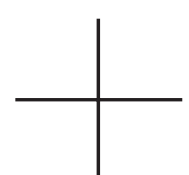
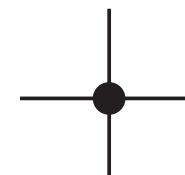



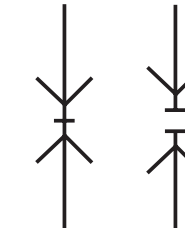
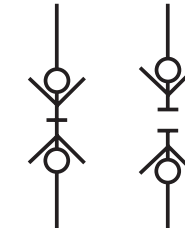


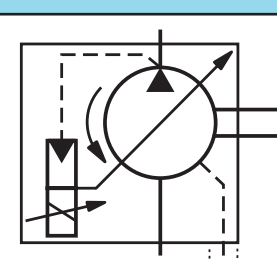
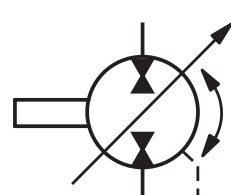

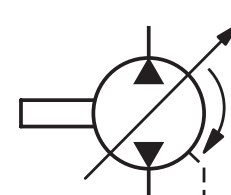







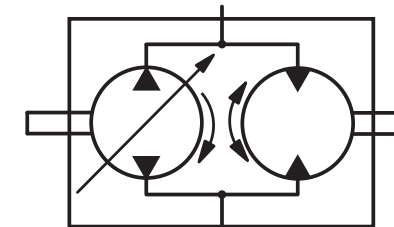
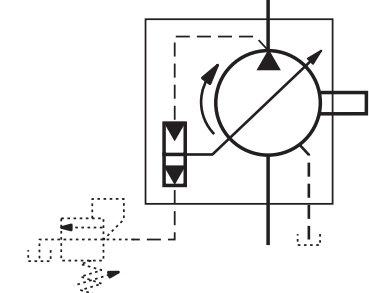
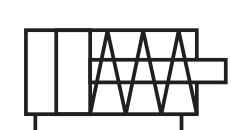
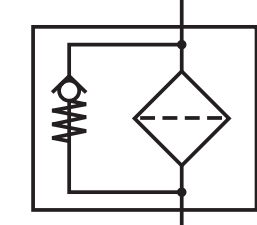
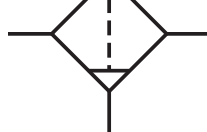
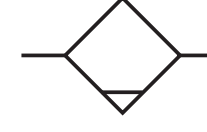
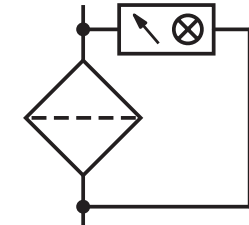
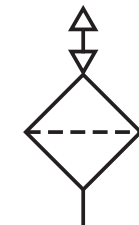
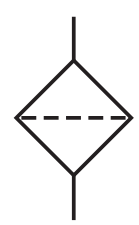

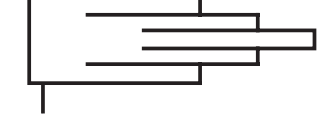
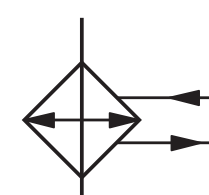
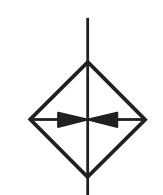
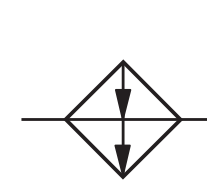



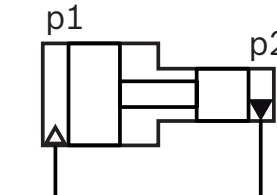
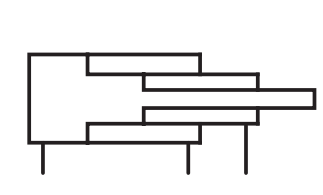






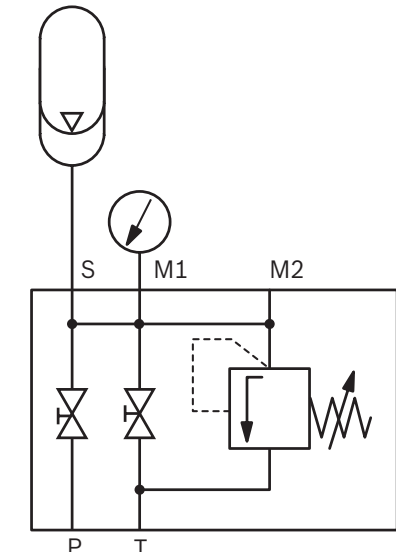

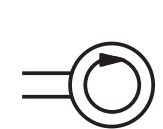
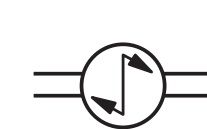
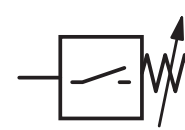
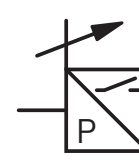
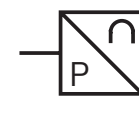


Hydraulics: Graphic symbols

Pumps, motors, cylinders and equipment

							
Crossing, no connection is intended	Crossing, connected lines	Hose assembly, flexible	Reservoir	Reservoir with line	Quick-action coupling without non-return valve, coupled/uncoupled	Quick-action coupling with non-return valve, coupled/uncoupled	Fixed displacement pump
	 <div>Variable displacement pump with electro-hydraulic servo control:<ul style="list-style-type: none">• 1 Direction of flow• 1 Direction of rotation• External drain line</div>	 <div>Variable displacement pump/motor:<ul style="list-style-type: none">• 2 Direction of flow• 2 Direction of rotation• External drain line</div>	 <div>Fixed displacement pump/motor unit with:<ul style="list-style-type: none">• 1 Direction of flow• 1 Direction of rotation</div>	 <div>Variable displacement pump with:<ul style="list-style-type: none">• 2 Direction of flow• 1 Direction of rotation• External drain line</div>	 <div>Fixed displacement motor with:<ul style="list-style-type: none">• 2 Direction of flow• 2 Direction of rotation</div>	 <div>Fixed displacement motor with:<ul style="list-style-type: none">• 1 Direction of flow• 1 Direction of rotation</div>	
							
Pneumatic source of energy	Drive unit, except electric motor	Electric motor	Hydraulic swivel motor	Hydrostatic transmission	Variable displacement pump with pressure compensation, pilot-operated and one direction of rotation and external drainline	Single-acting, single-rod cylinder, return stroke by spring force, spring chamber with connection	
							
Filter with bypass valve	Filter with separator and manual drain	Fluid separator with manual drain	Filter with optical clogging indicator based on differential pressure	Reservoir-breather filter	Filter	Double-acting, single-rod cylinder	Telescopic cylinder, single-acting
							
Cooler with liquid coolant	Heater	Temperature regulator	Piston-type accumulator	Bladder-type accumulator	Diaphragm-type accumulator	Pressure intensifier, single-acting, which converts a pneumatic pressure p1 into a higher hydraulic pressure p2	Telescopic cylinder, double-acting
							
Pressure gauge	Fluid Level indicator	Thermometer	Flow indicator	Flow meter	Gas bottle	Accumulator with accumulator safety block <ul style="list-style-type: none">• Shut off device• Equipment against excessive pressure• Discharge device	
							
Differential pressure gauge	Tachometer	Torque meter	Pressure switch, electro-mechanical, adjustable	Pressure converter, electronically adjustable, switching signal output	Pressure sensor, analogue output signal		

