



Certificate of Compliance

Certificate: 1087464 (248050)

Master Contract: 248050

Project: 70060015

Date Issued: 2016-01-14

Issued to: Ningbo EFF Manufactory Co. Ltd.
LongShan Industrial District
208 LongZhen Road
Cixi City, Zhejiang 315311
CHINA
Dong Tai Lin

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Vajira Sarathchandra*
Vajira Sarathchandra

PRODUCTS

CLASS C3371 10 - VALVES (GAS)-Lever Operated Non-Lubricated Shutoff

CLASS C3371 90 - VALVES (GAS)-Lever Operated Non-Lubricated-Shutoff-Certified to U.S. Standards

Model Number

TYPE

Size (Inches)

For use with Natural, Manufactured, Mixed, Liquefied Petroleum or Propane and LP Gas-Air mixtures;

Regular/Full port, 125 psig and 175 psig ball valves;

<u>Model Number</u>	<u>TYPE</u>	<u>Size (Inches)</u>	<u>Trade Name:</u> EFF
EFFN-01	Straight, NPT Female Connections	1/4" x 1/4"	
EFFN-02	Straight, NPT Female Connections	3/8" x 3/8"	
EFFN-03	Straight, NPT Female Connections	1/2" x 1/2"	
EFFN-04	Straight, NPT Female Connections	3/4" x 3/4"	
EFFN-05	Straight, NPT Female Connections	1" x 1"	
EFFN-06	Straight, NPT Female Connections	1 1/4" x 1 1/4"	
EFFN-07	Straight, NPT Female Connections	1 1/2" x 1 1/2"	
EFFN-08	Straight, NPT Female Connections	2" x 2"	
EFFN-09	Straight, NPT Female Connections	2 1/2" x 2 1/2"	
EFFN-10	Straight, NPT Female Connections	3" x 3"	



Certificate: 1087464
Project: 70060015

Master Contract: 248050
Date Issued: 2016-01-14

EFFN-11	Straight, NPT Female Connections	4" x 4"
EFFDN-01	Straight, NPT Female Connections	1/2" x 1/2"
EFFDN-02	Straight, NPT Female Connections	3/4" x 3/4"
EFFDN-03	Straight, NPT Female Connections	1" x 1"

Reduced port, 125 psig and 175 psig ball valves;

GBV-038	Straight, NPT Female Connections	Trade Name: EFF 3/8" x 3/8"
GBV-01, GBVD-01	Straight, NPT Female Connections	1/2" x 1/2"
GBV-02, GBVD-02	Straight, NPT Female Connections	3/4" x 3/4"
GBV-03	Straight, NPT Female Connections	1" x 1"

Reduced port, one piece body 125 psig and 175 psig ball valves;

GBV1P-01	Straight, NPT Female Connections	Trade Name: EFF 1/2" x 1/2"
GBV1P-02	Straight, NPT Female Connections	3/4" x 3/4"

- The 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2" & 2" valves are certified for operation at ambient temperature range of -40°C to 65°C (-40°F to 149°F).
- The 2 1/2", 3" & 4" valves are certified for operation at ambient temperature range of -20°C to 65°C (-4°F to 149°F).
- * 1/4" & 3/8" valves are certified for Canadian requirements only.

CLASS C3371 08 - VALVES (GAS)-General Use

CLASS C3371 12 - VALVES (GAS)-Manually Operated For Use on Piping

CLASS C3371 88 - VALVES (GAS)-General Use-Certified to U.S. Standards

CLASS C3371 92 - VALVES (GAS)-Manually Operated For Use in House-Piping Systems-Certified to U.S. Standards

Model Number Type Size (Inches)
For use with Natural, Manufactured, Mixed, Liquefied Petroleum or Propane and LP Gas-Air mixtures;

Regular/Full port, 1/2, 2 & 5 psig ball valves;

EFFN-01	Straight, NPT Female Connections	Trade Name: EFF 1/4" x 1/4"
EFFN-02	Straight, NPT Female Connections	3/8" x 3/8"
EFFN-03	Straight, NPT Female Connections	1/2" x 1/2"
EFFN-04	Straight, NPT Female Connections	3/4" x 3/4"
EFFN-05	Straight, NPT Female Connections	1" x 1"
EFFN-06	Straight, NPT Female Connections	1 1/4" x 1 1/4"
EFFN-07	Straight, NPT Female Connections	1 1/2" x 1 1/2"
EFFN-08	Straight, NPT Female Connections	2" x 2"
EFFDN-01	Straight, NPT Female Connections	1/2" x 1/2"
EFFDN-02	Straight, NPT Female Connections	3/4" x 3/4"
EFFDN-03	Straight, NPT Female Connections	1" x 1"



Certificate: 1087464
Project: 70060015

Master Contract: 248050
Date Issued: 2016-01-14

EFFC-01	Straight, CxC Connections	1/2" x 1/2"
EFFC-02	Straight, CxC Connections	3/4" x 3/4"
EFFC-03	Straight, CxC Connections	1" x 1"
EFFC-04	Straight, CxC Connections	1 1/4" x 1 1/4"
EFFC-05	Straight, CxC Connections	1 1/2" x 1 1/2"
EFFC-06	Straight, CxC Connections	2" x 2"

EFFDC-01	Straight, CxC Connections	1/2" x 1/2"
EFFDC-02	Straight, CxC Connections	3/4" x 3/4"
EFFDC-03	Straight, CxC Connections	1" x 1"

Regular/Full port, 1/2 psig ball valves;

EFFN-09	Straight, NPT Female Connections
EFFN-10	Straight, NPT Female Connections
EFFN-11	Straight, NPT Female Connections

Trade Name: EFF

2 1/2" x 2 1/2"
3" x 3"
4" x 4"

EFFC-07	Straight, CxC Connections
EFFC-08	Straight, CxC Connections
EFFC-09	Straight, CxC Connections

2 1/2" x 2 1/2"
3" x 3"
4" x 4"

Reduced port, 1/2, 2 & 5 psig ball valves;

GBV-038	Straight, NPT Female Connections
GBV-01, GBVD-01	Straight, NPT Female Connections
GBV-02, GBVD-02	Straight, NPT Female Connections
GBV-03	Straight, NPT Female Connections

Trade Name: EFF

3/8" x 3/8"
1/2" x 1/2"
3/4" x 3/4"
1" x 1"

Regular/Standard port, 1/2, 2 & 5 psig ball valves;

FIBV-00	Straight, NPT Female x Flare End Connections
FIBV-01	Straight, NPT Female x Flare End Connections
FIBV-02	Straight, NPT Female x Flare End Connections
FIBV-03	Straight, NPT Female x Flare End Connections
FIBV-04	Straight, NPT Female x Flare End Connections
FIBV-05	Straight, NPT Female x Flare End Connections
FIBV-06	Straight, NPT Female x Flare End Connections
FIBV-07	Straight, NPT Female x Flare End Connections
FIBV-08	Straight, NPT Female x Flare End Connections

TradeName: EFF

1/2" x 3/8" fl
3/8" x 3/8" fl
1/2" x 3/8" fl
1/2" x 1/2" fl
1/2" x 5/8" fl
3/4" x 1/2" fl
3/4" x 5/8" fl
3/4" x 5/8" fl
1/2" x 5/8" fl

Regular/Standard port, 1/2, 2 & 5 psig ball valves;

FFBV-01	Straight, Flare End Connections
FFBV-02	Straight, Flare End Connections
FFBV-03	Straight, Flare End Connections
FFBV-04	Straight, Flare End Connections

Trade Name: EFF

3/8" fl x 3/8" fl
1/2" fl x 1/2" fl
5/8" fl x 5/8" fl
5/8" fl x 5/8" fl

Regular/Standard port, 1/2, 2 & 5 psig ball valves;

FMBV-01	Straight, NPT Male x Flare End Connections
FMBV-02	Straight, NPT Male x Flare End Connections

Trade Name: EFF

1/2" x 3/8" fl
1/2" x 1/2" fl



Certificate: 1087464
Project: 70060015

Master Contract: 248050
Date Issued: 2016-01-14

Full port, 1/2, 2 & 5 psig ball valves;

		<u>Trade Name:</u> EFF
FIFBV-01	Straight, NPT Female x Flare End Connections	3/8" x 3/8" fl
FIFBV-02	Straight, NPT Female x Flare End Connections	1/2" x 3/8" fl
FIFBV-03	Straight, NPT Female x Flare End Connections	1/2" x 1/2" fl
FIFBV-04	Straight, NPT Female x Flare End Connections	1/2" x 5/8" fl
FIFBV-05	Straight, NPT Female x Flare End Connections	3/4" x 1/2" fl

- The EFF (1/4" thru 2"), GBV, FIBV, FFBV, FMBV & FIFBV series models are certified for operation at ambient temperature range of -40°C to 65°C (-40°F to 149°F).
- The EFF, 2 1/2", 3" & 4" valves are certified for operation at ambient temperature range of -20°C to 65°C (-4°F to 149°F).
- The maximum ambient temperature for the 2 & 5 psig valve is 52°C (149°F).

CLASS C3371 01 - VALVES (GAS)-Appliance Connector

CLASS C3371 81 - VALVES (GAS)-Appliance Connector-Certified to U.S. Standards

Model Number Type Size (Inches)
For use with Natural, Manufactured, Mixed, Liquefied Petroleum or Propane and LP Gas-Air mixtures;

Regular/Standard port, 1/2, 2 & 5 psig ball valves;

		<u>Trade Name:</u> EFF
FIBV-00	Straight, NPT Female x Flare End Connections	1/2" x 3/8" fl
FIBV-01	Straight, NPT Female x Flare End Connections	3/8" x 3/8" fl
FIBV-02	Straight, NPT Female x Flare End Connections	1/2" x 3/8" fl
FIBV-03	Straight, NPT Female x Flare End Connections	1/2" x 1/2" fl
FIBV-04	Straight, NPT Female x Flare End Connections	1/2" x 5/8" fl
FIBV-05	Straight, NPT Female x Flare End Connections	3/4" x 1/2" fl
FIBV-06	Straight, NPT Female x Flare End Connections	3/4" x 5/8" fl
FIBV-07	Straight, NPT Female x Flare End Connections	3/4" x 5/8" fl
FIBV-08	Straight, NPT Female x Flare End Connections	1/2" x 5/8" fl

Regular/Standard port, 1/2, 2 & 5 psig ball valves;

		<u>Trade Name:</u> EFF
FMBV-01	Straight, NPT Male x Flare End Connections	1/2" x 3/8" fl
FMBV-02	Straight, NPT Male x Flare End Connections	1/2" x 1/2" fl

Full port, 1/2, 2 & 5 psig ball valves;

		<u>Trade Name:</u> EFF
FIFBV-01	Straight, NPT Female x Flare End Connections	3/8" x 3/8" fl
FIFBV-02	Straight, NPT Female x Flare End Connections	1/2" x 3/8" fl
FIFBV-03	Straight, NPT Female x Flare End Connections	1/2" x 1/2" fl
FIFBV-04	Straight, NPT Female x Flare End Connections	1/2" x 5/8" fl
FIFBV-05	Straight, NPT Female x Flare End Connections	3/4" x 1/2" fl

- The FIBV, FMBV & FIFBV series models are certified for operation at ambient temperature range of -40°C to 65°C (-40°F to 149°F).
- The maximum ambient temperature for the 2 & 5 psig valve is 52°C (149°F).



Certificate: 1087464
Project: 70060015

Master Contract: 248050
Date Issued: 2016-01-14

APPLICABLE REQUIREMENTS

For 1/2 psig valves:

ANSI Z21.15-2009 / CSA 9.1-2009
R(2014)

Manually Operated Gas Valves For Appliances, Appliance Connector
Valves And Hose End Valves

For 2& 5 psig valves:

CGA Requirement CR91-002
ASME B16.44-2012

Manually Operated Gas Valves For Use On Piping
Manually Operated Metallic Gas Valves For Use In Aboveground Piping
Systems Up To 5 Psig

For 125 psig valves:

CAN/CGA-3.16-M88 (R2009)
ASME B16.33-2012

Lever Operated Non-Lubricated Gas Shut-Off Valves.
Manually Operated Metallic Gas Valves For Use In Gas Piping Systems
up to 125 psig. (1/2" thru 2").
Manually Operated Metallic Gas Valves For Use In Gas Piping Systems
up to 125 psig. (2½" thru 12").

ASME B16.38-2012

For 175 psig valves:

Interim Requirement No. 60

Lever Operated Gas Shut-Off Valves



Supplement to Certificate of Compliance

Certificate: 1087464 (248050)

Master Contract: 248050

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
70060015	2016-01-14	Addition of models FFBV-04, FIBV-00, FIBV-06, FIBV-07, and FIBV-08
2533660	2012-08-07	Add standard IR 60 to certification. This was never added and should have been. This supports the 175 psi pressure rating on previous reports.
2507745	2012-05-22	Transfer listed models and to new master contract and revise model numbers.
2111144	2009-03-06	Update to report 1087464 to add new models GBVD-01 & GBVD-02 with pressure tap
1898266	2007-03-30	Update Report and Certification Record to Fix Model Number/Size Errors on GBV-038 & FFBV-02
1571429	2005-02-07	Evaluation to compliance with ASME B16.33 & ASME B16.44
1476792	2003-11-13	Certification of Gas Valves, models GBV1P(01,02)
1432588	2003-07-28	Certification of 3/8" and address change