

Round points/Needles for stitching textiles



Normal round point «R»



Acute round point «SPI»



Light ball point «SES»



Medium ball point «SUK»



Heavy ball point «SKF»



Special ball point «SKL»

Round points / Needles for stitching textiles

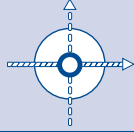


Seam appearance:



Normal round point «R»

Point symbol:



Direction of seam

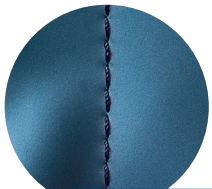
Product:

Point with a slim, conical shape

The normal round point is the standard point form. No point supplement "R" is used in the system code.

Applications:

Light woven fabrics
Coated materials, heavy woven materials, e.g. tent awnings
Laminated materials with soft plastic or thin cardboard
Films
Leather/textile combinations

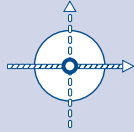


Seam appearance:



Acute round point «SPI»

Point symbol:



Direction of seam

Product:

Needle with very slim, acute point
Accurate piercing of densely woven and coated materials
Exact seam appearance
Avoidance of seam puckering

Applications:

Very densely woven materials, e.g. microfabrics, silk
Thin, coated materials
Thin, smooth materials, e.g. taffeta
Normal seams in shirt stitching (shirt collars, cuffs)
Non-covered elastomeric threads
Manufacture of fur garments and skins

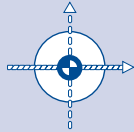


Seam appearance:



Light ball point «SES»

Point symbol:



Direction of seam

Product:

The light ball point displaces woven and knitted threads, directly piercing the spaces and avoiding damage to the material.

Applications:

Fine to medium knitwear
Light denim materials
Light, densely woven materials
Medium to heavy woven fabric
Laminated materials (textile/textile)

Highlight:

Particularly suitable for jersey and sports vests

Round points / Needles for stitching textiles

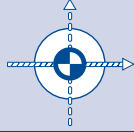


Seam appearance:



Medium ball point «SUK»

Point symbol:



Direction of seam



Product:

Needle with medium ball point (more rounded than the SES light ball point)

Applications:

Medium to coarse denim materials
Coarse knitwear
Manufacture of corsetry

Highlights:

Best needle for stone-washed and sand-washed denim grades (particularly in thick needle sizes)
Best needle for the manufacture of corsetry (particularly in thin needle sizes)

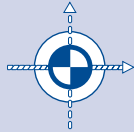


Seam appearance:



Heavy ball point «SKF»

Point symbol:



Direction of seam



Product:

Needle with heavy ball point
This extremely rounded ball form permits punctiform displacement with coarse, wide loops, without piercing the material threads.

Applications:

Fine elastic materials with covered elastomeric threads
Coarse knitwear

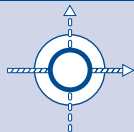


Seam appearance:



Special ball point «SKL»

Point symbol:



Direction of seam



Product:

Needle with very wide, highly rounded point

This combination achieves piercing of woven and knitted fabrics at specific points by means of the greatest possible displacement of the individual threads.

Applications:

Medium to coarse elastic materials with covered elastomeric threads
Very coarse knitwear

Highlight:

The best point form for sewing Lycra

Round points / Needles for stitching textiles

Material		Needle Size		Point form		
		NM	SIZE			
Woven fabric	Light (Shirt/blouse material)	65-75	9-11	R		
	Medium (Suit material)	80-90	12-14	SES		
	Heavy (Coat material, covering material)	100-110	16-18	SES		
	Denim	Light	70-90	10-14	SES	
		Medium	100-110	16-18	SUK	
		Heavy	110-140	18-22	SUK	
	Very densely woven materials	Light (e.g. microfibres, silk, artificial silk)	65-70	9-10	SES	to prevent material damage
			65-70	9-10	SPI	to prevent seam puckering
		Medium (e.g. tarpaulins)	100-180	16-24	R	
		Heavy	200-330	25-30	R	
Knitwear	Fine	60	8	SES or SUK		
	Medium	65-75	9-11	SES		
	Coarse	75-90	11-14	SUK or SKF		
	Very coarse	75-90	11-14	SKL		
Elastic materials						
E.g. highly elastic knitted fabrics and knitted fabrics with covered elastomeric threads (Elastan, Lycra etc.)						
	Fine	65-70	9-10	SKF		
	Medium (particularly bandages)	80-90	12-14	SKL		
	Coarse	80-90	12-14	SKL		
	Non-covered elastomeric threads (e.g. elastic for waistbands)	65-90	9-14	SPI	to prevent the elastomeric threads being pushed out	
Composite materials						
	Woven fabrics/knitwear combined with an interlining (e.g. shirt manufacture: seams for cuffs, collars)	65-80	9-12	SPI		
	Coated materials combined with woven fabrics/knitwear (e.g. Goretex, Sympatex, Helsapor)					
	Fine	65-70	9-10	SPI		
	Medium	80-90	12-14	SPI		
	Coarse	80-90	12-14	SPI		
Laminated materials						
	Textile/textile (e.g. car seat covers, wetsuits and diving suits)	80-110	12-18	SES		
	Textile/cardboard, textile/plastic, very rigid cardboard/plastic (e.g. car seat tracks)	100-140	16-22	R		
		100-140	16-22	SD1	for safety and reliable locking	
		80-130	12-21	DH	for an attractive seam	
	Coated materials (e.g. tarpaulins)					
	Medium	100-180	16-24	SPI or R		
	Heavy	200-330	25-30	R or SD1		
Films		65-90	9-14	R		
Material combinations						
	Leather with textile	80-100	12-16	R		
Manufacture of furs and skins		80-100	12-16	SPI		

Round points / Needles for stitching textiles

The right needle size:

In addition to material and material properties, the choice of thread also determines the right needle size:

Continuous filament								
Thread type	Polyamide 6.6 (Nylon)				Polyester			
	Yarn size		Needle size		Yarn size		Needle size	
	No*	tex*	NM	SIZE	No*	tex*	NM	SIZE
Coarse	13	231	160-200	23-25	13	231	130-160	21-23
					14	214	130-140	21-22
	15	200	160-180	23-24	15	200	120-140	19-22
					18	167	120-130	19-21
	20	150	120-160	19-23	20	150	110-130	18-21
					24/25	125/120	110-130	18-21
Medium	30	100	100-140	16-22	30	100	110-120	18-19
					35/36	86/83	100-110	16-18
	40	75	90-120	14-19	40	75	90-100	14-16
					50	60	80-90	12-14
	60/70	50/43	80-100	12-16	60/70	50/43	70-80	10-12
	80	38	70-90	10-14	80	38	65-80	9-12
Fine	90	33	65-90	9-14	90	33	60-80	8-12
	120	25	65-80	9-12	120	25	60-80	8-12
	180	17	65-80	9-12	180	17	60-70	8-10
					200	15	60-65	8-9
					250	12	55-60	6-9
					360	8	50-55	5-6

SCHMETZ Tip:

These tables only include the most common threads. Cotton threads, sewing silk and embroidery yarn have been omitted for the sake of clarity. If you have specific questions concerning these threads, please ask your thread manufacturer.

Core spun								
Thread type	Polyester/Cotton				Polyester/Polyester			
	Yarn size		Needle size		Yarn size		Needle size	
	No*	tex*	NM	SIZE	No*	tex*	NM	SIZE
Coarse	15	200	140-160	22-23				
	20	150	130-160	21-23	20	150	120-140	19-22
	24	125	130-160	21-23	25	120	110-130	18-21
	25	120	130-160	21-23				
	28	107	130-160	21-23				
	30	100	120-140	19-22	30	100	110-130	18-21
	30/36	86/83	110-130	18-21	35/36	86/83	110-120	18-19
Medium	40	75	100-120	16-19	40	75	90-110	14-18
	50	60	100-120	16-19	50	60	90-100	14-16
	60	50	100-110	16-18	60/70	50	90-100	14-16
	75	40	90-100	14-16	80	40	70-90	10-14
	80/90	38/33	80-90	12-14	90	38/33	65-80	9-12
Fine	100	30	70-90	10-14	100	30	70-80	10-12
	120	25	70-80	10-12	120	25	70-80	10-12
					140	21	60-70	8-10
	150/160	20/19	65-70	9-10	150/160	20/19	50-60	5-8
	180	17	50-65	5-9	180	17	50-60	5-8

* No = Label number

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



FERD. SCHMETZ GMBH, Bicherouxstraße 53 – 59, 52134 Herzogenrath (Germany)
Tel. +49 (0) 2406 – 85 0, Fax +49 (0) 2406 – 85 222
www.schmetz.com, info@schmetz.com