



**Technical Details**      **Metric**      **Inch**

| Operating conditions |               |               |
|----------------------|---------------|---------------|
| Maximum speed        | 4.0 m/sec     | 12.0 ft/sec   |
| Temperature range    | -30°C + 100°C | -22°F + 212°F |
| Maximum pressure     | 300 Bar       | 4500 p.s.i    |

**Maximum extrusion gap**

|                |       |       |       |       |
|----------------|-------|-------|-------|-------|
| Pressure bar   | 160   | 150   | 250   | 300   |
| Pressure p.s.i | 1500  | 2400  | 3750  | 4500  |
| Max Gap in     | 0.024 | 0.020 | 0.018 | 0.016 |

**Surface roughness**

|  | µmRa      | µmRt   | µinCLA  | µinRMS  |
|--|-----------|--------|---------|---------|
| Dynamic sealing surface<br>Ød <sub>1</sub> | 0.1 - 0.4 | 4 max  | 4 - 16  | 5 - 18  |
| Static sealing face ØD <sub>1</sub>        | 1.6 max   | 10 max | 63 max  | 70 max  |
| Static housing faces L <sub>1</sub>        | 3.2 max   | 16 max | 125 max | 140 max |

**Chamfers & Radii**

|                                  |       |       |       |       |       |
|----------------------------------|-------|-------|-------|-------|-------|
| Groove section ≤ S in            | 0.148 | 0.216 | 0.305 | 0.413 | 0.482 |
| Min chamfer C mm                 | 0.079 | 0.118 | 0.197 | 0.295 | 0.315 |
| Max fillet rad r <sub>1</sub> mm | 0.016 | 0.031 | 0.047 | 0.059 | 0.059 |

**Tolerances**

|                 |                 |                   |
|-----------------|-----------------|-------------------|
| Ød <sub>1</sub> | ØD <sub>1</sub> | L <sub>1</sub> in |
| f9              | H11             | +0.008 - 0        |

**DESIGN**

GS9S has a self relieving seal design which prevents pressure from trapping and a simple groove design for easy installation. The self relieving design prevents excessive pressure build up in the cavity between the buffer seal and rod seal.

It has a special glide ring that has low frictional properties which are normally associated with this material but is strengthened by additives to reduce creep. GS9S comes in a wide range of materials for special applications.

**FEATURES**

- Single acting seal
- Low friction - no stick slip
- Simple groove design and installation
- Self relieving design prevents pressure tapping

**MATERIAL**

Seal design comes in a variety of materials and sizes. For more information, please refer to MSDS datasheet.

**APPLICATIONS**

The seal can be considered for use in heavy-duty applications when used with a suitable full depth back-up ring.