>Electro-hydraulic Valve</td>
</tr>
<tr>
<td>VB-0D0</td>
<td>Hydrostatic Valve</td>
</tr>
<tr>
<td>VB-0B0</td>
<td>Hydrostatic Valve</td>
</tr>
<tr>
<td>VB-200</td>
<td>Hydraulic Valve</td>
</tr>
</tbody>
</table>

#### Electro-hydraulic option

<table>
<thead>
<tr>
<th>Valve Code</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VFR-0EX</td>
<td>Electro-hydraulic Valve</td>
</tr>
<tr>
<td>VFR-0HX</td>
<td>Hydrostatic Valve</td>
</tr>
<tr>
<td>VFR-0EX*</td>
<td>Electro-hydraulic Valve</td>
</tr>
<tr>
<td>VB-00E*</td>
<td>Hydrostatic Valve</td>
</tr>
<tr>
<td>VB-0D0</td>
<td>Hydrostatic Valve</td>
</tr>
</tbody>
</table>

### Valves modularity

The units could be flanged on the tractor distribution block, either separately (one or the other) or as a combined unit.

The perfect module to comply with the Italian legislation:
- **Poclain Hydraulics offers two products:**
  - Electro-hydraulic version (VFR-0EX) with hydraulic (VFR-0HX) option.
  
#### Tractor and Trailer Brake Valves

The ACV allows maintaining the proper level of pressure in the braking system by charging the accumulators in case of emergency braking (EU regulation)
- **Max. Working pressure:** 145-217 PSI
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Parking and/or emergency brake valves

The ACV also supplies auxiliary equipment and is therefore equipped with a priority output in order to supply the trailer brakes when needed (i.e. Priority is given to the trailer).
- **Max. Operating pressure:** 210 bar
- **Max. output pressure:** 145-217 PSI
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Accumulator charging valves

The ACV allows maintaining the proper level of pressure in the braking system by charging the accumulators.
- **Max. Working pressure:** 145-217 PSI
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Service brake valve

The ideal module to comply with the Italian legislation:
- **Combining two functions in one:**
  - Service and/or parking brake
  - Parking/emergency brake (0-10 bar)

### Parking brake

The trailer brakes valves (TBV) allow piloting the trailer braking pressure.
- **Max. Output pressure:** 20 to 120 bar

### Service brake valve

The perfect module to comply with the Italian legislation:
- **Combining two functions in one:**
  - Service and/or parking brake
  - Parking/emergency brake (0-10 bar)

### Parking and/or emergency brake valves

The valves combine two functions in one:
- **Parking the brake**
- **Precise modulation of the braking pressure in case of emergency braking (EU regulation)**

### Electro-hydraulic option

- **Valve Selection Guide**
  - **Tractor**
    - **Parking brake**
    - **Service brake**
  - **Trailer**
    - **Parking brake**
    - **Service brake**

- **Valves combination consideration:**
  - **Parking brake**
  - **Service brake**
  - **Parking/emergency brake** (EU regulation)

- **Electro-hydraulic option**

- **Hydraulic option**

- **Valves modularity**

- **Other**

### Electro-hydraulic option

The Trailer Brake Valves (TBV) allow piloting the trailer brake pressure.
- **Max. Output pressure:** 20 to 120 bar

### Parking and/or emergency brake valves

- **Parking/emergency brake (0-10 bar)**
- **Parking brake (15-150 bar)**

### Accumulator charging valves

- **Max. Working pressure:** 210 bar
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Service brake valve

- **Max. Operating pressure:** 210 bar
- **Max. output pressure:** 145-217 PSI
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Parking brake

- **Max. Operating pressure:** 210 bar
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Parking and/or emergency brake valves

- **Max. Working pressure:** 145-217 PSI
- **Flow rate:** 0.75, 2.1, 4.0 gpm

### Accumulator charging valves

- **Max. Working pressure:** 145-217 PSI
- **Flow rate:** 0.75, 2.1, 4.0 gpm
Hydraulic and Electro-Hydraulic Brake Systems

Poclain Hydraulics is involved in the development of future braking needs for agricultural tractors, such as products to fulfill the requirements of the upcoming EU Directive regarding: Tractor and trailers designed for speeds up to 40 km/h.

Advantages of Power Brake Valves are numerous when compared to air braking system:

- No need for an additional supply source (air compressor).
- Valves are fed by the hydraulic source on the tractor.
- Hydraulic accumulators are smaller than air reservoirs.
- Faster response time.
- True pedal feedback.
- Fewer risks of system contamination. No need for additional filters.
- System is totally independent of the tractor's engine.
- Improved control for the driver.
- Better braking distribution.
- Easier and faster adjustment and maintenance.
- Vast potential for new braking concepts.

POWER BRAKE VALVES

Tractor and Trailer Brake Valves

Hydraulic Brake Systems

The underlying concept of Poclain Hydraulics braking systems can be adapted to handle your specific braking requirements.

D1 Service Brake
D2 Parking Brake
D3 Trailer Brake

Accumulators

True pedal feedback.

Electro-hydraulic

Hydraulic

Pressure is maximum.

HASR (Hydraulic Applied Spring Release) brakes

Modulating Brake Valve

SAHR (Spring Applied Hydrostatic Release) brakes

HASR brakes control available in the accumulator(s)

Emergency brake functions.

Modulating Brake Valve

SAHR brake control

Coast Down (brakes are released)

Emergency (brakes are fully applied when the actuation pressure is released)

Parking

Power off braking.

Your local Poclain Hydraulic contact

 chịu trách nhiệm

reset the brake system

by cutting off the power.

in the event of an accident the brake

is also applied.

Safety valve

Power-off

valve

Apply power-off

valve: power-off

Use to provide parking and emergency brake functions.

Auxiliary Inlet

Compressor

is fully applied when the actuation pressure is released.

Auxiliary inlet

Compressor

ensures the pressure is maintained in the line (valves to

operate the brake).

Auxiliary inlet

Compressor

ensures the pressure is maximum.

Auxiliary inlet

Compressor

ensures the pressure is null.

Auxiliary Inlet

Compressor

is fully applied when the actuation pressure is released.