# LEE IMH 832 SERIES SIDE EXIT CHEK® VALVE

Most compact design in its class

Innovation in Miniature

- Low leakage
- 100% performance tested
- Installs easily into a drilled hole
- All stainless steel construction
- Forward and reverse flow models

The new Lee IMH 832 Series Side Exit Chek<sup>®</sup> Valve provides the lowest pressure loss of any valve this size. At only 8 mm in diameter, this new valve features a side exit design which will flow in excess of 6 gpm of water at 100 psid.

The 832 Series Chek<sup>®</sup> offers low leakage and uses the field-proven Lee expansion principle to seal and retain the valve. To install, simply insert the valve into a drilled hole and drive the expansion pin into the valve body to seal and lock the valve in place.

Robust stainless steel construction and 100% performance testing ensures consistent, long term performance.





As Installed

**CHECK VALVE** 

R

O D U C T



**INSTALLATION HOLE** 

S H E E T

DATA

**Forward Flow Forward Flow** Ø 11.00 10.60  $6.27 \pm 0.20$ (19.2) 16.0 FLOW DIRECTION CHECKED 0 DIRECTION Ø 7.96 8.13 118°±  $\bigcirc$ Ø О 8.05 FLOW 0 DIRECTION FLOW 4.50 MIN. DIRECTION 3.0 17.0 MIN. Finish machine this hole last. MIN All dimensions in millimeters.

#### 832 SERIES CHEK PART NUMBERS

FLOW DIRECTION	LEE PART NUMBER	CRACKING PRESSURE
REVERSE	CCRM8320000S	0 kPa (No Spring)
	CCRM8320014S	14 kPa (2 psid)
	CCRM8320040S	40 kPa (6 psid)
FORWARD	CCFM8320000S	0 kPa (No Spring)
	CCFM8320014S	14 kPa (2 psid)
	CCFM8320040S	40 kPa (6 psid)

#### PERFORMANCE

Flow Rate: 32 Lohms\* Maximum Restriction (6.2 gpm at 100 psid) Leakage: In the checked direction at 6.9-27.6 MPa (1,000 - 4,000 psid) - 1 drop/minute maximum after a 2 minute wait on hydraulic fluid.

Maximum Working Pressure: 28 MPa (4,060 psi) Materials: Stainless Steel

\* Lohm is a measure of flow resistance. See back page.

THE LEE COMPANY, 2 PETTIPAUG RD., P.O. BOX 424, WESTBROOK, CT 06498-0424

Tel: 860-399-6281 Fax, Order Entry: 860-399-7058 Fax, Technical Information: 860-399-7037 Web: www.leeimh.com

PDS 84 4/07

# LEE IMH 832 SERIES SIDE EXIT CHEK VALVE



Insert the IMH 832 Series Valve into a drilled installation hole.

## 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.





Seal and lock in place by driving in the expander pin with a minimum of 545 KgF (1,200 lbs. force) and a maximum of 635 KgF (1,400 lbs. force). Exposed ends of pin and insert will be flush within ±0.25mm (±0.010") of each other. Lee Installation Tool Part Number CCRT0900150S is available.

#### NOMENCLATURE

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

S = Specific gravity\*

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

### **LIQUID FLOW - UNITS CONSTANT K**

VOLUMETRIC FLOW UNITS					
	Pressure Units				
Flow Units	psi	bar	kPa		
GPM	20	76.2	7.62		
L/min	75.7	288	28.8		
ml/min	75700	288000	28 800		
in³/min	4620	17600	1760		

GRAVIMETRIC FLOW UNITS					
	Pressure Units				
Flow Units	psi	bar	kPa		
PPH	10000	38 100	3810		
gm/min	75700	288 000	28 800		

THE LEE COMPANY, 2 PETTIPAUG RD., P.O. BOX 424, WESTBROOK, CT 06498-0424

Tel: 860-399-6281 Fax, Order Entry: 860-399-7058 Fax, Technical Information: 860-399-7037 Web: www.leeimh.com

PDS 84 4/07