

Breather valve with flame arrester

Figure: HITEK – BVFA

According to API 2000 code, BS7244 and EN 12874. The BVFA is designed, manufactured and tested by HITEK. The pressure vacuum relief valves combined with flame arresters are used on liquid storage tanks and other process vessels or systems to prevent structural damage due to excess internal vacuum. Storage tanks are pressurized when liquid is pumped in, compressing the existing vapor or when rising temperatures cause increased evaporation or expansion of existing vapor. Conversely, a vacuum condition may be created when pumping out or due to falling temperature, vapor must be allowed out of the tank at specified vacuum condition.

The volume rate of venting depends upon the tank size, volatility of the tank contents, the pumping rates and the temperature. This is the safe breather valve to control deflation (vacuum) and inflation (pressure) of several storage tanks.



Product name: Breather valve with flame arrester

Model: BVFAA (Aluminum)

BVFAC (Carbon steel)

BVFAS (SS304/SS316)

Internal: SS304

Element: SS304/SS316/SS316L

Design standard: API 2000

Type: Explosion flame arrester

Set pressure: max. + 700mmW.C/ - 500mmW.C

Flame cell (Element): IIA (standard) or (IIB/IIC)

Flange standard: ASME B16.6(or requested by JIS/DIN)

Size 50mm – 300mm



DETAILED REQUEST

Project name:

End user (client)

Model and size: requested by client
as above specs

Material: as above specs

Set pressure: requested client

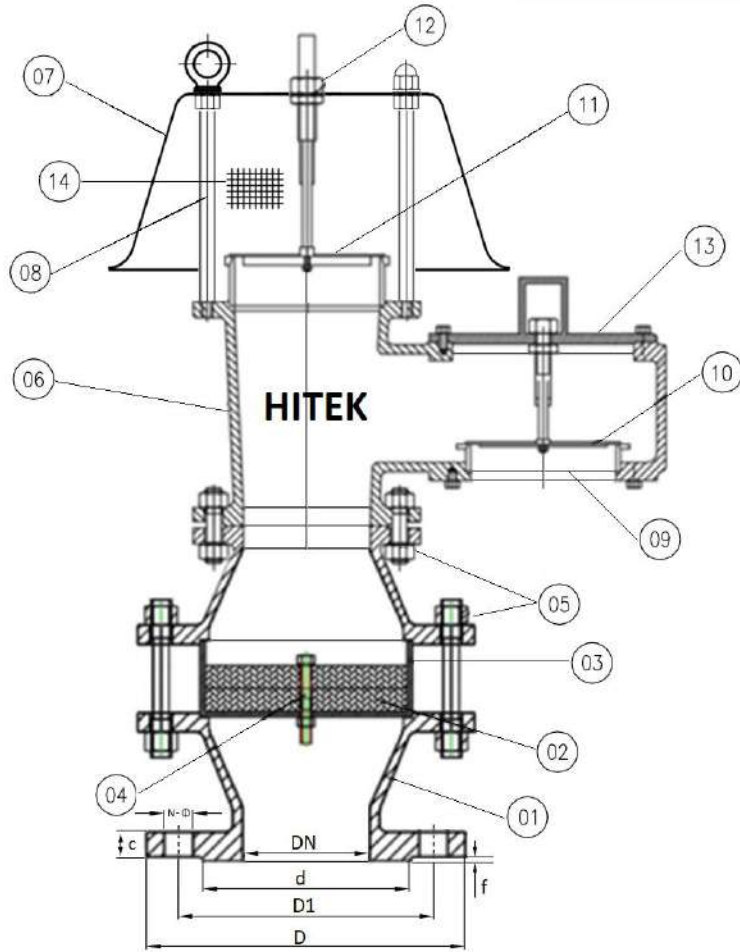
Detailed materials: see the part name

End connection: ASME B16.6(or
requested by JIS/DIN)

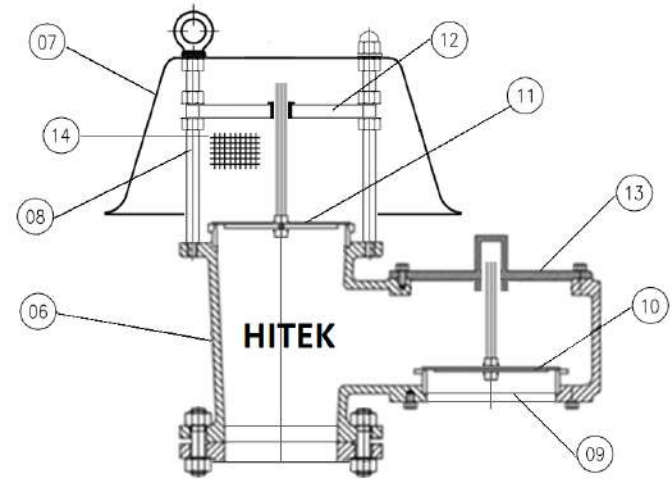
Design and produce: API 2000

Tested by: Hitek.tw

| Part No | Part name | Aluminum | Cast steel | Stainless steel | Stainless steel |
|---------|------------------------|--------------|--------------|-----------------|-----------------|
| 1 | Body of flame arrester | B26 -319.F | A216-WCB | SS304 | SS316 |
| 2 | Flame element | SS316/SS316L | SS316/SS316L | SS316/SS316L | SS316/SS316L |
| 3 | Element ring | PTFE | PTFE | PTFE | PTFE |
| 4 | Guide rod | SS304 | SS304 | SS304 | SS316 |
| 5 | Bolt & gasket | SS304 | SS304 | SS304 | SS316 |
| 6 | Body of breather valve | B26 -319.F | A216-WCB | SS304 | SS316 |
| 7 | Cap | SS304 | SS304 | SS304 | SS304 |
| 8 | Stub bolt | SS304 | SS304 | SS304 | SS316 |
| 9 | Vacuum screen | SS304 | SS304 | SS304 | SS316 |
| 10 | Vacuum disc | SS304/PTFE | SS304/PTFE | SS304/PTFE | SS316/PTFE |
| 11 | Pressure disc | SS304/PTFE | SS304/PTFE | SS304/PTFE | SS316/PTFE |
| 12 | Disc stem | SS304 | SS304 | SS304 | SS316 |
| 13 | Cover | B26 -319.F | A216-WCB | SS304 | SS316 |
| 14 | Dust screen | SS304 | SS304 | SS304 | SS316 |



| SIZE | DN | D | D1 | d | C | f | N-ØL |
|------|-----|-----|-------|-------|------|---|---------|
| 2" | 50 | 150 | 120.5 | 92.1 | 17.5 | 2 | 4- Ø18 |
| 3" | 80 | 190 | 152.5 | 127 | 22.3 | 2 | 4- Ø18 |
| 4" | 100 | 230 | 190.5 | 157.2 | 22.3 | 2 | 8- Ø18 |
| 6" | 150 | 280 | 241.5 | 215.9 | 23.9 | 2 | 8- Ø22 |
| 8" | 200 | 345 | 298.5 | 269.9 | 27 | 2 | 8- Ø22 |
| 10" | 250 | 405 | 362 | 323.8 | 28.6 | 2 | 12- Ø26 |
| 12" | 300 | 485 | 431.8 | 381 | 30.2 | 2 | 12- Ø26 |



NEW DESIGN BY HITEK

DESIGNED BY HITEK PETROLEUM EQUIPMENT CO., LTD