# Hydraulic Symbols

## Lines
- Line, Working (Main)
- Line, Pilot or Drain
- Flow Direction
  - Hydraulic
  - Pneumatic
- Lines Crossing
- Lines Joining
- Lines With Fixed Restriction
- Line, Flexible
- Station, Testing, Measurement or Power Take-Off
- Variable Component (run arrow through symbol at 45°)
- Pressure Compensated Units (Arrow parallel to short side of symbol)
- Temperature Cause or Effect
- Reservoir
  - Vented
  - Pressurized
- Line, To Reservoir
  - Above Fluid Level
  - Below Fluid Level
  - Vented Manifold

## Hydraulic Pumps
- Fixed Displacement
- Variable Displacement

## Motors and Cylinders
- Hydraulic
  - Fixed Displacement
  - Variable Displacement
- Cylinder, Single-Acting
  - Cylinder, Double-Acting
  - Single End Rod
  - Double End Rod
  - Adjustable Cushion
  - Advance Only
  - Differential Piston

## Miscellaneous Units
- Cooler
- Temperature Controller
- Filter, Strainer
- Pressure Switch
- Pressure Indicator
- Temperature Indicator
- Component Enclosure
- Direction of Shaft Rotation (assume arrow on near side of shaft)
- Reservoir
  - Electric Motor
  - Accumulator, Spring Loaded
  - Accumulator, Gas Charged
  - Heater

## Methods of Operation
- Spring
- Manual
- Push Button
- Push-Pull Lever
- Pedal or Treadle
- Mechanical
- Detent
- Pressure Compensated