

SCHMETZ



ABC Pocket Guide

Home Sewing Machine Needles
130/705 H

www.SCHMETZneedles.com

WELCOME

The history of the SCHMETZ family in the Aachen region of Germany can be traced back to the 18th century. Ferdinand Schmetz founded the SCHMETZ needle factory in Herzogenrath, Germany in 1851. With more than 170 years of experience, SCHMETZ has developed into a leading global provider of needle systems for both the home sewing industry and industrial processing of textile products.

The most used needle system for home sewing machines is 130/705 H (H=Hohlkehle in German, means with scarf). All needles of system 130/705 H have a flattened shank for perfect positioning of the needle in the needle bar and in relation to the point of the bobbin hook. The special needles differ in size, point shape, and eye. The groove is adapted to the needle size and guarantees the friction free guidance of the thread through the material. The scarf allows the bobbin hook to pick up the needle thread loop correctly.

Whether you're making a three-layer quilt or tackling artistic stitching, SCHMETZ has the ideal needle for every home sewing project, ensuring you achieve the best possible results.



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**Wondering which needle to use?
Download the SCHMETZ Web App — it's free!**

<https://www.SCHMETZneedles.com/pages/resources>

NEEDLE POINTS



Slightly Rounded Point

The slightly rounded point is the standard point shape for home sewing machines. This point shape assures trouble-free sewing of most materials and many applications.

- Universal
- Double Eye
- Embroidery
- Hemstitch Needle
- Metallic
- Quick Threading
- Super Universal
- Topstitch



Slim Acute Point

This is a slim, acute point shape, useful for accurate stitches on cotton, densely woven, and coated materials. It creates an exact seam appearance with straight stitches and helps to reduce seam puckering.

- Microtex



Slightly Rounded Point with Special Taper

The special taper to the slightly rounded point easily penetrates thick layers of fabric and batting and avoids material damages. Use for piecing and quilting.

- Quilting



Light Ball Point

This point shape displaces woven and knitted fibers, directly piercing the spaces between the fibers avoiding material damages. Use for embroidery.

- Embroidery
- Gold Embroidery



Medium Ball Point (SUK)

The medium ball point is rounder than a light ball point. Use on knitwear and fabric containing Lycra®/Spandex. Also suitable for medium to heavy denim.

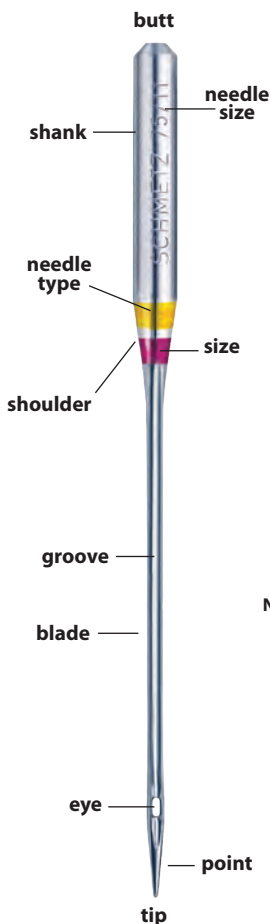
- Stretch
- Jersey
- Jeans (modified medium ball point)



Twist Point (LL)

This cutting point creates a stitch slightly inclined towards the left. Do not use on woven or knits.

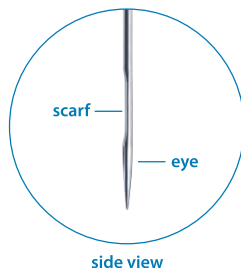
- Leather



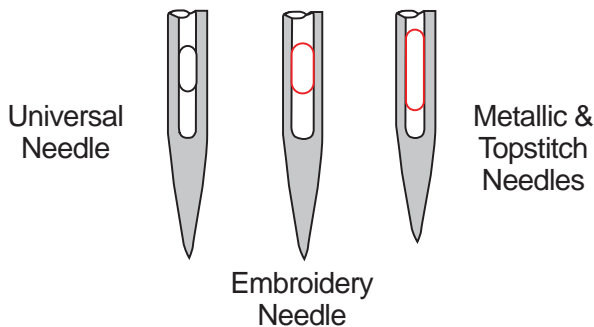
Needle Anatomy

130/705 H

- Butt:** The beveled end allows easy insertion in the needle bar.
- Shank:** Household needles have a flat shank, while commercial and industrial needles have round, threaded, notched or other special shanks. Shanks allow perfect positioning of the needle in the sewing machine.
- Shoulder:** The sloping area transitioning between the shank and blade. SCHMETZ color codes appear on the shoulder.
- Blade:** Needle size is determined by the blade diameter (i.e., size 75 is .75mm).
- Groove:** The groove cradles and guides thread to the eye. The length and size of the groove vary according to needle type.
- Scarf:** The indentation above the eye that allows the bobbin hook to smoothly grab the thread under the throat plate to create a stitch. The shape and size of the scarf vary according to needle type.
- Eye:** The hole through which thread passes. The shape and size of the eye vary according to needle type.
- Point & Tip:** Length, shape and size vary according to needle types.
- Needle Type:** Upper color band indicates needle type (i.e., Stretch).
- Size:** Lower color band indicates size (i.e., 75/11).



Needle Eye Comparison



Not all eyes are the same. Eye shape helps determine needle choice for projects. A larger eye is less stressful on the thread passing through the eye.

Change the Needle



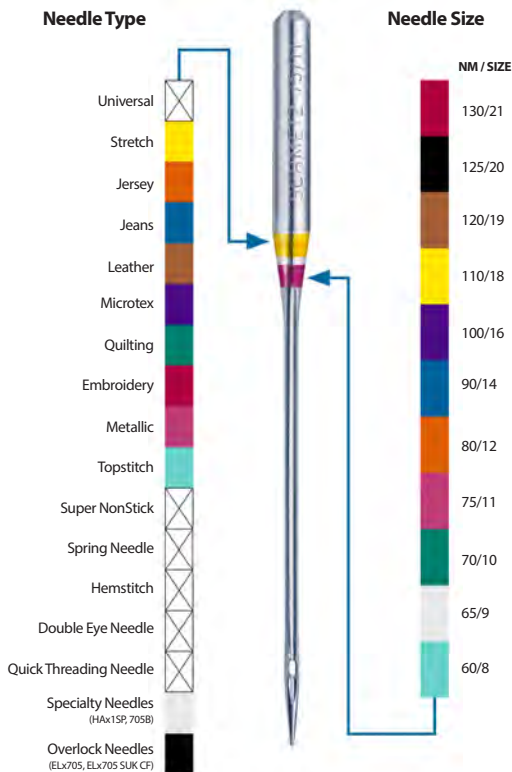
Replace your needle regularly! This is the easiest way to improve stitch quality.

Worn or damaged needles often result in:

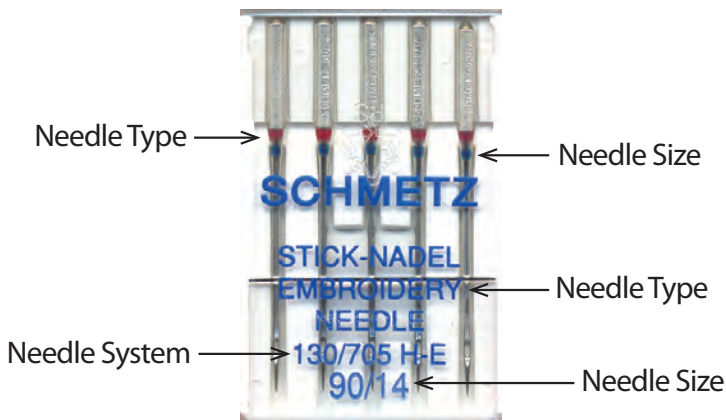
- Shredded or broken threads.
- Skipped or uneven stitches.
- Puckering or damaged fabrics.
- Popping or clicking sound during sewing.

COLOR CODING

The color coding on the shoulder of SCHMETZ home sewing machine needles enables the needle type and size to be identified quickly. The top color band indicates the needle type, the lower color band represents the needle size.



HOW TO READ A NEEDLE PACKAGE



Needle Systems

130/705 H

Home sewing machines require a flat shank needle with a scarf. All needles in this system have a scarf and flattened shank for perfect positioning in the needle bar in relation to the hook.

15x1 H

Cross reference to 130/705 H.

Serger/Overlock/Specialty Machines

SCHMETZ provides needle systems (ELx705, BLx1, DCx1) for domestic sergers and other special machines. Many machines use system 130/705 H. Consult machine owner's manual and www.SCHMETZneedles.com.

UNIVERSAL



- **Size:** 60/8, 65/9, 70/10, 75/11, 80/12, 90/14, 100/16, 110/18, 120/19, Assorted, Twin, Triple.
- **Color Code:** Size only
- **Feature:** Slightly rounded point.
- **Fabric Use:** Numerous — wovens and knits. A great general purpose needle.



The SCHMETZ Universal needle is the most popular, all-purpose needle type. The Universal needle is available in the widest range of sizes plus twin and triple.

- Needle system 130/705 H
- Slightly Rounded Point
- Regular Eye





- **Size:** 75/11, 90/14, Assorted, Twin
- **Color Code:** **Red**
- **Feature:** Light ball point, special scarf, widened groove, and enlarged eye.
- **Fabric Use:** Rayon, polyester, and other specialty embroidery threads.



The SCHMETZ Embroidery needle protects fragile threads and guards against excess friction allowing trouble-free embroidery and decorative stitching. Embroidery Twin needles are also available.

- Needle system 130/705 H-E
- Light Ball Point
- Enlarged Eye



GOLD EMBROIDERY



- **Size:** 75/11, 90/14
- **Feature:** Titanium Nitride coating, light ball point, and enlarged eye.
- **Fabric Use:** Coarse and densely woven materials.

The SCHMETZ Embroidery Gold needle is perfect for embroidery on most fabrics and with the most fragile specialty threads. The titanium coating resists adhesives, improves needle wear, and penetration of coarse and densely woven fabrics.

- Needle system 130/705 H-ET
- Light Ball Point
- Enlarged Eye





- **Size:** 70/10, 80/12, 90/14, 100/16, 110/18, Assorted, Twin
- **Color Code:** **Blue**
Feature: Modified medium ball point and reinforced blade.
- **Fabric Use:** Denim and similar fabrics.



The SCHMETZ Jeans needle is also known as a Denim needle. The advanced point design is a SCHMETZ exclusive. The Jeans needle penetrates thick woven fabrics, denims, and quilts with minimum needle deflection, reduced risk of needle breakage, and fewer skipped stitches. Denim Twin needle available.

- Needle system 130/705 H-J
- Modified Medium Ball Point
- Regular Eye



JERSEY/BALL POINT



- **Size:** 70/10, 80/12, 90/14, 100/16, Assorted
- **Color Code:** **Orange**
- **Feature:** Medium ball point.
- **Fabric Use:** Knits and some stretch fabrics. Made especially for sewing on knits.



The SCHMETZ Jersey sewing machine needle is also known as a ball point needle. Jersey Needles are recommended when working with jersey fabrics. The medium ball point is designed to avoid breakage of knit fibers at stitch creation.

- Needle system 130/705 H SUK
- Medium Ball Point
- Regular Eye





- **Size:** 70/10, 80/12, 90/14, 100/16, 110/18, Assorted
- **Color Code:** **Brown**
- **Feature:** Cutting point.
- **Fabric Use:** Leather, artificial leather, heavy non-woven synthetics. Do not use on knit or woven fabrics.



The SCHMETZ Leather sewing machine needle has a left twist cutting point. The cutting point easily penetrates leather. Remember, once the stitch is created, the thread can be removed, but the stitch hole will remain.

- Needle system 130/705 H LL
- Cutting Point LL = Twist Point
- Regular Eye



METALLIC



- **Size:** 80/12, 90/14, Twin
- **Feature:** Elongated eye and slightly rounded point.
- **Color Code:** **Pink**
- **Fabric Use:** Metallic and other specialty threads.



The SCHMETZ Metallic sewing machine needle has an elongated eye providing less stress on the thread as it passes through the eye. Achieve perfectly straight and even stitches when using a straight stitch needle plate. A popular needle choice for machine embroidery. Metallic twin needles also available.

- Needle system 130 MET
- Slightly Rounded Point
- Elongated Eye





- **Size:** 60/8, 70/10, 80/12, 90/14, Assorted
- **Color Code:** **Purple**
- **Feature:** Very slim acute point.
- **Fabric Use:** Microfibers, cork, batik, bamboo, cotton, polyester, silk, foils, artificial leather, coated materials.



The SCHMETZ Microtex sewing machine needle is generically known as a “sharp” needle. The very slim acute point creates beautiful topstitching on fashion sewing and perfectly straight stitches for piecing and quilting. Use the SCHMETZ Microtex when precision is paramount.

- Needle system 130/705 H-M
- Slim Acute Point
- Regular Eye



QUILTING



- **Size:** 75/11, 90/14, Assorted
- **Color Code:** **Green**
- **Feature:** Special taper to the slightly rounded point.
- **Fabric Use:** Made especially for piecing and machine quilting, cotton, batik.



The SCHMETZ Quilting sewing machine needle is specifically designed for piecing and quilting. With a special taper to the slightly rounded point, the needle easily penetrates fabric and helps eliminate skipped stitches.

- Needle system 130/705 H-Q
- Slightly Rounded, Special Taper Point
- Regular Eye





- **Size:** 75/11, 90/14, Twin
- **Color Code:** **Yellow**
- **Feature:** Medium ball point, special eye, and deep scarf.
- **Fabric Use:** Elastic materials and highly elastic knitwear.



The SCHMETZ Stretch needle has a medium ball point, smaller eye, and a deep scarf. Use on highly elastic knits especially if the fiber content includes Lycra®, Spandex, or elastic. Stretch Twin needles also available.

- Needle System 130/705 H-S
- Medium Ball Point
- Smaller Eye



TOPSTITCH



- **Size:** 80/12, 90/14, 100/16
- **Color Code:** Light Green
- **Feature:** Elongated eye.
- **Fabric Use:** Topstitch, heavy, multiple, or poor quality threads.



The SCHMETZ Topstitch needle has an elongated eye providing less stress on the thread as it passes through the eye. The Topstitch needle has a slightly rounded point. Achieve perfectly straight and even stitches when using a straight stitch needle plate. A popular needle choice for machine embroidery.

- Needle system 130 N
- Slightly Rounded Point
- Elongated Eye





- **Size:** 80/12
- **Color Code:** Size only
- **Feature:** Universal needle with two eyes.
- **Fabric Use:** Numerous — wovens and knits. Use two different threads for shading and texturing effects for embroidery and topstitching.



The SCHMETZ Double Eye needle creates shading and texturing effects using two spools of thread for embellishing, embroidery, and topstitching. Reduce sewing speed when using this special needle.

- Needle system 705 DE
- Slightly Rounded Point
- Regular Eye



ELx705 SERGER/OVERLOCK



- **Size:** 80/12, 90/14, Assorted
- **Color Code:** **Black**
- **Feature:** Designed for use in multi-purpose sergers that do overlock stitches. Not suitable for use in home sewing machines or embroidery machines. Machines should specify ELx705.



The SCHMETZ ELx705 needle features two grooves needed to create specialty serger stitches. The point is slightly rounded. **Do not use this needle in home sewing machines.**

- Needle system ELx705
- Slightly Rounded Point
- Regular Eye





- **Size:** 100/16, 120/19, Twin
- **Color Code:** Size only
- **Feature:** A wing on each side of the needle.
- **Fabric Use:** Light or medium weight loosely woven fabrics.

The SCHMETZ Hemstitch forms a unique stitch at stitch creation: the wings spread the fabric. This needle moves easily through light to medium weight loosely woven fabrics. Popular for heirloom sewing and decorative cutwork, the Hemstitch needle can be used in multi-media quilts. Twin Hemstitch needle also available.

- Needle system 130/705 H Wing
- Slightly Rounded Point
- Narrow Eye



HIGH SPEED PROFESSIONAL QUILTING



- **Size:** 75/11, 90/14, 100/16
- **Feature:** A flat shank needle (similar to 130/705 H) designed specifically for high-speed professional quilting machines. This needle features a short shank and a slightly rounded needle point with a shank diameter of only 2 mm.
- **Fabric Use:** Suitable for all common materials — jersey, denim, fancy fabrics, fake fur, etc.



The SCHMETZ HLx5 is a specific needle system specifically designed for high-speed professional quilting machines (i.e., Janome 1600 P series, etc.). Machine owner's manual will specify HLx5 system. **Do not use this needle in home sewing machines.**

- Needle system HLx5
- Slightly Rounded Special Taper Point
- Regular Eye





- **Size:** 80/12, 90/14
- **Color Code:** **Size only**
- **Feature:** Universal needle with a slip-in threading slot in the eye.
- **Fabric Use:** Numerous — wovens and knits, but test first.



The SCHMETZ Quick Threading needle is a Universal needle with an easy-to-thread slot in the eye. Reduce sewing speed so the thread does not pop out of the eye. Avoid using on sensitive fabrics as the slot may snag the fabric. Do not use for quilting as the batting may pull. Do not use when sewing denim, as the eye structure is too weak.

- Needle system 705 HDK
- Slightly Rounded Point
- Regular Eye with Open Slot



SUPER NONSTICK



- **Size:** 70/10, 80/12, 90/14, 100/16
- **Feature:** The anti-adhesive coating (NIT) resists sticky stabilizers, fusibles, and adhesives. Use for machine embroidery, machine appliqué, multi-media quilting, vinyl, and hoop and loop tape.



The SCHMETZ Super NonStick sewing machine needle is a Super Universal Needle with a reinforced blade, extra large eye, deep scarf, and a slightly rounded point. The eye corresponds to a needle two sizes larger. **If stitching on light or white fabrics or threads, test first for excess residue.**

- Needle system 130/705 H-SU
- Slightly Rounded Point
- Extra Large Eye



TWIN & TRIPLE NEEDLES

Sewing with Twin and Triple Needles opens a wide range of practical and creative options, such as adding texture with pin tucks or shaded effects. Use these needles to add decorative seams and creative hems to clothing, as well as echo quilting. Only suitable for zig-zag machines with a transverse hook. **Verify machine throat plate can accommodate needle width.**

Twin/Triple Needles:

Universal Twin - Sizes: 1.6/70, 1.6/80, 2.0/80, 2.5/80, 3.0/90, 4.0/80, 4.0/90, 4.0/100, 6.0/100, 8.0/100, Assorted

Universal Triple - Sizes: 2.5/80, 3.0/80

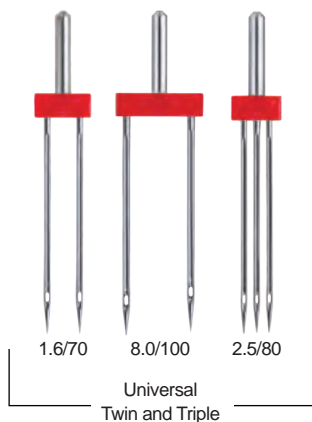
Double Hemstitch - Size: 2.5/100

Embroidery Twin - Sizes: 2.0/75, 3.0/75

Jeans/Denim Twin - Size: 4.0/100

Metallic Twin - Sizes: 2.5/80, 3.0/90

Stretch Twin - Sizes: 2.5/75, 4.0/75



- Needle spacing is shown in millimeters and the needle size in NM (number metric).
- The first number is the distance between the needles.
- The second number is the needle size.

SPRING NEEDLES



- **Feature:** Has a spring around the needle, which assumes the function of the presser foot.
- **Fabric Use:** Terrific for free motion and embroidery. Remove foot for easy viewing of stitches.

Available Spring Needles

- **Denim** — 100/16
- **Embroidery** — 75/11, 90/14
- **Quilting** — 75/11, 90/14
- **Stretch** — 75/11, 90/14
- **Universal** — 70/10, 80/12, 90/14

SCHMETZ spring needles combine the function of a darning spring on the needle itself. Use for free-motion machine embroidery or monogramming in a hoop without a foot. SCHMETZ spring needles work with all home sewing machine brands.

- Needle system 130/705 H

NEEDLE & FABRIC RECOMMENDATIONS

The following information is only a general guide. Experiment to determine the best needle to use for your application.

Artificial Leather – Microtex or Leather 70/10-100/16

Bamboo – Microtex 70/10-90/14; Super NonStick 70/10-90/14

Batik – Microtex 70/10-90/14

Batiste – Universal 60/08, 70/10

Bed-Linen, Jersey – Stretch 75/11, 90/14

Bed-Linen, Woven – Universal 70/10-100/16

Bouclé – Jersey 70/10-90/14

Brocade – Universal or Microtex 60/8-90/14

Calico – Universal 80/12-100/16

Cambric – Universal 60/8, 70/10

Canvas – Jeans 90/14-110/18

Chambray – Universal 80/12, 90/14

Chenille – Universal 90/14

Chiffon – Universal or Microtex 60/8, 70/10

Coarse Warp-Knit Fabric and Knitwear – Jersey 80/12, 90/14

Coat Fabric – Universal 90/14-120/19

Coated Material – Microtex 70/10-110/18

Cork – Microtex or Super NonStick 70/10-90/14

Corduroy – Universal 80/12-100/16

Corsetry – Stretch 75/11, 90/14; Jersey 70/10-90/14

Cotton, Knit – Jersey 70/10-90/14; Stretch 75/11, 90/14

Cotton, Woven – Universal 70/10-90/14

Crepe – Universal or Microtex 60/8-80/12

Crepe-de-Chine – Universal or Microtex 60/8-80/12

Crinkle – Universal or Microtex 60/8-80/12

Cupro – Microtex 60/8-80/12

Curtains – Universal or Jersey 80/12-90/14

Decorative Stitches – Embroidery 75/11-90/14; Embroidery Spring Needle (without a sewing foot) 80/12; Gold Embroidery 75/11-90/14; Super NonStick 70/10-90/14

Denim – Jeans 70/10-110/18

Double-Face Woven – Universal 70/10-110/18

Elastic – Stretch 75/11, 90/14

Fancy Seams – Hemstitch 100/16, 120/19; Double Eye 80/12; Twin 70/10-100/16 (special needles are available for different applications); Triple 2.5/80 or 3.0/80

Faux Fur – Universal 70/10-100/16; Jersey 70/10-90/14

Felt – Universal 80/12-100/16

Flannel – Universal 80/12-110/18

Fleece – Universal 70/10-90/14; Stretch 75/11, 90/14

Foils – Microtex 60/8-110/18

NEEDLE & FABRIC RECOMMENDATIONS

Fun Fur – Universal 70/10-100/16; Jersey 70/11-90/14

Gabardine – Universal 70/10-100/16

Gauze – Jersey 70/10, 80/12

Georgette – Universal or Microtex 60/8-80/12

Hemstitch Seams – Hemstitch 100/16, 120/19;
Double Hemstitch 100/16

Highly Elastic Warp-Knit Fabric (Lycra®, silk jersey) – Stretch 75/11, 90/14

Hook & Loop Tape – Super NonStick 80/12-100/16

Imitation Fur (fun fur) – Jersey or Universal 70/10-100/16

Jacquard – Universal 80/12-100/16

Jeans – Jeans 70/10-110/18; Jeans Twin 4.0/100

Jersey – Jersey 70/10-80/12

Knits – Jersey 70/10-100/16

Knits with Lycra®, Spandex, Elastic – Jersey 70/10-100/16; Stretch 75/11, 90/14

Knits, Fine – Jersey 70/10-90/14; Stretch 75/11, 90/14

Lace – Select by Fabric Type 70/10-90/14

Lamé – Microtex 60/8-90/14

Leather, Thick & Artificial Leather – Leather 100/16, 110/18

Leather, Thin – Leather or Universal 70/10-90/14

Linen & Linen Blend – Universal 70/10-90/14

Lingerie – Stretch 75/11, 90/14; Jersey 70/10-90/14

Loden – Universal 80/12-120/19

Lycra® – Stretch 75/11-90/14; Jersey 70/10-90/14

Metallic Thread – Metallic 80/12-90/14;
Gold Embroidery 75/11, 90/14

Microfiber – Microtex 60/8-90/14

Minky – Stretch 90/14

Nylon – Universal or Microtex 60/8-90/14

Oil Cloth – Microtex 80/12-100/16; Super NonStick 70/10-100/16

Organdy – Universal or Microtex 60/8, 70/10

Organza – Universal or Microtex 60/8, 70/10

Panne Velvet – Stretch 75/11; Universal 70/10, 80/12

Patchwork – Quilting 75/11, 90/14; Microtex 70/10-90/14

Polyester – Universal or Microtex 60/8-100/16

Poplin – Microtex or Universal 60/8-80/12

Quilt – Quilting 75/11, 90/14; Microtex 70/10-90/14

Rayon – Universal 70/10, 80/12; Microtex 60/8-80/12

NEEDLE & FABRIC RECOMMENDATIONS

Satin – Microtex, Jeans, or Universal,
70/10-90/14, depending on fabric weight
Seersucker – Universal 70/10-90/14
Sequined Fabric – Microtex 70/10-90/14;
Stretch 75/11, 90/14
Shirting – Universal 70/10, 80/12; with Stretch
– Stretch 75/11
Shot – Universal or Microtex 60/8-80/12
Silk – Microtex 60/8-90/14
Silk Jersey – Stretch 75/11
Single Jersey – Stretch 75/11
Specialty Threads – Embroidery 75/11, 90/14;
Gold Embroidery 75/11, 90/14; Metallic
80/12-90/14
Splash Fabric – Super NonStick 70/10-90/14
Suiting – Universal 80/12, 90/14
Sweatshirt – Jersey 70/10-90/14
Synthetic Leather, Hard – Leather 100/16,
110/18
Synthetic Leather, Soft – Microtex or Leather
70/10-100/16

Taffeta – Microtex or Universal 60/8, 70/10
Terry Cloth – Universal 80/12, 90/14

Thermovelour Fleece – Universal 70/10-
90/14;
Stretch 75/11, 90/14
T-Shirt Hems/Edge Finishing – Stretch Twin
2.5/75 or 4.0/75
Tulle – Universal or Jersey 70/10, 80/12
Twill – Jeans 70/10-110/18

Velour – Universal 70/10-100/16
Velour Jersey – Stretch 75/11, 90/14
Velvet – Stretch 75/11, 90/14; Universal
70/10-90/14
Velvet Burn-Out – Stretch 75/11, 90/14
Velvet Panne – Stretch 75/11; Universal
70/10-80/12
Vinyl – Microtex 70/10-90/14; Super NonStick
70/10-100/16
Viscose – Universal 70/10, 80/12
Voile – Universal 60/8-80/12

Waxed Cloth – Microtex 80/12-100/16;
Super NonStick 70/10-90/14
Wool & Wool Blends – Universal 70/10-
100/16

\$4.95

Dealer Stamp



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