

## QUALIKAP QKP-F

### Hydrophilic PVDF capsule filters

- Testable in situ
- Autoclave sterilizable
- Sanitizable
- Thermowelded assembly
- EC-listed materials for food contact
- FDA-listed materials per CFR21
- Extractables as per USP for plastic materials
- Validation Guide available
- Low extractables



QUALIKAP QKP-F capsules are especially designed to be used as sterilizing final filter for small batches in pharma and food applications. QUALIKAP QKP-F are fitted with a pleated hydrophilic PVDF membrane filter element, which guarantees enhanced microbiologic retention.

Typical applications are alcoholic solutions, ultra pure water, vaccines, physiological solutions, ophthalmic liquids and lab batches purification process, etc.

The manufacturing is done in a controlled environment; each filter element is tested to verify the integrity. Each capsule is supplied with conformity test certificate showing the lot.

#### MATERIALS OF CONSTRUCTION

<b>Membrane</b>	hydrophilic PVDF membrane
<b>Upstream drainage layers</b>	polypropylene
<b>Downstream drainage layers</b>	polypropylene
<b>Core and Cage</b>	polypropylene
<b>Outer Shell</b>	polypropylene
<b>Terminals</b>	polypropylene

#### FOOD-SAFETY

The materials used for QUALIKAP-QKP-F are in compliance with EU regulation 10/2011 and its amendments, and with regulations (EC) 1935/2004 and 1895/2005.

#### BIO-SAFETY AND EXTRACTABLES

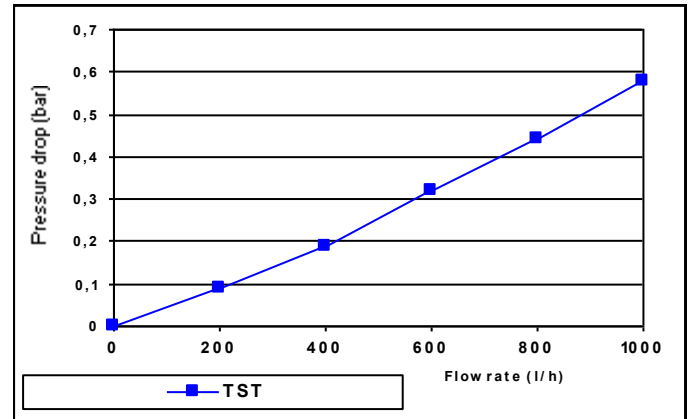
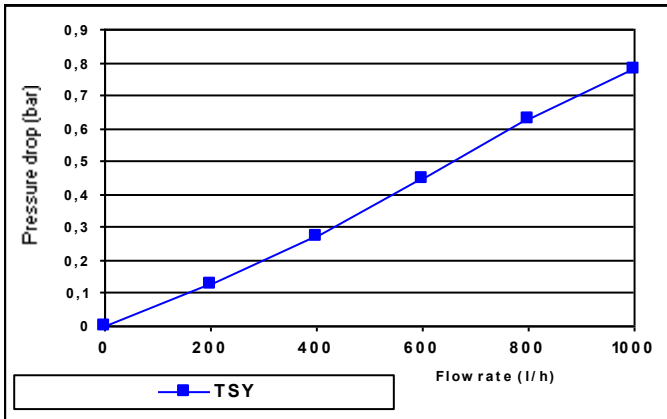
- Materials are compliant to USP-VI CLASS toxicological requirements and USP-Plastic Materials chemical and physical requirements.
- Capsule filters meet USP "Water for injection" requirements for endotoxin particle release; the bacterial endotoxin are determined using LAL Test.
- Extractable NVR (gravimetric) after autoclave  $\leq 2$  mg.
- TOC and conductivity according USP "Purified water" and "Water for Injection" requirements.

#### RECOMMENDED OPERATING CONDITIONS

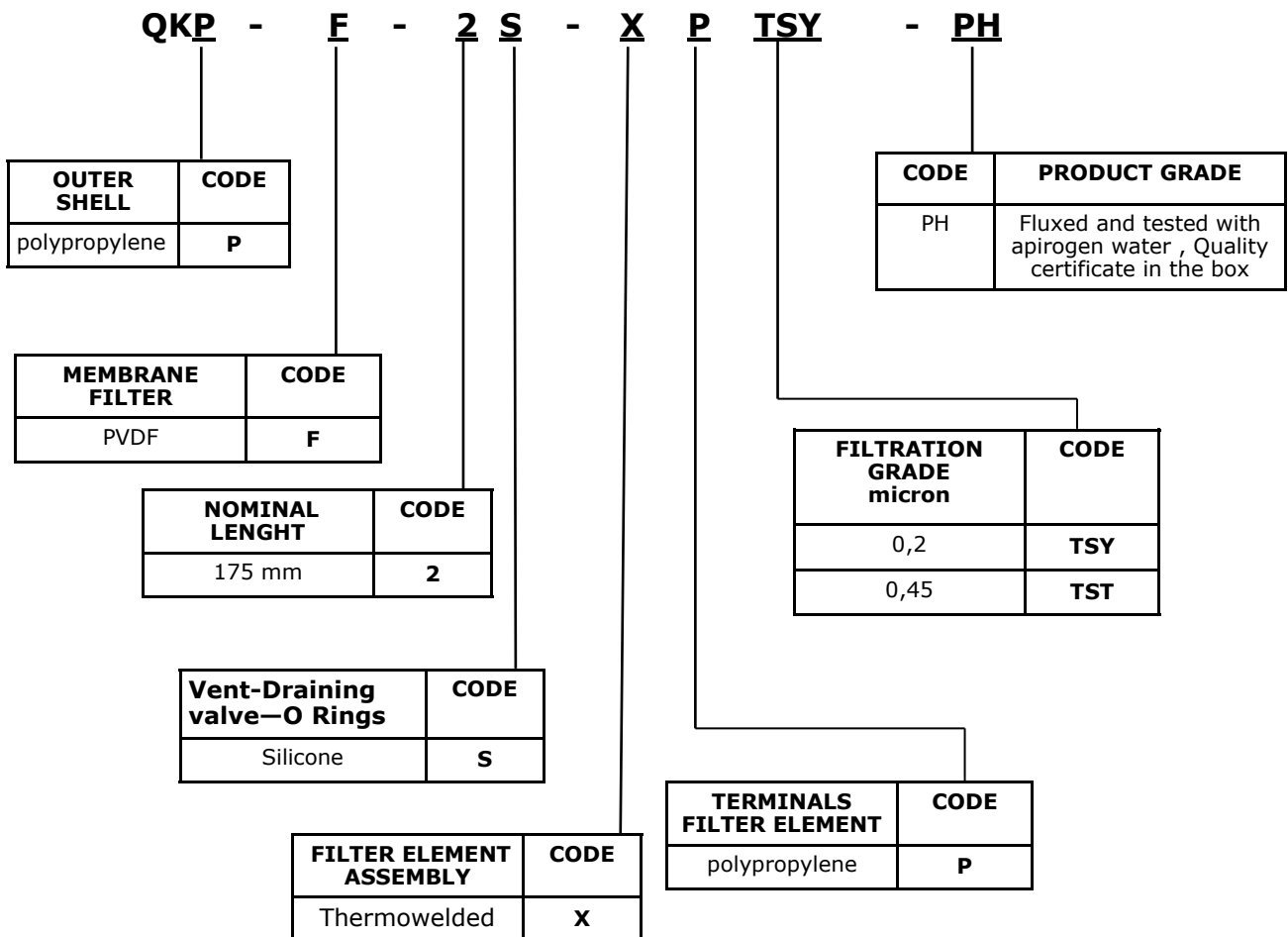
- max. continuous temperature	40 °C
- max. cumulative time of steam sterilization (no in line sterilization available)	16 hours at 125 °C or 8 hours at 135 °C (30' cycle)
- max. pressure	5 bar at 40 °C
- chemical sanitization	compatible with a wide range of sanitizers
- forward flow max. differential pressure	4,5 bar at 40 °C
- reverse flow max. differential pressure	1,0 bar at 40 °C
- recommended pressure drop for changeover	2,0 bar at 40 °C
- in situ recommended flushing volume	1 liter

CODE	ABSOLUTE FILTRATION GRADE IN LIQUIDS	BACTERIAL REDUCTION CHARGE $>10^7$ CFU/cm <sup>2</sup> *	ACCEPTANCE LIMIT FOR DIFFUSION TEST (ml/min)
TSY	0,2 µm	Brevundimonas diminuta	$\leq 13.0$ @ 2,3 bar
TST	0,45 µm	Serratia marcescens	$\leq 8.0$ @ 1,5 bar
* according ASTM F838			

## WATER FLOW RATE CHARTS



## QUALIKAP QKP-F ORDERING INFORMATION



- Max diameter (valves included): 117 mm
- Tri-clamp connections 1 1/2"

Data contained in this bulletin are informative and subject to change without notice.  
 User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.  
 For the type of liquids and gases that can be used, contact Bea Technologies.



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