

Eclipse Pilot Mixers



Low Pressure



High Pressure

Eclipse Pilot Mixers are of three different types: low pressure atmospheric, high pressure atmospheric and blast. All are designed to provide stable, accurate, air/gas mixtures for a great variety of pilot nozzles under many varying furnace conditions. These pilot mixers are available in either complete or stripped assemblies. Stripped assembly mixers are furnished less all valves and fittings.

Low Pressure Atmospheric Pilot Mixers

Eclipse Low Pressure Atmospheric Pilot Mixers will operate with any clean, commercially available fuel gas. It is only necessary to pipe low pressure gas (4" w.c. to 1 psig natural gas or 10" w.c. to 1 psig LP-gas) to the mixer for operation.

The energy of the gas passing through the mixer orifice is used to entrain a portion of the air required for combustion. The balance of the air is introduced as secondary air at the pilot nozzle, therefore, these pilot mixers are limited to open burner applications.

Pilot mixers are available in 1/2", 3/4" and 1" outlet sizes for all Eclipse atmospheric pilot nozzles. See Spec Sheet 810, page 1, for pilot assemblies with low pressure atmospheric pilot mixers.

See Bulletin 650, Eclipse Atmospheric Injectors, for detailed information on configured model numbers, dimensions, outlet sizing, orifice selection, and gas flow for these Atmospheric Pilot Mixers.

High Pressure Atmospheric Pilot Mixers

Eclipse High Pressure Atmospheric Pilot Mixers operate on the same principle as the low pressure atmospheric pilot mixers. The kinetic energy of the high pressure gas, however, is sufficient to entrain all the air required for combustion. This feature makes it possible to use high pressure pilot mixers on sealed burner applications as there is no requirement for secondary air at the pilot nozzle.

These mixers will operate with gas pressures ranging from 1 psig to 25 psig. High pressure pilot mixers are available in 1/2", 3/4" and 1" outlet sizes for all Eclipse High Pressure Pilot Nozzles. See Spec Sheet 810, page 2, for pilot assemblies with high pressure pilot mixers.

See Bulletin 650, Eclipse Atmospheric Injectors, for detailed information on configured model numbers, dimensions, outlet sizing, orifice selection, and gas flow for these Atmospheric Pilot Mixers.

Blast Pilot Mixers

Eclipse Blast Pilot Mixers utilize low pressure gas (6" w.c. to 15" w.c.) and air from a low pressure blower (4 oz. to 32 oz.) and can be used on open or sealed burner applications.

These mixers can be used for single pilot applications (see Spec Sheet 810, pages 3 through 5) or for multiple pilot applications. When using Eclipse Blast Pilot Mixers for multiple pilot applications, refer to Selection Guide 812.

Blast Pilot Mixers are available in sizes 1/2" through 1-1/2" and will supply air/gas mixture to as many as six pilot nozzles.

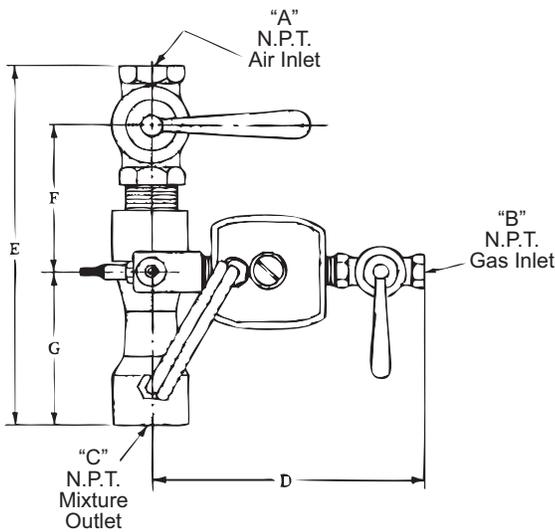


Low Pressure

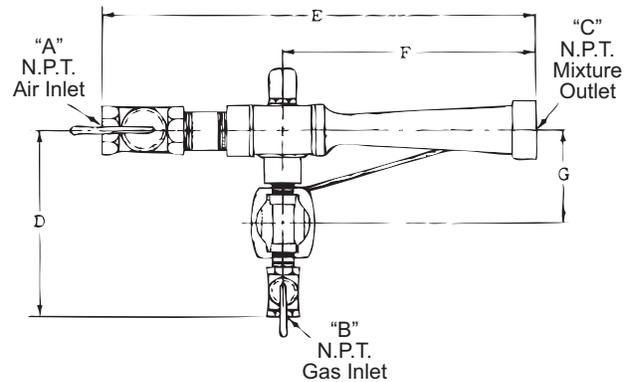


High Pressure

121 and 131 PM



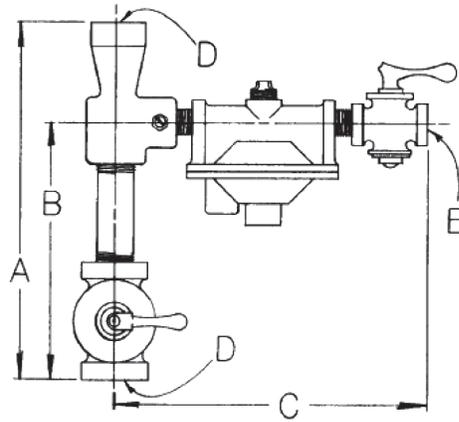
142 and 163 PM



| Catalog Number | Assembly Number | | Dimensions | | | | | | |
|----------------|-----------------|----------|------------|-----|-------|---------|----------|---------|---------|
| | Complete | Stripped | A | B | C | D | E | F | G |
| 121 PM | 300557 | 300561 | 1/2 | 3/8 | 1/2 | 5-3/4 | 7 | 2-27/32 | 3-1/32 |
| 131 PM | 300558 | 300562 | 3/4 | 3/8 | 3/4 | 5-3/4 | 7-1/8 | 2-29/32 | 3-1/32 |
| 142 PM | 300577 | 300579 | 1 | 1/2 | 1 | 7-13/16 | 19-1/8 | 10-1/32 | 3-15/16 |
| 163 PM | 300578 | - | 1-1/2 | 3/4 | 1-1/2 | 8-7/8 | 23-13/32 | 12 | 4-3/16 |

NOTE: All dimensions in inches.

32 LP



| Catalog Number | Assembly Number | | Dimensions | | | | |
|----------------|-----------------|----------|------------|-------|-------|-----|-----|
| | Complete | Stripped | A | B | C | D | E |
| 32 LP | 300694 | 300675 | 9-1/2 | 6-1/2 | 5-7/8 | 3/4 | 1/2 |

NOTE: All dimensions in inches.

