

# Split Polymer Labyrinth Seal

## Noncontact Split Rotary Seal for Bearing Protection

The Chesterton® patent-pending Split Polymer Labyrinth Seal (SPLS) is a noncontact, split rotary seal for splash-lubricated bearing protection in large pumps, gearboxes, and other rotating equipment. This split seal reduces installation time while outperforming conventional lip seals in operation.

Conventional lip seals have a high probability of fretting and wear on the shaft which leads to reduced life of the equipment. The SPLS with its design, reduces the chance of fretting and wear. It also helps to increase bearing and gearbox life by extending the mean time between equipment repairs (MTBR).

This SPLS uses Chesterton’s exclusive and industry-leading thermoset polymer to create a noncontact, 3-piece seal design that includes a rotor with an integrated valve, a stator, and a metal clamp with no wearing parts.

While in operation, centrifugal forces and gravity enable the lubricant to stay contained within the labyrinth and flow back into the bearing housing, while outside contaminants are excluded and redirected back to the atmosphere.

Chesterton’s advanced, durable, maintenance-friendly thermoset polymers are compatible with common bearing and gear oils and offer a cost-effective alternative to other material options. Each seal is custom manufactured to the exact equipment size needed to maximize performance.



- A split, noncontact design that reduces installation time and minimizes downtime for critical equipment.
- Reduces the chances of fretting caused by lip seals
- Keeps lubrication in and seals out external contamination
- Unitized design and durable material provide easy, reliable installation
- Available in a variety of configurations to meet plant-wide equipment needs
- Standard sizes available for popular equipment; custom sizes available upon request
- IP65 protection against water jets and dust

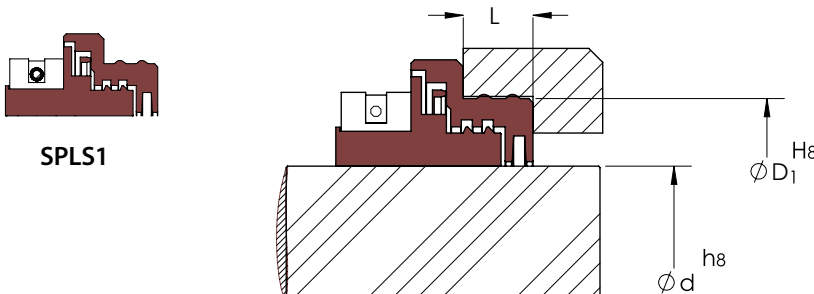
### SPECIFICATIONS



Material (designation)	Size Range mm (inch)	Temperature °C (°F)	Speed m/s (ft/min)*	Eccentricity mm (inch)
AWC800 (EU)	50 – 508 (2 – 20)	-40 – 93 (-40 – 200)	30.5 (6000)	0.75 (0.030)

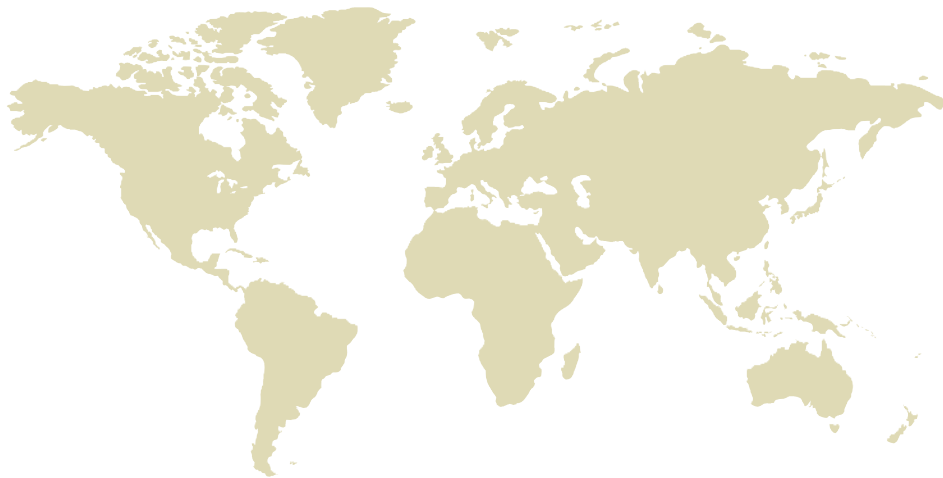
\*Contact engineering for speed beyond these limits.

### PROFILES



#### To place an order:

- Product profile: \_\_\_\_\_
- Material: \_\_\_\_\_
- Rod or ram diameter (d): \_\_\_\_\_
- Groove diameter (D<sub>1</sub>): \_\_\_\_\_
- Groove height (L): \_\_\_\_\_



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Chesterton's global capabilities include:

- Servicing plants in over 113 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians

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