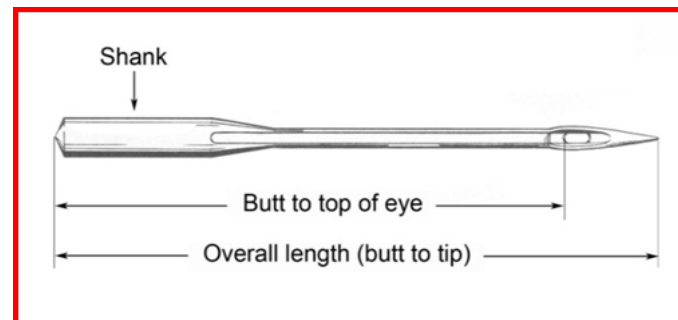


Introduction to these needle measurements

The data in this chart is organized by flat shank needles first and then by round shank needles. Each group of needles is further sorted by shank diameter, and then length to top of eye, and then finally by length to point (overall length). Each row contains data for a single needle. The columns following the measurements are needle system identifiers for the needle in that row, for various manufacturers, most of which are no longer in business. I have also included current manufacturers such as Schmetz, Groz-Beckert (GB) and Organ. Some needles may have multiple system identifiers. The GB data also included the catalogue identifier because I had that data and it spells out details about the needle. There is a color key at the bottom of the chart which describes what the background colors signify. If I do not have the overall needle length for a needle I have left that field blank. There are many needles in the round shank section which are listed there because I happen to get my hands on some of them so I included them.

I have tried to double and triple check the information listed here, but please use this at your own risk. The main purpose for this data is to help you identify needles you may have, and to also help try and locate an alternative needle which might be able to be used for one that is no longer available.

The measurements provided here are only meant as a starting point, there many additional things that need to be considered when finding a replacement needle besides just the measurements. Feel free to share this data. I want to thank Tim Traylor for all of the initial needle measurements he provided me. Countless other folks have also helped me in this work. This is still a work in progress so please check back everyonce in a while for updates. Thank you all. Kevin Pinkerton, pinkerton.farm@gmail.com



Flat Shank Needles

12/19/2023
7:25 AM

Shank	Scarf	Shank diameter mm	Length to top of eye mm	Length to point mm	Boye	Singer	Free	Brewer	Brewer No.	Torr	Other System IDs	Measurement source	Still Avail	Comments
	N	2.02	28.1	32.39								W&G 14		
	Y	2	28.2	32.3		24x1					02:65, 03:34, DHx1, 2060, SY1111	Singer 20 Chainstitch	Yes	Singer 24 chainstitch
	Y	2	28.6	33.3							66, 1881, DCX1F, 81x1F, 621F	DCx1F	Yes	
	Y	2.02	31.9	35.7	2 1/2		CC	T	6			Boye 2 1/2		
	Y	2.02	33.9	37.1		206x13					21:32, HPx13, 2029, SY2029	206x13		Singer 306, 206 and 319
	Y	2.02	33.9	38.2	16	15x1	AA JJ	J, M, N, R	11, 14, 15, 18	Y, BB, CC, LL	21:46, 130/705H, HAx1, 2020, 691, 705	Boye 16		Singer, Standard VS, Standard Rotary, White Rotary
	Y	1.75	33.9	39		130x3					17:10, DFx3, 727F, SY1794, 1232F	Schmetz 17:10	Yes	Singer 72W Hemstitcher
	N	2.02	34.7	38.8	6	15x1	JJ	M				Boye 6		Standard Rotary
	N	1.92	35	40.6								Raymond #4		
	N	1.5	38	44	2	1x7		H	9	M	28:05, 138	Boye 2		Household. 1x7 had a very tiny flat side, otherwise same as 13x1 round shank
	N	2.02	38.2	42.5	21	20x1	BB	F	7		35:11, 805, SY3241, 38, 712	Boye 21		Goodrich Flat Shank
	N	2.03	38.2	42.6			DD					Free DD		
	N	2.02	38.2	42.9	21	20x1	DD		5		32:11, 50N1, 38	Eldredge Rotary		Eldredge Rotary
	N	2.02	38.2	43.8	14	20x1	BB	E	4	J	35:11, 805, SY3241, 38, 712	Boye 14		Eldredge Flat Shank
	N	2.02	38.2	44.5	12	20x1	BB	P	17	KK	35:11, 805, SY3241, 38, 712	Boye 12		White Flat Shank
	N	2.02	38.2	44.9	4	20x1	BB	B, F, G, K	1, 7, 8, 12	R, X	35:11, 805, SY3241, 38, 712	Boye 4		Crown, Goodrich Flat Shank, New Home, Singer High Arm
	N	2.02	38.5	44.4		20x1						20x1		1.63 on flat side of shank
	N	1.75	38.9	43.9	18	127x1	EE	O	16	HH	35:05, 9N1, SY3347	Boye 18		MY1014 needle works as a replacement
	N	2.02	39.8	45.8	24	1x3 20x1	HH	I	10	T	35:11, 805, SY3241, 38, 712	Boye 24		New Royal
SS	N	1.11(v)	40.8	47.3								Grover & Baker		
	N	1.98	41.5								LAx81, SY7430		Yes	
	N	1.66	42	47.2								Wanzer C		Groove and eye 90 degree to shank. From top, flat at 6 o'clock, groove at 3 o'clock
	N	2.02	43	48	26			A				Boye 26		American Flat Shank
	N	2.02	43.2	49.9	10	1x2	FF	C	2	F	46:50, 86, 186, 350	Boye 10		Davis Long
	Y	2	57.5								9168		Yes	

Background Color Key

Needle is still available

Needle does not fit into any Syst (v) = varies by needle size

Flat Shank Key

SS = Straight Shank

Round Shank Needles

12/19/2023
7:23 AM

Shank	Scarf	Shank diameter mm	Length to top of eye mm	Length to point mm	Boye	Singer	Free	Brewer	Brewer No.	Torr	Other System IDs	Measurement source	Still Avail	Comments
			21.9								292 A, 292 SP, AIX1, 01:05			
			27.9								292, EBX292, 01:30			
G	Y	2.02	28.1	31.1							513, W&G513, EBx64, SY6050	Organ 513	Yes	
G	Y	2.02	28.1	32.2	20 1/2	1x11 25x1	ACS	S			02:50, WY502, 63, 64, W&G502, 503, SY6050, SOABAR, WGx64	Boye 20 1/2		W&G Chainstitch automatic. 513 works as a replacement
G	Y	2.02	28.6	33.6		82x3					03:32, SY1242, DMX3			Singer double chain stitch 82-11 machine
	Y	2.02	28.6	33.4		81x1 82x1					03:33, 03:36, B27, DCX1, DMX1, MY1023A, DCx27, MY1023, SY6120, 1886, RMx27	B27	Yes	
	Y	1.63	29.6	33.5		88x1 88x9					04:45, 1128, DAX1	04:45 1	Yes	
	Y	1.63	29.6	34.9		88x5								
G	Y	2.02	31.4	35.58							581, 75W, LA1617	581	Yes	W&G Model 10 lockstitch
		2	31.8			135x1					06:50, SY1451, DPX1		Yes	
	N	1	32	36.9		94x5					07:05, 573N, NBx5, SY1496	Lamm. 573 N	Yes	Schmetz only has one diameter, GB has all of them
	N	1.04	32	37.3	23	12x1		L	13		23:51, 257, 339, SY1489	Boye 23		Singer New Family. NBx5 works as a replacement.
N	Y	1.62	33	36.8							Reese 02-0750-0-100			
	Y	1.39	33.3	39.7							08:65, 459 R, 1567, EBx1567		Yes	
	Y	1.61	33.7	37.66							JLx1	Organ JLx1	Yes	
	Y	1.63	33.9	37.47							BLx1	Muva BLx1	Yes	
	Y	1.63	33.9	38.2		16x87 16x95 16x231 16x257 71x1					14:25, DBx1(c), 287WH, 1738, 1738 A, DB-K5, DBx257, SY1515, SY2254, SY2270, 373, 563	14:25 1	Yes	Identical to 15x1 but without the flat. (c) = Caution: DBx1 Shank diameter varies by mfg, MUVA = 2.00 mm, Schmetz = 1.63 mm, Organ = 1.59 mm
	N	1.63	33.9	38.2		16x1 16x73					12:05, 34, 287, 563, 1104, 1642, Tfx1, Tfx73, SY6830, 690, Pfx34	12:05 1	Yes	thread slots down both sides of needle
	Y	2	33.9	38.6		135x7 135x5					20:05, 134, SY1955, DPx5, DPx7	20:05	Yes	
	N	1.74	34	38.5		130x1					12N1, 727	130x1		W&W Industrial
	Y	1.74	34	39.51		128x1 128x21 128x3					16:05, 728, Tlx21, SY1666	Tlx21	Yes	
	Y	1.82	34.1								UY180GYS, UY180GPS, UOX180G		Yes	
	Y	1.2	35.6	42		46x1					1571, POx1, 339		Yes	German TS Machines
	Y	2	36.6	41.3							26:17, 26:50, SY7080, UY108G, UY108G, UY120G, SY7086, UY110G, UY110G, UY113G, SY7090, UOX113G, B-64, SY7045	26:65	Yes	

Round Shank Needles

12/19/2023
7:23 AM

Shank	Scarf	Shank diameter mm	Length to top of eye mm	Length to point mm	Boye	Singer	Free	Brewer	Brewer No.	Torr	Other System IDs	Measurement source	Still Avail	Comments
	Y	2	37	42.6		149x7					27:50, TVX7	27:50	Yes	
	Y	1.75	37.1	40.5		175x1 175x5					27:90, 29-S, 1985, 1661, SY2851, SY8724, TQx5, TQx1	TQx1	Yes	Boye 14 replacement in National Faultless
	Y	1.63	37.3	41.4		31x1 108x1 108x3					FVx1	108x1	Yes	Boye 14 replacement in National Faultless
	Y	1.98	37.3	43.08		16x99						16x99		
	Y	2	37.3								30:62, UY163, UY8021GS, MY1242, UOX163		Yes	
		1.75	37.5	44.5		176x5					01:05, 292, 292A, 292BP, 392, A1x1		Yes	Fur sewing machine. Singer 176-xx
	Y	2	38.1	42.78							DPx35R, 134-35, 2134-35, SY7225		Yes	
		1.08	38.15	44.14		13x1						13x1		Jon Helig provided measurements from size 11. NB says 13x1 round shank is identical to 1x7 flat shank.
	Y	2	38.6	44.04		62x57					33:30, 5640, SY3260, DVx57	33:30	Yes	
	N	1.93	38.7	44.2								Howe	Yes	
	Y	1.46	38.8	44							34:22, MY1014, SY7256, SMx1014, SM1014	34:22 1	Yes	
	N	1.75	38.9	43.8	27							Boye 27		MY1014 needle works as a replacement
	Y	2	38.9	43.8		135x17					37:20, SY3355, DPX17, UY 121 GBS	135x17	Yes	
	N	1.71	38.9	44.3		126x9					FOx9, 2165, SY3305	FOx9	Yes	
	N	1.98	38.9	44.5		29x3					35:15, D1x3, 332 LG, SY 7600, 65, 160, 332	35:15	Yes	
	Y	2	38.9	44.62		149x3 149x31					38:00, UYx128GAS, SY7292, UY128GS, UY128GAS, 1280, MY1040, MY1044 ,TVx3	UYx128GAS	Yes	
	Y	1.48	39								SMx1014A, MY1014A, MY1014, SY7255, UOX8023, UY8023GS		Yes	
	Y	1.75	39			126x1 126x3					FOx3, SY3303	126x1	Yes	
N	N	1.4	39.3	45.4	8	1x4	GG	D	3	H	427, 665	Boye 8		Domestic Top Notch. Notch is 1.46mm long
	N	1.15	41	47.8		2x1					50:10, 361, 382	2x1		
	Y	1.75	41.4			175x3					44:15, TQx3, 2018, 1661LG, WY4051, SY8727		Yes	
	Y	2	42.4	48.1							UOx147GA, SY7475, UY147GS	UOx147GA	Yes	
	N	2.02	42.7	48.3	20	1x1				E	44:25	Boye 20		Early White Round Shank
	Y	1.99	44.8	49.2							190R, MTx190, SY7555	190R	Yes	Boye 10 and 20 replacement for Davis VF use
	N	1.75	45	51.5		129x1					EEx1	129x1	Yes	
	N	.89 - 2.53	47.7	52.7 - 53.2		3x1 3x2						Singer 3-1		Shank varied with needle size. Size 16 - 27
	Y	1.98	48.6	52.4							2190, 332 LGH	Lammertz 332 LGH KSP	Yes	
	Y	2	38.8 - 39.2	45.85		62x41						62x41		

Curved Needles

12/19/2023
7:25 AM

Shank	Scarf	Shank diameter mm	Length to top of eye mm	Length to point mm	Other	Comments
R/F	N	1.32R and 1.20F	41.74	47.47	42, 178	W&W 4 Two thread grooves, one each side. Flat starts 2.66mm from end. Tip of needle is 2.92mm from center line of shank. Curve starts at end of shank and is 24.5mm in length. Shank is 23mm long. #1=.83mm diameter, #1.5=.85mm, #2=.92mm, #2.5=.95