

# Pumpsil Elements

*Pumpsil platinum-cured silicone tubing*



## Features and benefits

- Fully documented biocompatibility and comprehensive validation pack
- Absolute traceability with laser etched part number, lot number and use-by date
- Excellent flow stability for accurate process control
- Comprehensive stock of a wide range of sizes
- Operating temperature -20 °C to 80 °C (-4 °F to 176 °F)



## Technical specifications

|                                   | Pumpsil Elements                                                              |
|-----------------------------------|-------------------------------------------------------------------------------|
| Bore size                         | 0.5 - 25.4 mm (0.02 - 1 in)                                                   |
| Wall thickness                    | 2.4 - 4.8 mm (0.094 - 0.188 in)                                               |
| Colour                            | Colourless                                                                    |
| Transparency                      | Translucent                                                                   |
| Spallation                        | Low                                                                           |
| Certification and compliance      | FDA 21CFR177.2600, Ph. Eur. 3.1.9, Regulation (EC) No 1935/2004, USP Class VI |
| Operating temperature             | -20 °C to 80 °C (-4 °F to 176 °F)                                             |
| Hardness, shore A (5sec)          | 60                                                                            |
| Specific gravity                  | 1.16 g/ml                                                                     |
| UV resistance                     | Excellent                                                                     |
| Tear B                            | 0.02 - 0.06 kN/m (200-500 ppi)                                                |
| Ultimate tensile strength         | 9 Mpa (1306 psi)                                                              |
| Elongation at break               | 550-1500 %                                                                    |
| Tensile stress at 100% elongation | 8.13 MPa (1180 psi)                                                           |
| Gas permeability rating           | Low                                                                           |
| Compression set                   | 5-42.5 %                                                                      |
| Water absorption                  | Low                                                                           |
| Shelf life                        | 5 years                                                                       |
| Gamma stability                   | 25 kGy to 50 kGy                                                              |
| Autoclave stability               | 121 °C 30 minutes                                                             |
| Sterilisation methods             | Autoclave, EtO, Gamma                                                         |

ASTM methods Hardness: ASTM D 2240; Specific gravity: ASTM D 792; Tear B ISO 34-2; Ultimate tensile strength, Elongation at break, Tensile stress at 100 % elongation ISO 37; compression set ISO 815-1; ASTM D 412

## Materials of construction

|                    | Pumpsil Elements        |
|--------------------|-------------------------|
| Tubing             | Platinum-cured silicone |
| Connector material | Polypropylene, PVDF     |

Product codes

| Pumpsil Double Segment Kynar Y-Element ordering codes   |       |                |       |               |
|---------------------------------------------------------|-------|----------------|-------|---------------|
| Bore                                                    |       | Wall Thickness |       | Product codes |
| mm                                                      | inch  | mm             | inch  |               |
| 0.5                                                     | 0.02  | 2.4            | 0.094 | 913.AE05.K24  |
| 0.8                                                     | 0.031 | 2.4            | 0.094 | 913.AE08.K24  |
| 1.6                                                     | 0.063 | 2.4            | 0.094 | 913.AE16.K24  |
| 3.2                                                     | 0.125 | 2.4            | 0.094 | 913.AE32.K24  |
| 4.8                                                     | 0.188 | 2.4            | 0.094 | 913.AE48.K24  |
| 6.4                                                     | 0.25  | 2.4            | 0.094 | 913.AE64.K24  |
| 8                                                       | 0.313 | 2.4            | 0.094 | 913.AE80.K24  |
| 8                                                       | 0.313 | 4.0            | 0.156 | 913.AE80.K40  |
| 9.6                                                     | 0.375 | 2.4            | 0.094 | 913.AE96.K24  |
| Pumpsil Double Y-Element ordering codes                 |       |                |       |               |
| Bore                                                    |       | Wall Thickness |       | Product codes |
| mm                                                      | inch  | mm             | inch  |               |
| 12                                                      | 0.469 | 4              | 0.156 | 913.A12E.K40  |
| 16                                                      | 0.625 | 4              | 0.156 | 913.A16E.K40  |
| Pumpsil Loadsure Quick Release Elements ordering codes  |       |                |       |               |
| Product Name                                            |       |                |       | Product codes |
| Pumpsil 520 LoadSure 3.2mm Bore Quick Release Element   |       |                |       | 913.A032.PFQ  |
| Pumpsil 520 LoadSure 6.4mm Bore Quick Release Element   |       |                |       | 913.A064.PFQ  |
| Pumpsil 520 LoadSure 9.6mm Bore Quick Release Element   |       |                |       | 913.A096.PFQ  |
| Pumpsil Loadsure Tri-Clamp Elements ordering codes      |       |                |       |               |
| Product Name                                            |       |                |       | Product codes |
| Pumpsil 520 LoadSure 3.2mm Bore Tri-Clamp Element       |       |                |       | 913.A032.PFT  |
| Pumpsil 520 LoadSure 6.4mm Bore Tri-Clamp Element       |       |                |       | 913.A064.PFT  |
| Pumpsil 520 LoadSure 9.6mm Bore Tri-Clamp Element       |       |                |       | 913.A096.PFT  |
| Pumpsil 620 LoadSure 12.0mm Bore Tri-Clamp Element      |       |                |       | 913.A120.PFT  |
| Pumpsil 620 LoadSure 17.0mm Bore Tri-Clamp Element      |       |                |       | 913.A170.PFT  |
| Pumpsil 720 LoadSure 12.7mm Bore Tri-Clamp Element      |       |                |       | 913.A127.PFT  |
| Pumpsil 720 LoadSure 15.9mm Bore Tri-Clamp Element      |       |                |       | 913.A159.PFT  |
| Pumpsil 720 LoadSure 19.0mm Bore Tri-Clamp Element      |       |                |       | 913.A190.PFT  |
| Pumpsil 720 LoadSure 25.4mm Bore Tri-Clamp Element      |       |                |       | 913.A254.PFT  |
| Pumpsil Loadsure Cam and Groove Elements ordering codes |       |                |       |               |
| Product Name                                            |       |                |       | Product codes |
| Pumpsil 620 LoadSure 12.0mm Bore Cam and Groove Element |       |                |       | 913.A120.PPC  |
| Pumpsil 620 LoadSure 17.0mm Bore Cam and Groove Element |       |                |       | 913.A170.PPC  |
| Pumpsil 720 LoadSure 12.7mm Bore Cam and Groove Element |       |                |       | 913.A127.PPC  |
| Pumpsil 720 LoadSure 15.9mm Bore Cam and Groove Element |       |                |       | 913.A159.PPC  |
| Pumpsil 720 LoadSure 19.0mm Bore Cam and Groove Element |       |                |       | 913.A190.PPC  |
| Pumpsil 720 LoadSure 25.4mm Bore Cam and Groove Element |       |                |       | 913.A254.PPC  |

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