Steel Sheet Metal, with Double Valve



Version with thread A/F Seal







🕴 Туре

- F With filter
- FD With filter and double valve
- (only for $d_1 = 81$ mm)

Metric table

1 2

Ū	Dimensions in: millimeters - inch									neters - inches					
d ₁	d ₂ Pipe thread		Bayonet mount	d ₃	d4	d ₅	d ₆	I ₁	I ₂	I ₃	I ₄	I ₅ ≈	I ₆	A/F	Opening pressure in mbar Type FD
47 1.85	G 1/4	1/4 NPT	BA	7 0.28	52 2.05	40 1.57	27 1.06	10 <i>0.39</i>	5 0.20	51 <i>2.01</i>	35 1.38	13 <i>0.51</i>	66 <i>2.60</i>	17 <i>0.67</i>	-
81 <i>3.19</i>	G 3/4	3/4 NPT	BA	17 0.67	83 3.27	72 2.83	49 1.93	16 <i>0.63</i>	12 0.47	70 2.76	42 1.65	17 0.67	80 3.15	30 1.18	350

Specification

• Body

- Steel sheet metal
- Cap
- Chrome plated
- Other steel parts
- Zinc plated
- Seal
- Rubber NBR (Perbunan®)
- Air filter
- PU foam (Polyurethane)
- Grade of filtration 40 µm
- Temperature resistant up to 212 °F (100 °C)
- Thrust spring Stainless steel
- Elastomer Characteristics → page QVX
- · RoHS compliant

On request

- Type FD with other opening pressure
- Threaded version with dipstick

Information

For function and operational criteria of EN 764 breather valve caps with double valve (type FD), see description of function.

For the version with bayonet mount and filler strainer, the six M5x10 slotted head screws are included. see also ...

- Breather Valve Caps EN 774 (Plastic) → page QVX
- Safety Breather Valve Caps EN 775 (Plastic) → page QVX

How to order	1	Diameter d ₁				
1 2 3	2	Bayonet mount d ₂ (Pipe thread d ₂)				
EN 764-81-BA-FD	3	Туре				







Air escapes at an overpressure of >350 mbar

Description of function

EN 764 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 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 μ m.

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.



Air flow rate [l/min] as a function of the pressure difference Δp [mbar] container / outside space (type F with filter).

Δ p [mbar] 700 600 500 400 300 200 100 200 300 400 500 600 700 800 Q [l/min]

Pressure gradient Δp [mbar] in the container as a function of the air flow rate [l/min] at a valve opening pressure of 350 mbar (type FD with filter and double valve).

3.3 3

3.4

3.7

0 0 0

3.9

3.10

G