Type 51 Blowout Preventer

AXON's Type 51 Annular BOP is designed for safe well pressure control during drilling and workover operations. The simple design has been proven and accepted for reliable operation in all oil and gas areas in the world. Its four main components (body, piston, head, and packing element) allow for easy maintenance and reliability. In addition, the packing element can close on all pipe, casing, wireline, coiled tubing, and other objects to its full working pressure. Stripping of pipe, tubing, and wireline through the packing element can also be accomplished at lower pressures.



SPECIFICATIONS

- Designed and manufactured to ISO 13533 (API 16A) for drill-through equipment
- Designed as standard to ISO 15156-1 (NACE MR-0175) for use in hydrogen sulfide environments
- Normal configuration is flanged bottom (or clamp hub) and a studded top flange connection
- Hydraulic operation is performed by connection to open and close (NPT) ports located on the body (connected to the control system)
- Steel inserts prevent extrusion of the rubber and feed inward to close on any pipe or tubular in the well bore
- Replacement of the packing element is performed by unscrewing the head and lifting of the element out of the piston bowl

FEATURES / BENEFITS

- Available in all standard bore and pressure ratings
- Special rubber materials available for non standard environments
- Standard operation pressure of 1500 psi (10,34 Mpa)
- Forged materials rated for H₂S service
- Replaceable wear plate underneath the head limits wear from the inserts as they move radially inward during operation
- Latched heads are also available

AXON PRESSURE PRODUCTS

Type 51 Annular Blowout Preventer

SPECIFICATIONS

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Working Pressure: 10,000 psi					
Bore Size	7-1/16″	11″		11″	13-5/8″
Head Type	Screwed	d Scre	wed	Latched	Screwed
Operating Chamber Volume* (Closing)	9.42 gal	. 25.1	0 gal.	25.10 gal.	37.18 gal.
Operating Chamber Volume* (Opening)	7.08 gal	. 18.9	7 gal.	18.97 gal.	26.50 gal.
Full Piston Stroke	5.50"	8.00	"	8.00″	10.50″
Body Diameter	43.75″	56.5	0″	58.00"	61.00″
Clearance Diameter	49.50"	61.5	0″	60.75″	68.13″
Height (w/Flanged Bottom)	48.13"	63.5	0″	63.38″	71.38″
Height (w/Studded Bottom)	-	55.0	0″	54.88"	60.63″
Approx. Weight (w/Flanged Bottom)	12,200 l	b 26,1	40 lb	-	33,525 lb
Approx. Weight (w/Studded Bottom)	-	25,4	60 lb	-	32,850 lb
Standard Ring Groove (w/Flanged Bottom)	BX156	BX1	58	BX158	BX159
Standard Ring Groove (w/Studded Bottom)	-	BX1	58	BX158	BX159
*For full position choke					
Working Pressure: 5,000 psi					
Working Pressure: 5,000 psi	7 1/16″	11″	12 5/9″	12 5/9″	16 2/4″
Bore Size	7-1/16″	11″ Scrowod	13-5/8″	13-5/8″	16-3/4″
Bore Size Head Type	Screwed	Screwed	Screwed	Latched	Latched
Bore Size Head Type Operating Chamber Volume* (Closing)	Screwed 3.86 gal.	Screwed 9.81 gal.	Screwed 17.98 gal.	Latched 17.98 gal.	Latched 28.70 gal.
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening)	Screwed 3.86 gal. 3.30 gal.	Screwed 9.81 gal. 7.98 gal.	Screwed 17.98 gal. 14.16 gal.	Latched 17.98 gal. 14.16 gal.	Latched 28.70 gal. 19.93 gal.
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke	Screwed 3.86 gal. 3.30 gal. 4.50"	Screwed 9.81 gal. 7.98 gal. 7.13″	Screwed 17.98 gal. 14.16 gal. 8.50″	Latched 17.98 gal. 14.16 gal. 8.50″	Latched 28.70 gal. 19.93 gal. 10.50″
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25"	Screwed 9.81 gal. 7.98 gal. 7.13″ 37.50″	Screwed 17.98 gal. 14.16 gal. 8.50″ 45.50″	Latched 17.98 gal. 14.16 gal. 8.50″ 47.75″	Latched 28.70 gal. 19.93 gal. 10.50″ 54.50″
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter	Screwed 3.86 gal. 3.30 gal. 4.50″ 29.25″ 35.75″	Screwed 9.81 gal. 7.98 gal. 7.13″ 37.50″ 44.25″	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25"	Latched 17.98 gal. 14.16 gal. 8.50" 47.75" 52.25"	Latched 28.70 gal. 19.93 gal. 10.50″ 54.50″ 59.50″
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter Height (w/Flanged Bottom)	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25" 35.75" 35.88"	Screwed 9.81 gal. 7.98 gal. 7.13" 37.50" 44.25" 47.81"	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25" 54.13"	Latched 17.98 gal. 14.16 gal. 8.50″ 47.75″	Latched 28.70 gal. 19.93 gal. 10.50″ 54.50″ 59.50″ 61.30″
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter Height (w/Flanged Bottom) Height (w/Studded Bottom)	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25" 35.75" 35.88" 30.75"	Screwed 9.81 gal. 7.98 gal. 7.13" 37.50" 44.25" 47.81" 39.63"	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25" 54.13" 46.50"	Latched 17.98 gal. 14.16 gal. 8.50" 47.75" 52.25" 54.50"	Latched 28.70 gal. 19.93 gal. 10.50" 54.50" 59.50" 61.30" 53.42"
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter Height (w/Flanged Bottom) Height (w/Studded Bottom) Approx. Weight (w/Flanged Bottom)	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25" 35.75" 35.88" 30.75" 4,000 lb	Screwed 9.81 gal. 7.98 gal. 7.13" 37.50" 44.25" 47.81" 39.63" 8,200 lb	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25" 54.13" 46.50" 13,800 lb	Latched 17.98 gal. 14.16 gal. 8.50" 47.75" 52.25"	Latched 28.70 gal. 19.93 gal. 10.50" 54.50" 59.50" 61.30" 53.42" 21,230 lb
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter Height (w/Flanged Bottom) Height (w/Studded Bottom) Approx. Weight (w/Flanged Bottom)	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25" 35.75" 35.88" 30.75" 4,000 lb 3,785 lb	Screwed 9.81 gal. 7.98 gal. 7.13" 37.50" 44.25" 47.81" 39.63" 8,200 lb 7,750 lb	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25" 54.13" 46.50" 13,800 lb 13,100 lb	Latched 17.98 gal. 14.16 gal. 8.50" 47.75" 52.25" 54.50" - 13,250 lb -	Latched 28.70 gal. 19.93 gal. 10.50" 54.50" 59.50" 61.30" 53.42" 21,230 lb 20,400 lb
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter Height (w/Flanged Bottom) Height (w/Flanged Bottom) Approx. Weight (w/Flanged Bottom) Standard Ring Groove (w/Flanged Bottom)	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25" 35.75" 35.88" 30.75" 4,000 lb 3,785 lb R46	Screwed 9.81 gal. 7.98 gal. 7.13" 37.50" 44.25" 47.81" 39.63" 8,200 lb 7,750 lb R54	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25" 54.13" 46.50" 13,800 lb 13,100 lb BX160	Latched 17.98 gal. 14.16 gal. 8.50" 47.75" 52.25" 54.50" - 13,250 lb - BX160	Latched 28.70 gal. 19.93 gal. 10.50" 54.50" 59.50" 61.30" 53.42" 21,230 lb
Bore Size Head Type Operating Chamber Volume* (Closing) Operating Chamber Volume* (Opening) Full Piston Stroke Body Diameter Clearance Diameter Height (w/Flanged Bottom) Height (w/Studded Bottom) Approx. Weight (w/Flanged Bottom)	Screwed 3.86 gal. 3.30 gal. 4.50" 29.25" 35.75" 35.88" 30.75" 4,000 lb 3,785 lb	Screwed 9.81 gal. 7.98 gal. 7.13" 37.50" 44.25" 47.81" 39.63" 8,200 lb 7,750 lb	Screwed 17.98 gal. 14.16 gal. 8.50" 45.50" 52.25" 54.13" 46.50" 13,800 lb 13,100 lb	Latched 17.98 gal. 14.16 gal. 8.50" 47.75" 52.25" 54.50" - 13,250 lb -	Latched 28.70 gal. 19.93 gal. 10.50" 54.50" 59.50" 61.30" 53.42" 21,230 lb 20,400 lb

AXON PRESSURE PRODUCTS

Type 51 Annular Blowout Preventer

SPECIFICATIONS

Working Pressure: 3,000 psi			
Bore Size	7-1/16″	11″	13-5/8″
Head Type	Screwed	Screwed	Screwed
Operating Chamber Volume* (Closing)	2.85 gal.	7.43 gal.	11.36 gal.
Operating Chamber Volume* (Opening)	2.24 gal.	5.54 gal.	8.94 gal.
Full Piston Stroke	4.13″	6.13″	7.13″
Body Diameter	26.00"	33.75″	40.50″
Clearance Diameter	32.25″	40.00"	47.50″
Height (w/Flanged Bottom)	32.00″	39.75″	45.25″
Height (w/Studded Bottom)	27.75″	34.38″	39.38″
Approx. Weight (w/Flanged Bottom)	2,715 lb	5,500 lb	8,784 lb
Approx. Weight (w/Studded Bottom)	2,585 lb	5,140 lb	8,522 lb
Standard Ring Groove (w/Flanged Bottom)	R45	R53	R57
Standard Ring Groove (w/Studded Bottom)	R45	R53	R57
*For full position choke			

Diagram



