

Create! alicon

**alicon Series
Breakers**



DAEMO

DAEMO ENGINEERING CO., LTD.

Engineered for Excellence

Responsible Promise

Advanced Value

Powerful Performance

Challenging Effort

Features of alicon Series

The newly born alicon Series has innovated with technology, is lighter, stronger, and more powerful than ever.

By enlarging the diameter of the T/Bolt the alicon series has improved its durability.

Improved possible fail points of the port (areas where bolts break and oil leaks) by changing the In / Out Port starting from B250 to B450.

Changed the Box Housing to Bending design housing for more durability.

Advanced Functions : Anti Blank Firing On/Off Valve, 2 stage stroke Valve, Internal Relief Valve, BPM adjust Valve, Provision Hole for under water works and Auto Grease System.

Diversified in 17 products lines to fit to any work conditions.

Redesigning of the chisel pin has improved the durability.

Applied more powerful breaking ability by enlarging the chisel's diameter.

Increased the life of the equipment (Chisel Pins, T/Bolts, F/Heads, etc.) by applying the Anti Blank firing system.

alicon Series Breakers

Valve Case

- On the alicon series, there are more features than ever before : BPM adjuster, 2 stage stroke control valve, and Relief Valve. (option)
- We have shortened the height & Length of the valve case, but made the width wider for added balance.
- Valve Plate : Increased durability by using 6 bolts instead of 4 bolts.



Regeneration Valve

- After the piston hits the chisel, and the piston is retracting back up the cylinder, while the flow energy is harnessed up to 15% to be applied on the flow energy back down (B600, B800).



2 Stage Stroke Setting Valve System

- 2 Stage Stroke Setting Valve located on the side of cylinder, is provided as a standard on B50 to B180 models.
- As an option, 2 Stage Stroke control valve is conveniently located in the cab so that driver can change from long stroke to short stroke easily without wasting time. (B210~B800)
- This will improve performance and reduce the amount of wasted energy.



Seal System

- By using only NOK seals on the alicon series, we have achieved longer seal life.
- On models B210 and up, an additional square buffer seal was added to increase the durability of the gas seals, step seals, and the piston.
- This buffer seal also helps to minimise the piston's shaking action.



Anti Blank Firing System

- Anti Blank Firing System's "On/Off " switch Valve is provided as a standard starting from B50 to B450.
- This system will help to protect the Chisel pins, T/Bolts and Front Heads from blank fires, and it is suitable for all kinds of working environment.



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alicon Series Breaker Specification

Item	Unit	B10	B20	B30	B40	B50	B70	B90	B140	B180	B210	B230	B250	B300	B360	B450	B600	B800
Operating Weight (Top Box BKT.)	kg	123	155	190	199	333	431	614	929	1209	1738	1777	2165	2832	2937	3713	4105	5625
	lb	271	342	419	439	734	950	1354	2048	2665	3832	3918	4773	6243	6475	8186	9050	12401
Overall Length (w/STD. MTG.BKT.)	mm	1128	1250	1352	1380	1603	1805	1981	2225	2455	2764	2764	2898	3200	3200	3595	3616	4059
	in	44.4	49.2	53.2	54.3	63.1	71.1	78.0	87.6	96.7	108.8	108.8	114.1	126.0	126.0	141.5	142.4	159.8
Overall Length (w.o/MTG. BKT)	mm	988	1110	1212	1214	1419	1591	1760	1962	2153	2395	2395	2526	2790	2790	3173	3133	3505
	in	38.9	43.7	47.7	47.8	55.9	62.6	69.3	77.2	84.8	94.3	94.3	99.4	109.8	109.8	124.9	123.3	138.0
Chisel Out Dia.	mm	40	45	53	62	70	78	85	105	120	135	140	145	150	155	165	180	200
	in	1.6	1.8	2.1	2.4	2.8	3.1	3.3	4.1	4.7	5.3	5.5	5.7	5.9	6.1	6.5	7.1	7.9
Chisel Length	mm	425	500	580	625	730	806	850	975	1165	1250	1250	1280	1400	1400	1650	1500	1700
	in	16.7	19.7	22.8	24.6	28.7	31.7	33.5	38.4	45.9	49.2	49.2	50.4	55.1	55.1	65.0	59.1	66.9
Settig Pressure	kg/cm ²	150	150	150	150	170	180	190	190	210	210	210	210	210	210	210	240	250
	psi	2134	2134	2134	2134	2418	2560	2702	2702	2987	2987	2987	2987	2987	2987	2987	3414	3556
Working Pressure	kg/cm ²	80~110	80~110	90~120	90~120	100~140	100~140	100~140	120~160	120~170	130~170	130~180	140~180	140~180	140~180	140~180	150~190	150~190
	psi	1138~1565	1138~1565	1208~1707	1208~1707	1422~1991	1422~1991	1422~1991	1707~2276	1707~2418	1849~2418	1849~2560	1991~2560	1991~2560	1991~2560	1991~2560	2134~2702	2134~2702
Oil Flow	lpm	15~2.5	20~30	25~40	30~50	30~55	45~80	50~100	90~110	100~140	110~160	130~170	150~210	180~250	180~250	200~280	280~398	322~454
	gpm	4.0~6.6	5.3~7.9	6.6~10.6	7.9~13.2	7.9~14.5	11.88~21.1	13.2~26.4	24~29	26.4~37.0	29.1~42.3	34.3~44.9	39.6~55.5	47.6~66.0	47.6~66.0	52.8~74.0	74.0~105.1	85.1~119.9
Blow Rate	BPM	800~1200	600~1000	550~950	400~1000	350~900 (450~1000)	350~900 (450~1000)	300~700 (550~950)	350~550 (500~750)	350~550 (500~850)	350~500 (450~600)	250~400 (350~500)	250~350 (300~450)	200~350 (300~480)	200~350 (300~480)	200~300 (250~350)	294~480 (368~600)	231~374 (298~484)
Back Head N ₂ Gas Pressure	kg/cm ²	16.5	16.5	16.5	12	12	12	12	12	12	11	11	11	11	11	11	11	11
	psi	234.6	234.6	234.6	170.6	171	171	171	171	171	156	156	156	156	156	156	156	156
Suitable Exca.	ton	0.5~1.5	0.8~1.5	1.2~4	3~4.5	3~8	5~8	6~9	10~15	16~20	18~25	18~25	22~29	26~32	28~36	40~50	42~81	55~100
	lb	1102~3306	1763~3306	2644~8816	6612~9921	6612~17636	11020~17636	13227~19841	22046~33069	35274~44092	39683~55116	39683~55116	48502~63934	57320~70548	61729~79366	88185~110231	92594~178574	121254~220462



Suitable Excavators

MODEL	TON	HYUNDAI	CATERPILLAR	KOMATSU	HITACHI	VOLVO	DOOSAN	JCB
B10	0.5~1.5	R15-7, R16-7		PC09-1FPC09-1	EX8-2B		Solar010	8008,
B20	0.8~1.5	R15-7, R16-7		215,PC12R-8,PC09-1 218, PC15R-8,	ZX10U-2, ZX14-3, EX17, EX22		S015,DX15	8010,
B30	1.2~4	R22-7, R28-7, R35Z-7, R35Z-7A		PC20MRx-1, PC20R-8, 226, 232, PC14R- 3,PC16R-3, PC18MR-3, PC20MR-2, PC26MR-3	ZX16, ZX18, ZX17U-2, ZX210-3, ZX22U-2, ZX25, ZX30, ZX16-3, ZX18-3, ZX35, EX30 ZX27U-2, ZX35, ZX30U-2, ZX35U-2, ZX40, EX40	EC15B, EC20B, EC25, ECR28, EC30	Solar035super, Solar030super, S018, DX27Z, DX30Z	'8014, 8016, 8018, 8020, 8025ZTS
B40	3~4.5	R35-7, R36N-7	303C CR, 303.5C CR			EC30, ECR38, EC35	DX30Z, DX35Z	8030ZTS
B50	3~8	R55-7A, R55W-7A, R55-7, R55W-7	304C CR, 304C CR, 305C CR	PC40MRx-1, PC45R-8, 250, PC45MR-3, PC50MR-2, PC55MR-3	ZX40, ZX50, ZX40U-2, ZX50U-2, ZX60USB-3, EX50, ZX70, ZX80SB, ZX85USB-3, ZX70LC-3, EX60, EX70, TATA315	EC45Pro, ECR58 Plus, EC55B, EC55C, EW60C	S55-V, DX60R, DX55, DX55M7, DX55W, DX55A, DX55A-MT, DX55WA	8040 ZTS, 8045, 8052ZTS, 8060
B70	5~8	R75-7A, R80-7A, R75-7	308D CR, 307D	PC75MR-6, PW75R-2, PC78US-6		ECR88 PLUS	S75-V	JZ70, 8080
B90	6~9	R75-7A, R80-7A, R80-7	308D CR, 308CR SB	PC95R-2, PC110R-1, PW75R-2, 410, PW95R, PC80MR-3, PC88MR-8,	ZX85USB-3, ZX85US-3, 85USBL-3, EX90 ZX110-3, ZX130-3, ZAXIS130W, ZX110M-3, ZX130LCN-3, ZX135US-3, EX100, EX110			
B140	10~15	R110-1, R110-7A, R140LC-7, R140W-7, R140LC-7A	311C Utility, 311C, 311D LRR, 312D, 312D L, 314D LCR, M313D, M315D	PC130-7, PC138US-2, PW110R-1, PW130ES-6, PC130-8, PC138USLC-8		EC140B, EC145LC, EW140C, EW145B Prime, EC140B Prime, EC140C, ECR145C	DX140LC, DX160LC, Solar140W-V, S155LC-V, DX140W, DX140	JS115, JS130, JS145, JS130W, JS145W, JZ140LC
B180	16~20	R160LC-7A, R180LC-7, R200W-7A	315D L, 318C L, 319D LN, M316D, M318D	PC160LC-7, PC180LC-7, PW150ES-6, PW170ES-6 PC210LC-7, PC210NLC-7, PW200-7, PW220, PC200LC-8, PC220LC-8	ZX160LC-3, ZX180LC-3, ZAXIS160W, ZAXIS180W, ZX180LCN-3, EX160 ZX225USRLC-3, ZAXIS210WZX210-3, ZX210LCN-3, EX200, EX210	EC160C, EC180C, EW160C	DX160LC, DX180, Solar160W-V, Solar180W-V	JS160, JS180, JS160W, JS175W
B210	18~25		320D, 320D L, M322D			EC210C, EC210B, EC210B Prime, ECR235C		JS190, JS200L, JS210L, JS220L LR, JS220, JS220XD, JS200W
B230	18~25	R210LC-7, R200W-7A, R210LC-7A LR, R210LC- 7H, R210NLC-7A	323D L, 323D LN, 323D LRR, 321C LCR, M322D	PC230NHD-7, PC230NHD-7, PC228USLC-3, PC240NLC-7	ZX240N-3, ZX225USLC-3, EX210	EC240B, ECR235CL	DX220LC, DX225 NLC, DX225 LC, DX210W, DX255, S225LC-V	JZ235, JS230 HO, JZ255 JS240L, JS260L LR, JS290
B250	22~29	R250LC-7A, R290LC- 7A, R290LC-7A LR	323D S, 324D, 324D L, 330	PC240NLC-7, PC270LC-8	ZX250LC-3, EX220	EC240B	S255LC-V	
B300	26~36			PC290LC-7, ZX350LC-7, PC340LC-7, PC308USLC-3, PC300LC-8, PC350LC-8, PC350HD-8, PC400LC-8				
B360	26~36	R290LC-7A, R320LC- 7A, R360LC-7A, R305LC-7,	350D L, 324D LN, 328C LCR, 329D, 330D L, 336D, 325D L, 325LN, 328D LCR, 329D L, 336D L		ZX350LC-3, ZX280LC-3, ZX280LCN-3, ZX350LCN-3, EX270, EX300, EX350	EC290B, ECR305CL, EC360B, EC290B Prime, EC360B Prime, EC360C	DX300LC, Solar300SL R,DX340LC,DX350LC, DX360LCA,DX380LC, DX300LCA,DX350LCA, DX380LCA	JS290, JS330L, JS330LC, JS330LC
B450	40~55	R450LC-7A, R500LC-7A	345C L, 345C, 345D, 345DL	PC450-7, PC450LC-8, PC300HD-7	ZX470LCH-3, ZX520LCH-3, ZX500LC-3, ZX520LCR-3, EX400	EC460B	DX420LC, DX480LC, DX500LCA, DX420LCA, DX480LCA,	JS460
B600	42~75			PC600-7, PC600LC-7, PC600LC-8,	ZX650LC-3, ZX670LCH-3, ZX670LCR-3	EC460C	DX520LCA, DX520LC	
B800	65~150	R800LC-7A	365CL, 365C, 385C L, 385C	PC750LC-7, PC800LC-8,	ZX870LCH-3, ZX850LC-3, ZX870H-3, ZX870LCR-3	EC700B		

BREAKER



alicon Series Breakers - Application

Contents	B10	B20	B30	B40	B50	B70	B90	B140	B180	B210	B230	B250	B300	B360	B450	B600	B800
Under Water Works (for under water breaker work function)	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●
Auto Greasing System (Hole : STD, Unit : Option)	-	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●
2 Stage Stroke Setting Valve	-	-	-	-	●	●	●	●	●	-	-	-	-	-	-	-	-
Anti Blank Firing System On/Off Valve	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	-	-
Regeneration Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	●
Type Of Installed Grease Unit for Breaker (Option)	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●	●	●
Type Of Central Supply Grease Unit (Option)	-	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●
*BPM Adjust Valve (Option)	-	-	-	-	-	-	-	-	-	●	●	●	●	●	●	-	-
*Internal Relief Valve (Option)	-	-	-	-	-	-	-	-	-	●	●	●	●	●	●	-	-
*2 Stage Stroke Control Valve (Option)	-	-	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●
Low Noise Housing Bracket	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● STD

● Option ※Options with (*) will Supply as one Package (BPM Adjuster, Internal Relief & 2 stage stroke control valve)

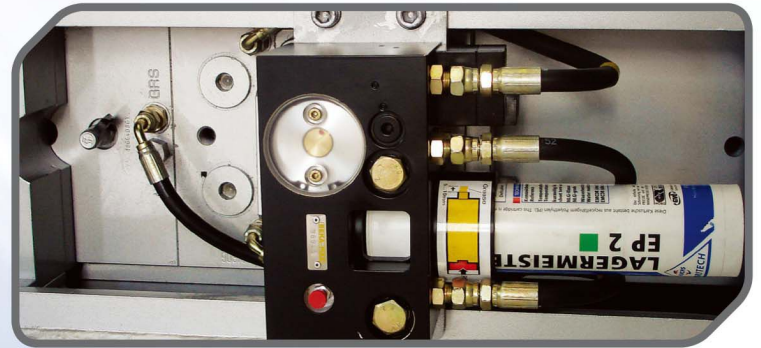
Attachments for Every Requirement

Choice of Options

Auto Grease Bracket Mounted System

This system has many advantages:

- Save human negligence of filling grease.
- To greasing several times a day, manual control does not need.
- Contributing to longer machine life, especially for chisels.
- No extra power source to drive.
- Applicable breakers are from B70 to B800.



2 Stage Stroke Valve System

- 2 Stage Stroke Setting Valve System is provided as a standard on B50 to B180 models. (2 stage stroke control valve system by remote control : B210 to B450)

The control for this 2 Stage Stroke Valve is conveniently located in the cab so the driver can change from long stroke to short stroke without wasting any time.

- Improved performance.
- Reduced the amount of wasted energy.



Shape of chisel

Classification	Major Contents	
Moil		Concrete, Rocks, Pavements, Slopes
Wedge		Trench, Slopes, Finishing
Blunt		Quarries
Conical		Concrete, Rocks, Pavements



Choosing the chisel for different rock types

Classification	Rock	Recommended Breakers	Recommended Chisels
Hard Rock	Basanite, Granite, Diabase	B140 to B800	Blunt type, Wedge type
Soft Rock	Sandstone, Limestone, Coal	B10 to B800	Moil type, Wedge type, conical type

