



## Round points - Needles for stitching textiles



Normal round point "R"



Acute round point "SPI"



Medium ball point "SUK"



Round point with slightly  
rounded tip "RRT"



Heavy ball point "SKF"



Light ball point "SES"



Special ball point "SKL"



**SCHMETZ**

### Normal round point "R"



#### Product:

Point with a slim, conical shape

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

#### Point symbol: Seam appearance:



Threading direction



#### 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

### Acute round point "SPI"



#### Product:

Needle with very slim, acute point

Accurate piercing of densely woven and coated materials

Exact seam appearance

Minimization of seam puckering

#### Point symbol: Seam appearance:



Threading direction



#### Applications:

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

### Round point with slightly rounded tip "RRT"



#### Product:

The round point with slightly rounded tip is less sensitive to burrs than the normal round point "R", therefore longer applicable with less damage of sewing goods.

#### Point symbol: Seam appearance:



Threading direction



#### Applications:

- Light to medium woven fabrics
- Fine to medium jeans
- Leather/textile combinations
- Technical textiles

#### Highlight:

Available in combination with GO design (needle with particularly wide eye). Especially suitable for multi-directional sewing, bartacking operations and embroidery to prevent thread breakage and material damage.

## Round points - Needles for stitching textiles

### Light ball point "SES"



#### Product:

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

#### Point symbol: Seam appearance:



#### 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 sportswear

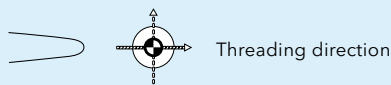
### Medium ball point "SUK"



#### Product:

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

#### Point symbol: Seam appearance:



#### Applications:

- Medium to coarse denim materials
- Coarse knitwear
- Manufacture of corsetry

#### Highlight:

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)

### Heavy ball point "SKF"



#### Product:

Needle with heavy ball point

This extremely rounded ball shape allows coarse, wide loops to be displaced by the needle without piercing the material threads.

#### Point symbol: Seam appearance:



#### Applications:

- Fine elastic materials with covered elastomeric threads
- Coarse knitwear

### Special ball point "SKL"

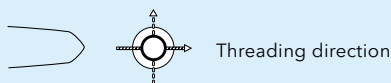


#### Product:

Needle with very wide, highly rounded point

This combination achieves the greatest possible displacement of material threads.

#### Point symbol: Seam appearance:



#### Applications:

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

#### Highlight:

The best point shape for sewing highly elastic fabrics containing elastane

## Round points - Needles for stitching textiles

Material		Needle size		Point shape		
		NM	SIZE			
<b>Woven fabric</b>	Light (Shirt/blouse fabric)	65-75	9-11	R		
	Medium (Suit material)	80-90	12-14	SES		
	Heavy (Coat material, upholstery fabric)	100-110	16-18	SES		
	Jeans	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	
<b>Knitwear</b>	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		
<b>Elastic materials</b>						
E.g. highly elastic knitted fabrics and knitted fabrics with covered elastomeric threads (Elastane, 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	
<b>Composite materials</b>						
	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		
<b>Laminated materials</b>						
	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		
<b>Films</b>		65-90	9-14	R		
<b>Material combinations</b>						
	Leather with textile	80-100	12-16	R or GO RRT		
<b>Manufacture of furs and skins</b>		80-100	12-16	SPI		
<b>Sewing with heavy sewing threads</b>		70-160	10-23	GO RRT		

### 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			
	Thread size		Needle size		Thread 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
Fine	80	38	70-90	10-14	80	38	65-80	9-12
	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 sewing threads.

Cotton threads, sewing silk and embroidery thread 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			
	Thread size		Needle size		Thread 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
	35/36	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				
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)

**For further information on round points, please contact:**

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