

# SILVERRING™

MEASURING · INSTRUCTIONS

VERSION 4



*Silver Ring Splint*

C O M P A N Y

SILVERRINGSPLINT.COM

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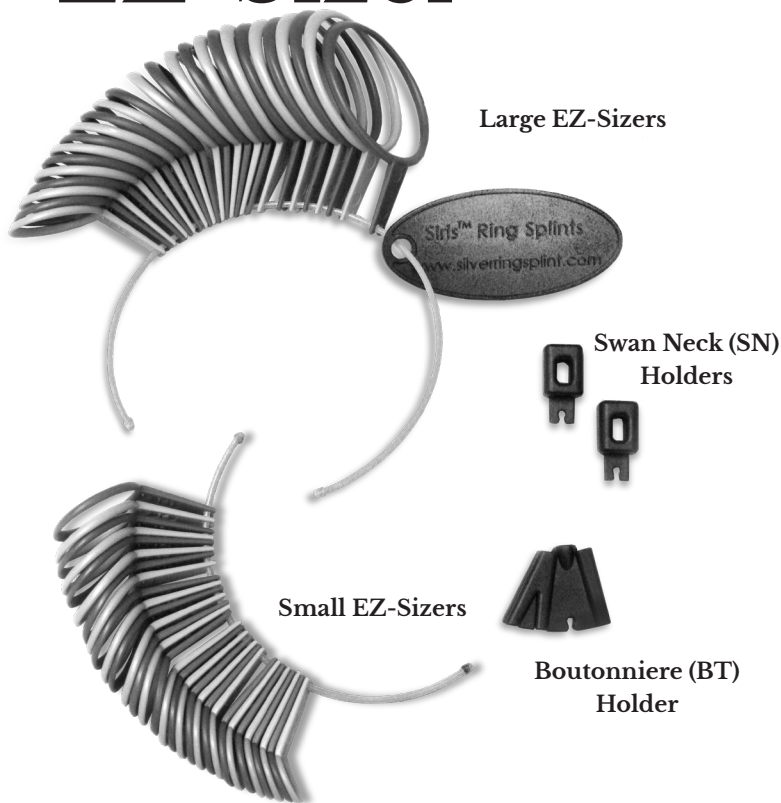
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**E** =EZ-Sizer

**R** =Round Ring

**A** =Adjustable

# SilverRing™ EZ-Sizer



## Sizing has never been easier!

The SilverRing™ EZ-Sizer allows you to measure for SilverRing™ splints with ease and accuracy. Designed to match the patented elliptical shape of our splints, this specialized measuring tool ensures an accurate fit. The individual EZ-Sizers fit conveniently into the Holders to form “splints”, allowing you to visualize how the complete splints will conform to your patients’ fingers.

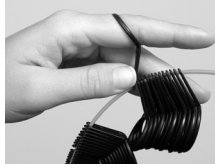
*Each SilverRing™ Measuring Kit consists of 56 large and small EZ-Sizers, 2 Swan Neck Holders, 1 Boutonniere Holder and 1 set of Round Ringsizers (not pictured).*



## SilverRing™ Swan Neck (SN)

*Hyperextension less than  $\approx 20^\circ$*

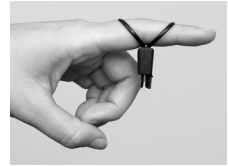
- 1 EZ-Sizer** Choose proximal and distal EZ-Sizers that fit, when angled at  $45^\circ$  from the volar crease, as shown in the pictures.



- 2** Remove the EZ-Sizers from the cord and place them in the SN Holder to form a "splint".

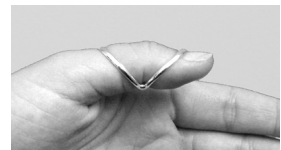


- 3** Slide the "splint" onto the finger.



- 4** Change the sizes as needed until the "splint" fit is comfortably snug.

*This splint can be worn on the PIP, DIP or Thumb IP joints. Use the same measuring steps for each joint. For the DIP or Thumb IP joints, the distal ring should rest on the nail, not on the nail bed.*



### SPLINT ADJUSTMENTS AND FITTING:

- To loosen the fit, decrease the angle between the rings by pushing the rings together.
- To tighten the fit, spread the rings further apart.



## SilverRing™ Forced Flexion (FF)

*Flexion held at  $30^\circ$  to  $50^\circ$*

### SPECIAL ORDER SPLINT

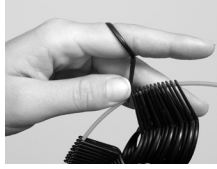
Force Flexion splint is measured the same as the above SN Splint, with joint in a neutral position (not flexed). Degree of Flexion desired is required when ordering.



# SilverRing™ Lateral Support Splint (LS)

*Lateral Deviation less than  $\approx 20^\circ$*

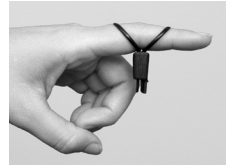
- 1** **EZ-Sizer** Choose proximal and distal EZ-Sizers that fit, when angled at  $45^\circ$  from the volar crease, as shown in the pictures.



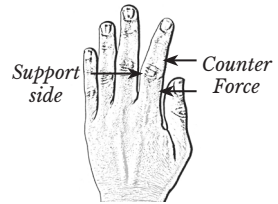
- 2** Remove the EZ-Sizers from the cord and place them in the SN Holder to form a "splint".



- 3** Slide the "splint" onto the finger.

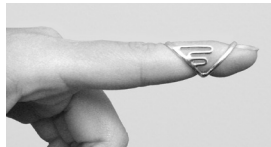


- 4** Change the sizes as needed until the "splint" fit is comfortably snug. Record the side for the lateral support (radial, ulnar or both). Support goes on the side opposite the direction the finger deviates. If the finger is bilaterally unstable or LS splint is rotating, request a splint with support on both sides.



*Note: LS splint is not appropriate for enlarged joints, joints with Heberden's or Bouchard's Nodes or when deviation cannot be passively corrected to neutral. Instead use BT or BLS splints.*

*This splint can be worn on the PIP or DIP joints, but is rarely used on the thumb IP joint due to the joint shape. Use the same measuring steps for each joint. For the DIP or thumb IP joints, the distal ring should rest on the nail, not on the nail bed.*



## SPLINT ADJUSTMENTS AND FITTING:

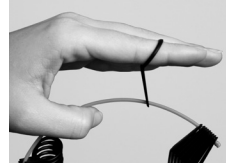
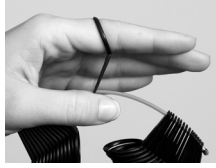
- To loosen the fit, decrease the angle between the rings by pushing the rings together.
- To tighten the fit, spread the rings further apart.



## SilverRing™ Boutonniere Splint (BT)

*Hyperextension greater than  $\approx 20^\circ$  (spacer worn under the joint)*

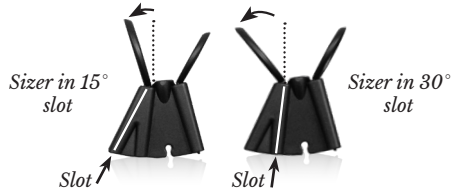
- 1 EZ-Sizer** Choose proximal and distal EZ-Sizers that fit when angled as shown in the pictures.



- 2** Remove the EZ-Sizers from the cord and place them in the BT Holder to form a “splint”.



- 3** One side of the BT Holder has 2 slots which position the proximal ring at either  $15^\circ$  or  $30^\circ$ . Choose the  $15^\circ$  slot for proximal EZ-Sizer when splinting the DIP or thumb IP joints or when a shorter splint is needed.



- 4** Slide the “splint” onto the finger. The spacer is worn under the joint. Change the sizes as needed until the “splint” fit is comfortably snug.



*This splint can be worn on the PIP, DIP or Thumb IP joints. Use the same measuring steps for each joint. For the DIP or Thumb IP joints, the distal ring should rest on the nail, not on the nail bed. If the BT splint is too long, consider using the SN splint.*



### SPLINT ADJUSTMENTS AND FITTING:

- The BT splint is shipped with both rings at  $30^\circ$ . If using the  $15^\circ$  slot for measuring, adjust the angle of the ring when the splint is received.
- To loosen the fit, decrease the angle between the rings by pushing the rings together.
- To tighten the fit, spread the two rings further apart.

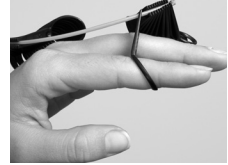
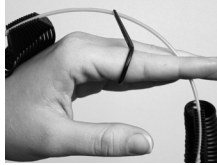


## SilverRing™ Boutonniere Splint (BT)

*Flexion Contractures less than 25° (spacer worn on top of the joint)*

*Note: Do not flex the finger when wearing the EZ-Sizer as it may weaken or break.*

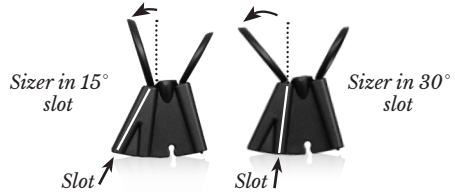
- 1 EZ-Sizer** Choose proximal and distal EZ-Sizers that fit when angled as shown in the pictures.



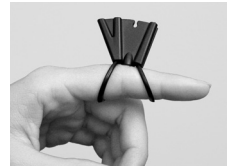
- 2** Remove the EZ-Sizers from the cord and place them in the BT Holder to form a “splint”.



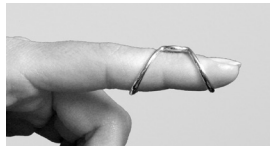
- 3** One side of the BT Holder has 2 slots which position the proximal ring at either 15° or 30°. Choose the 15° slot for the proximal EZ-Sizer when splinting the DIP or thumb IP joints or when a shorter splint is needed to avoid interfering with an adjacent joint.



- 4** Slide the “splint” onto the finger. The spacer is worn on top of the joint. Splints may be rotated on the finger when sliding into place. Change the sizes as needed until the “splint” fit is comfortably snug.



*This splint can be worn on the PIP, DIP or Thumb IP joints. Use the same measuring steps for each joint.*



### SPLINT ADJUSTMENTS AND FITTING:

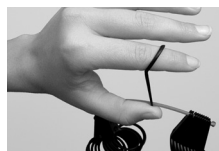
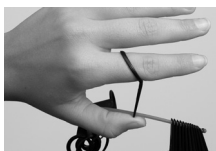
- The BT splint is shipped with both rings at 30°. If using the 15° slot for measuring, adjust the angle of the ring when the splint is received.
- To loosen the fit, decrease the angle between the rings by pushing the rings together.
- To tighten the fit, spread the two rings further apart.



## SilverRing™ Boutonniere Splint (BT)

*Deviation less than 25° (spacer worn on the side of the joint)*

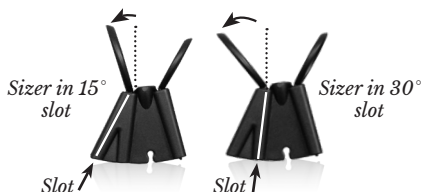
- 1 EZ-Sizer** Choose proximal and distal EZ-Sizers that fit when angled as shown in the pictures.



- 2** Remove the EZ-Sizers from the cord and place them in the BT Holder to form a “splint”.



- 3** One side of the BT Holder has 2 slots which position the proximal ring at either 15° or 30°. Choose the 15° slot for proximal EZ-Sizer when splinting the DIP or thumb IP joints or when a shorter splint is needed to avoid interfering with an adjacent joint.



- 4** Slide the “splint” onto the finger. The spacer is worn on the side of the joint. Splints may be rotated on the finger when sliding into place. Change the sizes as needed until the “splint” fit is comfortably snug.

*Note: Sizes may need to be increased to accommodate non-reducible contractures.*



*This splint can be worn on the PIP, DIP or Thumb IP joints. Use the same measuring steps for each joint.*



### SPLINT ADJUSTMENTS AND FITTING:

- The BT splint is shipped with both rings at 30°. If using the 15° slot for measuring, adjust the angle of the ring when the splint is received.
- The “spacer” is worn on the side of the joint opposite the direction of deviation.
- To loosen the fit, decrease the angle between the rings by pushing the rings together.
- To tighten the fit, spread the two rings further apart.





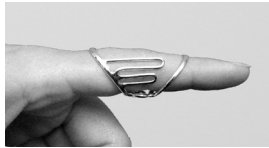
## SilverRing™ Boutonniere Lateral Support Splint (BLS)

*Hyperextension or Flexion with Lateral Deviation*

- 1 **EZ-Sizer** Measure the same as for BT splint. 15° is better if joint is enlarged or if a shorter splint is needed.
- 2 Record if the spacer is worn on the dorsal or volar surface of the joint.
- 3 Record the side for the lateral support (radial, ulnar or both).
- 4 Record if you use the 15° or 30° slot

*Note: BLS splint is not appropriate when deviation cannot be passively corrected to less than  $\approx 10^\circ$ .*

*This splint can be worn on the PIP but is rarely used for DIP (because the distal phalanx is too short and frequently has nodules around the joint) or Thumb IP joints (because of the shape of the joint). Use the same measuring steps for each joint. For the DIP or thumb IP joints, the distal ring should rest on the nail, not on the nail bed.*



## SilverRing™ Long Boutonniere Splint (LBT)

*Flexion or Deviation when extra length is needed*

- 1 **EZ-Sizer** LBT splints are measured the same way as BT splints.

*Note: LBT splints are longer than BT splints (see picture on right). They are useful for enlarged or fusiform PIP joints or when a longer splint is needed for better leverage.*

*LBT splints are not used for DIP or thumb IP joints.*



BT

LBT



## SilverRing™ Pulley Ring Splint (P)

*Bowstringing of A-2 Pulley*

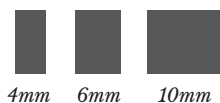
- 1 Round Ring** Ringsizer that fits at the base of the finger (MP crease).



- 2** Record band width: 4, 6 or 10mm.

*Note: Wider band widths are tighter going over the joint. Splint will not be effective if the PIP joint is enlarged.*

*(Approximate size shown)*



## SilverRing™ Hinged Pulley Ring (HP)

*Bowstringing of A-2 Pulley with enlarged PIP*

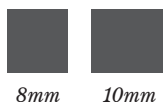
- 1 Adjustable** Email your mailing address to [info@SilverRingSplint.com](mailto:info@SilverRingSplint.com) to request GemOro zip tie style measuring tool from SilverRing™. Cinch tool on proximal phalanx until comfortably snug.



- 2** Write down band width: 8 or 10mm.

*Note: Hinged ring can be added to other splints that use round rings, i.e. BR, DOE, TR, EDS, ST.*

*(Approximate size shown)*



# Choosing the correct SilverRing™ Thumb Splint

## *Quick assessment of thumb*

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- If MCP joint hyperextends/subluxes with no IP issues and minimal CMC issues, use the **MCP Splint with PVX**. (pages 12-13)
- If CMC issues are affecting MCP joint, use **ST style with PVX** (pages 14-15)
- If MCP is deviated due to UCL issues, use **ST3 or ST4** for the best support. MCP with LS/PRX can be used but does not offer as much support.
- For **EDS** patients we recommend using **ST3 or ST4 with PVX** (pages 14-15)
- If MCP joint hyperflexes use **ST style no PVX** (pages 14-15)
- See page 13 for bracelet and clasp information

*Note: If there are any questions about which thumb splint to use (e.g. ST or MCP) and if options like the PVX or bracelet should be added, please feel free to text/call us at 434-971-4052 for assistance.*

## NOTES:



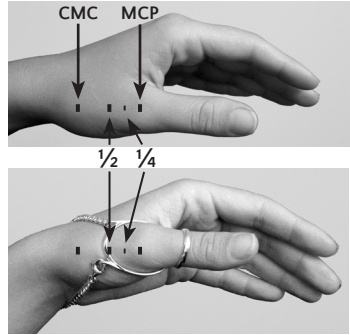
# SilverRing™ Thumb MCP Splint (MCP)

*Hyperextension of MCP Joint with Active Flexion at the MCP and Abduction at the CMC Joint*

You **must** provide three sizes to order. Start by marking the MCP joint and the CMC joint. Additionally mark the location  $\frac{1}{4}$  and  $\frac{1}{2}$  way between the MCP and CMC.

*Note: It is not uncommon for the proximal length and width measurements to have a difference of 2-10 sizes*

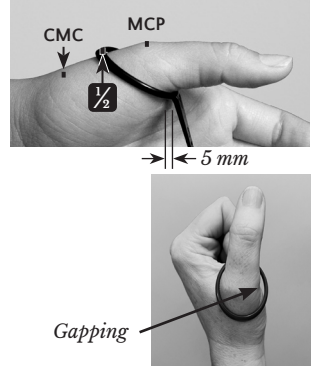
**Example: Proximal length 29.0  
Proximal width 22.0  
Distal 9.5**



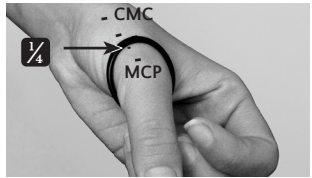
- 1 EZ-Sizer** For proximal length size, choose an EZ-Sizer that sits about 5 mm distal to the MCP volar crease and and clears the  $\frac{1}{2}$  way mark.

*Note: placement of the sizer 5 mm distal to MCP crease accounts for migration of splint with abduction of the thumb*

*Note: Gapping on the side of the sizer is expected in this step.*

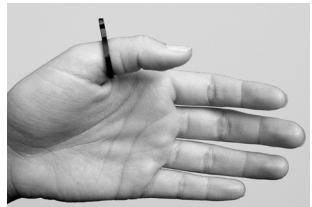


- 2 EZ-Sizer** For proximal width size, choose an EZ-Sizer that, when angled back past the MCP joint, touches the sides of the thumb. The lip of the ring will often land on top or slightly proximal to the  $\frac{1}{4}$  mark.  
*Note: width size will account for the gapping seen in Step 1*



- 3 Round Ring** For distal ring size, choose the smallest Round Ringsizer that is snug when it slides over the IP joint.

*Note: we are using Round Ringsizer to measure which allows an easier switch to ST style splints when needed.*



# SilverRing™ MCP Splint - Continued

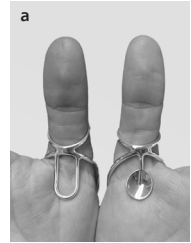
*Hyperextension of MCP Joint with Active Flexion at the MCP and Abduction at the CMC Joint*

## MCP OPTIONS:

**Proximal Volar Extension (PVX)** is used to stabilize under the head of the metacarpal joint to reduce hyperextension. No measurement is needed. PVX can be manually adjusted to fit the curvature of the palm.

**PVX** - standard "U" distributes pressure avoiding direct pressure on a potentially sensitive area

**Spoon PVX** - places more direct pressure with a curved pad that can more easily be adjusted by twisting or bending left/right.

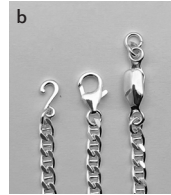


## BRACELET OPTIONS:

The bracelet is used to keep the splint from sliding distally. Lobster clasp is standard. A longer bracelet can be requested to criss-cross the bracelet to change angle of pull and better seat splint.

Use twist tie to temporarily adjust bracelet.

**'S' hook & Magnetic clasp** can replace the standard lobster claw clasp for people with fine motor limitations. The magnetic clasp has two interlocking sides that create a strong latch.



'S' hook, Lobster, Magnetic clasp



Bracelet criss-cross example

## SPECIAL ORDER SPLINT



## SilverRing™ MCP Splint LS & PRX

*Used for MCP Deviation, UCL issues, game keepers/skier thumb.*

**Proximal Radial Extension (c)** and **Ulnar Lateral Support (d)** can be added to correct MCP deviation. (c) & (d) are always ordered together.

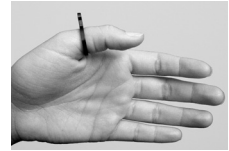




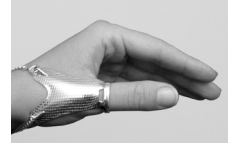
# SilverRing™ Stable Thumb Splint (ST) with PVX

*Hyperextension of the MCP Joint with CMC Joint Involvement*

- 1 Round Ring** Choose the smallest Round Ringsizer that is snug when it slides over the IP joint.



- 2** A bracelet is included with the splint. The length can be adjusted by a local jeweler or returned to us for adjustments.



- 3** Proximal Volar Extension (PVX) is used to stabilize under the head of the metacarpal joint to reduce hyperextension. No measurement is needed. PVX can be manually adjusted to fit the curvature of the palm.

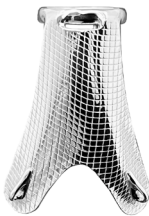


## ST THUMB OPTIONS:

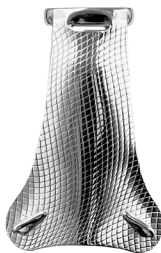
Choose from 4 different dorsal plate styles: ST1, ST2, ST3, ST4

- ST1:** Small or average hands, plate is not hand specific, proximal end cut out more to avoid pressure on sensitive dorsal areas, can use IP splint (5.25 cm total length)
- ST2:** Large or long hands for more leverage, plate is not hand specific, can use IP splint (6.0 cm total length)
- ST3:** Right or Left hand specific, deeper MCP pocket can reduce radial deviation, spiral distal to provide best leverage and support, most similar to short thumb spica, cannot use IP splint. (7.1 cm total length)
- ST4:** Same as ST3 but without spiral, allows more mobility than ST3, can use IP splint (6.2 cm total length)

5.25 cm



ST1



ST2



ST3



ST4

*(Not to actual size)*

# SilverRing™ ST with PVX - Continued

*Hyperextension of the MCP Joint with CMC Joint Involvement*

## ST OPTIONS CONTINUED:

**Proximal Volar Extension (PVX)** is used to stabilize under the head of the metacarpal joint to reduce hyperextension. No measurement is needed. PVX can be manually adjusted to fit the curvature of the palm.

**PVX** - standard "U" distributes pressure avoiding direct pressure on a potentially sensitive area

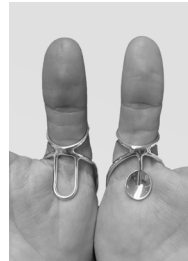
**Spoon PVX** - places more direct pressure with a curved pad that can more easily be adjusted by twisting or bending left/right.

## BRACELET OPTIONS:

The bracelet is used to keep the splint from sliding distal. Lobster clasp is standard.

Use twist tie to temporarily adjust bracelet.

'S'hook & Magnetic clasp can replace the standard lobster claw clasp for people with fine motor limitations. The magnetic clasp has two interlocking sides that create a strong latch.



'S' hook, Lobster, Magnetic clasp

## PLATE DESIGNS:

Examples of plate design options. A full list of designs can be found on the website.



Cindy



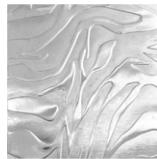
Daisy



Fern



Shells



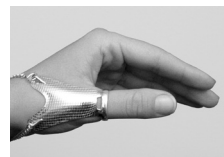
Zebra



## SilverRing™ Stable Thumb Splint (ST)

*Flexion of MCP Joint which is Passively Correctable to Neutral*

- 1 Round Ring** Choose the smallest Round Ringsizer that is snug when it slides over the IP joint. A bracelet is included with the splint.





# SilverRing™ Buddy Ring Splint (BR)

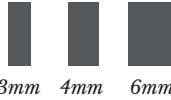
*Adduct Fingers (full offset), Abduct Fingers (no offset)*

- 1 Round Ring** Choose Round Ringsizers that fit at the base of the fingers (MP crease) which are being splinted.



- 2** Record band width: 3, 4 or 6mm.

*(Approximate size shown)*



- 3** Record: no offset, half offset or full offset.

*Note: The combination of band width and offset will determine the "total length" and weight of the splint. Make sure the "total length" does not limit flexion at the adjacent joint.*



No offset



1/2 offset



Full offset





# SilverRing™ 2 1/2 Buddy Ring Splint (2 1/2 BR)

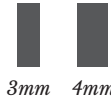
*Adduction of Fingers, Prevent Scissoring or Aligns and Supports MP Joints*

- 1 Round Ring** Choose Round Ringsizers that fit at the base of the three adjacent fingers being splinted: index, middle and ring fingers or middle, ring and little fingers.



(Approximate size shown)

- 2** Record band width: 3 or 4mm.



Record half ring depth and if worn volar or dorsal.

- |                           |  |   |
|---------------------------|--|---|
| <b>3</b> STANDARD ¼ DEPTH |  | • naturally contours to palmer arch                         |
| FULL DEPTH OPTION         |  | • use if ½ ring is worn dorsal                              |
| ½ DEPTH OPTION            |  | • use to raise finger slightly higher than adjacent fingers |
| RMO DEPTH OPTION          |  | • use to raise finger above adjacent fingers                |

- 4** Proximal & distal offsets can align rings better with MP volar crease to allow increased flexion.

Each ring can either be no offset, ½ offset or full offset (see page 16)

*Note: The half ring can be worn under the finger to correct an extension lag or on top of the finger to act as a PIP extension assist. It is most frequently used to prevent abduction or scissoring of fingers. People with EDS can use to control little finger MP hyperextension and dislocation.*



Volar ½ ring  
Extension Lag



Dorsal ½ ring  
PIP Extension assist



Stair Step offset  
Align with webspace



RMO Depth ½ ring  
Raise finger



# SilverRing™ EDS Splint (EDS)

*Hyperextension of MP Joints*

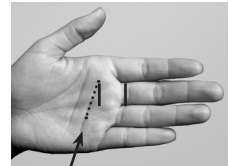
## SPECIAL ORDER SPLINT

*Note: Typically worn on middle finger to support all MP's of the hand. For Little Finger MP hyperextension consider using 2 ½ BR (page 17).*

- 1 Round Ring** Choose a Round Ringsizer that slides easily over the PIP joint and can be positioned at the base of the finger.

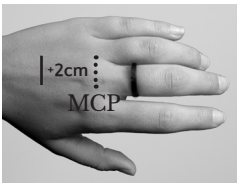


- 2** With the Ringsizer still in place, measure from distal edge of sizer to 5mm distal of distal palmer crease.  
**Example: Average volar length 2.0-2.7 cm**



*Distal crease*

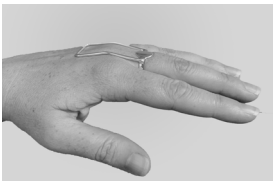
- 3** With the Ringsizer still in place and with the finger in slight flexion, measure from distal edge of sizer to center of the MCP joint and then add 2cm to that measurement.  
**Example: Average dorsal length 4.3-5.0 cm**



## EDS OPTIONS:

**Bend** can be added to force mild flexion. (shown left)

**Rocker Bar** can be added to disperse pressure on the dorsal side of the hand. (shown right)





# SilverRing™ Dorsal Extension Splint (DOE)

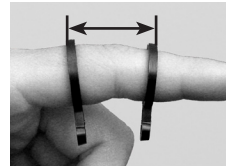
*Flexion or Deviation greater than 25°*

## SPECIAL ORDER SPLINT

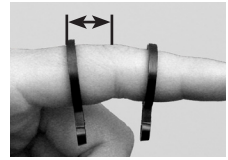
- 1 Round Ring** Choose Round Ringsizers that, when positioned perpendicular to phalanx, fit proximal and distal to the joint at the mid-phalanx.



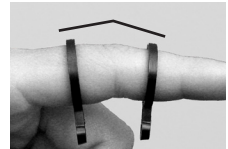
- 2** Measure the lengths from the proximal edge of proximal Ringsizer to distal edge of the distal Ringsizer. Use a straight ruler which you may need to place along side of finger to measure. Do not give a length using soft tape bent over the contracture.



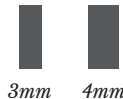
- 3** Measure the length from the proximal edge of proximal Ringsizer to the center of the joint.



- 4** Measure degree of contracture.



- 5** Write down band width: 3 or 4mm. 4mm is default band width (*Approximate size shown*)



3mm 4mm

*Deviation Deformity with bar worn on the side of the joint (shown left)*  
*Flexion Deformity with bar worn on top of the joint (shown right)*



## SPLINT ADJUSTMENTS AND FITTING:

- Splint can be adjusted to accommodate a contracture by bending the bar which connects the two rings. No tools should be used when changing the bend.



## SilverRing™ Trigger Splint (TR)

*Recurring Flexor Tenosynovitis of Index-Little Fingers*

### SPECIAL ORDER SPLINT

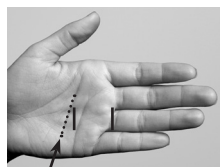
- 1 Round Ring** Choose a Round Ringsizer that fits at the base of the finger (MP crease).



- 2** Measure the length from the base of the finger (MP crease) to 5 mm proximal to the PIP volar crease. This should allow for full flexion at the PIP joint.



- 3** Measure the length from the base of the finger (MP crease) to 5mm distal to the proximal palmer crease.



*Prox crease*

*The dorsal pad on the splint helps distribute the pressure on the dorsal surface of the finger.*





# SilverRing™ Spiral Splint (SP)

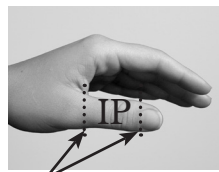
*Trigger Thumb*

- 1 EZ-Sizer** Choose an EZ-Sizer that, when rotated on its side, is snug when it slides over the IP joint.



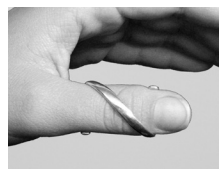
*Sideways over IP joint*

- 2** Measure the length from mid-phalanx to mid-phalanx.



*Mid-phalanx*

*The spiral splint can be worn for trigger thumb by positioning the center band to cross diagonally over the dorsal surface of the IP joint.*



## SPLINT ADJUSTMENTS AND FITTING:

- Splints can be adjusted for circumferential fit by either tightening or opening the spiral.
- Splint length can be adjusted by spreading the ends apart or squeezing the ends towards each other.

# Useful Tips

## **1** Choosing a size:

There is variability in finger size from morning to afternoon, day to day, season to season and with activity level. You are choosing an average size that will fit well most of the time. Note that when people use splints consistently, their edema may decrease.

## **2** Evaluating the fit of a splint:

Hold the finger in extension and gently push one side of the splint against the finger. Look on the other side of the finger to see if there is space between the ring and the finger. Normally there should be minimal or no space, however, if the joint is enlarged or has a contracture, there may be some space. It is normal to see space all around when the finger is flexed.

## **3** Adjusting splints:

Sterling silver and gold are both malleable and durable. Small adjustments will not damage the splints. The rings can be gently spread apart or squeezed together to tighten or loosen the fit of the splint on the finger. Generally, one can increase or decrease the fit of the splint by  $\frac{1}{2}$  a size with this adjustment.

## **4** Over-adjusting splints:

Frequent repetitive bending of the splint will gradually work-harden the metal and ultimately cause it to break. If one needs to frequently adjust the splint due to changes in edema or seasonal changes, having a second set of splints may be desirable. Shifting splints to different fingers on either hand may reduce the need to order all new sizes.

## **5** Splints that are too tight or too loose:

If a splint cannot be made to fit by adjusting the angle of the rings as described in #3 above, the overall splint size should be increased or decreased by at least a whole size.

## **6** How tight should splints be?

DIP splints should be very snug since they can be scraped off during functional activities. PIP and thumb IP splints should be comfortably snug. These are general guidelines; there are always exceptions.

**7 Indentations:**

Individuals have indentations from wearing glasses, socks, watches and splints. The indentations from wearing splints are normal and useful for keeping splints in place. This helps reduce the likelihood that splints will be lost. It is important, however, that an indentation does not develop into a pressure sore. Some splints, such as the SilverRing™ Boutonniere Splint, may need to be shifted slightly from side to side while wearing so that the “spacer” is not always in the same spot.

**8 Wearing time:**

When splinting mild, reducible deformities, some individuals wear their splints twenty-four hours a day because of the increased comfort, support and protection they provide. Individuals with fragile skin or flexion deformities may require a “wearing schedule” specified by the therapist to suit individual needs and tolerances.

**9 Wearing splints at night:**

Since fingers tend to swell while sleeping, it is not advisable to wear splints overnight until one knows how the fingers respond. The type of splint, the severity of the deformity and individual preferences will determine whether splints are worn at night. It is generally not advisable to wear splints for flexion deformities overnight.

**10 Choosing double extra-strength (XXS) or Stainless Steel splints:**

For hands requiring a heavier duty splint, we offer a double extra strength (XXS) splints (slightly adjustable) or Stainless Steel splints (not adjustable). Fit and angle of the rings must be confirmed with a normal sterling silver splint before ordering heavy duty splints.

**11 Correcting lateral deviation with the SilverRing™ Lateral Support Splint:**

The SilverRing™ Lateral Support Splint can be used to correct lateral deviation if the joint can be passively corrected and is not enlarged. It allows full flexion and is a good choice for early osteoarthritis, before there are significant joint changes. It will not be effective on failed arthroplasties because of the enlarged joint, if there are Bouchard's or Heberden's Nodes or if the joint is fusiform shaped.

**12 Understanding where to place the lateral support:**

Three points of contact are needed to correct deviation. The lateral support is the center point (the fulcrum) and goes on the side of the joint opposite the direction of deviation. For example, if the end of the finger is deviating in an ulnar direction, the support goes on the radial border of the joint. See page 25 for image.

## Useful Tips *(continued)*

---

### **13 Correcting lateral deviation with the SilverRing™ Boutonniere Splint:**

The SilverRing™ Boutonniere Splint gives a stronger corrective force because it is longer compared to the SilverRing™ Lateral Support splint. It will accommodate nodes or an enlarged joint, however it limits full flexion. It is an excellent choice for the DIP joint when there are significant joint changes and when the lack of full flexion is not an issue.

### **14 Correcting PIP joint hyperextension greater than 20° with the SilverRing™ Boutonniere Splint:**

When using the SilverRing™ Boutonniere Splint to limit hyperextension, the “spacer” positions the rings farther apart which increases the length of the splint. This extra length allows the splint to fit around an enlarged joint and/or be positioned to avoid Bouchard’s Nodes. It is also a good choice if there is limited ROM because it is easier to get on and off or if there is “bulging” on the volar aspect of the joint when the finger is extended.

### **15 Understanding the proximal volar extension (PVX) and why it is needed:**

When splinting the MCP joint, the web space prevents thumb splints from going far enough proximal to support the joint. The PVX curves along the volar aspect of the thumb to support under the head of the metacarpal joint and gives better alignment at the CMC joint. It can be adjusted by bending it in or out to fit the contour of the volar surface of the thumb for an exact fit. Use when there is more than 15° of hyperextension.

### **16 Understanding the 15° and 30° slots in the Boutonniere Holder:**

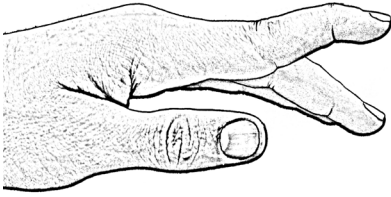
Using the 15° slot in the Boutonniere Holder makes the splint shorter and using the 30° slot makes the splint longer. When the SilverRing™ Boutonniere Splint is too long, the proximal ring rests too close to the volar crease of the adjacent joint. To prevent this, generally use the 15° slot for the proximal ring measurement of a PIP joint. Always use the 15° slot for the proximal ring of a DIP joint. Use the 30° slot for the proximal ring when a longer splint is needed.

**Measurements should be taken by a trained medical professional who is familiar with splinting such as an Occupational Therapist (OT), Physical Therapist (PT), or Certified Hand Therapist (CHT).**

*There are always exceptions! The information throughout this booklet is a basic guideline. Please call or e-mail for more technical advice.*



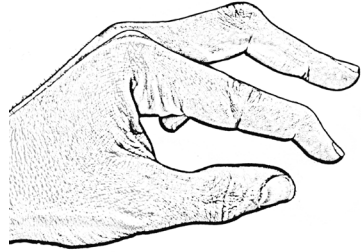
# Typical Finger Deformities



## Swan Neck Deformity:

Use SN

Use BT if hyperextension is greater than 20° or to avoid nodes



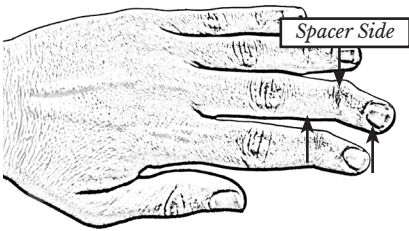
## Boutonniere Deformity (PIP):

Use BT

Use LBT if finger is long or very enlarged,

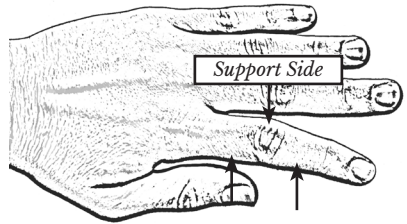
## Mallet Deformity (DIP):

Use BT



## Lateral Deviation (DIP) with Heberden's Nodes:

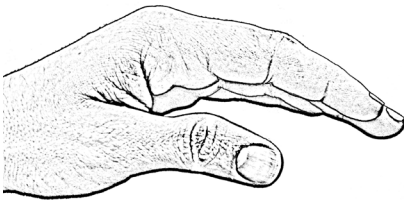
Use BT



## Lateral Deviation (PIP):

Use LS

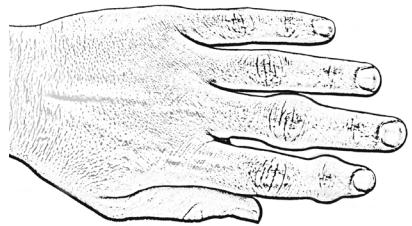
Use BT if the joint is enlarged or has nodes,



## Thumb IP Deviation:

Use BT

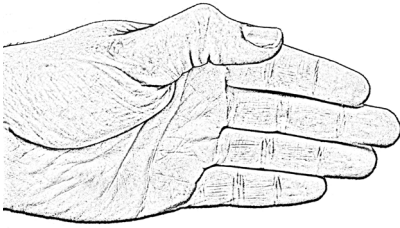
Use LS if the proximal phalanx is the same diameter as the joint,



## Fusiform Shaped Joints (PIP):

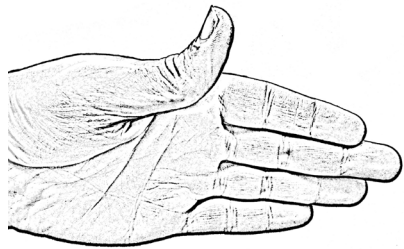
Use BT or LBT

# Typical Finger Deformities *(continued)*



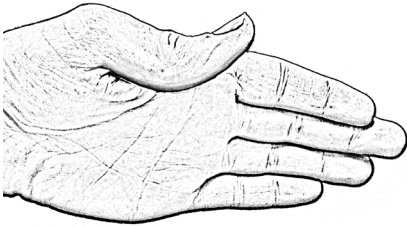
## Hyperextension of Thumb MCP:

If there is active flexion at the MCP joint and abduction at the CMC joint, use MCP with PVX or, if MCP joint flexion is limited or the thumb is adducted, use ST with PVX



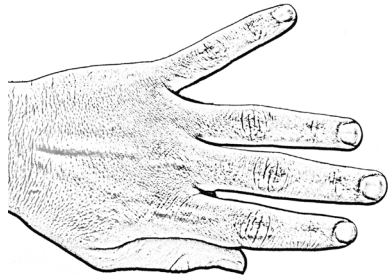
## Hyperextension of Thumb IP:

Use SN or BT



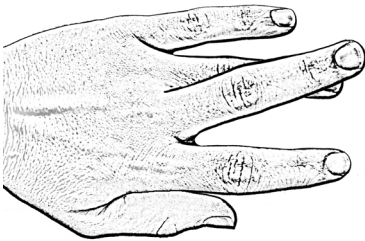
## Hyperflexion of the Thumb MCP Joint:

If joint can be passively extended to neutral, use ST and/or BT on IP joint



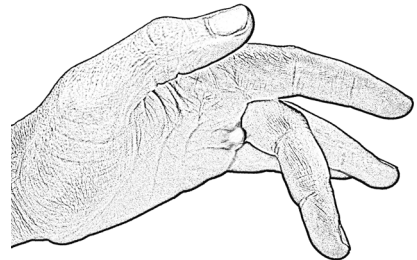
## Abduction of the Little Finger MP Joint:

If there is rotation and/or hyperextension at the MP joint, use 2 ½ BR



## Scissoring of the Fingers at the MP Joints:

Use 2 ½ BR



## Recurring Tenosynovitis in the Palm:

Use Trigger Splint



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