

Well Construction

Cementing Technologies

MULTICATCH™ Dart Catcher System

Expro's MULTICATCH™ Dart Catcher System provides enhanced cement displacement, cost-effective pipe cleaning, and efficient operations by allowing wiper darts or wiper balls to be caught and retrieved during inner-string cementing and balanced plug operations.

The MULTICATCH™ Dart Catcher has the capacity to catch up to eight darts, nerf or polyurethane wiper balls, or a combination of both, the largest in the industry. The MULTICATCH™ Dart Catcher System eliminates the need for dart drill-out and reduces overall cement drill-out time while allowing full forward and reverse flow capabilities when all darts are caught.

When used in combination with the BLACKHAWK® suite of cement heads and swivels, the Multicatch dart catcher system provides the operator with a complete package solution to ensure the exact location of downhole fluids during inner-string cement jobs, cementing squeezes, and balanced cement plugs for temporary and permanent well abandonment or sidetrack operations.

Additionally, the MULTICATCH™ Dart Catcher System can be run in conjunction with the Universal Cement Sub with four different jetting configurations to accommodate multiple wellbore conditions and provide efficient cement placement.

Features and Benefits

- Proprietary ball seat design provides a pressure spike at the surface when darts land in the tool to show exact displacement location for more reliable cement operations
- 4.7 in² flow area for full forward and reverse flow capabilities even with all darts caught
- Indication pressure can be changed by utilizing different dart noses for increased operational flexibility
- Proprietary dart design thoroughly wipes multiple IDs of the cementing string and maintains separation of wellbore fluids to reduce costly pipe cleaning and cement contamination
- Secondary bypass mechanism ensures full cement and mud displacement for increased reliability in the event an obstruction prevents dart from entering the catcher
- Optional Universal Cement Sub can be set up for down-jet or up-jet configuration to optimize cement placement at the end of the work string





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| Specifications | |
|--|---|
| Max. tensile yield (lbs) | 1,167,000 ^{1.} (SF 1.1) |
| Max. working pressure (psi) | 10,000 |
| Max. torque through tool (ft-lbs) | 30,700 ^{1.} |
| Overall length (in.) | 160 (4 Darts), 235 (8 Darts) |
| Max. tool O.D. (in.) | 7.00 (NC-50) |
| Indication pressure (psi) | 500 (Blue Nose), 1,500 (Gold Nose), 2,500 (Red Nose) |
| Secondary release pressure (psi) | 5,000 |
| Min. flow area (in²) | 4.7 |
| Connections | 4-1/2" IF (NC-50) Box x Pin, 6.625" OD, 3.25" ID, 120 ksi yield 25,600-30,700 ft-lbs Make-up Torque |
| Max. flow rate with/without darts loaded | Unlimited flow up to 20 BPM Up to 30 BPM for 12 hrs |
| Universal Cement Sub | |
| Max. torque through tool (ft-lb) | 30,700 |
| Overall length (in.) | 49 |
| Max. tool O.D. (in.) | 6.75 |
| Connections | 4-1/2 in IF (NC-50) Box x Pin, 6.625 in OD |
| Side port flow area (sq. in.) | 8.59 |
| Bottom port flow area (sq. in.) | 2.41 |
| | |
| MULTICATCH™ Indicator Dart | |
| Max. rigid O.D. (in.) | 2.50 |
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 $^{1. \ \ \}text{Max Tensile Yield and Torque through tool does not include end connection ratings}$