

## Concentric Electric Disconnect

Reliably Disconnect from the Lower Completion without Pulling the Entire Completion String

WellDynamics' Concentric Electric Disconnect lets operators disconnect from the lower SmartWell® system completion without having to pull the entire completion string, thereby saving rig time and costs. Compact in design, the Concentric Electric Disconnect enables reconnecting and isolation of the tubing and hydraulic/electrical umbilical to the lower completion when the tubing is redeployed. The unique Electric Disconnect design offers the capability to connect/disconnect from an electrical line (I-wire connection) in addition to the standard feature for hydraulic lines. This feature also provides the ability to run permanent downhole gauges (PDGs) as part of the lower completion.

Typical applications for the Concentric Electric Disconnect include:

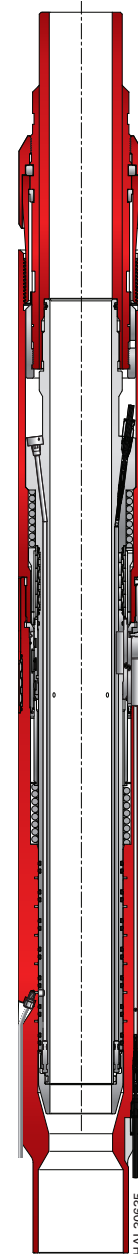
- ESP pump applications
- Safety valve replacement
- Plug and abandonment options
- One- and two-trip completions

### Benefits

- Save rig time and associated costs
- Minimize risk and costs associated with workovers
- Protect against extrusion and blowout with durable, high-performance seal

### Features

- Compact design
- Six hydraulic control line channels (up to eight channels available)
- One electrical line
- Proven bonded seal technology provides total isolation and prevents leakage between the tubing and annulus
- Straight string
- No j-slot mechanism



Concentric Electric  
Disconnect

## Running Options

The Concentric Electric Disconnect can be configured on location to provide three modes of operation:

- Snap Latch: Snap In/Snap Out
- Anchor: Snap In/Rotate Out to Release
- Shear Anchor: Snap In/Shear to Release

## How the Concentric Electric Disconnect Works

The Concentric Electric Disconnect features one electrical control line and six hydraulic control line channels and that provide communication in a SmartWell® intelligent completion. All seven channels are independent of each other.

Specifications	
Concentric Electric Disconnect	
Size	3 1/2-in. x 7-in. 32 lb (3593 size designation)
Maximum OD	5.950 in. (Concentric)
Minimum ID	2.995 in. (Concentric)
Concentricity	Upper and lower sections require concentric ID and OD
Top Connection	3 1/2-in., 9.2 lb/ft VAM Top Box (Upper Half)
Bottom Connection	4 1/2-in, 13.5 lb/ft VAM Top Pin (Lower Half)
Body Working Pressure	7,500 psi
Body Test Pressure	8,000 psi
C/L Pressure	7,500 psi maximum
Metallurgy	AISI 4140 18-22 Rc / 80,000 psi yield per PES Spec A-005 (other materials may be substituted later)
Working Temperature	275° F, 135° C maximum
Bypass Ports	1/8-in. NPT with Swagelok® tube fittings (others may be substituted to reduce OD)
Umbilical Hookup	1 x 1/4-in. electric line on each end of the tool 6 x 1/4-in. hydraulic lines on each end of the tool
C/L Internals	1/8-in. lines may be used internally to reduce OD
Hydraulic Conduit	Not required to be straight pass through
Tubing Seals	Bonded HNBR – 90 Durometer
C/L Fluids	Red Oil (MIL-H-5606)

**For more information on any of the details featured here, please email us at [welldynamics@halliburton.com](mailto:welldynamics@halliburton.com).**

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