

RIVETING HAMMERS



BRH-1U (R)



SBH-0



SBH-1A (R)



BRH-5U (R)



BRH-1US (R)

SPECIFICATIONS

Recommended Air Pressure : 0.6MPa (85psi)

Model	Riveting Capacity				Blow Per Min. (about)	Overall Length (about)		Weight Less Rivet Set (about)		Piston Diameter (about)		Piston Stroke (about)		Air Inlet Thread (Pipe Tap)		Air Hose Size		Average Air Consumption	
	Duralumin		Steel			mm	in	kg	lb	mm	in	mm	in	in	mm	in	m ³ /min	ft ³ /min	
	mm	in	mm	in															
SBH-0	2.3	No.2	-	-	6500	123	4 27/32	0.32	0.7	10.00	25/64	23	29/32	NPT1/8	6.35	1/4	0.10	3.5	
SBH-1A(R,H)	2.6	No.3	-	-	4000	209	8 15/64	0.86	1.9	11.11	7/16	56	2 3/16	NPT1/4	6.35	1/4	0.15	5.0	
BRH-1U(R,H)	3.2	No.5	2.4	No.3	2800	122	4 15/16	1.05	2.4	14.30	9/16	38	1 1/2	NPT1/4	9.5	3/8	0.34	12.0	
BRH-1US(R,H)	3.2	No.5	2.4	No.3	2800	180	7 1/8	1.00	2.2	14.30	9/16	38	1 1/2	NPT1/4	9.5	3/8	0.34	12.0	
BRH-1UG(R,H)	3.2	No.5	2.4	No.3	2800	187	7 3/8	1.78	3.9	14.30	9/16	38	1 1/2	NPT1/4	9.5	3/8	0.34	12.0	
BRH-5U(R,H)	6.4	1/4	4.8	No.10	1800	189	7 7/16	1.40	3.1	12.70	1/2	100	4	NPT1/4	9.5	3/8	0.37	13.0	
BRH-5US(R,H)	6.4	1/4	4.8	No.10	1800	246	9 11/16	1.45	3.2	12.70	1/2	100	4	NPT1/4	9.5	3/8	0.37	13.0	
BRH-5UG(R,H)	6.4	1/4	4.8	No.10	1800	258	10 5/32	2.13	4.7	12.70	1/2	100	4	NPT1/4	9.5	3/8	0.37	13.0	

VIBRATION-LESS TYPE

PERCUSSION TOOLS



BRH-1UV (R)



BRH-5UV (R)



BRH-1USV (R)



BRH-5USV (R)



Power is controlled by the built-in Air Regulator located on the handle. (Pistol handle type only)

BRH-1UV
BRH-5UV

SPECIFICATIONS

Recommended Air Pressure : 0.6MPa (85psi)

Model	Riveting Capacity				Blow Per Min. (about)	Overall Length (about)		Weight Less Rivet Set (about)		Piston Diameter (about)		Piston Stroke (about)		Air Inlet Thread (Pipe Tap)		Air Hose Size		Average Air Consumption	
	Duralumin		Steel			mm	in	kg	lb	mm	in	mm	in	in	mm	in	m ³ /min	ft ³ /min	
	mm	in	mm	in															
BRH-1UV(R,H)	3.2	No.5	2.4	No.3	2800	143	5 5/8	1.37	3.0	14.30	9/16	38	1 1/2	NPT1/4	9.5	3/8	0.34	12.0	
BRH-5UV(R,H)	6.4	1/4	4.8	No.10	1800	210	8 17/64	1.68	3.7	12.70	1/2	100	4	NPT1/4	9.5	3/8	0.37	13.0	
BRH-1USV(R,H)	3.2	No.5	2.4	No.3	2800	271	10 21/32	1.60	3.5	14.30	9/16	38	1 1/2	NPT1/4	9.5	3/8	0.34	12.0	
BRH-5USV(R,H)	6.4	1/4	4.8	No.10	1800	338	13 5/16	1.90	4.1	12.70	1/2	100	4	NPT1/4	9.5	3/8	0.34	12.0	

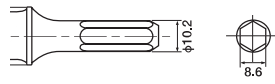
STANDARD ACCESSORIES

Model	Retainer Spring	Rivet Sets
SBH-0	①	a
SBH-1A (R)	②, ⑤	b
BRH-1U (R) Series	②, ⑤	c
BRH-1U (H) Series	②, ⑤	
BRH-5U (R) Series	④, ⑤	f
BRH-5U (H) Series	④, ⑤	

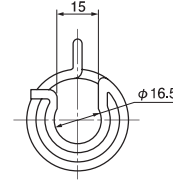
Snap is not attached to the H type.

*Retainer Spring No. ③ and Rivet Sets d/e/g/h are optional accessories.

SHANK SIZE for BRH-5U(H) series



SPRING CHISEL RETAINER 705-813-1



RIVETS for SBH & BRH Series

(mm)

	Retainer Spring		Rivet Sets		Model
	Part Number		Part Number		
Round Shank	①	700-810-1	a	920-004-0	SBH-0
	②	705-810-1	b	920-020-0	SBH-1A (R) BRH-1U (R) Series BRH-5U (R) Series
			c	920-021-0	
	③	710-811-1	d	920-030-0	SBH-1A (R) BRH-1U (R) Series BRH-5U (R) Series
			e	920-032-0	
	④	710-812-1	f	920-040-0	BRH-5U (R) Series
			g	920-042-0	
	⑤	705-813-1	h	920-800-0	SBH-1A (R) BRH-1U (R) Series BRH-5U (R) Series

IMPACT CUTTERS / FLUX CHIPPERS



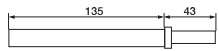
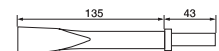
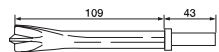
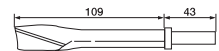
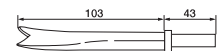
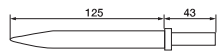
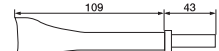
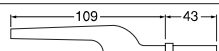
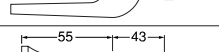
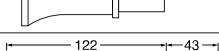
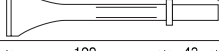
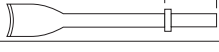
BRH-7 (R)



UFC-0N

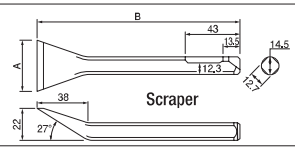
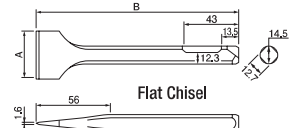
OPTION

Chisels For BRH-7

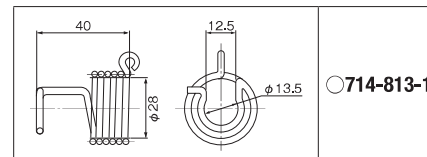
Chisel	Part Number	
	Round Shank	Hex. Shank
 Blank	921-095-0	★ 921-120-0
 Flat	○ (7") 921-087-0	○ 921-127-0
 Sheet Metal(A)	○ 921-096-0	○ 921-115-0
 Sheet Metal(B)	921-092-0	★ 921-117-0
 Spot Weld Breaker	○ 921-085-0	○ 921-125-0
 Taper Punch	921-091-0	★ 921-121-0
 Bushing Remover	921-094-0	★ 921-119-0
 Fork	921-097-0	★ 921-122-0
 Hammer	921-098-0	★ 921-123-0
 Scraper	○ 921-088-0	○ 921-128-0
 Tail Pipe Cutter	921-093-0	★ 921-118-0
 Double Blade Panel Cutter	921-089-0	★ 921-129-0

Min. quantity for ordering Hex. Shank Chisels marked with "★" is 30~100 pcs. each. Standard Chisels are marked with "○"

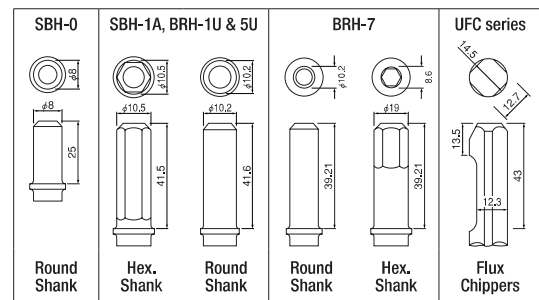
Chisels for UFC-0N, 1N

Chisel	Part Number	Dimension(mm)	
		A	B
 Scraper	○ 921-201-0	31.5	150
 Flat Chisel	921-202-0	35	158
	921-206-0	60	140

BRH-7 Retainer Spring



Shank Size Of Rivet Sets



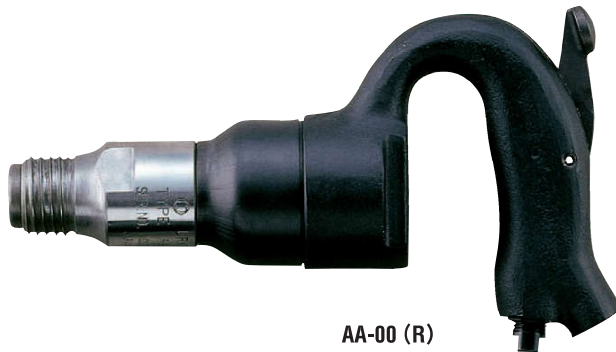
SPECIFICATIONS

Recommended Air Pressure : 0.6MPa (85psi)

Model	Blow Per Min. (about)	Overall Length (about)		Weight Less Chisel (about)		Piston Diameter (about)		Piston Stroke (about)		Air Inlet Thread (Pipe Tap)	Air Hose Size		Average Air Consumption	
	bpm	mm	in	kg	lb	mm	in	mm	in	in	mm	in	m ³ /min	ft ³ /min
BRH-7(R,H)	3400	168	6 39/64	1.64	3.60	19.05	3/4	50	1 31/32	NPT1/4	9.5	3/8	0.48	17.0
UFC-0N	5300	180	7 1/8	1.38	3.04	25.00	63/64	28	1 1/4	NPT1/4	9.5	3/8	0.3	10.7
UFC-1N	4200	190	7 1/2	1.50	3.30	25.00	63/64	34	1 11/32	NPT1/4	9.5	3/8	0.3	10.7

R= Round Shank H=Hex. Shank BRH-7= with Built-in Air Regulator

CHIPPING HAMMERS



AA-00 (R)



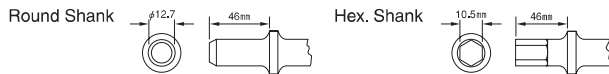
AA-20 (R)



PB-20 (R)

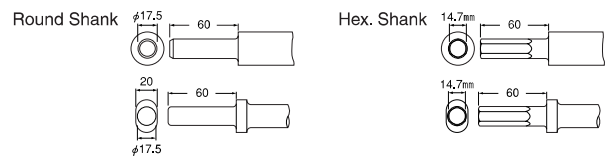
OPTION

CHISELS for AA-00 SERIES (Collared type)



POINT shape	Overall Length		Part Number	
	mm	in	Round Shank	Hex. Shank
	200	7 7/8"	921-224-0	921-049-0
	176	6 15/16"	877-035-1	921-221-0
	220	8 21/32"	921-225-0	921-220-0

CHISELS for AA & PB SERIES



POINT shape	Overall Length		Part Number			
	mm	in	Plain Type		Collared Type	
	200	7 7/8"	R	921-021-0	921-072-0	
			H	921-025-0	921-075-0	
	220	8 21/32"	R	921-003-0	921-070-0	
			H	921-010-0	921-073-0	
	200	7 7/8"	R	921-056-0	921-071-0	
	220	8 21/32"	H	921-055-0	921-074-0	



Chisel Retainer Assembly 727-847-6
AA-20,30,40, PB-20,30 Standard Accessories.
(Chisel not included)

SPECIFICATIONS

Recommended Air Pressure : 0.6MPa (85psi)

Model	Chisel Shank Size				Blow Per Min. (about)	Overall Length (about)		Weight Less Chisel (about)		Piston Diameter (about)		Piston Stroke (about)		Air Inlet Thread (Pipe Tap)	Air Hose Size		Average Air Consumption	
	Round		Hexagonal			mm	in	kg	lb	mm	in	mm	in		mm	in	m³/min	ft³/min
	mm	in	mm	in														
AA-00(R,H)	12.7	1/2	10.5	3/8	2700	228	8 31/32	2.3	5.00	20.0	25/32	50	1 31/32	NPT1/4	9.5	3/8	0.35	12.3
AA-20(R,H)	17.5	5/8	14.7	9/16	2300	270	10 5/8	5.3	11.60	28.0	1 7/64	55	2 5/32	NPT3/8	12.7	1/2	0.60	21.1
AA-30(R,H)	17.5	5/8	14.7	9/16	2000	298	11 23/32	5.7	12.50	28.0	1 7/64	79	3 1/8	NPT3/8	12.7	1/2	0.60	21.1
AA-40(R,H)	17.5	5/8	14.7	9/16	1450	340	13 3/8	6.1	13.40	28.0	1 7/64	111	4 3/8	NPT3/8	12.7	1/2	0.60	21.1
PB-20(R,H)	17.5	5/8	14.7	9/16	1900	350	13 25/32	6.6	14.50	28.5	1 1/8	76	3	NPT3/8	12.7	1/2	0.80	28.0
PB-30(R,H)	17.5	5/8	14.7	9/16	1500	397	15 5/8	7.1	15.60	28.5	1 1/8	102	4 1/62	NPT3/8	12.7	1/2	0.80	28.0

Compressor

Theoretical Consumption Energy of Compressor

You can refer to the table 1 to find the theoretical consumption energy of compressor, which is created through the adiabatic compression, to compress 1m³/min (normal cubic meter per minute) of free air to the various pressure levels. It is highly recommended that you should make the consumption energy value greater than the actual value by taking into consideration the machine efficiency including friction loss caused by compressor.

The consumption energy of compressor providing a pneumatic tool with 1m³/min (normal cubic meter per minute) of air at the gauge pressure 0.6MPa will be some 6.5kW or larger, if we consider the possible losses.

Energy Needed for Compressor

$$Q \geq 6.5 \text{ kW} \times (V \times n + V \times n + V \times n \dots) \times K \times S \times \alpha$$

Q : Energy needed for compressor (kW)

V : Air consumption per tool (m³/min (normal cubic meter per minute))

n : Number of tool

K : Coefficient of multiple tools in operation (table 2)

S : Coefficient of tool usage (table 3)

① Continuous operation: 1.0

Tool model for this category: Grinder, Sander, and Percussion Tool

② Discontinuous operation: 0.5

Tool model for this category: Oil-pulse tool, Impact Wrench, and Screwdriver

α : Loss caused by air leakage from connection between pipes

The table 4 refers to the major compressor power, which is sorted by tool category and model number, to operate a tool based on the catalogue air consumption value.

It takes long for a tool to complete a job at 0.4MPa as a compressor generates less power. On the other hand, it will not take long for a tool to do at 0.6MPa as a compressor generates more power. You should decide which helps you save cost, based on your various applications.

The table 2 gives you an idea of coefficient of operation. The value to operate a number of tools simultaneously is smaller as there are an increasing number of tools in operation.

The air consumption rate refers to the value in which a tool is used continuously for 1 minute. It is recommended, as shown in the table 3, that you should make the consumption energy value smaller than the actual value when you operate tools in the above-mentioned discontinuous operation and that you should make the consumption energy value larger than the actual value when you operate tools in the above-mentioned continuous condition.

Table 1

Gauge pressure	Single Stage Compression (Adiabatic Compression)		
	Theoretical Consumption Energy	Machine Efficiency (15% Included)	Various Losses (30% Included)
MPa	kW	kW	kW
0.3	2.84	3.27	4.25
0.4	3.41	3.92	5.10
0.5	3.91	4.49	5.84
0.6	4.35	5.00	6.50
0.7	4.74	5.45	7.09

Table 2

Number of Tool	Coefficient of Multiple Tools in Operation
1~5	1.0
6~10	0.8
11~20	0.7
21~30	0.6
31~50	0.5
50~100	0.4

Table 3

Operation	Coefficient of Tool Usage
Continuous Operation	1.0
Discontinuous Operation	0.5

Table 4

Category	Tool Model	Air Consumption	Energy Needed for Compressor (kW)
		m ³ /min	
Oil-pulse Tool	UAT60	0.35	2.28
	UL90	0.53	3.45
Impact Wrench	UW-6SK	0.30	1.95
	UW-13SK	0.55	3.58
Screwdriver	US-3.5A	0.20	1.02
	US-5W	0.30	1.53
Grinder	UG-38N	0.40	2.60
	USG-7S	1.10	7.15
Drill	UD-60-29	0.50	3.25
	UD-80-12	0.65	4.23
Percussion Tool	SBH-1A	0.15	0.98
	BRH-7	0.45	2.93

Note: Value for tools except Screwdriver: 0.6MPa at gauge
Value for Screwdriver: 0.4MPa at gauge.