

Integral Drill Collar

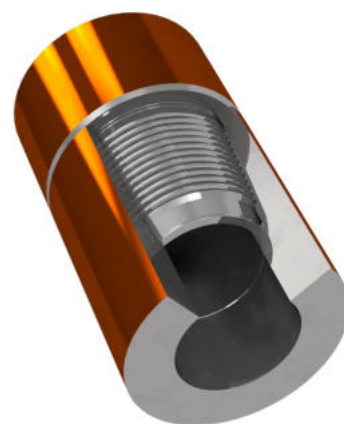
Introducing Black Diamond's Integral Drill Collars: Elevating Drilling Efficiency to Unprecedented Heights

Employing Black Diamond's patented PULSAR™ connections, the Integral Collars achieve a larger bore than standard collars while maintaining or elevating rigidity and collar integrity. PULSAR™ is the an engineered, BHA specific, double shouldered MWD and BHA collar connection. Redefining industry standards, PULSAR™ presents a sleek design with a smaller relative OD and a larger relative ID compared to standard API connections facilitating enhanced fluid flow efficiency.

The major operational benefit of the Integral Collars is the large bore that facilitates higher flow rates, ensuring drilling operations progress with unmatched efficiency. Coupled with the PULSAR™ connections, the Collars offer optimized torsional capacity, ensuring heightened efficiency and durability in demanding drilling operations. Engineered for longevity, Integral Collars are meticulously designed and validated through rigorous full scale rotating and bending testing to provide reliability under the most challenging conditions.

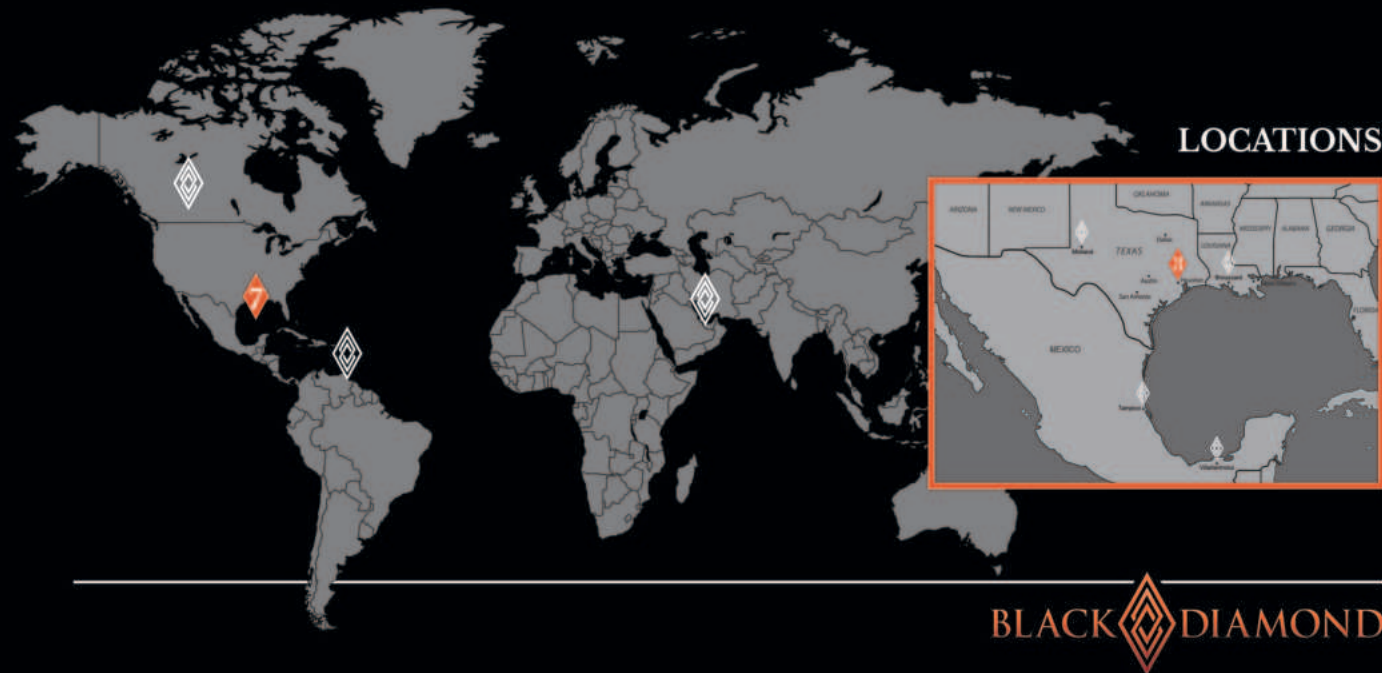
Features & Benefits

- **Enlarged ID:** Facilitates enhanced flow rates without compromising integrity or rigidity.
- **Superior torque transmission:** The innovative double shouldered PULSAR™ design enhances torque transmission, ensuring efficient power transfer. Provides performance in extended-reach laterals and challenging well environments.
- **User friendly design:** The Pulsar double shouldered connection offers the convenience of a conventional shouldered and threaded connection, which effortlessly spins until shouldered to the MUT.
- **Sleek profile:** Increased torsional strength that allows for streamlined tool joint OD and ID dimensions, resulting in improved hydraulic performance.
- **Seamless internal diameter:** Zero-gap or change in ID from box to pin, greatly reducing erosion during high internal flow conditions.
- **Enhanced fatigue resistance:** Designed to withstand repetitive stress and fatigue, leading to a longer operational lifespan and reduced maintenance needs.
- **Design validated:** Connection design validated through Finite Element Analysis and verified through exhaustive fatigue and torque testing.



Technical Specifications

OD (in)	Length (ft)	Drift (in)	Box		Pin	
			ID (in)	Type	ID (in)	Type
5.375	22.5	3.215	3.500	Pulsar 45G	3.250	Pulsar 45G DS
	24.0					
	27.75					
6.500	22.0	3.625	4.250	NC 50	3.750	Pulsar 52G DS
	24.0					
	27.75					
6.750	22.0	4.125	4.250	NC 50	4.250	Pulsar 56G DS
	24.0					
	27.75					
8.000	22.0	4.375	4.500	6 5/8 REG	4.500	Pulsar 64 DS
	24.0					
	27.75					



LOCATIONS



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BLACK DIAMOND CONROE

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BLACK DIAMOND MWD

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BLACK DIAMOND WEST TEXAS

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MIDDLE EAST

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