

SAGA Series Product Catalogue



MSB CORPORATION
MASTER OF SUPER BREAKERS

SAGA Mid & Large Series



※ Open / Box (Soundproof) / Side housing are all available in SAGA Mid & Large Sized Series.

Technical Specification

Specification	Unit	SAGA Mid-Sized Series								SAGA Large Sized Series					
		SAGA 120H		SAGA 180H		SAGA 220H		SAGA 250H		SAGA 310H		SAGA 400H		SAGA 510H	
		OPEN	BOX	OPEN	BOX	OPEN	BOX	OPEN	BOX	OPEN	BOX	OPEN	BOX	OPEN	BOX
Working Weight 1)	kg	1082	1050	1325	1268	1730	1720	1750	1760	2300	2340	3050	3090	4200	3900
	lb	2385	2315	2920	2795	3813	3790	3858	3880	5070	5158	6724	6810	9260	8600
Impact Rate	bpm	450 - 650		450 - 800		400 - 800		400 - 800		350 - 700		200 - 450		200 - 400	
Operating Pressure	bar	140 - 160		150 - 170		160 - 180		160 - 180		160 - 180		160 - 180		160 - 180	
	psi	2030 - 2320		2175 - 2465		2320 - 2610		2320 - 2610		2320 - 2610		2320 - 2610		2320 - 2610	
Relief Pressure	bar	190 - 200		200 - 210		200 - 210		200 - 210		200 - 210		200 - 210		200 - 210	
	psi	2755 - 2900		2900 - 3045		2900 - 3045		2900 - 3045		2900 - 3045		2900 - 3045		2900 - 3045	
Oil Flow	l / min	80 - 100		90 - 120		125 - 150		125 - 150		160 - 190		190 - 260		250 - 300	
	gal / min	21 - 26		23 - 31		33 - 39		33 - 39		42 - 50		50 - 68		66 - 79	
Accumulator Pressure	bar	60		60		60		60		60		60		60	
	psi	870		870		870		870		870		870		870	
Back Head Pressure	bar	16		6		6		8		6		16		16	
	psi	232		87		87		87		87		232		232	
Tool Diameter	mm	98		120		135		140		150		160		180	
	inch	3.85		4.72		5.31		5.51		5.9		6.29		7.08	
Pressure Line Size [IN] (Hose Connection)	mm	19		25		25		25		25		32		32	
	inch	3/4		1		1		1		1		1 1/4		1 1/4	
Return Line Size [OUT] (Hose Connection)	mm	19		25		25		25		25		32		32	
	inch	3/4		1		1		1		1		1 1/4		1 1/4	
Carrier Weight Range 2)	ton	11 - 16		13 - 18		18 - 25		18 - 25		25 - 32		36~45		40 - 55	
	lb	24200-35200		28600-39600		39600-55100		39600-55100		55100-70547		39360-99200		88100-121200	

1) Working Weight : Included top bracket, one tool, pin, bush

2) Check the lifting capacity of the main carrier from the carrier manual and the carrier manufacturer.

3) Some numeric figures are calculated with the round off for the easier understanding for the customer preference.

Competitive Feature List : SAGA Series

Series	Size	Model	Valve Adaptor (Oil Flow Control)	Super Anti Blank Firing (SABF) System	Underwater Application (UA)	Swivel Bar (Swivel Joints)	Double Speed System (DSS)	All-in-One Type of Upper Bushing & Thrust Ring	Accumulator System	Soundproof Housing Application (SHA)	Manual Autogrease System I (Powercell)	Automatic Autogrease System II (Side Mounted Refiller)	Easy Pass Valve (Oil Traffic Control)	Energy Regeneration Nitrogen Gas Cushion Chamber (ERNGCC)
SAGA Series	Mid	SAGA 120H	●	●	●		●	●	●	●	●	●	●	●
		SAGA 180H	●	●	●		●	●	●	●	●	●	●	●
		SAGA 220H	●	●	●	●	●	●	●	●	●	●	●	●
		SAGA 250H	●	●	●	●	●	●	●	●	●	●	●	●
	Large	SAGA 310H	●	●	●	●	●	●	●	●	●	●	●	●
		SAGA 400H	●	●	●	●	●	●	●	●	●	●	●	●
		SAGA 510H	●	●	●	●	●	●	●	●	●	●	●	●

※ Note 1: Some competitive features may not be available, please consult this concern to MSB corporation for the availability.

Note 2: ● Option.

SAGA Series Section Feature (Mid & Large Size : SAGA 120/180/220/250/310/400/510H)

1 Energy Regeneration Nitrogen Gas Cushion Chamber (ERNGCC)

Absorbs the piston's upward recoil and conduct energy recycling for the constant blow .

2 Side Buffer

Side vibration absorber and side suspension device to protect the powercell.

3 Easy-Pass Valve

Side mounted type of 'Easy-Pass Valve (EPV)' as a spool to regulate smooth oil traffic and to control the oil direction for the stable operation and the vibration absorbing .

4 N2 Gas Charged Accumulator

Rechargeable N2 gas accumulator to assist power stroke and to reduce the surge pressure and the spikes from the hydraulic circuit of the excavator.

5 Piston

Most efficient design for maximum energy transfer and recoil reduction as well as ideal match of tool and piston diameters. It transfers highest shock wave into the breaking objects.

6 Efficient Power Transfer(Piston to tool)

Optimum transfer of blow energy into the material and the reduction of the recoil.

7 Dual Tool Retainer Pins

Correct tool alignment and dispersion of tool wear.

8 Housing Bottom Plate

Abrasion-resistant plate delivers breaker protection.

9 Working Tool

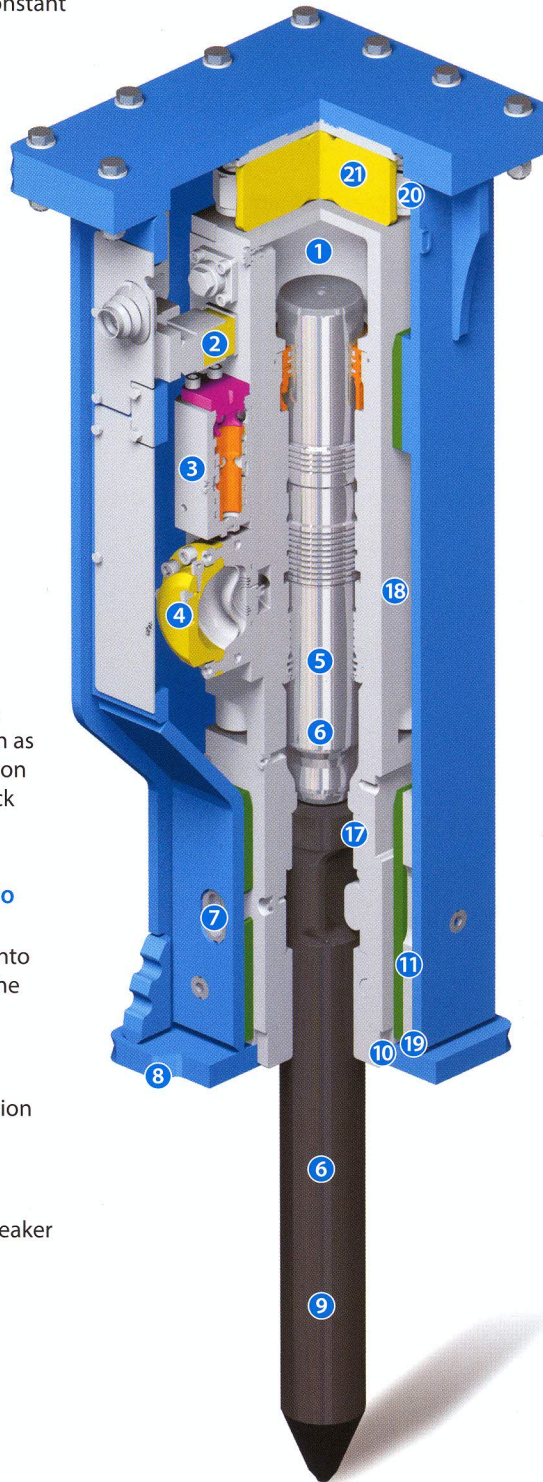
Heat treated and optimal length for efficient breaking.

10 Replaceable Tool Bushing

Convenience for replacement and protect the front head. (Not shown on the illustration)

11 Wearing Plates

Employment of wear resistant plates between cylinder, front head and housing increases the overall product durability.



12 Auto Grease Refiller

Compact auto grease refiller is equipped as an optional feature. Easy daily refill is serviced and continuous greasing is available as long as the breaker is operated. (Not shown on the illustration)

21 Top Buffer

Vibration absorber to prevent the impulses between the carrier and the breaker.

20 Side(Tie) Rods

Fully closed side (tie) rods enlarges the durability and the optimal load carrying capacity is designed.

19 Base Buffer

Vibration absorber and suspension device to protect the powercell.

18 Cylinder Design

Square typed cylinder design brings optimum match between back head and front head as well as improves stable operation to increase the product durability and to reduce the unnecessary damages such as scratches.

17 All-in-One Type of Upper Bushing and Thrust Ring Integration

Convenient one set and easier maintenance and serviceability without disassembly of powercell.

16 Super Anti Blank Firing (SABF) System

SABF increases the lifespan of all components subject to wear and fatigue and reducing stress for the arm of the main carrier and the breaker. (Not shown on the illustration)

15 Underwater Application (UA)

Air line for underwater use. (Not shown on the illustration)

14 Effective Swivel Bar

High pressure (in) and low pressure (out) swivel bar increase hose lifespan. (Not shown on the illustration)

13 Double Speed System (DSS)

As a standard feature (above SAGA120) to change from long stroke to short stroke according to the operator's requirement for the optimal performance. (Not shown on the illustration)

※ Note : some features may be adjusted due to the drawing updates by the manufacturer.