

Needles for single and multihead embroidery machines

Hook needles for tambouring machines and
automatic embroidery machines



Needles for single and
multihead embroidery machines

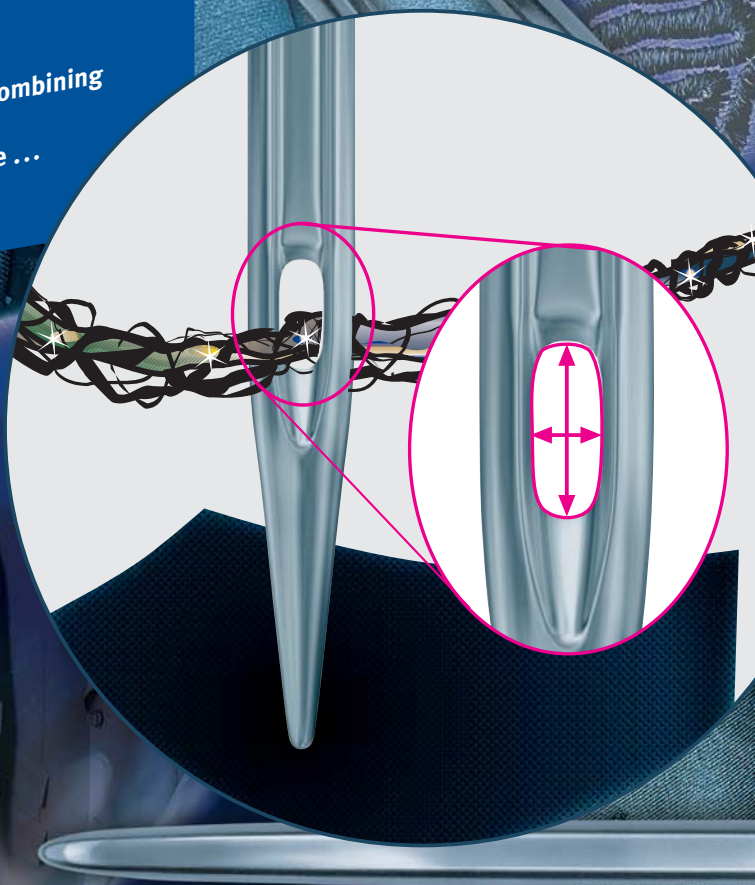
Hook needles for tambouring machines
and automatic embroidery machines

SCHMETZ embroidery needles

DBXK5

DBXK5 KK/1738 ES

Needle design improvements combining
3 important benefits!
For more information see inside ...



Embroidery needles

Hook needles for tambouring machines and automatic embroidery machines

Applications:

Chain stitch, coil and braid embroidery
Moss stitching

Machine:

Crank handle machines:
Manual guidance of the material being embroidered

Automatic embroidery machines:
Program-controlled guidance of the material being embroidered

You can find the right system via the hook design:

Choosing the right needle:

Your type of stitch determines the length and the hook design:

Type of embroidery	Hook design
Chain stitch, coil and braid embroidery	Standard hook
Moss stitching	Short hook

Needle type		System
Needle with threaded shank	Short hook	137x1 SM PHx1 SM
	Standard hook	253 C (PHx253 C)
		253 M
		253 S/C (PHx253 S/C)
		137x1 PHx1
Needle with notch at shank	Standard hook	CEx3



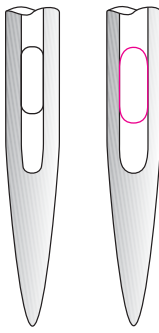
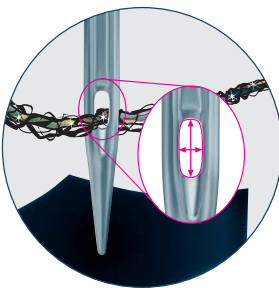
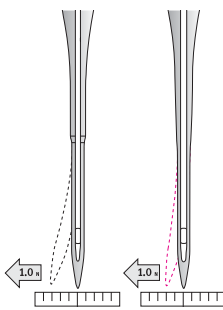
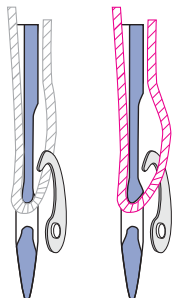
Embroidery appearance:



Embroidery needles

Needles for single and multihead embroidery machines

The features of the **SCHMETZ DBXK5 and DBXK5 KK/1738 ES** for optimized embroidery stitching

Features		Customer benefits
SCHMETZ Special embroidery eye Two sizes larger eye, e.g. needle size 70/10 has an eye of a size 90/14		Optimized thread handling due to less friction Easy threading minimizes damages on embroidery thread and reduces down-time Trouble-free use of special embroidery threads, so-called effect yarns (metallic threads e.g. lurex yarn, viscose, polyester etc.)
SCHMETZ Chemical eye and groove polishing (Total needle polish) Total chemical needle polishing guarantees both needle eye and grooves to be smooth and free of burrs		Thread passing smoothly through the embroidery eye Minimized thread breakage Gentle stitching of thread
SCHMETZ Reinforced upper blade Less deflection of the needle, especially in areas of high stitch density		Long needle life Minimized needle breakage Straight penetration creates clear border lines Minimized damages of the hook point, throat plate and feed dog of the sewing machine
SCHMETZ Optimized hump scarf Creates ideal distance between scarf and thread		Avoidance of skip stitches The optimized scarf shape produces a larger thread loop which can be easily caught by the hook

Embroidery needles

Get your free sample of the SCHMETZ DBXK5 and DBXK5 KK/1738 ES from:

Please specify needle size and point shape:

Product:

In addition, SCHMETZ embroidery needles feature all characteristics necessary for the demanding requirements on single and multihead embroidery machines:

Requirement	Further characteristics of SCHMETZ embroidery needles for single and multihead embroidery machines
Trouble-free thread passage (especially with bulky embroidery threads and metallic threads)	Larger eye and wider long groove
Less needle breakage	
Easy threading	
Easy gentle piercing of the material	Optimum point shape
Trouble-free changing of the embroidery thread colour	Short point
Compensation of the spring effect of the needle bar	
Highly raised embroidery	
Damage-free penetration	Perfectly rounded edges of eye and long groove
Gentle handling of thread (no roughening of embroidery thread) and material being embroidered, particularly over long feed paths	
Short distances between stitches	SUK Medium ball point
Gentle stitching of thread	

Machine:

Fully automatic embroidery machines

Realisation of the embroidery process on horizontally guided material, with one or several embroidery heads running in parallel, several needles and different embroidery threads per head

2-thread system (needle thread and bobbin thread)

Parallel use of embroidery needles and hook needles possible on special machines

SCHMETZ tip:

If you are looking for an embroidery needle with a very short point, use the 287 WK H needle system.

Applications:

Embroidery of individual motifs and monograms on prefabricated goods.

Broderie anglaise, sequin and cord embroidery on textile surfaces.

Embroidery needles

Choosing the right needle:

The material determines the choice of the right needle size and point shape:

Material	Needle size		Point shape	
	NM	SIZE		
Knitwear Jersey	65-90	9-14	SUK	Medium ball point
Fine knitwear	65-80	9-12	SES	Light ball point
Woven fabrics	65-100	9-16	SUK	Medium ball point
Denim	80-100	12-16	SUK	Medium ball point
Terry towelling	70-100	10-16	SUK	Medium ball point
Densely woven material (microfibres)	65-80	9-12	R	Normal round point
Silk	65-80	9-12	SPI	Acute round point
Coated, reinforced materials	65-80	9-12	SUK	Medium ball point
Patent leather/ Imitation leather	70-90	10-14	R SD1	Normal round point Round point with small triangular tip
Fine leather goods	70-90	10-14	R SD1	Normal round point Round point with small triangular tip



Embroidery appearance:



Highlight:

SCHMETZ SUK Medium ball point:

Avoids damage to the embroidery thread at small distances between stitches.

Embroidery needles

Choosing the right needle size

The embroidery stitching technique and the choice of embroidery thread determine the needle size.

Two essential criteria must be taken into account:

1. Embroidery thread/ Embroidery appearance

The needle size is determined by the thickness of the embroidery thread and the desired embroidery appearance.

2. Material and material properties

The harder and thicker the material, the thicker the needle must be.

Continuous filament								
Thread type	Polyester				Viscose			
	Yarn size		Needle size		Yarn size		Needle size	
	Nr.*	tex*	NM	SIZE	Nr.*	tex*	NM	SIZE
	40	30	70-80	10-12	60	20	65	9
	40	30				30	65-80	9-12
	30	40				40	80-90	12-14
	12	100				90-100	14-16	

Continuous filament				
Thread type	Metallic			
	Yarn size		Needle size	
	Nr.*	tex*	NM	SIZE
	50	23	65-80	9-12
	40	30	75-90	11-14
	30	40	80-90	12-14
	20	60	80-90	12-14
	15	80	80-100	12-16

Core-spun								
Thread type	Cotton				Wool/Acrl			
	Yarn size		Needle size		Yarn size		Needle size	
	Nr.*	tex*	NM	SIZE	Nr.*	tex*	NM	SIZE
	30	40	80-90	12-14	12	70	80-100	12-16
	50	23	65-80	9-12				

* Nr. = Label Number

tex = Unit of size in g/1000 m
(e.g. 17 tex = 1000 m yarn weigh 17 g)

SCHMETZ products available through:

SCHMETZ tip:

These tables only include the most common embroidery threads.

If you have specific questions concerning these embroidery threads, please ask your thread manufacturer.

