









Dimensions in: millimeters - inches

# Metric table

V								
<b>d<sub>1</sub></b> Thread	Opening pressure in mbar at container overpressure		Opening pressure in mbar at container underpressure	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>
G 3/4	350	700*	30	36 <i>1.42</i>	16 <i>0.63</i>	15 <i>0.59</i>	5.5 0.22	68 2.68
M 42 x 2	350	700*	30	47 1.85	32 1.26	21 0.83	4 0.16	74 2.91

\*Not available from stock, requires a minimum order quantity

## Specification

#### Body

## Plastic

Technopolymer

- Temperature resistant up to 212 °F (100 °C)

- Black
- Upper part (cap)
- Polyamide PA
- Lower part (screw-in thread) Polyacetal POM
- Polya

Seal

Rubber NBR (Perbunan®)

- Air filter
- PU foam (Polyurethane) Grade of filtration 40 µm
- Grade Or
- Key Plastic, red
- Insert profile
- Stainless steel sheet metal
- Thrust spring
- Stainless steel
- IP Protection Classes → page QVX
- Elastomer Characteristics → page QVX
- Plastic Characteristics → page QVX
- · RoHS compliant

## Information

For function and operational criteria of EN 775 safety breather valve caps with double valve, see description of function.

In addition, they are characterized by the following properties:

A torque limiter is installed in the mechanism which is set to give the optimum screw-in torque to ensure a perfect seal. Once the breather valve caps are screwed in position, they can only be removed with a special key. This vandal-proof function ensures that the breather valve caps cannot be opened or removed by an unauthorized person.

Furthermore, the connection between upper part (cap) and lower part (screw-in thread) conforms to IP protection class 65  $\rightarrow$  page QVX.

These safety breather valve caps are supplied with two keys each.

#### see also ...

- Breather Valve Caps EN 774 → page QVX
- Breather Valve Caps EN 764 → page QVX

How to order	1	Thread d <sub>1</sub>	
EN 775-G3/4-350	2	Opening pressure (container overpressure)	



3.1

3.2

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3.4

3.5

3.0



#### **Description of function**

EN 775 safety breather valve caps with double valve are normally used when the fluid container is under pressure, yet air has to flow in from the outside in case of underpressure (decreasing fluid level).

This is achieved by combining two valves (check / bypass valve). The inlet valve allows air to enter at an underpressure of 30 mbar or higher. The second valve only opens at an overpressure of > 350 / 700 mbar.

The air filter prevents contamination of the fluid from outside (dust). It is made of PU foam with a grade of filtration of 40 µm.

The overpressure inside the container ensures that the air volume, which is flowing in or escaping due to the fluctuating fluid level, is kept to a minimum. This reduces filter fouling and substantially increases the service life, especially in dusty environments.

In addition, a pressurized container has a positive effect on the function of the pump and prevents the formation of foam.

The valve seal ensures that no fluid will leak, especially if the fluid is strongly moved or during transport.

## Assembly instruction



When screwing in, a torque limiter ensures that a specified torque is not exceeded. It is set for optimum seal. Turning out the cap without a key is no longer possible.

# Caution:

#### When screwing in, the key must not be inserted.

To unscrew, turn the cap clockwise to the stop (torque limiter). In this position, insert the key into the keyhole. This will connect the screw-in thread and the cap, allowing the breather valve cap to be removed.

The key is designed such that, when inserted, it can be clipped to the cap.



3.7

3.10

G



Pressure gradient  $\Delta p$  [mbar] in the container as a function of the air flow rate [l/min] at a valve opening pressure of 350 or 700 mbar.







