# **Disc and Sheet Membranes**

# Quartz microfiber filters

The GVS quartz microfiber filters are made with pure quartz microfibers and are free of binders or additives of any kind. These filters have retention, loading and air permeability features similar to those of the glass microfiber filters. However, since they have greater chemical resistance at high temperatures, they can be used in environments where extreme conditions are present, replacing the glass microfiber filters in such cases.

#### D0QF1 Standard grade

DOQF2 Very pure filter/very low trace levels of heavy metals

#### **Features**

High-purity quartz microfiber filters (SiO<sub>2</sub>) free of binding elements or additives

Excellent retention levels for very fine particles

Very high air permeability

High temperature stability. It is very good up to 900°C, some loss of their usual properties setting in beyond that point

Excellent chemical stability with practically no filtermass losses through chemical reactions under extreme conditions with the presence of acid gases  $[HCl, SO_2, SO_3, H2, SO_4, N0 \text{ and } NO_3]$ 

### **Applications**

Determination of suspended particles on the atmosphere

Emissions monitoring in industrial chimneys

Gravimetric determination in gases

Monitoring the level of heavy metals in atmospheric pollution studies

Incinerators

When the temperature of emissions is higher than the temperature that the glass microfiber can beat, it is used quartz microfiber

Analysis of acid gases

Microplastic sample preparation and separation before chromatographic analysis

#### **Technical Specifications**

Grade	Weight (g/m²)	Thickness (µm)	Retention Dop (*) (%)	Maximum Temperature (°C)	Binder
D0QF1	85.0	440	99,998	900	NO
D0QF2	85.0	430	99,998	900	NO

(\*) Retention of a Dyoptil Ophtalate fog with  $0.3 \mu m$  particles

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## **Ordering Information**

Diameter (mm)	D0QF1	D0QF2
	25 Circles/Box	
25	FP025D0QF1QUFC01	-
37	FP037D0QF1QUFC01	-
47	FP047D0QF1QUFC01	FP047D0QF2QUFC01
50	FP050D0QF1QUFC01	FP050D0QF2QUFC01
55	FP055D0QF1QUFC01	FP055D0QF2QUFC01
70	FP070D0QF1QUFC01	-
90	FP090D0QF1QUFC01	FP090D0QF2QUFC01
110	FP110D0QF1QUFC01	-
125	FP125D0QF1QUFC01	-
150	FP150D0QF1QUFC01	FP150D0QF2QUFC01
	100 Sheets/Pack	
203X254	FP203R0QF1QUFC01	-

# Equivalence Table

GVS	Equivalent 1	Equivalent 2	Equivalent 3	Equivalent 4
D0QF1	QM-A	QF20	QF10	T293
D0QF2	-	-	-	MK360

## Trace elements in ppm

Element	D0QF1	D0QF2
Αl	50	25
As	0.75	0.2
Cd	1.5	<0.02
Со	1	<0.5
Cr	5	3.5
Cu	1.25	<1

Element	D0QF1	D0QF2
Fe	30	20
Hg	<0.05	<0.025
Mg	25	15
Mn	1.25	1
Na	40	10
Ni	2	0.5

Element	D0QF1	D0QF2
Pb	0.75	0.3
Sb	1.25.	<1
Sn	0.5	<0.5
Tl	2.5	1.5
V	0.5	<0.5
Zn	5	3

