

# FBT Cartridge Filter

*Provides safe, sterile filtration for air and gas food and beverage applications.*

FBT Cartridge filters are constructed of polypropylene components and a hydrophobic polytetrafluoroethylene (PTFE) membrane, 100% integrity tested before released. They are designed to provide safe and sterile filtration for air and gas applications in the food and beverage industry.

## APPLICATIONS

- Venting
- Sterile filtration of air and gas

## FEATURES & BENEFITS

<b>All components meet USP&lt;88&gt; ,21CFR and Commission regulation for food contact materials</b>	Provides biosafety insurance and global regulatory compliance
<b>Sterilizing-grade meets Bacterial Challenge Test ASTM F838</b>	Safety sterile filtration for air and gas applications
<b>Excellent robustness and integrity maintained after multiple cycles of SIP at higher temperature and longer time</b>	Ensures high quality for sterility assurance and longer service life even at extremely demanding applications

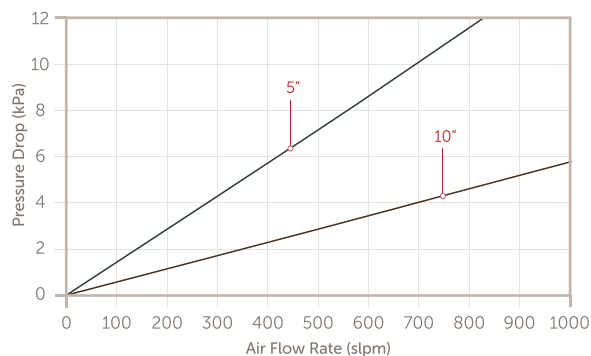


*Ensures high-quality, sterility assurance*

## SPECIFICATIONS

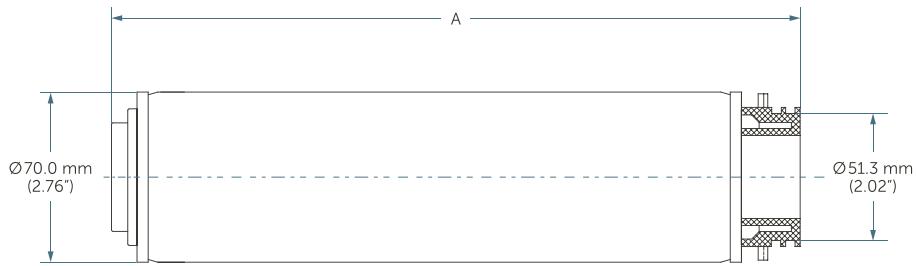
<b>Retention rating</b>	0.22 $\mu\text{m}$	
<b>Materials</b>	Media	Polytetrafluoroethylene (PTFE)
	Support	Polypropylene
<b>Filtration area</b>	$\geq 0.58 \text{ m}^2$ @ 10", $\geq 0.28 \text{ m}^2$ @ 5"	
<b>Integrity test (0.22 <math>\mu\text{m}</math>)</b>	Minimum bubble point @ 60 isopropanol water at 25°C (77°F)	$\geq 1155 \text{ mbar}$
	Minimum bubble point @ 95% ethanol water at 25°C (77°F)	$\geq 1100 \text{ mbar}$
	Water intrusion at 2620 mbar 25°C (77°F)	$\geq 1.0 \text{ ml/min}$ @ 5", $\leq 1.4 \text{ ml/min}$ @ 10"
<b>Maximum operating conditions</b>	Maximum forward differential pressure	5 bar @ 25°C (77°F), 2.0 bar @ 80°C (176°F)
<b>Sterilization cycles</b>	Maintained integrity after 50 cycles of steam-in-place (SIP) sterilization, 60 min at 137°C (279°F)	
<b>Material toxicity</b>	All components meet the requirements of USP<88> Reactivity Test for Class VI Plastics	
	Filters meet the requirement of USP<87> Biological Reactivity Tests in Vitro cytotoxicity	
<b>Animal Free</b>	Meets the EU directive for animal free CPMP EMA/410/01 and 21 CFR parts 189.5	
<b>Bacterial challenge test</b>	Passed the bacterial challenge test using <i>Brevundimonas diminuta</i> (ATCC 19146) at a minimum challenge concentration $1 \times 10^7$ CFU/cm <sup>2</sup> (0.22 $\mu\text{m}$ ) per ASTM F838	
<b>Indirect food additive</b>	Meets the FDA Indirect Food Additive requirements cited in 21 CFR 177	
<b>Food contact material</b>	Meets the Regulation (EU) No. 1935 /2004	
<b>Quality</b>	Manufactured in accordance with ISO 9001 and ISO 13485 certified quality management system	

## PERFORMANCE DATA



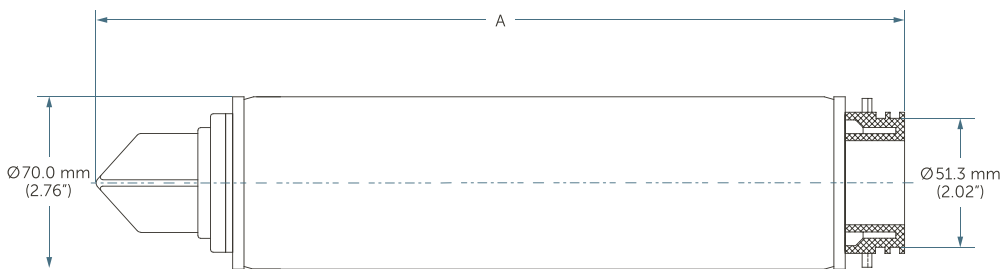
## DRAWINGS

### Code 6



Length	Code 6 (A)
5"	150.5 mm (5.9")
10"	276.0 mm (10.9")
20"	520.0 mm (20.5")
30"	764.5 mm (30.1")

### Code 7



Length	Code 7 (A)
5"	—
10"	316.5 mm (12.5")
20"	561.0 mm (22.1")
30"	805.5 mm (31.7")

## ORDERING INFORMATION

PART NUMBER	CONNECTION	LENGTH	O-RING	RETENTION RATING
FBT022605S1	Code 6	5"	Silicone	0.22 µm
FBT022610S1	Code 6	10"	Silicone	0.22 µm
FBT022620S1	Code 6	20"	Silicone	0.22 µm
FBT022720S1	Code 7	20"	Silicone	0.22 µm

## ORDERING INFORMATION

PART NUMBER	CONNECTION	LENGTH	O-RING	RETENTION RATING
FBT022730S1	Code 7	30"	Silicone	0.22 µm

### FOR MORE INFORMATION

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