

hydro-massage guide

fluvo[®]
innovative schwimmbadtechnik



Holistic
effects

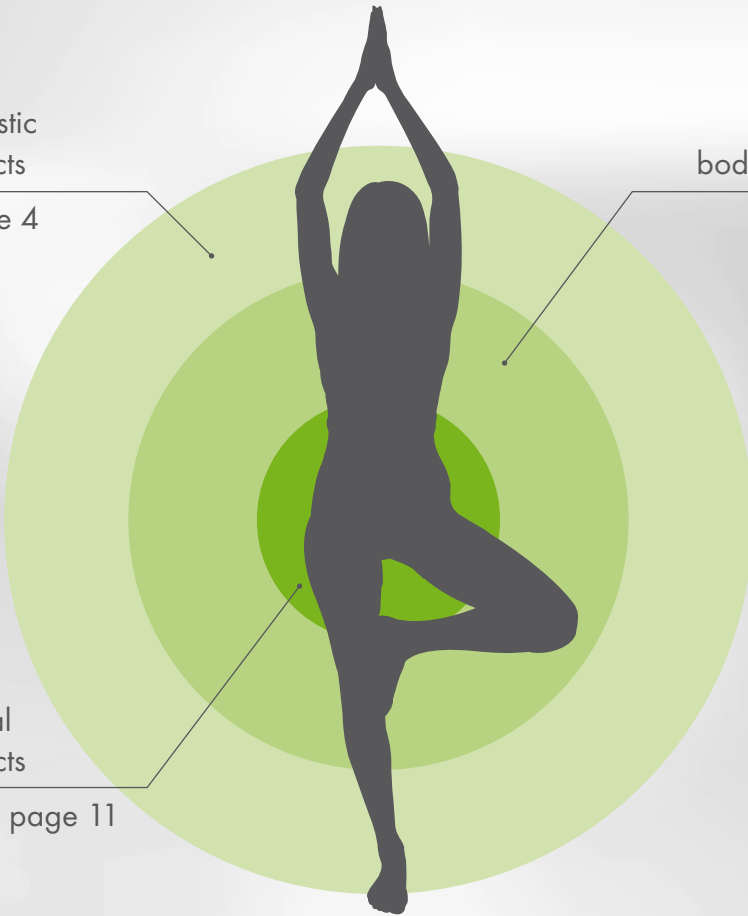
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hydro-massage – gentle regeneration

The hectic daily routine is over, stress is banished – that's when it's high time for complete relaxation. The magical answer to persistent sensory overload is hydro-massage.

Body, spirit and soul rediscover their natural harmony. Water and air currents gently massage the neck, shoulders, back, posterior and legs and act on the most important foot reflex zones. Tissue and joints lying deeper below the surface also enjoy these benefits. hydro-massage from **fluvo**[®] is a unique concept with innovative jets; the ingenious combination of water and air soothingly refreshes the body without any effort or force. hydro-massage from **fluvo**[®] is a practical investment in your health and a substantial contribution to the quality of your life. It also brings the fun into swimming in your pool.

hydro-massage – holistic effects

Movement in the water conveys well-being and balance. Weightlessness and distance from the stress of everyday life help people to find themselves and gain a new relationship with his body. Body, soul and spirit are again perceived as a unity. The positive physical stimuli of hydro-massage lead to a positive mood: we feel well again in our skin.

Physical and mental relaxation is a correlation. The physical relaxation is a measurable lowering of muscle tone. Nerve impulses that stimulate the muscle to tension, become less, the existing basic tension decreases slightly, the muscle relaxes. Something similar happens in mental-spiritual relaxation in the brain. The frequency in which the neural networks of the brain communicate with each other, decreases measurably. The hydro massage can help through physical relaxation to reach mental and emotional balance.

Of course, we can also consciously share our relaxation with other people and enjoy the bathing experience together. This has a long tradition. When bathing, the social position and importance disappears and man comes to the foreground.





Fig.
Jet with massage strength *comfort*

hydro-massage – general bodily effects

Buoyancy

Each body loses in water seemingly as much weight as the amount of fluid it displaces weighs (Archimedes principle). This is 10 % of our body weight. When we are standing up to our neck in the water, our body weighs only 10 % of our normal body weight. The result is a feeling of lightness and muscle tension is reduced. Relieving of the joints results in pain relief. The easier movement in the water increases the motion range in the joints.

Water temperature

Whether we feel a bit cold or warm is mediated by receptors in the skin. The cold receptors are more superficial in the skin than the heat receptors. However, the temperature perception is dependent on the temperature difference and the stimulus area. Indifferent is the range between 22°–24° C in the air, and in the water between 34°–35° C. For hydro-massage through massage jets, the range from 27° C water temperature is suitable because the bather actively massages and therefore requires a rather „invigorating“ water temperature.

Hydrostatic pressure

Air pressure is important for maintaining body function. In addition to the air pressure, the weight of the water as a hydrostatic pressure has a positive effect on our body. The following effects are achieved:

- Cardiovascular stimulation: The pressure of the water on the veins (blood vessels that bring the spent blood back to the heart) reduces its lumen (inner diameter of the vessels). This will pump blood back to the heart more quickly and increase cardiac output volume, i.e. the heart pumps more blood to the periphery per beat.
- Stimulation of the lymphatic system, the body circumference can decrease by several centimeters.
- Deeper breathing: i.e. more oxygen is absorbed into the blood.

Overall, this results in a general vitalization for the bather.



Fig.
On the left, jet with massage strength **comfort**
On the right, jet with massage strength **pulsive**



hydro-massage – local effects

Reduction of muscle tension and stimulation of the metabolism

Massage reduces muscle tension and stimulates the metabolism. A tense muscle leads to reduced blood flow, i. e. metabolic waste products are not transported away, nutrients do not get into place, hyperacidity occurs in the intercellular space. Through the massage, the muscle softens, its diameter decreases, it comes to a better circulation, to an improved oxygenation of the cells, skin pores open and toxins are flushed out.

Circulation increase

It has been proven that the massage leads to increased blood flow to the skin and underlying muscles. Due to the mechanical stimulus, mast cells are stimulated to release a tissue hormone (histamine), resulting in enlargement of the capillaries. Capillaries are tiny blood vessels that serve for the exchange of substances between blood and tissue.

Pain relief

The pulsating effect of hydro-massage positively influences skin, connective tissue and musculature. We rub and press a painful spot in order to soothe the pain. This age-old experience is probably at the bottom of all massaging. As a result of pressing and rubbing, specialized perceptive cells in the skin (mechanoreceptors) transmit a large number of signals to the central nervous system, thus “cover up” the perception of pain.

Activation of life force

The massage jet causes acupressure of the acupuncture points and activation of the energy pathways in the body. It is interesting that the human being feels what is good for him.

Psychic effect

Most people find a massage to be very pleasant. This feeling of relaxation and “feeling good” is registered in our brain, the limbic system. This reduces the release of stress hormones, stabilizes the immune system and improves wound healing. The relaxation we experience also leads to a relaxation of the muscles, the vegetative nervous system (sympathetic) calms down, i.e. blood pressure, heart rate and respiratory rate decrease, as well as the sensation of pain, the general condition improves. Fears and depressive moods also improve.



Fig:
Jet with massage strength *balance*

Musculature that can be reached by hydro-massage

Very many muscles of our body are accessible to hydro-massage. Especially the deeper muscles can be considered. For massage, the muscle must always be relaxed. The local individual hydro-massage can be applied to different body regions:

1 Shoulder/Nape of the neck

2 Lower back area

3 Buttock muscles

4 Upper thigh (rear)

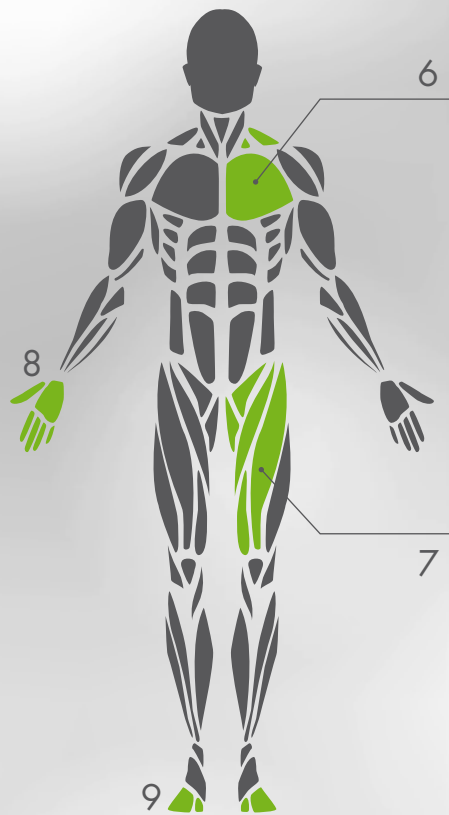
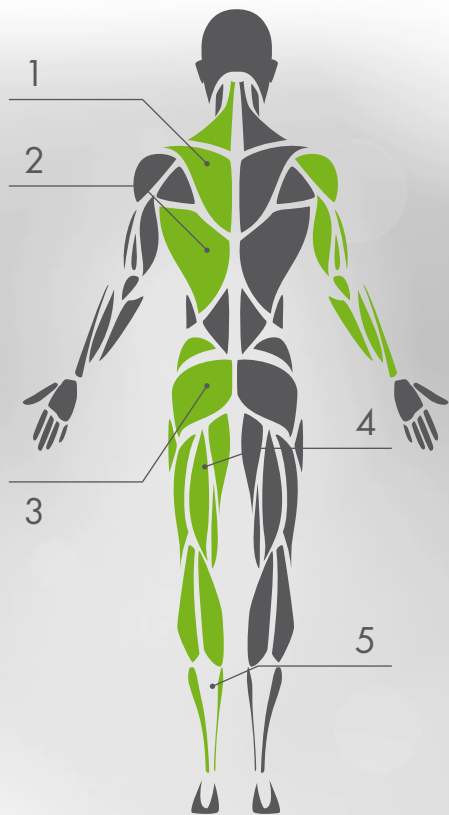
5 Calf muscles

6 Main chest muscle

7 Upper thigh (front)

8 Palms

9 Soles of the feet (reflexology)



balance

12m³/h

comfort




20m³/h

pulsive

7m³/h



The series **pro**, **compact** and **Q-Line** of the **fluvo**[®] hydro-massage are available in three different massage strengths (**comfort**, **balance**, **pulsive**) and thus cover all muscle groups optimally. With the designing, these different massage strengths should be considered whereby the nozzles should be placed at different heights. Furthermore, grab handles are to be installed because the muscles should always be relaxed for massage.

-  For the back and neck, we recommend the nozzle **balance** for a wide and caressing massage jet of 12 m³/h
-  For the thigh muscles, we recommend the nozzle **comfort** for a wide and powerful massage jet of 20 m³/h
-  For the targeted relaxation of muscles we recommend nozzle **pulsive** with a local and concentrated massage jet of 7 m³/h

Important remarks

For healthy people, hydro-massage is a pleasant, relaxing and invigorating experience. However, hydro-massage is not suitable for the following indications: cardiovascular weakness, varicose veins, anticoagulant drugs, pregnancy, sensory impairment.

fluvo[®] hydro-massage in detail

More detailed information about our hydro-massage nozzles can be found in our hydro-massage brochure or on www.fluvo.de.

hydro-massage pro – elegant, dezent und wirkungsvoll



Stilvoll und elegant fügen sich die neuen 150 mm Durchmesser Modelle mit 150 mm mit den bestehenden in aufgesetzten Anschlüssen.

Die hydro-massage pro ist ein Styling in eleganten, für kleine und große Räume der 150 mm Reihe geeignet. Es ist kompatibel mit fast allen Installationen.

hydro-massage pro ist stilvoll und elegant, die 150 mm Durchmesser in der Serie. Die Installation ist einfach.

pro balance inox	pro balance inox	pro standard
		
7 m ³ /h 150 mm	12 m ³ /h 150 mm	140 cm ²
40 cm ²		
pro balance ABS	pro balance ABS	
		
7 m ³ /h 150/190 mm	12 m ³ /h 150/190 mm	140 cm ²
40 cm ²		
Aluminium 1. Qualität Proof	Aluminium 1. Qualität Proof	

hydro-massage compact – kraftvoll und breitflächig



Die **compact** Serie besteht durch ihre geringere Leistung, die großen Dimensionen, angedeuteten kreisförmigen Massagepositionen. Durch die hohe Leistung ist die **compact** Hydro-Massage besonders für den Rückenbereich geeignet.

Hydro-massage ultra compact, professionell und leicht
 Die ultra compact, ist ein sehr effizientes, leichtes Massagegerät. Das leicht gebogene und niedrige Profil des Massagegeräts hat einen hydro-massagierten Wasserfluss, der das Rückenprofil perfekt umhüllt und stimuliert.

Hydro-massage compact – besonders großartig
 Die compact Serie umfasst auch die großen Effekte. Die Länge ist leicht ablesbar und ermöglicht effiziente Massage. Das ist ein Design, das eine hydro-massage mit der besten Qualität in der Natur.

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compact pulsive inox
 20 m²/h
 150 mm
 140 cm²

compact pulsive PVC
 20 m²/h
 150/190 mm
 140 cm²

compact pulsive inox
 20 m²/h
 150/190 mm
 140 cm²



compact pulsive inox

7 m²/h
 150 mm
 10 cm²

compact pulsive inox

12 m²/h
 150 mm
 250 cm²

compact pulsive inox

20 m²/h
 150 mm
 410 cm²

compact pulsive PVC

7 m²/h
 120/170 mm
 10 cm²

compact pulsive PVC

12 m²/h
 120/170 mm
 250 cm²

compact pulsive PVC

20 m²/h
 120/170 mm
 420 cm²

- Wasserdicht | Comfort Grip
- Leichtgewicht | Funktionale Massage | Massage auf Rücken
- Motor | Funktion | Dauerlauf



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