

Thread Weight Determines Density and Needle Size

Due to the different thread weights, stitch density needs to be adjusted while digitizing. The following overview shows the stitch densities that are suitable for each embroidery thread. Combining the right stitch density with the appropriate needle size will result in the best embroidery!

Thread Type	Satin Stitch per cm ²	Density based on 1/10 mm	Density based on 1 mm	Needle Size
Classic Rayon 60	57	3.5	0.35	65/9
Classic Rayon 40	51	4.0	0.40	65/9 - 75/11
Classic Rayon 30	41	5.0	0.50	75/11
Classic Rayon 12	25	8.0	0.80	100/16
Polyneon 60	57	3.5	0.35	65/9
Polyneon 40	51	4.0	0.40	65/9 - 75/11
Frosted Matt 40	51	4.0 or 3.5	0.40 or 0.35	65/9 - 75/11
Burmilana 12	23	9.0	0.90	100/16
FS 50	57	3.5	0.35	65/9 - 75/11
FS 45	51	4.0	0.40	90/14
FS 40	51	4.0	0.40	65/9 - 75/11
FS 35	48	4.5	0.45	90/14
FS 30	41	5.0	0.50	90/14
FS 20	27	8.0	0.80	100/16
FS 15	23	9.0	0.90	100/16
Supertwist 30	30	6.0	0.60	90/14
Supertwist 12	25	8.0	0.80	100/16
Fire Fighter 40	51	4.0	0.40	75/11 - 80/12