



## SUTURES POCKET GUIDE

## PRODUCT INFORMATION

# COMPLETE SUTURE RANGE

## ABSORBABLE SUTURE MATERIAL

| Monofilament Advantage                                                                | Monofilament Advantage                                                            | Monofilament Advantage                                                                                                     | Monofilament Advantage                                                                                                                                                                                               | Braided                                                                                            |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Monosyn Quick                                                                         | Monosyn                                                                           | MonoPlus                                                                                                                   | Monomax                                                                                                                                                                                                              | Novosyn                                                                                            |
|       |  |                                           |                                                                                                                                     |                  |
|       |  |                                           |                                                                                                                                     |                  |
| Glyconate, short-term absorbable                                                      | Glyconate, mid-term absorbable                                                    | Polydioxanone, long-term absorbable                                                                                        | Poly-4-hydroxybutyrate extra long-term absorbable                                                                                                                                                                    | Polyglactin mid-term absorbable                                                                    |
| Coating: none                                                                         | Coating: none                                                                     | Coating: none                                                                                                              | Coating: none                                                                                                                                                                                                        | Coating: Polyglactin calcium st                                                                    |
| USP 6/0 to 1 metric 0.7 to 4                                                          | USP 7/0 to 2 metric 0.5 to 5                                                      | USP 7/0 to 2 metric 0.5 to 5                                                                                               | USP 2/0 to 1 metric 3 to 4                                                                                                                                                                                           | USP 8/0 to 10 metric 0.4 to 0.6                                                                    |
| Tensile strength retention:<br><br>1 Day ~100 %<br>6-7 Days ~50 %<br>10 Days ~20-30 % | Tensile strength retention:<br><br>1 Day ~100 %<br>14 Days ~50 %<br>21 Days ~20 % | Tensile strength retention:<br><br>1 Day ~100 %<br>14 Days ~90 %<br>28 Days (≤ USP 4/0) ~50 %<br>35 Days (≥ USP 3/0) ~50 % | Tensile strength retention:<br><b>USP 2/0, 3/0:</b><br>1 Month ~90 %<br>3 Months ~60 %<br>5 Months <25 %<br>7 Months ~0 %<br><b>USP 1, 0:</b><br>1 Month ~90 %<br>3 Months ~70 %<br>5 Months ~60 %<br>7 Months ~50 % | Tensile strength retention:<br><br>1 Day ~100 %<br>14 Days ~50 %<br>21 Days ~20 %<br>28 Days ~10 % |
| Mass absorption: after 56 days                                                        | Mass absorption: from 60 to 90 days                                               | Mass absorption: from 180 to 210 days                                                                                      | Mass absorption: between 13 months and more than 36 months                                                                                                                                                           | Mass absorption: from 56 to 112 months                                                             |

|                                                                                 |                                                                                   |                                                                                                          |                                                                                          |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                                                                                 | Braided                                                                           | Braided or<br>Monofilament**                                                                             | Braided                                                                                  |
| n                                                                               | <b>Novosyn Quick</b>                                                              | <b>Safil</b>                                                                                             | <b>Safil Quick</b>                                                                       |
|  |  |                         |         |
|  |  |                         |         |
| n 910,<br>absorbable                                                            | Polyglactin 910,<br>short-term absorbable                                         | Polyglycolic acid,<br>mid-term absorbable                                                                | Polyglycolic acid,<br>short-term absorbable                                              |
| 370 and<br>earate                                                               | Coating:<br>Polyglactin 370 and<br>calcium stearate                               | Coating:<br>Copolymer of glyco-<br>lide, ε-caprolactone<br>and trimethylene car-<br>bonate or uncoated** | Coating:<br>Copolymer of glyco-<br>lide, ε-caprolactone<br>and trimethylene<br>carbonate |
| 0 to 2<br>4 to 5                                                                | USP 6/0 to 2<br>metric 0.7 to 5                                                   | USP 10/0 to 2<br>metric 0.2 to 5                                                                         | USP 7/0 to 2<br>metric 0.5 to 5                                                          |
| length                                                                          | Tensile strength<br>retention:                                                    | Tensile strength<br>retention:                                                                           | Tensile strength<br>retention:                                                           |
| ~100 %<br>~75 %<br>~40-50 %<br>~25 %                                            | 1 Day ~100 %<br>5 Days ~50 %<br>after 14 Days ~0 %                                | 1 Day ~100 %<br>14 Days ~60-70 %<br>21 Days ~24-42 %                                                     | 1 Day ~100 %<br>5 Days ~50 %<br>10-14 Days ~0 %                                          |
| orption:<br>70 days                                                             | Mass absorption:<br>in approx. 42 days                                            | Mass absorption:<br>from 60 to 90 days                                                                   | Mass absorption:<br>from 42 to 56 days                                                   |

\*\* USP 10/0 and 9/0

## Monofilament Indications



### Cardiovascular Surgery

- Optilene
- Premicron



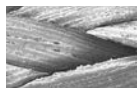
### Abdominal Wall Health

- Monomax



### PARS – Plastic And Reconstructive Surgery

- Monosyn
- Monosyn Quick
- Dafilon



Braided



Monofilament Advantage

# COMPLETE SUTURE RANGE

## NON-ABSORBABLE SUTURE MATERIAL

| Monofilament Advantage                                                           | Monofilament Advantage                                                            | Braided                                                                           | Monofilament or twisted                                                                                                                      | Monofilament Advantage                                                             |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Optilene                                                                         | Premilene                                                                         | PremiCron                                                                         | Steelex                                                                                                                                      | Dafilon                                                                            |
|  |  |  |                                                             |  |
| Polypropylene and polyethylene non-absorbable                                    | Polypropylene, non-absorbable                                                     | Polyester, non-absorbable                                                         | Stainless steel, non-absorbable                                                                                                              | Polyamide 6, blue or un-dyed (black), non-absorbable                               |
| Coating: none                                                                    | Coating: none                                                                     | Coating: silicone                                                                 | Coating: none or polyethylene <sup>3</sup>                                                                                                   | Coating: none                                                                      |
| USP 10/0 to 0<br>metric 0.2 to 3.5                                               | USP 10/0 to 2<br>metric 0.2 to 5                                                  | USP 6/0 to 5<br>metric 0.7 to 7                                                   | <sup>1</sup> USP 5/0 to 7<br>(metric 1 to 9)<br><sup>2</sup> USP 1 to 7<br>(metric 4 to 9)<br><sup>3</sup> USP 3/0 to 0<br>(metric 2 to 3.5) | USP 11/0 to 0<br>metric 0.1 to 0.5                                                 |

<sup>1</sup> Steelex, <sup>2</sup> Steelex Sternum Set, <sup>3</sup> Steelex

## PACKAGING INFORMATION

### RacePack® – INNOVATIVE SUTURE PACKAGING SYSTEM BY B. BRAUN



Open non-sterile outer package  
 ■ Wide grasp area



RacePack transfer to sterile field



Grasp needle directly from the packaging with the needle holder  
 ■ Flexible rear flap allows an easier grasping of the needle



Pull out the suture rightwards

RacePack-single step packaging system  
 ■ Faster suture transfer, time savings for OR staff

RacePack, reduced memory effect  
 ■ A reduction of up to 40 % compared to standard packaging in the market

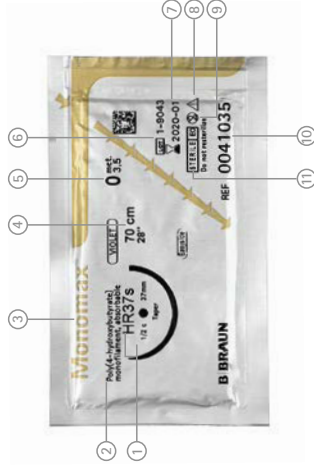
|                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| ent                                                                            | Braided                                                                           | Pseudomonofilament Advantage                                                      | Braided                                                                           | Braided                                                                           |
|                                                                                | Trelon                                                                            | Supramid                                                                          | Dagrofil                                                                          | Silkam                                                                            |
|  |  |  |  |  |
|  |  |  |  |  |
| 6.6 (dyed), non-absorbable                                                     | Polyamide 6.6, non-absorbable                                                     | Polyamide 6/6.6, non-absorbable                                                   | Polyester, non-absorbable                                                         | Natural silk, non-absorbable                                                      |
| Coating:                                                                       | Coating:                                                                          | Coating:                                                                          | Coating:                                                                          | Coating:                                                                          |
| silicone                                                                       | none                                                                              | none                                                                              | none                                                                              | Pure beeswax or refined paraffin wax                                              |
| to 5<br>to 7                                                                   | USP 6/0 to 3<br>metric 0.7 to 6                                                   | USP 6/0 to 3<br>metric 0.7 to 6                                                   | USP 6/0 to 8<br>metric 0.7 to 10                                                  | USP 8/0 to 6<br>metric 0.4 to 8                                                   |

celex Electrode Set

## DGP – DIRECT DISPENSE PACKAGING



# BOX AND PEEL INFORMATION



| Description |                                         |
|-------------|-----------------------------------------|
| 1           | Needle code                             |
| 2           | Description of the suture               |
| 3           | Product name                            |
| 4           | Length of the suture /Colour            |
| 5           | USP and EP size                         |
| 6           | Batch code                              |
| 7           | Expiry date (year /month)               |
| 8           | Observe the instructions for use        |
| 9           | Do not re-sterilize, single use product |
| 10          | Article number                          |
| 11          | Sterilization method                    |
| 12          | Number of units*                        |

\* Box is available in following units:  
M=6 units, G=12 units, B=24 units, C=36 units

## B.BRAUN NEEDLE NOMENCLATURE

| A                         |                    | B         |                                 | C          |                     | 12                                                                                                                     | D      |                           |
|---------------------------|--------------------|-----------|---------------------------------|------------|---------------------|------------------------------------------------------------------------------------------------------------------------|--------|---------------------------|
| Needle angle of curvature |                    | Body type |                                 | Point type |                     | Needle length                                                                                                          | Remark |                           |
| S                         | 1/8 circle         | R         | round body                      | T          | trocar point        | This refers to the distance between the needle point and the needle end, measured along the length of the needle in mm | ff     | extra thin bodied needle  |
| V                         | 1/4 circle         | S         | cutting needle                  | N          | blunt point         |                                                                                                                        | f      | thin bodied needle        |
| D                         | 3/8 circle         | G         | trapezoidal micro engraved body | S          | sternum point       |                                                                                                                        | s      | heavy bodied needle       |
| H                         | 1/2 circle         | L         | lancet needle                   | C          | short cutting point |                                                                                                                        | ss     | extra heavy bodied needle |
| F                         | 5/8 circle         |           |                                 | M          | micro-point         |                                                                                                                        | v      | break-off needle          |
| G                         | straight           |           |                                 | MP         | precision point     |                                                                                                                        | b      | black needle              |
| P                         | progressive curved |           |                                 | m          | micro needle        |                                                                                                                        |        |                           |
| J                         | hook               |           |                                 | mV         | micro vascular      |                                                                                                                        |        |                           |
| SK                        | ski needle         |           |                                 | B          | protection point    |                                                                                                                        |        |                           |

Example:

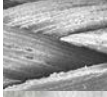
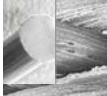
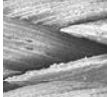
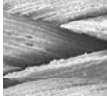
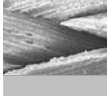
| H | R | C | 26 | b |
|---|---|---|----|---|
|---|---|---|----|---|

HRC 26b → 1/2 circle round bodied needle with short cutting point, 26 mm long, black

| Needle angle of curvature                                                               |  | Others                                                    |  | "Take off" removable needle                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------|--|-----------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>S 1/8 circle<br/>V 1/4 circle<br/>D 3/8 circle<br/>H 1/2 circle<br/>F 5/8 circle</p> |  | <p>J Hook<br/>P Progressive<br/>G Straight<br/>SK Ski</p> |  | <p>In order to remove the needle from the suture without the aid of scissors, one must pull the suture taut and secure and grasp the needle with the needle-holder. With a straight tug of the needle holder, the needle can be removed from the suture fiber.</p> |

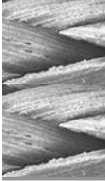
# COMPARISON CHART

## NON-ABSORBABLE SUTURE MATERIAL

|                                                                                    | B. Braun         |                                                        | Ethicon                                   | Covidien                              |
|------------------------------------------------------------------------------------|------------------|--------------------------------------------------------|-------------------------------------------|---------------------------------------|
|    | <b>Optilene</b>  | <i>polypropylene<br/>polyethylene<br/>monofilament</i> | <b>Prolene*<br/>Pronova</b>               | <b>Surgipro** II<br/>~ Surgipro**</b> |
|    | <b>Premilene</b> | <i>polypropylene<br/>monofilament</i>                  | <b>Prolene*<br/>Pronova</b>               | <b>Surgipro** II<br/>~ Surgipro**</b> |
|    | <b>PremiCron</b> | <i>polyester braided<br/>coated</i>                    | <b>Ethibond<br/>Excel*</b>                | <b>Ti-Cron**</b>                      |
|    | <b>Dafilon</b>   | <i>polyamide<br/>monofilament</i>                      | <b>Ethilon*</b>                           | <b>Monosof ~<br/>Dermalon**</b>       |
|    | <b>Supramid</b>  | <i>polyamide pseudo-<br/>monofilament</i>              |                                           |                                       |
|   | <b>Trelon</b>    | <i>polyamide braided<br/>coated</i>                    | <b>Nurolon*</b>                           | <b>Surgilon**</b>                     |
|  | <b>Dagrofil</b>  | <i>polyester braided</i>                               | <b>Mersilene*</b>                         | <b>Surgidac**</b>                     |
|  | <b>Silkam</b>    | <i>silk braided coated</i>                             | <b>Perma-<br/>Hand silk*<br/>Mersilk*</b> | <b>Silk**</b>                         |
|  | <b>Steelex</b>   | <i>stainless steel</i>                                 | <b>Stainless<br/>steel*</b>               | <b>Steel**</b>                        |

# COMPARISON CHART

## ABSORBABLE SUTURE MATERIAL

|                                                                                   | B. Braun                           |                                                | Ethicon               | Covidien               |
|-----------------------------------------------------------------------------------|------------------------------------|------------------------------------------------|-----------------------|------------------------|
|   | <b>Monosyn Quick</b>               | <i>short term absorbable monofilament</i>      | <b>Monocryl*</b>      | <b>Caprosyn**</b>      |
|   | <b>Monosyn</b>                     | <i>mid term absorbable monofilament</i>        |                       | <b>Biosyn**</b>        |
|   | <b>MonoPlus</b>                    | <i>long term absorbable monofilament</i>       | <b>PDS II*</b>        | <b>Maxon**</b>         |
|   | <b>Monomax</b>                     | <i>extra long term absorbable monofilament</i> |                       |                        |
|  | <b>Novosyn Quick / Safil Quick</b> | <i>short term absorbable braided</i>           | <b>Vicryl Rapide*</b> | <b>Velosorb Fast**</b> |
|                                                                                   | <b>Novosyn / Safil</b>             | <i>mid term absorbable braided</i>             | <b>Vicryl*</b>        | <b>Polysorb**</b>      |

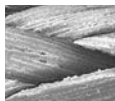
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Monofilament  
Advantage



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