


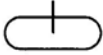


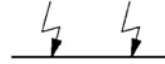



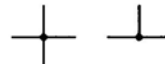






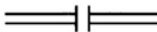


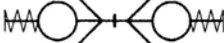








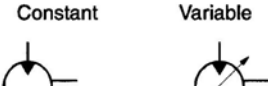


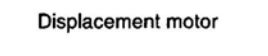

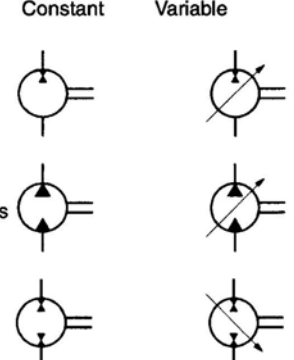
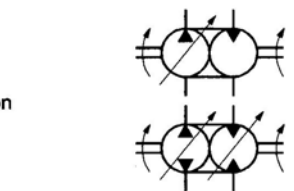
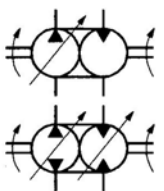
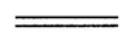
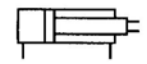
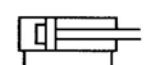



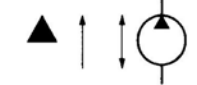




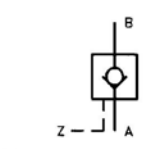
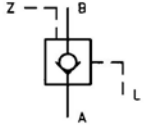

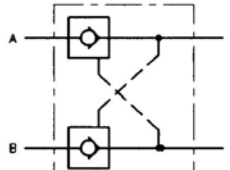
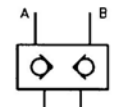
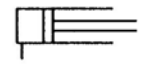
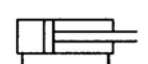

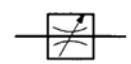
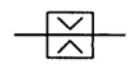
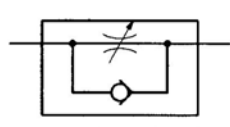
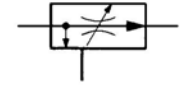
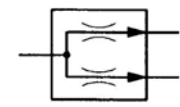


ISO / CETOP HYDRAULIC SYMBOLS

Work line		Reservoir, open	
Pilot line		Reservoir, pressurized	
Drain line		Enclosure for several components in one unit	
Electric line		Manometer, Thermometer	
Flexible line		Flow meter	
Line connections		Pressure source	
Crossing lines		Electromotor	
Venting		Combustion engine	
Pressure connection w. plug		Coupling	
With line connection		1 Flow direction	
Quick koupling w. check valve		Constant	
Accumulator		Variable	
Filter		2 Flow directions	
Cooler		Displacement pump	
Heater		1 Flow direction	
		Constant	
		Variable	
		2 Flow directions	
		Displacement motor	

<p>Constant      Variable</p>  <p>Combined pump-motors</p>  <p>Hydrostatic transmission</p>  <p>Shaft, lever, rod, piston</p> 	<p>Differential cylinder</p>  <p>Cylinder with cushion</p> 
<p>Spring</p>  <p>Throttling, depending on viscosity</p>  <p>Restriction, not viscosity influenced</p>  <p>Flow direction</p>  <p>Direction of rotation</p>  <p>Variable setting</p> 	<p>Check valve, not spring loaded</p>  <p>Spring loaded</p>  <p>Pilot controlled check valve</p>  <p>Pilot controlled opening</p>  <p>Pilot controlled closing</p>  <p>Example</p>  <p>Simplified</p> 
<p>Cylinders</p> <p>Single acting</p>  <p>Double acting</p> 	<p>Restrictor, fixed</p>  <p>Restrictor, variable</p>  <p>Restrictor, not viscosity influenced</p>  <p>Throttle-check valve</p>  <p>3-way by-pass flow regulator</p>  <p>Flow divider</p> 

Directional valves			
<i>Basic symbol:</i>			
Two - way			
Three - way			
Two - way			
Without fixed position 2 - extreme position			
2 - extreme position and between (OSP)			
2/2 - valve			
3/2 - valve			
4/3 - valve			
		with transient intermitten pos.	
		mechanical feed back	
		Hand operated	
		Lever	
		Roller	
		Hydraulic operated	
		Pneumatic operated	
		Direkt pressure	
		Solenoid	
		Motor operated	
		Solenoid, hydraulik-operated	
		PVEO	
		PVEM	
		PVEH	
		Pneumatic, hydraulic-operated	
		Mekanical lock	
		Spring return	
<i>Examples</i>			
		Solenoid	
		Mechanical	
		Roller	
		Direct pressure	
		Pressure rise	

