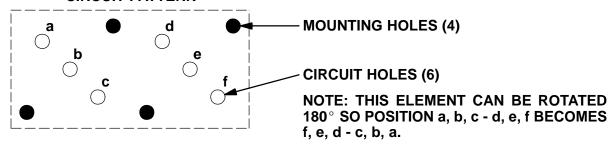
ARO PNEUMATIC LOGIC CONTROL LOGIC FUNCTION ASSEMBLY

LOGIC SYMBOL	LOGIC FUNCTION	PORT DESIGNATION
a → F - F → d → b/e	Flip-Flop	a = input S (set) b or e = Supply c = output (set) d = output (reset) f = input R (reset)
VALVE SYMBOL	VALVE FUNCTION	PORT DESIGNATION
d c a o o o f	4 - way, 2 position, double pilot operated	a = pilot b or e = supply c = output d = output f = pilot

REVISED: 2-6-01 PN 58999-60 FORM: 2457-2

CIRCUIT PATTERN





b/e

READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT.

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

DESCRIPTION

This element performs the logic function "Flip-Flop" with two inputs and two outputs. One output is always on while the other is always off. Applying a signal to one of the inputs turns the corresponding output on and the other off. If the corresponding output was already on, the Flip-Flop will remain in that state. The element has six bottom ports which are designated a, b, c, d, e and f and marked on the top of the element to correspond to the position on the base. These ports are connected to the circuit board or function base and, through circuit passages in the circuit module, allow the required circuitry to be performed.

OPERATING PRESSURE RANGE

30 to 150 p.s.i.g.

TEMPERATURE RANGE

 $+32^{\circ}$ to $+160^{\circ}$ F.

RESPONSE TIME

"a" on \rightarrow "c" on = 11 ms (approximately). "f" on \rightarrow "d" on = 11 ms (approximately).

FLOW CHARACTERISTICS

Flow b or $e \rightarrow c$ or d at 100 p.s.i.g. = 12 c.f.m. free air. Capacity Factory Cv = 0.21

INSTALLATION

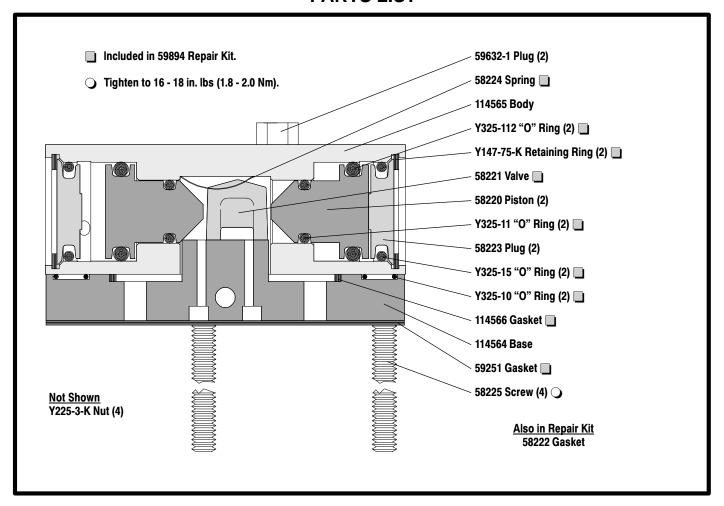
Pressure regulation is recommended for applications where optimum repeatability is required. Lubrication is not required. Filtration is recommended to assure a clean, dry air supply for optimum repeatability.

OPERATING PRESSURE

When input a is pressurized, the left (58220) piston is shifted towards the f port (f must be depressurized). This movement positions the (58221) valve to make the connection d exh. Therefore, d is off and port c is uncovered, exposing it to supply pressure from port **b** or **e**. Therefore, **c** is on. When input **a** is removed, the left piston will retract, but the (58221) valve will remain in its position, thus retaining output **c** on and output **b** off. Similarly, when input f is pressurized (on), the right (58220) piston shifts towards the a port (input a must be pressurized), making the connection d on and c off. The (58225) screw threads into base to assemble the element and extend beyond the base for insertion into mounting holes in the circuit board assembly (or function base). The (Y225-3-K) nuts are used to attach the assembly to the circuit board. The (59251) gasket provides sealing between the circuit base plate and the element ports.



PARTS LIST



SERVICE

In the event of a malfunction:

Check (58221) valve for damage or defects.

Check (114564) base for damage or defects.

Check (Y325-10, Y325-11 and Y325-112) "O" rings for excessive wear or defects.

Check (Y325-15) "O" rings, (114566) gasket and (59251) gasket for imperfections if external leakage occurs.

TESTING (element mounted on function base)

Apply pressure at port **a** and port **b** or **e**. Output should appear at **c**. No output should appear at **d**. Apply pressure at port **f** and port **b** or **e**. Output should appear at **d**. No output should appear at **c**.