

# PowerChokes®

## Pressure Relief Valve (PRV) MAX

**PowerChokes® new and improved patented mud pump/Managed Pressure Drilling (MPD) Pressure Relief Valve MAX operates with a significantly faster response time compared to competitive models and is unparalleled in accuracy, repeatability and reliability.**

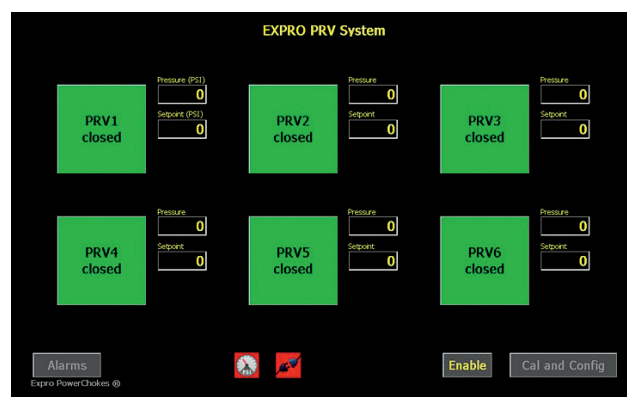
The PRV is used to control pressure within a given system to prevent pressure build up and potential damage to equipment. The PRV allows pressure to flow from the system once a certain pressure is reached. The valve will then open to release the pressure in order to protect the system and once the pressure has been stabilised, the valve will then close.

### Features and benefits

- Provides redundancy data logging and enhanced safety features
- Uses field-proven PowerChokes® technology and software for positioning accuracy, stability and repeatability
- Can be re-set after each trip with no maintenance or rebuilding
- May be manually or automatically re-set after each trip
- Opens in less than 375 msec upon pressure reaching the setpoint
- Extends the life of your equipment
- Avoids improper functioning of the system when the pressure is off
- Maintains pressure in a system in order to avoid dangerous situations

### Applications

- PRVs are used in a wide range of specifications where pressure levels are critical for smooth operations



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### Touch screen HMI capable of mounting anywhere on the rig for complete control:

- Standard PLC with 12" touch screen HMI can control up to 6 PRVs separately
- Control panel displays rig air with alarms, HPU hydraulic pressure alarm
- Provides much needed redundancy, each PRV is packaged with a dedicated self-contained
- System maintains retrievable logs of all alarms, PRV valve open/close events, valve pressures and sequence during valve pop off
- Intelligent maintenance indicator alerting the operator when valve maintenance may be required
- Additional Audio/Visual alarms capability to signal the operator of abnormal conditions
- Optional battery backup so the system is never down
- Optional dual setpoints. One open setpoint to prevent overpressure and one reset setpoint to prevent low pressures
- Optional remote communication for both control and monitoring of valves
- System configured with a fail open option available for increased safety while drilling

### Conforms to:

- API 6A, PSL3, PR1, PX
- API, 5000, 10,000, PSI pressure ratings
- ABS and DNV type approved
- Pressure Equipment Directive (PED), CE Mark
- Pressure-assisted sealing in closed position
- Control Panel ATEX Certified suitable for Zone 2, CE Mark
- HPU and PRV valve ATEX Certified suitable for Zone 1, CE Mark

### Material information:

- NACE MR0175
- API material class EE or better
- Valve body of forged construction, API 75K material, impact-tested
- Metal to metal sealing (no elastomers in gate and seat seal), provide extended service life between maintenance periods
- 316SS enclosure, IP 65 ingress protection

### Utility requirements:

- Control panel power requirements: 120/230 VAC, 1-Phase, 50Hz/60Hz, 10A
- HPU: Rig air 110 PSI

### Additional Information:

- Visual position indicator
- High CV value to allow large flow rates to be accommodated
- Drop tight seal
- Piston actuated
- 3" trim
- Additional visual and audio alarms available upon request
- Addition certification available upon request

