



# Hydraulic BREAKERS KSB-Series and KFX-Series



# **BREAK THE SMART WAY...**

### **KSB-Series up to 12t Excavators**

The KSB breaker series, for excavators from 0.5-12t, benefits from a distinctive 'monobloc' design, manufactured in a single piece and without any tie rods – a feature that makes the structure extremely durable and resistant to leverage during operation.

The breakers all work with nitrogen inertial energy recovery – a gas that provides greater machine power and less stress on the excavator arm. Traditionally, breakers with nitrogen energy recovery require frequent recharges – but with the new KSB-range's special sealing system, the charge-life can be increased by up to 300%. The series offers unrivalled stability in nitrogen pressure whilst remaining tolerant to back pressure. The distinctive sealed casing design is also sound-proofed, emitting low noise levels during operation.

The new KSB-series has a wide calibration range of the required oil flow for an easier setup.

excellent visibility during operation, allowing the operator to work close to walls and other structures.

as hoses are within the width of the breaker.

There are seven different tool



# **Tools for KSB-Series**



#### **Moil Point**

Suitable for concrete, mediumhard and non-layered rock.



#### **Blunt Tool**

Suitable for reinforced concrete and highly compact rock.



#### **Pyramid Tool**

Suitable for reinforced concrete and highly compact rock.



#### **Chisel Tool**

Suitable for medium-hard and layered rock.



#### **Wood Cutter Tool**

Suitable for cutting all types of wood.



#### **Pile Driver**

Suitable for planting wooden or concrete poles and posts.



#### **Asphalt Cutter**

Suitable for cutting asphalt.

# **Options for KSB-Series**

#### **Automatic Greaser**

Greases automatically using the breaker's pressure line to save time and increase productivity – available for mounting on all breaker ranges.

# **KSB-Series**

#### More power, less vibration and maintenance 1



Inertial nitrogen energy recovery gives more power and less vibration thanks to nitrogen chamber (no internal diaphragms), reducing maintenance costs.



Long-lasting nitrogen 2

New compound development has resulted in a 300% improvement in gas retention.

### Monobloc body 3



Monobloc design feature gives the structure a high resistance to leverage during operation. The casing is built as a single piece, without side-bolts, increasing productivity and reducing maintenance. No vulnerable tie rods are required.

#### For all types of installations (pressurisation) 4



The KSB-series tolerates high back pressure values and has a wide calibration range of the required oil flow, facilitating installation.

#### Only two moving parts 5



### Protected tubes 4



Tubes are completely protected through the casing and are suitable for all types of excavation, especially in narrow spaces.

### Silenced body 6



The closed box casing and internal sound-absorbing material creates a breaker with very low noise levels.

#### Easy to change 7



Piston moves in a single interchangable cylinder liner which is easy to replace.

#### Special geometry 8



Piston is constructed with a special geometry to keep a constant energy level and reduce breakages.

### Hydraulic system for blank firing 8



A regenerative oil circuit that avoids blank firing when the tool is not in contact with the rock.

#### Double retainer pin 9



The tool locking system with double retainer pin for models from KSB 2 to KSB 12 controls wear rate, ensuring longer maintenance intervals for the whole locking system.

#### Visibility and versatility 10



Tapered shape provides the operator with an excellent view during operation, allowing for easier working close to walls and narrow spaces.

# ... A SMART CHOICE!

# **KFX-Series up to 200t Excavators**

The KFX breaker-series, for excavators from 8-200t, has two adjusting valves as standard. Firstly, a control valve on the cylinder of the hammer allows the operator to adjust the number of blows generated. A second valve allows the adjustment of the working pressure from 160 to 200 bar.

The standard, inner pipes provide direct greasing of the lower bushing and spacer, improving the longevity of retainer pins and bushings.

Working in tunnels, and even underwater, is also possible by adding air tubes. The KFX breaker-series is available with a range of five different tools, suitable for penetrating a variety of surface structures.



# **Tools for KFX-Series**



#### **Moil Point**

Suitable for concrete, mediumhard and non-layered rock.



#### **Blunt Tool**

Suitable for reinforced concrete and highly compact rock.



#### **Pyramid Tool**

Suitable for reinforced concrete and highly compact rock.



#### **Chisel Tool**

Suitable for medium-hard and lavered rock.



#### **Cobra Tool**

Suitable for quarry works such as primary demolition and block reduction.

# **Options for KFX-Series**

#### **Gallery Kit**

A specific system for heavy-duty gallery work, to extend maintenance intervals and reduce costs – comprising bushes and pistons suitable for such a tough working environment. A spray mist kit option for dust abatement is also available, which directs a strong water jet over the tool operation area.

#### **Underwater Kit**

Avoid water entering the breaker with a specific underwater kit, for use in the most demanding of environments.

#### **Automatic Greaser**

Greases automatically using the breaker's pressure line to save time and increase productivity – available for mounting on all breaker ranges.

#### Automatic hydraulic greasing device (optional, mounted on the breaker) 1



The Beka-Lube automatic lubrication system optimises the lubrication procedure, reducing maintenance and downtime.

Protected tubes 2 Tubes with swivels are fully protected and therefore suitable for all types of excavation.

Regulation of the operating pressure 4 For KFX-breakers (KFX 20 to KFX 200), regulating the working pressure from 160 bar to 200 bar can be managed manually

by valve adjustment.

Blows adjustment 6 For KFX-breakers (KFX 20 to KFX 200), regulating the blow rate can be managed manually by adjusting a valve located on the side of the breaker.

Anti-dust and working underwater 8 Prevent the entry of dust and water into the breaker by blowing air into the main opening at the front of the breaker (with a pressure not less than 10 bar).

Automatic hydraulic greasing device with exclusive Hammer electric control (optional, mounted on the excavator) 3

Innovative electric system with automatic grease distribution – less liable to vibration damage due to a dedicated oil tank (with a capacity of 4kg or 8kg), making the system cheaper than competitor cartridge based devices.

Hydraulic system for blank firing 5 A regenerative oil circuit that avoids blank firing when the tool is not in contact with the rock.

Special geometry 7

Piston is constructed with a special geometry to keep a constatnt energy level and reduce breakages.

Anti-dust system for galleries (optional) 9 The anti-dust system features a dustproof seal

mounted in the lower bush, to avoid dust and debris entering the circuit.

## **KSB Hydraulic Breakers**

Technical Key Features KSB								
Туре	Operating weight (t)	Weight of breaker (kg)	Height with standard tool (mm)	Chisel diameter (mm)	Blows per minute (/min)	Energy (J)		
KSB 1	0,5 - 2,5	70	900	40	900 - 1100	280		
KSB 2	1,2 - 3,5	100	1000	45	900 - 1100	400		
KSB 3	1,5 - 4,5	145	1100	48	900 - 1100	580		
KSB 4	2,5 - 6,5	190	1200	55	900 - 1100	750		
KSB 6	3 - 8	250	1250	65	900 - 1100	950		
KSB 8	4,5 - 9	320	1550	75	800 - 1000	1200		
KSB 10	6 - 11	430	1650	80	700 - 900	1700		
KSB 12	8 - 12	540	1700	90	600 - 800	2300		

<u>Hydraulics KSB</u>					
Туре	<b>Oil flow</b> (l/min)	Operating pressure (bar)	Back pressure max. (bar)	Nominal diameter pressure line	Nominal diameter tank line
KSB 1	13 - 20	100	25	1/2"	1/2"
KSB 2	15 - 30	110	25	1/2"	1/2"
KSB 3	18 - 40	110	25	1/2"	1/2"
KSB 4	25 - 55	130	25	3/4"	3/4"
KSB 6	30 - 60	140	25	3/4"	3/4"
KSB 8	50 - 70	160	25	3/4"	3/4"
KSB 10	75 - 90	150	25	3/4"	3/4"
KSB 12	85 - 110	150	25	3/4"	3/4"

8t 9t 10t ... 20t ... 30t ... 40t ... 50t ... 60t 70t 80t 90t 100t ... 150t 200t

## **KFX Hydraulic Breakers**

Technical Key Features KFX							
Туре	Operating weight (t)	Weight of breaker (kg)	Height with standard tool (mm)	Chisel diameter (mm)	Blows per minute (/min)	Energy (J)	
KFX 14	8 - 15	700	1900	95	600 - 900	2000	
KFX 17	12 - 21	1050	2050	115	600 - 900	3000	
KFX 20	14 - 24	1250	2400	120	400 - 900	3200	
KFX 26	20 - 30	1700	2700	135	400 - 800	4200	
KFX 32	23 - 35	2200	3000	150	400 - 800	5400	
KFX 36	28 - 45	2900	3300	160	350 - 700	8500	
KFX 40	30 - 47	3200	3400	160	300 - 650	9000	
KFX 47	35 - 50	3700	3500	175	300 - 650	9500	
KFX 58	37 - 57	4400	3800	180	300 - 650	12500	
KFX 70	40 - 70	4850	4000	195	250 - 550	16500	
KFX 80	45 - 80	5800	4200	200	250 - 550	18500	
KFX 120	60 - 110	7800	4500	215	200 - 400	23000	
KFX 150	80 - 170	12000	5200	255	150 - 300	28000	
KFX 200	100 - 200	14500	5500	280	150 - 250	35000	

<u>Hydraulics KFX</u>					
Туре	<b>Oil flow</b> (I/min)	Operating pressure (bar)	Back pressure max. (bar)	Nominal diameter pressure line	Nominal diameter tank line
KFX 14	70 - 100	160	25	3/4"	3/4"
KFX 17	135	165	25	1"	1"
KFX 20	105 - 140	170	25	1"	1"
KFX 26	130 - 160	180	25	1"	1"
KFX 32	165 - 190	180	25	1"	1" 1/4
KFX 36	180 - 240	180	25	1" 1/4	1" 1/4
KFX 40	200 - 260	180	25	1" 1/4	1" 1/4
KFX 47	250 - 300	180	25	1" 1/4	1" 1/4
KFX 58	270 - 320	190	25	1" 1/4	1" 1/4
KFX 70	290 - 350	190	25	1" 1/4	1" 1/4
KFX 80	300 - 380	190	25	1" 1/4	1" 1/4
KFX 120	380 - 440	200	25	1" 1/4	1" 1/4
KFX 150	480 - 570	200	25	1" 1/2	1" 1/2
KFX 200	500 - 600	200	25	1" 1/2	1" 1/2

All packages consist of: breaker body, two standard tools at your option (chisel, blunt, moil or pyramid), plate for bracket and Nitrogen

# TAKE A LOOK INSIDE

The work of Hammer SRL, a member of the Kinshofer Group since 2019, is based on continuous innovation and research in the seven factories of Molfetta, Italy, featuring:

- an equipped workshop with around 50 high-productivity CNC machines.
- a grinding and quality department in which we ensure the highest manufacturing standards in our product componentry.
- a cutting department, equipped with five latest generation plasma cutting stations, five robot welding stations and two robot stations, for assembly.
- an assembly department with a highly qualified technical team, who remain constantly updated on the new and emerging technologies of the sector.
- a large spare parts warehouse featuring six automated modules that expand vertically, allowing us to optimize the assembly of our range and increase storage areas to 1000 m<sup>2</sup>.

In addition, due to the Industry investment plan 4.0, we have been able to optimize the production process further – involving the search for new solutions and innovation within our existing product range. As leaders in a global marketplace, we continue to pass the associated benefits to our customers.













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