



Long Life Check Valves



These check valves feature:

- Brass or SS Construction
- Zero differential pressure
- Elastomeric ball
- More than two million operations
- Variety of sizes and configurations
- Suitability for compatible gases or liquids

O'Keefe Controls Co.

Long Life Check Valves

BALL TYPE

Description

The long life check valve product line has been tested to two million operations without any change in performance. The only moving part is an elastomeric ball made of nitrile or fluorocarbon. There is no spring in the valve, which allows for a near zero pressure differential to actuate free flow.

Features

- Sizes – 10/32 or 1/8" NPT.
 - Brass or 303 SS bodies.
 - Tested to 2 million cycles.
 - Zero pressure differential.
 - Only one moving part.
 - Suitable for air, H₂O or fluids.
- compatible with construction materials.

Symbol-Check Valve



Part Numbers

Type	Body ¹	Thread	Elastomer ²	Part Number
Z1EC	BR	10/32	BN	Z1EC-0-BR-BN
Z1EC	SS			Z1EC-0-SS-BN
FM1EC	BR	10/32	BN	FM1EC-0-BR-BN
FM1EC	SS			FM1EC-0-SS-BN
FMEC	BR	10/32	V	FMEC-0-BR-V
FMEC	SS			FMEC-0-SS-V
FFEC	BR	10/32	V	FFEC-0-BR-V
FFEC	SS			FFEC-0-SS-V
BEC	BR	1/8 NPT	V	BEC-0-BR-V
BEC	SS			BEC-0-SS-V
DEC	BR	1/8 NPT	V	DEC-0-BR-V
DEC	SS			DEC-0-SS-V
DFEC	BR	1/8 NPT	V	DFEC-0-BR-V
DFEC	SS			DFEC-0-SS-V

¹BR – brass; SS – 303 Stainless Steel

²BN – Buna-N; V – Viton

General Specifications

Materials of Construction

Body – Brass or 303SS

Ball – Types Z1EC and FM1EC

Buna –N (Nitrile)

All Others

Viton (Fluorocarbon)

Sealant Types FFEC, FMEC - Loctite 609

All Others - None

Maximum Temperature*** – 125°F

Maximum Operating Pressure*** – 125 psig*

Seat Leakage – <10 sccm at 25 psid**

0 sccm above 50 psid**

Flow Capacity (Free Flow)

Type	C _v	Air Flow (SLPM) @ 50 psig
FM1EC, Z1EC	.04	43
FMEC, FFEC	.13	131
BEC, DEC, DFEC	.20	215

Crack Pressure >0 psid**

Orientation

Horizontal or free flow down – preferred.

Free flow up – 10 psid** minimum.

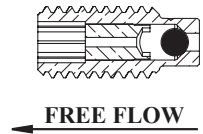
**psid = differential pressure

* psig = gage pressure

***test for higher temp. or pressure

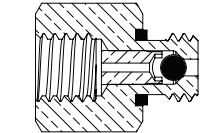
Construction

Type Z1EC



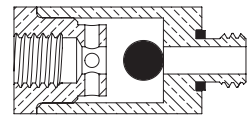
← FREE FLOW

Type FM1EC



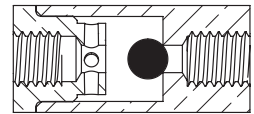
← FREE FLOW

Type FMEC



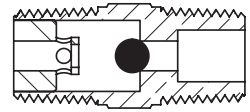
← FREE FLOW

Type FFEC



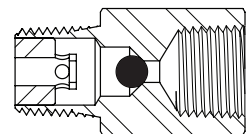
← FREE FLOW

Type BEC



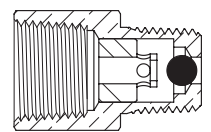
← FREE FLOW

Type DEC



← FREE FLOW

Type DFEC



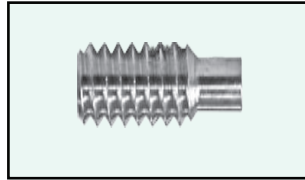
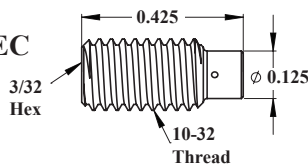
← FREE FLOW

Long Life Check Valves

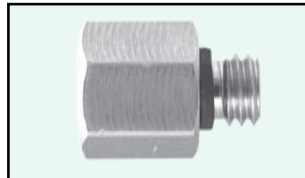
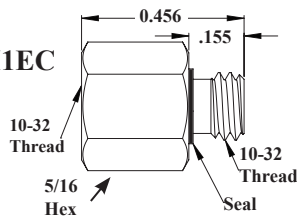
BALL TYPE

Dimensions*

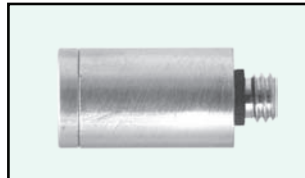
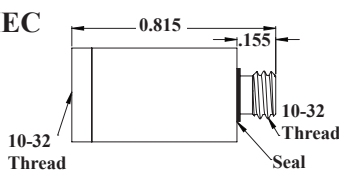
Type Z1EC



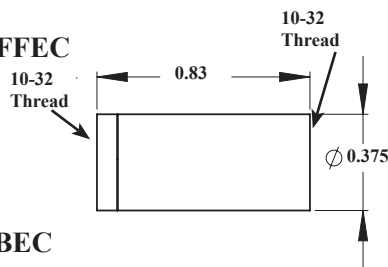
Type FM1EC



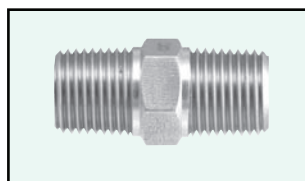
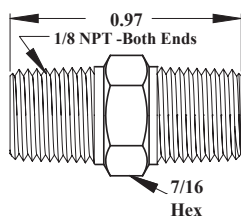
Type FMEC



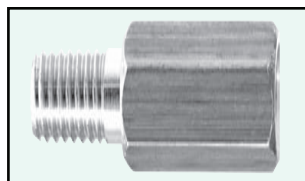
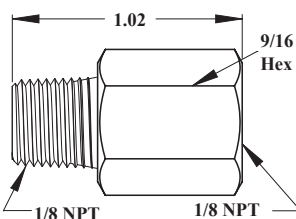
Type FFEC



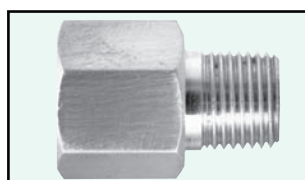
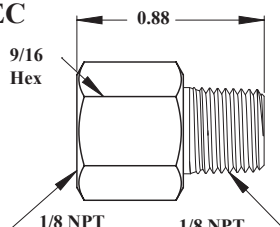
Type BEC



Type DEC



Type DFEC



Specifications

10/32 SET SCREW

Cv - .04

Ball - Buna-N

Body/Ball Stop - Brass or 303SS

10/32 ADAPTER

Cv - .04

Ball - Buna-N

Body/Ball Stop - Brass or 303SS

10/32 ADAPTER

Cv - .12

Ball - Viton

Body/Ball Stop - Brass or 303SS

Sealant - Loctite 609

10/32 COUPLING

Cv - .12

Ball - Viton

Body/Ball Stop - Brass or 303SS

Sealant - Loctite 609

1/8" NPT NIPPLE

Cv - .20

Ball - Viton

Body/Ball Stop - Brass or 303SS

1/8" NPT ADAPTER

Cv - .20

Ball - Viton

Body/Ball Stop - Brass or 303SS

1/8" NPT ADAPTER

Cv - .20

Ball - Viton

Body/Ball Stop - Brass or 303SS

*All dimensions - Inches

O'Keefe Controls Co.

P.O. BOX Q • TRUMBULL, CT 06611 • CT PHONE (203) 261-6711 • TOLL FREE PHONE (800) 533-3285 • FAX (203) 261-8331

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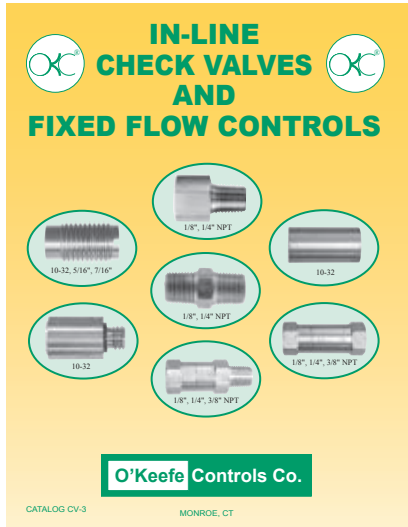
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for more details.



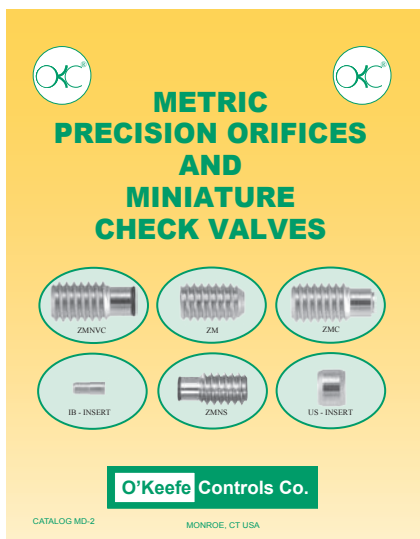
CATALOG CV-3



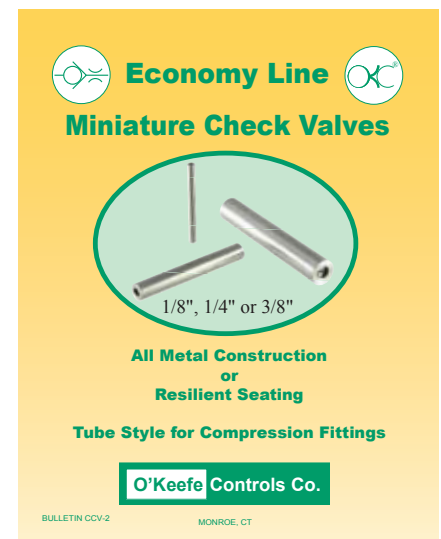
CATALOG TCV-1



CATALOG 11



CATALOG MD-2



CATALOG CCV-2

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