












# Product Specifications

| NON-BREATHABLE CONNECTORS (Polyurethane) |   |  |  |   |  |
|--|---|--|--|---|--|
|  | Seeflex O20E  | Seeflex O40E   | Seeflex O40AS  | Seeflex O60ES   | Flexi & Flexi Earthed  |
|  |    |   |   |    |   |
| <b>Material</b>                          | Ether based thermoplastic polyurethane  | Ether based thermoplastic polyurethane   | Ether based thermoplastic polyurethane with Anti-static infusion   | Ether based thermoplastic polyurethane with a polyester scrim   | Ether based thermoplastic polyurethane with 316 stainless steel wire coil<br>Flexi-Earthed option has Terminal Lugs at each end of coil (inset)  |
| <b>Colour</b>                            | Transparent   | Transparent  | Transparent  | Semi-transparent  | Transparent  |
| <b>Hardness (Shore A)</b>                | 90  | 90   | 90   | 90  | 90   |
| <b>Temperature range (Continuous)</b>    | -25 - 80°C / -13 - 176°F  | -25 - 110°C / -13 - 230°F  | -25 - 95°C / -13 - 203°F   | -25 - 120°C / -13 - 248°F   | -20 - 85°C / -4 - 185°F  |
| <b>Temperature range (Surge)</b>         | 100°C / 212°F   | 120°C / 248°F  | 100°C / 212°F  | 130°C / 266°F   | -  |
| <b>Surface</b>                           | Gloss/Gloss   | Gloss/Gloss  | Gloss/Gloss  | Gloss/Gloss   | Gloss/Gloss  |
| <b>FDA Approved</b>                      | CFR 177.1680 & 177.2600   | CFR 177.1680 & 177.2600  | CFR 177.1680 & 177.2600  | CFR 177.1680 & 177.2600   | CFR 177.1680 & CFR 21 177.1550 (adhesives) & 177.2600  |
| <b>3A Certified</b>                      | Yes ( 20- )   | Yes ( 20- )  | -  | TBC   | Yes ( 20- )  |
| <b>EU Approved</b>                       | EC 1935/2004, 2023-2006 & 10/2011   | EC 1935/2004, 2023-2006 & 10/2011  | -  | EC 1935/2004, 2023-2006 & 10/2011   | EC 1935/2004, 2023-2006  |
| <b>ATEX Certified</b>                    | Approved for all dust explosion hazardous areas. Some restrictions apply.   | Approved for all dust explosion hazardous areas. Some restrictions apply.  | Approved for all dust explosion hazardous areas. Some restrictions apply.  | TBC   | Approved for all dust explosion hazardous areas. Some restrictions apply.  |
| <b>Thickness</b>                         | 0.35 mm / 1/64 inch   | 0.9 mm / 1/32 inch   | 0.9 mm / 1/32 inch   | 1.3mm / 1/16 inch   | 0.6 mm / 1/32 inch - 0.7mm / 1/16 inch (depending on diameter)   |
| <b>Surface Resistivity (Ohms)</b>        | 10 <sup>10</sup>  | 10 <sup>10</sup>   | 10 <sup>8</sup>  | 10 <sup>10</sup>  | NA   |
| <b>Air Permeability</b>                  | 0   | 0  | 0  | 0   | 0  |
| <b>Application</b>                       | <ul style="list-style-type: none"> <li>●Lightweight media specifically designed for load and weigh scale type equipment. ●No memory so will not fracture as a result of constant flexing.</li> <li>●Excellent abrasion resistance.</li> </ul> | <ul style="list-style-type: none"> <li>●Used for most static, vibratory and gyratory sifters, screeners, feeders, bin dischargers, hoppers, conveyors, packing equipment. ●No memory so will not fracture as a result of constant flexing.</li> <li>●Greater resistance to chemical and UV conditions as well as liquid and CIP. ●Excellent strength and abrasion resistance.</li> </ul> | <ul style="list-style-type: none"> <li>●Applications where static is a problem. ●Applications with explosion risks and for metal detection. ●No memory so will not fracture as a result of constant flexing. ●Excellent abrasion, chemical and puncture resistance.</li> </ul> | <ul style="list-style-type: none"> <li>●For over-pressure situations up to 1.3 bar (tested on a static 250mm diameter x 200mm long connector)* ●The internally bonded scrim restricts the Seeflex sleeve from stretching.</li> <li><i>*Engineering adjustments should be made for changes in diameter. For adjustments in length or non-static applications, contact BFM®.</i></li> </ul> | <ul style="list-style-type: none"> <li>●Ideal for bag feeders, filling heads or bulk bag feeders where connector needs to remain open. ●CIP safe, excellent microbial resistance. ●Very flexible &amp; lightweight, tight bend radius. ●Good mechanical strength. ●Good hydrolytic stability. ●Flexi-Earthed option includes terminal lugs at ends of wire coil</li> </ul> |
| <b>Tensile Strength</b>                  | 78 MPa  | 40 MPa   | 37 MPa   | 47 MPa  | 34 MPa   |
| <b>Ultimate Elongation</b>               | 644%  | 593%   | 450%   | 382%  | -  |
| <b>Tear Strength - Die C (N)</b>         | 17  | 67   | 51   | 111   | NA   |
| <b>100% Modulus (MPa)</b>                | 8.3   | 8  | 7.5  | 12.5  | NA   |
| <b>300% Modulus (MPa)</b>                | 18.4  | 15.6   | 11.7   | 16  | NA   |

# Product Specifications

| BREATHABLE CONNECTORS & COVERS (Fabric)                          |  |   |  |  |  |  |
|--|--|---|--|--|--|--|
|  | LM3  | LM4   | Teflex   | FM1 Breather   | Kevlar Cover   | Black Out Cover  |
|  |   |    |                         |    |   |   |
| <b>Material</b>  | 100% woven polypropylene   | 100% woven polyester  | 100% woven Teflon PTFE   | 100% polyester multi-filament scrim supported needle felt  | 100% woven Kevlar (Aramid)   | 100% woven polypropylene   |
| <b>Colour</b>  | White  | White   | Dark Brown   | White  | Yellow   | Black  |
| <b>Weight (± 10%)</b>  | 295g/m <sup>2</sup> / 8.7oz/yd <sup>2</sup>  | 393g/m <sup>2</sup> / 11.6oz/yd <sup>2</sup>  | 678g/m <sup>2</sup> / 20oz/yd <sup>2</sup>   | 550g/m <sup>2</sup> / 16.22oz/yd <sup>2</sup>  | 447g/m <sup>2</sup> / 13.2 oz/yd <sup>2</sup>  | 207g/m <sup>2</sup> / 6.1oz/yd <sup>2</sup>  |
| <b>Temp. range (Continuous)</b>                                  | -70 - 94°C / -94 - 201°F   | 130°C / 266°F   | 260°C / 500°F  | 130°C / 266°F  | 260°C / 500°F  | -70 - 95°C / -94 - 203°F   |
| <b>Temp. range (Surge)</b>                                       | 107°C / 225°F  | 150°C / 302°F   | 280°C / 536°F  | 150°C / 302°F  | 300°C / 572°F<br><i>(NB Limited to max. temp. of inner layer)</i>  | 100°C / 212°F<br><i>(NB Limited to max. temp. of inner layer)</i>  |
| <b>Construction/ Finish</b>                                      | Multi-filament twill weave, heat set   | Multi-filament plain weave, calendered  | Basket weave   | Heat set, singed and super-glazed one side   | Multi-filament plain weave, scoured & heat set   | Multi-filament plain weave, calendered   |
| <b>FDA Approved</b>  | CFR 21 177.1680 & 177.2600   | CFR 21 177.2800   | CFR 21 177.1550  | CFR 21 177.2800  | CFR 21 177.1632  | CFR 21 177.1520  |
| <b>3A Certified</b>  | -  | -   | -  | -  | (as long as inner meets 3A)  | (as long as inner meets 3A)  |
| <b>EU Approved</b>   | EC 1935/2004 & 10/2011   | EC 1935/2004 & 10/2011  | -  | -  | (as long as inner meets 3A)  | (as long as inner meets 3A)  |
| <b>ATEX Certified</b>  | -  | Approved for all dust explosion hazardous areas. Some restrictions apply.   | -  | -  | -  | -  |
| <b>Surface Resistivity (Ohms)</b>                                | 10 <sup>8</sup>  | 10 <sup>9</sup>   | Insulative   | 10 <sup>8</sup>  | NA   | NA   |
| <b>Air Permeability</b><br><i>(NB: 125Pa = 0.5" water gauge)</i> | 13 (cm <sup>3</sup> /cm <sup>2</sup> /sec@125Pa)<br>25 (ft <sup>3</sup> /ft <sup>2</sup> /min@0.5" wg)   | 0.4 (cm <sup>3</sup> /cm <sup>2</sup> /sec@125Pa)<br>0.8 (ft <sup>3</sup> /ft <sup>2</sup> /min@0.5" wg)                                  | 0.3 (cm <sup>3</sup> /cm <sup>2</sup> /sec@125Pa)<br>0.5 (ft <sup>3</sup> /ft <sup>2</sup> /min@0.5" wg) | 17 (cm <sup>3</sup> /cm <sup>2</sup> /sec@125Pa)<br>33 (ft <sup>3</sup> /ft <sup>2</sup> /min@0.5" wg)   | (Depends on inner layer)   | (Depends on inner layer)   |
| <b>Application</b>   | ●Used for lower temperature environments (temperatures down to -70°C). ●Ideal for food processing, especially when some breathability is required to alleviate pressure. | ●Perfect when some breathability is required to alleviate pressure. ●Used for higher temperature environments (temperatures up to 130°C). | ●For extreme temperatures and highly resistant also against alkalis / acidic / caustic products.         | ●Designed for breathing applications such as venting hoppers and other contained vessels. ●May become required as BFM® connectors create a 100% sealed system. | ●Used in over pressure and potentially explosive applications. ●Can be used with food processing. ●Designed to fit over existing connectors and uses simple butterfly mechanism (no tools required). | ●Used for light sensitive areas and processes - cuts out all light. ●Designed to fit over existing BFM® connectors and uses simple butterfly mechanisms (no tools required). |
| <b>Tensile Strength</b>  | -  | ASTM 5034 (kg)<br>Warp 522<br>Weft 745  | ASTM 5034 (kg)<br>Warp 90<br>Filling 100   | Bursting strength (kg)<br>45.7+  | ASTM 5034 (kg)<br>Warp 700<br>Filling 704 (±58kgf)   | -  |

**NOTE:** All information in this document is based on our present knowledge and experience at the time of printing. Due to the multitude of factors influencing the suitability and performance of BFM® fittings, it does not exempt the user from performing their own tests, nor does it imply any legally binding assurance concerning specific properties of the BFM® fittings, or the suitability for a particular application. The responsibility of complying with any governing laws and regulations relevant to the use of BFM® fittings is the obligation of the end user.