

# DIGIBAND DIGITAL TOURNIQUET

## Information on application;

The Digiband digital tourniquet is manufactured from medical grade silicone, with excellent physical properties. It exceeds ISO 10993 standards for sensitivity and dermal irritation. It has a tensile strength 7.0 Nmm<sup>-2</sup> min, with an elongation of 400%. It cannot be over-tightened yet effectively produces ischaemia and a bloodless field.

The strip is 10mm wide presenting a broad flat area of pressure and reducing damaging peak pressure. The material cannot roll reducing the surface area. The material is brightly coloured and the time of application can be easily written and recorded on the tourniquet.

The strip does not need to be rolled over the injury site thus avoiding further injury.

The release of the clip automatically loosens the tourniquet even if the strip itself is left in situ. The use of a clip automatically includes the tourniquet into the "count" though the tourniquet itself should also be "counted" and the time of application and removal noted on the records and operation notes. The tourniquet is low profile and unobtrusive avoiding interference with the surgical field.

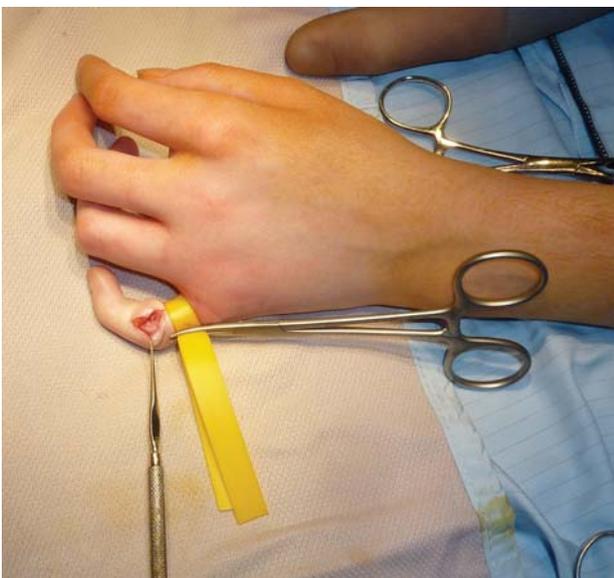
Yellow silicone strip.  
Size: 200mm length x 10mm width



Ordering details:

COLOUR	ordering code
Yellow	<b>DT-2</b>

- High visibility colour prevents non-removal
- Soft silicone material applying safe pressure
- Simple application
- One size fits all
- Sterile packed CE marked
- Supplied in boxes of 20



# DIGIBAND DIGITAL TOURNIQUET

Under clinical evaluation three different surgeons applied the silicon strip digital tourniquet as tightly as possible, 33 times to a digit, as the sub-tourniquet pressures were measured. The mean pressure generated was 211 mmHg, the median 209 mmHg, with the SD 45.24, and the range 146-318. The inexperienced trainee generated a mean of 243 mmHg with a range of 38.42 by comparison the experienced surgeons generated a mean of 191 and 201 respectively with ranges of 45 and 34. These figures show that the pressures generated by this tourniquet are not excessive yet sufficient to produce a bloodless field.

Clinical use shows that the tourniquet is easy to use, and effective in producing a bloodless field. There have been no failures. It is low profile and unobtrusive. The tight cord like depression seen after removal of a Penrose drain tourniquet is not seen due to the broad nature of the strip. It has been effective on all digits including toes.

The ability to record the tourniquet application time directly on the tourniquet has been beneficial. The bright colour makes it highly visible.

## Henk Giele

Hon. Senior Clinical Lecturer Plastic Surgery,  
University of Oxford

Consultant Plastic Reconstructive and  
Hand Surgeon,  
Nuffield Orthopaedic Centre and  
Oxford Radcliffe Hospitals



Supplied sterile  
in boxes of 20 pieces



Due to the broad nature of the strip, there are no tight cord like depressions left after removal of the tourniquet.

We wish to acknowledge the design & concept contribution in development of this tourniquet of:  
Henk Giele, Hon. Senior Clinical Lecturer Plastic Surgery, University Oxford.



**MERCIAN**  
Surgical Instruments of Excellence

established over  
40 years

Mercian Surgical Supply Co. Limited

10 Topaz Business Park, Topaz Way, Bromsgrove, Worcestershire B61 0GD. UK.  
Tel: +44 (0) 844 879 1133 Fax: +44 (0) 844 879 1155 Email: info@merciansurgical.com  
www.merciansurgical.com