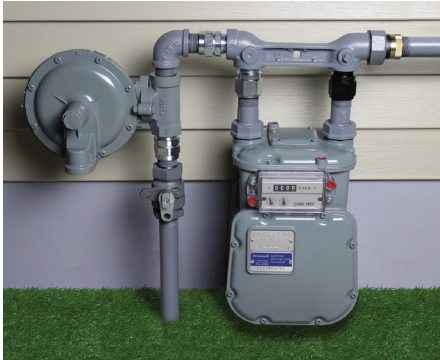
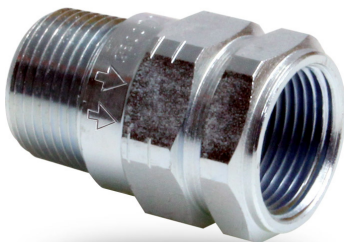


FireBag[®]

Thermal-activated Shut-off Device for Natural, Propane & Butane Gas Metering Applications



Used for Natural Gas and Propane Gas in metering applications, as well as residential and commercial applications



The FireBag[®] automatically shuts off gas supply in the event of fire, preventing explosions and the spreading of fire.

When the ambient temperature reaches 203°F to 212°F (95°C to 100°C), the metal alloy that keeps the plug and cartridge together melts and the spring pressure pushes the plug against the gas opening to make a gas tight closure. The FireBag[®] closes within 60 seconds, per DIN 3586. No fire or heat detectors are required to automatically stop gas flow.

CERTIFICATIONS

- Meets and exceeds DIN 3586 thermo activated safety device for gas applications
- European UNI EN 1775 Standard for indoor gas installations
- European Directive 90/396/CEE certification for durability in mechanical or thermal stress
- German DVGW TRGI 86/96 Standard for thermo activated locking systems on gas heaters, water heaters & domestic gas fittings
- German Standard Muster-Feuerverordnung (FeuVo v. 02/95 - edition 09/97) for thermo activated devices
- Italian UNI 7129 Ed 2001 Standard for fire protection and gas supply line components
- Independent testing by GTI certifies the FireBag[®] meets or exceeds requirements per Massachusetts D.P.U. MGL Section 75A of Chapter 164, Ruling #14899 (March 1974) Section 8 (c) and (d).

MAXIMUM PRESSURE

100 PSI (NPT)

AMBIENT TEMPERATURE RANGE

-40°F to +176°F (-40°C to 80°C)

MATERIALS OF CONSTRUCTION

Housing and Finishing:
Zinc-plated steel

SPECIFICATIONS

Actuation Temperature:
203°F to 212°F (95°C to 100°C)

High Temperature Resistance (Fire Resistance)*
1,700°F (927°C) for
60 minutes at 100 PSI (NPT)

Leakage: 1.06 ft³/h (30L/h)**

* The FireBag meets and exceeds the DIN3586 High Temperature requirements: 1,200°F (650°C) for 30 minutes at 72.5 PSI

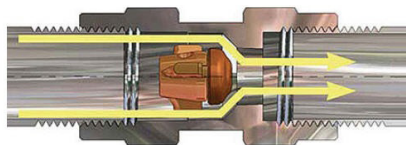
** Measured using the same testing method as described in DIN3586 paragraph 5.10.2

Cv FACTORS	
SIZE	CV
½"	3.7
¾"	6.7
1"	10.3
1¼"	25.7
1½"	42.7
2"	66.7

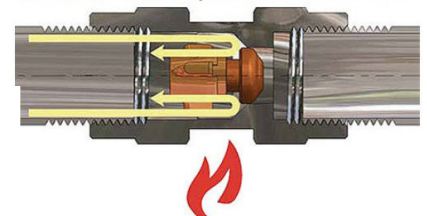
CROSS SECTIONS

The FireBag[®] is triggered when the ambient temperature reaches 212°F, blocking the flow of gas for at least 60 minutes at the temperature of 1,700°F (927°C).

Inactive, temperature below 203°F



Active, temperature above 212°F

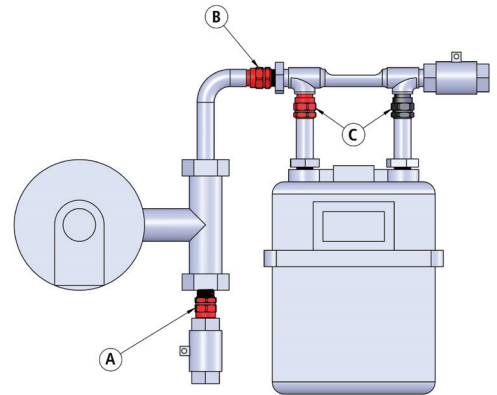


FireBag®

Thermal-activated Shut-off Device for Propane, Natural & Butane Gas

Single Residential & Commercial Metering Applications

FireBag® Thermal Activated Shutoffs are available in multiple piping configurations and sizes to accommodate the varying piping requirements of a natural gas or propane system. A recommended FireBag® piping orientation and design illustration is highlighted as follows or simply contact your local Firebag® distributor for additional information and specifications:



A — Upstream of the Regulator

Installed prior to the regulator, Male x Female FireBag® configurations are available in ¾" – 2" NPT sizes.

B — Upstream of the Meter Bar

For installations after the regulator and prior to the meter bar, Female x Male FireBag® configurations are available in ¾" – 1½" NPT sizes.

C — In-Line with the Meter Swivels & Nuts

A FireBag® Meter Connection Kit can easily be installed on new or existing meter installations by utilizing a FireBag® fitting in-line with the inlet swivel of the meter and accompanied by a BLANK companion fitting installed with the outlet swivel, keeping the meter balanced and level. Sizes include a ½" x ¾" reducing kit, ¾", and 1" NPT Male x Female configurations.

TYPE	SIZE	CONFIG	MODEL NUMBER	DESCRIPTION
A	¾"	MxF NPT	FBAS20002	TECO FIREBAG ¾" MxF NPT
A	1"	MxF NPT	FBAS25002	TECO FIREBAG 1" MxF NPT
A	1¼"	MxF NPT	FBAS32001	TECO FIREBAG 1¼" MxF NPT
A	1½"	MxF NPT	FBAS40001	TECO FIREBAG 1½" MxF NPT
A	2"	MxF NPT	FBAS50001	TECO FIREBAG 2" MxF NPT

TYPE	SIZE	CONFIG	MODEL NUMBER	DESCRIPTION
B	¾"	FxM NPT	FBAS20001	TECO FIREBAG ¾" FxM NPT
B	1"	FxM NPT	FBAS25001	TECO FIREBAG 1" FxM NPT
B	1¼"	FxM NPT	FBAS32003	TECO FIREBAG 1¼" FxM NPT
B	1½"	FxM NPT	FBAS40003	TECO FIREBAG 1½" FxM NPT

TYPE	SIZE	CONFIG	MODEL NUMBER	DESCRIPTION
C	½" x ¾"	MxF NPT	OEAS0001	TECO FIREBAG KIT w/ Companion Blank Fitting ½" x ¾" MxF NPT
C	¾"	MxF NPT	OEAS0002	TECO FIREBAG KIT w/ Companion Blank Fitting ¾" MxF NPT
C	1"	MxF NPT	OEAS0006	TECO FIREBAG KIT w/ Companion Blank Fitting 1" MxF NPT

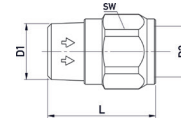
FireBag®

Thermal-activated Shut-off Device for Propane, Natural & Butane Gas

Dimensions & Specifications

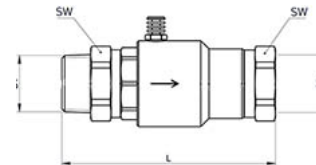
Male to Female Flow Direction

¾", 1"



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
¾"	MxF NPT	FBAS20002	TECO FIREBAG ¾" MxF NPT	2.30"	0.75"	0.75"	1.25"	202	13.40	6.8
1"	MxF NPT	FBAS25002	TECO FIREBAG 1" MxF NPT	2.34"	1"	1"	1.67"	318	20.00	10.5

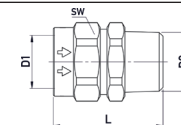
1¼", 1½", 2"



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
1¼"	MxF NPT	FBAS32001	TECO FIREBAG 1¼" MxF NPT	3.94"	1.25"	1.25"	2.00"	777	14.4	25.7
1½"	MxF NPT	FBAS40001	TECO FIREBAG 1½" MxF NPT	4.13"	1.5"	1.5"	2.33"	1330	15.2	42.7
2"	MxF NPT	FBAS50001	TECO FIREBAG 2" MxF NPT	4.37"	2"	2"	2.75"	1907	19.6	66.7

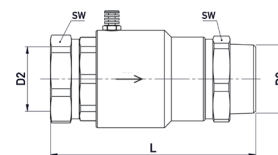
Female to Male Flow Direction

¾", 1"



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
¾"	FxM NPT	FBAS20001	TECO FIREBAG ¾" FxM NPT	1.93"	0.75"	0.75"	1.25"	202	14.00	6.7
1"	FxM NPT	FBAS25001	TECO FIREBAG 1" FxM NPT	2.26"	1"	1"	1.67"	314	20.40	10.4

1¼", 1½", 2"



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
1¼"	FxM NPT	FBAS32003	TECO FIREBAG 1¼" FxM NPT	3.62"	1.25"	1.25"	2.00"	777	14.4	25.7
1½"	FxM NPT	FBAS40003	TECO FIREBAG 1½" FxM NPT	3.67"	1.5"	1.5"	2.33"	1130	15.2	42.7
2"	FxM NPT	FBAS50003	TECO FIREBAG 2" FxM NPT	4.72"	2"	2"	2.75"	1907	19.6	66.7

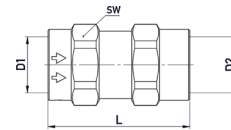
FireBag®

Thermal-activated Shut-off Device for Propane, Natural & Butane Gas

Dimensions & Specifications

Female to Female Flow Direction

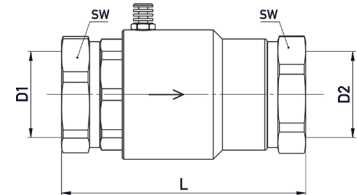
1/2", 3/4", 1"



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
1/2"	FxF NPT	FBAS15004*	TECO FIREBAG 1/2" FxF NPT	2.21"	0.5"	0.5"	1.00"	113	10.60	3.7
3/4"	FxF NPT	FBAS20003	TECO FIREBAG 3/4" FxF NPT	2.32"	0.75"	0.75"	1.25"	202	14.00	6.7
1"	FxF NPT	FBAS25003	TECO FIREBAG 1" FxF NPT	2.60"	1"	1"	1.67"	314	20.40	10.4

*Special Order

1 1/4", 1 1/2", 2"



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
1 1/4"	FxF NPT	FBAS32004	TECO FIREBAG 1 1/4" FxF NPT	3.74"	1.25"	1.25"	2.00"	777	14.4	25.7
1 1/2"	FxF NPT	FBAS40004	TECO FIREBAG 1 1/2" FxF NPT	3.94"	1.5"	1.5"	2.33"	1130	15.2	42.7
2"	FxF NPT	FBAS50004	TECO FIREBAG 2" FxF NPT	4.37"	2"	2"	2.75"	1907	19.6	66.7

Kits (FireBag® & Companion Fitting)

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



SIZE	CONFIG	MODEL NUMBER	DESCRIPTION	L	D1	D2	SW	FLOW RATE IN CHF	EQUIVALENT LENGTH PIPE IN FT.	CV
1/2" x 3/4"	MxF NPT	OEAS0001	TECO FIREBAG KIT w/ Companion Blank Fitting 1/2" x 3/4" MxF NPT	2.87"	0.5"	0.75"	1.25"	268	8.3	8.9
3/4"	MxF NPT	OEAS0002	TECO FIREBAG KIT w/ Companion Blank Fitting 3/4" MxF NPT	2.30"	0.75"	0.75"	1.25"	202	13.4	6.8
1"	MxF NPT	OEAS0006	TECO FIREBAG KIT w/ Companion Blank Fitting 1" MxF NPT	2.34"	1"	1"	1.67"	318	20.0	10.5

Please reference the FireBag® Technical Manual for a full listing of sizing and configurations available.

FireBag®

Thermal-activated Shut-off Device for Propane, Natural & Butane Gas

Multi-Meter Gas Manifold Metering Applications

Natural gas and propane utilities now are able to add thermal shutoff protection to multi-meter installations at residential and commercial buildings, adding a level of fire safety previously unattainable. Various FireBag® configurations are available for multi-meter gas manifolds, where each residence or business has its own gas meter. The FireBag® configuration and sizes are available to utilities to meet the following installation options.

A — In-line with the Manifold

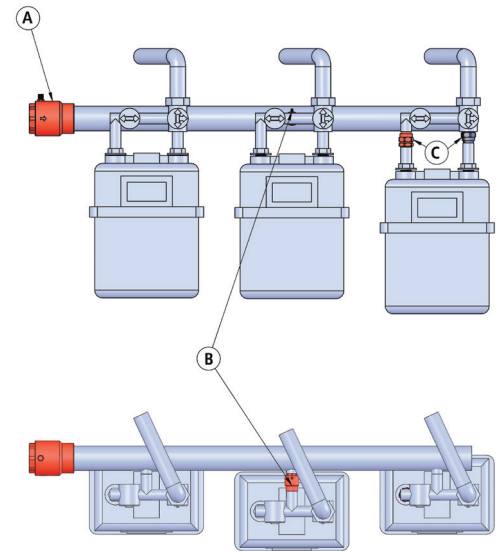
FireBag® thermal shutoffs can be installed “prior-to” or “coupled-with” a multi-meter manifold to provide protection to multiple meters using just one device. Sizes include 1¼”, 1½” and 2” in Female x Female configurations.

B — In-line with the Manifold Nipples to the Meter

Individual FireBag® installations place the thermal activated shutoff fittings between the manifold nipple and inlet to the meter bar. Sizes include 1”, 1¼” and 1½” NPT Female x Male configurations.

C — In-Line with the Meter Swivels & Nuts

A FireBag® Meter Connection Kit can easily be installed on new or existing meter installations by utilizing a FireBag® fitting in-line with the inlet swivel of the meter and accompanied by a BLANK companion fitting installed with the outlet swivel, keeping the meter balanced and level. Sizes include a ½” x ¾” reducing kit, ¾”, and 1” NPT Male x Female configurations.



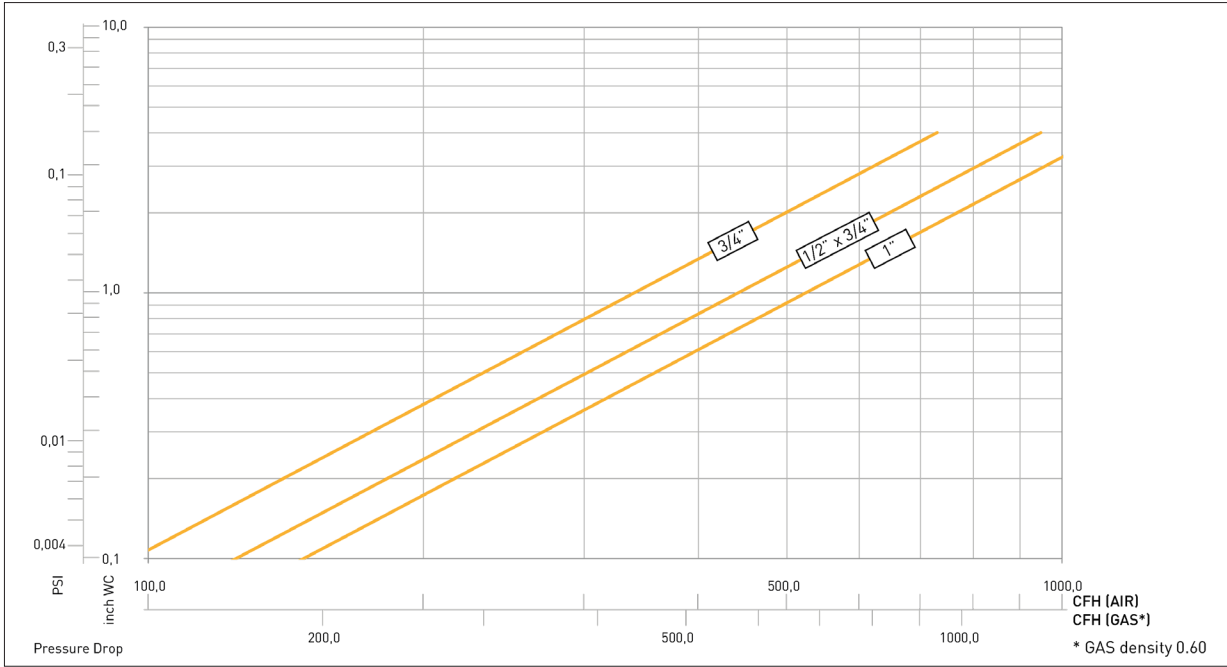
TYPE	SIZE	CONFIG	MODEL NUMBER	DESCRIPTION
A	1¼"	FxF NPT	FBAS32004	TECO FIREBAG 1¼" FxF NPT
A	1½"	FxF NPT	FBAS40004	TECO FIREBAG 1½" FxF NPT
A	2"	FxF NPT	FBAS50004	TECO FIREBAG 2" FxF NPT

TYPE	SIZE	CONFIG	MODEL NUMBER	DESCRIPTION
B	1"	FxM NPT	FBAS25001	TECO FIREBAG 1" FxM NPT
B	1¼"	FxM NPT	FBAS32003	TECO FIREBAG 1¼" FxM NPT
B	1½"	FxM NPT	FBAS40003	TECO FIREBAG 1½" FxM NPT

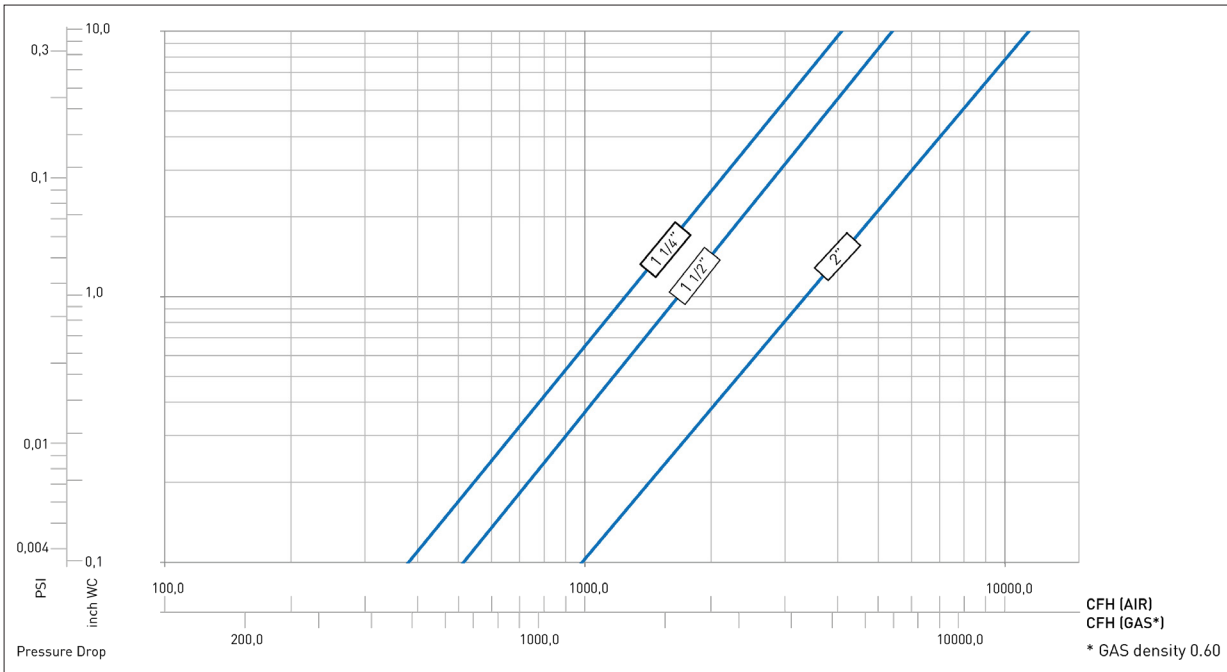
TYPE	SIZE	CONFIG	MODEL NUMBER	DESCRIPTION
C	½" x ¾"	MxF NPT	OEAS0001	TECO FIREBAG KIT w/ Companion Blank Fitting ½" x ¾" MxF NPT
C	¾"	MxF NPT	OEAS0002	TECO FIREBAG KIT w/ Companion Blank Fitting ¾" MxF NPT
C	1"	MxF NPT	OEAS0006	TECO FIREBAG KIT w/ Companion Blank Fitting 1" MxF NPT

FireBag®

Thermal-activated Shut-off Device for Propane, Natural & Butane Gas



Flow rate/pressure drop diagrams obtained with 10.04 inH₂O (0.36 psig) inlet pressure.



Flow rate/pressure drop diagrams obtained with 10.04 inH₂O (0.36 psig) inlet pressure.