

CHURCH UPSTREAM TECHNOLOGIES

TYPE C32 CHOKE

The Type C32 Choke is a flow control choke valve is a field proven design used in surface oilfield choke and kill manifolds, production, workover, and fracking operations. It is ideally suited for all upstream oil and gas activities. This flow control choke valve provides precise flow metering and positive closure for operation up to 15,000 psi (103.4 MPa) working pressure. The C32 choke is available in a manual or hydraulically operated actuator. The choke has a remote position indicator which shows equivalent orifice or “bean” size for flow rate calculations. Control panels, provided for remote operation, can operate multiple chokes with mud pump flow rate, choke position and upstream pressure readout. An external relief valve ensures any internal pressure is released prior to bonnet removal or from installation.

The type C32 choke design uses two tungsten carbide discs, one fixed and the other under rotational actuator control. Partial circular openings provide a variable orifice size and complete shutoff of fluid flow through the choke. A downstream removable spool, with tungsten carbide wear sleeves, provides protection from erosion and wear on fluids exiting the choke. A hydraulic rotating actuator provides precise positioning of the rotating disc. A variable pneumatic pressure signal from the choke actuator to the remote-control panel provides the trim position and orifice size. The precision lapped discs provide metal to metal sealing under all operating conditions. Type C32 chokes can be furnished in API flanged or studded end connections.

An all forged construction provides uniform and defect free materials for stringent quality requirements as required by API Specification 6A and ISO 10423.

Church Upstream Technologies uses materials of the finest quality in the manufacture of the C32 Choke.

Design features:

- Designed and manufactured to API Specification 6A (ISO 10423)
- Working pressures up to 15,000 psi (103.4 MPa)
- Manual or hydraulic operation less than 1500 psi (10.34 MPa)
- Remote control panels provide trim position, flow, and pressure readings
- Inlet and outlet flange sizes from 1.81” to 4.06” (46-103 mm)
- 1.57” (40mm) equivalent diameter maximum orifice
- Tungsten carbide trim discs provide precise flow control
- Complete pressure assist shutoff of flow
- Wear sleeves in downstream spool for wear and erosion protection
- Pneumatic position indicator gives remote or visual orifice reading
- External relief valve vents internal pressure during actuator removal or from installation
- API Flanged or studded end connections
- All API 6A PSL, PR, material, and temperature classes available
- Forged construction for H2S service per NACE MR-0175 (ISO 15156-1)

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Control Panel design features:

- Pneumatic operated hydraulic pump
- Manually operated hand pump back up operation
- Gauges for drill pipe and casing pressures
- Choke position indicator gauge
- Battery powered digital pump stroke counter
- Hydraulic pump pressure gauge
- Rig air supply pressure gauge
- Hydraulic fluid reservoir
- Connecting hoses and electrical cables for pump stroke counter switches
- Heavy duty oilfield skid mounted
- Protective panel face cover
- Remote pressure transmitters

