

THERMALLY ACTIVATED SAFETY DEVICE



- **♥FREBAG** is a DIN 3586 DVGW certified passive safety device manufactured by TECO since 1995.
- It blocks the gas flow automatically when the ambient temperature reaches 212 °F (in the event of fire).
- •When in the tripped position under thermal stress (high-

temperature resistance: see table for values), maintains a gas tight closure, stopping gas flow, and preventing gas from fueling the fire.

• Does not require maintenance.

Material				
Body	Cartridge			
Zinc plated Steel	Thermo sensitive alloy			

TECHNICAL SPECIFICATIONS

Reference standards	Maximum Allowable Operating Pressure (MAOP)	Operating Temperature	Set-off Temperature	High temperature resistance (Fire Resistance)	Application
DIN 3586 ^[1] Gas directive EU/2016/426	150 psig	-40 °F - 176 °F ⁽²⁾ (-40 °C - 80 °C)	203 °F - 212 °F (95 °C - 100 °C)	Pressure up to 150 psig Temperature up to 1500 °F Guaranteed resist for 90' Max. Leakage ⁽³⁾ : 3.18 ft ³ /h The FireBag exceeds the DIN3586 High Temperature Requirements: 1200°F for 30 minutes at 72.5 psig	Natural gas, butane, propane

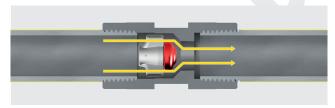
NOTE

- A standard coat of primer and paint is permitted on the body of the device. Avoid excessive paint thickness, avoid painting the heat sensor (for devices 1" - 1 1/4" - 1 1/2" - 2"), avoid using insulation of any kind which could impair the functioning of the device.
- The devices covered by this specification fully comply with the high temperature resistance requirements of DIN 3586. Compliance with declared performances has been tested in the laboratory.
- The device temperature shall never exceed the declared value. Be aware that radiant heat combined with high temperature may lead the device to be exposed to excessive heat
- (3) Average flow value over 90 min. (Test method according to DIN 3586).

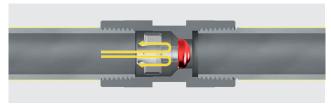
FUNCTION AND INTEGRATED TECHNOLOGIES

♦FREBAS is composed of an external steel body and a thermal sensitive device.

When the external temperature reaches 203 °F - 212 °F, the metal alloy that holds the plug to the cartridge melts, and the compression force of the spring pushes the plug against the gas flow orifice, closing it.



Inactive T<194 °F



Thermally activated T>212 °F

0

TEMPERATURE SENSOR FOR 1" TO 2" DEVICES

The temperature sensor may have different shapes depending on the model and version of the device.

In this document, a neutral graphic representation A has been chosen to show the true appearance B or C, depending on the version and model.





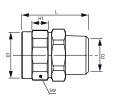


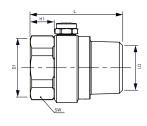
TECO® Americas, LLC 263 Cox Street Roselle, NJ 07203

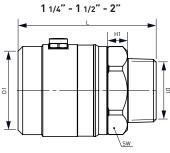


MODELS, FLOW DIRECTION, AND DIMENSIONS

FIREBAG fitting threaded NPT – (inlet FEMALE connection / outlet MALE connection) 3/4" 1"

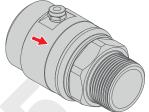










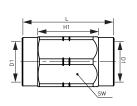


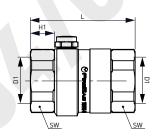
Size D1	L ±0.08 (in)	H1 (in)	SW (in)	KV	CV
3/4" - 14 NPT	1.93	0.80	1 1/4"	5.7	6.7
1" - 11.5 NPT	2.26	0.59	1 1/2"	8.9	10.4
1 1/4"-11.5 NPT	3.62	0.59	2"	22	25.7
1 1/2"-11.5 NPT	3.67	0.59	2 1/3"	32	42.7
2"-11.5 NPT	4.72	0.71	2 3/4"	54	66.7
	D1 3/4" - 14 NPT 1" - 11.5 NPT 1 1/4"-11.5 NPT 1 1/2"-11.5 NPT	D1 ±0.08 (in) 3/4" - 14 NPT 1.93 1" - 11.5 NPT 2.26 1 1/4"-11.5 NPT 3.62 1 1/2"-11.5 NPT 3.67	D1 ±0.08 (in) (in) 3/4" - 14 NPT 1.93 0.80 1" - 11.5 NPT 2.26 0.59 1 1/4"-11.5 NPT 3.62 0.59 1 1/2"-11.5 NPT 3.67 0.59	D1 ±0.08 (in) (in) (in) 3/4" - 14 NPT 1.93 0.80 1 1/4" 1" - 11.5 NPT 2.26 0.59 1 1/2" 1 1/4"-11.5 NPT 3.62 0.59 2" 1 1/2"-11.5 NPT 3.67 0.59 2 1/3"	D1 ±0.08 (in) (in) (in) 3/4" - 14 NPT 1.93 0.80 1 1/4" 5.7 1" - 11.5 NPT 2.26 0.59 1 1/2" 8.9 1 1/4"-11.5 NPT 3.62 0.59 2" 22 1 1/2"-11.5 NPT 3.67 0.59 2 1/3" 32

⁽²⁾ Upon receipt of a Purchase Order, dimensions will be verified. Verified dimensions may be +/- 2% of listed values.

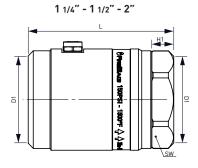
●FREBAG fitting threaded NPT – (inlet FEMALE connection / outlet FEMALE connection)

1/2" - 3/4"

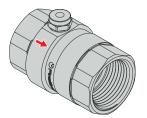




1"









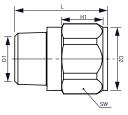
Part Number	Size D1	L ±0.08 (in)	H1 (in)	SW (in)	KV	CV
FBAS15004	1/2" - 14 NPT	2.21	1.52	1"	3.2	3.7
FBAS20003	3/4" - 14 NPT	2.32	1.53	1 1/4"	5.7	6.7
FBAS25003	1" - 11.5 NPT	2.60	1.41	1 1/2"	8.9	10.4
FBAS32004 (2)	1 1/4"-11.5 NPT	3.74	0.55	2"	22	25.7
FBAS40004 (2)	1 1/2"-11.5 NPT	3.94	0.59	2 1/3"	32	42.7
FBAS50004 (2)	2"-11.5 NPT	4.37	0.71	2 3/4"	54	66.7

⁽²⁾ Upon receipt of a Purchase Order, dimensions will be verified. Verified dimensions may be +/- 2% of listed values.

MODELS, FLOW DIRECTION, AND DIMENSIONS

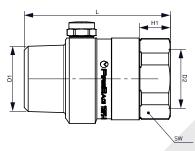
● PREBAG fitting threaded NPT - (inlet MALE connection / outlet FEMALE connection)



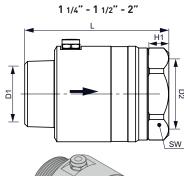


1/2" - 3/4"







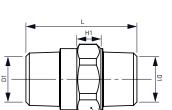




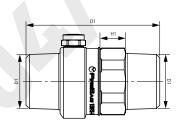
Part Number	Size D1	Size D2	L ±0.08 (in)	H1 (in)	SW (in)	KV	CV
FBAS15003	1/2" - 14 NPT	3/4" - 14 NPT	2.87	1.14	1 1/4"	7.6	8.9
FBAS20002	3/4" - 14 NPT	3/4" - 14 NPT	2.30	1.12	1 1/4"	5.8	6.8
FBAS25002	1" - 11.5 NPT	1" - 11.5 NPT	2.85	1.04	1 1/2"	9.0	10.5
FBAS32001 (2)	1 1/4"-11.5 NPT	1 1/4"-11.5 NPT	3.94	0.55	2"	22	25.7
FBAS40001 (2)	1 1/2"-11.5 NPT	1 1/2"-11.5 NPT	4.13	0.59	2 1/3"	32	42.7
FBAS50001 (2)	2"-11.5 NPT	2"-11.5 NPT	4.37	0.71	2 3/4"	54	66.7

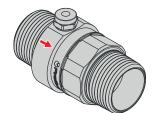
⁽²⁾ Upon receipt of a Purchase Order, dimensions will be verified. Verified dimensions may be +/- 2% of listed values.

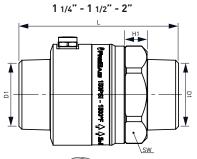
●FREBAG fitting threaded NPT – (inlet MALE connection / outlet MALE connection) 3/4"











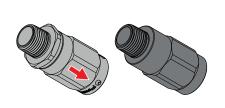


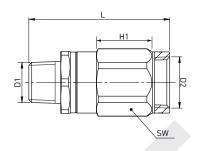
Part Number	Size D1	L ±0.08 (in)	H1 (in)	SW (in)	KV	CV
FBAS20004	3/4" - 14 NPT	2.09	0.39	1 1/4"	5.6	6.6
FBAS25004	1" - 11.5 NPT	3.15	0.39	1 1/2"	8.8	10.2
FBAS32002 (2)	1 1/4"-11.5 NPT	4.13	0.55	2"	22	25.7
FBAS40002 (2)	1 1/2"-11.5 NPT	4.33	0.59	2 1/3"	32	42.7
FBAS50002 (2)	2"-11.5 NPT	4.72	0.71	2 3/4"	54	66.7

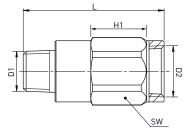
⁽²⁾ Upon receipt of a Purchase Order, dimensions will be verified. Verified dimensions may be +/- 2% of listed values.

KITS (COMPANION FITTING)

●FREBAG fitting threaded NPT – (inlet MALE connection / outlet FEMALE connection)



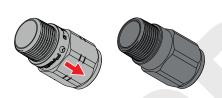


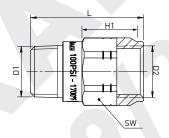


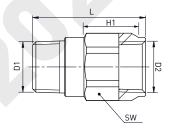
Part Number	Size D1	Size D2	L ±0.08 (in)	H1 (in)	SW (in)	KV	CV
0EAS0001	1/2" - 14 NPT	3/4" - 14 NPT	2.87	1.14	1 1/4"	7.6	8.9

Data is based on the FIREBAG® fitting (FBAS15003) included in the kit.

●FREBAG fitting threaded NPT - (inlet MALE connection / outlet FEMALE connection)



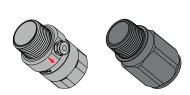


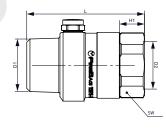


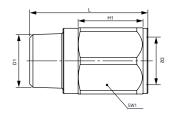
Part Number	Size D1/D2	L ±0.08 (in)	H1 (in)	SW (in)	KV	CV
OEAS0002	3/4" 14 NPT	2.30	1.12	1 1/4"	5.8	6.8

Data is based on the FIREBAG $^{\scriptsize \odot}$ fitting (FBAS20002) included in the kit.

●FREBAG fitting threaded NPT - (inlet MALE connection / outlet FEMALE connection)







Part Number	Size D1/D2	L ±0.08 (in)	H1 (in)	SW (in)	SW1 (in)	KV	CV
0EAS0006	1" 11.5 NPT	2.85	1.04	1 1/2"	1 2/3"	9.0	10.5

Data is based on the FIREBAG® fitting (FBAS25002) included in the kit.

PRESSURE DROP GRAPH







