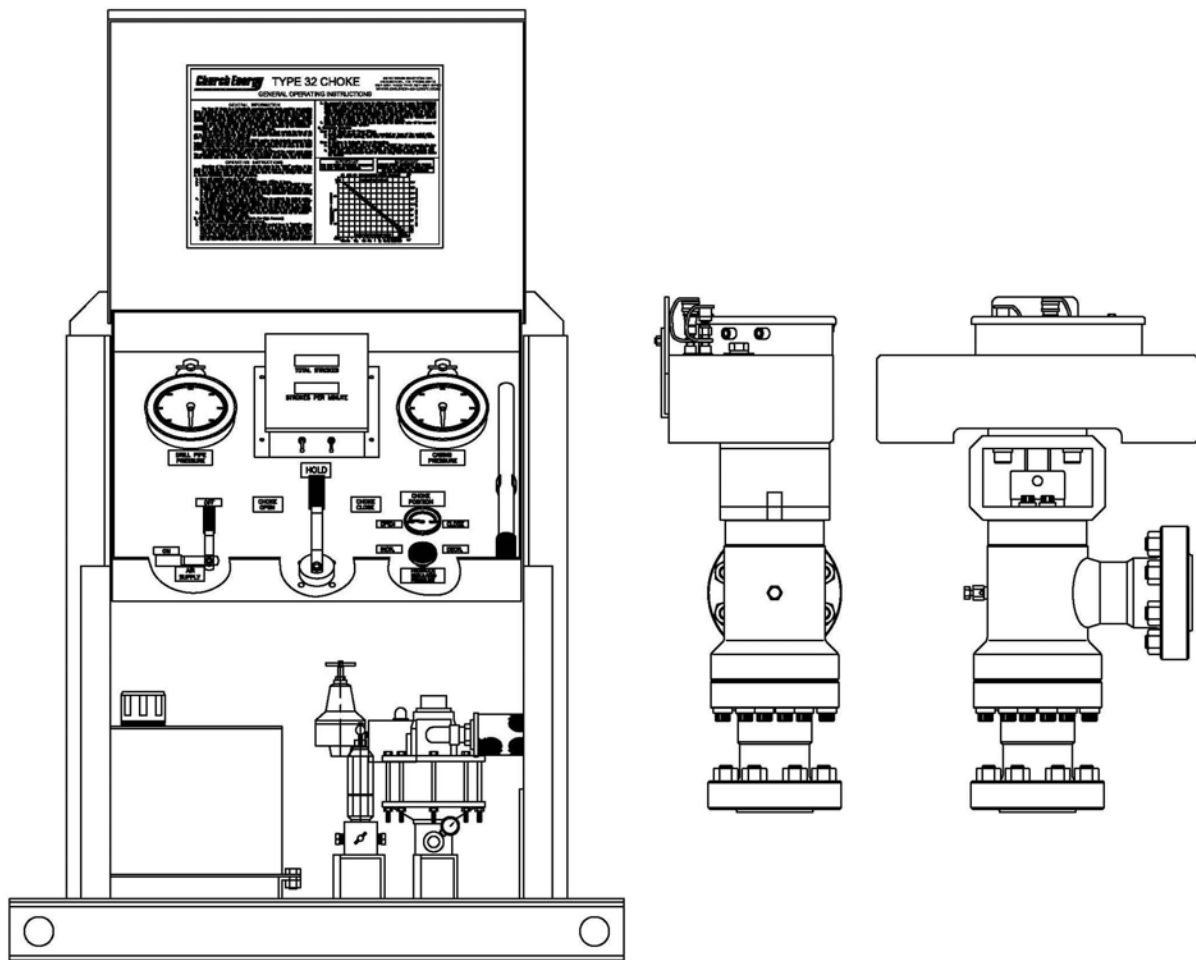


Church Energy

SERVICES LTD.

TYPE 32 HYDRAULIC SUPER CHOKE



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CHURCH ENERGY

TYPE 32 SUPER CHOKE

Type 32 Super Chokes are designed for safe and reliable flow pressure control during production, drilling or well service operations. The Type 32 Super Choke has been proven and accepted for reliable operation in all oil and gas areas in the world. A remote choke control panel operates the Type 32 Super Choke hydraulically.

The Type 32 Super Choke utilizes two flat tungsten carbide discs with a half round cut out in each disc. One disc remains stationary while the opposing disc rotates 180° providing a variable orifice from 0 to 1.93 in² (1245 mm²) opening equal to 1.57" (40 mm) diameter. The lapped matting surfaces of the discs provide a positive seal when the choke is closed.

Hydraulic fluid applied to a rotary actuator rotates the disc to precise choke control of the process fluid. A stem (or fork) attached to the rotating disc is sealed in the choke bonnet and connected to the actuator assembly. Visual choke position is made in an open area between the choke bonnet and actuator. A variable, low-pressure pneumatic, signal also relays the choke position to a remote choke control panel. Replaceable wear sleeves located below the carbide discs protect the choke body from flow wear and turbulence. A pressure relief valve, located on the choke body, ensures any trapped pressure is released from the choke prior to bonnet removal.

Working pressure ranges from 5,000 to 15,000 psi (34.5 to 103.5 MPa) are available. Inlet and outlet bore sizes are available in 2-1/16" to 4-1/16" diameter. Type 32 chokes are available in all temperature, material classes, and PSL levels according to API Specification 6A and ISO 10423.

The hydraulic choke is operated with hydraulic fluid from an air-operated pump in the remote choke control panel. Choke control panels are available in single, or dual choke operation. Battery operated pump stroke counters, choke position indicator, remote manifold pressure transmitter gauges and manual pump back up are also provided in the choke control panels.

Special design features of the Type 32 Drilling Choke:

- Designed and manufactured to API Specification 6A and ISO 10423 for Wellhead and Christmas Tree Equipment
- Rotating Tungsten carbide discs provide precise choke flow control
- 1.57" (40mm) equivalent maximum diameter orifice opening with positive sealing
- Inlet and outlet sizes 2-1/16" to 4-1/16" bore in a 90° body configuration
- 5,000 to 15,000 psi (34.5 to 103.5 MPa) maximum working pressures
- Replaceable downstream wear sleeves protect body from erosion and wear
- Forged materials rated for H₂S service per NACE MR0175
- Choke control panels are designed to API Specification 16C for Choke and Kill Systems