

END-TO-END ROD CONTROL



Complete, Predictable, End-to-End Rod Control

Black Mamba Rod Lift's belief to string design is simple... Compression cannot be eliminated. Instead, it must be planned for, designing accordingly.

Complete Rod Control prevents axial deflection and instability in sucker rods during compressive moments. By stabilizing the sucker rod from end-to-end, all diameters of traditional sucker rod may be used in compression without the risk of pre-mature failure.

Black Mamba's simple approach has allowed operators to extend runtimes far beyond what was imaginable – 12x run times with wells featuring over 1300 lbf side load!

Our complete elimination of rod buckling undoubtedly increases reliability and longevity of the rod lift system!

UNFILLED POLYKETONE



BLACK MAMBA® UPK	LENGTH	O.D.	TEMP RATING	DIM AT LAYDOWN
3/4" X 2-3/8"	34.5"	1.875"	250 F	1.187"
7/8" X 2-3/8"	34.5"			1.250"
1" X 2-3/8" (7/8" OR 3/4" PIN)	25"			1.313"
3/4" X 2-7/8"	36"	2.320"		1.187"
7/8" X 2-7/8"	30"			1.250"
1" X 2-7/8"	25"			1.313" (3/4" Pin) / 1.500" (1" Pin)

Caliper Black Mamba® shall be done between the steel rod body and outside fin

PPS-TSX

High Temp Thermoset Composite

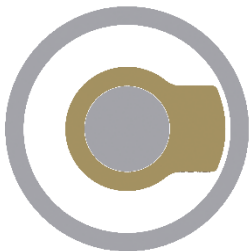


HydraHT	LENGTH	O.D.	TEMP RATING	DIM AT LAYDOWN
3/4" X 2-7/8"	7.5" x 4	2.320"	375 F	1.412"
7/8" X 2-7/8"	7" x 4			1.568"
1" X 2-7/8"	7" x 4			1.538" (3/4" Pin) / 1.725" (1" Pin)

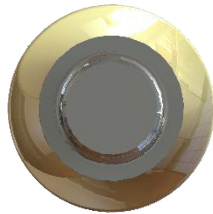
Caliper HydraHT guides shall be done outside fin to composite body

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Black Mamba® UPK
Unfilled Polyketone

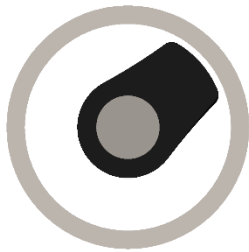


Cross-section View



End View

HydraHT



Cross-section View



End View