Cardiovascular

POLYMAILLE® Extra Thin



High-compliance vascular prosthesis for peripheral bypass

Close to arterial compliance

- Extra thin: perfect handling and conformability to the host artery
- Perfect suturability
- Optimum healing no chemical agent
- New helicoidal reinforcement
 SHR® technology





POLYMAILLE® Extra Thin

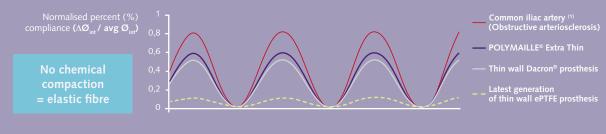
High-compliance vascular for peripheral bypass



CLOSE TO ARTERIAL COMPLIANCE AND PULSATILITY

Due to its unique manufacturing process, with no chemical compaction, **POLYMAILLE® Extra Thin** is the most compliant and pulsatile vascular prosthesis in the market. Resembling the "elastic" behaviour of the artery, this new generation of vascular prostheses is perfectly suited to peripheral surgery.

Compliance measurements for various types of arterial replacements ($\Delta P = 50 \text{ mmHg}$)



Benefits of compliance

- Limited haemodynamic disorders
- Less anastomotic stress

- Less neointimal hyperplasia
- Limited risk of anastomotic stenosis

Dynamic behaviour resembling the artery

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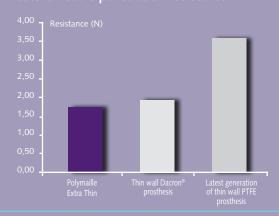
PERFECT HANDLING AND SUTURABILITY



- The thinnest wall on the market
- Exceptional flexibility offering perfect handling and conformability to the host artery
- Better suturability with no bleeding from suture holes

POLYMAILLE®	Thin wall Dacron®
Extra Thin (2)	prothesis ⁽²⁾
0,32 mm	0,44 mm

Suture needle penetration resistance²



Unrivalled ease of implantation.

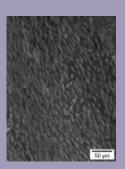
The prime replacement for peripheral vascular surgery

Cardiovascular



- No chemical compaction agent (methylene chloride): reduced risk of periprosthetic effusion
- A unique "formaldehyde and glutaraldehyde free" collagen coated thin wall prosthesis (patented CXE® collagen)
 - No toxicity to periprosthetic tissue
- Better tissue integration than a conventional thin wal Dacron® prosthesis:

"(...) at 13 weeks, a lower incidence of endoluminal fibrinous deposits, a higher grade of endothelialized neointimal tissue and a lower grade of macrophages were observed qualitatively and semi-quantitatively in the test article when compared to conventional thin wall prosthesis."³



Reduced risk of periprosthetic effusion

- **A NEW GENERATION OF REINFORCEMENT:** SHR® TECHNOLOGY (Stretch Helicoidal Reinforcement)
- HELICOIDAL reinforcement matching the crimping profile of the prosthesis
- Higher radial compression strength⁽²⁾

POLYMAILLE Extra Thin (2)	Thin wall Dacron® prosthesis (2)
35N	16N

- Elastic elongation = STRETCH effect
 - The length varies according to the haemodynamic and anatomical stress
 - Less anastomotic stress for long bypasses











Thin wall **Dacron® prosthesis**



IDEAL RESPONSE TO ARTICULAR STRESSES

- The stretch effect allows elastic elongation of the prosthesis in flexion/extension
- The kink resistance maintains the diameter

POLYMAILLE® Extra Thin straight ©

References	Nominal diameter (mm)	Usable length (cm)	
PMET060040	6	40	
PMET060070	6	70	
PMET060100	6	100	
PMET070040	7	40	
PMET070070	7	70	
PMET070100	7	100	
PMET080040	8	40	
PMET080070	8	70	
PMET080100	8	100	
PMET100040	10	40	
PMET100070	10	70	
PMET100100	10	100	

Thin wall: 0.32 mm

No chemical agents = elastic fibre

POLYMAILLE® Extra Thin Straight with reinforcement _SHR®



References	Diameter (mm)	Usable length (cm)	SHR® (cm) reinforced length	Proximal/distal length (cm)
PMETR06040015	6	40	15	15 / 10
PMETR06040020	6	40	20	10 / 10
PMETR06070020	6	70	20	30 / 20
PMETR06070040	6	70	40	20 / 10
PMETR06100060	6	100	60	25 / 15
PMETR07040015	7	40	15	15 / 10
PMETR07040020	7	40	20	10 / 10
PMETR07070020	7	70	20	30 / 20
PMETR07070040	7	70	40	20 / 10
PMETR07100060	7	100	60	25 / 15
PMETR08040015	8	40	15	15 / 10
PMETR08040020	8	40	20	10 / 10
PMETR08070020	8	70	20	30 / 20
PMETR08070040	8	70	40	20 / 10
PMETR08100060	8	100	60	25 / 15
PMETR10040015	10	40	15	15 / 10
PMETR10040020	10	40	20	10 / 10
PMETR10070020	10	70	20	30 / 20
PMETR10070040	10	70	40	20 / 10
PMETR10100060	10	100	60	25 / 15



(1) Vascular Surgery. Rutherford. Sixth Edition. Elsevier Saunders.
(2) Issued from CE Mark file.
(3) Namsa-Biomatech study report Evaluation of the local tolerance and performance of a knitted polyester vascular prosthesis following functional implantation in the sheep. 2009
This device is « CE » marked.

