

# Seal the Deal with the Master Flo CSS (Cyclical Stem Seal) 10K psi/Temp: -50F to 350F



Scan here to learn more about our exclusive solution:



## Tackling specific high-cycling choke challenges

The Cyclical Stem Seal (CSS) is a next-generation evolution of our sealing technology that has been developed to address specific challenges in high-cycling choke applications. It builds on the success of our ESS (Engineered Stem Seal) and offers enhanced performance for demanding field conditions.

### Why Choose the CSS?

- **Enhanced Durability:** Designed for applications with frequent cycling and low-pressure gas, the CSS offers unparalleled run-time and reduced downtime for maintenance.
- **Advanced Design:** Incorporates a unique four-part system, each engineered for specific roles:

### Proven Performance

- **Field-Tested Success:** Over two years of successful field use with three different end-users.
- **R&D Excellence:** Over 100,000 test cycles completed at our R&D facility in Edmonton.
- **Extended Runtime:** Lasts up to three times longer than previous designs, significantly reducing maintenance intervals.

### Benefits You'll See

- **Increased Productivity:** Reduced downtime translates to higher profitability for operators.
- **Reliable Sealing:** Virtually eliminates stem leaks, even in high-cycling and low-pressure gas applications.
- **Cost Efficiency:** Maintenance cycles extended from three weeks to nearly two years in some cases.

### Parts

1. **Guide Bushing:** Durable PEEK material for long-lasting alignment.
2. **Secondary Barrier:** HNBR elastomer for superior flexibility and gas sealing.
3. **Primary Barrier:** New lip seal, energized PTFE-filled seal with enhanced pressure response.
4. **Lead Ring:** PEEK material with an integrated scraper to keep the stem debris-free.