DEAS 1141-3: 2023

ICS 61.020



# DRAFT EAST AFRICAN STANDARD

Textile garments — Specification — Part 3: T-shirts

EAST AFRICAN COMMUNITY

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### Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 061, *Textiles, textile products and accessories*.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

EAS 1141 consists of the following parts, under the general title *Textile garments* — Specification:

- Part 1: General requirements
- Part 2: Shirts
- Part 3: T-shirts
- Part 4: Skirts and dresses
- Part 5: Jackets and coats
- Part 6: Cardigans and sweaters
- Part 7: Trousers and shorts

# **Textile garments — Specification — Part 3: T-shirts**

#### 1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for T-shirts such as sports t-shirts, polo, crew neck and vests

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

DEAS 1141-1, Textile garments — Specification — Part 1: General requirements

ISO 105-B01, Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight

ISO 105-X12, Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing

ISO 139, Textiles — Standard atmospheres for conditioning and testing

ISO 2859-1, Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

ISO 3801, Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area

ISO 5077, Textiles — Determination of dimensional change in washing and drying

ISO 6330, Textiles — Domestic washing and drying procedures for textile testing

ISO 12945-1, Textiles — Determination of fabric propensity to surface pilling, fuzzing or matting — Part 1: Pilling box method

ISO 12945-2, Textiles — Determination of fabric propensity to surface pilling, fuzzing or matting — Part 2: Modified Martindale method

ISO 12947-2, Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 2: Determination of specimen breakdown

ISO 13938-2, Textiles — Bursting properties of fabrics — Part 2: Pneumatic method for determination of bursting strength and bursting distension

ISO 16322-3, Textiles — Determination of spirality after laundering — Part 3: Woven and knitted garments

ISO 18890, Clothing - Standard method of garment measurement

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8498 and ISO 8499 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at http://www.iso.org/obp

#### 3.1

#### T-shirt (or tee-shirt)

short sleeved, long sleeve or sleeveless knit-outerwear with or without a color and folded rib tape attached to the neck and sometimes to sleeves and bottom

#### 3.2

#### crew tshirt

type of a t-shirt that has a round or vee neckline with no collar

#### 3.3

#### polo tshirt

form of t-shirt with a collar, placket, buttons and an optional pocket

#### 4 Requirements

#### 4.1 Additional requirements

T-shirts shall comply with the colourfastness, restricted chemical substances, pH, fibre composition, packaging and other general requirements specified in DEAS 1141-1.

#### 4.2 Specific requirements

#### 4.2.1 Physical and chemical requirements

T-shirts or the fabric used for the manufacture of T-shirts shall comply with the requirements given in Table 1 when tested in accordance with the test methods specified therein.

Table 1 — S	pecific requiren	ents of T-shirts	or the fabric use	ed to manufacture T-shirts
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S/No	Parameter <sup>a</sup>	Requirement	Test method					
i	Dimensional change, %, max.	±6	ISO 5077					
2			ISO 6330, Procedure 6N					
ii	Spirality	3	ISO 16322-3					
iii	Bursting strength <sup>b</sup> , kPa, min.	160	ISO 13938-2					
iv	Abrasion resistance at 2 000 rubs	No specimen	ISO 12947-1					
		breakdown	ISO 12947-2					
v	Piling resistance (500 rubs), min.	4	ISO 12945-2					
	<sup>a</sup> Recommended minimum values for mass per unit area are indicated in Annex B for guidance purposes only.							
<sup>b</sup> Use a test area of 50 cm <sup>2</sup> .								

#### 4.2.2 Dimensions

The dimensions of t-shirts are as given in Annex A for guidance purposes. Garment measurements may be carried out in accordance with ISO 18890.

#### 4.2.3 Number of stitches

The density of the stitches shall not be less than 3.5 stitches per centimetre.

### 5 Labelling

T-shirts shall comply with the labelling requirements in DEAS 1141-1.

### 6 Sampling

Sampling shall be done in accordance with ISO 2859-1.

### Annex A

(informative)

# **Dimensions of t-shirts**

Table A.1 and Table A.2 contain dimensions of crew-neck and polo t-shirts for guidance purposes only. Figure A.1 and Figure A.2 are examples of crew-neck and polo t-shirts to show measurement points.

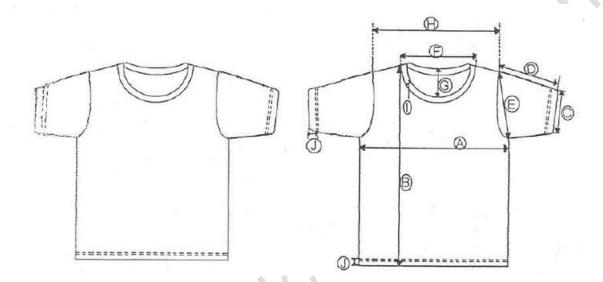


Figure A.1 — Example of a crew neck t-shirt

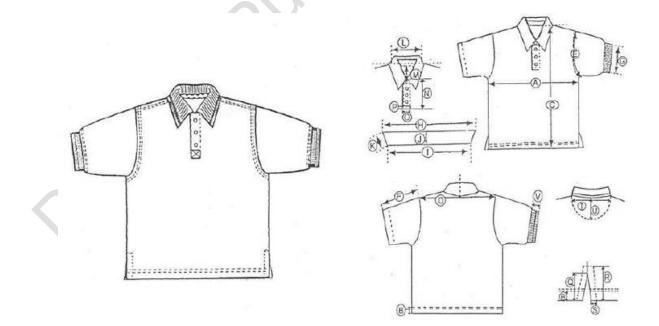


Figure A.2 — Example of a polo T-shirt

Ref	Description	Dimension						
		cm						
		Small (S)	Medium (M)	Large (L)	Extra- large (XL)	Extra extra large (XXL)	Extra extra extra large (XXXL)	
А	½ chest flat	50	53	56	59	64	66	
В	Full length	68	70	73	75	78	80	
С	1/2 sleeve opening	18	19	20	21	22	23	
D	Sleeve length	19.5	20	21	2.5	22.5	23	
Е	Armhole (straight)	24	25	27	28	29	30	
F	Neck width (seam to seam)	18	18	19	19	19.5	20	
G	Neck drop	7.5	7.5	8	8	8	8	
Н	Across shoulders	48	51	54	57	59	61	
I	Rib width	2.5	2.5	2.5	2.5	2.5	2.5	
J	Hem height	2	2	2	2	2	2	

Table A.1 — Dimensions of crew neck type T-shirt

Table A.2 – Dimensions of polo type T-shirt

Ref	Description	Dimension							
			cm						
		S	М	L	XL	XXL			
A	1/2 Chest width - 1" below armhole	52	56	60	64	66			
В	Hem bottom	2	2	2	2	2			
С	Front length	74	76	48	80	82			
D	Shoulder to shoulder	47	49.5	52	54	57			
E	Armhole (straight)	24.75	24.75	25.5	26	26.75			
F	Sleeve length (from shoulder seam)	24	24.75	25.5	26	26.75			
G	1/2 Cuff/ Sleeve opening	16	17	18	18	19			
н	Collar- point to point	35.75	38.25	40.75	43.25	43.25			
I	Neck circle (closed at neck seam)	39.5	42	44.5	47	47			

K   I     L   I     M   I     N   I     O   I     Q   S     R   S     S   S     T   I     U   I	Collar height Collar points Neck width (seam to seam) Front neck drop Front placket length Front placket width Placket box stitch Side vents opening Side vent stitch length Side vent double fold width Locker patch length	8.25     7.5     18.5     6     15.5     3.5     0.75     6.25     7.5     1     18	8.25     7.5     19.25     6.5     15.5     3.5     0.75     6.25     7.5     1	8.25 7.5 20 7 15.5 3.5 0.75 6.25 7.5	8.25 7.5 20.75 7.5 15.5 3.5 0.75 6.25 7.5	8.25 7.5 21 7.5 15.5 3.5 0.75 6.25
L   M   N   O   P   Q   S   S   T   U	Neck width (seam to seam) Front neck drop Front placket length Front placket width Placket box stitch Side vents opening Side vent stitch length Side vent double fold width Locker patch width	18.5     6     15.5     3.5     0.75     6.25     7.5     1	19.25     6.5     15.5     3.5     0.75     6.25     7.5     1	20 7 15.5 3.5 0.75 6.25 7.5	20.75 7.5 15.5 3.5 0.75 6.25	21 7.5 15.5 3.5 0.75
M 1 N 1 O 1 P 1 Q 3 R 3 S 3 T 1 U 1	Front neck drop Front placket length Front placket width Placket box stitch Side vents opening Side vent stitch length Side vent double fold width Locker patch width	6 15.5 3.5 0.75 6.25 7.5 1	6.5 15.5 3.5 0.75 6.25 7.5 1	7 15.5 3.5 0.75 6.25 7.5	7.5 15.5 3.5 0.75 6.25	7.5 15.5 3.5 0.75
N I   O I   P I   Q S   S S   T I   U I	Front placket length Front placket width Placket box stitch Side vents opening Side vent stitch length Side vent double fold width Locker patch width	15.5 3.5 0.75 6.25 7.5 1	15.5 3.5 0.75 6.25 7.5 1	15.5 3.5 0.75 6.25 7.5	15.5 3.5 0.75 6.25	15.5 3.5 0.75
O I   P I   Q S   S S   T I   U I	Front placket width Placket box stitch Side vents opening Side vent stitch length Side vent double fold width Locker patch width	3.5 0.75 6.25 7.5 1	3.5 0.75 6.25 7.5 1	3.5 0.75 6.25 7.5	3.5 0.75 6.25	3.5 0.75
P I   Q S   R S   S S   T I   U I	Placket box stitch Side vents opening Side vent stitch length Side vent double fold width Locker patch width	0.75 6.25 7.5 1	0.75 6.25 7.5 1	0.75 6.25 7.5	0.75 6.25	0.75
Q 3 R 3 S 5 T 1 U 1	Side vents opening Side vent stitch length Side vent double fold width Locker patch width	6.25 7.5 1	6.25 7.5 1	6.25 7.5	6.25	
R S S S T I U I	Side vent stitch length Side vent double fold width Locker patch width	7.5	7.5 1	7.5		6.25
S : T   U	Side vent double fold width Locker patch width	1	1		7.5	
T I U I	Locker patch width	-	1			7.5
UI		18		1	1	1
	Locker patch length		19	20	20.5	20.5
V		10	10.75	11.5	12	12.5
	Cuff height	2.5	2.5	2.5	2.5	2.5
		SIC				

## Annex B

## (informative)

# Recommended minimum mass per unit area

Table B.1 shows minimum mass per unit area for the different categories of t-shirts

### Table B.1 — Recommended minimum mass per unit area for crew neck and polo T-shirts

Mass per unit area, g/m², min.	Requ	Test method	
	Natural fibres	Man-made and natural fibre blends	×
Crew-neck (plain) T-shirt:			
Lightweight crew neck body fabric	140	85	
Heavyweight crew neck body fabric	180	120	
Neck fabric	200	180	100 2004
Polo t-shirt:			ISO 3801
Lightweight polo body fabric		180	
Heavyweight polo body fabric		210	
Collar/cuff fabric		600	

### **Bibliography**

US 1968: 2019, Textiles - Cotton T-shirts - Specification

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