# **OSARTIS**

PulsaClean® Pulse Lavage System	Quantity	ArtNo.
PulsaClean® Disposable Pulse Lavage System (with batteries)	1	LD 1000
PulsaClean® AC Disposable Pulse Lavage System	1	LD 1500
Adapter for PulsaClean® AC	1	LD 1510
PulsaClean® Accessories		
PulsaClean® Disposable Femoral Canal Brush	1	LD 1010
PulsaClean® Short nozzle with splash shield for knee TEP and other debridement	1	LD 1020





#### References

- **1.** Majkowski RS, Miles AW, Bannister GC, Perkins J, Taylor GJ. Bone surface preparation in cemented joint replacement. J Bone Joint Surg [Br] 1993; 75-B, 459-63.
- **2.** Schlegel UJ, Siewe J, Delank KS, et al. Pulsed lavage improves fixation strength of cemented tibial components. Int Orthop 2011; 35, 1165–1169.
- **3.** Svoboda SJ, et al. Comparison of Bulb Syringe and Pulsed Lavage Irrigation with Use of a Bioluminescent Musculoskeletal Wound Model. J Bone Joint Surg [Am] 2006; 88, 2167-2174.
- **4.** Benneker LM, et al. Cardiovascular changes after PMMA vertebroplasty in sheep: The effect of bone marrow removal using pulsed jet-lavage. Eur Spine J 2010; 19, 1913–1920.

### **Distributed by**

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## PulsaClean® & PulsaClean® AC

Disposable Pulse Lavage System





# **OSARTIS**

## PulsaClean® / PulsaClean® AC

PulsaClean® is an effective and easy-to-use disposable Pulse Lavage System for an intense wound debridement of bone and tissue defects. With its two nozzles for knee and hip arthroplasties as well as its rinsing and sucking mechanism PulsaClean® allows an optimal treatment flexibility for the user without any additional logistic effort.

#### Intended use

The PulsaClean® Pulse Lavage System is indicated for pulsatile lavage and removal of debris from operative area e.g. for the use during

- debridement of a wound site through irrigation and suction
- preparation of a bone bed for hip or knee arthroplasties

This device is used together with normal sterile saline or other applicable solutions. A suction machine is optional.

Battery pack with suspension device

### PulsaClean® Disposable Pulse Lavage at a glance

PulsaClean® LD 1000 (with batteries) Handpiece



#### PulsaClean® AC LD 1500 and Adapter LD 1510

• More power

\* Both nozzles are

included in the set.

Unlimited irrigation volume and non-diminishing power output.

No battery waste

The re-usable AC adapter allows the riddance of any alkaline batteries and is an environmentally friendly option.



#### Easy and safe application by nozzle fixation with one »click«

The PulsaClean® handpiece contains a special attachment mechanism which is complementary to the nozzles. The different diametric openings inhibit a wrong fixation of the nozzles and prevent from the mixing of the rinsing and sucking tubes.



By an easy going click mechanism the nozzles can be fixated tightly at the handpiece and prevent from loosening during usage.



#### **Additional accessories**

### Short nozzle with splash shield for knee TEP and other debridement LD 1020

- Easy to use
- User friendly click mechanism for safe fixation of the nozzle



#### Femoral canal brush LD 1010

Additionally to the PulsaClean® Disposable Lavage System with each a short and a long nozzle, a femoral canal brush is available. The short and strong bristles allow an intense cleaning deep into the marrow canal. Analogously to the nozzles the canal brush provides a rinsing and sucking function, too.

#### **Benefits**

#### LD 1000 & LD 1500



- Latex free product
- User friendly click mechanism for safe fixation of the nozzles
- Two flow stages with flow rate > 0.9 L/min (long nozzle) and > 1.0 L/min (short nozzle)
- Intense but gentle cleaning due to fog-like irrigation pressure of > 15 psi
- User friendly noise level with < 75 dB(A)
- Lightweight handpiece with < 0.13 kg, net weight disposable lavage < 0.9 kg
- Ergonomic designed handpiece with about 3 m integrated rinsing and sucking tubes allows comfortable usage for the surgeon
- High patient safety due to special clamps that prevent backflow of rinsing solution
- Total operation time of each device shall not exceed 5 minutes

#### LD 1000

- Powered by 10 pieces of DC 1.5 V mercury-free AA alkaline batteries
- Power voltage: max. 15 V (DC), power rating: 37.5 W
- Easy suspension device for battery pack

#### LD 1500

- Power supply: 100-240 V ~ (AC), 50/60 Hz, 120 VA; Line Current 0.50 A RMS @ 120 ~ (AC) (Max.)
- Power voltage: max. 12 V, power rating: 48 W
- Non-limited irrigation volume with constant output
- Environmentally friendly option due to the absence of disposable batteries