

# wcbAquaMaKks Water Cooled Brakes



## wcbAquaMaKks Water Cooled Brakes

are designed to provide excellent controllability for drilling feed off, tripping, pay out, and holding functions.

wcbAquaMaKks brakes are air-applied, spring-released, water-cooled, friction interface brakes designed ideally for draw-works, service rigs, dyno applications, and winches. Models are available in 24" and 36" sizes.

Features:

- Interchangeable with existing 'wcb' types of brakes to allow for ease of installations, conversions, and spare parts utilizations
- Units are Air Tube Disc (atd) actuation
- Reduced overall brake weight with use of light weight aluminum powerhead
- Wichita drill & trip controls available for enhanced controllability & performance

Wichita's unique patented water jacket design, with improved channeled water flow, ensures high heat absorption and torque stability, providing greater heat dissipation compared to similar sized competitive units.

Other water jacket benefits include:

- Improved channeled water flow – achieved via groove designed into jacket providing enhanced cooling capability
- The water jackets high rib design offers a patented 'balance flow' along with extremely high velocities of coolant for enhanced HP absorptions
- Water Jackets have extremely low pressure drops across the flow path compared to other legacy branded water jackets
- Water jacket assemblies are interchangeable with WCB compatible brakes
- For added protection, hardware used to attach copper onto the water jackets is marine grade, fluoropolymer coated to resist gauling and corrosion
- Marine Corrosion Resistant Brakes and Assemblies are also available.
- Units are Air Tube Disc (ATD) actuation for drastically improved brake response, low hysteresis, and natural resilience to 'air systems' w/ hi moisture content and/or salty environment exposure.



wcbAquaMaKks brakes are an air actuated water cooled design, featuring copper wear plates optimized for heavy-duty continuous slip tension applications



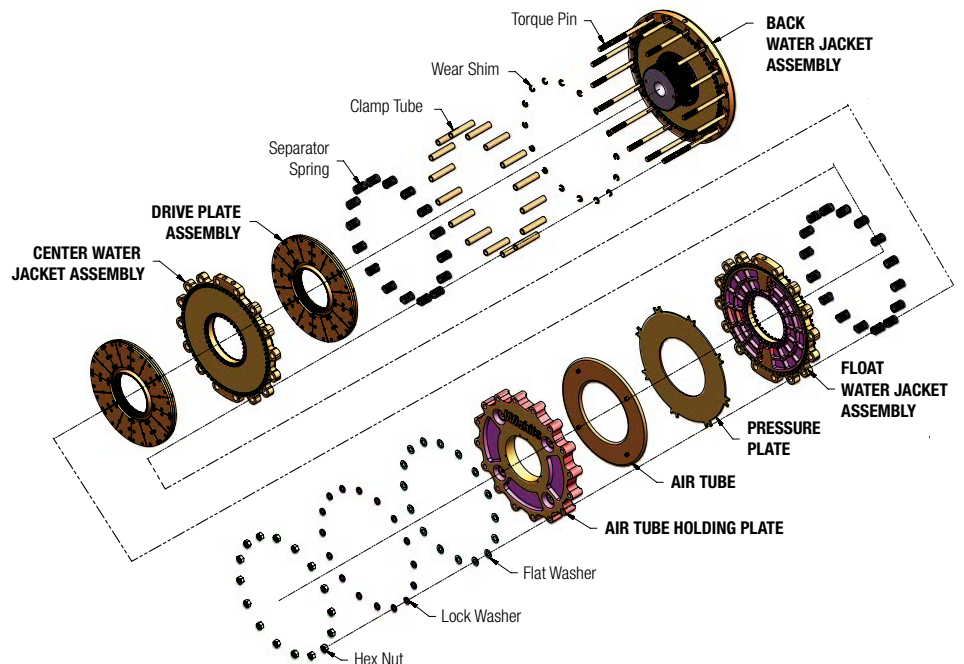
### Oil and Gas

wcbAquaMaKks brakes have superior water cooled tension control and very high heat dissipation to provide excellent controllability on draw-works applications.

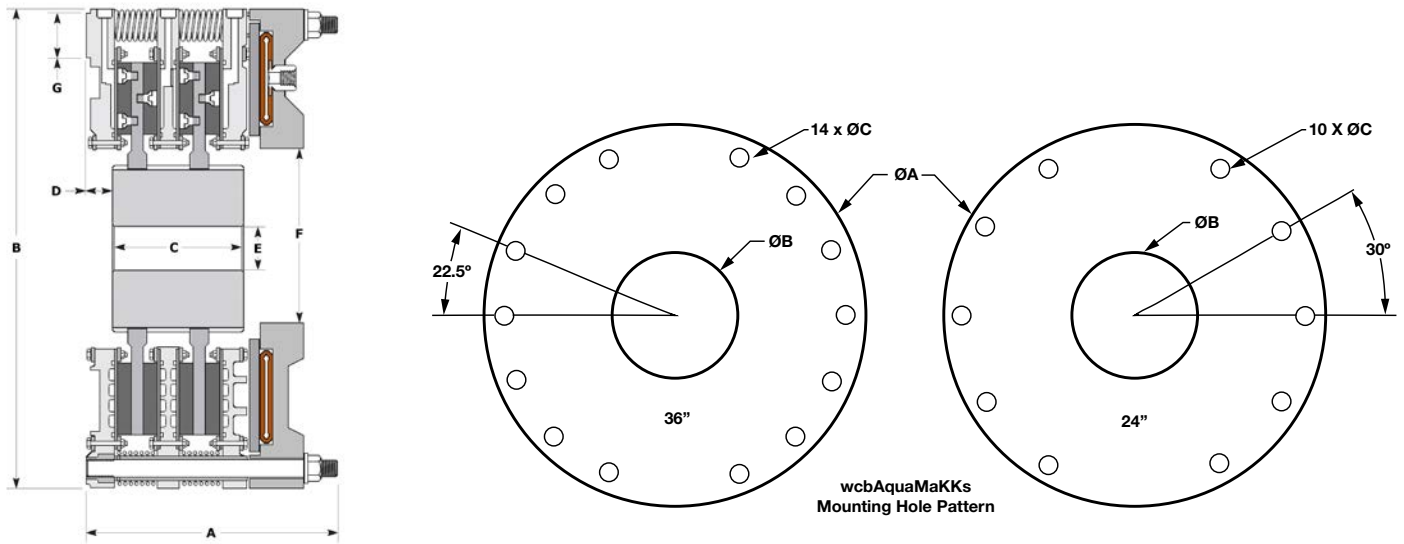


### Marine Deck Machinery

Positioning and mooring winches require high heat dissipation and accurate tension control. The performance and features of the wcbAquaMaKks brakes are perfectly suited for these applications.



## Air Tube Actuation (ATD)



## Dimensions

Model Size - ATD	Assembly Number	(A) Length		(B) Diameter		(C) Length		(D) Length		(F) Diameter		(G) Pilot Diameter			
												OD		ID	
		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in.	(mm)	in.	(mm)
124wcbAM	7-124WCB-1000	11.37	289	30.38	772	3.50	89	1.38	35	11.50	292	30.00	762	24.38	619
224wcbAM	7-224WCB-1300	15.75	400	30.38	772	8.63	219	1.38	35	11.50	292	30.00	762	24.38	619
324wcbAM	7-324WCB-1300	19.78	502	30.38	772	13.19	335	1.38	35	11.50	292	30.00	762	24.38	619
424wcbAM	7-424WCB-1300	23.81	605	30.38	772	16.94	430	1.38	35	11.50	292	30.00	762	24.38	619
136wcbAM	7-136WCB-1000	15.69	399	44.94	1141	5.00	127	2.38	60	16.00	406	44.50	1130	18.38	467
236wcbAM	7-236WCB-1300	21.12	536	44.94	1141	9.00	229	2.38	60	16.00	406	44.50	1130	18.38	467
336wcbAM	7-336WCB-1300	27.83	707	44.94	1141	13.00	330	2.38	60	16.00	406	44.50	1130	18.38	467
436wcbAM	7-436WCB-1300	35.64	905	44.94	1141	18.00	457	2.38	60	16.00	406	44.50	1130	18.38	467

## Specifications

Model Size - ATD	Assembly Number	Unit Weight Less Hub		Max Water Temperatures (°F)		Max Water Pressure (PSI) <sup>1</sup>		Heat Capacity Parallel Water Hosing <sup>2</sup>		(E) Max Bore Rect. Key		Min Water Flow Rate <sup>3</sup>	
		LB	KG	Inlet	Outlet	Inlet	Outlet	HP	kW	in	(mm)	Gallons/Min	Liters/Min
124wcbAM	7-124WCB-1000	445	202	100	150	60	20	350	261	7.25	184	35	133
224wcbAM	7-224WCB-1300	646	293	100	150	60	20	700	522	7.38	187	70	265
324wcbAM	7-324WCB-1300	831	377	100	150	60	20	1050	783	9.38	238	105	398
424wcbAM	7-424WCB-1300	1045	474	100	150	60	20	1400	1044	9.38	238	140	531
136wcbAM	7-136WCB-1000	1058	480	100	150	60	20	825	615	11.25	286	83	313
236wcbAM	7-236WCB-1300	1657	752	100	150	60	20	1650	1230	11.75	298	165	625
336wcbAM	7-336WCB-1300	2255	1023	100	150	60	20	2475	1846	11.75	298	248	938
436wcbAM	7-436WCB-1300	2862	1298	100	150	60	20	3300	2461	11.75	298	330	1251

\*Maximum Operating Pressure is 130 PSI for Airtube

1- Maximum pressure drop across water jacket is 40 PSI (Water Inlet/Outlet ports are SAE O-Ring Boss Female)

2- Heat capacity based on minimum flow rate requirement of 1 U.S. GPM per 10HP using 100% water.

3- 50% increase to minimum flow rate is suggested for Drawworks Applications using glycol mixture.

## Mounting Hole Pattern

Model Size - ATD	Ø A		Ø B		Ø C		Hole Circle		# Holes
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	Qty
24wcbAM	30.38	772	12.76	324	0.656	17	28.75	730	10
36wcbAM	44.94	1141	16.40	417	1.062	27	42.00	1067	14

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