



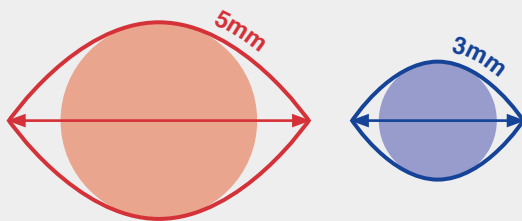
**Lapro Surge**<sup>®</sup>

# 3mm Laparoscopy

## The True Difference Between 5mm and 3mm



**Incision length reduced by 48%<sup>1</sup>**

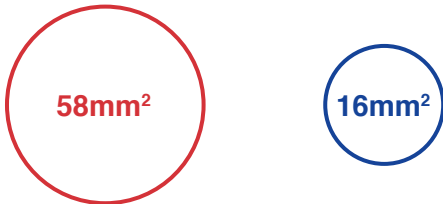


5mm vs 3mm incision length:



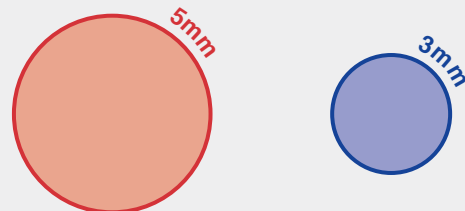
Incision length reduced by 6.4mm

5mm vs 3mm port site surface area:



Port site surface area reduced by 42mm<sup>2</sup>

**Tissue displacement reduced by 73%<sup>2</sup>**



**Reduced wound infection and reduced tissue damage**

3mm trocars create significantly less tissue displacement than 5mm trocars, reducing the level of local tissue damage. In turn, this may considerably reduce the incidence of wound infection at 3mm port sites compared to 5mm.

**Reduced pain scores<sup>3</sup>**

**Reduced skin scarring<sup>5</sup>**

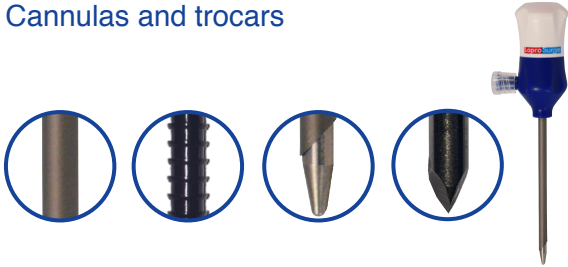
**Less risk of port-site herniation<sup>4</sup>**

\* References overleaf

Turn over for full details of the 3mm range available from LaproSurge

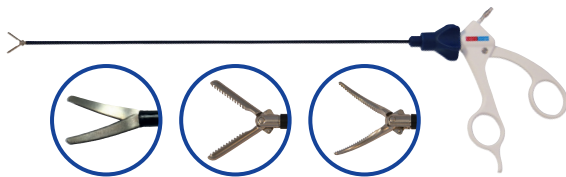


**Cannulas and trocars**



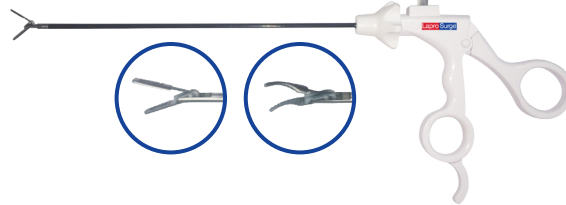
EC3SSB	3mm cannula without gas tap and bladeless trocar
EC3SSB(GT)	3mm cannula with gas tap and bladeless trocar
EC3SSPT(GT)	3mm threaded cannula with gas tap and pyramidal trocar
EC3SS-C	3mm cannula only

**Monopolar scissors, graspers and dissectors**



LS006-3	3mm curved scissors - 310mm length
LS006-3S	3mm curved scissors - 230mm length
LG005-3	3mm Maryland dissector - 310mm length
LG005-3S	3mm Maryland dissector - 230mm length
LG006-3	3mm Johan grasper - 310mm length
LG006-3S	3mm Johan grasper - 230mm length

**Bipolar graspers and dissectors**



BFG003	3mm bipolar fenestrated grasper - 310mm length
BFG003-S	3mm bipolar fenestrated grasper - 230mm length
BPM003	3mm bipolar Maryland dissector - 310mm length
BPM003-S	3mm bipolar Maryland dissector - 230mm length

**Monopolar L hook electrode**



HE003	3mm L hook - 330mm length
HE003-S	3mm L hook - 230mm length

**Suction irrigation**



MD001-3	3mm suction irrigation - 330mm length
MD001-3S	3mm suction irrigation - 230mm length

<sup>1,2</sup> Calculated using OD of LaproSurge 3mm smooth cannula vs LaproSurge 5mm ribbed cannula  
<sup>3,5</sup> Bignell, M., Lewis, M. P. N., Cheong, E. C. K., and Rhodes, M. (2013), "A prospective, randomized, single-blind trial of 5-mm versus 3-mm ports for laparoscopic cholecystectomy: is smaller better?", *Surgical Endoscopy*, Vol. 27, pp. 3616-3621  
<sup>4</sup> Lajer, H., Widecrantz, S., Heisterberg, L. (1997), "Hernias in trocar ports following abdominal laparoscopy. A review", *Acta Obstetrica et Gynecologica Scandinavica*, Vol. 76, Issue 5, pp. 389-93  
<sup>5</sup> Franklin, M.E. Jr, Jaramillo, E.J., Glass, J.L., Treviño, J.M., Berghoff, K.R. (2006), "Needlescopic Cholecystectomy: Lessons Learned in 10 Years of Experience", *JSLs*, Vol. 10, Issue 1, pp. 43-46