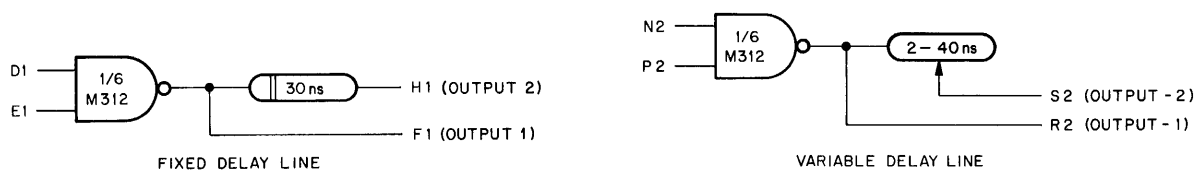


# M312 Delay Lines

The M312 module contains six delay lines. Five of these delay lines have fixed delays with  $\pm 5\%$  tolerance, and one is variable. Delays and output pins are as follows:

Delay (ns)	Output Pins	
	No. 1	No. 2
30	F1	H1
50	F2	H2
30	L1	M1
50	L2	M2
50	R1	S1
0-40	R2	S2

The input NAND gates of the delay lines provide an additional delay of 10 ns.



15-0114

## M312 Simplified Diagram

The following are the input, output, and power characteristics of the M312 module.

- INPUTS:** Each input presents 1.25 TTL unit loads.
- OUTPUTS:** 30 ns delay lines - Each output of the 30 ns delay line is capable of driving 6 unit loads. However, the total number of unit loads on both outputs of the delay line should not exceed six.
- 50 ns lines - Output No. 1 of each 50 ns delay line is capable of driving 6 unit loads, and output No. 2 is limited to 4 unit loads. The total unit load capability of each delay line should not exceed 6 unit loads.

Variable delay line - Output No. 1 of the variable delay line is capable of driving 5 unit loads, and output No. 2 is limited to 1 unit load. The total unit load capability of this delay line should not exceed 5 unit loads.

**POWER:** Power dissipation of the M312 module is 5V at 275 mA (maximum).