

Needles

All sewing machine needles have the same basic parts.

Shank – The upper thick part of a sewing machine needle that is inserted in the machine. Home sewing machine needles are composed of a flat and a round side, to assist in always having the needle in the correct position. Refer to your sewing machine manual for the correct way to insert the needle in your machine.

Shaft – The shaft is the area from the bottom of the shank to the point. The shaft contains the groove, scarf, eye and point of the needle.

Groove – A groove is in the side of the needle leading to the eye. The groove is a place for the thread to lay into the needle.

Scarf – The scarf is a flat part of the needle. The scarf allows the bobbin case hook to intersect with the upper thread and form stitches.

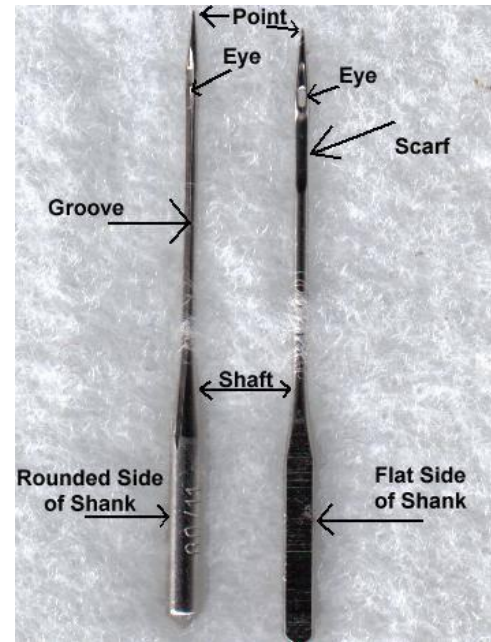
Eye – The eye of the needle carries the thread so the machine can keep forming stitches.

Point – The point of the needle is the first contact with the fabric and responsible for how the needle pierces the fabric. The most common types of point are sharps, ballpoint and universal.

Sharp needles – are for all woven fabric. The sharp point is especially helpful when sewing straight lines and tasks such as tops stitching.

Ballpoint needles – are designed for knit fabric so that the point glides between the loops of a knit fabric without disturbing the fibers that make up the fabric. Ball point needles do not form as straight stitching as sharp needles. The non-straight stitching is more apt to stretch with the fabric. A stretch needle is the last-resort needle when ballpoint needles still leave skipped stitches.

Universal needles – can be used with woven or knit fabric. The point of a universal needle is sharp yet very slightly rounded giving it the characteristics of a sharp and a ballpoint needle. If you are not happy with the stitches your machine is forming, try switching the needle to either a ball point or sharp.



Sewing Machine Needle Sizes	
American	European
8	60
9	65
10	70
11	75
12	80
14	90
16	100
18	110

The American system uses 8 to 19, 8 being a fine needle and 19 being a heavy needle. European sizes range from 60 to 120, 60 being a fine needle and 120 being a heavy needle. You may find a needle size listed as 90/14 or 14/90. The order of the numbers does not affect the size. For fine, sheer fabrics, you will want to use a smaller needle. I seldom go much smaller than 70/10, due to threading. Most denims work well with a 90/14, although a particularly heavy fabric may require larger. In general, 80/12 should work for most projects. Always test your thread and fabric combination on scraps of fabric rather than the item you are working on. Remember, needles work by punching holes in the fabric for the thread to go through. Choose wisely.