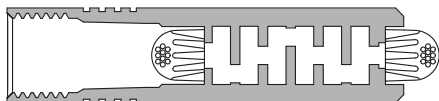


156 LEE BENDER JET

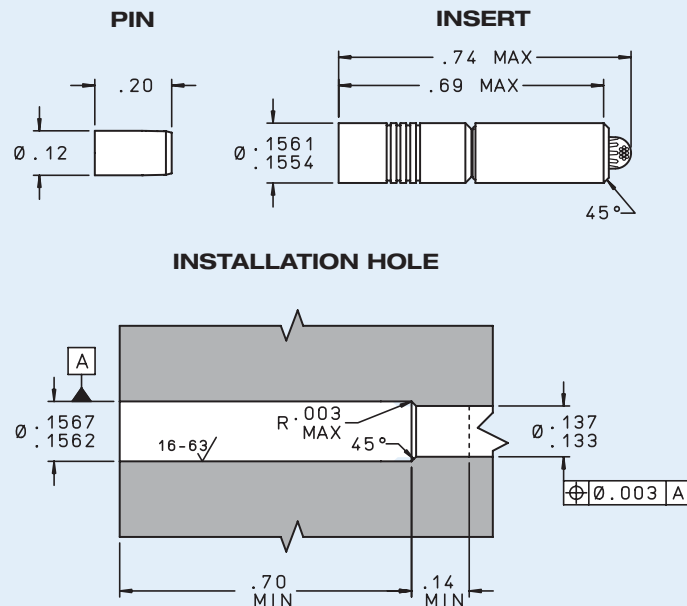
The new 156 Lee Bender Jet® is a miniature, lightweight multi-orifice restrictor. Weighing only 1.1 grams nominal, the 156 Bender Jet offers a 21% weight savings over the 187 Bender Jet and is 17% smaller in diameter, resulting in a corresponding reduction in installation boss size and weight. Using the same field-proven technology as our other Lee Bender Jets, the 156 Bender Jet incorporates multiple orifices in series to lower fluid velocity and reduce the possibility of cavitation. The multi-orifice configuration also provides a larger minimum passage for a given Lohm* rate to increase resistance to contamination.

Designed to meet the requirements of 5,000 psi systems, 156 Bender Jets are offered in eight standard** Lohm rates, ranging from 1,900 to 9,500 Lohms, and are protected with two integral safety screens for bidirectional flow capability. In addition, each Bender Jet is 100% flow tested to ensure accurate, consistent performance.



CROSS-SECTION VIEW

- Lohm Rate Tolerance: +/- 5%
- 100% Tested Bidirectional Flow
- Maximum Working Pressure: 5000 psid
- Nominal Weight: 1.1 grams



LEE PART NUMBER	LOHM RATE +/-5%	MINIMUM PASSAGE SIZE (Inches)	NOMINAL SCREEN HOLE SIZE (Inches)
JHBA1565190D	1900	0.029	0.015
JHBA1565240D	2400	0.024	0.015
JHBA1565330D	3300	0.024	0.015
JHBA1565370D	3700	0.019	0.015
JHBA1565500D	5000	0.019	0.015
JHBA1565590D	5900	0.017	0.008
JHBA1565710D	7100	0.014	0.008
JHBA1565950D	9500	0.014	0.008

MATERIALS		
PART	MATERIAL	SPECIFICATION
Body	304L CRES	AMS 5647
Pin	15-5 PH CRES	AMS 5659
Metering Elements	17-7 PH CRES	AMS 5529
Spacers	303 CRES	QQ-S-763C
Screens	304L CRES	ASTM A 666
Braze	—	AMS 4774

* The Lohm is a measure of flow resistance. Example: One Lohm will permit a flow of 100 GPM of water at 25 psid at 80°F. Additional information can be found at www.TheLeeCo.com.

**Special flow rates are available upon request. Contact your Lee Sales Engineer for more information and technical assistance.

LEE LOHM LAWS

LOHMS LAWS (liquids)

Every engineer will be interested in our simple system of defining the fluid resistance of Lee hydraulic components.

Just as the OHM is used in the electrical industry, we find that we can use a liquid OHM or "Lohm" to good advantage on all hydraulic computations.

When using the Lohm system, you can forget about coefficients of discharge and dimensional tolerances on drilled holes. These factors are automatically compensated for in the Lohm calculations, and confirmed by testing each component to establish flow tolerances. The resistance to flow of any fluid control component can be expressed in Lohms.

The Lohm has been selected so that a 1 Lohm restriction will permit a flow of 100 gallons per minute of water with a pressure drop of 25 psi at a temperature of 80°F.

LIQUID FLOW FORMULA

The following formulas are presented to extend the use of the Lohm laws to many different liquids, operating over a wide range of pressure conditions.

These formulas introduce compensation factors for liquid density and viscosity. They are applicable to any liquid of known properties, with minimum restrictions on pressure levels or temperature.

The units constant (K) eliminates the need to convert pressure and flow parameters to special units.

$$\text{Volumetric Flow Units } L = \frac{KV}{I} \sqrt{\frac{H}{S}} \quad \text{Gravimetric Flow Units } L = \frac{KV}{w} \sqrt{HS}$$

NOMENCLATURE

- L = Lohms
- S = Specific gravity*
- H = Differential pressure
- V = Viscosity compensation factor**
- I = Liquid flow rate: Volumetric
- w = Liquid flow rate: Gravimetric
- K = Units Constant – Liquid (see chart below)
- *S = 1.0 for water at 80°F.
- **V = 1.0 for water at 80°F.

For other fluids and temperatures, contact your Lee Sales Engineer or visit us at www.TheLeeCo.com

LIQUID FLOW - UNITS CONSTANT K

VOLUMETRIC FLOW UNITS			
Flow Units	Pressure Units		
	psi	bar	kPa
GPM	20	76.2	7.62
L/min	75.7	288	28.8
ml/min	75 700	288 000	28 800
in ³ /min	4 620	17 600	1 760

GRAVIMETRIC FLOW UNITS			
Flow Units	Pressure Units		
	psi	bar	kPa
PPH	10 000	38 100	3 810
gm/min	75 700	288 000	28 800