

## LENGTH OF WOOL IN A BALL OR HANK: *How long is a ball of wool?*

Well, this depends on many factors.

Firstly, a ball of wool made from fleece of one sheep breed will differ from that made from another breed.

Main reasons for differences are:

- There is in fact no British Standard (or any standard) for yarn size, which is why manufacturers specify their own patterns to be knitted when buying their wool. For the purposes of each knitting pattern, that is also why there is always a tension setting provided, to enable a knitter to knit up a sample of set numbers of stitches and rows and to measure it against the standard set in the pattern, whereafter the tension, or needle size, or number of stitches and rows can be adjusted by the knitter to achieve the garment dimensions set in the pattern.
- All yarns may vary by up to 15% in diameter over every 100 yards or so. This is in the nature of the fibres and the spinning process, hence the variations between the lengths given in the tables below. Woollen spun will vary more than worsted spun.
- Wool, as a natural material, will absorb water and after washing and drying, there is a process called "regain" when the wool will re-absorb a certain amount of moisture. This will vary from wool to wool according to breed type, the type of yarn, etc. This means that the

weight of a ball of wool is not necessarily constant and will depend on its storage conditions. Wool can in fact absorb up to 30% moisture before feeling wet, which is why it is such an excellent outdoor clothing material.

- The weights and measures laws allow for up to a 4.5% variation on a 50g ball, so that each ball of wool is only actually approximately 50g in weight, within the legal variation.

At Blacker Designs, when ball-winding the wool, the way the machine works is that it will run for a set period and this period is set by adjusting gears on the machine so that the eventual ball weighs close to 50g on average. The machine makes up to 12 balls at a time, from 12 cones of wool, and each will vary slightly. The setting is designed to approximate the length to the weight, and we check by weighing, due to the legal requirements, but we cannot measure exact lengths per ball, which would anyway measure differently for the reasons explained above.

**Therefore the only way you can be absolutely sure is to measure each ball and each will vary.**

The tables below give ranges of yarn lengths for 50g or 2oz balls of wool. These can be doubled for 100g/4 oz balls and for hanks.

Because we weigh in grams, our ball lengths will be shorter than those for a 2 oz ball by about 12%. The American system of selling by the yard is better and we are working on making this available.

### Metric: 50 gm ball (=1.76 oz)

Yarn size	Length of yarn (range)	No. balls for 91cm chest jersey	Total length for jersey	Conventional needle size
2-ply	300-400 m (325-433 yd)	4.5	1350-1800 m	2.5 mm
3-ply	200-240 m (217-260 yd)	6	1200-1440 m	3-3.25 mm
4-ply	150-200 m (163-217 yd)	7	1050-1400 m	3.5 mm
Double knitting	100-120 m (108-130 yd)	9	900-1080 m	4 mm
Triple knitting	60-80 m (65-87 yd)	12	720-960 m	5 mm
Chunky	50-60 m (54-65 yd)	14	700-840 m	6 mm

### Imperial 2 oz ball (=56.7 gms)

Yarn size	Length of yarn (range)	No. balls for 36" chest jersey	Total length for jersey	Conventional needle size	
				UK	US
2-ply	400-500 yd (369-461 m)	4	1600-2000 yd	12-13	1-0
3-ply	260-300 yd (240-280 m)	5	1300-1500 yd	10-11	3-2
4-ply	200-250 yd (185-230 m)	6	1200-1500 yd	9-10	4-3
Double knitting	120-150 yd (111-138 m)	8	960-1200 yd	8	5
Triple knitting	80-100 yd (74-92 m)	10	800-1000 yd	6	7
Chunky	60-80 yd (55-74 m)	12	720-960 yd	4	9

**PLEASE CONTACT US FOR FURTHER INFORMATION ON SPINNING, PRICES, TIMING, ETC.**