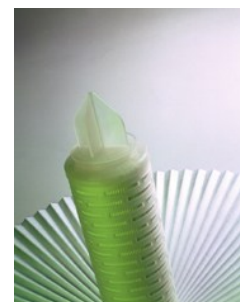


## POLYSAN-PKP

- Higher surface area
- Higher resistance with high dirt holding capacity
- Steamable and sanitizable
- EC-listed materials for Food contact
- FDA-listed materials per CFR21
- Validation guide on request (only PH grade)



POLYSAN-PKP is obtained by pleating up to 5 polypropylene layers of decreasing porosity to achieve high effective filtration area, high dirt holding capacity and precise and controlled filter ratings. All the components in polypropylene are assembled by thermowelding process. POLYSAN-PKP is well suited in all applications (chemical—petrochemical—water treatment—food&beverage—RO—etc..) thanks to its strengths and high chemical compatibility both with liquid and gases; PH grade is prefluxed with non-pyrogenic water and suitable for pharmaceutical applications.

### MATERIALS OF CONSTRUCTION

|                            |               |
|----------------------------|---------------|
| <b>Filter media</b>        | polypropylene |
| <b>Upstream supports</b>   | polypropylene |
| <b>Downstream supports</b> | polypropylene |
| <b>Internal Core</b>       | polypropylene |
| <b>External Cage</b>       | polypropylene |
| <b>End caps / Adapters</b> | polypropylene |

### FOOD-SAFETY

POLYSAN-PKP filter element materials meet (EU) regulation 10/2011 and its amendments, regulations (EC) 1935/2004 and 1895/2005.

### BIO-SAFETY

Filter media and components pass USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics. Specific for "PH" grade: the filter meets USP "Water for injection" requirements for particle release and the effluent is Non-Pyrogenic per USP Bacterial Endotoxins (< 0,25 EU/ml).

### RECOMMENDED OPERATING CONDITIONS

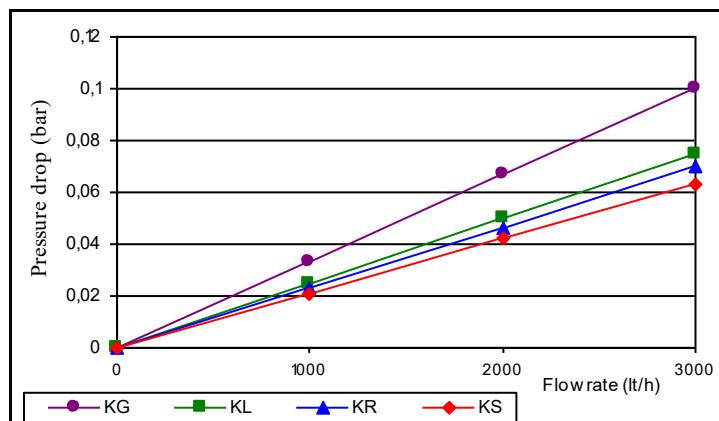
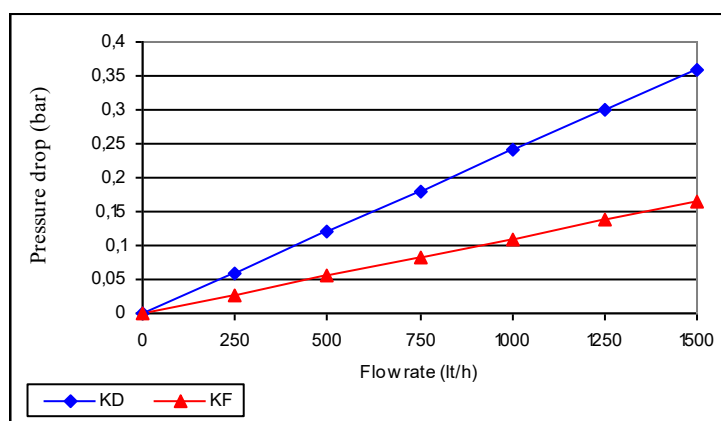
|   |  |
|---|--|
| <b>- max. continuous temperature</b>                  | 65 °C  |
| <b>- regeneration</b>                                 | 2% NaOH solution at room temperature             |
| <b>- sterilization with steam</b>                     | continuously with cycles of 20 minutes at 121 °C |
| <b>- sanitization with hot water</b>                  | 80 °C max  |
| <b>- sanitization with chemicals</b>                  | Can be sanitized by standard chemical agents     |
| <b>- max. differential pressure</b>                   | 5,0 bar at 25 °C                                 |
| <b>- recommended change out differential pressure</b> | 2,0 bar at 25 °C                                 |

### POLYSAN-PKP SOE END FITTING

| CODE | FILTRATION RATING<br>(µm) * | MAX. WATER FLOW RATE FOR 10"<br>CARTRIDGE (l/h) | MAX. AIR GAS FLOW RATE FOR<br>10" CARTRIDGE<br>(Nm³/h @ 7 bar and 20°C) |
|------|-----------------------------|---|---|
| KD   | 0,6                         | 450   | 400   |
| KF   | 1,2                         | 800   | 500   |
| KG   | 2,5                         | 3000  | 550   |
| KL   | 4,5                         | 3000  | 600   |
| KR   | 6,5                         | 3000  | 600   |
| KS   | 10,0                        | 3000  | 600   |
| KT   | 20,0                        | 3000  | 600   |
| KV   | 40,0                        | 3000  | 600   |
| KZ   | 60,0                        | 3000  | 600   |
| KW   | 120,0                       | 3000  | 600   |

\* Referred to filtration of liquid and wet gas; filtration efficiency is drastically increased when dry gases are involved

## WATER FLOW RATE FOR 10" CARTRIDGE POLYSAN-PKP



## POLYSAN ORDERING INFORMATION

**PKP - 207 1 - KR - [ ] - [ ]**

| END FITTING  | CODE       |
|--|------------|
| DOE: double open end with flat gaskets.                                      | <b>200</b> |
| SOE: lopen end with (1) O-Ring 2.20. Blind end with flat top.                | <b>202</b> |
| SOE: open end with (2) O-Ring 2.222. Blind end with flat top.                | <b>203</b> |
| SOE: open end with (2) O-Ring 2.226 and 2 bayonet locks. Blind end with fin. | <b>207</b> |
| SOE: open end with (2) O-Ring 2.222. Blind end with fin.                     | <b>208</b> |
| SOE: open end with (2) O-Ring 2.225. Blind end with fin.                     | <b>209</b> |
| SOE: open end with (2) O-Ring 2.222 and 3 bayonet locks. Blind end with fin. | <b>212</b> |

| ABSOLUTE FILTRATION RATING<br>µm | CODE      |
|----------------------------------|-----------|
| <b>PKP</b>                       |           |
| 0,6                              | <b>KD</b> |
| 1,2                              | <b>KF</b> |
| 2,5                              | <b>KG</b> |
| 4,5                              | <b>KL</b> |
| 6,5                              | <b>KR</b> |
| 10,0                             | <b>KS</b> |
| 20,0                             | <b>KT</b> |
| 40,0                             | <b>KV</b> |
| 60,0                             | <b>KZ</b> |
| 120,0                            | <b>KW</b> |

| CODE           | DESCRIPTION  |
|----------------|--|
| <b>PH</b>      | Prefluxe with non-pyrogenic water; Quality Certification in the box. |
| <b>no code</b> | General Grade  |

| CODE           | GASKETS    |          | END FITTING  |
|----------------|------------|----------|--|
| <b>no code</b> | Standard   | EPDM     | 200—202  |
| <b>S</b>       | On request | Silicone |  |
| <b>no code</b> | Standard   | Silicone | 203<br>207<br>208<br>209<br>212                          |
| <b>E</b>       | On request | EPDM     |  |
| <b>F</b>       | On request | FEP      | 207  |
| <b>SSS</b>     | On request | SILICONE | 203-207<br>208-212<br>With AISI 316 stainless steel ring |

| CODE      | NOMINAL LENGTH |
|-----------|----------------|
| <b>1</b>  | 10"            |
| <b>2</b>  | 20"            |
| <b>3</b>  | 30"            |
| <b>4</b>  | 40"            |
| <b>05</b> | 5"             |

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.



**Bea Technologies Spa** Via Newton, 4 - 20016 Pero (Milano) ITALY  
Tel +39 02 339271 FAX +39 02 3390713 e-mail: [info@bea-italy.com](mailto:info@bea-italy.com)  
web: [www.bea-italy.com](http://www.bea-italy.com)