

One of the items I knit most often as a charity project are socks. These socks knit top down with an integrated heel are worked entirely in ribbing patterns. The advantage of this kind of pattern is that thanks to the ease of rib the socks fit slightly smaller or bigger circumferences comfortably, which is perfect when the exact size of the recipient is not known.

## Yarn

1 skein of fingering weight yarn with a yardage of approximately 400 m ( 437 yds ) per 100 g (sufficient up to a foot length of approximately 30 cm [11.75"])
Used in the sample: Hedgehog Fibres Sock ( 400 m [437 yds] / $100 \mathrm{~g} ; 90 \%$ Wool, 10\% Nylon) in a one of a kind colourway (Potluck)

## Needles

$2.25 \mathrm{~mm} / \mathrm{US}$ size 1 DPNs or circular needle(s) for your preferred way to knit in the round

## Notions -

2 stitch markers, yarn needle
Gauge
32 sts $/ 42$ rows $=10 \mathrm{~cm} / 4$ " in Stockinette Stitch, blocked

## Size and measurements

S, M, L and XL to fit leg circumference 17.5 $(20,22.5,25) \mathrm{cm}[7(8,9,10) "]$.
Please note that the measurements are based on the gauge in Stockinette Stitch. The ribbing patterns used for leg and instep have some ease; each size fits slightly smaller and bigger circumferences comfortably.
Leg length results in $20.5(20.5,22,22) \mathrm{cm}$ [8 (8, 8.75, 8.75)"] when knit as given in the pattern, adjustable (see 'Notes'). Foot length is adjustable.

## Abbreviations

- beg - beginning
- dec('d) - decrease(d)
- k-knit
- k2tog - knit 2 stitches together
- m - marker
- M1/M1P- make 1/make 1 purl (see 'How to...’)
- p - purl
- p2tog - purl 2 stitches together
- pm - place marker
- rep - repeat
- rnd(s) - round(s)
- RS - right side
- ssk - slip 1 knitwise, slip 1 knitwise, knit 2 slipped stitches together through the back loop
- sl - slip
- sm - slip marker
- st(s) - stitch(es)
- WS - wrong side
- wyib - with yarn in back
- wyif - with yarn in front


## Notes -

The socks are knitted from the cuff down. Heel flap and gusset are integrated into the leg pattern.
The Integrated Heel and Gusset Section needs to be worked in full and adds approximately $6.75(7.5,8.5,9.5) \mathrm{cm}[2.75$ $(3,3.25,3.75)$ "] to the total leg length. To
adjust the leg length, work fewer or more rounds in the Leg section before the Integrated Heel section.

Please pay attention which rounds of the Integrated Heel and Gusset Section to work for your size: for size S work Rnds 1-26 and the final rounds under 'All sizes'; for size M work Rnds 1-30 and the final rnds; for size L work Rnds 1-34 and the final rnds; for size XL work Rnds 1-38 and the final rnds.

In places the pattern refers to 'work all stitches in established pattern'. This means to work the stitches as they were worked in previous rounds: all knit stitches are knitted and all purl stitches are purled.

All instructions for size $S$ are given before the parentheses; the instructions for sizes M, L and XL follow in that order in the parentheses.

## How to work...

- M1 (make 1): Pick up bar of yarn between needles from the front with the left needle, knit the newly picked up stitch through the back loop.
- M1P (make 1 purl): Pick up bar of yarn between needles from the back with the left needle, purl the newly picked up stitch through the front loop.
- Kitchener Stitch (grafting)

With an equal number of stitches on two needles, thread end of working yarn through yarn needle. Hold needles parallel with RS facing and both needles pointing to the right. Perform Step 2 on the first front stitch, and then Step 4 on the first back stitch, and then continue with the instructions below.

Step 1: Pull yarn needle knitwise through front stitch and drop stitch from knitting needle.
Step 2: Pull yarn needle purlwise through next front stitch, leave stitch on knitting needle.
Step 3: Pull yarn needle purlwise through first back stitch and drop stitch from knitting needle.
Step 4: Pull yarn needle knitwise through next back stitch, leave stitch on knitting needle.
Repeat Steps 1 - 4 until there are only 2 sts left. Finish the grafting of the final two stiches with Step 1 and Step 3.

There are several video demonstrations of Kitchener stitch to be found on the internet, for example here: How to Kitchener Stitch

## Instructions

- Leg

Cast on $56(64,72,80)$ sts, pm, join to work in the rnd, being careful not to twist.

Rnd 1: *K2, p2; rep from * to end.
Rep Rnd 1 a total of $58(54,56,52)$ times or until leg measures $6.75(7.5,8.5,9.5) \mathrm{cm}$ [2.75 (3, 3.25, 3.75)"] less than the desired leg length.

- Integrated Heel and Gusset

The gusset stitches are increased in the middle of all knit and purl columns. The increases are made every other round and gradually change the knit 2, purl 2 rib pattern into a knit 3, purl 3 rib pattern.

Rnd 1: K1, M1, k1, p2, [k2, p2] to end. " $57(65,73,81)$ sts
Rnd 2 and all even numbered rounds through Rnd 26 (30, 34, 38): Work all stitches in established pattern.
Rnd 3: K3, p1, M1P, p1, [k2, p2] twelve (fourteen, sixteen, eighteen) times, $k 2, \mathrm{p} 1$, M1P, p1. " $59(67,75,83)$ sts
Rnd 5: K3, p3, k1, M1, k1, p2, [k2, p2] eleven (thirteen, fifteen, seventeen) times, k1, M1, k1, p3.» $61(69,77,85)$ sts
Rnd 7: K3, p3, k3, p1, M1P, p1, [k2, p2] ten (twelve, fourteen, sixteen) times, $k 2, p 1$, M1P, p1, k3, p3.» $63(71,79,87)$ sts
Rnd 9: [K3, p3] twice, k1, M1, k1, p2,
[k2, p2] nine (eleven, thirteen, fifteen) times, k1, M1, k1, p3, k3, p3.» $65(73,81,89)$ sts
Rnd 11: [K3, p3] twice, k3, p1, M1P, p1, [ $k 2, p 2$ ] eight (ten, twelve, fourteen) times, k2, p1, M1P, p1, [k3, p3] twice. " $67(75,83,91)$ sts
Rnd 13: [K3, p3] three times, k1, M1, k1, p2, [k2, p2] seven (nine, eleven, thirteen) times, k1, M1, k1, p3, [k3, p3] twice. " $69(77,85,93)$ sts
Rnd 15: [K3, p3] three times, k3, p1, M1P, p1, [k2, p2] six (eight, ten, twelve) times, $k 2$, p1, M1P, p1, $[k 3, p 3]$ three times.
" $71(79,87,95)$ sts
Rnd 17: [K3, p3] four times, k1, M1, k1, p2 [k2, p2] five (seven, nine, eleven) times, k1, M1, k1, p3, [k3, p3] three times.
" 73 (81, 89, 97) sts
Rnd 19: [K3, p3] four times, k3, p1, M1P, p1, [k2, p2] four (six, eight, ten) times, k2, p1, M1P, p1, [k3, p3] four times.
" $75(83,91,99)$ sts

Rnd 21: [K3, p3] five times, k1, M1, k1, p2, [k2, p2] three (five, seven, nine) times, k1, M1, k1, p3, [k3, p3] four times.
" $77(85,93,101)$ sts
Rnd 23: [K3, p3] five times, k3, p1, M1P, p1, [k2, p2] two (four, six, eight) times, k2, p1, M1P, p1, [k3, p3) five times.
" $79(87,95,103)$ sts
Rnd 25: [K3, p3] six times, k1, M1, k1, p2, [k2, p2] one (three, five, seven) time(s), k1, M1, k1, p3, [k3, p3] five times.
" $81(89,97,105)$ sts

## Sizes M, L and XL only

Rnd 27: [K3, p3] six times, k3, p1, M1P, p1, [k2, p2] - (two, four, six) times, k2, p1, M1P, p1, [k3, p3] six times." - $(91,99,107)$ sts
Rnd 29: [K3, p3] seven times, k1, M1, k1, p 2 , [k2, p2] - (one, three, five) time(s), k1, M1, k1, p3, [k3, p3] six times.
" - $(93,101,109)$ sts

## Sizes L and XL only

Rnd 31: [K3, p3] seven times, k3, p1, M1P, p1, [k2, p2] - (-, two, four) times, k2, p1, M1P, p1, [k3, p3] seven times.
" - (-, 103, 111) sts
Rnd 33: [K3, p3] eight times, k1, M1, k1, p2, [k2, p2] - (-, one, three) time(s), k1, M1, k1, p3, [k3, p3] seven times. " - (-, 105, 113) sts

## Size XL only

Rnd 35: [K3, p3] eight times, k3, p1, M1P, p1, [k2, p2] - (-,-, two) times, k2, p1, M1P, $p 1,[k 3, p 3]$ eight times. " - $(-,-, 115)$ sts
Rnd 37: $[K 3, p 3]$ nine times, $k 1, M 1, k 1, p 2$, k2, p2, k1, M1, k1, p3, [k3, p3] eight times. " - (-,-, 117) sts

## All Sizes

Next Rnd: [K3, p3] six (seven, eight, nine) times, k3, p1, M1P, p1, k2, p1, M1P, p1, [k3, p3] six (seven, eight, nine) times.
" 83 (95, 107, 119) sts
Next Rnd: Work all sts in established pattern.
Please note: The following rnd is only a partial rnd and ends before you reach the beg of rnd marker.
Set-up Rnd for heel turn: [K3, p3] seven (eight, nine, ten) times, k1, M1, k1, [p3, k3] two (two, two, three] times, p1 (3, 3, 1), k0 $(0,2,0)$. " total of $84(96,108,120)$ sts; $26(30$, $34,38)$ sts stay unworked at end of rnd

Turn heel
The heel turn will be worked back and forth in short rows over the next $55(63,71,79)$ sts; keep remaining $29(33,37,41)$ sts on hold for the instep. Remove beg of rnd marker when you come to it in first row.

Row 1 (RS): K30 (35, 40, 45), ssk, k1, turn. Row 2 (WS): SI1 wyif, p6 (8, 10, 12), p2tog, p1, turn.
Row 3: SI1 wyib, $k$ to 1 st before the gap, ssk, k1, turn.
Row 4: SI1 wyif, p to 1 st before the gap, p2tog, p1, turn.
Rep Rows 3-4 eight (nine, ten, eleven) more times. » 27 (31, 35, 39) sts between the gaps; $4(5,6,7)$ sts on each side of the gap
Row 5: SI1 wyib, k to 1 st before gap, ssk, turn.
Row 6: SI1 wyif, p to 1 st before gap, p2tog, turn.
Rep Rows 5-6 two (three, four, five) more time(s). Rep Row 5 once more; do not turn at the end of final row.
" $57(65,73,81)$ sts; $29(33,37,41)$ on instep, $28(32,36,40)$ on sole

- Foot

You resume working in the round. All instep stitches are worked in established rib pattern.

Set-up rnd: Pm for new beg of rnd, k0 (0, 2, 0), p1 (3, 3, 1), [k3, p3] four (five, five, six) times, k3 (0, 2, 3), p1 (0, 0, 1), pm, k2tog, knit to end. " $56(64,72,80)$ sts; $29(33,37$, $41)$ on instep, $27(31,35,39)$ on sole

Next rnd: Work in established rib pattern to m , sm, knit to end.
Continue as set, keeping all instep stitches in rib and knitting all sole sts. Work until foot measures $4.5(5.25,5.75,6.5) \mathrm{cm}[1.75$ (2, $2.25,2.5) "]$ less than the desired length.

Knit 3 rnds.

- Toe

Set-up Rnd 1: K1, ssk, k to 3 sts before m, k2tog, k1, sm, knit to end.
" 54 (62, 70, 78) sts; $27(31,35,39)$ each on instep and sole
Set-up Rnd 2: Knit.
Rnd 1: *K1, ssk, k to 3 sts before m, k2tog, k1; rep from * once. " 4 sts dec'd Rnd 2: Knit.
Rep Rnds 1-2 four (five, six, seven) more times. " 34 (38, 42, 46) sts
Rep Rnd 1 four (five, five, six) more times. " $18(18,22,22)$ sts
Graft sts together using Kitchener Stitch or finish the toe with the alternative version below.

Alternative version without grafting:
Rep Rnd 1 three (three, four, four) more times. " 6 sts
Cut yarn leaving a tail of approximately 15 cm
(6"), thread yarn through remaining 6 sts.
Pull tight to gather sts and fasten off on WS.

## Finishing

Weave in ends. Block lightly. Enjoy your new socks!

