

Addressable Downhole Release (ADR) cased-hole tool suite

Get the strongest and most reliable ADR tool

The new **Addressable Downhole Release (ADR) cased-hole release tool suite** from Baker Hughes is a digitally controlled and remotely operated device that can be separated into two pieces on command. It enables the controlled release of a toolstring downhole and leaves a clean fishing neck for the safe retrieval of wireline tools or perforating guns. This reduces the risk of cable damage from excessive over-pull of the wireline when trying to part the mechanical weak point inside the cablehead.

The ADR suite

The ADR Suite comprises three tool versions that are suitable for cased-hole wireline logging and perforating:

- **ADR 001:** 2-1/8-in. OD tool with a new single-piece feedthrough for increased reliability and full pass-through functionality.
- **ADR 201 and ADR 202:** 2-3/4-in. OD tool with built-in negative and positive voltage-blocking circuitry for use with all common perforating systems. The design includes the new single-piece feedthrough for increased reliability. The ADR 200 variants have undergone stringent bending-moment testing, resulting in a 200% increase in strength over previous-generation tools.

Safe and reliable operation

The enhanced, single-piece, feedthrough is rated for high voltages and currents for greater versatility in all models, and can be used with downhole tractors and mechanical cutting tools.

Once unlatched, the upper section of the ADR, including the main body and electronics, can be retrieved out of the hole with the wireline. The lower section remains downhole with the fishing neck for retrieval. Both sections are sealed to prevent tools above or below the unlatch point from being flooded with well fluids. This enables safe correlating using a gamma ray (GR) or casing collar locator (CCL) device when pulling out of the hole.

For safety, all ADR tools respond only to the signal from the surface control panel and use a distinct set of protocols within a specific time period, so they cannot activate inadvertently. The stand-alone, portable panel controls and monitors the tool in real time, providing the precise status of the tools at all times. The disconnect/re-connect process is fast (8 min) and can be carried out at the wellsite for tool status confirmation.

Post release, the tools, which have no “do not tighten” points, can be re-dressed at the wellsite without additional

Applications

- Wireline operations using ballistic or electrical logging instruments
- Situations where pulling a mechanical weak point is beyond the cable capability
- Deviated wells where cable tension cannot be transferred to the mechanical weak point
- Cased-hole wells with elevated risk of stuck tools or toolstrings

Benefits

- Reduces wireline deployment risk
- Protects cable integrity
- Minimizes risks and costs associated with complex fishing operations
- Safely correlates and retrieves toolstring after disconnecting

maintenance or personnel.

The ADR 001 tool is compatible with the Baker Hughes Addressable Downhole Switch (ADS) to enable safe operation when using a tractor and perforating guns.

The ADR 201 and ADR 202 tools have built-in blocking circuitry and do not

require a safe switch, which simplifies the toolstring when combined with tractors or perforating guns.

Contact your Baker Hughes representative to learn more about how the ADR cased-hole release tool suite can safely disconnect tools downhole.

Parameter	ADR 001	ADR 201	ADR 202
Diameter	2-1/8 in. (54 mm)	2-3/4 in. (70 mm)	2-3/4 in. (70 mm)
Field joint	1-3/16 in. UN 12TPI GO-A	1-5/8 in. ACME 6TPI GO-B	1-5/8 in. ACME 6TPI GO-B
Length	25.37 in. (644.3 mm)	33.5 in. (851 mm)	32.8 in. (851 mm)
Weight	19.6 lb (8.89 kg)	42.3 lb (19.2 kg)	42.3 lb (19.2 kg)
Operating temperature	-4° to 350° (-20°C to +177°C)	-4° to 350° (-20°C to +177°C)	-4° to 350° (-20°C to +177°)
Working pressure	20,000 psi (137.9 MPa)	20,000 psi (137.9 MPa)	20,000 psi (137.9 MPa)
Time for release/ connection	8 min	8 min	8 min
Through volts	+1600 to -1200V DC	+650 to -300V DC	+300 to -350V DC
Through current	12A DC continuous	3A continuous	3A continuous
Operating volts	-50 to -80V DC	-50 to -80V DC	+50 to +80V DC
Current	30 mA motor off, 70-90 mA motor on	30 mA motor off, 60 to 100 mA motor on	30 mA motor off, 60 to 100 mA motor on
Multi-tool	4 x ADR L	0	0
Fish neck size	1-3/8 in.	1-3/4 in.	1-3/4 in.

ADR 001



ADR 200 Series

