

# NPK

## Hydraulic Hammers



- Hardest Hitting, Most Productive Hammer in the Industry
- Full Range of Hammers with Proven Design, Suited for All Applications and Ranges of Carriers
- All Models Backed by NPK's 3 Year Limited Warranty
- Comprehensive Dealer Network Providing Sales, Parts and Service, and Backed by the Industry's Best Support!

**NPK ATTACHMENTS...designed, built and backed by NPK.**



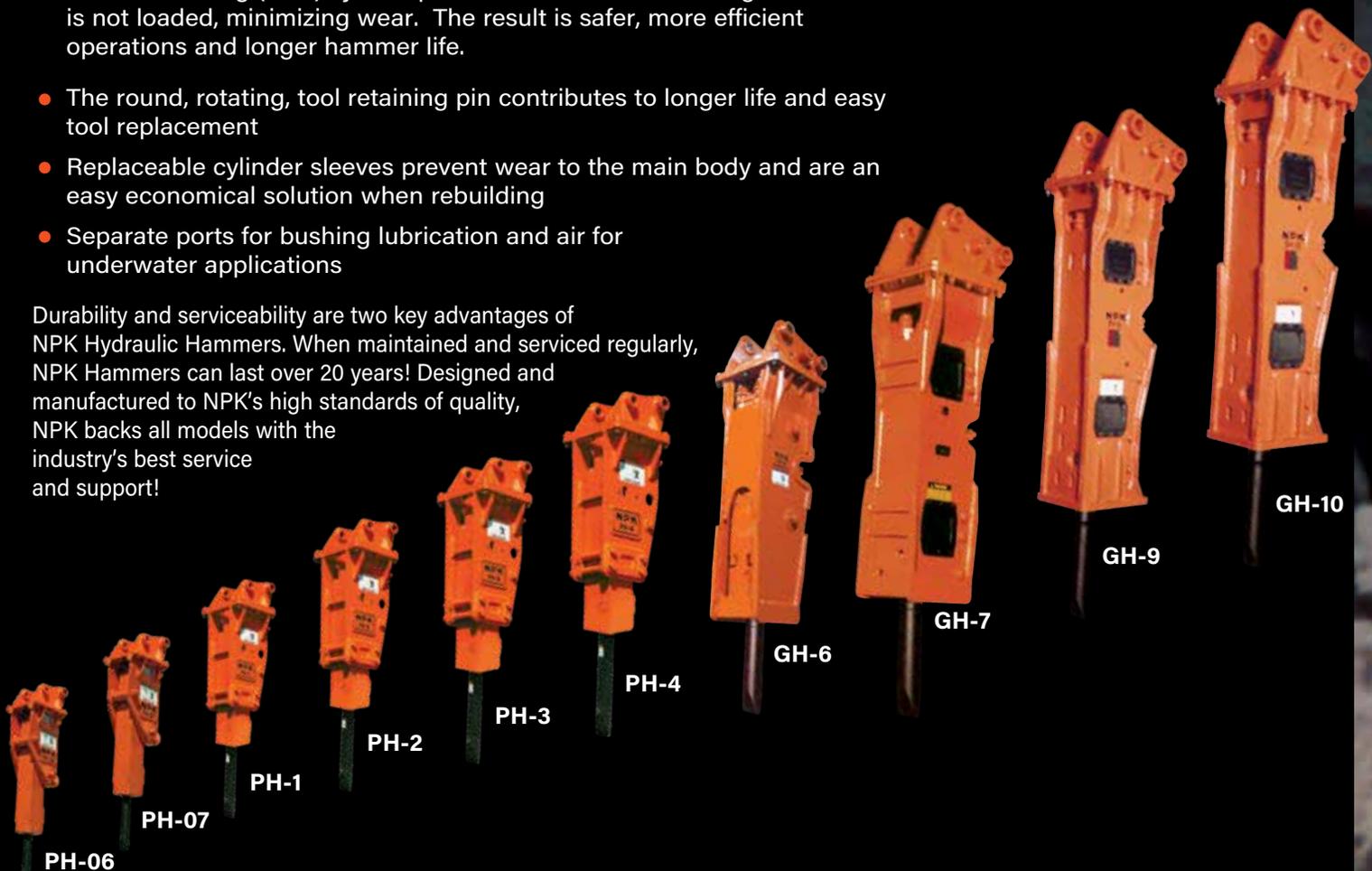
# Service, Parts and the Best Dealer Network

## Hammers for an assortment of carriers: mini-excavators, skid steers, backhoes, loaders and full size excavators

Whether it be for the smallest, most nimble of carriers to the largest of excavators, NPK maintains its commitment to incorporate the latest technological innovations into our entire Hydraulic Hammer product line. Utilizing state-of-the-art computer modeling and manufacturing practices, NPK has designed and manufactured a high impact energy hammer that is both durable and efficient, increasing uptime and profitability.

- Favorable power-to-weight ratio
- Gas-powered operating system creates more impact per blow than any hammer in the industry
- Eliminates bladder type accumulators that are prone to sudden failure and costly maintenance
- Only two moving parts means increased productivity and reliability
- Anti-blank firing (ABF) system prevents hammers from firing if the chisel is not loaded, minimizing wear. The result is safer, more efficient operations and longer hammer life.
- The round, rotating, tool retaining pin contributes to longer life and easy tool replacement
- Replaceable cylinder sleeves prevent wear to the main body and are an easy economical solution when rebuilding
- Separate ports for bushing lubrication and air for underwater applications

Durability and serviceability are two key advantages of NPK Hydraulic Hammers. When maintained and serviced regularly, NPK Hammers can last over 20 years! Designed and manufactured to NPK's high standards of quality, NPK backs all models with the industry's best service and support!



***Durability, Productivity and Rebuildability***

# The Right Hammer for Every Job!



GH-12

GH-15



GH-18



GH-23



GH-30



GH-40



GH-50



NPK's enclosed hammer bracket option decreases operating noise beyond standard low-noise brackets. Additionally, the enclosed hammer bracket is much narrower than our standard hammer bracket and may be preferred in some trenching applications.

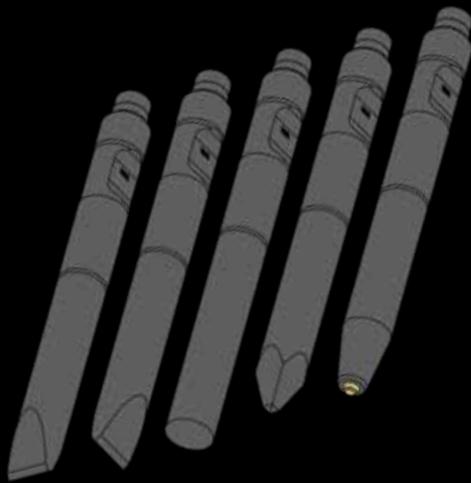


Hammer mounted automatic lubrication systems are an optional add-on for models ranging from PH-3 to GH-50. This type of auto lube is ideal for hammers being used by multiple machines. For dedicated hammer carriers, NPK offers a carrier mounted auto lube system.

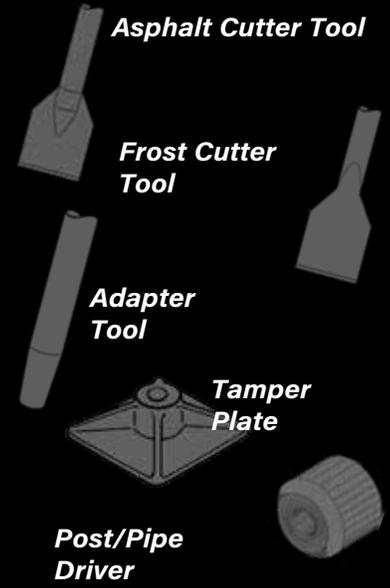
## Full serviceability of the industry's easiest, lowest cost, body-rebuild system

Hammers aren't meant to have an easy life and occasionally need to be rebuilt. An NPK hammer body can be re-sleeved for approximately 1/3 the cost of competing brands when the body becomes worn or damaged. A typical hammer body can cost as much as 70% the cost of a new hammer, so when you buy an NPK Hammer you can expect an excellent return on your investment!

# Standard & Specialty Tools

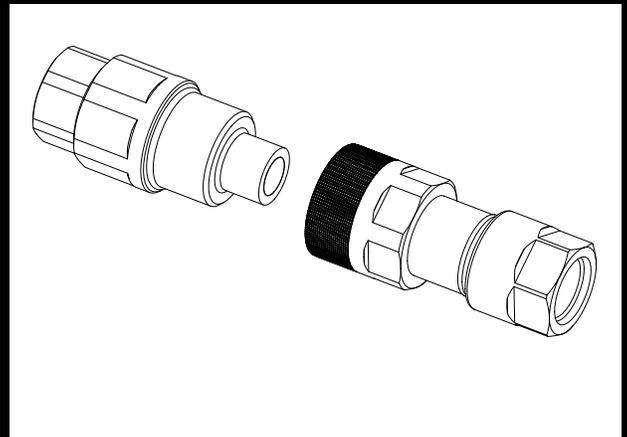


- **Chisel (FX) or (FY)**  
Controlled breakage of concrete, layered sedimentary rock (trenching, breaking oversize), general demolition
- **Blunt Tool (E)**  
Concrete slab, bridge decking, breaking oversize, slag removal
- **Moil Point (P)**  
Soft material, breaking concrete structures - columns, etc., highway construction, general demolition
- **Core Tool (PC)**  
Carbide steel core minimizes wear and breakage. Hard rock, general demolition



## Quick Disconnects

NPK Quick Disconnects make installing your NPK attachments fast and easy while also minimizing the loss of oil. Quick disconnects are not only compatible with hammers, they can also be used with compactors, crushers, processors and more! With the addition of a quick disconnect package to each unit, you can easily swap out multiple NPK attachments onto a single carrier. When the disconnect is assembled and the female coupling nut is tightened, the internal poppets are held rigid. Rapid pulsations or flow changes do not move internal parts, typically the source of deterioration in conventional designs. These internal poppets are guided by a long spool section, rather than the usual flimsy supports of lock rings and poppet guides. Also missing are any ball bearings, commonly the cause of failure in high pulsation environments. The generous flow path allows for very low pressure drops, which is revolutionary in coupling



## Dedicated Mounting Kits

- **Bracket weldment designed and built by NPK to the exact OEM bucket specs to mount your NPK attachment to your carrier:**
  - Mini excavators
  - Skid steers
  - Backhoes
  - Wheel loaders
  - Full size excavators
  - Available for specialty couplers also...Consult NPK
- **Whip hoses and hardware package included**
- **OEM match pins available for most carriers (up to 110 mm diameter)**
- **Made in USA**



# Auto Lubes

- Hydraulically-driven, automatically providing a continuous supply of grease while hammer is running
- Reduce maintenance costs by extending hammer tool bushing life
- Reduce labor costs due to elimination of manual greasing
- Reliable even in low temperatures
- Suitable for special lubricants including copper based pastes
- All NPK Auto Lube Systems include mounting hardware and adapter fittings

## Hammer Mounted Auto Lubes

- Ideal for hammers being used on multiple machines
- Various cartridge adapters available for conforming to different size grease tubes
- Cartridge refill adapter provided with pump for refilling grease tubes



G015: Compatible with PH-3, PH-4, GH-6  
Max Output/Hr at 24V: 0.43 lbs (0.19 kg)

G025: Compatible with GH-7, GH-9, GH-10, GH-12, GH-15, GH-18  
Max Output/Hr at 24V: 0.43 lbs (0.19 kg)

G050: Compatible with GH-23, GH-30, GH-40, GH-50  
Max Output/Hr at 24V: 0.85 lbs (0.38 kg)

## Carrier Mounted Auto Lubes

- Ideal for dedicated hammer carriers

	G-075/G-075L	G-100/G-100L	G-150/G-150L	G-153/G-153L	G-175/G-175L	G-186/G-186L
Reservoir Capacity	4.4 lbs (2 kg)	8.8 lbs (4 kg)	8.8 lbs (4 kg)	17.6 lbs (8 kg)	8.8 lbs (4 kg)	17.6 lbs (8 kg)
Max Output/Hr at 24V	0.5 lbs (0.22 kg)	0.5 lbs (0.22 kg)	1 lb (0.44 kg)	1 lb (0.44 kg)	1.5 lbs (0.68 kg)	1.5 lbs (0.68 kg)
Models	PH-3, PH-4	GH-6, GH-7, GH-9	GH-10, GH-12, GH-15, GH-18, GH-23		GH-30, GH-40, GH-50	

NOTE: Max Outputs specified are per hour at 24V. (Numbers would be half at 12V.) Hose from Auto Lube to Hammer is not included and is a dealer supplied option. L Models come with a low level switch that activates a warning light and buzzer in the cab, and can be wired (on solenoid energized circuits) to shut off hammer when insufficient grease levels are detected.

It is recommended that special lubricants be used in your NPK Hammer to protect premature wear of tool bushings and tool. NPK grease products contain additives that resist extreme pressures and heat. Our specially formulated moly-based grease and chisel paste are available through your local NPK dealer. NPK lubricants are offered in 14 oz. cartridges, 35 lb. pails, 120 lb. kegs, 400 lb. drums or refillable cartridges for Hammer Mounted Auto Lube Systems.



## Dust Suppression

Currently available on NPK Hammer models PH-1, PH-2, PH-3 and PH-4 with enclosed bracket.

- Water spray nozzle integrated into bracket
- Wide spray angle for maximum coverage
- Easy access for serviceability
- Ready to be connected to water supply (NOTE: Water reservoir and pump not included.)

NPK's water-ready hammers help to make working environments safer and to meet OSHA silica dust reduction regulations.

# A design that combines

**EFFICIENCY - RELIABILITY - SERVICEABILITY**

## Small Hammer Lineup: PH-Series

The NPK PH-Series Hammers use the same proven gas-powered operating system utilized in all NPK Hammers. They are designed with a fully-sleeved, one-piece hammer body, eliminating tie rods. The valve system is small, internal and highly efficient. Replaceable sleeves ensure the hammer body doesn't undergo the wear and tear caused by repetitive firing of the piston.

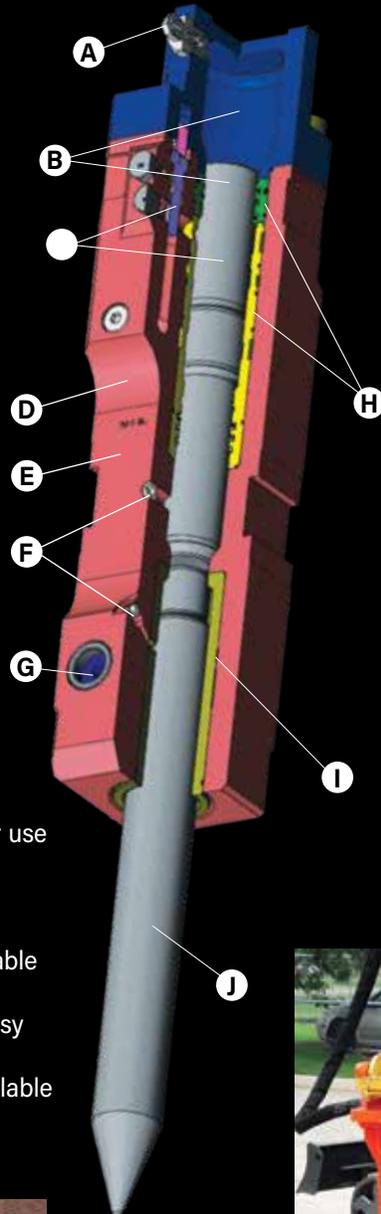
Additionally, the PH-Series "slip-fit" style tool bushings are held in place by the retaining pin in the same manner as the tool. Because of this feature, bushings are quickly and easily replaced, even in the field, eliminating downtime due to tool bushing replacement. The PH-Series Hammers are standard equipped with the Anti-Blank Firing feature providing longer component life; however, still have the ability to be changed to blank fire in the field if preferred, by simply switching 2 plugs.

PH-Series Hammers are available with either the standard hammer bracket or the optional enclosed bracket. The enclosed bracket design decreases operating noise and can be readily equipped with an optional Water-Ready Dust Suppression Kit. (Water reservoir and pump not included.)



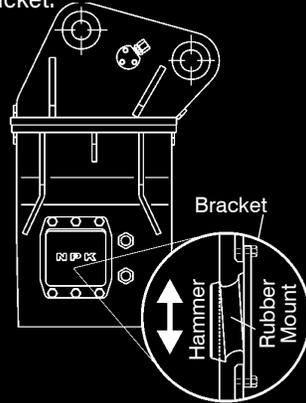
### PH-Series Hammers

- A. Gas head with charging valve
- B. Unique gas-charged piston maximizes hammer efficiency
- C. Simple, two-moving-parts design for reliability
- D. Anti-blank fire feature for long hammer life
- E. One-piece hammer body without tie rods
- F. Ports for automatic bushing lubrication and air for underwater use
- G. Quick-change tool system with single round retainer pin
- H. Fully-sleeved design allows for extended service life- more favorable cost of long term ownership
- I. Slip-fit tool bushings for quick, easy replacement
- J. Variety of tool configurations available



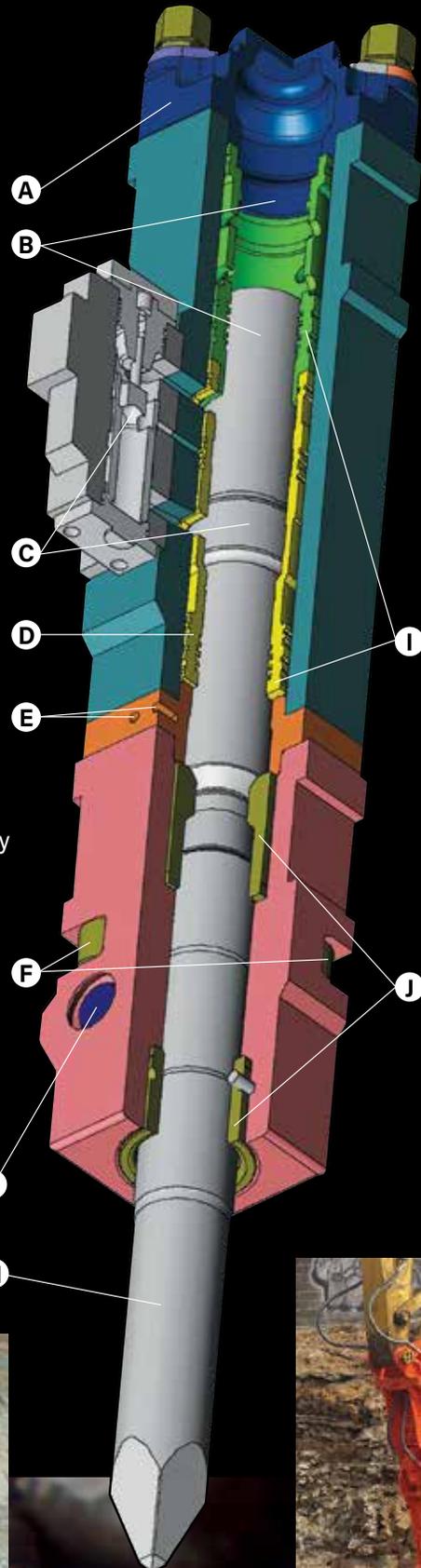
# Medium to Large Hammer Lineup: GH-Series

NPK's GH-Series Hydraulic Hammers feature our gas-powered operating system creating maximum impact per blow. This design, coupled with our long piston stroke and greater piston mass, creates superior impact energy. The long-used NPK rubber mount system protects the operator from excessive vibration and helps increase the life of the carrier. NPK's ABF feature allows the hammer to fire only when pressure is applied/maintained to the tool, increasing the component life and reducing operating costs. These rugged hammers are capable of high production rates in all forms of concrete, as well as medium and hard materials. The simplicity of the NPK Hammer design is not limited to the main components; the standard bracket design and mounting kits lend themselves to easy general maintenance and ease of rebuild. As an example, the hammer power cell can be removed from the bracket without removal of the mounting bracket.



## GH-Series Hammers

- A. Gas head with charging valve
- B. Unique gas-charged piston maximizes hammer efficiency
- C. Simple, two-moving-parts design for reliability
- D. Anti-blank fire feature for long hammer life
- E. Ports for automatic bushing lubrication and air for underwater use
- F. Bottom tie rod nuts for easier serviceability
- G. Quick-change tool system with single round retainer pin
- H. Variety of tool configurations available
- I. Fully-sleeved design allows for extended service life- more favorable cost of long term ownership
- J. Upper and lower replaceable tool bushings



# Hydraulic Hammers

The right model for every machine

## SPECIFICATIONS

NPK Model	Impact Energy Class* (ft lb)	Impact Frequency (bpm)	Recommended Carrier Weight (lb-metric tons)	Oil Flow (gpm-lpm)	Operating Pressure (psi-bar)	Working Weight** (lb-kg)	Tool Diameter (in-mm)	Tool Working Length (in-mm)
PH-06	150 ft lb	480 - 1,200 bpm	2,400 - 4,000 lb 1 - 1.8 metric tons	4 - 9 gpm 15 - 35 lpm	2,030 psi 140 bar	220 lb 100 kg	1.7 in 42 mm	11.8 in 300 mm
PH-07	200 ft lb	450 - 1,300 bpm	3,000 - 6,000 lb 1.3 - 2.7 metric tons	4 - 12 gpm 15 - 45 lpm	2,465 psi 170 bar	275 lb 125 kg	1.9 in 47 mm	12.4 in 315 mm
PH-1	350 ft lb	550 - 1,100 bpm	4,000 - 7,500 lb 1.8 - 3.5 metric tons	7 - 15 gpm 25 - 55 lpm	2,465 psi 170 bar	500 lb 225 kg	2.2 in 57 mm	14 in 356 mm
PH-2	500 ft lb	500 - 1,200 bpm	6,000 - 11,000 lb 2.7 - 5 metric tons	7 - 16 gpm 25 - 60 lpm	2,465 psi 170 bar	610 lb 275 kg	2.6 in 66 mm	15.1 in 384 mm
PH-3	750 ft lb	500 - 1,150 bpm	8,000 - 16,000 lb 3.6 - 7.3 metric tons	12 - 26 gpm 45 - 100 lpm	2,465 psi 170 bar	990 lb 450 kg	3 in 76 mm	16.5 in 419 mm
PH-4	1,300 ft lb	400 - 1,000 bpm	12,000 - 18,000 lb 5.5 - 8 metric tons	13 - 32 gpm 50 - 120 lpm	2,465 psi 170 bar	1,235 lb 560 kg	3.4 in 86 mm	18.5 in 470 mm
GH-6	2,000 ft lb	460 - 800 bpm	22,000 - 31,000 lb 10 - 14 metric tons	24 - 40 gpm 90 - 150 lpm	2,400 psi 165 bar	2,500 lb 1,135 kg	4.2 in 106 mm	19.7 in 500 mm
GH-7	2,500 ft lb	400 - 750 bpm	28,000 - 42,000 lb 13 - 19 metric tons	26 - 48 gpm 100 - 180 lpm	2,600 psi 180 bar	2,900 lb 1,315 kg	4.6 in 116 mm	23 in 583 mm
GH-9	3,000 ft lb	500 - 670 bpm	40,000 - 56,000 lb 18 - 25 metric tons	40 - 53 gpm 150 - 200 lpm	2,600 psi 180 bar	3,605 lb 1,635 kg	5 in 126 mm	23.9 in 608 mm
GH-10	4,000 ft lb	400 - 550 bpm	46,000 - 66,000 lb 21 - 30 metric tons	44 - 55 gpm 165 - 210 lpm	2,600 psi 180 bar	4,190 lb 1,900 kg	5.4 in 136 mm	24.4 in 620 mm
GH-12	5,500 ft lb	380 - 480 bpm	56,000 - 86,000 lb 25.5 - 39 metric tons	45 - 58 gpm 170 - 220 lpm	2,650 psi 183 bar	5,655 lb 2,565 kg	5.7 in 146 mm	25.6 in 650 mm
GH-15	8,000 ft lb	320 - 400 bpm	66,000 - 100,000 lb 30 - 45 metric tons	53 - 66 gpm 200 - 250 lpm	2,600 psi 180 bar	6,800 lb 3,085 kg	6.1 in 156 mm	27.2 in 690 mm
GH-18	12,000 ft lb	300 - 400 bpm	70,000 - 114,000 lb 32 - 52 metric tons	58 - 77 gpm 220 - 290 lpm	2,500 psi 172 bar	7,805 lb 3,540 kg	6.5 in 165 mm	29.1 in 740 mm
GH-23	13,500 ft lb	300 - 400 bpm	100,000 - 150,000 lb 45 - 68 metric tons	66 - 85 gpm 250 - 320 lpm	2,600 psi 180 bar	13,295 lb 6,030 kg	6.9 in 174 mm	34.6 in 880 mm
GH-30	15,000 ft lb	310 - 390 bpm	100,000 - 186,000 lb 45 - 84 metric tons	74 - 92 gpm 280 - 350 lpm	2,600 psi 180 bar	13,500 lb 6,125 kg	7.2 in 184 mm	32 in 813 mm
GH-40	17,000 ft lb	240 - 330 bpm	160,000 - 260,000 lb 72.5 - 118 metric tons	79 - 106 gpm 300 - 400 lpm	2,600 psi 180 bar	17,000 lb 7,710 kg	8 in 204 mm	35.4 in 899 mm
GH-50	20,000 ft lb	210 - 280 bpm	240,000+ lb 108+ metric tons	92 - 119 gpm 350 - 450 lpm	2,600 psi 180 bar	24,910 lb 11,300 kg	8.4 in 214 mm	39.7 in 1,008 mm

\* "Impact Energy Class" is a marketing rating and does not relate to measured impact energy. \*\*Working weight includes tool and mounting bracket. Weights may vary depending on bracket configurations. Specifications subject to change without notice.



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Each product sold by NPK is subject to an express written warranty. NPK makes no other warranty, express or implied, including any warranty of merchantability or fitness for any particular purpose. NPK is not liable for any incidental or consequential damages.

For more information on Hydraulic Hammers