

K-BOS

Kinetic Blowout Stopper



The Ultimate in Drilling Safety

- > Available 13-5/8" and 18-3/4" K-BOS designs optimized for surface drilling applications.
- > Superior Capability: Offers a dramatic increase in capability, able to "Shear Anything" (including casing/BHAs) and "Seal Instantly"
- > Standards Met: Successfully qualified to DNVGL-OS-E101 and meets the intent of API 16A PR2 and API S53
- > Operational Integrity: Working parts are isolated until activation and can be configured for H₂S (sour service) up to 5,000 psi partial pressure.

www.kineticpressurecontrol.com



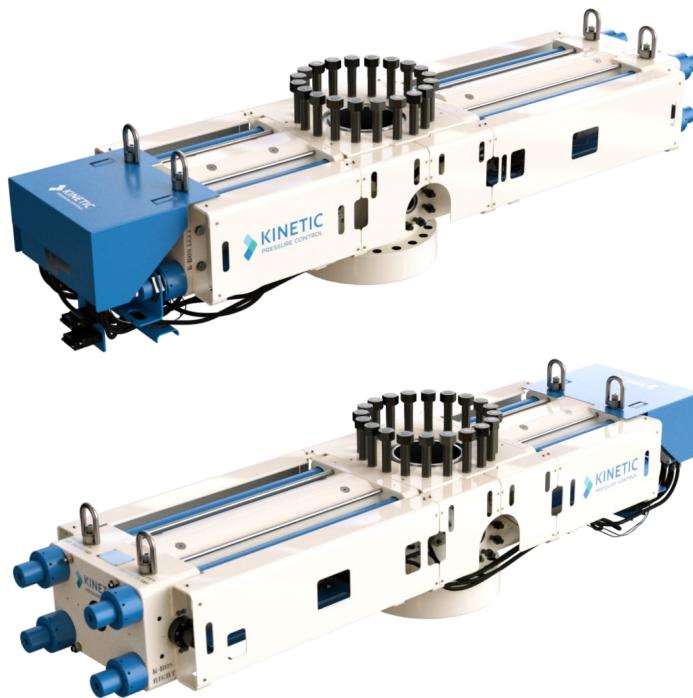
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The Ultimate Shear-Seal BOP

K-BOS has been optimized for surface drilling and completion applications and can “Shear Anything” (work string BHAs, tool joints, and heavy casing) and “Seal Instantly”, offering a dramatic increase in shearing and sealing capability compared to typical BOP stacks.

The 13-10M K-BOS has been successfully qualified to meet DNVGL-OS-E101 per DNVGL-RP-A203 and meets the intent of API 16A PR2 and API S53 by reference. Like all K-BOS, the working components are isolated from wellbore fluids until activation and may be configured with materials qualified for use with up to 5,000 psi partial pressure H₂S well bore fluids.



Shown Above, a 13-5/8” 10,000 psi K-BOS

The 13-10M K-BOS provides a dramatic improvement in shear and seal capability:

Item	Typical BOP Shear Ram	K-BOS® Capability
Shearing And Sealing Capability	Excluding tool joints, BHAs, tool strings, and vulnerable to washout if closed under flow and pressure	Shear anything but the bit, including pipe-light situations, and not affected by pressure or flow up to RWP.
Time To Secure The Well	30-45 seconds	Less than 1 second
Component Integrity	Working components and elastomers exposed to corrosive well bore fluids. - Maintenance between each well.	Working components isolated from well fluids until activation Maintenance free until 5 yr recertification Compatible w/ extreme sour fluids up to 50% H ₂ S

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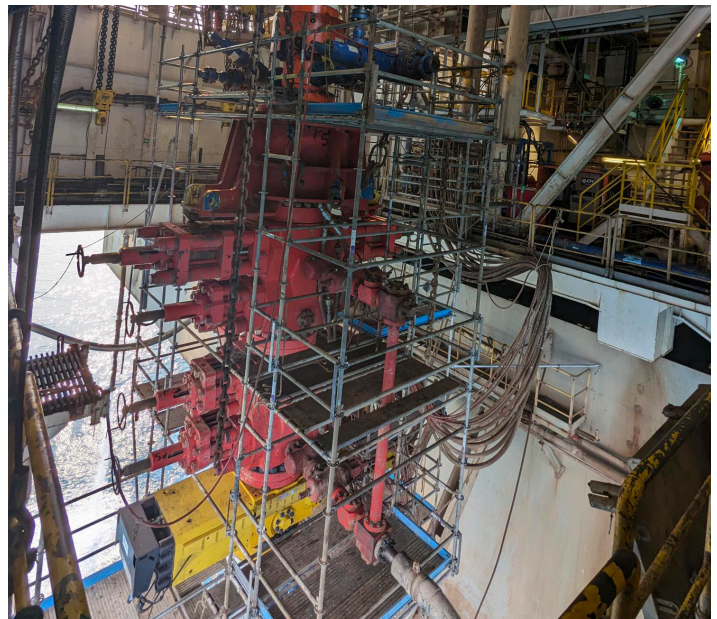
Surface Applications



Shown Left: K-BOS added to a BOP stack as a replacement for the drilling cross flow spool.



Shown Right: K-BOS added to the stack as an additional barrier where stack height is not a limiting factor.

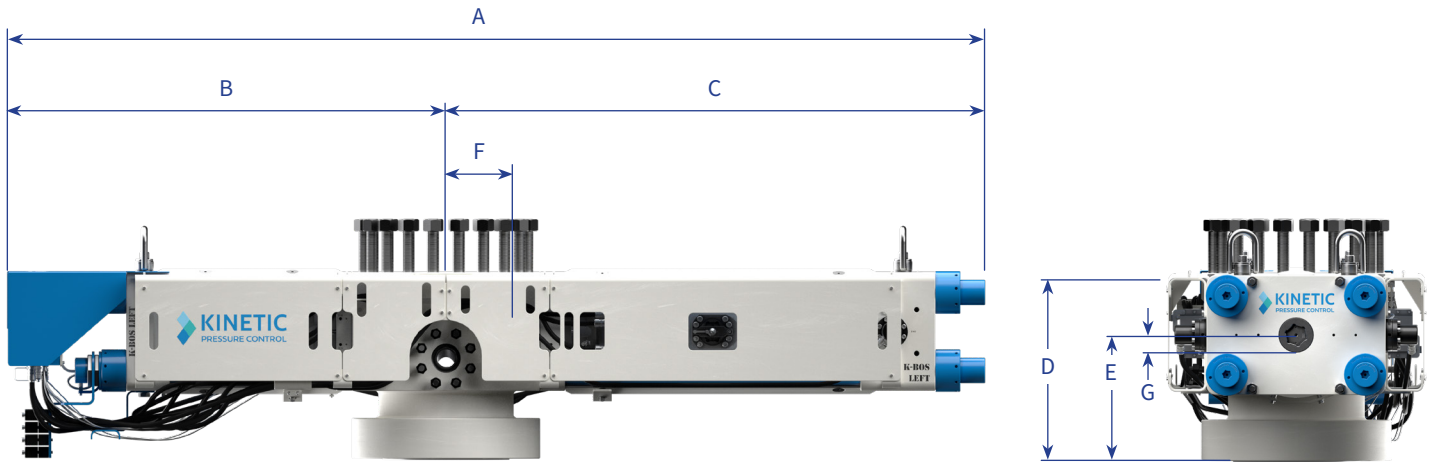


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Technical Data

The K-BOS has a compact design that allows its use on most drilling rig configurations.



K-BOS® Specifications For Drilling

Bore Size	WPR	Flange Gasket	Flange Configuration	Outlet Size	Outlet Gasket	Dimensions (in)				C.O.G. From Center Line (in)				Est. Dry Weight (Lbs)
						A	B	C	D	E	F	G	H	
13-5/8"	10,000 psi	BX-159	Studs Up / Studs Down	2-1/16" 10M	BX-152	146.0	59.4	86.6	20.0	10.0	12.7	0.6	0	13,359
13-5/8"	10,000 psi	BX-159	Studs Up / Flange Down	2-1/16" 10M	BX-152	146.0	59.4	86.6	30.0	20.5	12.7	1.2	0	14,062
18-3/4"	15,000 psi	BX-164	Studs Up / Flange Down	3-1/16" 15M	BX-154	207.2	87.1	120.1	49.1	31.1	13.2	19.6	0	57,614

These dimensions, along with fully rated side outlets, allow the K-BOS to be installed as an additional item in the BOP stack or replace the existing drilling crossflow spool, resulting in an easy retrofit into almost any BOP stack.

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Shearing Capability Analysis (D&C)

Phase of Well Construction	% Time Across BOP	K-BOS®	Regulatory Context
Drill / Work String	40-60%	100%	API S53 Regulations
E-Line / Wireline / Slickline	20-30%	100%	
Tubing (Incl. Control Lines)		100%	
Casing Incl Joints	10-20%	100%	Process Safety
Casing w/ Inner String or Drill-in Liner		100%	
Tool Joints	4-7%	100%	
BHAs And Tools (Excluding Bits)	2-5%	100%	Well Control Situations
"Moving Pipe" Situations	<1%	100%	
Under Compression		100%	
Under Side Load / Any Position in Wellbore		100%	
Full Flowing Conditions		100%	

Color Legend: Shear & Seal



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18-15M K-BOS Shearing Capability



8.5" OD Tool Joint Landing String,
V150



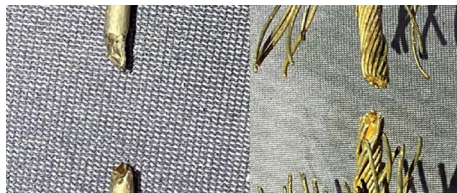
16" OD HP Casing, Q125 6-5/8" OD Inner String,
V150 Combined 186ppf



6.9" OD Slip Proof Landing String, V150
Side Load & Compression



18" OD Casing, P110 6-5/8" OD Inner String,
V150 Combined 167ppf



0.3125" Braided
E-Line / 0.125" Slick Line



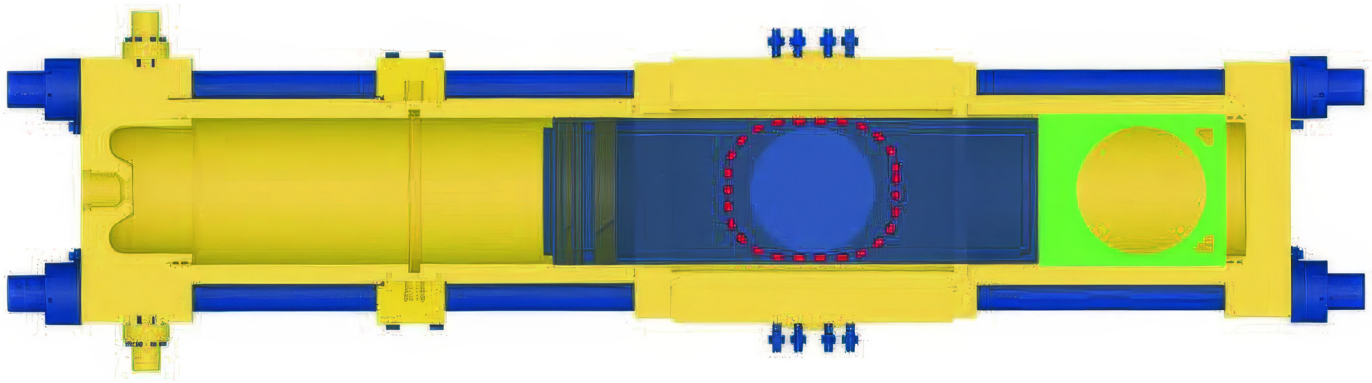
9.5" OD Drill Collar
214ppf, MYS 120

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Proprietary Seals

Kinetic's proprietary seal design allows for reliable use of elastomeric materials compatible with up to 50% H₂S and 50% CO₂. The design may be actuated under full flow and pressure and is not susceptible to failure due to compression set or extrusion.



Shown Above: A cut-away view illustration of the 13-10M K-BOS as seen from above the device looking down the wellbore. The semi-transparent dark blue element has been actuated across the wellbore, and the red dashed line illustrates the seal location.

Integrity

Operational Excellence

Innovation



Kinetic Pressure Control Limited

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