

# Dimensions | Three-pipe Bleeder

8654 and 8655 Bleeders have aluminum bodies to minimize rust problems. They are furnished with four interchangeable orifice plugs. One is undrilled, the other three drilled for various bleeds indicated in Table A as "Standard."

To determine most appropriate orifice, divide maximum gas pressure at ratio **regulator outlet** by air pressure; then use the orifice giving the next lower % impulse pressure.

The bleeder and the filter are intended for use on low pressure combustion air only and have a maximum operating pressure of 2 psi.

In the example on the front side: 10 psi gas ÷ 14 psi air = 71%. Use the 57% (#32 drill) orifice. Or bore it out with a #38 drill for 70% impulse.

To determine optimum orifice through trial and error: Light burner, bring it to high fire, and adjust limiting orifice valve for desired air/gas ratio.

Insert smallest orifice (#32 drill) into "M" opening in bleeder. If flame indicates drop in gas flow, use this orifice; or make a smaller one by drilling blank plug. (It is desirable to have impulse pressure as high as possible as finally set via the bleed at high fire; and the smaller the orifice, the higher the impulse pressure.)

If #32 orifice does not cause a drop in gas flow, try successively larger orifices until an effect is observed.

Readjust limiting orifice valve for desired air/gas ratio. Burner will maintain that ratio at all firing rates.

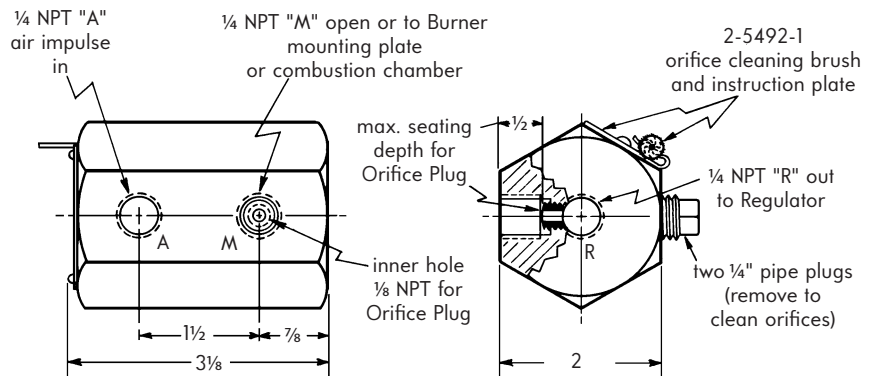
TABLE A

	Impulse as a % of air pressure	Orifice drill size	part number
Standard	10	# 8	OA2-0401-1
	30	25	OA2-0401-2
	57	32	OA2-0401-3
Special	15	15	
	20	19	
	40	29	
	70	38	
	82	44	

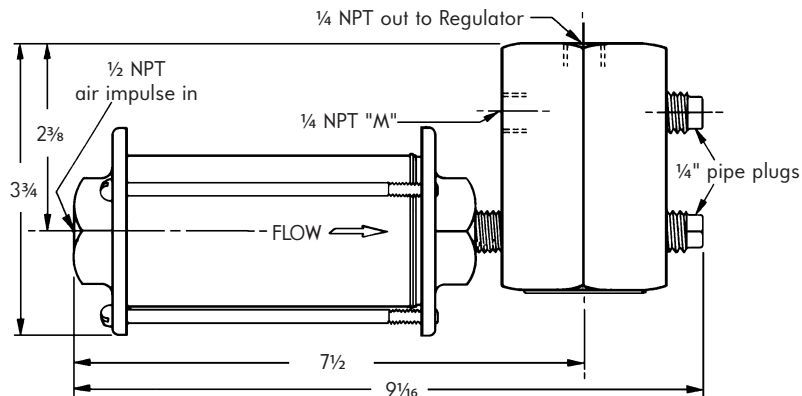
User can make one of these orifices by drilling blank plug included with each bleeder or by enlarging one of the 3 Standard orifices. Drill plug from end opposite slot. Remove burrs and insert plug so slotted surface is about 1/2" below surface.

## DIMENSIONS inches

8654 Bleeder  
wt. 1 lb



8655 Bleeder and Filter Assembly  
wt. 2 lb



To order, specify: 8654 Bleeder, or 8655 Bleeder-Filter.