Breather caps with vacuum breaker valve

Technopolymer

ELESA Original design

MATERIAL

Polypropylene based (PP) technopolymer.
- Cover: red colour (TVD-EPDM), green (TVD-FKM).

Graphic symbol "valve" tampoprinted in black colour.
- Avoid contact with solvents, alcohol or detergents containing alcohol to preserve tampoprinted graphic symbol.

Threaded connector: black colour.

STANDARD EXECUTIONS

- **TVD-FKM**: flat packing ring and FKM membrane gasket, hardness 70 Shore A.
- **TVD-EPDM**: flat packing ring and EPDM membrane gasket, hardness 70 Shore A.

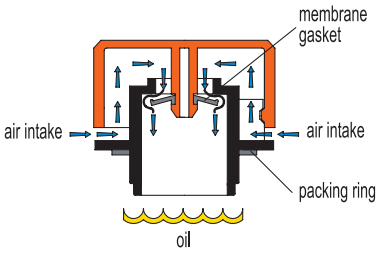
MAXIMUM CONTINUOUS WORKING TEMPERATURE

50°C.

FEATURES AND APPLICATIONS

TVD. breather caps with vacuum breaker valve are suitable for reservoirs and tanks for liquid transport.
The membrane retaining system allows a quick emptying out of the reservoir by letting in big quantities of air through the cap. Thus avoiding the vacuum inside the reservoir, slowing down the liquid exit.
The pre-set pressure of the membrane gasket stops any liquid loss when the reservoir is shaken (for example during transportation).
The liquid pressure on the gasket guarantees a perfect seal of the cap, for example in case of overturning of the reservoir.

Operating layout



The membrane gasket warps and lets air inside the reservoir due to the effect of the vacuum which is created by the liquid discharge.

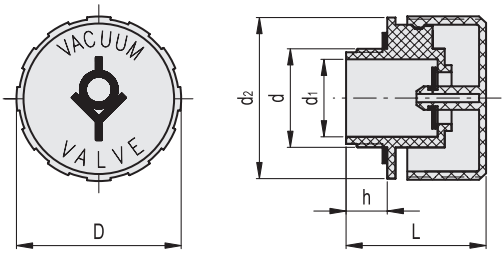
DEPRESSION	FLOW RATE	
	FKM	EPDM
50 mb	360 l/min	370 l/min
40 mb	320 l/min	330 l/min
30 mb	260 l/min	280 l/min
20 mb	210 l/min	230 l/min
10 mb	140 l/min	160 l/min
5 mb	110 l/min	130 l/min

RESISTANCE TO CHEMICAL AGENTS

Tests carried out under standard laboratory conditions at 23°C. Values to be considered only as guidelines.
Please contact ELESA Technical Department for further chemical resistance details to particular liquids not reported in the table.

CHEMICAL AGENTS	EPDM	FKM	PP
POOR ACIDS	●	●	●
STRONG ACIDS	●	▲	●
CONC. ACETIC ACID 40%	●	▲	●
CONC. HYDROCHLORIC ACID 10%	●	●	●
CONC. NITRIC ACID 10%	▲	●	■
CONC. SULPHURIC ACID 20%	▲	●	●
ALCOHOL	●	▲	●
ALDEHYDE (FORMALDEHYDE)	●	▲	●
AMMONIA	●	▲	●
POOR BASES	●	●	●
STRONG BASES	●	▲	●
BENZOL	▲	●	▲
KETONES (Acetone, Methyl Ethyl Ketone)	●	▲	●
ESTERS	●	▲	●
GLYCOL	●	●	●
ALIPHATIC HYDROCARBONS (Petrol, Gas oil, Ethane, Propane, Butane)	▲	●	■
AROMATIC HYDROCARBONS (Toluol, Xylol)	▲	●	■
ANIMAL AND VEGETAL OILS AND GREASES	▲	●	●
MINERAL OIL AND GREASES	▲	●	■

Resistance: Good ● Fair ■ Poor ▲



Code	Description	d	D	L	d1	d2	h	⚖
61011	TVD.70-1¼-FKM	G1 1/4	70	59	33	68.5	17	80
61021	TVD.70-1¼-EPDM	G1 1/4	70	59	33	68.5	17	80