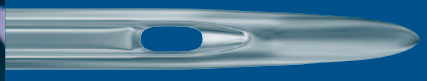
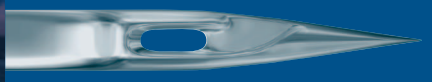
Cutting points/Needles for stitching leather



Narrow cross point »S«

Narrow wedge point »P«

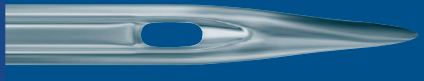


Narrow wedge point »PCL«

Narrow wedge point »PCR«

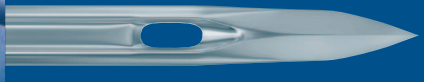
Reverse twist point »LR«

Wide reverse twist point »LBR«



Twist point »LL«

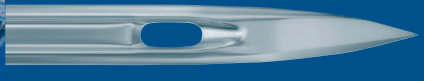
Twist point »LLCR«



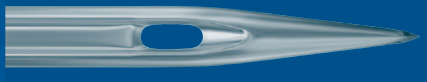
Diamond point »DI«

Triangular point »D«

Half triangular point »DH«



Reverse twist spear point »VR«



Round point with small triangular tip »SD1«

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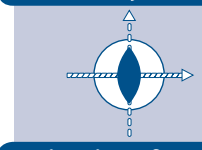
Cutting points / Needles for stitching leather

Seam appearance:

Narrow cross point »S« or »NCR«

Point symbol:



Direction of seam

Product:

Cutting point with a lens-shaped cross-section. The incision follows the direction of the seam.

Result: A very straight seam

Materials:

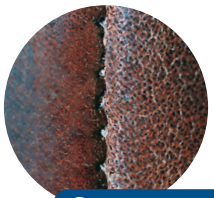
Suitable for all types of leather

Applications:

Footwear manufacture

Manufacture of bags, suitcases, etc. with coarse ornamental seams

Manufacture of belts and straps



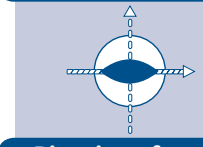
Seam appearance:

Narrow wedge point »P« or »NW«

Narrow wedge point »PCL«

Narrow wedge point »PCR«

Point symbol:



Direction of seam

Product:

Cutting point with a lens-shaped cross-section. The incision is made at right angles to the seam direction.

Result: A very strong seam

Materials:

Suitable for all types of leather

Applications:

Footwear manufacture

Manufacture of bags, suitcases, accessories

Highlight:

The twist ensures that, when the needle emerges from the material being sewn, the thread is protected in the twist groove and is thus not drawn over the edge of the groove and eye or over the cutting edge and not damaged.

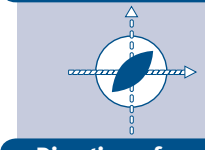
CL: Left twist groove below eye for hooks positioned to the right of the needle.

CR: Right twist groove below eye for hooks positioned to the left of the needle. It is particularly useful as the lefthand needle on a twin needle lockstitch machine.

Seam appearance:

Reverse twist point »LR« or »RTW«

Point symbol:



Direction of seam

Product:

Cutting point with a lens-shaped cross-section. The incision is made at a 45° angle to the direction of the seam.

Result: A decorative seam inclined slightly towards the left

Materials:

Suitable for all types of leather

Applications:

Clothing industry

Footwear manufacture

Manufacture of bags, suitcases

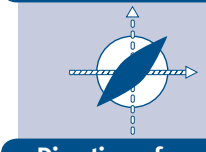
Highlight:

The best needle for decorative seams

Seam appearance:

Wide reverse twist point »LBR« or »WD R TW«

Point symbol:



Direction of seam

Product:

Cutting point with a lens-shaped cross-section. The incision is made at a 45° angle to the direction of the seam. The cutting effect is achieved beyond the diameter of the needle.

Result: A raised, decorative seam inclined towards the left

Materials:

Suitable for all types of leather

Applications:

Clothing industry

Manufacture of bags, suitcases

Upholstery manufacture

Highlight:

Recommended for decorative seams which characterise the design

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Cutting points / Needles for stitching leather

Seam appearance:

Twist point »LL« or »TW«

Twist point »LLCR«

Point symbol:

Direction of seam

Product:

Cutting point with a lens-shaped cross-section. The incision is made at a 135° angle to the direction of the seam.

Result: A slightly recessed, straight seam

Materials:

Suitable for all types of leather

Applications:

LL point:

Footwear manufacture

Manufacture of bags, suitcases

Particularly suitable for shoe repairs

LLCR point:

For the manufacture of footwear, in order to achieve the same seam appearance with the hook positioned to the left of the needle as achieved using the LR point in conjunction with a hook positioned to the right of the needle.

Seam appearance:

Diamond point »DI« or »DIA«

Point symbol:

Direction of seam

Product:

Cutting point with a rhombic cross-section. The centred incision is made in the direction of the seam. The seam appearance corresponds to that achieved with the narrow cross point (S point); however, the four cutting edges of the DI point allow heavy, hard material to be pierced more easily.

Result: A very straight, recessed seam

Materials:

Suitable for heavy, dry, hard leather

Applications:

Footwear manufacture

Manufacture of bags, suitcases

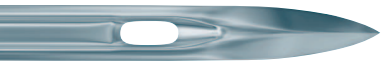
Highlight:

Absolutely precise and tidy seam appearance

Correct stitch appearance

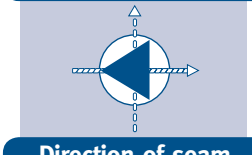
No needle deflection

Seam appearance:



Triangular point »D« or »TRI«

Point symbol:



Direction of seam

Product:

Cutting point with a triangular cross-section.

Result: A straight seam

Materials:

Suitable for hard, dry leather

Applications:

Manufacture of footwear, especially for heavy footwear (e.g. high-leg boots)

Stitching upholstery

Stitching plastics, cardboard, heavy pressboard, paper

Highlight:

The best cutting effect of all cutting points

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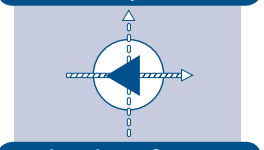
Cutting points / Needles for stitching leather

Seam appearance:

Half triangular point »DH«

Point symbol:



Direction of seam

Product:

Cutting point with a triangular cross-section; smaller than D point.

Result: A straight seam

Materials:

Composites, e.g. laminated material together with plastic sections

Plastic sections

Hard pressboard

Tarpaulin material

Tent canvas

Applications:

Stitching upholstery

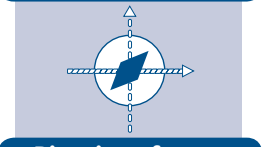
Manufacture of vehicle interiors

Manufacture of tarpaulins, tents, awnings

Seam appearance:

Reverse twist spear point »VR« or »R TW SP«

Point symbol:



Direction of seam

Product:

Cutting point with a rhombic cross-section. The incision is made at a 45° angle to the direction of the seam.

Result: A seam inclined slightly towards the left

Better cutting effect than the comparable reverse twist point (LR point)

Materials:

Suitable hard, dry leather

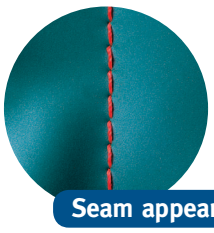
Applications:

Footwear manufacture

Manufacture of bags, suitcases

Highlight:

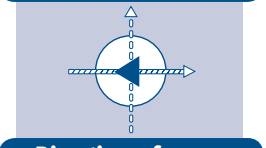
Due to the four cutting edges, a correct stitch appearance and no needle deflection is achieved



Seam appearance:

Round point with small triangular tip »SD1« or »TRI TIP«

Point symbol:



Direction of seam

Product:

Round point with a very small, triangular cross-section. The small triangular tip cuts approx. 10% of the stitch hole, with the remaining 90% being displaced by the conical round point (R point).

Result: A straight seam

A tidy seam appearance

Correct stitch appearance and less needle deflection than with a round point (R point)

Smaller incision than when using a cutting point

Materials:

Fine leather

Clothing made of leather and imitation leather

Thin, synthetic leather materials

Materials coated with PVC/PUR, e.g. tarpaulins, tents, coated table cloths

Applications:

Stitching leather

Stitching plastic

Stitching hard fibres

Stitching films

Highlight:

Multidirectional sewing:

The stitch appearance remains the same in all sewing directions when using multidirectional sewing techniques (programmable sewing machines).

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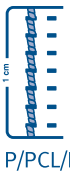
Cutting points / Needles for stitching leather

Choosing the point form:

The point form is determined by the stitching technique and the desired seam appearance.

Needle threading from left to right.

Stitching technique	Seam appearance	Point form	
Very strong seams **Fine ornamental seams**	 P/PCL/PCR	**P** **PCL** **PCR**	Narrow wedge point Narrow wedge point with left twist groove below eye Narrow wedge point with right twist groove below eye
Normal seams **Coarse ornamental seams** **Very straight seams**	 S  DI	**S** **DI**	Narrow cross point Diamond point
Decorative seams (ornamental seams/normal seams)	 LR  VR  LBR	**LR** **VR** **LBR**	Reverse twist point Reverse twist spear point Wide reverse twist point
Very straight seams	 LL	**LL**	Twist point
Coarse/normal seams **Cross seams**	 D  DH	**D** **DH**	Triangular point Half triangular point
Embroidery Special features, e.g. appliqué	 R  SD1	**R** **SD1**	Normal round point Round point with small triangular tip
Multidirectional sewing	 SD1	**SD1**	Round point with small triangular tip
Material combinations, composites: **– Garments**	 R  SD1	**R** **SD1**	Normal round point Round point with small triangular tip
– Industrial sector	 D  DH	**D** **DH**	Triangular point Half triangular point

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Cutting points / Needles for stitching leather

The right needle size:

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

Two essential criteria must be taken into account:

1. Thread/seam appearance

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

2. Material and material properties

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

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.

Continuous filament

Stitching technique	Polyamide 6.6 (Nylon) Yarn size No*	Yarn size tex*	Needle size NM	Needle size SIZE	Polyester Yarn size No*	Yarn size tex*	Needle size NM	Needle size SIZE
Coarse decorative seams	4	750	280-330	28-30	4	750	250-300	27-29
	5	600	250-300	27-29	5	600	250-280	27-28
					6	500	230-250	26-27
	7	429	230-250	26-27	7	429	200-230	25-26
	8/9	375/333	200-250	25-27	8/9	375/333	180-200	24-25
	10/11	300/273	160-230	23-26	10/11	300/273	140-180	22-24
	12	250	160-230	23-26	12	250	140-180	22-24
Coarse seams	13	231	160-200	23-25	13/14	231/214	130-160	21-23
	15	200	160-180	23-24	15	200	125-140	20-22
					18	167	120-130	19-21
	20	150	120-160	19-23	20	150	110-130	18-21
					24/25	125/120	100-110	16-18
	30	100	100-140	16-22	30	100	100-110	16-18
Medium seams	40	75	100-120	16-19	40	75	100-110	16-18
					50	60	90-100	14-16
	60	50	80-100	12-16	60	50	80-90	12-14
					70	43	75-80	11-12
	80-90	38/33	70-90	10-14	80/90	38/33	70-80	10-12
Stay seams (heel seams)	40	75	100-120	16-19	40	75	100-110	16-18
	60	50	80-100	12-16	60	50	80-90	12-14
	80/90	38/33	70-90	10-14	80/90	38/33	70-80	10-12
					100	30	65-70	9-10

Core spun

Stitching technique	Polyester/Cotton Yarn size No*	Yarn size tex*	Needle size NM	Needle size SIZE	Polyester/Polyester Yarn size No*	Yarn size tex*	Needle size NM	Needle size SIZE
Coarse decorative seams	4	750	230-280	26-28				
	5	600	180-250	24-27				
	6	500	180-200	24-25				
	8	375	180-200	24-25	8	375	160-200	23-25
	12	250	160-180	23-24	12	250	140-180	22-24
Coarse seams	15	200	140-160	22-23				
	20	150	140-160	22-23	20	150	120-160	19-23
	24	125	130-160	21-23				
	25	120	120-140	19-22	25	120	110-140	18-22
	28	107	120-140	19-22				
	30	100	120-140	19-22	30	100	110-130	18-21
	35/36	86/83	110-130	18-21	35/36	86/83	100-120	16-19
Medium seams	40	75	100-120	16-19	40	75	100-110	16-18
	50	60	100-110	16-18	50	60	90-100	14-16
	60/75	50/40	90-100	14-16	60/75	50/40	90-100	14-16
	80	38	90-100	14-16	80	38	80-90	12-14
	90	33	80-90	12-14				
	100	30	80-90	12-14	100	30	70-90	10-14
Stay seams (heel seams)	40	75	100-120	16-19	40	75	100-110	16-18
	60/75	50/40	90-100	14-16	60/75	50/40	90-100	14-16
	80	38	90-100	14-16	80	38	80-90	12-14

* No = Label number

tex = Unit of size in g/1000 m (e.g. 75 tex = 1000 m yarn weigh 75 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

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