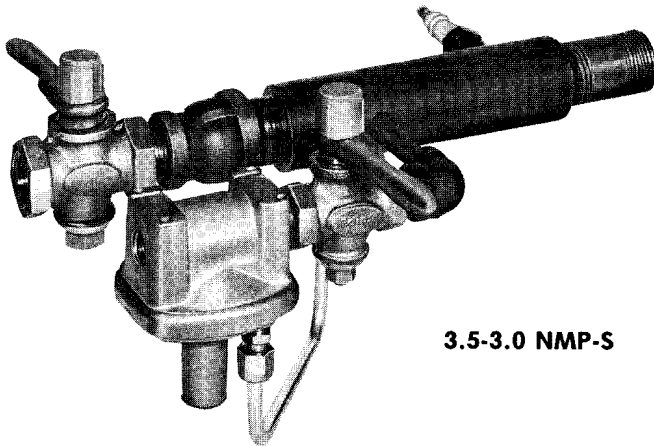
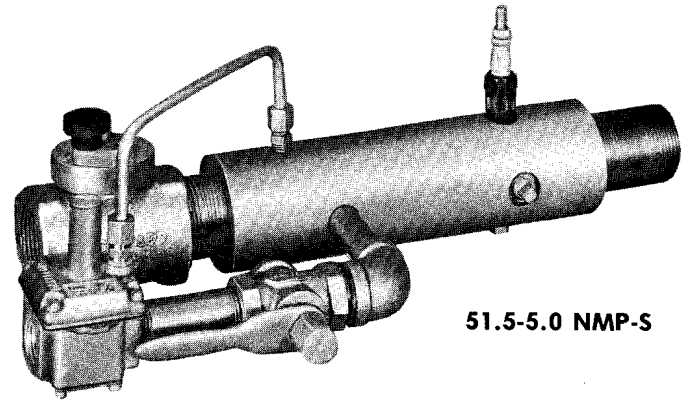


ECLIPSE NOZZLE MIXING PILOTS*

SERIES NMP-S



3.5-3.0 NMP-S



51.5-5.0 NMP-S

Eclipse Nozzle Mixing Pilots are designed to reliably ignite all types of gas, oil, or combination gas/oil burners. The 3.5 Series NMP-S pilots will ignite burners with inputs to 3,000,000 Btu/hr., and the 51.5 Series pilots, depending on the outlet size selected, will ignite burners rated to 20,000,000 Btu/hr. NMP-S pilots feature easy ignition and extremely stable operation with air/gas ratios ranging from 50% fuel rich to over 600% excess air. Performance under varying back pressures or drafts is excellent. The wide operational range of these pilots simplifies adjustment for maximum signal strength from flame monitoring devices. Their low capacity capabilities can help improve turndown on small capacity burners.

Nozzle mixing pilots are available in two main body sizes.

The 3.5 Series NMP-S pilots have a 1/2" air inlet and 1/4" gas inlet. They can be ordered with a 3/8", 1/2", or 3/4" threaded outlet. Maximum capacity of all 3.5 Series NMP-S pilots is 25,000 Btu/hr. The 51.5 Series NMP-S pilots have a 1-1/4" air inlet and 1/2" gas inlet. If ordered with a 3/4" threaded outlet, the 51.5 NMP-S pilot has a maximum capacity of 65,000 Btu/hr. With a 1" threaded outlet the 51.5 pilot capacity is 90,000 Btu/hr. while a 1-1/4" threaded outlet provides 150,000 Btu/hr.

All Eclipse NMP-S pilot assemblies are completely packaged and include: patented burner body; cross loaded gas pressure regulator; 10mm spark plug; adjustable orifice manual shut-off gas cock; and adjustable air control valve.

Maximum gas inlet pressure for all sizes is 1/2 psig.

CAPACITIES (Using Natural Gas—0.6 Sp. Gr.)

3.5-1.5 NMP-S

	0	5	10	15	20	25
CAPACITY IN 1000'S BTU/HR.						
MIN. AIR PRESS. REQ'D. @ PILOT INLET* - "W.C.		← 5	→ 12			
MIN. GAS PRESS. REQ'D. @ PILOT INLET** (ON RATIO) "W.C.		← 6	→ 10			
APPROX. FLAME LENGTH (ON RATIO) IN INCHES		5	7	9	11	12

*At inlet to adjustable pilot air cock.

**At inlet to pilot gas regulator.

*U.S. Pat. No. 3,418,060. Canadian Pat. No. 824,463



Eclipse Combustion

CAPACITIES (Cont'd)

3.5-2.0 & 3.5-3.0 NMP-S

	0	5	10	15	20	25
CAPACITY IN 1000'S BTU/HR.	[Graph showing capacity range from 0 to 25]					
MIN. AIR PRESS. REQ'D. @ PILOT INLET* - "W.C.	← 3.0 8.0 →					
MIN. GAS PRESS. REQ'D. @ PILOT INLET** (ON RATIO) "W.C.	← 4.0 6.0 →					
APPROX. FLAME LENGTH (ON RATIO) IN INCHES	5	7	9	11	12	

*At inlet to adjustable pilot air cock.

**At inlet to pilot gas regulator.

51.5-3.0 NMP-S

	0	6	10	20	30	40	50	60	65	
CAPACITY IN 1000'S BTU/HR.	[Graph showing capacity range from 0 to 65]									
MIN. AIR PRESS. REQ'D. @ PILOT INLET* - "W.C.	← 4 8 →									
MIN. GAS PRESS. REQ'D. @ PILOT INLET** (ON RATIO) - "W.C.	← 5 10 →									
APPROX. FLAME LENGTH (ON RATIO) IN INCHES	6	7	11	13	15	16	16	17		

*At inlet to air butterfly valve.

**At inlet to pilot gas regulator.

51.5-4.0 NMP-S

	0	6	10	20	30	40	50	60	70	80	90	
CAPACITY IN 1000'S BTU/HR.	[Graph showing capacity range from 0 to 90]											
MIN. AIR PRESS. REQ'D. @ PILOT INLET* - "W.C.	← 4 8 →											
MIN. GAS PRESS. REQ'D. @ PILOT INLET** (ON RATIO) "W.C.	← 4 10 →											
APPROX. FLAME LENGTH (ON RATIO) IN INCHES	6	12	17	18	19	20	21					

*At inlet to air butterfly valve.

**At inlet to pilot gas regulator.

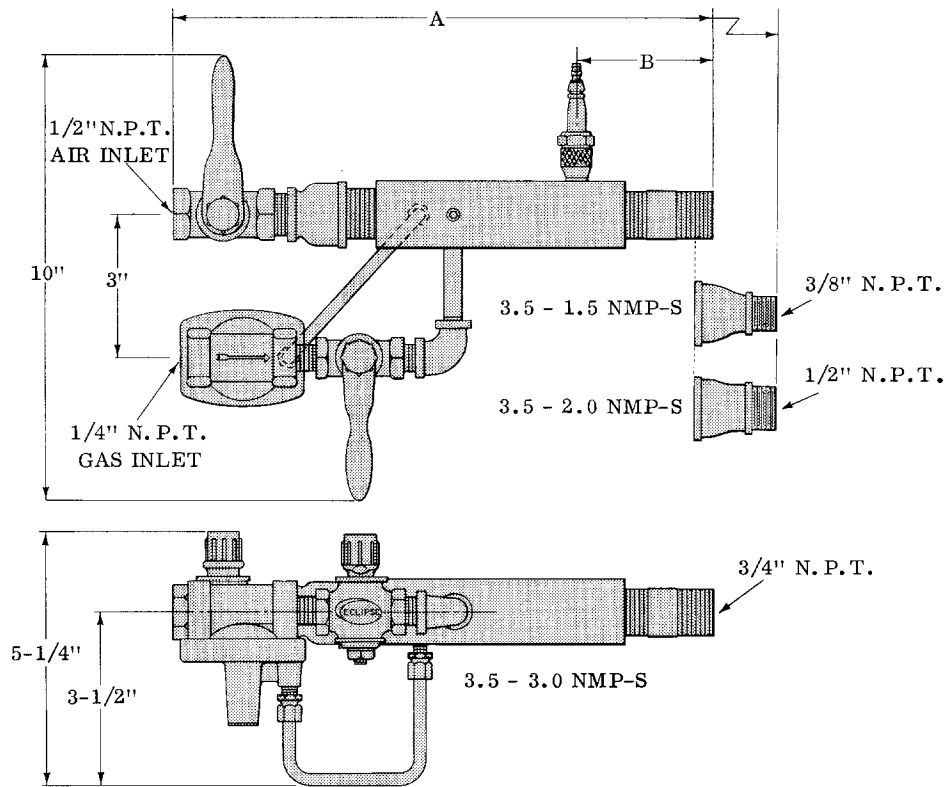
51.5-5.0 NMP-S

	0	6	20	40	60	80	100	120	140	150	
CAPACITY IN 1000'S BTU/HR.	[Graph showing capacity range from 0 to 150]										
MIN. AIR PRESS. REQ'D. @ PILOT INLET* - "W.C.	← 4 8 →										
MIN. GAS PRESS. REQ'D. @ PILOT INLET** (ON RATIO) "W.C.	← 4 10 →										
APPROX. FLAME LENGTH (ON RATIO) IN INCHES	5	9	14	17	19	19	20	20	20	20	

*At inlet to air butterfly valve.

**At inlet to pilot gas regulator.

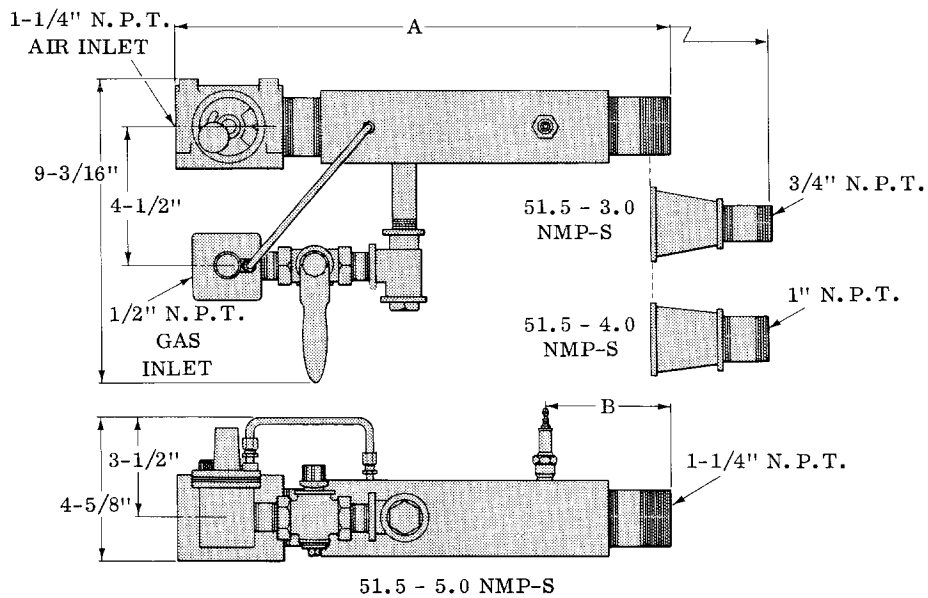
DIMENSIONS
3.5 Series NMP-S



CATALOG NUMBER	ASSEMBLY NUMBER	DIMENSIONS		APPROX. WT./LBS.
		A	B	
3.5-1.5 NMP-S	102600	12-1/8	4	4.3
3.5-2.0 NMP-S	102599	12-3/8	4-1/4	4.3
3.5-3.0 NMP-S	102598	10-7/8	2-3/4	4.0

NOTE: All dimensions are in inches.

DIMENSIONS
51.5 Series NMP-S



CATALOG NUMBER	ASSEMBLY NUMBER	DIMENSIONS	
		A	B
51.5-3.0 NMP-S	102722	17-3/8	6-1/2
51.5-4.0 NMP-S	102721	17-1/4	6-3/8
51.5-5.0 NMP-S	102720	14-9/16	3-11/16

NOTE: All dimensions are in inches.