

SPECIFICATION FOR JERSEY WOOLEN 'V' NECK DYED FOR CAPF

1. FOREWORD

This specification is prepared taking assistance of specification available for other depts and as per the requirements of CAPF.

2. Scope

This specification caters to the need of CAPFs. This standard prescribes the constructional details & other particulars of jersey woolen V neck dyed.

3. MATERIAL

3.1. Jersey shall be manufactured from the following materials:

SI NO	COMPONENTS	MATERIALS	PARTICULARS
a	Body & Sleeves	Basic knitted fabric	Worsted yarn 55 tex X 2.
b	Reinforcement	Cloth polyester Cotton Gaberdine dyed	AS PER Appendix (C)
c	Stitching	Thread sewing spun polyester 145 d tex x 4 /	IS: 9543-1980
d	Linking	Worsted yarn 55 tex x2	
e	Overlocking	Worsted yarn 55 tex x 2 /	
f	Buttons	Plastic 13 mm	IS:1461-1984

4. Manufacture

4.1. The body and sleeves shall be knitted independently from worsted yarn of 55 Tex /2 in 2x2, rib knit. The cuff and bottom rib shall be knitted integrally and tightly to achieve the desired rib effect. The fabric shall be uniform in shade, texture and appearance and free from knitting flaws. The cuff and bottom rib shall contain at least two strengthening rounds.

4.2 The Jersey shall be fabricated to the required size and dimensions as given in appendix 'B'. The shape and design of the jersey shall be as shown in the drawing attached (Fig. 1 and 2) to the specification. The total rib cuff shall be 17 cms in length and shall be joined on upper side by flat lock linking machine and shall be free from protrusions and looseness.

4.3 The neck opening shall be 'V' shape overlapping at the bottom keeping the left side welt on upper side at above 45 degree angle. The neck welt shall be of 2x2 rib knit of body material and shall be 3 cm wide in double fold. The welt shall be secured to the body linking.

4.4 The jersey shall be provided with two shoulder straps. The seam of shoulder (Inside top portion) shall be made with over lock stitching and finally with seam covering machine throughout the shoulder seam. In case the neck welt is secured with linking the over lock stitching of the shoulder shall be completely covered with reinforcement material for strengthening. The shoulder seam and arm pit shall be strengthened with Cloth Polyester cotton Gaberdine dyed of required shade. Button plastic provided on shoulder at 2 cm away from the neck welt and a button hole shall also be provided one on each shoulder strap 6 mm away from the edge of open end.

4.5 Two pen pocket on the upper arm base of left sleeve shall be provided with Cloth Polyester cotton Gaberdine dyed of required shade. The base of these pockets shall be 15.5 cm in length and 6 cm in width. The pockets shall be straps joint.

4.6 The shoulder and sleeves at elbow shall be reinforced with Cloth Polyester cotton Gaberdine dyed as shown in the drawing. The shoulders reinforcement shall be extended on front and back equally to a depth of 11 cm and shall be in one piece without seam /joint on shoulder top. One side of each shoulder reinforcement piece shall be stitched along wit joint of body and sleeves.

4.7 Stitching of shoulder reinforcement, sleeves reinforcement. Shoulder straps and pen pockets shall regulate at 4-5 stitch per cm.

4.8 Overlook stitching/ linking and seam covering shall be done with one worsted thread as used for knitting in conjunction two threads of thread sewing spun polyester. The stitching tension shall be even throughout with all loose ends fastened and trimmed off. The number of stitches per centimeter shall not be less then 5 at any place.

4.9 The seams and joints shall withstand stitching in all direction to the full extent of the knitted fabric without breaking of allowing the loop of knitted fabric to run.

5 REQUIREMENTS

5.1 Jersey shall conform to dimensions as per appendix 'B'. Other requirements shall be as per table below:

S. No	Characteristic	Requirements	Method of test
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1	Composition	All Wool-100%	IS:2006-1998(ON DRY MASS)
2	Wool quality	64 S as per IS: 5911-1977.	IS: 744-1977
3	No of Wales/ DM on either surface	Body 30(15x2 visible rib) Cuffs & Bottom rib-40 (20x2) visible rib	As per clause A-4 of IS: 2360.1977
4	No of courses/DM on either surface	Body 56 or more Cuff & bottom rib 64 min	As per clause A-4 of IS: 2360.1977
5	Scouring	3% Max	As per clause A-5/6 of IS: 2360.1977
6	Dimensional Change	5.0% Max	As per clause A-5/6 of IS: 2360.1977
7	pH	4 to 7.5 / Light 4-5, Washing 3-4	IS: 1390-1983
8	Colour fastness to Light	4 and above	IS: 2454, 3361
9	Colour fastness to Washing	4 and above	IS: 2454, 3361
10	Breaking load of yarn	550.0 gms Min	IS: 1567.1991-

6. Marking

6.1 A suitable cloth label/Taffeta, white in ground, shall be securely attached to each jersey on the inside of the neck opening (back side) detailing:

- Name of material,
- Size,
- Fiber composition,
- Manufacturer details or trade mark.

7. Preservation

7.1 Preserved with naphthalene using a minimum of 5 kg per cubic meter.

8. Packing

8.1 Each Jersey Woollen shall be individually packed in a **self-sealing polyethylene (PE) bag of minimum 0.05 mm thickness** to protect the garment from moisture, dust, dirt and contamination. The individually packed garments shall thereafter be suitably packed in **strong, moisture-resistant corrugated fibreboard boxes of adequate strength**, capable of withstanding normal handling, transportation and storage without damage to the contents. The packing shall be neat, secure and suitable for long-term storage.

9. SAMPLING

1	Composition	All Wool-100%	IS:2006-1998(ON DRY MASS)
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6. Marking

The sampling procedure given below shall give desired protection to the buyer and the seller

provided that the lot submitted for inspection is homogeneous. To achieve this, manufacturer shall

maintain a system of process control at all stages of manufacture and shall ensure that the jerseys

tendered by him for inspection comply with the requirements of this standard in all respect.

Note: For effective process control, the use of statistical quality control techniques is recommended and a helpful guidance may be obtained in this respect from IS: 397 (Part 1) 1972.

9.1 LOT: In any consignment, all jerseys of same size, colour and composition of fibers delivered to a buyer against one dispatch note shall constitute a lot.

9.1.1. The conformity of the lot to the requirements of this specification shall be determined on the

basis of the test carried out on the samples selected from it.

9.2. Unless otherwise agreed to between the buyer and the seller, the number of jerseys to be selected shall be in accordance with column 2 of Appendix A.

9.3. The sample size and criteria for conformity for various characteristics shall be as given in the table.

Characteristic	Number of Tests	Criteria for Conformity
Freedom from defects, Dimensions, and Number of Wales and Courses	All the jerseys selected according to col 2 of Appendix (A)	Non-conforming jerseys not to exceed the corresponding number given in col 3 of Appendix (A).
Mass, Specification for wool tops, breaking load of knitting yarn, dimensional change, scouring loss, pH value, colour fastness to washing, alkali solubility, and fiber composition	All the jerseys selected according to col 4 of Appendix (A)	Each observed value to satisfy the specified requirement. Non-conforming jerseys not to exceed the corresponding number given in col 5 of Appendix (A).
Colour fastness to light	One in case of lot size up to 500 jerseys; two above that	Each jersey to satisfy the specified requirement.

Appendix-A

Number of Jersey to be selected from a Lot and Permissible Number of Non- Conforming Jersey (Clause 9.2 and 9.3)

Number of Jersey in the Lot	Non-Destructive Testing		Destructive Testing	
	Number of Jersey to be selected	Permissible Number Non-Conforming Jersey	Number of Jersey to be selected	Permissible Number Non-Conforming Jersey
1	2	3	4	5
Upto 300	10	1	2	0
301 to 500	20	1	3	0
501 to 1000	30	2	5	0
1001 to 3000	50	3	8	0
3001 and above	80	5	13	1

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Appendix-A

DIMENSIONS AND MASS

All Dimensions in Cms

SIZ E	Roun d Chest	Lengt h of body	Total Length of sleeves includin g turned up cuff	Widt h of arm hole	Width of neck openin g	Depth of neck openin g	Width across the shoulde r (top)	Lengt h of turned up cuff	Depth of Botto m rib	Mass of jersey in Gram s
	A	B	C	D	E	F	G	H	I	
85	75	64	48	20	16	15	36	8.5	6.5	560
90	80	68	51	21	16	15	38	8.5	6.5	590
95	85	70	54	22	16	15	40	8.5	6.5	620
100	90	72	57	23	16	15	42	8.5	6.5	650
105	95	74	60	24	16	15	44	8.5	6.5	680
110	100	76	63	25	16	15	46	8.5	6.5	710
115	110	78	66	26	16	15	38	8.5	6.5	740
Tol in %	+4% -2%	+2 -1	+2 -1	+2 -0.5	+1 -1	+1 -1	+1.5 -1.5	- -	- -	+4% -4%

Appendix-C

Particulars for Cloth polyester Cotton Gaberdine dyed Cloth polyester Cotton Gaberdine dyed

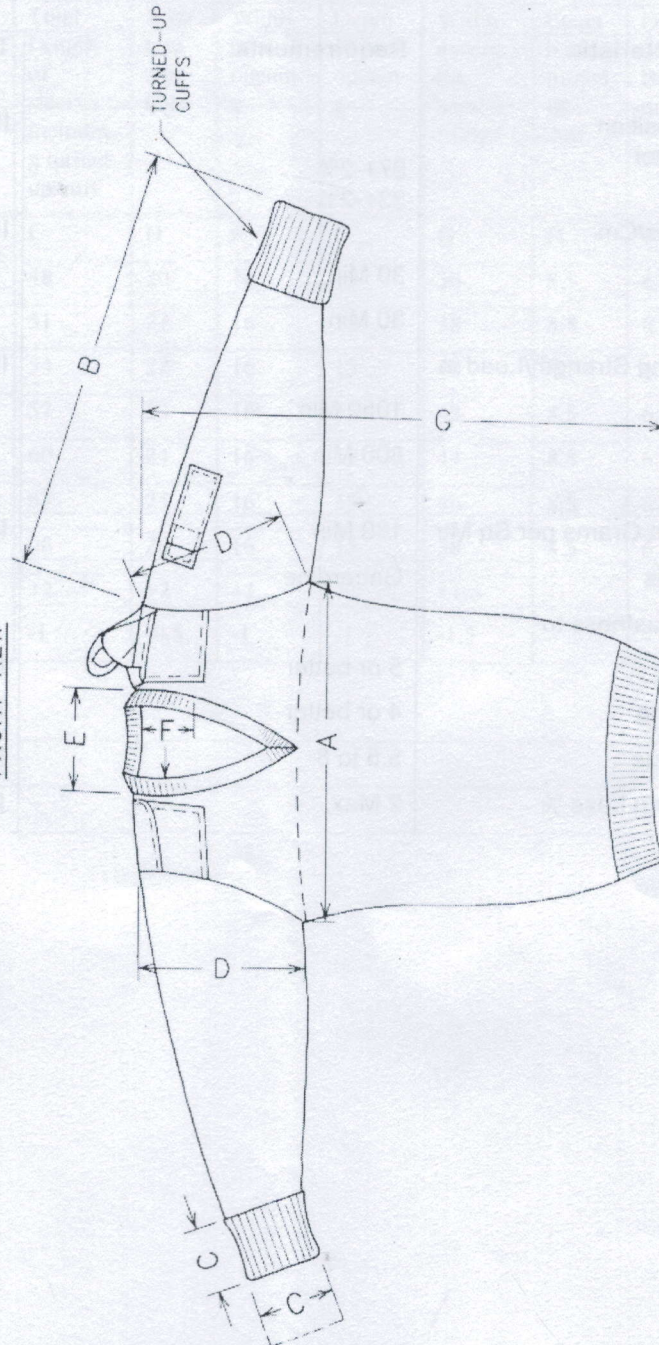
SI No	Characteristic	Requirements	Test methods
1	Composition Polyester Cotton	67+/-2% 33+/-2%	IS:3416
2	Threads/Cm Warp Weft	30 Min. 30 Min.	IS:1963
3	Breaking Strength/Load in "N" Warp Weft	1050 Min 800 Min	IS : 1969
4	Mass in Grams per Sq Mtr	180 Min	IS: 1964
5	Weaves	Gaberdine	
6	Color fastness to Light Washing	5 or better 4 or better	IS: 2454 IS: 765
7	Ph Value	5.5 to 8	IS: 1390
8	Scouring Loss %	2 Max.	IS: 2360

Fig- 1

QA/TEX/045

JERSEY WOOLEN

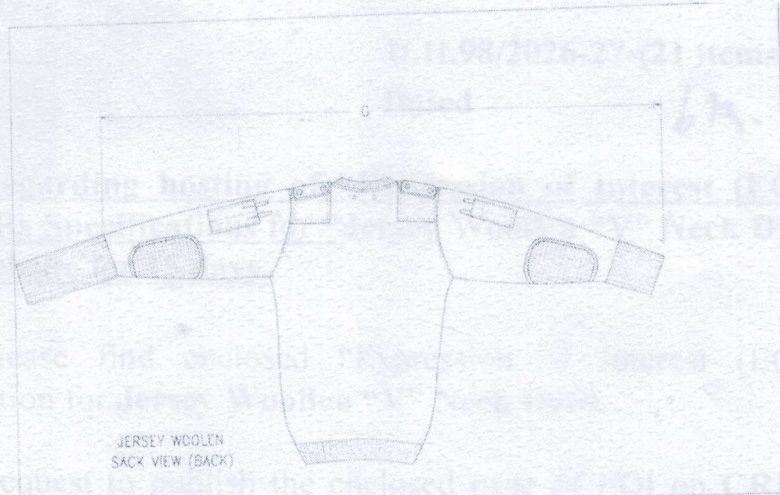
FRONT VIEW



JERSEY WOOLEN
SACK VIEW

QA/TEX/045

INTER OFFICE NOTE
(Proc Branch)



JERSEY WOOLEN

Fig-2

[Signature]
(Proc Branch), Directorate

Sl. No.	Description	Remarks
1	By Proc Branch, W.P. No. 100	<i>[Signature]</i>
2	By Proc Branch, W.P. No. 100	<i>[Signature]</i>
3	By Proc Branch, W.P. No. 100	<i>[Signature]</i>
4	By Proc Branch, W.P. No. 100	<i>[Signature]</i>

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