

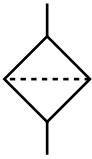
Vacuum filter VAF, ESF, OAFF

FESTO



Datasheet

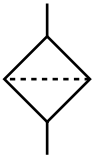
Technical data – Vacuum filter ESF



Description	For suction cup Ø 20 mm, Size 4	Size 3	For suction cup Ø 30/40/50 mm, Size 4
Pneumatic connection	M6	M4	M6
Vacuum connection	M6	M4	M6
Mounting position	optional		
Type of mounting	Via male thread, Via vacuum port		
Grade of filtration	10 µm		
Flow rate with vacuum = -0.075 MPa (-0.75 bar, -10.875 psi)	260 l/min	100 l/min	270 l/min
Operating pressure	-0.95 ... 4 bar		
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:::]		
Ambient temperature	0 ... 60°C		
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress		
Material housing	Aluminium Brass, nickel-plated		
Material seals	NBR		
Material filter	PVF		
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364-A1-L		

1) For more information, visit www.festo.com/x/topic/kbk

Technical data – Vacuum filter VAF-PK

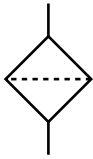


Pneumatic connection ¹⁾	PK-3 with union nut	PK-4 with union nut	PK-6 with union nut
Nominal size	2 mm	3 mm	4.6 mm
Mounting position	optional		
Type of mounting	In-line installation		
Grade of filtration	50 µm		
Flow rate with vacuum = -0.075 MPa (-0.75 bar, -10.875 psi)	50.8 l/min	70 l/min	210 l/min
Suitable for ejector pulse	≤8 bar		
Operating pressure	-0.95 ... 0 bar		
Note on operating pressure	Only for use in open vacuum systems		
Operating medium	Compressed air to ISO 8573-1:2010 [7:::]		
Ambient temperature	0 ... 40°C		
Material housing	PA		
Material union nut	POM		
Material filter	Fabric PA		
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364-B1/B2-L		
Suitability for the production of Li-ion batteries	Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni		

1) Can be used for the corresponding tubing outside diameter

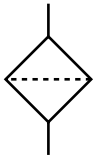
Datasheet

Technical data – Vacuum filter VAF-DB



Pneumatic connection	G1/4	G3/8	G1/2
Vacuum connection	G1/4	G3/8	G1/2
Mounting position	Vertical		
Type of mounting	In-line installation Via wall/surface bracket		
Grade of filtration	80 µm		
Max. tightening torque	8.7 Nm	15.3 Nm	20.5 Nm
Suitable for ejector pulse	≤7 bar		
Operating pressure	-0.95 ... 0 bar		
Note on operating pressure	Only for use in open vacuum systems		
Operating medium	Compressed air to ISO 8573-1:2010 [7:::]		
Ambient temperature	-5 ... 50°C		
Material housing	PP reinforced		
Material seals	NBR		
Material bowl	PA		
Material filter	PE		
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364 zone III		

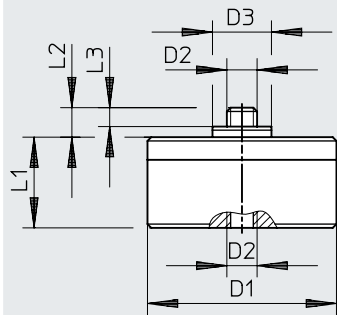
Technical data – Vacuum filter OAFF



Description	For vacuum generator OVEL-7/10	For vacuum generator OVEL-5
Type of mounting	Push-on Snapping in	
Grade of filtration	40 µm	
Suitable for ejector pulse	0.7 MPa	
Suitable for ejector pulse	7 bar	
Suitable for ejector pulse	101.5 psi	
Operating pressure	-95 ... 0 kPa	
Operating pressure	-0.95 ... 0 bar	
Operating pressure	-13.775 ... 0 psi	
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:::]	
Material housing	POM	
Material seals	NBR	–
Material filter	Fabríc PA	
Note on materials	RoHS-compliant	
LABS (PWIS) conformity	VDMA24364-B1/B2-L	

Dimensions

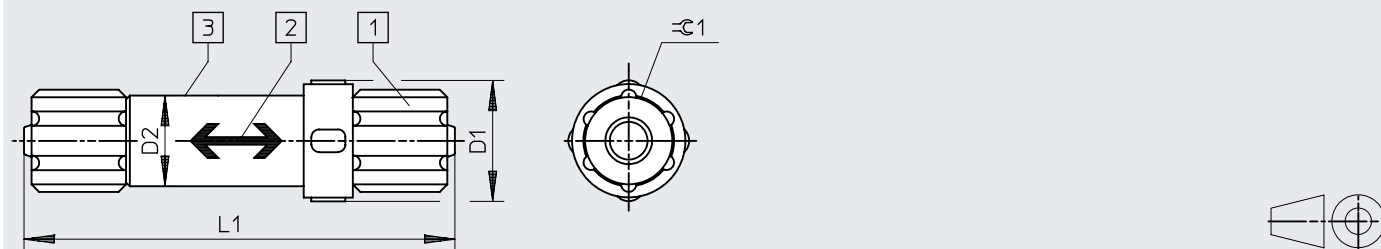
Dimensions – Vacuum filter ESF [Download CAD data](#) www.festo.com



	D1 ø	D2	D3 ø	L1	L2	L3
ESF-3	25	M4	7,8	10,5	4,5	3
ESF-4A	25	M6	8,8	10,5	5,5	4
ESF-4B	40	M6	8,8	14	5,5	4

Dimensions

Dimensions – Vacuum filter VAF-PK

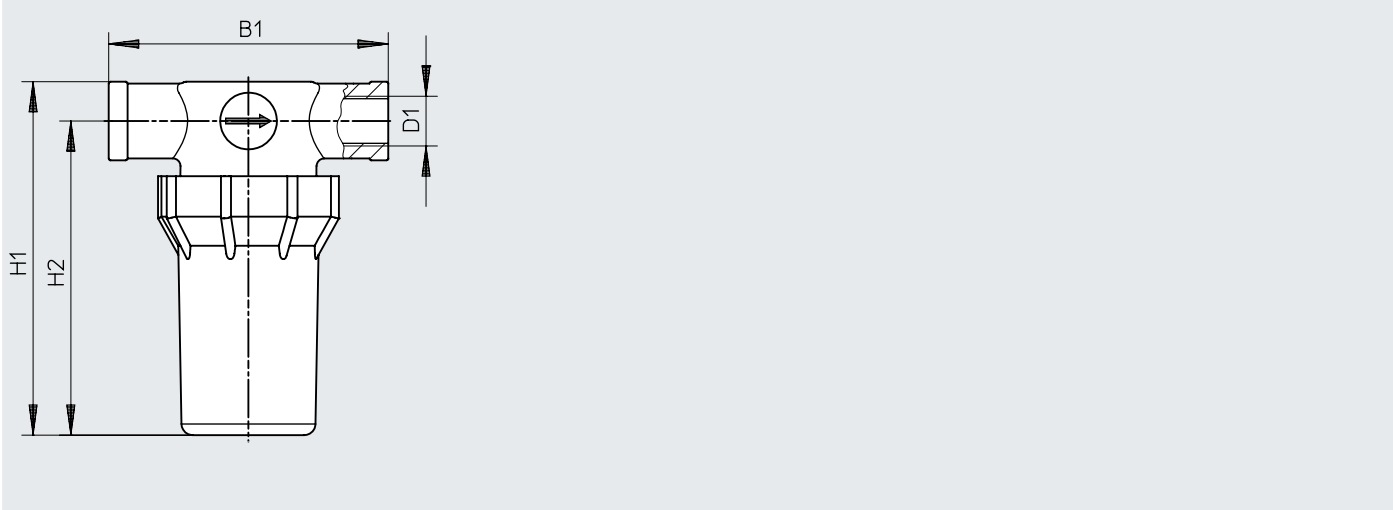
[Download CAD data](http://www.festo.com)


- [1] Quick connector for plastic tubing
- [2] Flow direction indicated with arrow
- [3] Contamination level visible through the transparent housing

	D1 Ø	D2 Ø	L1	≅ 1
VAF-PK-3	16	12	50,8	8
VAF-PK-4	16	12	57	12
VAF-PK-6	24	19	64	14

Dimensions

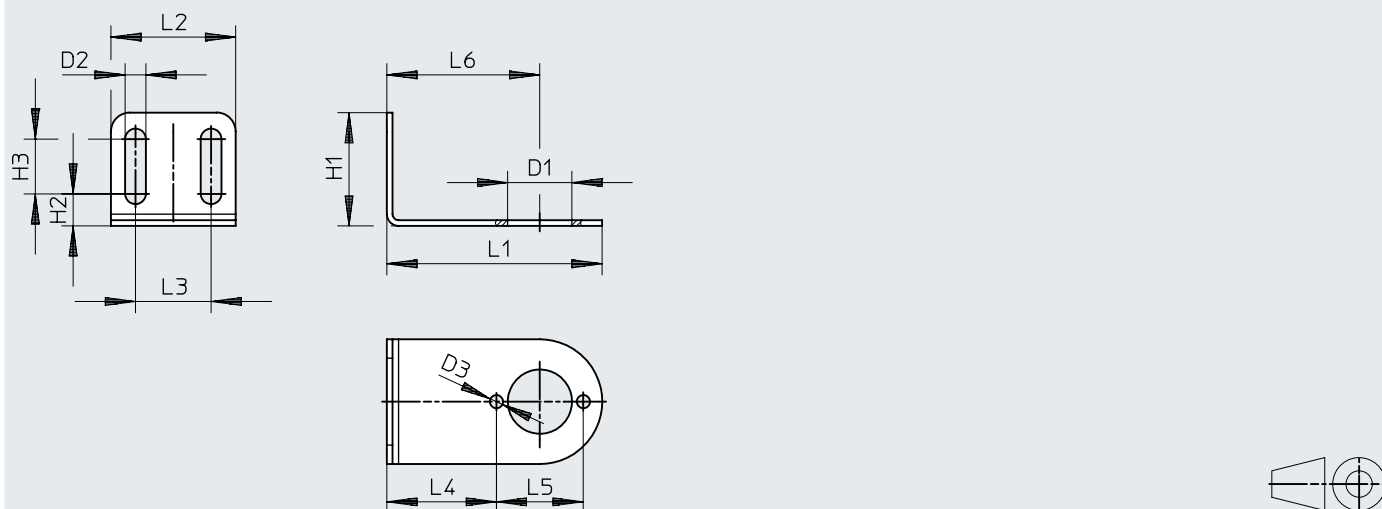
Dimensions – Vacuum filter VAF-DB [Download CAD data](http://www.festo.com) www.festo.com



	D1	B1	H1	H2
VAF-DB-1/4	1/4	75	94,5	84,5
VAF-DB-3/8	3/8	90,5	125	113
VAF-DB-1/2	1/2	90,5	129	115

Dimensions

Dimensions – Mounting bracket VAF-DB-HR

[Download CAD data](#) www.festo.com


	L1	L2	L3	L4	L5	L6	H1	H2	H3
VAF-DB-HR-1/8-1/4	57	33	20	29	23	40,5	30	8,5	14,5
VAF-DB-HR-3/8-1/2	80	53	35	37	33	53,5	50	13,5	24,5

Ordering data

Ordering data – vacuum filter ESF

	Description	Pneumatic connection	Vacuum connection	Grade of filtration	Product weight	Part no.	Type
	Size 3	M4	M4	10 µm	9 g	191202	ESF-3
	Size 4, For suction cup Ø 20 mm	M6	M6		19 g	191203	ESF-4A
	Size 4, For suction cup Ø 30/40/50 mm					191204	ESF-4B

Ordering data – vacuum filter VAF-PK

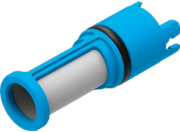
	Pneumatic connection ¹⁾	Nominal size	Grade of filtration	Product weight	Part no.	Type
	PK-3 with union nut	2 mm	50 µm	4 g	535883	VAF-PK-3
	PK-4 with union nut	3 mm		6 g	15889	VAF-PK-4
	PK-6 with union nut	4.6 mm		10 g	160239	VAF-PK-6

1) Can be used for the corresponding tubing outside diameter

Ordering data – Vacuum filter VAF-DB

	Pneumatic connection	Vacuum connection	Grade of filtration	Product weight	Part no.	Type
	G1/4	G1/4	80 µm	71 g	547261	VAF-DB-1/4
	G3/8	G3/8		156 g	553140	VAF-DB-3/8
	G1/2	G1/2		162 g	553141	VAF-DB-1/2

Ordering data – Vacuum filter OAFF

	Description	Size of pack	Grade of filtration	Product weight	Part no.	Type
	For vacuum generator OVEL-5	10	40 µm	1 g	8068944	OAFF-G3-5
	For vacuum generator OVEL-7/10			1.5 g	8068945	OAFF-G3-7

Accessories

Mounting bracket VAF-DB-HR (for vacuum filter VAF-DB)

	Type of mounting	Material mounting bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	Screw-in	High-alloy stainless steel	VDMA24364 zone III	27 g	553144	VAF-DB-HR-1/8-1/4
				92 g	553145	VAF-DB-HR-3/8-1/2

Filter cartridge VAF-DB-P (for vacuum filter VAF-DB)

	Type of mounting	Material filter	Note on materials	LABS (PWIS) conformity	Part no.	Type
	Plug-in	PE	RoHS-compliant	VDMA24364 zone III	553143	VAF-DB-P-3/8-1/2
					553142	VAF-DB-P-1/8-1/4