

FASHION SOLUTIONS

The Beissel Needle Catalogue



Sewing is all about imagination. It's about weaving fashion from fabric, creating comfort from clothing, archiving traditions with threads and crafting riches from rags. At Beissel, we know the power of the stitch. That's why we strive to empower the fashionista, the haberdasher, the designer & the tailor by providing top notch needles that can help sew designs from dreams.

About Beissel

Beissel is a global brand of needles that aspires to bridge the exacting new age demands of the fashion industry with old fashioned precision. Licensed from BMN Beissel Machinennadel GmbH, the Beissel trademark is a symbol of class borne by needles made lovingly by over 200 passionate experts in our 80,000 sq. ft. factory, located in Southern India. For over a decade now, Beissel has been providing nearly 500 readymade stitching solutions to the who's who of the fashion industry. An eye for detail, delicious pricing and above all, our fashion focused approach has made us a hot favourite with hip labels across the globe.

About Altek Beissel

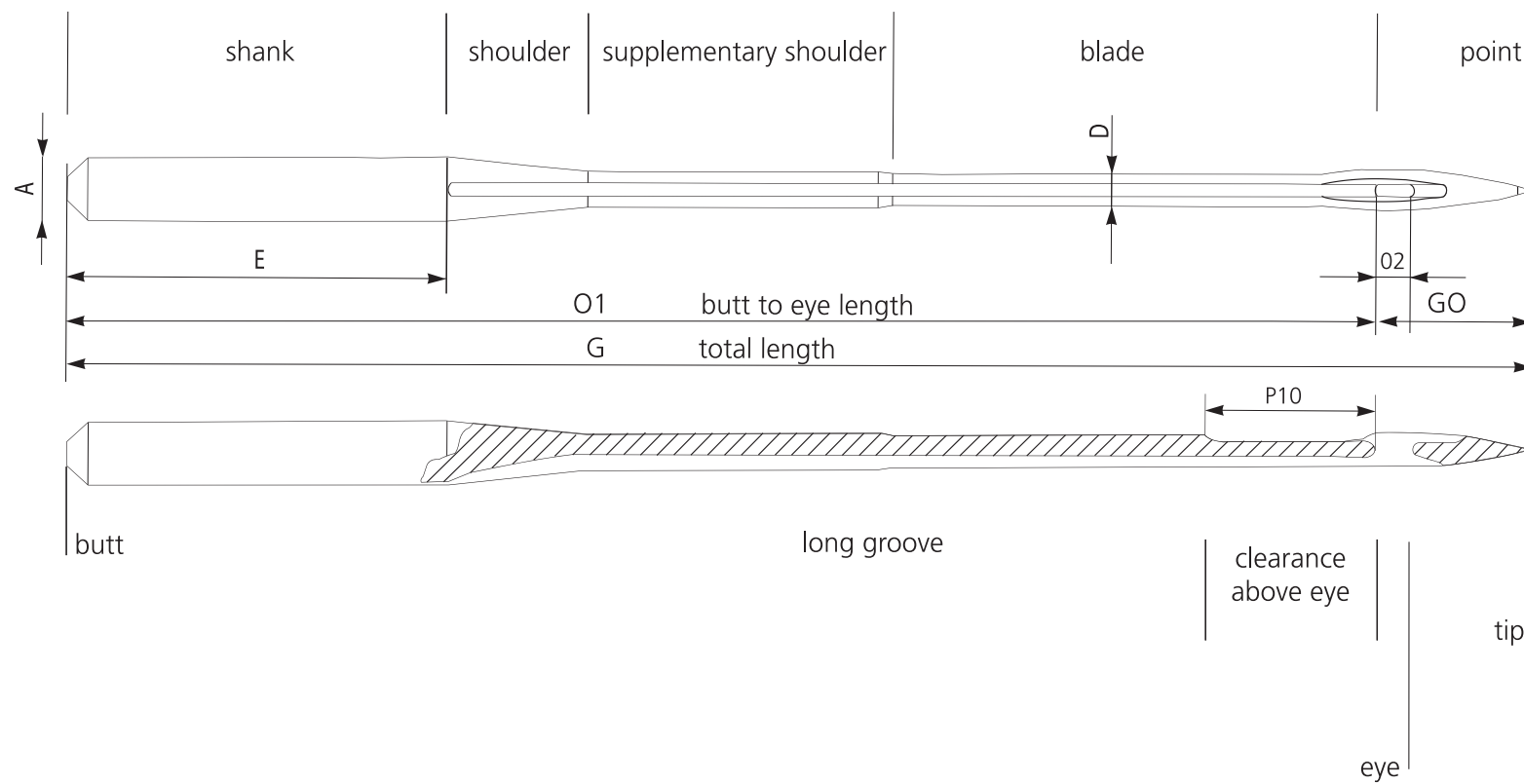
Beissel is made by Altek Beissel Needles Limited, the only needle company in the world to manufacture 100% of its needles under the ISO 9002 Quality system. We were the first in the world to pass the performance standards laid down for sewing machine needles by SATRA of the UK. We use the same technology and processes as the now legendary Lammertz of Germany. Every single needle made in our state-of-the-art factory in Chennai, goes through 155 different quality checks. We have some very sharp minds working round-the-clock to ensure that nothing but the best reaches our clients.

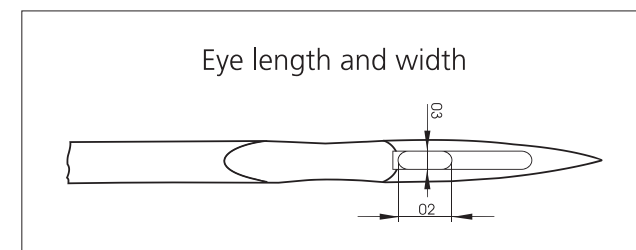
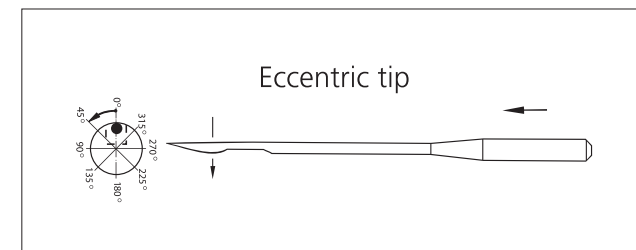
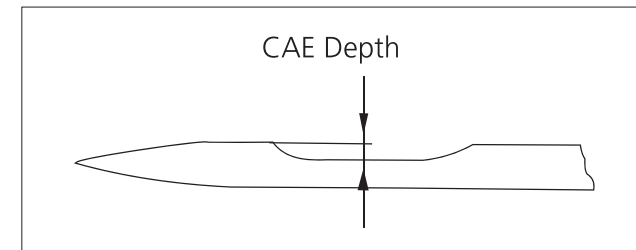
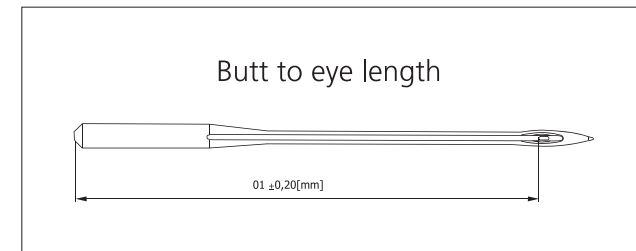
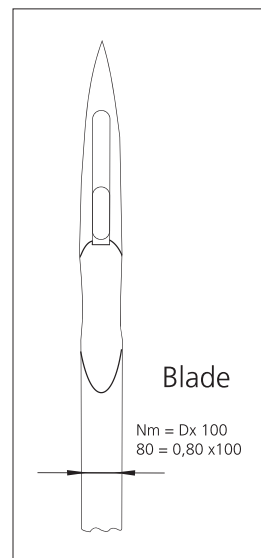
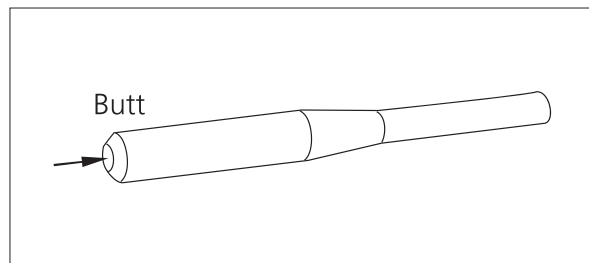
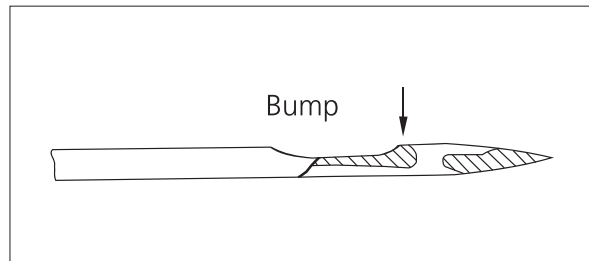
About our needles

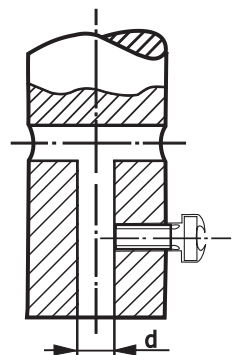
Altek Beissel makes needles of all point styles, sizes and systems for every conceivable need in the industrial and home sewing segments. Weaving fashion from lycra, tencel, rayon, nylon, silk, chiffon, leather, linen, cotton or polyester is what our needles do for a living.

To the naked eye, a needle looks like a tiny piece of metal. Take a closer look and you will be amazed at the 20 odd parts that make up this magical fashion tool. Attached are illustrations of the needle with proper labeling to help you study the parts.

PARTS OF A NEEDLE







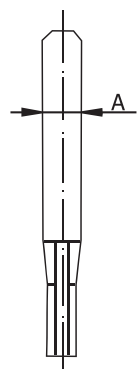
Shank thickness

d (mm)	Tolerances (mm) (mm)	
1.64	+0.006	+0.020
2.00	+0.006	+0.020

German

d (mm)	Tolerances (mm) (mm)	
1.64	+0.000	+0.050
2.00	+0.010	+0.050

Japanese



Shank thickness

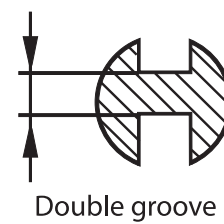
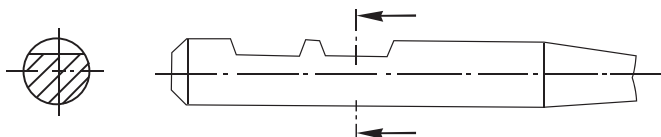
A (mm)	Tolerances (mm) (mm)	
<1	+0,020	-0,020
1-3	+0,000	-0,025
>3	+0,000	-0,030

German

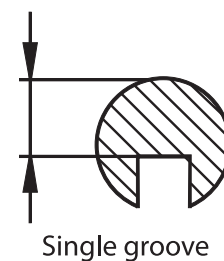
A (mm)	Tolerances (mm) (mm)	
1,64	+0,030	-0,030
2,02	+0,030	-0,030

Japanese

Notched shank

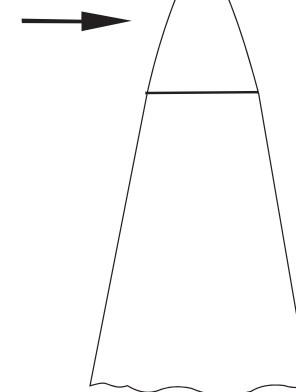


Double groove

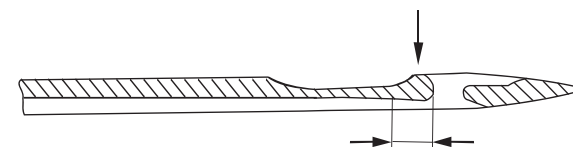


Single groove

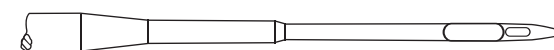
Tip



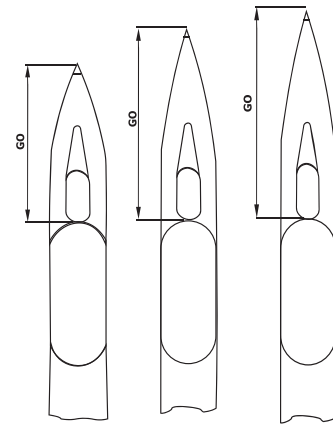
Thread protection



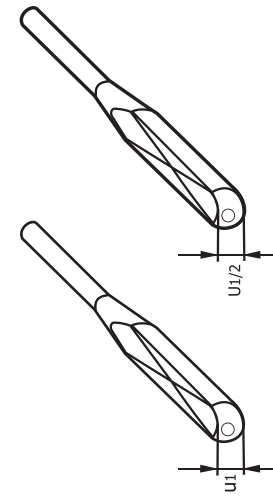
Reinforced blade



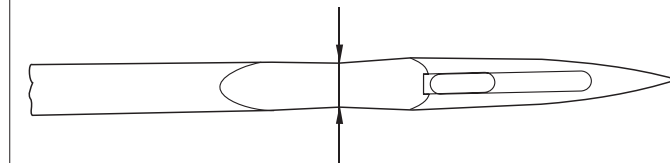
Point length



Flattened shank



Relief grinding



Blade

It's the part of the needle between the end of the shoulder and the top of the eye. Blades can be distinguished as straight, supplementary shoulder, curved, tapered and reduced.

Butt

It's the flattened section at the end of the shank. For technical reasons the butt is not chrome plated.

Butt to Eye length

It's the distance between the butt and the top of the eye which is determined by the construction of the sewing machine and is of great importance for the stitch formation.

Clearance Above Eye (CAE)

It's the depression in the needle to allow unhampered motion of parts of the machine below and above the throat plate.

Eye

The exact opening in the needle blade through which the thread is inserted is called the eye of the needle.

Needle Size

The needle size is the diameter of the needle blade just above the scarf or short groove. The needle size is indicated on the shank of the needle. The Number metric [Nm] unit is conventionally used to designate needle size. 1 Nm equals one hundredth of a millimeter. So an Nm 80 needle will have a blade diameter of 0.80 mm. In the United States, we commonly see needles labeled with two measurements separated by a slash. The first number is the old singer needle sizing standard, the second is NM designation. A 12/80 needle is simply the same needle measured by two different systems.

Needle System

The needle system describes the needle which belongs to a certain sewing machine class. This consists of numbers, letters or a combination of both.

Point

A point is the part of the needle between the top of the eye and the end of the needle. Fundamentally, there are round and cutting points.

Round Point Needles

Sewing machine needles with points ground in a cone shape are round point needles. The tip may be shaped differently depending on the application of the needle. Needles with a round point are predominantly used on textiles. There are centric and eccentric round points.

Ball Point Needles

These are round points with a ball-shaped tip. Their task is to avoid, or at least reduce damage to the fabric. They are of 5 types – Light Ball Point (notated by SES), Medium Ball Point (notated by SUK), Heavy Ball Point (notated by SKF), Extra Heavy Ball Point (notated by TR) and Special Ball Point (notated by SKL).

Slim Round Point Needles

Needles with cone-shaped points starting about the middle of the eye. Used for sewing very fine fabrics such as silk. Notated by SPI.

Cutting Point Needles

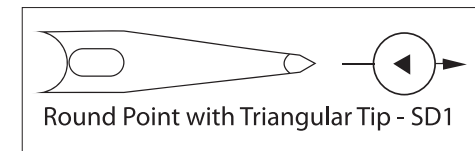
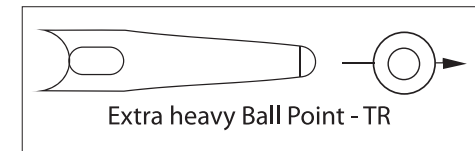
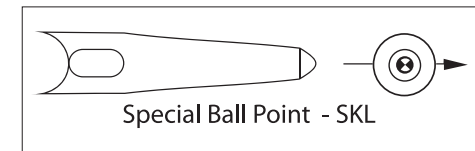
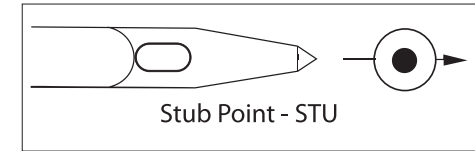
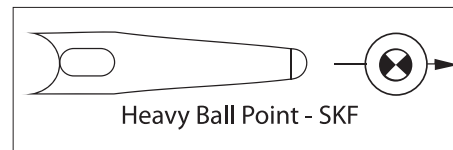
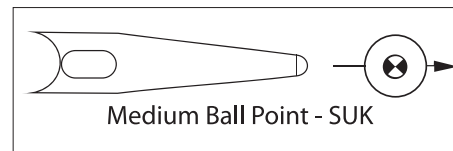
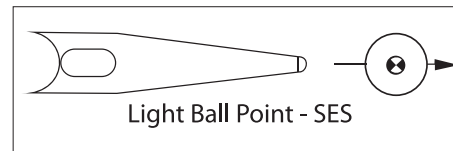
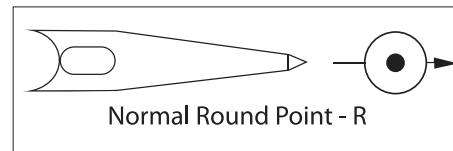
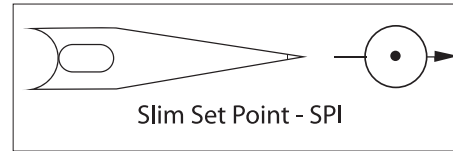
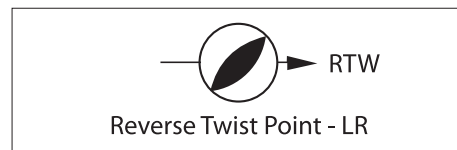
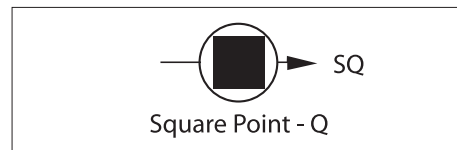
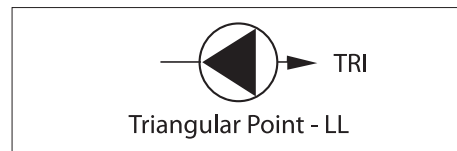
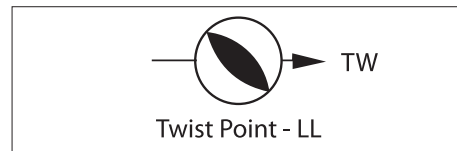
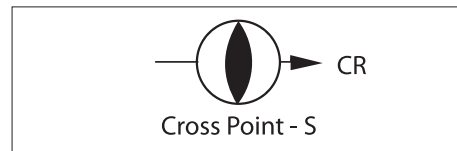
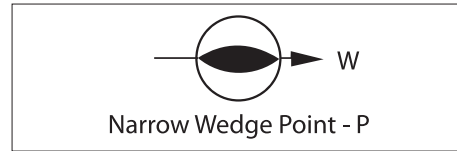
Sewing machine needles with cutting points are predominantly used for sewing leather. A specific seam appearance is achieved by a specially ground shape, at the same time the cutting point reduces the resistance of the sewing material. There are six different types of cutting points – Wedge Point (notated by W), Cross Point (notated by CR), Reverse Twist Point (notated by RTW), Twist Point (notated by TW), Triangular Point (notated by TRI) and Square Point (notated by SQ).

Shank

It's the part of the needle which is inserted in the needle bar. It is normally secured with a screw. The manufacturer's name and needle size are usually stamped on the shank.

Shank Diameter

Most of the needle systems have a constant shank diameter for all sizes. Some of the needle systems have different shank diameters increasing at intervals. While some needle systems, starting from a certain size, have a shank diameter which equals the diameter of the needle blade.



NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	BCX5	2.00	38.9		R	200	Bag closing	FD 5R
	BQX1	1.64	37.3		R-STU	80, 90, 100, 110	Button sewing on skirts, underwear.	108 x 1
	BQX1	1.64	37.3		R-SES	80	Button sewing on skirts, underwear.	108 x 1
	BQX1	1.64	37.3		R-SUK	90	Button sewing on skirts, underwear.	108 x 1
	DBX1	1.63	33.9		R	55, 60, 65, 70, 75, 80, 85, 90, 100, 110	Lock stitch & for general sewing on light and medium woven fabrics.	287 WH, 1738 (A), 16X231, 16X257
	DBX1	1.63	33.9		R-SES	60, 65, 70, 75, 80, 85, 90, 100, 110	Lock stitch & for general sewing on light and medium woven/knit fabrics.	287 WH, 1738 (A), 16X231, 16X257
	DBX1	1.63	33.9		R-SUK	60, 65, 70, 75, 80, 85, 90, 100, 110	Lock stitch & for general sewing on light, medium woven/knit and foundation fabrics.	287 WH, 1738 (A), 16X231, 16X257
	DBX1	2.00	33.9		R	125, 130, 140, 150, 160, 180, 200	Heavy sewing materials	287 WH, 1738 (A), 16X231, 16X257
	DBX1 KN	1.63	33.9		R-SES	65, 70, 75, 80, 85, 90	Knit fabrics of finer gauge (minimize the penetration resistance)	DBX1KN
	DBX95	1.63	33.9		R	120, 125, 130, 140, 160	Small shank (special applications)	287H, 1738A, 16X95, 71 X1
	DBXK5	1.63	33.9		R	60, 65, 70, 75, 80, 85, 90	Embroidery application	DBK5

NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DBXK5	1.63	33.9		R-SPI	70, 75, 80, 85, 90	Embroidery application	DBK5
	DBXK5	1.63	33.9		R-SES	60, 65, 70, 75, 80, 85, 90	Embroidery application	DBK5
	DBXK5	1.63	33.9		R-SUK	60, 65, 70, 75, 80, 85, 90	Embroidery application	DBK5
	DBXK5 KN	1.63	33.9		R-SES	65, 70	Fine embroidery work	DBK5 R-SDI
	DBK5 R-SDI	1.63	33.9		R-SDI	60, 65, 70, 75, 80, 85, 90, 100, 110	Embroidery with leather	DBXK5 KN
	DBK5 KK	1.63	33.9		R-SES	60, 65, 70, 75, 80, 85, 90, 100, 110	Embroidery work	1738 ES SES
	DBK5 KK	1.63	33.9		R-SUK	60, 65, 70, 75, 80, 85, 90, 100, 110	Embroidery work	1738 ES SUK
	DBXF2	1.63	33.9		LR POINT	75, 80, 90, 100, 110	Sewing leather goods	1738 LR, 16X230 NRTW, 16230 RTW
	DBXF2	1.90	33.9		LR POINT	120	Sewing leather goods	1738 LR, 16X230 NRTW, 16230 RTW
	DBXF2	2.00	33.9		LR POINT	125, 130, 140, 150, 160	Sewing leather goods	1738 LR, 16X230 NRTW, 16230 RTW
	DCXI	2.02	33.9		R	60, 65, 70, 75, 80, 90, 100, 110, 120, 125, 130	Overedging (Overlock)	1886, 81XI, DMXI,

NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DCXI	2.02	28.6			60, 65, 70, 75, 80, 90	Overedging (Overlock)	1886, 8IXI, DMXI,
	DCXI	2.02	28.6			60, 65, 70, 75, 80, 90	Overedging (Overlock)	1886, 8IXI, DMXI,
	DCX27	2.02	28.6			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	High speed Overedging (skip proof)	3027GS, MY 1023, B27, 191 GS, D100 SY 6120, 1886
	DCX27	2.02	28.6			60, 65, 70, 75, 80, 90	High speed Overedging (skip proof)	3027GS, MY 1023, B27, 191 GS, D100 SY 6120, 1886
	DCX27	2.02	28.6			60, 65, 70, 75, 80, 90, 100, 110, 120, 130	High speed Overedging (skip proof)	3027GS, MY 1023, B27, 191 GS, D100 SY 6120, 1886
	DCX27	2.02	28.6			60, 65, 70, 75, 80, 85, 90, 100, 110, 120, 130	High speed Overedging (skip proof)	3027GS, MY 1023, B27, 191 GS, D100 SY 6120, 1886
	DDXI	2.02	52.0			90, 100, 110, 120, 130, 140	Inter lock	328, 214xl
	DMXI3	2.02	28.6			65, 75, 80, 90, 100, 110	For stitching leather and heavy weight fabrics/shoe broder threading	82XI3, 1886KK, SY1246
	DMXI3	2.02	28.6			70, 80	Inter lock	82XI3, 1886 KK, SY 1246
	DMXI3	2.02	28.6			65, 75, 80, 90, 100, 110, 120	Inter lock	82XI3, 1886 KK, SY 1246
	DN XI	2.00	42.1			140, 170, 200	Bag closing & gunny closer sewing	UY 143 GS, 92XI, 1286

NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DO X5	2.04	31.2			80, 90, 100, 110, 120	Eyelet button holing	42x5, SY 1413
	DO X 558	2.00	33.9			80, 90, 100, 110, 120	Eyelet button holing	558
	DO X 558	2.00	33.9			110, 120	Eyelet button holing	558
	DO X 558	2.00	33.9			80, 90, 100	Eyelet button holing	558
	DP X1	2.00	31.8			65, 75, 80, 90, 100, 110	Stitching shoe tongues and straps, and general sewing	135X1, 1531, SY 145, 61B, 354, 1673
	DPX5	2.00	33.9			60, 65, 75, 80, 90, 100, 110, 120, 130, 140, 160, 180, 200	Lock stitch, button holing zig zag, double needle	134R, 797, 135x5, DPX7, 134, PFX134, 135 X25
	DPX5	2.00	33.9			60, 65, 75, 80, 90, 100, 110	Lock stitch, button holing zig zag, double needle	134R, 797, 135x5, DPX7, 134, PFX134, 135X25
	DPX5	2.00	33.9			60, 65, 75, 80, 90, 100, 110	Lock stitch, button holing, zig zag, double needle	134R, 797, 135x5, DPX7, 134, PFX134, 135X25
	DPX5 KN	2.00	33.9			65, 70, 75	For knitted fabric	UY 121 GS, 759, MY 1001
	DPX17	2.00	38.9			70, 80, 90, 100, 110, 120, 130, 140, 160, 180, 200	Medium to heavy materials sewing, button sewing	UY 121 GS [L]
	DPX17	2.00	38.9			70, 80, 90, 100, 110, 120, 130, 140	Medium to heavy materials sewing, button sewing	UY 121 GS, 759, MY 1001

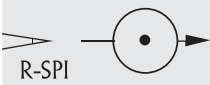
NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DPX17	2.00	38.9			70, 80, 90, 100, 110, 120, 130, 140	Medium to heavy materials sewing, button sewing	I34 KN, I35X5 KN
	DPX35R	2.00	38.1			70, 80, 90, 100, 110, 120, 130, 140, 160, 180, 200	For leather sewing (Post bed)	I35X17, SY 3355
	DPX35 LR	2.00	38.1			70, 80, 90, 100, 110, 120, 130, 140	For leather sewing (Post bed)	I35X17, SY 3355
	DPX35 S	2.00	38.1			70, 80, 90, 100, 110, 120, 130, 140, 160, 180	For leather sewing (Post bed)	I35X17, SY 3355
	DPX35 PCL	2.00	38.1			100, 110, 120, 130, 140	For leather sewing (Post bed)	I34-35R, SY 7225
	DVXI	2.00	38.9			65, 75, 80, 90, 100, 110, 120, 130, 140	Two needle double chain stitch, inter lock stitching for knitted goods.	I34-35LR, SY 7225
	DVXI	2.00	38.9			70, 75, 80	Two needle double chain stitch, inter lock stitching for knitted goods.	I34-35 S, SY 7225
	DVXI (L)	2.00	38.9			65, 75, 80, 90, 100	Two needle double chain stitch for zipper.	I34-35 PCL, SY 7225
	DVXI (R)	2.00	38.9			65, 75, 80, 90, 100	Two needle double chain stitch for zipper.	UY 121 GS (R)
	DVX57	2.00	38.6			75, 80, 90, 100, 110, 120, 130, 140	For sewing waist band of jeans	B-57, 62X57, 5640
	DVX57	2.00	38.6			100, 110, 120, 130, 140	For sewing waist band of jeans	B-57, 62X57, 5640

NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DVX57	2.00	38.6		 R-SUK	110, 120, 130	For sewing waist band of jeans	B-57, 62X57, 5640
	DVX63	2.00	38.9		 R	75, 80, 90, 100, 110, 120, 130, 140	2-needle, 3-needle double chain stitch for elastic tape attaching.	B- 63
	DVX63	2.00	38.9		 R-SES	75, 80, 90, 100, 110	2-needle, 3-needle double chain stitch for elastic tape attaching.	B- 63
	DVX63	2.00	38.9		 R-SUK	75, 80, 90, 100, 110	2-needle, 3-needle double chain stitch for elastic tape attaching.	B- 63
	DVX63	2.00	38.9		 R-SPI	70, 75, 80	2-needle, 3-needle double chain stitch for elastic tape attaching.	B- 63
	EBXI	2.02	49.0		 R	90, 100, 110, 120, 130	Quilting needle, for bed covering sewing	48, 51, 490, 2331
	EBX755	1.63	33.0		 R	75, 80, 90, 100, 110, 120, 130	Eyelet button holing	501, 755H, 1807
	EBX755	1.63	33.0		 R-SES	100, 110, 120	Eyelet button holing	501, 755H, 1807
	LW 2 T	2.02	NA		 R	65, 75, 80, 90, 100, 110	Felled seam, blind stitch	29-34, 29-49, 29-BL
	LW 3 T	2.02	NA		 R	80, 90, 100, 110	Felled seam, blind stitch	29-C -300, 251, 1715 F, LWX4T
	LW 5 T	2.02	NA		 R	80, 90	Felled seam, blind stitch	29-300 LG, 251 LG, 300

NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	LW 6 T	2.02	NA		 R-SES	65, 70, 75, 80	Felled seam, blind stitch	29-34, 29-49, 29-BL
	TQX1	1.75	37.1		 STU	70, 75, 80, 90, 100, 110, 120, 130	Button sewing	175x1, 1985, 29-s
	TQX1	1.75	37.1		 R-SES	70, 75, 80, 90, 100, 110	Button sewing	175x1, 1985, 29-s
	TQX1	1.75	37.1		 R-SUK	80, 90, 100	Button sewing	175x1, 1985, 29-s
	TQX7	1.75	47.0		 R	75, 80, 90, 100, 110, 120, 130	Button sewing and snaps on clothes	175x7, 29-l, 2091
	TQX7	1.75	47.0		 R-SES	75, 80, 90, 100, 110	Button sewing and snaps on clothes	175x7, 29-l, 2091
	TQX7	1.75	47.0		 R-SUK	75, 80, 90, 100	Button sewing and snaps on clothes	175x7, 29-l, 2091
	TQX9	1.75	47.0		 R	75, 80, 90, 100, 110	Button sewing (short shank)	29-lss, 175x9, 1987
	TVX1	2.00	37.0		 R	65, 75, 80, 90, 100, 110	Double chain stitch, hemming, felled seam	149x1, sy 2774
	TVX1	2.00	37.0		 R-SES	80, 90	Hemming, felled seam, for elastic tap, jeans	149x1, sy 2774
	TVX5	2.00	41.4		 R	65, 75, 80, 90, 100, 110, 120, 130, 140	Hemming, felled seam, for elastic tap, jeans	62x53, 149x5, SY 4151

NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	TVX7	2.00	37.0		 R 	65, 75, 80, 90, 100, 110, 120, 130, 140	Double chain stitch for elastic tape knit wears hemming or felled seam	149x7, MY 1002 A
	TVX7	2.00	37.0		 R-SES 	65, 75, 80, 90	Double chain stitch for elastic tape knit wears hemming or felled seam	149x7, MY 1002 A
	TVX64	2.00	36.6		 R 	70, 75, 80, 90, 100, 110, 120, 130	Double chain stitch for elastic tape knit wears hemming or felled seam	B64
	TVX64	2.00	36.6		 R-SES 	70, 75, 80	Double chain stitch for elastic tape knit wears hemming or felled seam	B64
	UOX113 GS	2.00	36.6		 R 	65, 75, 80, 90, 100, 110, 120, 130, 140	Waist banding, shirt fronting, tapes, shrring sewing	UY 113 GS, SY 7090, 2055
	UOX113 GS	2.00	36.6		 R-SES 	65, 75, 80, 90, 100, 110, 120	Waist banding, shirt fronting, tapes, shrring sewing	UY 113 GS, SY 7090, 2055
	UYX121 GBS	2.00	38.9		 R-SES 	90, 100, 110, 120, 130, 140	Double chain stitch	UYX121 GBS
	UYX128 GAS	2.00	38.9		 R 	65, 75, 80, 90, 100, 110, 120, 130, 140	2 needle double chain stitch for attaching elastic tapes, rings etc	MY 1040, MY 1044, 1280
	UYX128 GAS	2.00	38.9		 R-SES 	65, 75, 80, 90, 100, 110, 120, 130, 140	2 needle double chain stitch for attaching elastic tapes, rings etc	MY 1040, MY 1044, 1280
	134 D	2.00	33.9		 R-TRI 	70, 75, 80, 90, 100, 110	Triangular cutting point (for leather)	PFX 134 D
	134 LL	2.00	33.9		 LL 	90, 100	Twist cutting point (for leather)	PFX 134 LL, 135X8 NTW

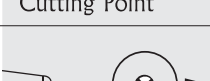
NEEDLES FOR SEWING MACHINES (INDUSTRIAL)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	134 LR	2.00	33.9		 LR-POINT	70, 75, 80, 90, 100, 110	Reverse twist cutting point (for leather)	PFX 134 LR, 135X8 RTW
	134 LR	2.00	33.9		 LR-POINT	120, 130, 140, 160, 180	Reverse twist cutting point (for leather)	PFX 134 LR, 135X8 RTW
	134 PCL	2.00	33.9		 PCL	70, 80, 90, 100, 110, 120, 130, 140	Wedge cutting point (with left twisted point groove)	PFX 134 PCL, 797 PCL
	134 S	2.00	33.9		 S	70, 80, 90, 100, 110, 120, 130, 140	Cross cutting point (for leather)	PF 134 KS, 135 X 8 NCR
	134-35 R	2.00	38.1		 R	70, 80, 90, 100, 110, 120, 130, 140	Lock stitch flat bed sewing for heavy material (shoes, bags, seats etc)	134-35 R
	134-35 LR	2.00	38.1		 LR POINT	70, 80, 90, 100, 110, 120, 130, 140	Reverse twist cutting point (for leather)	134-35 LR
	134-35 LL	2.00	38.1		 LL	70, 80, 90, 100, 110, 120, 130, 140	Twist cutting point (for leather)	134-35 LL
	134-35 S	2.00	38.1		 S	70, 80, 90, 100, 110, 120, 130, 140	Cross cutting point, long (for leather)	134-35 S
	134-35 D	2.00	38.1		 TRI	70, 80, 90, 100, 110, 120, 130	Triangular cutting point (for leather)	134-35 D
	134-35 PCL	2.00	38.1		 PCL	70, 80, 90, 100, 110, 120, 130, 140	Wedge cutting point (with left twisted point groove) longer type 134 pCL	134-35 PCL

NEEDLES FOR SEWING MACHINES (DOMESTIC)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	130 N (or) 130 MET	2.03	33.9		 R SES	70, 80, 90, 100	Top stitch needles (with longer eye) for metallic embroidery threads.	130 N, 130/705 HM
	130/705 H	2.03	33.9		 R SES	60, 70, 80, 90, 100, 110, 120	Universal needle, slightly rounded point for all fabric types.	15 XI, 130/705 H, HA XI
	130/705 H-J	2.03	33.9		 SPI	70, 80, 90, 100, 110	J = Jeans , For Heavy /dense fabrics like denim and canvas, More rigid shank for less deflection.	130/705 H-J
	130/705 H-LL	2.03	33.9		 Cutting Point	70, 80, 90, 100, 110, 120	Needle with cutting point (with left twist) for sewing on leather, suited for decorative seams.	130/705 H-LL
	130/705 H-LR	2.03	33.9		 Cutting Point	70, 80, 90, 100, 110, 120	Needle with cutting point (with right twist) for sewing on leather, suited for decorative seams.	130/705 H-LR
	130/705 HM	2.03	33.9		 R SES	60, 70, 80, 90	Application on M-Micro fibre, Silks, Foils etc.	130/705 HM
	130/705 HQ	2.03	33.9		 R SES	75, 90	Needles for quilting and patch work - slightly rounded point.	130/705 HQ
	130/705 H-S	2.03	33.9		 SUK	75, 90	For elastic materials, T-shirt knits (Jersey) knitted and warp knits -Medium ball point.	130/705 H-S
	130-705 H SUK	2.03	33.9		 SUK	70, 80, 90, 100	For knitted fabrics lycra, medium ball point.	130-705 H SUK
	130-705 H E	2.03	33.9		 R SES	75, 90	Large eye for special effect or metallic embroidery threads. Light ball point to avoid shredding.	130-705 H E

NEEDLES FOR SEWING MACHINES (DOMESTIC)

BEISSEL

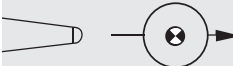
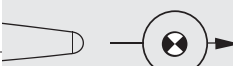
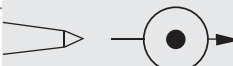
	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	I30-705 H E ZWI NE 2,0	2.03	33.9			75	Large eye for special effect or metallic embroidery threads. Light ball point to avoid shredding.	I30-705 H E
	I30-705 H E ZWI NE 3,0	2.03	33.9			75	Large eye for special effect or metallic embroidery threads. Light ball point to avoid shredding.	I30-705 H E
	I30/705 H-S ZWI 2, 5	2.03	33.9			75	Twin needle for elastic material - distance between points: 2.5mm	I30/705 H-S ZWI 2, 5
	I30/705 H-J ZWI 4,0	2.03	33.9			100	Twin needle for jeans - distance between points: 4mm	I30/705 H-S ZWI 4,0
	I30/705 H-ZW II, 6	2.03	33.9			70, 80	Twin needle for universal point - distance between points: 1.6mm	I30/705 H-ZW II, 6
	I30/705 H-ZW I2, 0	2.03	33.9			80	Twin needle for universal point - distance between points: 2.0mm	I30/705 H-ZW I2, 0
	I30/705 H-SZW I2, 5	2.03	33.9			80	Twin needle for universal point - distance between points: 2.5mm	I30/705 H-SZW I2, 5
	I30/705 H-SZW I3 ,0	2.03	33.9			90	Twin needle for universal point - distance between points: 3.0mm	I30/705 H-SZW I3, 0
	I30/705 H-SZW I4, 0	2.03	33.9			80, 90, 100	Twin needle for universal point - distance between points: 4mm	I30/705 H-SZW I4, 0
	I30/705 H-BR NE 6, 0	2.03	33.9			100	Twin needle for waist band sewing - universal point distance between points: 6mm	I30/705H-BRNE 6, 0

NEEDLES FOR SEWING MACHINES (DOMESTIC)

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	130/705 H-BR NE 8, 0	2.03	33.9		 R SES	100	Twin needle for waist band sewing - universal point distance between points: 8mm	130/705H-BRNE 8, 0
	130-705 H DRI NE 3, 0	2.03	33.9		 SPI	80	Three needles on a cross bar from a single shaft, sews three rows of decorative stitching.	130-705 H DRI NE 3, 0
	130-705 H ZWIHO	2.03	33.9		 R SES	100	1 x Wing needle + 1 x Universal needle as twin.	130-705 H ZWIHO
	130/705 H-WING	2.03	33.9		 R SES	100, 120	1 Wing needle for decorative hem stitch seams.	130/705 H-WING

1, 2 & 3 NEEDLE GROUP

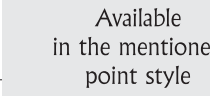
	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DVXI	2.00	38.9		Available in the mentioned point style	60, 65, 70, 75, 80, 90, 100, 110, 120, 125, 130, 140	Double chain stitch	1628, 62X21, UY121GS, MY1001, DVX21, UYX121
	UYX128 GAS	2.00	38.9			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	With scarf 2 & 3 needle	1280, UY128GAS, MY1040, MY1044, DVXG9
	DVX43	2.00	38.9			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Tv x3 from #19	62X3, 62X43
	DVX63	2.00	38.9			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Skip proof	B63
	TVXI	2.00	37.0			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Hem stitching & felling	149X1
	DVX57	2.00	38.6			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Twisted groove	62X57
	TVX3	2.00	38.9			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Side stitching dvx43 from #18	149X3, UY124GS
	TVX5	2.00	41.4			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	2 needle felling 3 needle heavy material	62X 45, 149X5
	TVX7	2.00	37.0			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Hem stitch & felling	149 X7MY1002A, 149X25, TVX25
	TVX64	2.00	36.6			60, 65, 70, 75, 80, 90, 100, 110, 120, 130, 140	Skip proof	B64

BLIND STITCH NEEDLE GROUP

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	LW X 1T	2.02	NA		Available in the mentioned point style 	65, 75, 80, 90, 100, 110, 120, 130	Felling	29-BC, 29 BD, 29-12, 1717 BE, 1717TP
	LW X 2T	2.02	NA			65, 75, 80, 90, 100, 110, 120, 130	For blind chain stitching & felling	29 BA, 29 BL, 29-20, 29-34, 29-35, 2140 BE, 2140TP LW X 6T
	LW X 3T	2.02	NA			65, 75, 80, 90, 100, 110, 120, 130	For blind chain stitching & felling	29-CA, 29-C-300, 25I, 1715F, BLIND STITCH, LW X4T
	LW X C 5	2.02	NA			65, 75, 80, 90, 100	Bluff edging and felling	29 BK, 29-38L, 29-39, 2186 TP
	LW X 6T	2.02	NA			2, 2 1/2, 3, 3 1/2, 4, 4 1/2, 5	For attaching shoulder pads and basting	29-BA, 29-BL, 29-20, 29-34, 2935, 29-49, 2140BE, 2140TP, 3140TP, LWX 2T
	LW X7T	2.02	NA			75, 80, 90, 100, 110	Felling	29 BB, 29-6, 29-63, 1717 DC, 1828E
	LW X1669E	2.02	NA			65, 75, 80, 90, 100, 110, 120, 130	Lapel padding	1669 E, 1715E, 2669E, 3669E

BUTTON SEWING NEEDLE GROUP

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	BQXI	1.63	37.3		Available in the mentioned point style 	70, 75, 80, 90, 100, 110, 120, 130, 140	Button (2 or 4 holes) of skirts, under wear	108 XI
	TQXI	1.75	37.1			70, 75, 80, 90, 100, 110, 120, 130, 140	Button sewing	175 XI, 175 XI, 29-S, 1661, 1985
	TQX3	1.75	41.4			70, 75, 80, 90, 100, 110, 120, 130, 140	Sewing button and snaps on clothes	175 X3 2018
	TQX7	1.75	47.0			70, 75, 80, 90, 100, 110, 120, 130, 140	Button sewing longer length	175 X 7, 29 -L, 2091, 2091 LGK
	TQX9	1.75	47.0			70, 75, 80, 90, 100, 110, 120, 130, 140	Button sewing with short shank	175 X9, LS X 18, 29-LSS, 1661 ELG

LEATHER NEEDLE GROUP

BEISSEL

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	TF X2	1.63, 1.90, 2.02	33.9			60, 70, 80, 90, 100, 110, 120, 125, 130, 140, 160	For stitching leather	34LL, 287LL, 563LL, 690LL, 16X2NTW, TFX2LL
	DP X16 N	2.00	38.9			80, 90, 100, 110, 120, 125, 130, 140, 160, 180		135X 16 NTW, 135 X16 TW,
	MT X 134PCL	2.00	33.9			70, 80, 90, 100, 110, 120, 125, 130, 140		134 PCL, 797 PCL, PF 134 PCL
	PF 134LL	2.00	33.9			70, 80, 90, 100, 110, 120, 125, 130, 140, 160, 180, 200		134LL, 7697LL, 135 X8NTW, 135X8TW
	DBXF2	1.63, 1.90, 2.02	33.9			70, 80, 90, 100, 110, 120, 125, 130, 140, 160, 180, 200		1738LR, 16X230NRTW: 16X230RTW
	PFX 134LR	2.00	33.9			70, 80, 90, 100, 110, 120, 125, 130, 140, 160, 180, 200		134 LR, 797 LR, 135X8 NRTW, 135X8 RTW
	DPX35LR	2.00	38.1			70, 80, 90, 100, 110, 120, 125, 130, 140, 160, 180, 200		135-35 LR, 2134-35 LR
	DPXF22	2.00	33.9			60, 70, 80, 90, 100, 110		134KKS, 797 KKS
	PF X134KS	2.00	33.9			70, 80, 90, 100, 110, 120, 125, 130, 140, 160, 180, 200		134S, 797S, 1345X8 CR, 135X8 NCR,

LOCK STITCH NEEDLE GROUP

BEISSEL

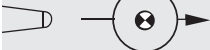
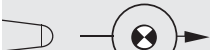
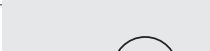
	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DB XI	1.63, 2.00	33.9		Available in the mentioned point style      	60, 65, 70, 75, 80, 85, 90, 100, 110, 120, 130, 140, 160, 180, 200	Sewing on light and medium woven fabrics.	16 X231, 16 X 257, 1738, SY 2254
	DBXI KN	1.63	33.9			65, 70, 75, 80, 85, 90	Application on knit fabrics of finer gauge.	DBXI KN
	DBX K5	1.63	33.9			60, 65, 70, 75, 80, 85, 90, 100, 110	For multi head embroidery.	DBX K5
	DPX 5	2.00	33.9			60, 65, 70, 75, 80, 85, 90, 100, 110	Double lock stitch sewing on light and medium fabrics.	134 R, 135 X 5, 135 X17, SY 1955
	DA XI	1.63	29.6			60, 65, 70, 75, 80, 85, 90, 100, 110	High speed straight sewing for medium weight fabrics such as shirts, knit wear, aprons, etc.	88 XI, 1128
	DPXI7	2.00	38.9			60, 65, 70, 75, 80, 85, 90, 100, 110, 120, 130, 140, 160, 180, 200	Lock stitch on leather sewing.	135X17

ZIG - ZAG NEEDLE GROUP

BEISSEL

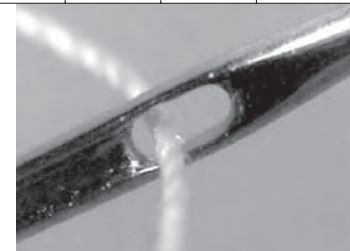
	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DPX5	2.00	33.9		Available in the mentioned point style    	70, 75, 80, 90, 100, 110, 120, 130, 140	Zig zag	134R, 797, 135x5, DPX7, 134, PFX134, 135 X25
	DPX5 KN	2.00	33.9			70, 75, 80, 90, 100, 110, 120, 130, 140	Knit	134KN, 135X5 KN
	PFX34R	1.63, 1.90, 2.02	33.9			70, 75, 80, 90, 100, 110, 120, 130, 140	Bartack	134R, 797, 135x5, DPX7, 134, PFX134, 135 X25
	PFX134	2.00	33.9			70, 75, 80, 90, 100, 110, 120, 130, 140	Lock stich	134R, 797, 135x5, DPX7, 134, PFX134, 135 X25
	PFX797	2.00	33.9			70, 75, 80, 90, 100, 110, 120, 130, 140	Buttoning and holing	134K, 556KH, 797KH, 135X9, PFXK

OVER LOCK NEEDLE GROUP

	NEEDLE SYSTEM	SHANK DIA mm	BUTT TO EYE LENGTH mm	GROOVES	POINT STYLE	NEEDLE SIZES	SPECIAL FEATURES	EQUIVALENT SYSTEMS
	DC XI	2.02	28.6		Available in the mentioned point style    	70, 75, 80, 90, 100, 110, 120, 130, 140	Over lock for overedging hoisery goods, underwear and joining knit wear pieces.	81 XI, 62I, MY 1023A
	DC XI KN	2.02	28.6			70, 75, 80, 90, 100, 110, 120, 130, 140	Over lock for overedging hoisery goods, underwear and joining knit wear pieces.	DC XIKN
	DC X27	2.02	28.6			70, 75, 80, 90, 100, 110, 120, 130, 140	High speed overedging	B -27, 81 X27, 1886, MY 1023
	DM XI	2.02	28.6			70, 75, 80, 90, 100, 110, 120, 130, 140	Inter lock	82 XI
	DM XI3	2.02	28.6			70, 75, 80, 90, 100, 110, 120, 130, 140	Inter lock	82 XI3, 1886 KK

The width of the eye of a needle is normally 40% of the size of the needle. The thread must occupy no more than 60% of the width of the eye so that there is no risk of fraying of thread during sewing and the thread flows smoothly during operation. The table attached gives a general guide to matching thread and needle size.

Needle Size Thread Count (German Standard)																		
Needle size			Cotton		Polyamide				Polyester				Silk				Core Yarn	
			N _{eg}	tex	Continuous		Monofilament		Continuous		Fiber		Reeled		Shappe		Nm	tex
					Nm	tex	den	tex	Nm	tex	Nm	tex	Nm	tex	Nm	tex		
50	60	70	80/3	7x3			50	5,5			120/3	8x3						
60	70	80	70/3	8x3	100/3	10x3	80	9	80/3	12x3	100/3	10x3	100/3	10x3	120/3	8x3		
70	80	90	50/3	12x3	70/3	14x3	130	14			70/3	14x3	80/3	12x3	100/3	10x3	100/3	10x3
80	90	100	40/3	15x3	60/3	16x3	180	20	60/3	16x3	60/3	16x3	60/3	16x3	70/3	14x3	80/3	12x3
90	100	110	30/3	20x3	50/3	20x3	320	36	40/3	25x3	50/3	20x3	50/3	20x3	60/3	16x3		
100	110	120	20/3	30x3	40/3	25x3					40/3	25x3	40/3	25x3	50/3	20x3	50/3	20x3
110	120	130							30/3	33x3					40/3	25x3	30/3	33x3
120	130	140	12/3	49x3	30/3	33x3					30/3	33x3	30/3	33x3	30/3	33x3		
130	140	160							20/3	50x3	20/3	50x3						
140	160	180							10/3	100x3			20/3	50x3	20/3	50x3		
160	180	200									10/3	100x3	10/3	100x3	10/3	100x3		
light	medium	heavy	Nm = Number metric = length (m) of the single thread per 1.00 g tex = $\frac{1000}{Nm}$ N_{eg} = Number english cotton = length (m) of the single thread per 0.59 g tex = $\frac{590}{N_{eg}}$ den = denier = mass (g) of the single thread per 9000 m tex = $\frac{den}{9}$ tex = mass (g) of the single thread per 1000 m															



A good needle is a pre-requisite for good sewing and finish of any product. Modern day sewing machines operate at speeds exceeding 5000 stitches per minute. This means that the needle travels at a speed exceeding 15 km per hour! Whatever the sewn product - be it leather, garment etc, it is the seam which joins everything together and is crucial to the finish and quality of the final product. That's why we stop at nothing, when it comes to quality control.

PRODUCTION INSPECTION



The sewing machine needles are inspected using established statistical quality control parameters at every stage of production.

This comprises:

- Measuring the main dimensions (shank and blade diameters, butt to top of the eye distance, length of point etc)
- Checking special shapes (cone-shaped point, tip etc)
- Bending properties (elastic limit, breaking angle, breaking force)
- Eye testing (free of fins)
- Measuring the hardness and thickness of the surface layer (nickel, chromium)
- Visual inspection (blemishes etc,)

PRODUCT INSPECTION

The finished sewing machine needles are inspected using established statistical Quality Control (DIN 40 080) techniques.



The needle is checked for predetermined quality parameters at the end of every single operation. All these together total 155 different checks for every single needle. After the needle manufacturing process is completed, every single

needle is visually inspected for a further 25 parameters. Only those needles that pass every one of the following tests reach our customers:

A) BREAKING ANGLE TEST

The single most important quality that a needle must meet is that it should be strong and must not break easily. A specially designed computer controlled device is used to ensure that the needle retains a certain elastic property and does not break within specified limits.

B) ELASTICITY TEST

The needle must have elastic property. Additional layers in sewing (e.g. collar attachment) pose sudden resistance which can be met only if the needle is elastic. It is mandatory that the needle returns at once to its straight position. If not, there will be problems of skipped stitching and damage to vital sewing machine parts. This elastic limit is continuously monitored.

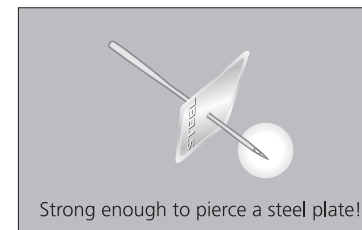
C) EYE TEST

Cotton thread (though polyester is a more commonly used thread and breaks less easily) is used and tested rigorously under conditions far more severe than real life conditions. If the cotton thread does not break, the needle batch is passed by our Quality Control department.

D) TORTURE TEST

Our Quality Control department is equipped with modern sewing machines for real life testing of needles. Our technicians sew non-stop for 20 minutes on several layers (garment and leather) to inspect whether the needle performs without breakage.

E) GUN SHOT TEST



This is the ultimate test determines the strength and tip hardness of the needle. A needle is shot through a steel plate and the tip is checked. The tip must remain sharp and intact.

These painstaking steps are a must to ensure top notch needles. At Beissel, we stick to this Quality Control regime almost every day. No wonder we've managed to win seals of approval from the finicky gentlemen who award the ISO 9002.



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