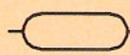
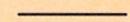
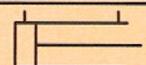
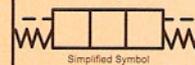
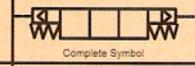
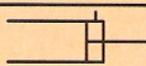
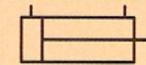
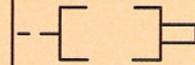
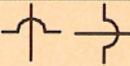
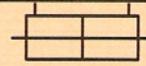
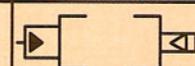
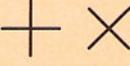
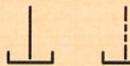
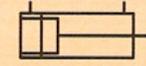
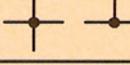
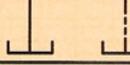
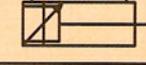
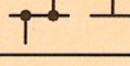
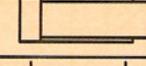
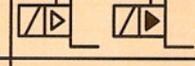
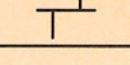
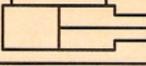
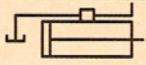
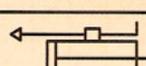
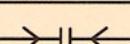
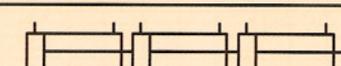
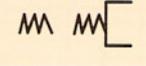
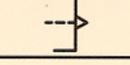
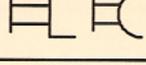
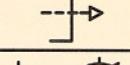
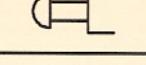
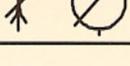
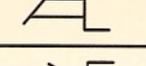
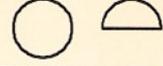
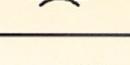
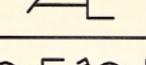
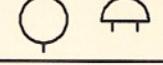
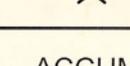
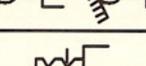
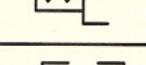
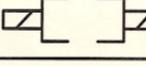
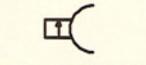
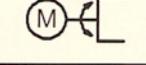
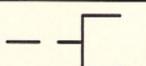
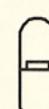
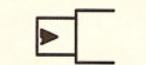
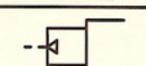


LINES		 Air Receiver	CYLINDERS		 Internal Return
 Main		RESERVOIRS		 Single Acting	 Simplified Symbol  Complete Symbol
 Pilot	 Vented	 Single Acting			
 Exhaust or Drain	 Pressurized	 Double Acting Single Rod End		 Pilot Differential Simplified Symbol	
 Crossing	 Simplified Symbol Connecting Lines	 Double Rod End		 Complete Symbol	
 Crossing	 Above Fluid	 Fixed Cushion (Advance & Retract)		 Solenoid or Pilot External Pilot Supply	
 Joining	 Below Fluid	 Adjustable Cushion (Advance Only)		 Internal Pilot Supply and Exhaust	
 Joining	 Vented Manifold	 With Large Rod (Non-Cushion)		 Solenoid and Pilot	
 Joining	FLUID CONDITIONERS		 Cushion Advance & Retract	 Thermal Local Sensing	
 Pneumatic Air or Gas Flow	 Fluid Conditioners	 Pressure Intensifier		 Remote Sensing	
 Hydraulic Liquid Flow	 Heaters Introduction of Heat	 Servo Positioners Hydraulic		 Servo	
 Connected	 Fluid Heating Medium	 Pneumatic Discrete Positioner		 Composite Actuators and/or One Signal Only	
 Disconnected	 Gaseous Heating Medium	 One and Other		 One and Other	
 Flexible	 Coolers Dissipation of Heat	ACTUATORS & CONTROLS		 One or Other	
 Rotating Coupling	 Liquid Cooled	 Spring		 Solenoid and Pilot or Manual and Pilot	
 Plain Orifice	 Gas Cooled	 Manual		 Solenoid and Pilot or Manual and Pilot or Manual Only	
 Threaded Orifice	 Temperature Controllers	 Push Button		ROTARY DEVICES	
 Adjustable	 Filter Strainer	 Lever		 Basic Symbol	
 Fixed Position	 Separators Manual Drain	 Pedal or Treadle		 With Ports	
 Plugged Ports	 Automatic Drain	 Mechanical		 With Rotating Shaft, Control and Drain	
ACCUMULATORS		 Filter Separators Manual Drain	 Detent	 With Rotating Shaft, Control and Drain	
 Spring Loaded	 Automatic Drain	 Pressure Compensated			
	 Automatic Drain	 Solenoid Single Winding			
 Gas Charged	 Dessicator Chemical Dryer	 Reversing Motor			
	 Lubricators Less Drain	 Pilot Pressure Remote Supply			
 Weighted	 With Manual Drain	 Internal Supply			
		 Released Pressure Remote Exhaust			

	Hydraulic Pumps (Fixed Displacement Uni-Directional)		Pneumatic Pump		Envelopes		Actuated Left
	Bi-Directional		Pneumatic Motor		Two-Way (manual On-Off)		Actuated Right
	Hydraulic Pumps (Variable Displacement Non-Compensated Uni-Directional Simplified)		Oscillator		Off	Typical Flow Paths for Center Condition of Three-Way Valve	
	Uni-Directional Complete		Electric Motor		On		Closed Center
	Bi-Directional Simplified		Heat Engine		Check		Open Center P, A&T
	Bi-Directional Complete	ACCESSORIES			Check (Pilot-Operated) To Open		Open Center P&T Closed Crossover
	Hydraulic Pumps (Variable Displacement Pressure Compensated Uni-Directional Simplified)		Pressure Gauge		To Close		Open Center B&T
	Uni-Directional Complete		Temperature Gauge		Two-Way Two-Position Normally Closed		Open Center P, A
	Bi-Directional Simplified		Temperature		Two-Way Two-Position Normally Open		Open Center A, T
	Bi-Directional Complete		Flow Meter Flow Rate		Two-Way Infinite Position Normally Closed		Open Center P, B&T
	Hydraulic Motor (Fixed Displacement Uni-Directional)		Totalizing		Two-Way Infinite Position Normally Open		Pressure Relief Normal
	Bi-Directional		Venturi		Two-Way Infinite Position Normally Open		Relieving
	Hydraulic Motor (Variable Displacement Uni-Directional)		Orifice Plate		Two-Way Infinite Position Normally Open		Sequence
	Bi-Directional		Pilot Tube		Three-Way Two-Position Normally Open		Pressure Reducing
	Hydraulic Pump Motor (One Direction as Pump, Other as Motor)		Nozzles		Three-Way Two-Position Normally Closed		Pressure Reducing & Relieving
			Pressure Switch		Three-Way Distributor		Float Switch
	Hydraulic Pump Motor (One Direction of Flow as Either Pump or Motor)		Muffler		Three-Way Two-Pressure	Two-Position Snap Action with Transition	
		VALVES			Double-Check Without Cross Bleed		Typical Transition Symbol
	Hydraulic Pump Motor (Operating in both Directions as Either Pump or Motor)		Envelopes		Double-Check With Cross Bleed		Infinite Positioning
			Envelopes		Four-Way Two-Position Normal		Three-Way Valves
	Hydraulic Pump Motor (Operating in both Directions as Either Pump or Motor)		Envelopes		Actuated		Infinite Positioning
			Envelopes		Four-Way Three-Position Normal		Four-Way Valves