

## Needle Recommendation Chart

Needle Types	Fabric/Use	Sizes
Sharp point	Lingerie, Silk	60/8
Ball point	Lingerie, Silk	60/8
Ball point	Organza, Taffeta, Velvet	65/9
Sharp point	Cotton Sheeting, Lingerie, Silk	70/10
Ball point	Dress Shirt (woven), Golf Shirt (Knit), Lingerie, Silk, Lycra, Spandex, Nylon Wind Breaker, Sweatshirt	70/10
Sharp point	Corduroy, Denim, Lace, Satin Jacket, Sweater, Terry Cloth Towels, Vinyl, Cotton Sheeting, Lingerie, Silk, Quilted Totes, Boat Totes, Lunch Totes, Backpacks, Cosmetic Bags, Kiwi Paper	75/11
Ball point	Corduroy, Rayon, Terry Cloth Towels, Dress Shirt, Golf Shirt, Lingerie, Silk, Lycra, Spandex, Nylon Wind breaker, Satin Jacket, Sweater Knit, Sweatshirt	75/11
Sharp point	Canvas, Coated or Waterproof Fabrics, Cotton Sheeting, Leather, Vinyl, Terry Cloth Towel, Quilted Totes, Boat Totes, Lunch Totes, Backpacks, Cosmetic Bags	80/12
Ball point	Dress Shirt (woven), Golf Shirt (Knit), Coated/Water Proof, Nylon Windbreaker, Sweatshirt, Lycra, Spandex, Terry Cloth Towel	80/12
Wedge point	Leather	80/12
Sharp point	Leather	90/14
Large Eye	Filaine specialty threads	90/14
Large Eye	Burmilana, Filaine and other 12 weight specialty threads	100/16

**Just remember that high quality embroidery is a delicate balance between the design, thread [top & bobbin], stabilizer, needle, and item being stitched.**

**Remember when you change one of these, you are changing more than the needle:**

- ~ The needle size or the eye size of the needle - you are changing the tension on the top thread.
- ~ The needle size - you are changing the relationship of the needle scarf to the hook point.
- ~ The needle point - you are changing the way the needle penetrates the fabric.

**AKD ADVICE** ~ Like most other things embroidery related, there is no set rule to solving problems associated with needles. Experimentation to solve problems is the best advice. Keep a variety of needle types, sizes, and finishes on hand so you will have the tools needed to solve any related problem.

## Basic Needle Information

### Needle Type

**Sharp Point:** Sharp points are also called "Regular Points". A sharp point is just as it sounds. The point of the needle is sharp and offers more of a cutting action than a ball point needle. Sharps are more commonly used for woven fabrics. The point of a sharp needle makes it easier for the needle to penetrate the tighter construction of a woven fabric. This places less stress on the needle, thus reducing needle deflection, therefore reducing broken needles.

**Ball Point:** Ball point needles have a rounded tip as opposed to a sharp tip, therefore they have less cutting action, which reduces the cutting of fabric fibers. These needles are very good for knits or loosely woven fabrics. The cross fibers which constitute the knit or loosely woven fabric are relatively far apart when compared to a tightly woven material. The rounded tip of a ball point separates fibers as opposed to cutting them thus practically eliminating the potential of damaging the garment being sewn. A rounded "ball" point needle is recommended for use with tricot, jerseys, lingerie and power net. Unlike sharp, pointed needles which pierce fibers of knit / fabrics, destroying elasticity, ball points slip between fibers, preventing damage to fabric, and annoying skipped stitches. Select light or medium ball in the correct size to suit fabric.

**EBBR:** This needle was developed for use in the commercial Babylock EMB and Brother PR machines. It is an industrial quality needle with a flat shank, reinforced blade, and an oversized eye. It is available with a hard chrome finish. The regular point is a light ball point [a ball point that is not as round as a regular ball point, and not quite as sharp as a sharp point]. This is the only style available in this EBBR line.

### Needle Size

**65/9:** This needle is mainly used for small detail work when curves are sharp and density is an issue.

**75/11:** This needle is used in embroidery machines 75-80% of the time. It is the most universal needle because the diameter is not too big for embroidery and it offers sufficient needle strength.

**80/12:** This needle is used for heavier fabrics, such as denim, because it makes a bigger hole in the fabric while it sews. Another example of when to use an 80/12 needle is when operators are sewing on caps and are experiencing many needle breaks. Because of the larger diameter, this needle is often stronger with these situations.

### Needle Finish

**Chrome:** Standard needle with a chromium finish.

**Titanium or PD (Perfect Durability):** PD needles have a titanium-nitride ceramic finish which makes them more wear-resistant than any other needles. When embroidering large stitch patterns or penetrating very abrasive, dense or tough materials the needle points and surface will maintain its original shape and dimensions 3 to 5 times longer. PD needle points will not wear down as fast as chromium plated needle points. The use of PD needles gives you longer needle life, fewer defects due to "dulled" needle points, and increased productivity.

### Please Note

This information was gathered from several sources and compiled to make a comprehensive chart. AKDesigns Boutique cannot be held responsible for any unsatisfactory results that you might experience from using the wrong needle for a project.