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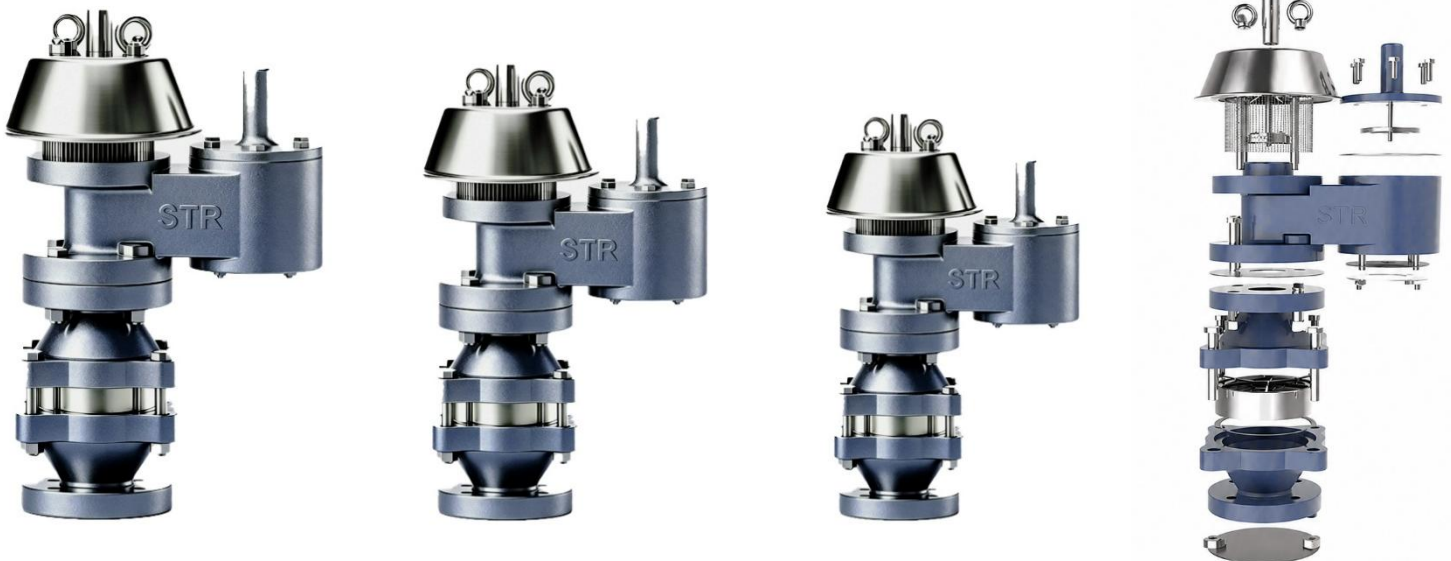
Sales support department (Petro equipment)

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### BREATHER VALVE WITH FLAME ARRESTOR

MODEL: KVFA



## THE DESCRIPTION OF PRODUCT

The model KVFA (the technology from Korea) - Breather valve with flame arrestor which is the combination of breather valve cum flame arrestor, also called the pressure vacuum relief valve with flame arrestor that is installed on top of tanks, which provides protection against positive or vacuum overpressure and prevents air intake, evaporative losses of product and helps contain odorous and potentially explosive vapors.

Type: End of line, Weight Loaded Pressure Vacuum Relief Valve is designed to protect the tank from excessive internal pressure during operation.

## THE WORKING PRINCIPLE

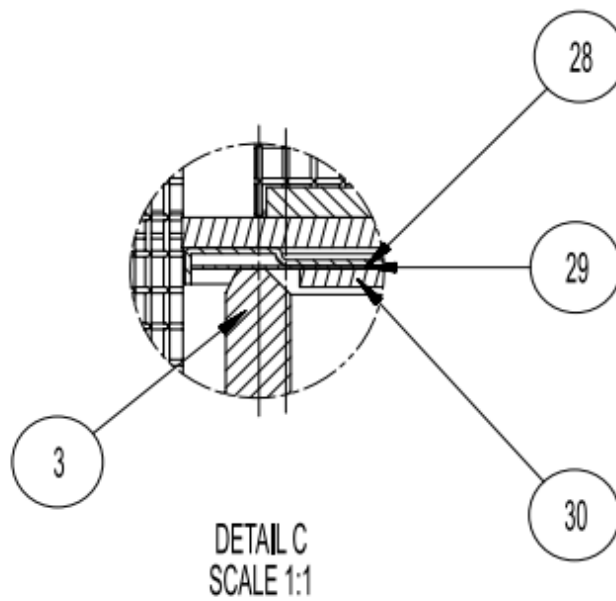
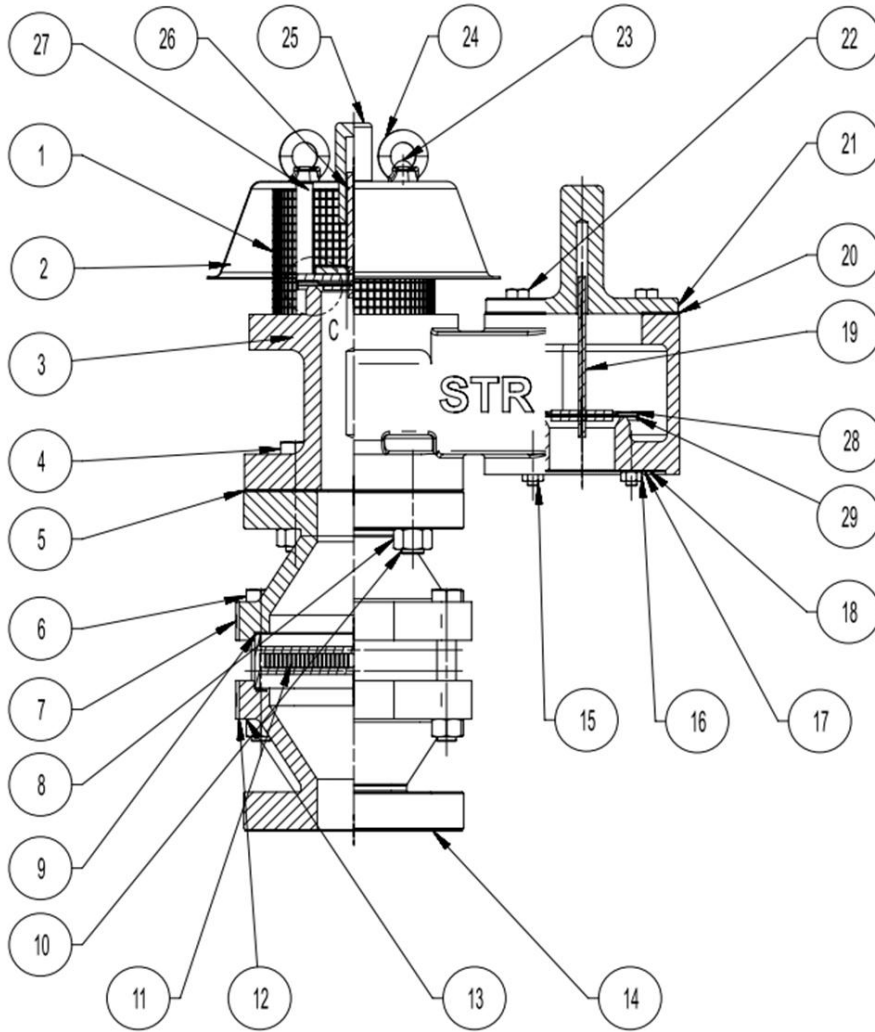
When internal pressure in the tank goes up, due to product filling or vapor development, the set pressure will be increased, accordingly, the pressure disc will be opened and discharge the gas to atmosphere. The set pressure can be arranged according to storage tank requirements and the breather valve will be reset when internal pressure returns to below set pressure. The vacuum disc is similarly maintained in the closed position.

When internal pressure in the tank reduces, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure change. Accordingly, the set pressure of the unit is reached, the vacuum disc opens to vacuum air content and rebalance the internal pressure, and so the breather valve activated as close as to set pressures.

## KEY CONSTRUCTION AND MODELS

<b>Standard size</b>	: Inch: 2" - 12"      DN: DN50 - DN300
<b>Models</b>	: KVFAA (Cast aluminum)    KVFAAC (WCB - Cast steel)    KVFAAS (Stainless steel)
<b>Elements</b>	: SS316/ SS316L
<b>Internal</b>	: SS304/ SS316
<b>Design std</b>	: API2000, EN12874, BS7244
<b>Flame cell</b>	: Group IIA (standard) or IIB/IIC
<b>Set pressure</b>	: Max pressure 700mmW.C/ max vacuum -400mmW.C for weight loaded valves
<b>End connection</b>	: Flange according to ANSI150FF/150RF, (on request for JIS - 10K, DIN,...)
<b>Paint</b>	: Grey epoxy on request

DRAWING AND PARTNAMES

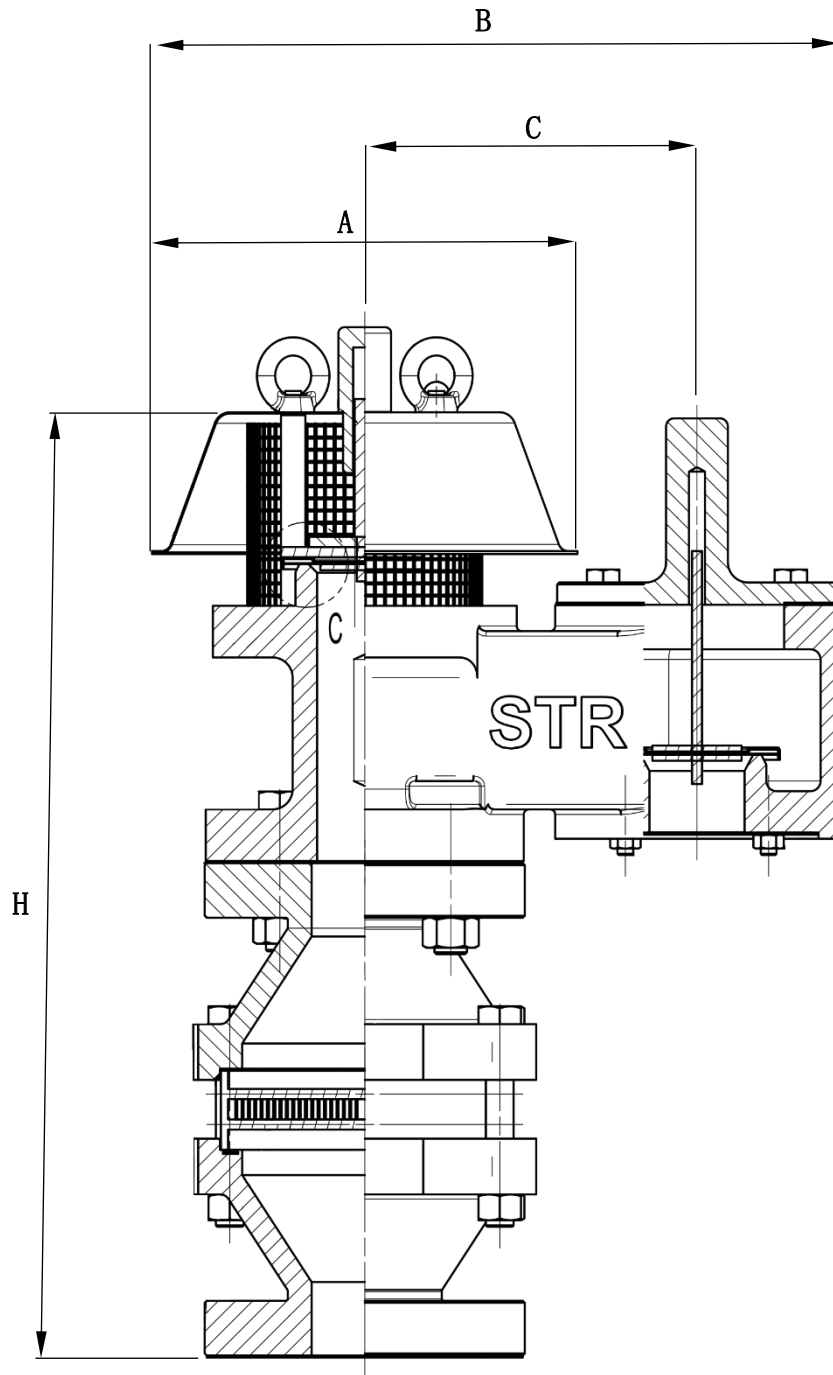


Part names	No.	Aluminum	WCB	SS304	SS316
Bird screen	1	SS304	SS304	SS304	SS316
Hood	2	SS304	SS304	SS304	SS316
Breather valve body	3	B26 - A356	A216-WCB	CF8	CF8M
Bolt	4	SS304	SS304	SS304	SS316
Gasket 1#	5	Non asbestos	Non asbestos	Non asbestos	Non asbestos
Bolt	6	SS304	SS304	SS304	SS316
Flame arrestor body	7	B26 - A356	A216-WCB	CF8	CF8M
Nut	8	SS304	SS304	SS304	SS316
Gasket 2#	9	Non asbestos	Non asbestos	Non asbestos	Non asbestos
Bolt	10	SS304	SS304	SS304	SS316
Element	11	SS316	SS316	SS304	SS316
Element ring	12	SS304	SS304	SS304	SS316
Nut	13	SS304	SS304	SS304	SS316
Gasket 3#	14	Non asbestos	Non asbestos	Non asbestos	Non asbestos
Bolt	15	SS304	SS304	SS304	SS316
Nut	16	SS304	SS304	SS304	SS316
Cover plate	17	B26 - A356	A216-WCB	CF8	CF8M
Vacuum screen	18	SS304	SS304	SS304	SS316

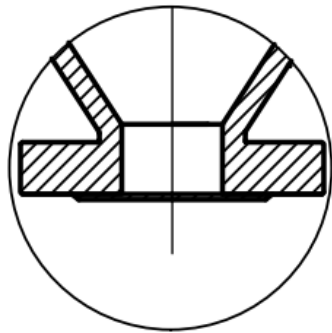
Vacuum stem	19	SS304	SS304	SS304	SS316
Gasket 4#	20	Non asbestos	Non asbestos	Non asbestos	Non asbestos
Vacuum cover	21	B26 - A356	A216-WCB	SS304	SS316
Bolt	22	SS304	SS304	SS304	SS316
Nut	23	SS304	SS304	SS304	SS316
Lifting plus	24	SS304	SS304	SS304	SS316
Stem guide	25	MC Nylon	MC Nylon	MC Nylon	MC Nylon
Pressure stem	26	SS304	SS304	SS304	SS316
Guide post	27	SS304	SS304	SS304	SS316
P/V disc	28	SS304	SS304	SS304	SS316
P/V diaphragm	29	FEP/TPTFE	FEP/TPTFE	FEP/TPTFE	FEP/TPTFE
P/V support plate	30	SS304	SS304	SS304	SS316



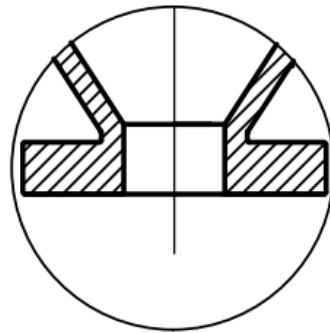
DIMENSIONS



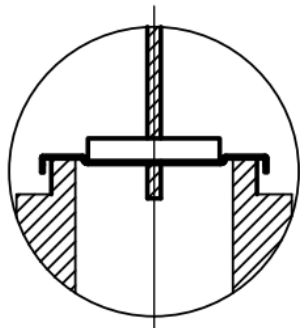
Size	2"	3"	4"	6'	8"	10"	12"
DN	50	80	100	150	200	250	300
A	253	328	350	442	500	558	620
B	368	462	498	628	750	880	978
C	164	205	230	284	348	405	544
H	510	568	588	738	820	882	1016



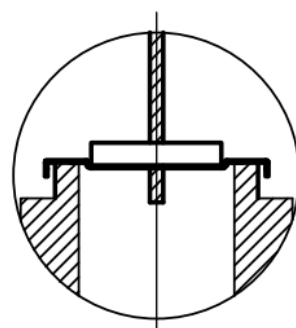
RAISED FACE FLANGE



FLAT FACE FLANGE



PRESSURE SIDE



VACUUM SIDE