ABG VARIOMATIC SCREEDS

Volvo Screeds 1.5-10.0 m





Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

The road to success

Our range of road machinery combines the heritage of the Blaw Knox, Ingersoll Rand and ABG brands with the engineering excellence of Volvo. The result is a line-up of Volvo pavers and compactors which achieve an unrivalled level of quality, in both paving and compaction applications.

Building on our proud history, we continue to innovate our products to offer customers the best solutions for their operation. Our Compact Assist and Pave Assist products are just two examples of how we are developing intelligent solutions to ensure our machines deliver world-class performance and results long into the future.























Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.

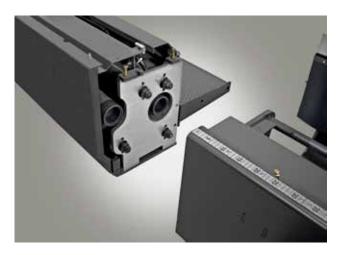


The heart of the paver

Take your paver's performance to the next level with Volvo Variomatic screeds, built on extensive road machinery experience and advanced technology. To ensure every paving job is a success, Volvo screeds are made of the highest quality material and undergo an extensive manufacturing process. Enjoy ultimate paving performance and continuous state-of-the-art support with Volvo, a partner to trust.

Productivity at speed

Add or remove screed extensions in minutes with no special tools required with Volvo's unrivalled quick coupling system. Paving crew members can change bolt-on extensions efficiently and safely, saving time and money. Thanks to the efficient screed heating system, the screed reaches the required working temperature quickly, so you can get to work without delay.



Control with ease

Enhance ease of operation, comfort, performance and quality of work. The intuitive screed control units give you total control during the paving process, while easy-to-use Power-Float End Gates guarantee perfect results. Experience superb visibility thanks to the low profile compact design of the screeds and quickly adjust the height of the extendable screeds during the work process.



Secured versatility

Versatile and effective in paving widths up to 10 meters and with a range of compaction systems for every need, Volvo Variomatic screeds can take on a variety of project types and applications. From cold mixes to hot mixes and all types of special profile, Volvo's range of screeds cover a spectrum of applications, so you can choose the best screed for the job.



Designed for durability

It's full speed ahead thanks to Volvo screeds, built with quality components to ensure long lasting performance. The specially-designed tamper bars are fully hardened for long term durability, and achieve material target density with ease. What's more, Volvo base plates are chamfered, ensuring a uniform finish, and made of wear-resistant steel, for reliable performance year after year.





PRECISE, HIGH QUALITY RESULTS

Achieve high-quality surfaces with Variomatic screeds. Unique double tamper technology offers the highest compaction density levels behind the screed, essential for thick asphalt and cement treated base material. The stable screed guide system secures accurate movement and the screed tensioning device ensures the correct angle of attack across the entire screed. An optional screed load device prevents movement at start-off.

The perfect choice for your paver

Screed guide system

Two purpose-build guide cylinders, in combination with four guide rods, on each side guarantee smooth and precise movement of the hydraulic extensions for longlasting performance.

Single tamper screed

Depending on applications, jobsite conditions and material, rely on the versatile, single tamper screed for a smooth surface.

Quick coupling system

Safely add or remove screed extensions in minutes with no special tools required thanks to Volvo's quick coupling system.

Efficient screed heating

Three independent heating circuits, plus two heating bars per segment, reach uniform temperature quickly and efficiently.



Double tamper screed

Rely on the industry-leading double tamper screed for projects demanding high density results.

Intuitive control units

Easily control paving performance thanks to the logicallygrouped controls on the intuitive EPM screed control units.

Optional hydraulic end gates

Two hydraulic cylinders per end gate operate independently and enable the end gates to follow the profile of the surface, preventing unwanted flow of material to the sides while maintaining consistent screed behavior.



Low profile compact design

See and do even more thanks to the low profile compact design of the screeds, offering greater visibility of the auger.

Hydraulic height adjustment

Quickly and easily adjust the height of the hydraulic screed extensions via the screed panel, during the paving process.

Special profiles

The unique VB 79/89 and VDT-V 79/89 screeds are the perfect choice when paving special crown profiles and sloping shoulders in road surfaces.

Ease of lubrication

Daily maintenance work is reduced to a minimum thanks to the progressive distribution of lubrication.

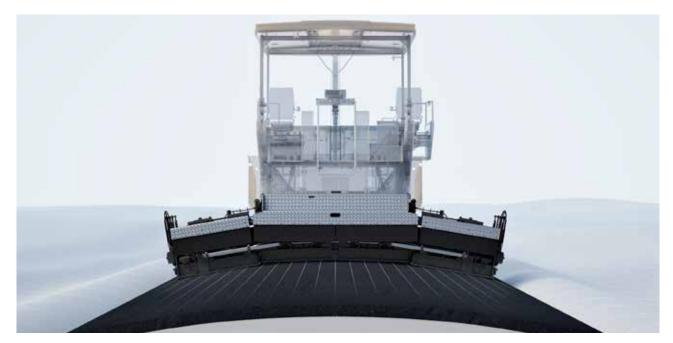
Grade and slope controls

Screed supports integration with state-of-the-art grade and slope control systems.

Change paving widths

Variomatic screed extensions move via the screed panels, enabling the crew to accurately follow the quickly changing widths.

Technical information



Tamper technology

With the Duotamp screeds the main compaction work is achieved by the double tampers which lie in the material flow in front of the vibration screed, guaranteeing exact proportioning and consistent high density of the paving material over the full working width. Finished level tolerances are tighter controlled even with large variations in subbase conditions, thanks to the material being compacted twice before it leaves the screed. The vibration system subsequently ensures a smooth finish of the wearing course. With the double tamper technology, users achieve a 5 - 7% higher degree of compaction than with the combination screeds with a single tamper and vibration system known for their good compaction effect.



For large working widths a screed load device is offered as a sensible extension to the screed anti-climbing lock. It prevents the occurrence of start-off bumps by exerting pressure on the screed for a short period after start-up. The force acts on a broad basis owing to the arrangement of the cylinders.





Screed lock

The screed lock prevents the screed from sinking into the freshly paved asphalt when the paver stops. The screed is held at a constant height by the cylinders. This function is switched off automatically when the paver restarts paving.





Auger assembly

We have associated auger assembly options for all corresponding screed assembly options.

Screed anti climbing lock

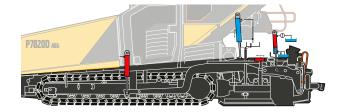
After an interruption in the paving process, e.g. due to material supply, the material cools in the auger channel. When paving is continued, the screed anti-climbing lock cylinders exert pressure on the screed over the first few metres so that it is not raised by the cooled paving material. As a result, the screed anti-climbing lock improves pavement quality by reducing the occurrence of bumps.

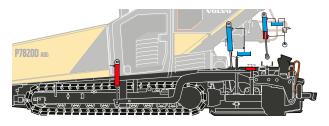
Screed assist

With paved material with a low load-bearing capacity, it may happen that the screed sinks into the material owing to its weight, losing its positive angle of attack. In order to prevent this, part of the screed weight is shifted by the transport cylinder onto the paver.

Screed tensioning device

For very large working widths the screed end pieces are always subjected to torsion resulting from frictional forces between the screed and the paving material. These forces are effectively offset by the screed tensioning device, ensuring a constant angle of attack across the screed. Thanks to a hydraulic cylinder, the length of the tensioning device can be adapted to follow the changing widths of Variomatic screeds. The use of the tensioning device is recommended for working widths above 7.50 m.







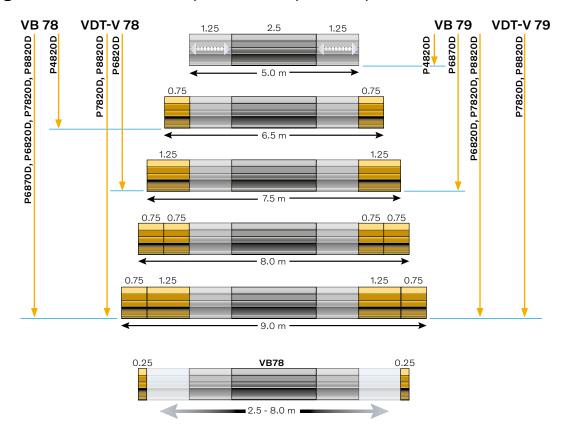
Hydraulic height adjustment of extensions

The height adjustment feature serves to accurately adapt the height of the extendable screeds to the basic screed. Instead of the standard mechanical adjustment feature, Volvo also offers a convenient hydraulic height adjustment device.

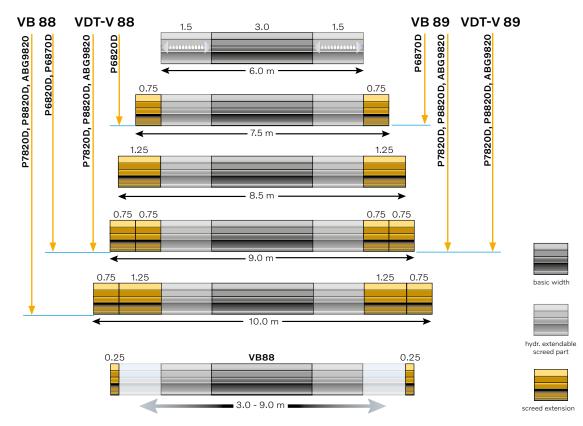


Paving widths and specifications

Paving widths with VB 78, VDT-V 78, VB 79, VDT-V 79

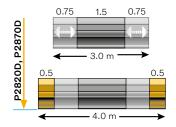


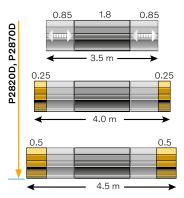
Paving widths with VB 88, VDT-V 88, VB 89, VDT-V 89



Paving widths with VB 30

Paving widths with VB 40





| | | Single tamper screeds | | | | | | Double tamper screeds | | | |
|----------------------------------|----|-----------------------|------------------|------------|-----------|-----------|-----------|-----------------------|-----------|-----------|-----------|
| Screed type | | VB 30 | VB40 | VB 78 | VB 79 | VB 88 | VB 89 | VDT-V 78 | VDT-V 79 | VDT-V 88 | VDT-V 89 |
| Basic width | m | 1.5 | 1.8 | 2.5 | 2.5 | 3.0 | 3.0 | 2.5 | 2.5 | 3.0 | 3.0 |
| Adjusting range | m | 1.5 - 3.0 | 1.8 - 3.5 | 2.5 - 5.0 | 2.5 - 5.0 | 3.0 - 6.0 | 3.0 - 6.0 | 2.5 - 5.0 | 2.5 - 5.0 | 3.0 - 6.0 | 3.0 - 6.0 |
| Max. paving width ¹ | m | 4.05 | 4.55 | 9.0 | 9.0 | 10.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 |
| Min. paving width | m | 0.8 | 0.8 | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 3.0 |
| Screed extension | m | 0.525 | 0.26 | 0.25 | - | 0.25 | - | - | - | - | - |
| | m | - | 0.525 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | m | - | - | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Reduction in basic width | m | 0.7 | 1.0 | 0.50 | 0.50 | 0.50 | 0.50 | - | - | - | - |
| Depth of base plate | mm | 335 | 335 | 350 | 350 | 350 | 350 | 350 | 350 | 350 | 350 |
| Tamper | | 1 | 1 | | 1 | | | 2 | | | |
| Stroke 1st tamper | mm | 5 | 3 | 5 | | | | 0/3/6/10 | | | |
| Stroke 2nd tamper | mm | - | - | - | | | | 5 | | | |
| Angle | ۰ | 50 | 50 | 50 | | | | 45/50 | | | |
| Width | mm | 40 | 38 | 43 | | | | 43/43 | | | |
| Frequency ² | Hz | 0-26.5 | - | 0 -27.5 | | | | 0 - 27.5 | | | |
| Vibration frequency ² | Hz | 0-46.3 | - | 0 - 53.360 | | | | 0 - 53.360 | | | |
| Heating system | | | | | | | | | | | |
| Electric/Propane | | Е | Е | E/P | Е | E/P | Е | E/P | Е | E/P | Е |
| Crown adjustment | % | -2/+4 | -3/+4 | -2/+4 | -2/+4 | -2/+4 | -2/+4 | -2/+4 | -2/+4 | -2/+4 | -2/+4 |
| mechanical/hydraulic | | m/h | m/h | hydraulic | | | | hydraulic | | | |
| Articulated screed sections | | - | - | - | yes | - | yes | - | yes | - | yes |
| Adjustment range | % | - | - | - | ± 10 | - | ± 10 | - | ± 10 | - | ± 10 |
| Weights ³ | | | | | | | | | | | |
| Basic screed ⁴ | kg | 1 855 - 1 875 | 1 640 - 1 720 | 3 500 | 3 950 | 3 950 | 4 400 | 3 750 | 4 200 | 4 300 | 4 700 |
| Extension 0.25 m | kg | - | - | 155 | | | | - | | | |
| Extension 0.26 m | kg | - | 90 | - | | | | - | | | |
| Extension 0.50 m | kg | 120 | - | - | | | | - | | | |
| Extension 0.525 m | kg | - | 155 | - | | | | - | | | |
| Extension 0.75 m | kg | - | - | 375 | | | | 450 | | | |
| Extension 1.25 m | kg | - | - | 555 | | | | 595 | | | |

 $^{^{\}rm 1}$ Max. paving width depends on the paver in question

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Folding end gates

Bolt-on screed extensions



Hydraulic end gates



Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

 $^{^{\}rm 2}$ May vary depending on the paver type

³ Weights may vary, depending on the heating system

⁴ Incl. towing arms and end plate

