ProCarve – Pure Sport.
Sun, snow and pure sport.

Step into the binding and off to the piste. Expansive skiing terrain, an unending view, fresh winter air – is there anything more beautiful than soaking in the alpine panorama and then carving down the mountainside?
ProCarve – the mountains are calling!

Expressing your individual lifestyle through winter sport, charging up in the mountain environment and enjoying unlimited freedom.

Exercise out in the fresh air?
Much more than that!
ProCarve provides targeted support for ambitious hobby and weekend athletes in their individual alpine winter sports. It also meets the highest demands of performance athletes on the piste. It has been designed especially for skiing and snowboarding with a lot of carving.

The dampers are a combination of a pneumatic spring and a hydraulic unit, developed and produced by the French company Fournales – renowned in motorsport.

Due to the similar motions involved, ProCarve is also suitable for other sports, such as wakeboarding and waterskiing. Optimal support in summer or winter.
What altitude will it be today?

Going down the mountain freestyle, whether in powder or on prepared pistes – with ProCarve there are almost no limits on creativity. And none at all on altitude.
Hello winter, hello mountains, hello sport!
Enjoy the moment ...
... show confidence in carving down the piste:

Regardless of whether the amputation is above or below the knee, flexion and extension are always an interplay of the knee, ankle and hip joint. Thanks to the high-performance and robust damping units in the ankle and knee joints, movements are supported in a targeted manner with ProCarve.

Damping in the flexion direction is adjusted using the high-pressure air pump provided, while decompression damping is set using the adjustment screw on the hydraulic damper – both according to body weight and the user’s individual riding style.
Take a breather.

The flexion in the ProCarve knee joint works against the resistance of the damper in the engaged state. But a break is needed every now and then. And in order to sit comfortably – whether in the chairlift or during après-ski – the knee joint can be disengaged.

The knee joint is disengaged simply by pulling on the attached belt, which increases the flexion angle to up to 80° – without any resistance from the damper. Once you’re ready to continue, just re-engage the knee joint in the extended position with a simple hand movement and nothing is stopping you from carrying on.
ProCarve – the system.

3R2 ProCarve Prosthetic Knee Joint
The aluminium sports knee joint is equipped with a high-performance damper for movement control and a disengagement function to make sitting comfortable. The damping element – a combination of a pneumatic spring and a hydraulic unit – ensures dynamic movement. The individually adjustable air pressure controls the flexion movement and the hydraulics dampen the extension movement. Together with the ProCarve foot component, this provides a targeted and coordinated system solution for users with an above-knee amputation or knee disarticulation.

1E2/1E2=1 ProCarve Prosthetic Foot
The ProCarve foot can be used as an independent unit or in combination with the ProCarve knee joint. It is connected directly to the ski binding or combined with the footshell with a shape suited especially for snowboard boots. Like the ProCarve knee, the foot includes a high-performance, robust damping unit for controlling movement around the pivot point. The function and the adjustment options are the same as for the damping unit in the knee joint. A second version of the foot (1E2=1) offers increased stiffness, from which advanced riders with below-knee amputations can profit the most.
**Note**

Please note that you must first practice using a ProCarve prosthesis with your prosthetist, therapist or ski/snowboard instructor.

**Trial fitting**

Are you interested in a trial fitting with the ProCarve system? Contact your prosthetist or a medical supply company.