# hydroven® 3

3 Chamber Intermittent
Pneumatic Compression System

HUNTLEIGH


*...performance for life*

# **A legacy**
# you can trust

Huntleigh has been innovating and developing products that assist in the management and treatment of Vascular and Lymphatic conditions for over 30 years. Linking this experience to our world class hand held Dopplers and assessment systems, Huntleigh are uniquely positioned to offer clinicians comprehensive solutions for the holistic assessment and treatment of vascular conditions.

### The problem

*Venous leg ulcers (VLU) are a significant health problem that afflicts a large percentage of the population. Intermittent Pneumatic Compression (IPC) is an effective treatment for a variety of circulatory disorders [1].*

### The Solution

The **hydroven**® 3 Intermittent Compression System (IPC) has been developed to address the following vascular conditions:

- Oedema
- Lymphoedema
- Chronic Venous Insufficiency
- Acute and chronic wound management including venous leg ulcers and post-surgical wounds.

**hydroven**® 3 can be used as an adjunct to traditional compression therapies in patients who may be immobile or are unable to tolerate pain from conventional therapy or have previously failed treatment with other modalities.
The simple to use system is designed to provide each of its patients with maximum comfort and a treatment which delivers an effective outcome.

**hydroven**® 3 can be used at home, clinic or hospital setting, its robust design ensures that the system can be handled, transported and stored safely and easily.

**hydroven**® 3 offers clinicians a choice of single or three chamber garments which can be applied to the patients' upper or lower limbs. Garment inflation and deflation cycles which are specific to the type of therapy being delivered are controlled from a high reliability silent pneumatic pump.

# **Designed for patients**
# compliance and comfort

**Snap lock connection system**
A secure single hose, *snap-lock* connection system ensures a positive connection between both garment and pump. It eliminates any potential for accidental disconnection or air leak.

**Auto detection**
Automatic detection of single or dual garments supports the different treatment regimes.

**Uniform or graduated pressure**
**hydroven**® 3 supports a range single chamber or three chamber garments.

Single chamber garments deliver uniform pressure, whilst the three chamber garments provide a graduated sequential pressure delivering a 10% pressure reduction between adjacent chambers.

For those larger limbs, both garments can be expanded by the introduction of an inflatable insert.

**Durable garments**
All **hydroven**® garments are manufactured with a soft pliable inner lining for maximum patient comfort; the construction of each garment ensures inward expansion to fit the contours of each limb.

The inflatable foot section ensures pressure is distributed around the foot to aid blood flow and treatment.
If patient movement is restricted or impaired, the large ring pull zip ensures easy garment application and removal.

**Integrated handle**
The integrated handle promotes safe and effective transportation.

**Simple controls**
The simple minimal controls can be accessed with the minimum of effort. Main on / off control and garment pressure adjustment promotes patient compliance which enhances the patient experience.

**Silent operation**
**hydroven**® 3 uses a vibration free pump which minimises disturbances around the patient environment, ensuring that the system fits comfortably into the patients' lifestyle and surrounding area.

**Single limb or bi-lateral assessment**
Single or bi-lateral assessment is possible by simply connecting two garments to the system.


**Clinical evidence** - Application of Intermittent Pneumatic Compression (IPC) in conjunction with sustained graduated compression improves outcomes in patients with the most advanced venous diseases[1].

Using IPC in combination with bandaging may be more effective than bandaging alone. The sequential inflation and deflation of the chambers creates intermittent pressure peaks, mimicking the effect of the calf muscle pump thus offering a number of benefits such as improved tissue oxygenation, accelerated venous return and healing rates[2].

Management of chronic venous leg ulcers is complex and demanding. Application of IPC has shown to be beneficial and could be considered to optimize outcome[3].

# Specification

| hydroven® 3 Intermittent Pneumatic Compression System | |
|---|---|
| Order code | 5100XX (XX defined country variant) |
| Supply voltage | Power - Determined by country (110VAC to 240VAC) |
| Supply frequency | 50Hz |
| Pressure range | Pressure Range - 30 - 100mmHg +/- 5% |
| Power input | 14VA |
| Size | 270 x 140 x 140mm (10.6 x 5.5 x 5.5”) |
| Weight | 2.4Kg (5.5lbs) |
| Degree of protection against electric shock | Class II, double insulated Type BF |
| Degree of protection against liquid ingress | IPXO – no protection |
| Mode of operation | Continuous |

| Order Code | Description | Size |
|---|---|---|
| | **Single Chamber Leg Garments** | |
| **5101L50** | Half leg garment | 500mm (19.5”) |
| **5101L66** | Full leg garment | 660mm (26”) |
| **5101L71** | Full leg garment | 710mm (28”) |
| **5101L76** | Full leg garment | 760mm (30”) |
| **5101L84** | Full leg garment | 840mm (33”) |
| **5101L92** | Full leg garment | 920mm (36.25”) |
| | **Single Chamber Arm Garments** | |
| **5101A51** | Half arm garment | 510mm (20”) |
| **5101A68** | Full arm garment | 680mm (26.75”) |
| **5101A78** | Full arm garment | 780mm (30.6”) |
| | **Three Chamber Leg Garments** | |
| **5103L50** | Half leg garment | 500mm (19.6”) |
| **5103L66** | Full leg garment | 660mm (26”) |
| **5103L71** | Full leg garment | 710mm (28”) |
| **5103L76** | Full leg garment | 760mm (30”) |
| **5103L84** | Full leg garment | 840mm (33”) |
| **5103L92** | Full leg garment | 920mm (36.25”) |
| | **Three Chamber Arm Garments** | |
| **5103A68** | Full arm garment | 680mm (26.75”) |
| **5103A78** | Full arm garment | 780mm (30.6”) |
| | **Leg Inserts** | |
| **510LI50** | Half leg insert | 500mm (19.6”) |
| **510LI66** | Full leg insert | 660mm (26”) |
| **510LI71** | Full leg insert | 710mm (28”) |
| **510LI76** | Full leg insert | 760mm (30”) |
| **510LI84** | Full leg insert | 840mm (33”) |
| **510LI92** | Full leg insert | 920mm (36.25”) |
| | **Arm inserts** | |
| **510AI68** | Full arm insert | 680mm (26.75”) |
| **510AI78** | Full arm insert | 780mm (30.6”) |


References

[1] Comerota, A J. Intermittent Pneumatic Compression: Physiologic and clinical basis to improve management of venous leg ulcers. Journal of Vascular Surgery 53, 4 2011

[2] World Union of Wound Healing Societies (WUWHS). Principles of best practice. Compression in venous leg ulcers. A consensus document. London: MEP Ltd, 2008.

[3] Case Reports in Clinical Medicine, 2014, 3, 513-517. Published on line September 2014. http://www.scrip.org/journal/crcm



HUNTLEIGH ...performance for life

**Huntleigh Healthcare Ltd. - Diagnostic Products Division**
35 Portmanmoor Road, Cardiff, CF24 5HN, United Kingdom
**T:** +44 (0)29 20485885 **F:** +44 (0)29 20492520 **E:** sales@huntleigh-diagnostics.co.uk
**W:** www.huntleigh-diagnostics.com




dopplex® hydroven®
VASCULAR ASSESSMENT AND TREATMENT

WELSH WOUND INNOVATION


We would like to express our sincere appreciation to the Welsh Wound Innovation Centre for their assistance and for allowing access to their facility and resources.