EPIC™

BY

CheckAll® VALVE

EXPRESS LINE

www.checkall.com/express_line.html

Proudly Manufactured in the USA
by Check-All Valve®

EXPRESS LINE

EPIC™

By Check-All Valve®

In the beginning . . . the first **Check-All**® valve was designed

and built for use as a pump foot valve; the year was 1958. Since then **Check-All**® has grown from an idea to a reality; from one valve to many series of valves; from one use to multiple uses; from one material to a variety of materials and from one man to a factory. **Check-All**® has grown in all respects — but one element remains the same — SERVICE TO EACH CUSTOMER. We will never permit this to change.

The *EPIC*™ series consists of in-line spring-loaded poppet-type check valves

that are designed to be simple, rugged, and efficient in any flow orientation. It is streamlined so that media flows through the valve over smooth, contoured surfaces with a minimum change in direction. This minimizes the pressure drop across the valve. The patent pending *EPIC*™ series features a complete, drop-in, Replaceable Insert that is engineered for silent operation. The valve closes quickly and smoothly to minimize fluid hammer.

ISO 9001

Check-All Valve® is an ISO 9001 Certified company. Our certificate number is FM 40858 and is issued by The British Standards Institution (BSI). This certification indicates that Check-All® products are designed, manufactured, and distributed in accordance with ISO 9001 requirements. That means when you order Check-All Valve® products you are assured of receiving the highest quality check valves; consistently and on-time.

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ISO 9001 CERTIFIED

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Aflas® is a Registered Trademark of AGC Chemicals Americas, Inc.

WARRANTY

Check-All Valve® Mfg. Co., hereinafter called "Check-All®" warrants as follows:

(a) That each new Check-All® valve is free from defects in material and workmanship when installed and used in accordance with current Check-All® publications. Customer modified valves may void warranty.

(b) That each new Check-All® valve is fit for the purpose for which similar type valves are ordinarily intended. Purchaser shall be solely responsible for determining suitability for use and in no event shall Check-All® be liable in this respect.

DURATION — The warranty period shall begin on the date of shipment to the first purchaser and extend for twelve (12) months.

EXCLUSIVE REMEDY — Check-All® will repair or replace, at its discretion, any valve it finds to be defective under this warranty upon return of the valve, prepaid, to Check-All® at 1800 Fuller Road, West Des Moines, IA 50265 or any warehouse designated by Check-All®. Except for such repairs or replacements, CHECK-ALL® SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.

DISCLAIMER — Check-All® excludes from this warranty compressor discharge applications; valves mounted on the discharge of an elbow ("ell"); and failures due to corrosion, erosion, abrasion, cavitation, or other application-related failures and DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Further, it is the end user's responsibility to account for environmental influences such as traffic, wind, earthquake or other external loadings, decomposition of unstable fluids, simultaneous loadings or loadings due to fluid weight. There are no warranties that extend beyond the terms hereof and no one is authorized to assume for Check-All® any other liability in connection with the sale of Check-All® valves. This warranty supersedes all previous warranties.

TERMS AND CONDITIONS OF SALE

Terms: Net 30 days with approved credit.

Prices: FOB FACTORY, West Des Moines, Iowa. All prices subject to change without notice. Any manufacturers' or sales tax or use tax payable on any transaction under any effective statutes will be added to the price of the goods.

Shipment Data: All statements of prospective shipping dates are estimates made in good faith. Maximum effort will be made to ship within the time estimated.

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Design: We reserve the right to make design changes without notice.

Returns: All returns must be factory authorized within one year of purchase and are subject to restocking charges. Special valves and valves with permanent tags attached are not returnable. Contact the factory for a Return Material Authorization form.

Cancellations: Firm orders which have been accepted are not subject to cancellation or changes except by written agreement to reimburse the company for costs incurred.

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Female Pipe

EXPRESS LINE
Check Valves

The ***EPIC*™ Female Pipe** valve is a poppet style check valve with female NPT threaded connections machined from 300 series stainless steel bar stock with Aflas® seat/seals and a 1/2-PSI stainless steel spring setting (cracking pressure) that can be installed in any flow orientation. This check valve achieves a high flow capacity and reduced pressure loss compared to other poppet style check valves of similar sized connections. Additionally, the *EPIC*™ series incorporates a drop-in replaceable check mechanism (Replaceable Insert Kit sold separately) that is easily installed into the existing body without requiring additional assembly of separate checking components.

Due to the materials of construction, high flow capacity, field repairability and the quality customers have come to expect from Check-All®, the *EPIC*™ check valves are uniquely suited for a very wide range of applications in liquids, gases and steam.

Nominal Pipe Size	A	O.D. B	Hex Ends C	Part Number
1/8	2.33	1-1/4	1-1/16	EPIC-0125FP
1/4	2.33	1-1/4	1-1/16	EPIC-0250FP
3/8	2.75	1-7/16	1-1/8	EPIC-0375FP
1/2	3.15	1-3/4	1-7/16	EPIC-0500FP
3/4	3.35	2	1-9/16	EPIC-0750FP
1	3.81	2-1/2	2-1/16	EPIC-1000FP

EPIC™ Female Pipe For Water at 72° F

Non-Shock Pressure-Temperature Rating

Recommended service temperature for the *EPIC*™ series is +10°F to 400°F. Pressure rating is 1500 psi from +10°F to 300°F and 1395 psi at 400°F.

Style *EPIC*™ Female Pipe
C_V Values & Valve Weights

SIZE	C_V	SS	Part Number
1/8	1.9	9.5 oz.	EPIC-0125FP
1/4	2.1	9.1 oz.	EPIC-0250FP
3/8	4.2	11.5 oz.	EPIC-0375FP
1/2	7.2	1.3 lb.	EPIC-0500FP
3/4	13.0	1.6 lb.	EPIC-0750FP
1	23.4	2.8 lb.	EPIC-1000FP

Valve weights are approximate.

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PATENT PENDING

EXPRESS LINE
Check Valves

The ***EPIC*™ Male Pipe** valve is a poppet style check valve with male NPT threaded connections machined from 300 series stainless steel bar stock with Aflas® seat/seals and a 1/2-PSI stainless steel spring setting (cracking pressure) that can be installed in any flow orientation. This check valve achieves a high flow capacity and reduced pressure loss compared to other poppet style check valves of similar sized connections. Additionally, the *EPIC*™ series incorporates a drop-in replaceable check mechanism (Replaceable Insert Kit sold separately) that is easily installed into the existing body without requiring additional assembly of checking components.

Due to the materials of construction, high flow capacity, field repairability and the quality customers have come to expect from Check-All®, the *EPIC*™ check valves are uniquely suited for a very wide range of applications in liquids, gases and steam.

Nominal Pipe Size	A	O.D. B	Hex Ends C	Part Number
1/8	3.06	1-1/4	1-1/16	EPIC-0125MP
1/4	3.37	1-1/4	1-1/16	EPIC-0250MP
3/8	3.39	1-1/4	1-1/16	EPIC-0375MP
1/2	4.09	1-7/16	1-1/8	EPIC-0500MP
3/4	4.51	1-3/4	1-7/16	EPIC-0750MP
1	5.01	2	1-9/16	EPIC-1000MP
1-1/4	5.52	2-1/2	2-1/16	EPIC-1250MP

EPIC™ Male Pipe For Water at 72° F

Non-Shock Pressure-Temperature Rating

Recommended service temperature for the *EPIC*™ series is +10°F to 400°F. Pressure rating is 1500 psi from +10°F to 300°F and 1395 psi at 400°F.

Style *EPIC*™ Male Pipe
C_V Values & Valve Weights

SIZE	C_V	SS	Part Number
1/8	1.6	9.4 oz.	EPIC-0125MP
1/4	1.8	9.6 oz.	EPIC-0250MP
3/8	2.1	9.6 oz.	EPIC-0375MP
1/2	4.0	13.4 oz.	EPIC-0500MP
3/4	7.3	1.5 lb.	EPIC-0750MP
1	12.8	1.8 lb.	EPIC-1000MP
1-1/4	25.5	3.2 lb.	EPIC-1250MP

Valve weights are approximate.

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The ***EPIC*™ Double Ferrule** valve is a poppet style check valve with compression tube connections. These connections are interchangeable with the most commonly used double ferrule connections in instrumentation applications. The check valves are machined from 300 series stainless steel bar stock with Aflas® seat/seals and a 1/2-PSI stainless steel spring setting (cracking pressure) that can be installed in any flow orientation. Additionally, the *EPIC*™ series incorporates a drop-in replaceable check mechanism (Replaceable Insert Kit sold separately) that is easily installed into the existing body without requiring additional assembly of checking components.

Due to the materials of construction, field repairability, and the quality customers have come to expect from Check-All®, the *EPIC*™ check valves are uniquely suited for a very wide range of applications in liquids, gases and steam.

Nominal Pipe Size	A	O.D. B	C	D	Part Number
*1/8	2.33	1-1/4	3.09	4.09	EPIC-0125DF
1/4	2.33	1-1/4	2.51	3.76	EPIC-0250DF
3/8	2.33	1-1/4	2.51	4.00	EPIC-0375DF
1/2	2.75	1-7/16	2.68	4.57	EPIC-0500DF
3/4	3.15	1-3/4	2.96	5.02	EPIC-0750DF
1	3.35	2	2.97	5.46	EPIC-1000DF

* End connections are not integral to the body.

EPIC™ Double Ferrule For Water at 72° F

Non-Shock Pressure-Temperature Rating

Recommended service temperature for the *EPIC*™ series is +10°F to 400°F. Pressure rating is 1500 psi from +10°F to 300°F and 1395 psi at 400°F.

Style *EPIC*™ Double Ferrule
C_V Values & Valve Weights

SIZE	C_V	SS	Part Number
1/8	0.06	10.9 oz.	EPIC-0125DF
1/4	0.6	10.4 oz	EPIC-0250DF
3/8	1.4	10.7 oz.	EPIC-0375DF
1/2	3.3	14.9 oz.	EPIC-0500DF
3/4	6.9	1.6 lb.	EPIC-0750DF
1	13.8	2.2 lb.	EPIC-1000DF

Valve weights are approximate.

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The ***EPIC*™ Flared Tube** valve is a poppet style check valve with 37° flared tube connections. These connections meet SAE J514 & ISO 8434-2 dimensional standards. These check valves are machined from 300 series stainless steel bar stock with Aflas® seat/seals and a 1/2-PSI stainless steel spring setting (cracking pressure) that can be installed in any flow orientation. Additionally, the *EPIC*™ series incorporates a drop-in replaceable check mechanism (Replaceable Insert Kit sold separately) that is easily installed into the existing body without requiring additional assembly of checking components.

Due to the materials of construction, field repairability, and the quality customers have come to expect from Check-All®, the *EPIC*™ check valves are uniquely suited for a very wide range of applications in liquids, gases, and steam.

Nominal Pipe Size	A	O.D. B	Hex Ends C	D	Part Number
*1/8	3.86	1-1/4	1-1/16	0.76	EPIC-0125FT
1/4	3.44	1-1/4	1-1/16	0.55	EPIC-0250FT
3/8	3.45	1-1/4	1-1/16	0.56	EPIC-0375FT
1/2	4.07	1-7/16	1-1/8	0.66	EPIC-0500FT
3/4	4.88	1-3/4	1-7/16	0.86	EPIC-0750FT
1	5.17	2	1-9/16	0.91	EPIC-1000FT

* End connections are not integral to the body.

EPIC™ Flared Tube For Water at 72° F

Non-Shock Pressure-Temperature Rating

Recommended service temperature for the *EPIC*™ series is +10°F to 400°F. Pressure rating is 1500 psi from +10°F to 300°F and 1395 psi at 400°F.

Style *EPIC*™ Flared Tube
C_V Values & Valve Weights

SIZE	C_V	SS	Part Number
1/8	0.08	10.4 oz.	EPIC-0125FT
1/4	0.8	9.6 oz	EPIC-0250FT
3/8	1.6	9.6 oz.	EPIC-0375FT
1/2	3.4	14.1 oz.	EPIC-0500FT
3/4	7.2	1.5 lb..	EPIC-0750FT
1	12.6	1.9 lb.	EPIC-1000FT

Valve weights are approximate.

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PATENT PENDING

Replaceable Insert Kit

EXPRESS LINE
Check Valves

The ***EPIC*™ Replaceable Insert Kit** is superior to traditional repair kits for poppet style check valves that utilize individual components. This pre-assembled replacement check mechanism eliminates the need to assemble individual checking components, creating an efficient and economical method of effectively rebuilding the **entire** check mechanism (if an application requires). Simply unscrew the two threaded body pieces, remove the **one-piece** Replaceable Insert and two sealing O-rings, replace with new insert and O-rings, and refasten the body pieces.

The Replaceable Insert Kit is made of 300 series stainless steel and is supplied assembled with both body and insert O-ring seals included.

EPIC™ Replaceable Insert Kit for **Female Pipe body**		
NPS	Kit Number	Used In
1/8	EPIC-RKD	EPIC-0125FP
1/4		EPIC-0250FP
3/8	EPIC-RKF	EPIC-0375FP
1/2	EPIC-RKH	EPIC-0500FP
3/4	EPIC-RKI	EPIC-0750FP
1	EPIC-RKJ	EPIC-1000FP

EPIC™ Replaceable Insert Kit for **Male Pipe body**		
NPS	Kit Number	Used In
1/8	EPIC-RKD	EPIC-0125MP
1/4		EPIC-0250MP
3/8		EPIC-0375MP
1/2	EPIC-RKF	EPIC-0500MP
3/4	EPIC-RKH	EPIC-0750MP
1	EPIC-RKI	EPIC-1000MP
1-1/4	EPIC-RKJ	EPIC-1250MP

EPIC™ Replaceable Insert Kit for **Double Ferrule body**		
NPS	Kit Number	Used In
1/8	EPIC-RKD	EPIC-0125DF
1/4		EPIC-0250DF
3/8		EPIC-0375DF
1/2	EPIC-RKF	EPIC-0500DF
3/4	EPIC-RKH	EPIC-0750DF
1	EPIC-RKI	EPIC-1000DF

EPIC™ Replaceable Insert Kit for **Flared Tube body**		
NPS	Kit Number	Used In
1/8	EPIC-RKD	EPIC-0125FT
1/4		EPIC-0250FT
3/8		EPIC-0375FT
1/2	EPIC-RKF	EPIC-0500FT
3/4	EPIC-RKH	EPIC-0750FT
1	EPIC-RKI	EPIC-1000FT

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NOTES

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PATENT PENDING

EPIC ™ INSTALLATION & OPERATION Manual

The ***EPIC*** ™ is an in-line spring loaded poppet-type check valve that is designed to be simple, rugged, and efficient in any flow orientation. It is streamlined so that media flows through the valve over smooth contoured surfaces with a minimum change in direction. This minimizes the pressure drop across the valve. The patent pending ***EPIC*** ™ features a complete drop in Replaceable Insert that is engineered for silent operation. The valve closes quickly and smoothly to minimize fluid hammer.

The following instructions are meant as a guideline only. They do not cover every situation and rely on the common sense and expertise of the person installing the valve. See also checkall.com/*EPIC* for an Assembly/Disassembly video. In no way is Check-All® liable for any damage to the valve, the system, or for personal injury resulting from use of these guidelines.

INSTALLATION

Prior to installation remove any end caps and inspect the valve(s) for any damage, internal debris or loose parts that may have occurred during shipment.

Orient the valve so the FLOW ARROW is pointing in the direction of desired flow *(Fig. 1)*. From the closed position the POPPET moves away from the SEAT in the direction of flow *(Fig. 2)*.

Connect the valve inlet and outlet to the system. **Care should be taken to prevent disassembling the valve body.** After the valve has been installed verify that it is properly supported to prevent additional loading on the valve body.

Fig. 1: Horizontal Orientation (Example Only)

REMOVAL

To avoid personal injury, take appropriate precautionary measures if the system contains hazardous materials. Discharge, depressurize, and drain the surrounding system prior to removing the valve from service. If the media within the system is colder or hotter than room temperature allow the valve to return to room temperature before removing from the system.

While holding the valve ends disconnect it from the system. **Care should be taken to prevent disassembling the valve body.**

Clean the valve to remove any thread sealant, tape, debris and/or hazardous materials prior to preforming maintenance, inspection and/or re-installation.

Fig. 2: Vertical Flow Up Orientation (Example Only)

Table 1

EPIC ™ **Kits**	
Valve Part Number	**Replaceable Insert Kit Part Number**
EPIC-0125, all styles EPIC-0250, all styles EPIC-0375MP EPIC-0375FT EPIC-0375DF	EPIC-RKD
EPIC-0375FP EPIC-0500MP EPIC-0500DF EPIC-0500FT	EPIC-RKF
EPIC-0500FP EPIC-0750MP EPIC-0750DF EPIC-0750FT	EPIC-RKH
EPIC-0750FP EPIC-1000MP EPIC-1000DF EPIC-1000FT	EPIC-RKI
EPIC-1000FP EPIC-1250MP	EPIC-RKJ
Scan here for Online Ordering	**Insert kits come with a replaceable insert, insert o-ring, and body o-ring**

WARNING: READ ALL OF THESE INSTRUCTIONS BEFORE PROCEEDING. ONLY EXPERIENCED PERSONNEL SHOULD BE ALLOWED TO INSTALL OR HANDLE THE ENCLOSED VALVE(S). ANY DAMAGE RESULTING FROM MISHANDLING OR IMPROPER INSTALLATION IS NOT COVERED BY THE MANUFACTURER'S WARRANTY. FOR WARRANTY DETAILS, REFER TO THE LATEST REVISION OF CHECK-ALL VALVE® MANUFACTURING COMPANY MANUFACTURER'S TERMS AND CONDITIONS (Form #160). SEE www.checkall.com OR REQUEST A COPY FROM THE FACTORY. Form #106B

DISASSEMBLY

Orient the valve to the VERTICAL FLOW UP position *(Fig. 2)*. Hold the Inlet End and unthread the OUTLET from the INLET and set aside *(Fig. 3)*.

Remove the REPLACEABLE INSERT from the INLET *(Fig 3)*. Clean to remove any debris that may be present. Inspect the SEAT *(Fig. 2)* for debris, dings, scratches and/or tears. Replace as needed (*See Table 1 for Insert Kits)*.

Remove the INSERT O-RING from the INSERT GROOVE *(Fig. 3)* and replace.

Remove the BODY O-RING from the BODY GROOVE *(Fig 3)* and replace.

Clean the INLET and OUTLET to remove any thread sealant, tape, debris and/or hazardous materials that may be present.

ASSEMBLY

Orient the INLET to the VERTICAL FLOW UP position. Insert the BODY O-RING into the BODY GROOVE *(Fig 3)*. Verify that the o-ring is positioned correctly in the groove and is free from debris, dings, scratches and/or tears.

Place the INSERT O-RING into the INSERT GROOVE *(Fig 3)*. Verify that the o-ring is positioned correctly in the groove and is free from debris, dings, scratches and/or tears.

Place the REPLACEABLE INSERT onto the INLET face so that the YOKE goes inside of the INLET and the POPPET is exposed *(Fig 2 & 3)*. Note: The Replaceable Insert will self-center within the INLET and OUTLET when assembled.

CAUTION: The Replaceable Insert can be installed backwards which will prevent flow and/or result in damage to the valve. VERIFY THAT THE REPLACEABLE INSERT IS INSTALLED CORRECTLY BEFORE PROCEEDING.

Hold the INLET stationary in the VERTICAL FLOW UP position. Tighten the two body components to the appropriate torque for your individual application requirements. *(Fig 3)*. *Note: Thread lubricant may be required to prevent thread galling.*

WARNING: DO NOT CHANGE THE VALVE ORIENTATION UNTIL THE VALVE HAS BEEN COMPLETELY ASSEMBLED.

CAUTION: Improper seating of components will result in failure of the valve and/or diminish the life of the Replaceable Insert and/or o-rings.

Fig. 3: Expanded Assembly

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