



Univee® 3 & 320 multipocket bag filters



VOKES Univee 320 Grade EU8 Fire Resistant Multipocket Bag Filter.



VOKES Veeglass VG2 pre-filter fitted in a Side Withdrawal Frame.

VOKES Univee 3 fitted in a Side Withdrawal Frame.

INTRODUCTION

The Univee 3 range of multipocket bag filters combine a high dust holding capacity with long service life, to provide an economic solution to high efficiency air filtration in commercial applications. Fully performance tested for efficiency in VOKES laboratories to BS 6540 Pt.1 (EUROVENT 4/5, ASHRAE 52-76) and confirmed by the results of independent test authorities, they are graded EU8-EU5 within their respective Rated Air Flow Range. Univee 3 bag filters are designed for use in air handling units and air conditioning systems, which have separate pre-filters or where multi-layer type bags are not suitable.

CONSTRUCTION

Each bag is manufactured from a layer of media to the specified filtration performance and a backing material. The first provides fine filtration, while the second prevents fibre migration.

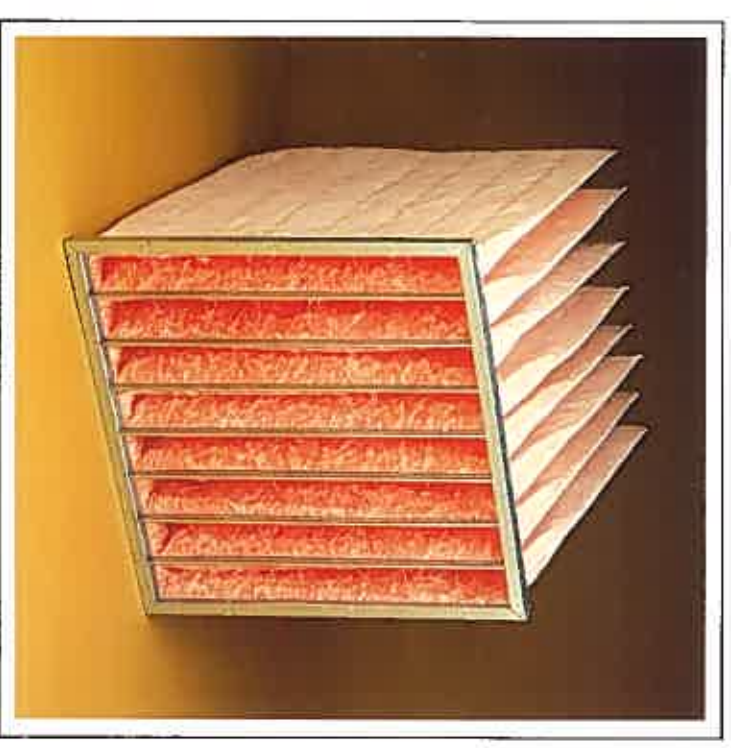
The Univee 3 pocket is designed for the efficient flow of air through the pocket, providing minimal resistance, while optimising the dust holding capacity. This is achieved by using a specially designed stitching pattern which controls the inflation of the pocket, maximising the media area exposed to the air flow and ensuring an even dust loading. To avoid the risk of leakage, the stitching pattern across the pocket is sealed with an adhesive and particular care is given to the over edge stitching.

Each pocket is attached to a supporting frame which is held to adjacent pockets with locking strips. Assembled into a 'U' form galvanised steel header, the assembled pockets provide a rigid and robust filter.

Fire Resistant Bags—Univee 320 filters have been tested and approved by London Scientific Services for compliance with the flammability requirements of BS 5588 Part 9: 1989 (supersedes CP 413 Appendix A) Code of Practice for Ventilation and Air Conditioning Ductwork. These filters are inherently non-flammable and if ignited will generate minimal smoke and toxic gases.

RANGE

Univee 3 bags are available in four grades 90/95%, 80/85%, 60/65% and 40/45% which can be operated at Grades EU8, 7, 6 and 5 respectively. Each grade is available in three sizes to fit 610 x 610, 610 x 508 and 610 x 305 mm frames with either 25 or 20 mm headers. For new installations where filter frames are required, Univee 3 bags with 25 mm headers are recommended, to suit the VOKES range of filter frames. Depending on the specified air flow and the space available, bags can be provided with different combinations of pocket length and number of pockets.



FILTER FRAMES

VOKES has a comprehensive range of front and side withdrawal frames for Univee 3 bag filters, with 25 mm deep headers. Modular in design, bag filter installations of various sizes and configurations can be assembled, based on standard filter sizes.

KEY FEATURES

- Univee 3, a range of multipocket bag filters for high efficiency applications
- Available in 4 grades—90-95%, 80-85%, 60-65% and 40-45%
- Efficiency is laboratory tested to BS 6540 Pt.1 (EUROVENT 4/5, ASHRAE 52-76)
- Graded EU8-EU5 within their respective Rated Air Flow Range
- Univee 320 Fire Bags tested by LSS for compliance with BS 5588 Pt.9
- A wide range of different frame sizes, bag lengths and number of pockets
- Comprehensive range of front and side withdrawal frames available
- VOKES is quality assessed to BS 5750 Pt. 1 and ADAP-1 registered

VOKES

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Univee® 3 & 320 – Multipocket Bag Filters

EUROVENT Grade – (Average Filter Efficiency)

EU8 – (90/95%)

EU7 – (80/85%)

EU6 – (60/65%)

EU5 – (40/45%)

To Fit Frame Size/ Header Size mm	Bag Length mm	Number of Pockets	Rated Air Flow Range m ³ /h Nominal	Rated Initial Resistance Pa Nominal	VOKES Part No.		Rated Initial Resistance Pa Nominal	VOKES Part No.		Rated Initial Resistance Pa Nominal	VOKES Part No.		Rated Initial Resistance Pa Nominal	VOKES Part No.	
					Standard	Fire Resistant		Standard	Fire Resistant		Standard	Fire Resistant		Standard	Fire Resistant
610 x 610	900	9	3000–4000–5000	105–160–220	U385965	U32085965	85–130–180	U375965	U32075965	65–100–130	U365965	U32065965	48–72–104	U355965	U32055965
			2500–3400–4300	85–135–190	U385865	U32085865	60–100–140	U375865	U32075865	43–65–100	U365865	U32065865	33–48–72	U355865	U32055865
			2100–3050–4000	80–120–165	U383865	U32083865	54–84–120	U373865	U32073865	29–51–80	U363865	U32063865	24–42–66	U353865	U32053865
			1600–2300–3000	80–120–165	U383665	U32083665	54–84–120	U373665	U32073665	29–51–80	U363665	U32063665	24–42–66	U353665	U32053665
610 x 508	900	6	950–1350–1750	78–112–148	U382665	U32082665	45–70–98	U372665	U32072665	23–38–55	U362665	U32062665	15–28–45	U352665	U32052665
			2500–3400–4300	70–100–130	U381665	U32081665	42–65–85	U371665	U32071665	15–24–33	U361665	U32061665	11–16–23	U351665	U32051665
			2050–2900–3750	85–135–190	U385655	U32085655	60–100–140	U375655	U32075655	43–65–100	U365655	U32065655	33–48–72	U355655	U32055655
			1600–2300–3000	80–120–165	U383655	U32083655	54–84–120	U373655	U32073655	29–51–80	U363655	U32063655	24–42–66	U353655	U32053655
25+	600	6	1300–1900–2500	80–120–165	U383555	U32083555	54–84–120	U373555	U32073555	29–51–80	U363555	U32063555	24–42–66	U353555	U32053555
			1150–1600–2050	78–112–148	U382555	U32082555	45–70–98	U372555	U32072555	23–38–55	U362555	U32062555	15–28–45	U352555	U32052555
			775–1125–1475	70–100–130	U381555	U32081555	42–65–85	U371555	U32071555	15–24–33	U361555	U32061555	11–16–23	U351555	U32051555
			1050–1525–2000	85–135–190	U385435	U32085435	60–100–140	U375435	U32075435	43–65–100	U365435	U32065435	33–48–72	U355435	U32055435
610 x 305	900	4	1250–1700–2150	80–120–165	U383435	U32083435	54–84–120	U373435	U32073435	29–51–80	U363435	U32063435	24–42–66	U353435	U32053435
			800–1150–1500	80–120–165	U383335	U32083335	54–84–120	U373335	U32073335	29–51–80	U363335	U32063335	24–42–66	U353335	U32053335
			650–950–1250	78–112–148	U382335	U32082335	45–70–98	U372335	U32072335	23–38–55	U362335	U32062335	15–28–45	U352335	U32052335
			475–675–975	70–100–130	U381335	U32081335	42–65–85	U371335	U32071335	15–24–33	U361335	U32061335	11–16–23	U351335	U32051335

†20 mm Headers—The above range of filters is based on 25 mm Headers. For 20 mm Headers, select the required filter eg **U385965** and replace the final digit '5' with a '0' eg **U385960**.

HOW TO SPECIFY

Filter Efficiency/Grade—Univee 3 & 320 bag filters have been performance tested for efficiency to BS 6540 Pt. 1 (EUROVENT 4/5, ASHRAE 52-76) and are available in the following four grades.

Univee 3 Grade	Av. Filter Efficiency	EU Grade*
Grade 8	90 – 95%	EU8
Grade 7	80 – 85%	EU7
Grade 6	60 – 65%	EU6
Grade 5	40 – 45%	EU5

*Univee 3 & 320 bag filters can be operated at their corresponding EU Grade, within the Rated Air Flow Range.

Frame size—Univee 3 & 320 bag filters are specified in terms of the frame size in which the filter fits and equate with the following actual sizes:

Frame Size mm	Header Dims. mm
610 x 610	592 x 592
610 x 508	592 x 490
610 x 305	592 x 287

Univee 3 & 320 bag filters are supplied with 25 mm headers as standard, but are also available with 20 mm headers.

For new installations select a frame size which provides a suitable arrangement of filter modules having regard for the space available and the air flow of the system.

Bag Length & Number of Pockets—For each frame size Univee 3 & 320 bag filters are available in a range of four lengths between 350 and 900 mm. Depending on the frame size there are various pocket options ranging from 3 to 9 pockets.

In general terms for any given air flow it is recommended that the filter with the maximum bag length and largest number of pockets is selected. This solution will provide the optimum performance in terms of efficiency and dust holding capability, and as a consequence the longest filter life and lowest overall running cost.

EXAMPLES

- U3** Univee 3 multipocket bag filter
- U385965** VOKES Part No. **U385965**
- 8** Grade 8 – 90-95% Average Filter Efficiency
- 59** Bag Length – 900 mm, Number of Pockets – 9
- 65** Fits Frame Size, 610 x 610 with 25 mm Header

VOKES Part No. **U32073435**

- U320** Univee 320 multipocket fire resistant bag filter
- 7** Grade 7 – 80-85% Average Filter Efficiency
- 34** Bag Length – 600 mm, Number of Pockets – 4
- 35** Fits Frame Size, 610 x 305 with 25 mm Header

TEMPERATURE

Maximum working temperature (continuous): **60°C**

HUMIDITY

Maximum relative humidity: **100%**

PRESSURE DROP

Maximum recommended final: **650Pa**
(10Pa = 1 mm w.g.)