We took on the challenge to create ergonomically designed breakers already in the 1960s. The first we did was to allow the piston to turn on cushions, a technique which has been fine-tuned over the years. During the 70s we introduced the first vibration damping handles. In the 80s and 90s we added vibration-damping springs and optimized the weight relationship between handle and body. Today we have added a flexible pivot point, where the energy is reduced in all three directions. The relationship between fixed and movable parts has also been adjusted in recent years.

**10 SIMPLE WAYS TO REDUCE VIBRATION**

- Use HAPS-enabled machines
- Use the right machine for the right job
- Use the proper machine maintenance
- Keep tools sharp
- Let go of the trigger while extracting the tool from the broken surface
- Switch work tasks
- Take regular breaks
- Don’t grip the machine too hard
- Keep hands warm and dry
- Massage your fingers during breaks

**YOUR SURFACE ROCK DRILL INSIDE OUT**

This is how your breaker takes care of dangerous vibrations. It is also the story of our hand and arm protection system – HAPS.

**THIS IS VIBRATION**

There are two types of forces that result in vibration. The first type comes from the machine itself. It occurs when the piston accelerates, when internal parts are in imbalance or when the tools are in imbalance. We battle this type of vibration with HAPS technology.

The second vibration-source we have to battle is caused by the impact energy from the breaking itself. By using the right breaking techniques you can reduce the effect of impact-induced vibration.

**RELATION BETWEEN VIBRATION AND EXPOSURE LEVEL**

**VIBRATION MAGNITUDE**

- **Above the ELV**
- **Between the EAV and ELV**
- **Below the EAV**

The Exposure Limit Value (ELV) is 5 m/s²

The red area = immediate action to stop

The Exposure Action Value (EAV) is 2.5 m/s²

The grey area = establish an action plan
**LET THE MACHINE WORK**

**THIS IS HOW TO BEST USE YOUR HAPS-ENABLED MACHINE**

Vibration-dampened HAPS-machines have prestressed spring handles. If you push down too hard on them, you hit a stop and lose the effect of the springs. Press the handle half-way down, and the right amount of feed force is applied automatically. Allow the machine to “float” between the handles.

---

**Rifle bar rotation mechanism**

Provides high impact power to ensure outperforming penetration rate, less dust sensitive.

---

**Keep it clean**

Air flushing lever let you switch the full air flow to the end of the drill steel to blow out dust particles quickly and avoid jamming in the rock or concrete.

---

**Do more, feel better**

The Hand and Arm Protection System, HAPS, helps to reduce harmful vibrations with up to 75 percent. That means you can work much longer without risking your health.

---

**Schhhh!**

The effective silencer is made from impact and wear-resistant polyurethane. It reduces the noise level by more than 50 percent.

---

**Quick tool change**

The robust kick-latch retainer lets you change steels quick and easy.

---

**GET MORE DONE**

Vibration-dampened HAPS-machines have prestressed spring handles. If you push down too hard on them, you hit a stop and lose the effect of the springs. Press the handle half-way down, and the right amount of feed force is applied automatically. Allow the machine to “float” between the handles.
CONQUER THE HARDEST ROCK

The RH drills were the backbone of the Swedish Method. And after more than 60 years development they are still on top.

The RH drills saw the light of day in the 1940s and they were an immediate success. Today, they carry on that tradition. The RH-model was designed for heavier jobs such as bench and secondary drilling, plus drilling for smooth blasting.

Thanks to the robust rifle-bar rotation mechanism and high impact energy for drilling in hard rock. The lightweight RH 571 is perfect for smaller jobs. The RH 658, slightly heavier and more powerful, is suitable for deeper drilling.

The RH 572E combines light weight with extra operator comfort, thanks to the vibration dampened handles and efficient silencer. All models are equipped with T-handles to give you a solid, comfortable grip. The best way to use the RH machines is when you do bench, secondary drilling and smooth blast drilling. Dust generated by drilling obscures vision and poses a health risk.

---

**Pneumatic rock drill**

<table>
<thead>
<tr>
<th></th>
<th>RH 572E</th>
<th>RH 571-5L</th>
<th>RH 571-5LS</th>
<th>RH 658L</th>
<th>RH 658LS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight kg</td>
<td>22.8</td>
<td>17.8</td>
<td>18.9</td>
<td>24</td>
<td>22.8</td>
</tr>
<tr>
<td>Length mm</td>
<td>583</td>
<td>510</td>
<td>510</td>
<td>565</td>
<td>510</td>
</tr>
<tr>
<td>Air consumption at 6 bar l/s</td>
<td>37</td>
<td>39</td>
<td>39</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Impact rate blows/min</td>
<td>2,040</td>
<td>2,100</td>
<td>1,980</td>
<td>2,040</td>
<td>2,040</td>
</tr>
<tr>
<td>Rotation speed rpm</td>
<td>170</td>
<td>190</td>
<td>190</td>
<td>215</td>
<td>215</td>
</tr>
<tr>
<td>Hose connection mm</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Drill steel chuck: Hex mm</td>
<td>22x108</td>
<td>22x108</td>
<td>22x108</td>
<td>22x108</td>
<td>22x108</td>
</tr>
</tbody>
</table>

Part number:
- RH 572E: 8311 0301 76
- RH 571-5L: 8311 0301 29
- RH 571-5LS: 8311 0301 37
- RH 658L: 8311 0301 86
- RH 658LS: 8311 0301 87

Important: Full details of measurement are available in the Safety and Operating Instruction of the product (part no 9800 0970 90). They can be found on www.airprintshop.com. 1) Including drill steel retainer.

---

**Optional equipment**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9030 2047 00</td>
<td>Hand hose, 19 mm x 3 m complete with claw coupling and hose clamps</td>
</tr>
</tbody>
</table>
**RH Drills**  
*For hard rock and holes*

- **Bigger**
  The RH 658 is slightly heavier and more powerful than its little sister. That means it can drill deeper.

- **Quiet breaking**
  The silencer brings down noise levels by up to 50 percent.

- **Clean out!**
  All RH-models have built-in air-flushing. A direct air flow within the drill steel removes drill chippings and prevents the drill from jamming.

- **More comfort**
  The design combines light weight with extra comfort for the operator, thanks to the vibration dampened handles and the efficient silencer.

- **Perfect for...**
  Production drilling in quarry and dimension stone industry.

- **For smaller jobs**
  The RH 572E is specialised for your smaller jobs in confined spaces and can drill to six metres depth.

- **The RH-models have built-in air-flushing which reduces the risk of jamming and gives faster blasting cycles**
- **Stepless throttle for easy collaring**
- **Robust kick-latch retainer for quick and easy tool change**
- **Spring-dampened handles reduce vibrations by 75 percent**
- **Silencer in impact- and wear-resistant polyurethane reduces noise levels by more than 50 percent**

---

**RH 658 LS**

**RH 572 E**

---

**Quiet breaking**

**Clean out!**

**More comfort**

**Perfect for...**

**For smaller jobs**
Rock drilling is tough work, but we always try to make it as easy as possible for you. The light-weight BBD 12 rock drill is great when you need to get smaller jobs done and haven’t got the time to start up the heavy machinery.

The BBD is available in two versions. Equipped with a D-type handle, it is used for horizontal drilling, plug hole drilling, and drilling in concrete to a maximum depth of one meter. Equipped with T-handles, the BBD 12T is designed for vertical drilling of up to two meters.

The medium-weight BBD15E has a combined “T/D handle” that make it easy for you to carry. It offers a high power-to weight ratio and a high operational safety. The E means it’s equipped with spring dampened handles and a highly effective silencer. The largest BBD drill is available in a version with a trigger valve, BBD 15ET. If you have an older machine it’s possible to retrofit it with a trigger conversion kit.

**GRAB A BBD AND GO!**

The BBD drills are light and easy to handle, which makes them ideal for those quick jobs and for working in difficult-to-get-to areas.

---

**Pneumatic rock drill - Light Range**

<table>
<thead>
<tr>
<th>Pneumatic rock drill</th>
<th><strong>BBD 15E</strong></th>
<th><strong>BBD 15E</strong></th>
<th><strong>BBD 15 ET</strong></th>
<th><strong>BBD 15 ET</strong></th>
<th><strong>BBD 12T</strong></th>
<th><strong>BBD 12T-01</strong></th>
<th><strong>BBD 12D</strong></th>
<th><strong>BBD 12D</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>kg</td>
<td>15.5</td>
<td>15.5</td>
<td>15.6</td>
<td>15.6</td>
<td>11.1</td>
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<tr>
<td>Length</td>
<td>mm</td>
<td>575</td>
<td>575</td>
<td>575</td>
<td>575</td>
<td>505</td>
<td>505</td>
<td>565</td>
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<tr>
<td>Air consumption at 6 bar</td>
<td>1/s</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Impact rate</td>
<td>blows/min</td>
<td>2,520</td>
<td>2,520</td>
<td>2,520</td>
<td>2,520</td>
<td>2,580</td>
<td>2,580</td>
<td>2,580</td>
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<tr>
<td>Rotation speed</td>
<td>rpm</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>220</td>
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<tr>
<td>Hose connection</td>
<td>mm</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>16</td>
<td>16</td>
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<tr>
<td>Drill steel chuck: Hex</td>
<td>mm</td>
<td>19x108</td>
<td>22x108</td>
<td>19x108</td>
<td>22x108</td>
<td>22x108</td>
<td>22x108</td>
<td>19x108</td>
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<tr>
<td>Part number</td>
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<td>8311 0104 02</td>
<td>8311 0104 10</td>
<td>8311 0104 12</td>
<td>8311 0104 13</td>
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<td>8311 0102 98</td>
<td>8311 0102 47</td>
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**Optional equipment**

<table>
<thead>
<tr>
<th>Optional equipment</th>
<th>Partnumber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hose, 13 mm x 3 m complete with claw coupling and hose clamps</td>
<td>9030 2066 00</td>
</tr>
<tr>
<td>Hand hose, 16 mm x 3 m complete with claw coupling and hose clamps</td>
<td>9030 2046 00</td>
</tr>
<tr>
<td>Hand hose, 19 mm x 3 m complete with claw coupling and hose clamps</td>
<td>9030 2047 00</td>
</tr>
<tr>
<td>Retro-fit kit BBD 15E to BBD 15ET</td>
<td>8311 0104 95</td>
</tr>
</tbody>
</table>
**BBD Drills**  For lighter jobs

---

**D handle special**  
With the D-handle the BBD 12D is ideal for horizontal rock drilling, plug hole drilling and concrete drilling.

**Shallow drilling**  
The BBD 12D drills holes down to two metres depth.

**Use it for...**  
It’s perfect for plug hole drilling, anchor and wedge hole drilling.

**Ideal for**  
Just like its sister the BBD 12DS with a D-handle works best in horizontal rock drilling, plug hole- and concrete drilling.

**Silent**  
The DS model is equipped with a polyurethane cover that can reduce noise by up to 50 percent.

---

**Vibration reduction**  
HAPS, Hand and Arm Protection System for all E-versions

**Built in air flushing**

---

**Watch the E**  
The BBD’s designated E are equipped with HAPS, Hand Arm Protection System. The vibration reduction lets you work longer hours without risking health.

**Watch the T**  
The BBD’s designated E are equipped with HAPS, Hand Arm Protection System. The vibration reduction lets you work longer hours without risking health.

---

**Watch the T**  
T stands for Trigger, which gives you better start and control during the operation. It’s excellent for gas companies’ pipe service maintenance.
The quick-release chuck is a money saver. It helps you change between drilling and chipping operations and you can do more work in shorter time. Lubrication is especially important to think about when you are drilling. With the DKR 36 you can concentrate on the task at hand.

A built-in lubricator lasts a whole normal shift and helps keep the drill chipper and tools in shape.

The nimble size together with a mass of applications make this a “grab and go”-tool. There is almost always a use for it, and the weight helps you work in almost impossible positions. You can go overhead or under water. Divers especially like this model because they can do so much with it – anything from underwater drilling to chipping – thanks to low feed force.

**GRAB IT AND GO**

The DKR 36 is small enough to fit in a (very deep) pocket and strong enough to do both chipping and drilling.

**Be prepared for anything**
The DKR 36 is tiny, but it handles anything from cracking rocks to chipping brickwork.

**Never mind the lubrication**
We take care of it for you. The DKR 36 has a built-in lubricator that lasts for a whole shift.

**Quick tool change**
The quick release helps you change between drilling and chipping in seconds.

---

**Drill/chippers**

**GRAB AND GO-KIT**
At just 10 kg, it’s easy to carry around. And the steel case is complete with both hose and accessories.

---

### Drill/chipper specifications

<table>
<thead>
<tr>
<th><strong>Drill/chipper</strong></th>
<th><strong>DKR 36</strong></th>
<th><strong>DKR 36 R</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>kg</td>
<td>4.5</td>
</tr>
<tr>
<td>Length</td>
<td>mm</td>
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<tr>
<td>Air consumption at 6 bar</td>
<td>l/s</td>
<td>10</td>
</tr>
<tr>
<td>Impact rate</td>
<td>blows/min</td>
<td>2,820</td>
</tr>
<tr>
<td>Revolutions</td>
<td>rpm</td>
<td>250</td>
</tr>
<tr>
<td>Hose connection</td>
<td>mm</td>
<td>19</td>
</tr>
<tr>
<td>Vibration level 3 axes (ISO 28927-10) - breaking</td>
<td>m/s²</td>
<td>20.2</td>
</tr>
<tr>
<td>Vibration level 3 axes (ISO 28927-10) - drilling</td>
<td>m/s²</td>
<td>21.2</td>
</tr>
<tr>
<td>Sound power level guaranteed (2000/14/EC)</td>
<td>Lw, dB(A)</td>
<td>103</td>
</tr>
<tr>
<td>Sound pressure level (ISO 11203)</td>
<td>Lp, r=1m</td>
<td>88</td>
</tr>
<tr>
<td>Shank size: Round</td>
<td>mm</td>
<td>R19xH14.7x89</td>
</tr>
<tr>
<td>Part number</td>
<td></td>
<td>8463 0103 80</td>
</tr>
</tbody>
</table>

---

### Accessories

<table>
<thead>
<tr>
<th><strong>Accessories</strong></th>
<th><strong>Part number</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hose 10 mm x 3 m complete with claw coupling and quick coupling (incl. nipple)</td>
<td>9038 2042 00</td>
</tr>
<tr>
<td>Adapter for fitting 8, 10, 12 mm drills (only for DKR 36)</td>
<td>0701 1001 32</td>
</tr>
<tr>
<td>Knock-out block for removal of 8, 10, 12 mm drills</td>
<td>3085 0210 00</td>
</tr>
</tbody>
</table>

Please note: the above hand hose is equipped with Atlas Copco standard claw couplings. For N. American and Australian markets, hand hoses with couplings according to the local claw coupling standard should be used.

---

**Kits DKR 36**

<table>
<thead>
<tr>
<th><strong>Kits</strong></th>
<th><strong>DKR 36</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Part number</td>
<td>8463 0103 61</td>
</tr>
</tbody>
</table>
**PNEUMATIC ROCK DRILL - MEDIUM RANGE**

**ALL-ROUNDERS**

**SAVE MONEY**

As soon as you pick up the drill, you’ll feel the quality. That pays off from day one.

It’s solid, well made. Start it up and you’ll notice the raw power. Your drill is a good long-term investment and it makes money from day one. For every litre of air you put in, you’ll get high impact energy out.

Our water flushed, pusher leg mounted rock drills are designed for driving drifts and tunnels with a small cross section. They are intended for use for hole diameter range of 27 to 41 mm (1-1 5/8 in) with Hex 22 (7/8”) rotation shank as a standard. When used with Atlas Copco tapered button bits, penetration rate will improve some 25-50 percent compared to conventional integral steels. And they have three to five times longer service life. These all-rounders can be used in a wide range of applications. They have a robust rifflerbar rotation, long stroke length and high penetration rates.

<table>
<thead>
<tr>
<th>Rock drills</th>
<th>BBC 10W</th>
<th>BBC 16W</th>
<th>BBC 34 WTH</th>
<th>BBC 34 W</th>
<th>BBC 34 WS²</th>
<th>BBD 94 W</th>
<th>BBD 94 WE²</th>
<th>BBD 94 WS ATEX</th>
<th>RH 656 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hole range</td>
<td>mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Weight</td>
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<td>Length</td>
<td>mm</td>
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<td>670</td>
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<td>88</td>
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<td>97</td>
<td>97</td>
<td>48</td>
</tr>
<tr>
<td>Impact rate</td>
<td>blows/min</td>
<td>2,340</td>
<td>2,340</td>
<td>2,280</td>
<td>2,280</td>
<td>2,280</td>
<td>3,300</td>
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<td>70</td>
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<td>16.6</td>
<td>20.4</td>
<td>20.4</td>
<td>20.4</td>
<td>15</td>
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<tr>
<td>Sound power level guaranteed (2000/14/EC)</td>
<td>Lw, dB(A)</td>
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<td>114</td>
<td>127</td>
<td>127</td>
<td>120</td>
<td>125</td>
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<tr>
<td>Part number</td>
<td>8311 0401 10 8311 0303 46 8311 0408 10 8311 0408 05 8311 0303 47 8311 0206 09 8311 0303 44 8311 0206 12 8311 0303 45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1) Important: Full details of measurement is available in the Safety and Operating Instruction of the product. It can be found on www.acprintshop.com.

Data at 6 bar (90 psi) air pressure. 2) Silenced version

**Pusher legs**

<table>
<thead>
<tr>
<th>Product type</th>
<th>BMT 51</th>
<th>ALF 71</th>
<th>ALF 71-1</th>
<th>ALF 720</th>
<th>ALF 720-1</th>
<th>BMK 62S</th>
<th>BMK 91RS</th>
<th>ALF 67/80</th>
<th>ALF 67/80D</th>
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</thead>
<tbody>
<tr>
<td>Suitable for rock drill:</td>
<td>BBC 16W, 34W</td>
<td>BBC 16W, 34W</td>
<td>BBC 16W, 34W</td>
<td>BBD 94W</td>
<td>BBD 94W</td>
<td>RH 656W</td>
<td>BBD 94WS</td>
<td>BBC 16W, 34W</td>
<td>BBD 94W</td>
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<tr>
<td>Feeding length</td>
<td>mm</td>
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<td>1,300</td>
<td>950</td>
<td>1,300</td>
<td>1,200</td>
<td>1,300</td>
<td>1,300</td>
<td>1,855</td>
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<tr>
<td>Length retracted</td>
<td>mm</td>
<td>1,658</td>
<td>1,805</td>
<td>1,455</td>
<td>1,970</td>
<td>1,830</td>
<td>1,815</td>
<td>1,870</td>
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<tr>
<td>Length extracted</td>
<td>mm</td>
<td>2,958</td>
<td>3,105</td>
<td>2,405</td>
<td>3,270</td>
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<tr>
<td>Weight</td>
<td>kg</td>
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<td>19</td>
<td>16</td>
<td>17</td>
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<tr>
<td>Piston bore</td>
<td>mm</td>
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<td>70</td>
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<td>70</td>
<td>70</td>
<td>53</td>
<td>67</td>
<td>67/80</td>
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</tbody>
</table>
Rock drills  Medium range

**LEOPARD**  
BBC 34 W  
- Highly efficient in medium to hard rock  
- Long stroke, high impact energy  
- Large piston diameter makes it very efficient even at low air pressure  
- Powerful rifle bar rotation mechanism  
- Pusher leg control placed in back head of the rock drill

**PANTHER**  
BBD 94 W  
- High performance rock drill for soft to hard rock  
- Short stroke and high impact rate makes it ideal for soft rock  
- Large piston diameter for high efficiency even at low air pressure  
- Ratchet wheel rotation mechanism  
- Pusher leg control is placed on the pusher leg

**RH 656 W**  
- Suitable for soft to medium hard rock  
- Good ratio between high penetration/low air consumption  
- Due to low weight, it can also be used as a sinker. Supplied with T-handle  
- Robust rifle bar rotation mechanism  
- Pusher leg control is placed on the pusher leg

**PUMA**  
BBC 16 W  
- Highly efficient in medium to hard rock  
- Long stroke, high impact energy  
- Large piston diameter makes it very efficient even at low air pressure  
- Powerful rifle bar rotation mechanism  
- Pusher leg control placed in back head of the rock drill

**Pusher legs  Your best legs**

These pusher legs were made with an aluminium alloy that was first developed for use in spacecrafts. They’re strong and feature a large piston diameter for high feed force. The simple and robust design makes operations reliable and promise minimum maintenance time.

**Double action**  
The Alf 72-pusher legs are double-acting, they push out and pull back in.

**Quick connect**  
When time is short, simple connection means money saved.

**Easy reach**  
The feed control is placed on the pusher leg, which makes it easy to reach.

**Double telescopic**  
The legs provide a long feeding length from a relatively short length feed. Intended for drilling holes high up or when extra feed length is required.

**GREAT ERGONOMICS**  
Spacecraft aluminium alloys makes the legs strong and light.

**VERSATILE**  
The Puma is an all-round rock drill suitable for most drilling applications in medium to hard rock.

**GET MORE DONE**  
The Puma has good penetration rate. And the quality rifle bar rotation mechanism can handle the load.

**Anytime, anywhere**  
With its long stroke the Puma has good penetration rate. And the quality rifle bar rotation mechanism can handle the load.

**Easy reach**  
With the pusher leg control placed in back head of the rock drill, they are easy to reach.

**Drill deep**  
Easy reach

**Go further**  
The double-telescopic leg makes for long reach.
Stoppers

**KEEP PRODUCTION ON THE UP!**

You can go deep with our all-steel stopers. These rock drills will deliver even at low air pressure.

Stoppers are made for vertical or inclined environments. The machines are especially designed for production drilling, raise driving and roof bolting. Thanks to the ratchet wheel rotation and short piston stroke you get good penetration rates in soft and medium hard rock.

While you are drilling, air blows through the system to clean the rotation chuck and lubricate the drill steel shank. The WR versions have clockwise rotation and can be used for tightening or installing screen on threaded roof bolts.

**Powerful**
The stoper provides short stroke with good penetration rates. The large piston diameter gives high efficiency even at low air pressure.

**Go clockwise**
The WR versions come with clockwise rotation for tightening nuts and roof bolting.

**Falcon for softer rocks**
The BBD 46WS – Falcon provides a high impact rate for good performance in soft to medium rock.

**When you do ...**
Production drilling, raise driving and bolting in soft to medium hard rock.

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### Stoppers

<table>
<thead>
<tr>
<th>Feature</th>
<th>BBC 34 WS-6</th>
<th>BBC 34 WS-8</th>
<th>BBC 46 WS-6</th>
<th>BBC 46 WS-8</th>
<th>BBC 46 WR-6</th>
<th>BBC 46 WR-8</th>
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</thead>
<tbody>
<tr>
<td>Hole range</td>
<td>27-41</td>
<td>27-41</td>
<td>27-41</td>
<td>27-41</td>
<td>27-41</td>
<td>27-41</td>
</tr>
<tr>
<td>Weight</td>
<td>45.5</td>
<td>46.5</td>
<td>39</td>
<td>40</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Length retracted</td>
<td>1,810</td>
<td>1,810</td>
<td>1,435</td>
<td>1,650</td>
<td>1,435</td>
<td>1,650</td>
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<tr>
<td>Length extracted</td>
<td>2,380</td>
<td>2,780</td>
<td>2,205</td>
<td>2,620</td>
<td>2,205</td>
<td>2,620</td>
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<tr>
<td>Air consumption</td>
<td>1/4s</td>
<td>1/4s</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Impact rate</td>
<td>2,340</td>
<td>2,340</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
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<tr>
<td>Piston diameter</td>
<td>80-90</td>
<td>75-75</td>
<td>75</td>
<td>75</td>
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<td>75</td>
</tr>
<tr>
<td>Stroke length</td>
<td>70</td>
<td>70</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Vibration level 3 axes</td>
<td>30.5 m/s²</td>
<td>30.5 m/s²</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Sound power level guaranteed</td>
<td>129 dB(A)</td>
<td>129 dB(A)</td>
<td>124</td>
<td>124</td>
<td>124</td>
<td>124</td>
</tr>
<tr>
<td>Sound pressure level</td>
<td>121 Lp, r=1m</td>
<td>121 Lp, r=1m</td>
<td>121</td>
<td>121</td>
<td>121</td>
<td>121</td>
</tr>
<tr>
<td>Part number</td>
<td>8311 0104 03</td>
<td>8311 0104 04</td>
<td>8311 0202 03</td>
<td>8311 0202 11</td>
<td>8311 0202 29</td>
<td>8311 0202 37</td>
</tr>
</tbody>
</table>

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1) Important: Full details of measurement is available in the Safety and Operating Instruction of the product. It can be found on www.acprintshop.com.

Data at 6 bar (87 psi) air pressure. R = right rotation.
GO FOR TAPERED
Tapered drilling equipment beats integral in speed and cost of operations.

First and foremost, penetration is faster with tapered steel. In some rock you can shave time by over 50 percent. Tapered bits are also easier to use; collaring is faster, drilling straight holes is simpler and vibrations are considerably lower. And in addition to all of this, tapered equipment actually gives you lower total drilling costs. Still not convinced? Do a test run and judge for yourself.

FOUR ACTIONS FOR SUCCESSFUL DRILLING

ACTION 1: PERCUSSIVE IMPACT
Percussive drilling breaks the rock by hammering impacts transferred from the rock drill to the drill bit at the bottom of the hole.

ACTION 2: FEED FORCE
The purpose of the feed force is to keep the drill bit in close contact against the rock. The engineering challenge is to combine high feed force with good rotation.

ACTION 3: ROTATION
Rotation moves the drill bit to a new position to make the next blow as effective as possible. When the drilling starts you need even and smooth rotation.

ACTION 4: FLUSHING
Drill systems with a high output need good flushing technology to be able to remove drill cuttings. Particle size, shape and material affect the flushing methods.
GO INDUSTRIAL

With our heavy range you can break rock with industrial efficiency and still keep noise down.

When you see the DSI designation on a drill, you’ll know it’s made for bigger operations. DSI stands for Dimension Stone Industry and these well-proven pneumatic rock drills can be mounted on a drill column to make you really productive. The BBD and BBC-models can drill holes of up to 27-41 mm in diameter and they come equipped with an H22 chuck and air flushing as standard. You can get water flushing as an option and the machines can be equipped with both cable or chain feeds. These heavy drills come from a proud lineage of products.

We have been crafting quality tools for more than 100 years and every bit is machined to the highest standards. But quality is more than just the nuts and bolts. It’s also how you experience the machine. The silenced BBC 34DSI is pure quality in all aspects. If you are operating in sensitive areas the silencer can prove invaluable for your business.

This is dimension stone

The most common commercial stones are marble, granite and slate. Dimension stone is the name given to natural rock that has been quarried and shaped to certain dimensions or specifications for use in building, construction, monument and tombstone industries.
Heavy range  For industrial use

Recipe for productivity
The BBD 94DSI weighs 26 kg, has great impact energy and can handle low air pressures.

When to use ...
Short stroke and high impact rate makes it ideal for soft rock.

Harder stuff
The BBC 34-DSI is highly efficient in medium to hard rock.

Cut noise
The silencer can reduce the noise by up to 5 dB(A), which is perceived as a 50 percent improvement of noise levels to the human ear.

Rotation that lasts
The powerful rifle bar rotation mechanism is dimensioned to handle industrial demands.

HIGH EFFICIENCY
A large piston diameter makes the drill efficient even at low air pressure.

CORRECT MOUNTING
The rock drills can be rig-mounted for use in a number of applications within the dimension stone industry. For good results, however, the following conditions must be met:

Use the attachment point (1) on the underside of the rock drill as the main means of fixing it to the cradle. To further secure the rock drill, a support (2) must be mounted at the rear end and attached with the side bolts. To minimize stress and hole deviation, the rock drill chuck and drill steel support must be aligned perfectly. If drill steels longer than 1.8 m are used, an intermediate drill steel support is recommended to improve hole straightness.

ADEQUATE FEED FORCE
To get the most from your drill’s impact energy, the drill bit has to be pressed against the rock with a certain force. How much force depends on the impact energy and the rock’s hardness. Higher air pressure gives higher impact energy.

On rigs for light rock drills, a minimum feed force of 1.4 kN (140 kp) is recommended for each rock drill. The feed system must include a pressure regulator for seamless control of the feed force.

If two or more rock drills are mounted on the same feed unit, the cradle must be designed to permit variations in the rate of penetration between the individual drills while maintaining the correct feed force on each rock drill.

<table>
<thead>
<tr>
<th>Rock drill type</th>
<th>BBD 94-DSI</th>
<th>BBC 34-DSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height to drill center (h)</td>
<td>mm</td>
<td>53</td>
</tr>
<tr>
<td>Attachment bolt diameter (1)</td>
<td>mm</td>
<td>23-24</td>
</tr>
<tr>
<td>Attachment hole diameter (2)</td>
<td>mm</td>
<td>23-24</td>
</tr>
</tbody>
</table>

AIR SUPPLY
The rock drill needs a certain flow of air at a given pressure to produce sufficient impact energy. The DSI-rock drill is designed for optimum performance at an air pressure of 6 bar, unless stated otherwise. Air pressure and flow should be measured dynamically at the intake nipple of the rock drill.

EASY RIG MOUNTING

LUBRICATION
The drill rig must be fitted with an in-line lubricator that is compatible with the air pressure and flow rate of your rock drills. Fill the lubricator with air tool oil that has a viscosity suited for the ambient working temperature. When the lubrication is effective, a continuous film of oil wets the neck of the shank adapter during operation. Remember that oil in the exhaust air is not a guarantee for effective lubrication. See recommended air tool lubricant table on page 18.

GREAT FOR BUSINESS
GREAT ERGONOMICS

Recipe for productivity
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<td>mm</td>
<td>23-24</td>
</tr>
<tr>
<td>Attachment hole diameter (2)</td>
<td>mm</td>
<td>23-24</td>
</tr>
</tbody>
</table>
### ROCK DRILL OIL, SYNTHETIC LUBRICANT

**Oil volume** | l | 1 | 5 | 20
---|---|---|---|---
**Weight** | kg | 1.1 | 5.8 | 23
**Part number** | | 8099 0202 36 | 8099 0202 02 | 8099 0202 15

BBC/BBD/RH – Optional equipment

<table>
<thead>
<tr>
<th>Pos</th>
<th>Description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed air hose for rock drill and feed, fitted with couplings for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>BBC 16, BBC 34, BBD 46</td>
<td>9030 2091 00</td>
</tr>
<tr>
<td>2</td>
<td>RH 656</td>
<td>9030 2067 00</td>
</tr>
<tr>
<td>2</td>
<td>BBD 94</td>
<td>9030 2068 00</td>
</tr>
<tr>
<td>3</td>
<td>Water flushing hose with fitted couplings for BBC, BBD, RH</td>
<td>9030 2069 00</td>
</tr>
</tbody>
</table>

Lubricator for BBC, BBD, RH

<table>
<thead>
<tr>
<th>Pos</th>
<th>Description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BLG 30</td>
<td>B202 5102 05</td>
</tr>
<tr>
<td>4</td>
<td>CLG 30</td>
<td>B202 5102 39</td>
</tr>
</tbody>
</table>

Tools for roof bolting with BBD 46 WR

<table>
<thead>
<tr>
<th>Pos</th>
<th>Description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Mandrel for 25 mm bolt</td>
<td>3081 0001 00</td>
</tr>
<tr>
<td>6</td>
<td>Socket for 37 mm hexagon nut</td>
<td>3081 0008 00</td>
</tr>
</tbody>
</table>

**Rock drill oil, synthetic lubricant**

*Use a mineral-based air tool oil.*

<table>
<thead>
<tr>
<th>Ambient temperature</th>
<th>Viscosity grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>-30 to 0°C</td>
<td>ISO VG 32-68</td>
</tr>
<tr>
<td>-10 to +20°C</td>
<td>ISO VG 68-100</td>
</tr>
<tr>
<td>+10 to +50°C</td>
<td>ISO VG 100-150</td>
</tr>
</tbody>
</table>