

## Garlock 3-D Seal

### Cartridge design, high mis-alignment seal

#### Description

Garlock 3-D Seal is designed to be the foremost solution for high radial misalignment and high run out applications. By combining Garlock's proven PS-SEAL® and expansion joint technologies into a single solution, Garlock has developed a seal that leads the industry in solving applications plagued with high misalignment and run out. While this seal is typically used on agitators and mixers, Garlock's wide range of available materials make it possible to configure this seal to fit a virtually endless array of applications in various industries. Each seal is custom designed to your application, allowing Garlock to minimize the difficulty of retrofitting your equipment and through this, increase value and further minimize the total cost of ownership.



#### Main Segments

- » Food & Beverage
- » Chemical Processing

#### Applications

- » Mixers
- » Vacuum Pans
- » Agitators
- » Decanters
- » Separators

#### Certificates/Declarations <sup>1)</sup>

- » FDA 21 CFR177.1550
- » EC1935/2004 incl. EC10/2011
- » USP Class VI <87>, <88>
- » USP <31>, <281>, <661>
- » BAM tested
- » Phthalate free
- » Silicone free
- » ADI free (EMEA 410/01)
- » Hydrocheck

#### Key Benefits

- » Provides excellent sealing ability, while mitigating extreme shaft movement
- » Multi-lip design allows for various sealing stages and configurations (pressure/vacuum)
- » Can be tailored to each unique application

#### Features <sup>1)</sup>

- » Temperature: 150 °C
- » Pressure: up to 10 bar
- » Dry running capability up to 15 m/s
- » Vacuum: full vacuum
- » Movement capability:  
25 mm total indicated runout (TIR)  
25 mm total axial movement (TAM)

1) depending on product and application details

#### Standard Materials of Construction

- » 316SS housing/sleeve
- » Chrome oxide sleeve coating
- » PTFE expansion joint
- » Lip materials in GYLON® quality

Note:  
Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury. Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice GARLOCK is a registered trademark for packings, seals, gaskets, and other products of Garlock.  
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