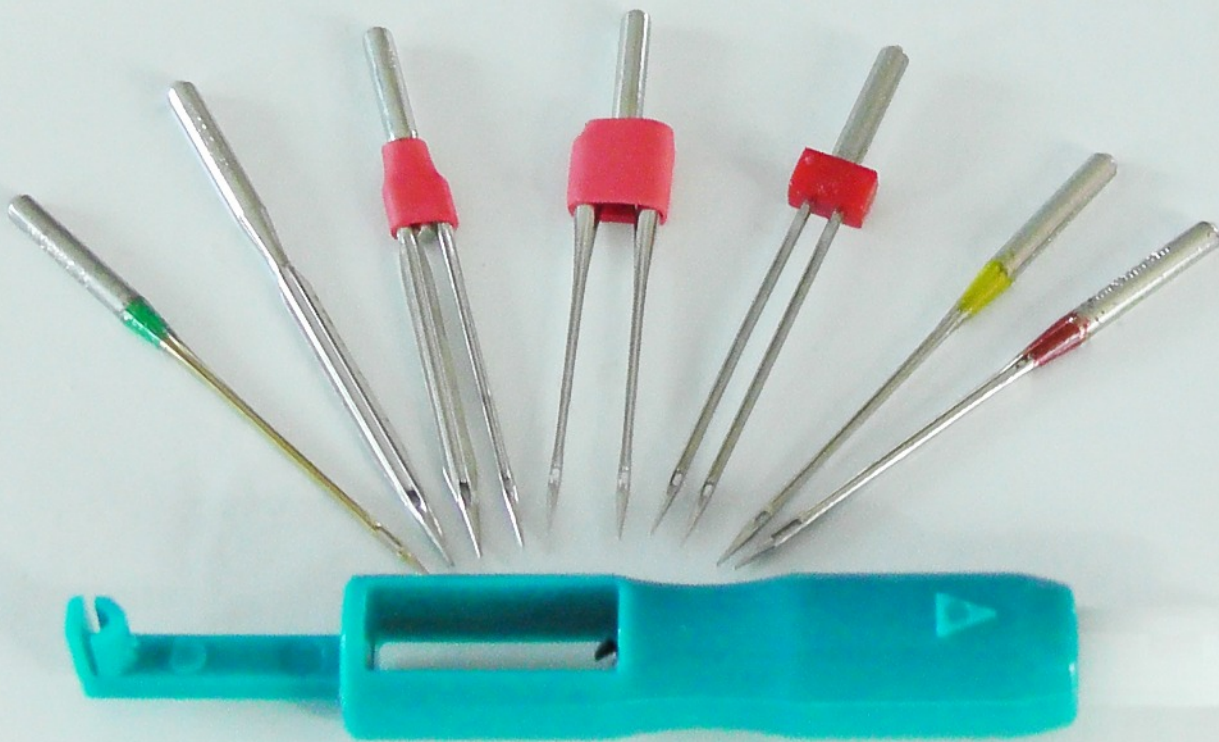




Smooth Stitches



“ There are many factors in sewing but the needle is #1 ”

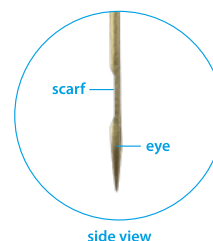
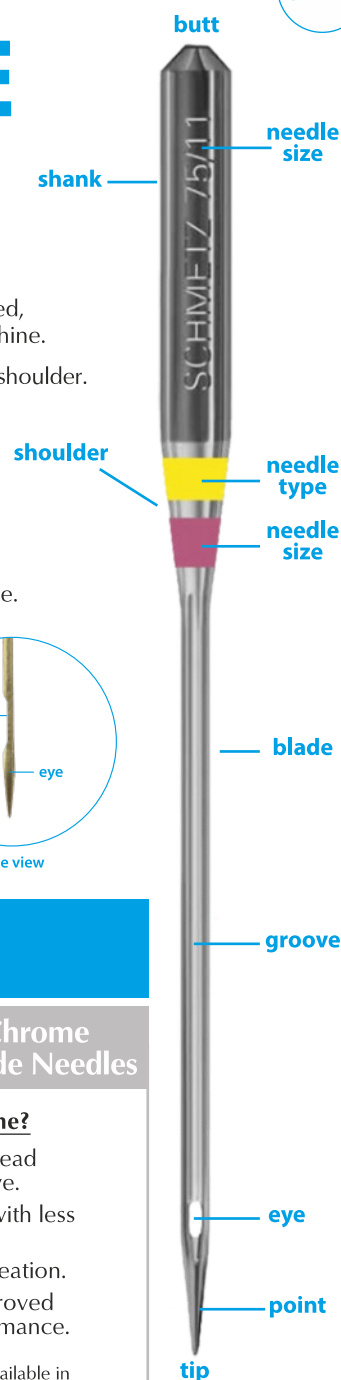


\$1.95

SCHMETZ® NEEDLE GUIDE

Needle Anatomy

- Butt:** The beveled end allows easy insertion in the needle bar.
- Shank:** Household needles have a flat shank, while commercial and industrial needles have round, threaded, notched or other special shanks. Shanks allow perfect positioning of the needle in the sewing machine.
- Shoulder:** The sloping area transitioning between the shank and blade. SCHMETZ® color codes appear on the shoulder.
- Blade:** Needle size is determined by the blade diameter (i.e., size 75 is .75mm).
- Groove:** The groove cradles and guides thread to the eye. The length and size of the groove vary according to needle type.
- Scarf:** The indentation above the eye that allows the bobbin hook to smoothly grab the thread under the throat plate to create a stitch. The shape and size of the scarf vary according to needle type.
- Eye:** The hole through which thread passes. The shape and size of the eye vary according to needle type.
- Point & Tip:** Length, shape and size vary according to needle types.
- Needle Type:** Upper color band indicates needle type (i.e., Stretch).
- Needle Size:** Lower color band indicates size (i.e., 75/11).



Change Your Needle

Damaged or worn needles result in:

- Broken or shredded threads
- Skipped or uneven stitches
- Puckered or damaged fabrics
- Popping sounds made by sewing machine

130/705 H

The needle system used by home sewing machines. Needles have a flat shank and a scarf.

SCHMETZ® Works with All Sewing Machine Brands!

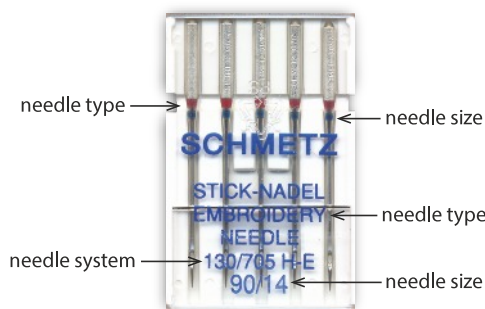
Replace Your Needle

It's the easiest way to improve your stitch quality.

Needle Selection

Choose needle size according to thread thickness and needle type according to fabric application.

How to Read a Needle Package



SCHMETZ® Chrome Professional Grade Needles

Why Chrome?

- Less friction on thread passing through eye.
- Penetrates fabric with less resistance.
- Smoother stitch creation.
- Resists heat – improved durability & performance.

● indicates select sizes available in SCHMETZ® Chrome.

General Purpose Needles

Universal ●

Size: 60/8, 65/9, 70/10, 75/11, 80/12, 90/14, 100/16, 110/18, 120/19, Assorted, Twin, Triple
Color Code: None
Feature: Slightly rounded point.
Fabric Use: Numerous - woven and knits.
 A great general purpose needle.



Jersey (Ball Point) ●

Size: 70/10, 80/12, 90/14, 100/16, Assorted
Color Code: Orange
Feature: Medium ball point.
Fabric Use: Knits and some stretch fabrics. Made especially for sewing on knits. The medium ball point does not damage or break knit fibers.



Stretch ●

Size: 65/9, 75/11, 90/14, Twin
Color Code: Yellow
Feature: Medium ball point, special eye and scarf.
Fabric Use: Elastic materials and highly elastic knitwear. The medium ball point, specially designed eye and scarf prevent skipped stitches.



www.SCHMETZneedles.com

Specialty Needles

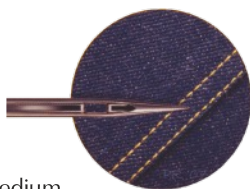
Jeans

Size: 70/10, 80/12, 90/14, 100/16, 110/18, Assorted, Twin

Color Code: Blue

Feature: Modified medium ball point and reinforced blade.

Fabric Use: Denim and similar fabrics. Advanced point design is a SCHMETZ® exclusive. For penetrating extra thick woven fabrics, denims, or quilts with minimum needle deflection, reduced risk of needle breakage and skipped stitches.



Microtex (Sharp)

Size: 60/8, 70/10, 80/12, 90/14, 100/16, 110/18, Assorted

Color Code: Purple

Feature: Very slim acute point.

Fabric Use: Micro fibers, polyester, silk, foils, artificial leather, coated materials. Very thin acute point creates beautiful topstitching and perfectly straight stitches for quilt piecing when precision is paramount.



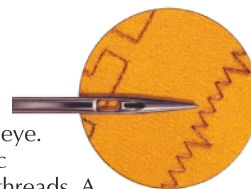
Metallic

Size: 80/12, 90/14, Twin

Color Code: Pink

Feature: Elongated eye.

Fabric Use: Metallic and other specialty threads. A "must have" for sewing with sensitive metallic threads. The elongated eye prevents shredding and breaking of metallic threads.



Quilting

Size: 75/11, 90/14, Assorted

Color Code: Green

Feature: Special taper to the slightly rounded point.

Fabric Use: Made especially for piecing and machine quilting. The special tapered design allows easier fabric penetration and helps eliminate skipped stitches.



Embroidery

Size: 75/11, 90/14, Assorted, Twin

Color Code: Red

Feature: Light ball point, wide eye and groove.

Fabric Use: Use with rayon, polyester and other specialty embroidery threads. The special scarf, widened groove and enlarged eye protect fragile threads and guard against excess friction allowing trouble-free embroidery and decorative stitching.



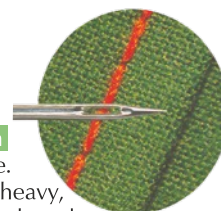
Topstitch

Size: 80/12, 90/14, 100/16

Color Code: Lt. Green

Feature: Extra long eye.

Fabric Use: Topstitch, heavy, multiple or poor quality threads. Achieve perfectly straight stitch lines and even stitches when using a straight stitch plate.



Leather

Size: 70/10, 80/12, 90/14, 100/16, 110/18, Assorted

Color Code: Brown

Feature: Cutting point.

Fabric Use: Leather, artificial leather, heavy non-woven synthetics. Do not use on knit or woven fabrics.



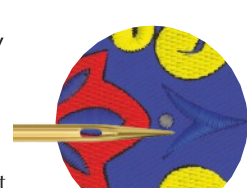
Gold Embroidery

Size: 75/11, 90/14

Color Code: None

Feature: Titanium Nitride coating, slightly rounded point and enlarged eye.

Fabric Use: Coarse and densely woven materials. Slightly rounded point and enlarged eye are perfect for embroidery on most fabrics and with the most fragile specialty threads. Titanium coating resists adhesives, improves needle wear and penetration of coarse and densely woven fabrics.



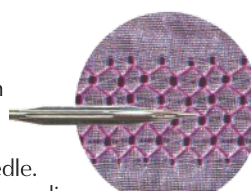
Hemstitch

Size: 100, 120, Twin

Color Code: None

Feature: A wing on each side of the needle.

Fabric Use: Light or medium weight loosely woven fabrics. Popular for heirloom sewing and to create decorative cutwork.



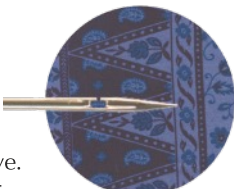
Quick Threading

Size: 80/12, 90/14

Color Code: None

Feature: Universal needle with a slip-in threading slot in the eye.

Fabric Use: Numerous — woven and knits. A general purpose needle for effortless threading.



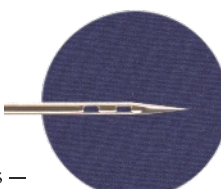
Double Eye

Size: 80/12

Color Code: None

Feature: Universal needle with two eyes.

Fabric Use: Numerous — woven and knits. Use two different threads for shading and texturing effects for embroidery and topstitching.



● indicates select sizes available in SCHMETZ® Chrome.

Multiple Needles

Twin

Double needles are actually two needles mounted on one shaft used to create two rows of stitches simultaneously. Use two spools of thread and one bobbin thread.

Universal Twin

Sizes: 1.6/70, 1.6/80, 2.0/80, 2.5/80, 3.0/90, 4.0/80, 4.0/90, 4.0/100, 6.0/100, 8.0/100, Assorted



Double Hemstitch

Size: 2.5/100

A hemstitch needle and a universal needle with a 2.5 mm separation.

Embroidery Twin

Size: 2.0/75, 3.0/75



www.SCHMETZneedles.com

Metallic Twin

Size: 2.5/80, 3.0/90

Jeans Twin

Size: 4.0/100

Stretch Twin

Size: 2.5/75, 4.0/75

Universal Triple

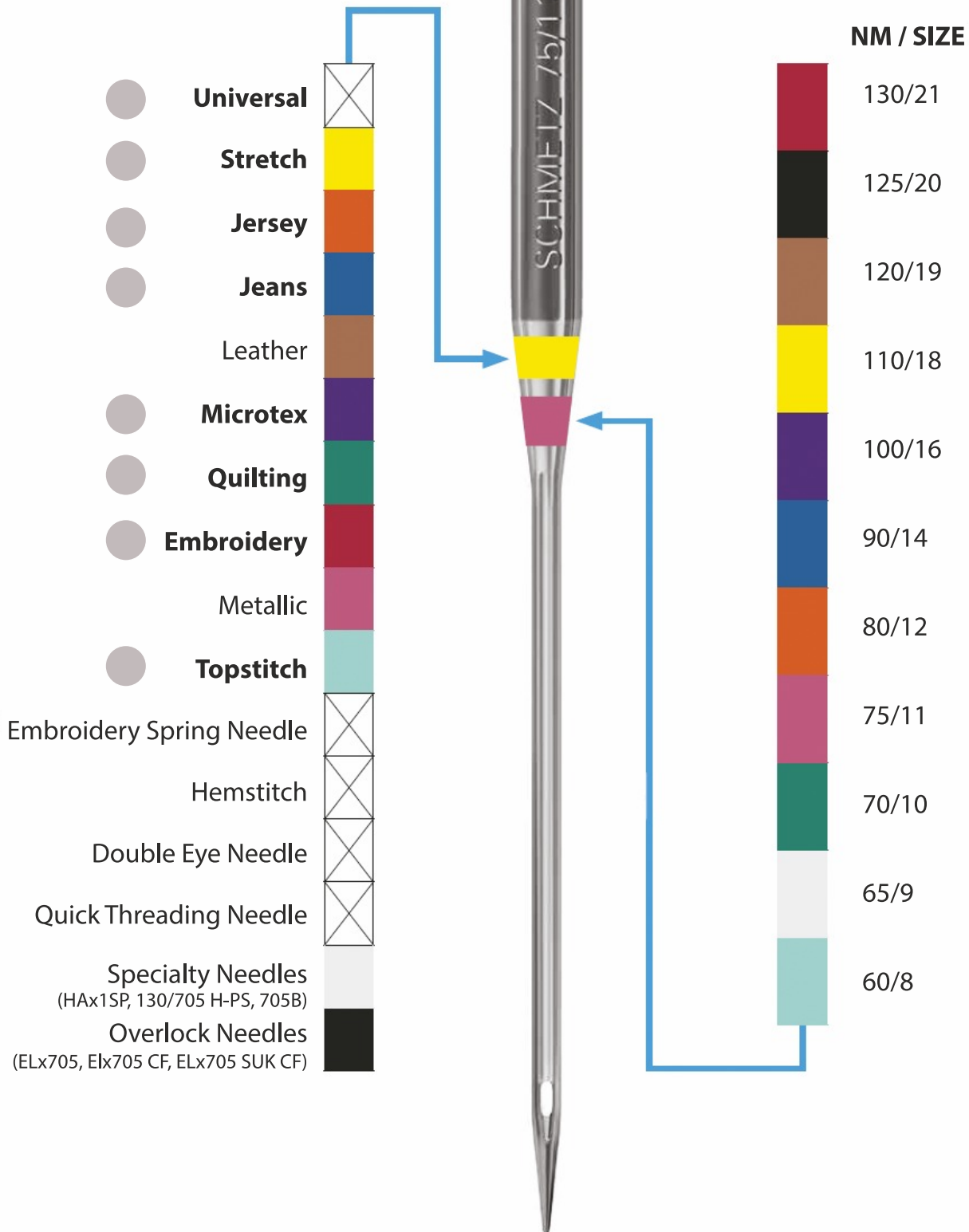
Size: 2.5/80, 3.0/80





Needle Type

Needle Size

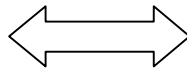


Needle Life

One of the most asked questions I have experienced during the years of travelling and giving needle seminars to the apparel industry is: How long does a sewing machine needle last? Interestingly enough people from the shoe and leather industry where they really put wear and tear on the needle never asked me this question.

Generally my answer is: Between one minute and one month.

It can happen that you change a sewing machine needle because it was broken, start the machine and within the next moment the needle breaks again.



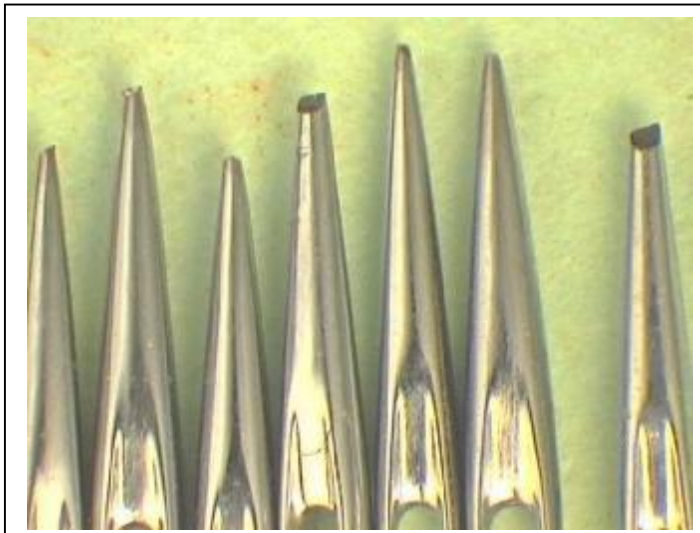
These two pictures have one thing in common. On the left side you can see the Taipei 101 Tower (508 m, 1667 ft.) compared to a normal sewing machine needle. The ratio of thickness to length is approximately the same. Everybody has an imagination of how difficult it is to construct a tower like the Taipei 101 and to make it rigid and stable in order to withstand heavy winds and earthquakes. The same applies to a sewing machine needle. But the sewing machine needle besides the bending resistance has one additional force to bear which is the penetration force, i.e. the load which is put on top of it by the sewing machine in order to be able to penetrate the sewing good.

From this comparison it becomes very clear that a sewing machine needle really is a piece of engineering artwork. On the other side it is clear as well that the needle – if treated the wrong way or overloaded – will be destroyed and end its life.

If we just take the operator as one of the most influencing factors on needle performance we can see that the skills and work experience is a significant parameter. But also here the human factor comes in because not everyday the operator works the same depending on the physical and mental condition. If you put two operators side by side sewing the same workpiece under the same outer conditions like same machine, same speed etc. it can happen that the results are very different, especially when we look into the needle consumption.

From all these influencing parameters it becomes very clear now that they cannot be predetermined because they are individual to the specific sewing factory. Almost every factory has different conditions and setups even if they make the same product.

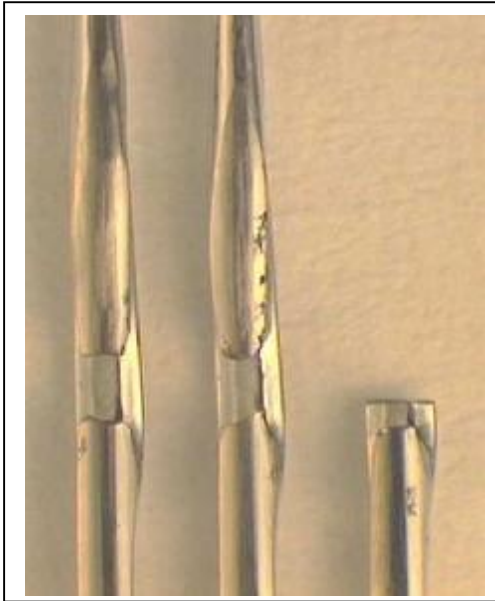
3 Examples



Broken needle points because the needle has touched some machine parts.
The fabric never would cause this type of fault.

Abrasion on eye sidewall because the needle was deflected during sewing and was touching the sides of the needle hole in the throat plate





Total abrasion of eye sidewall. The eye is open. This happened with a very abrasive sewing good containing a flame-retardant chemical.

4 How to find your individual needle life

As the manufacturer of the sewing machine needle we are not able to give a prediction of needle life for the individual plant because it is impossible to know all your individual factors. But a lot of sewing factories have the data available or are able to find the data for every sewing line or even for every sewing machine. It just is a matter of about a month collecting data for every needle change, log the data and categorize by reason for the needle change.

This will give a good basis for quality improvement because if you have these data you will be able to implement a needle change policy in your factory as already a lot of the high quality manufacturers do. You will have the possibility now to change the needle before it starts to abrade or before the needle point gets damaged.

5 Hints

- The operator should check the needle point regularly for damage. This can be done with the fingernail of the pointing finger or with a piece of nylon stocking. The best effect is achieved if the check is done every hour.
- This check is essential when you are sewing knitwear because only this measure together with a needle change policy will maintain a good quality garment.

Product Brochure

製品カタログ
産 品 目 録



ORGAN NEEDLE CO., LTD.

Sewing machine needles


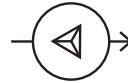
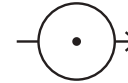
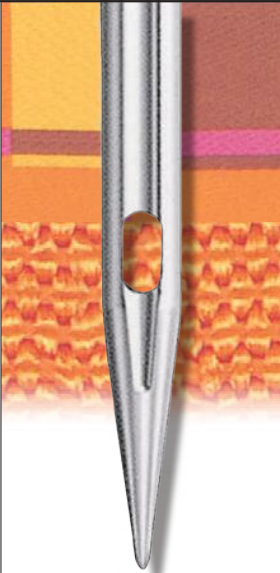


ミシン針

縫紉針

ミシン針の針先形状及び先端形状

POINT STYLE and TIP OF THE POINT STYLE

縫紉機針の針頭形状及針尖形状

先端形状 Symbol 針頭形状			
針先図 Illustration of Needle Point 針尖圖			
オルガン記号 ORGAN Designation 風琴公司記號	R	TRI	SPI
他社記号 Other Maker Designation 其它公司記號	R, SET	SD1, TRI TIP	RS, S SET
特徴 Description 特徵	正規型 Regular point 標準針頭	小三角型 Light triangular point 小三角形頭	尖頭細身型 Slim sharp point 尖頭細身形頭

表面処理のご紹介

COATING STYLE

關於表面處理

縫製条件に合わせて三種類の表面処理をご用意します。
*HPのみ#14以下の針では、先端はJボールポイントが標準仕様となっています。

We have three types of coatings depending on sewing conditions.

*Regarding HP coating, the J-ball has been adapted for needles of size #14 and under to maintain consistency.

針對縫紉條件現在共有三種表面處理方式。

*HP、#14以下の針的針尖標準為J圖頭。

HP

針熱トラブル

Trouble due to Needle Heat

針熱而引起的縫紉問題



LP

粘着トラブル

Trouble due to Adhesion

粘着而引起的縫紉問題



PD

摩耗・先つぶれが引き起こすトラブル

Trouble due to Wear and Point Damage

磨損・針尖損傷而引起的縫紉問題



糸と針の関係表
Interrelationship Table (Thread/Needle Sizes)
縫号和針号的關係表

呼び番手	対応する針番手/Needle Size/針號			
	綿糸 Cotton 全棉縫紉綫	ポリエステルスパン Polyester spun 滌綸短纖維縫紉綫	ポリエステルフィラメント Polyester filament 滌綸長絲縫紉綫	ナイロンフィラメント Nylon filament 尼龍長絲縫紉綫
呼び番手表 (日本) Japanese Ticket 縫號針號對應表 (日本)	120	7	7	
	100	7~8	7~8	7~9
	80	7~11	7~9	7~10
	60	8~14	8~12	7~11
	50	10~16	10~14	9~14
	40	14~19	12~18	11~14
	30	16~21	14~19	16~19
	20	19~23	19~23	18~21
	10	20~23	20~23	
	8	22~24	22~24	
	5		24~25	

	糸の太さ /Thread Size/ 縫號				対応する針番手 Needle Size 針號
	Tex	dTex	Nm	Ticket	
スパン Spun 短纖維縫紉綫	16	160	200	200	50/6~55/7
	18	180	180	180	55/7~65/9
	21	210	140	150	60/8~80/12
	27	270	120	120	65/9~90/14
	30	300	120	90	70/10~100/16
	40	400	75	75	80/12~110/18
	60	600	50	50	90/14~120/19
	70	700	50	60	90/14~120/19
	80	800		30	100/16~125/20
	105	1050	30	25	110/18~130/21
	120	1200	25	24	120/19~160/23

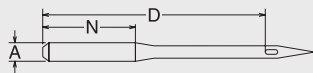
※参考資料としてお使い下さい。
※This table is only for reference purposes.
※請作為參考資料。

	糸の太さ /Thread Size/ 縫號				対応する針番手 Needle Size 針號
	Tex	dTex	Nm	Ticket	
フィラメント Filament 長絲縫紉綫	10	100		250	55/7
	12	120		230	55/7~65/9
	16	160	180	200	55/7~70/10
	24	240	160	120	60/8~80/12
	30	300	100	80	70/10~100/16
	50	500		60	80/12~110/18
	60	600	40	40	90/14~125/20
	80	800	30	30	100/16~130/21
	105	1050	25	25	110/18~140/22
	180	1800		20	130/21~180/24

	糸の太さ /Thread Size/ 針號				対応する針番手 Needle Size 針號
	Tex	dTex	Nm	Ticket	
コアスパン Core Spun 包芯綫	18	180	160	180	60/8~65/9
	21	210	150	150	60/8~70/10
	24	240	120	120	70/10~80/12
	30	300	100	100	70/10~90/14
	40	400	75	80	80/12~100/16
	50	500	60		90/14~100/18
	60	600	50	50	90/14~120/19
	80	800	36	40	100/16~120/19
	105	1050	30	30	100/16~140/22
	140	1400	25	25	120/19~160/23
	200	2000	14		140/22~160/23

刺繍糸 Embroidery Thread 绣花綫	Denir	対応する針番手/Needle Size/針號
	75	60/8~70/10
	120	65/9~75/11
	200	75/11~90/14

記号 SYSTEM SYSTEM SISTEMA 型號	他社記号 OTHER MAKER SYSTEM PARALLELSYSTEME SISTEMAS EQUIVALENTES 其他公司型號	先端 POINT SPITZE PUNTA 針尖	ミシン針イラスト ILLUSTRATION OF NEEDLE NADELFOTO FOTO DE AGUJA 縫紉機針示意图	用途 APPLICATION ANMERKUNG NOTAS 用途	番手 NEEDLE SIZES NADELSTÄRKEN TAMAÑOS DE AGUJAS 針號
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■ 本縫い関係 For Lockstitch 平縫系列

DB × 1	16 × 231 16 × 257			A:1.62~2.02 D:33.80 N:16.00~10.50	1本針本縫い 1-needle lockstitch	7 8 9 10 11 12 13 14 16 18 19 20 21 22 22½ 23 24 25 55 60 65 70 75 80 85 90 100 110 120 125 130 140 150 160 180 200
DB × 1KN				A:1.62 D:33.80 N:16.00	地糸切れ対策針 preventing fabric yarn breakage	8 9 10 11 12 14 60 65 70 75 80 90
DB × 1KNLE				A:1.62 D:33.80 N:16.00	糸締め不良対策 preventing loose seams	9 10 11 12 65 70 75 80
DB × 1SF				A:1.62 D:33.80 N:16.00	地糸切れ対策針 preventing fabric yarn breakage	8 9 10 11 60 65 70 75
DB × 1NS				A:1.62 D:33.80 N:16.00~10.50	パッカリング対策 糸引け対策針 preventing seam puckering preventing needle line	8 9 10 11 12 14 60 65 70 75 80 90
DB × 1 - NY2				A:1.62~1.90 D:33.80 N:16.00~12.50	目飛び対策針 preventing skipped stitches	9 10 11 12 14 16 18 19 65 70 75 80 90 100 110 120
DB × A20	287WK SY6633			A:1.62 D:33.80 N:12.50~10.50	A寸=1.62mm DB×1 #19~ (shank diameter = 1.62mm)	19 20 21 22 23 120 125 130 140 160
DB × 287WKH				A:1.63 D:33.90 N:16.00	DB × 1のF寸短 DB×1 with shorter distance from tip of the point to end of needle eye	7 8 9 10 11 12 13 14 16 18 19 21 55 60 65 70 75 80 85 90 100 110 120 130
DB × 1KK	1738KK			A:1.62 D:33.80 N:12.50	1のN寸短 shorter shank	11 14 16 75 90 100
DA × 1	88 × 1 SY1315			A:1.62 D:29.60 N:14.50	1本針本縫い 1-needles lockstitch	7 8 9 10 11 12 13 14 16 18 19 20 21 22 55 60 65 70 75 80 85 90 100 110 120 125 130 140
DA × 1KN				A:1.62 D:29.60 N:13.50	地糸切れ対策針 preventing fabric yarn breakage	8 9 10 11 60 65 70 75
DI × 3				A:1.98 D:39.20~39.00 N:14.50	靴、袋物縫用 1~2本針本縫い for shoes, bags, etc 1or2-needle lock stitch	12 14 16 18 19 20 21 22 22½ 23 24 25 26 80 90 100 110 120 125 130 140 150 160 180 200 230
DP × 17	135 × 17			A:2.00 D:39.00 N:16.00~13.00	1~2本針本縫い厚物用 1or2-needle lock stitch for thick materials	9 10 11 12 13 14 16 18 19 20 21 22 23 24 25 26 65 70 75 80 85 90 100 110 120 125 130 140 160 180 200 230
DP × 17 - NY2				A:2.00 D:39.00 N:16.00~13.00	目飛び対策針 preventing skipped stitches	11 12 14 16 18 19 20 21 22 23 75 80 90 100 110 120 125 130 140 160
DP - C80 - NY2				A:2.00 D:39.00 N:13.00~16.00	DP × 17 - NY2の平取針 DP×17 - NY2 with flat shank	18 19 21 22 23 110 120 130 140 160
DP - C119 - NY2				A:2.00 D:39.00 N:13.00	DP × 17 - NY2の平取針 DP×17 - NY2 with flat shank	19 22 23 120 140 160
DP × 17 - SK				A:2.00 D:39.00 N:16.00~13.50	目飛び対策針 従来名称:DP×17-SK1 preventing skipped stitches former system:DP×17-SK1	14 16 18 19 20 21 22 23 24 90 100 110 120 125 130 140 160 180

上記以外にも様々な種類の針があります。詳しくは、お問い合わせください。／Please Note: we have many other types of needles that are not indicated above. Please contact us for details.

Ball Point series

ボールポイント
Ball-Point
圓頭針

工業用ミシン針のすべての種別・番手にボールポイント加工を施すことができます。詳しくはお問い合わせください。
Ball Points can be supplied on all ORGAN needles. Please contact our representative for further information.
圓頭針的加工處理可以對風琴針品牌工業縫紉機針的所有種類的各種型號。具體事宜請向敝公司詢問。

先端形状 Symbol 針頭形狀						
針先図 Illustration of Needle Point 針尖圖						
オルガン記号 ORGAN Designation 風琴公司記號	S	Q	J	B	U	Y
他社記号 Other Maker Designation 其它公司記號		RG	SES, FFG, L BALL, SIN, R-K, NYR, BPL	SUK, FG, M BALL, SI R-KB, LAC, BMP	STR, TR, H BALL, KAL, BPH	SKF, G, EH BALL, BIL
特徴 Description 特徴	スリムポイント Slim point 纖細針頭	Qボール Extra light ball point 極小圓頭	Jボール Light ball point 小圓頭	Bボール Medium ball point 中圓頭	Uボール Heavy ball point 大圓頭	Yボール Extra heavy ball point 特大圓頭

※スリムポイントは、先端がJボールで、糸穴から先端までの針先の形状は当社標準針よりも細身になっています。
Slim point has adopted a slimmer needle point (from the side of the eye to the tip) along with the J-ball than our regular needle.
細身圓頭針的針尖為J圓頭、從針眼到針尖的針頭部分比標準針細

ボールポイント表示例
description example of ball point on package
圓頭針的包裝樣例

-10pcs-
DPx134
Size 9S

-10pcs-
DBx1KN
Size 11U

-10pcs-
DPx17-NY2
Size 21SPD