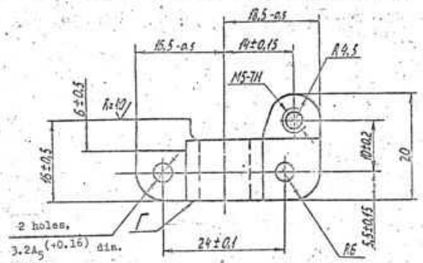
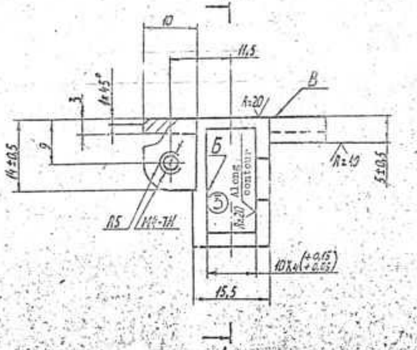
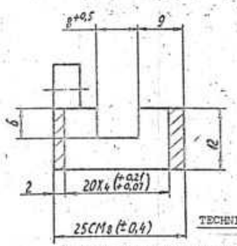
MB67.035







TECHNICAL CONDITIONS

1. Material substitute: Casting I-OCT3-4227-79 AL9 KT5 ГОСТ 2685 75
2. Tolerable deviations of sizes are within ±0.25 mm, angular deviations, within ±30' unless otherwise specified.
5. Casting slope gradients are 2° in increasing order of outer sizes and in decreasing order of inner sizes.
6. Casting radii are within 3 mm.
7. Round off sharp edges to R ≈ 0.3 mm.
8. Squareness tolerance of axis of window B relative to surface is within 0.3 mm.
9. Markings may be omitted.
10. Tolerable sinks left by the pushers on surface Г, should be within 0.5 mm deep.

APPROVED		MB67·035	
CHECKED		BRUSH HOLDER	WEIGHT 1.8 kg / SCALE 2
			SHT / SHTS
		CASTING I-OCT5-4227-79 AL2 Д ГОСТ 2685-75	

Easy2Convert
www.easy2convert.com

MB67·035

EXPLANATORY NOTES TO TECHNICAL CONDITIONS

BRUSH HOLDER SHOULD BE MANUFACTURED FROM ALUMINIUM PRESSURE DIE CASTING ALLOYS OF GRADES AL2 OR AL9 OF GOST 2685-75 THE METHOD OF CASTING FOR AL2 IS PRESSURE DIE CASTINGS (Д) AND FOR AL9 CHILL MOULD CASTING (К)

CHEMICAL COMPOSITION

GRADE OF ALLOYS	BASIC COMPONENTS %						ADMIXTURE % (MAX)									
	ALUMINIUM	MAGNESIUM	SILICON	MANGANESE	IRON К	IRON Д	MAGNESIUM	MANGANESE	COPPER	ZINC	TIN	LEAD	TITANIUM	BERILLIUM	ZIRCONIUM	TOTAL OF CALCULATED ADMIXTURES К / Д
AL2	BASE	–	10·0-13·0	–	–	1·50	0·10	0·50	0·60	0·30	–	–	0·15	–	0·10	– / 2·20
AL9	BASE	0·2-0·4	6·0-8·0	–	1·00	–	–	0·50	0·20	0·30	0·01	0·05	–	0·10	0·15	1·50 / –

III MECHANICAL PROPERTIES OF GRADE AL2 Д AND GRADE AL9 КТ5 IS AS GIVEN BELOW

GROUP OF ALLOYS	GRADE OF ALLOYS	PARTIAL RESISTANCE kg/mm² (NOT LESS THAN)	SPECIFIC ELONGATION % (NOT LESS THAN)	HARDNESS AS PER BRINELL MB
I	AL2 Д	16	1	50
I	AL9 К	21	2	60

TB HARDENING AND SHORT TIME (INCOMPLETE) ARTIFICIAL AGEING

SURFACE FINISH

Rz 80 (▽) :- REPRESENTS THE SURFACE FINISH OF Rz VALUE 80 MICRONS ON THOSE SURFACES BY ANY PRODUCTION METHOD WHERE THE SURFACE FINISH IS NOT SPECIFIED

Rz 40 :- REPRESENTS THE SURFACE FINISH OF Rz VALUE OF 40 MICRONS

Rz 20 :- REPRESENTS THE SURFACE FINISH OF Rz VALUE OF 20 MICRONS

										INSCRIBED	
										CHECKED	
										APPROVED	
DCN	D·T	ZONE	BRIEF RECORD	SIGN						DATE	13-11-79
										TOLERANCE UNLESS OTHERWISE SPECIFIED GEN. DEC. ± ANG.	

DRG NOT TO BE SCALED
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED

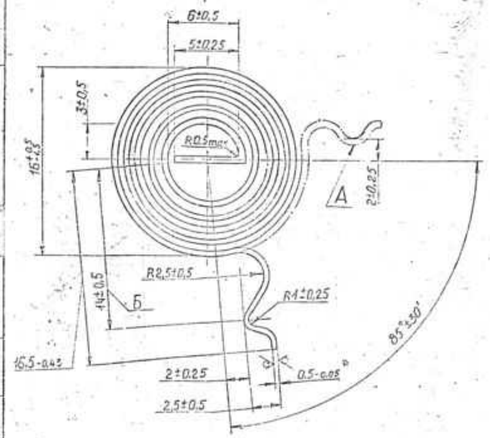
PERTAINS TO

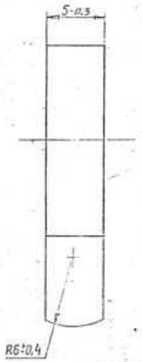
BRUSH HOLDER MB67-035

SCALE :-

CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT PUNE

MB67-110





1. HRA 72 to 75.
2. Dimensions given with symbol (R) is given for reference.
3. Number of working turns 5.
4. Increase in the width of spring upto 6mm due to face projections/ burrs as well as deviation from the face plane/axis for measuring over dimension B are allowed.
5. Tangle angle due to changed depending on heat treatment and material during the coiling of springs.
6. Touching of turns after heat treatment is not allowed.
7. Pressure of spring 'A' at point 'A' should be 81 +100 -50 gf
8. Coating shall be applied of varnish ГФ-95, GOST 8018-...

								MB67-110	
DRAWN	DOC. NO	SIGN	DATE					SHEET WEIGHT	SCALE
EDITED BY								0 3.7g	1:1
P/N, DC				SPRING				TOTAL SHEET	
DIV.OFFR									
	NAME	SIGN	DATE	Band: YBA-1-H-0.5 IOCT 21567-76					

MB 67-110

EXPLANATORY NOTES TO TECH. CONDITIONS.

SPRING SHOULD BE MANUFACTURED FROM COLD-DRAWN SPRING STEEL BRAND WITH RESPECT TO THE SURFACE INTO LIGHT- IN DARK (C) WITH THICKNESS 0.5MM OF GRADE YBA AS PER GOST 2283-69

CHEMICAL COMPOSITION AS PER GOST 1435-74 (AS REFFERED IN GOST 2283-69)

1) CARBON % — 0.75 - 0.84
2) MANGNESE % - 0.15 - 0.30
3) SILICON % - 0.15 - 0.38
4) SULPHUR % — 0.020 MAX.
5) PHOSPHORUS % — 0.030 MAX.

MECHANICAL PROPERTIES AS PER GOST 2283-69

1) ULTIMATE TENSILE STRENGTH Kgf/mm² — 76 TO 120
2) THE TOTAL DEPTH OF SINGLE-SIDE DECARBONISING OF THE SHEET MUST NOT EXCED — 0.02 m.m.

COATING : PHYSICO - CHEMICAL AND ELECTRICAL PROPERTIES OF THE VARNISH ГФ-95 (ELECTRO-INSULATING, IMPREGNATING) OF GOST-8018-70 ARE GIVEN BELOW.

PROPERTIES	NORMS
1 PRESENCE OF MECHANICAL INCLUSIONS IN VARNISH 2 APPEARANCE OF VARNISH FILM	NIL AFTER DRYING THE VARNISH SHOULD FORM A GLOSSY, HOMOGENEOUS AND SMOOTH FILM
3 VISCOSITY BY VISCOSIMETER B3-4 AT 20°C, IN SECS.	30 → 50
4 DRY RESIDUE CONTENT IN % NOT LESS THAN	45
5 ACID NUMBER IN Mg OF KOH, NOT EXCEEDING	12

PROPERTIES	NORMS
6 DRYING TIME AT 105 - 110°C IN HOURS NOT EXCEEDING	2
7 THERMOELASTICITY OF FILM AT 150°C IN HOURS NOT LESS THAN	48
8 HARDNESS OF FILM BY PENDULUM TESTER AT 20 ± 2°C NOT LESS THAN	0.40
9 OIL RESISTANCE OF FILM IN Kg NOT LESS THAN	6
10 ELECTRICAL STRENGTH OF FILM IN kv/mm NOT LESS THAN AT 20 ± 2°C AT 120 ± 2°C AFTER ACTION OF WATER FOR 24 HRS. AT 20 ± 2°C	90 40 20
11 VOLUME RESITIVITY OF FILM IN OHM Cm NOT LESS THAN AT 20 ± 2°C AFTER ACTION OF WATER FOR 24 hrs. AT 20 ± 2°C	$1 \cdot 10^{14}$ $1 \cdot 10^{12}$

SURFACE FINISH

1) ⌀ specified roughness to be obtained by without removal at material on both side of the job.
2) $R_z 80$ (▽) represents surface finish value Rz 80 microns. On those surfaces where surface finish is not specified.

								INSCRIBED	
								CHECKED	
								APPROVED	
								DATE	23-11-87
								TOLERANCE UNLESS OTHERWISE SPECIFIED GEN ; DEC ; ANG	
DCN	D-T	ZONE	BRIEF RECORD				SIGN		

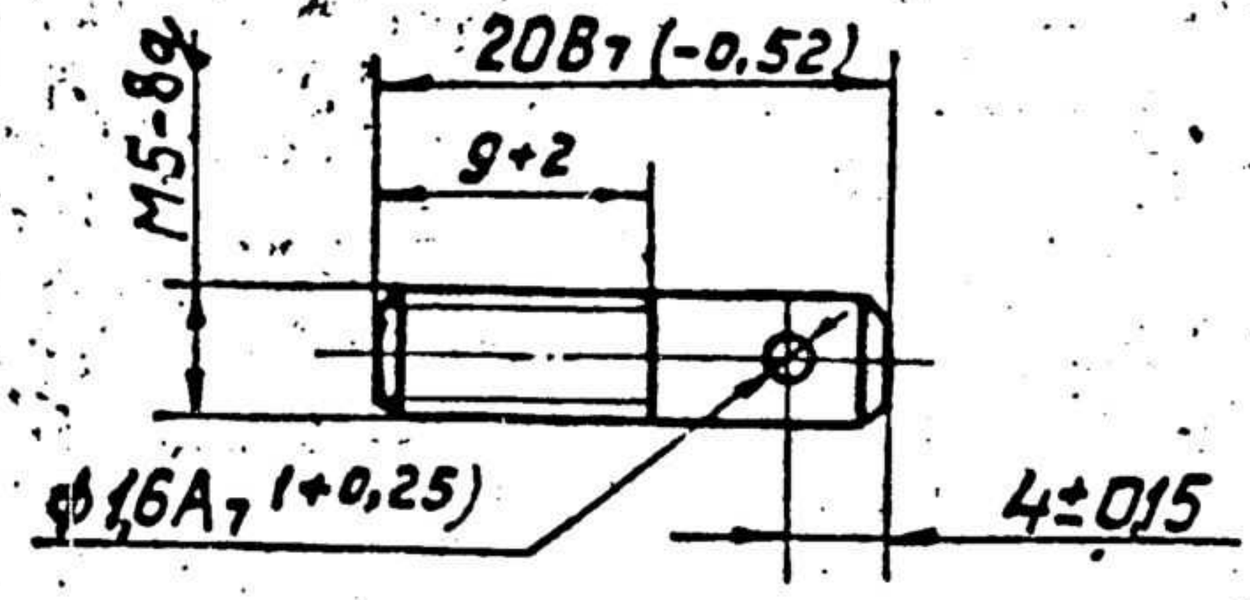
DRG NOT TO BE SCALED
ALL SHARP EDGE & CORNERS TO BE ROUNDED OFF
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED

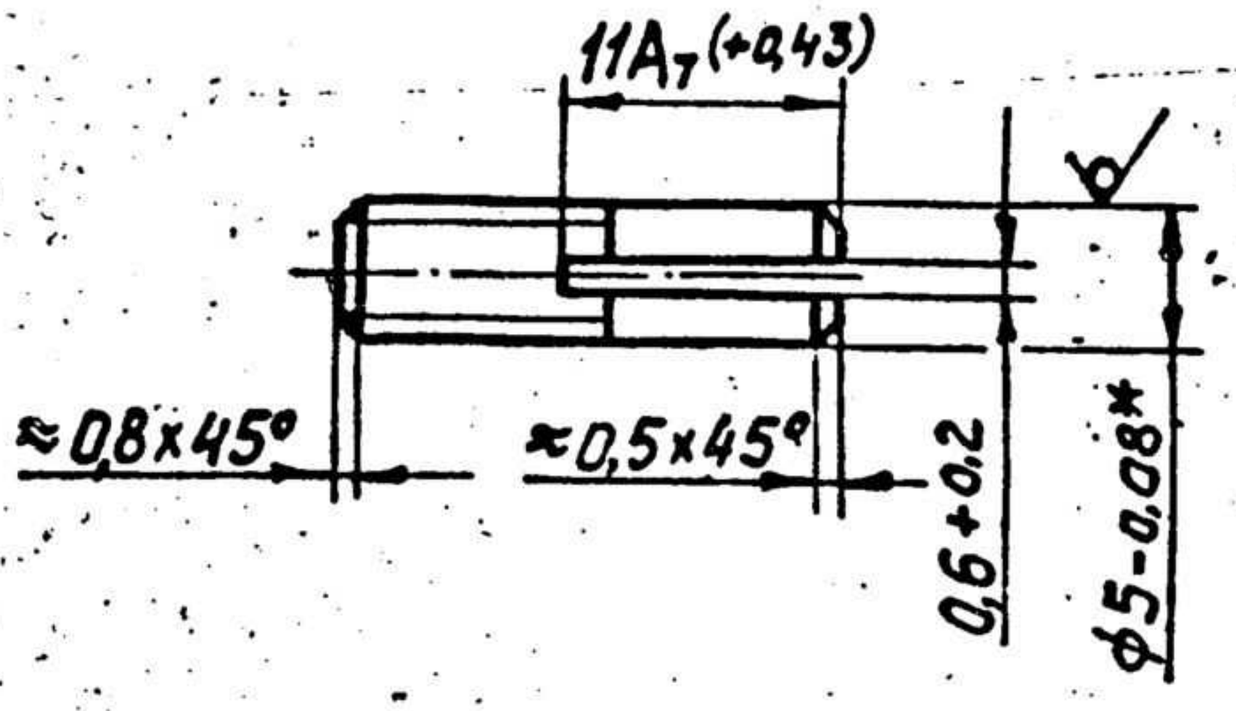
PERTAINS TO
MB67 - 110
SPRING

SCALE -
CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT PUNE

MB67-111

Rz40 √ (√)





Designation	Coating
MB67-111	Zinc plating 6 followed by chromate treatment

TECHNICAL CONDITIONS

1. Size for reference.
2. The slot displacement relative to the axis should be within 0.4 mm.
3. Round off sharp edges: chamfer ≈0.3 mm x 45° or radius ≈ ≈0.3 mm.

"REFER TO DRG NO ЭА25.038 FOR EXPLANATORY NOTES"

(R. VEERARAGHAVAN)
SSO-II

78/D2073

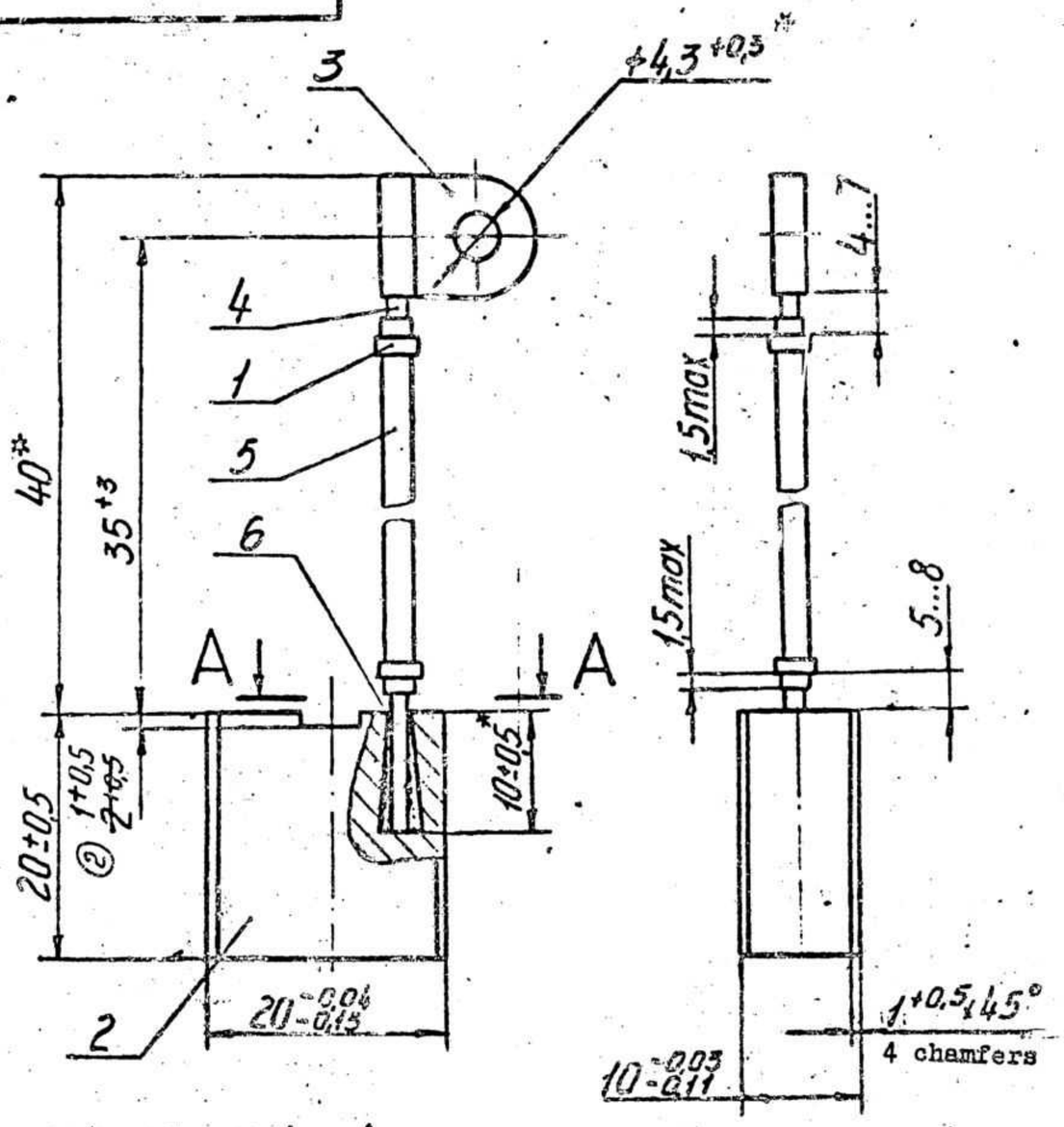
APPROVED	MB67-111		
CHECKED.		WEIGHT	SCALE
CONTROLLERATE OF INSPECTION	SHAFT	3·18	2:1
		SHT	SHTS. 1
	ROUND BAR 5-4 IOCT7417-75 / A-12-H B IOCT1414-75		

1-4-4

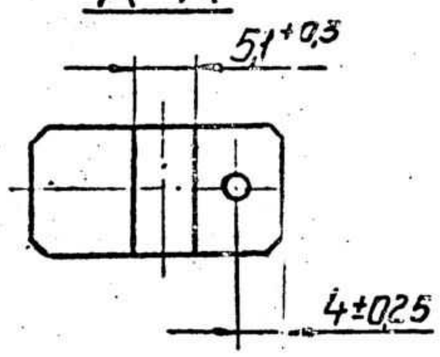
Инв. № дубл. | Подпись и дата | Инв. № подл. | Справ. №

M853

MB67.140 CB



A-A



TECHNICAL CONDITIONS

1. Sizes for reference.
2. Attach the wire to the brush by caulking.
3. The electric contact resistance between the brush and the wire should not exceed 2.5 megohms.
4. The force to be applied to break the wire away is at least 7 kgf.
5. Solder end piece, Ref. No. 3, with solder ПОС-40 ГОСТ 21930-76.
6. Mark at any side.

REFER NOTE NO 5

SOLDER END PIECE WITH SOLDER GRADE Sn 40 TOIS: 193-82

PILOT SAMPLE

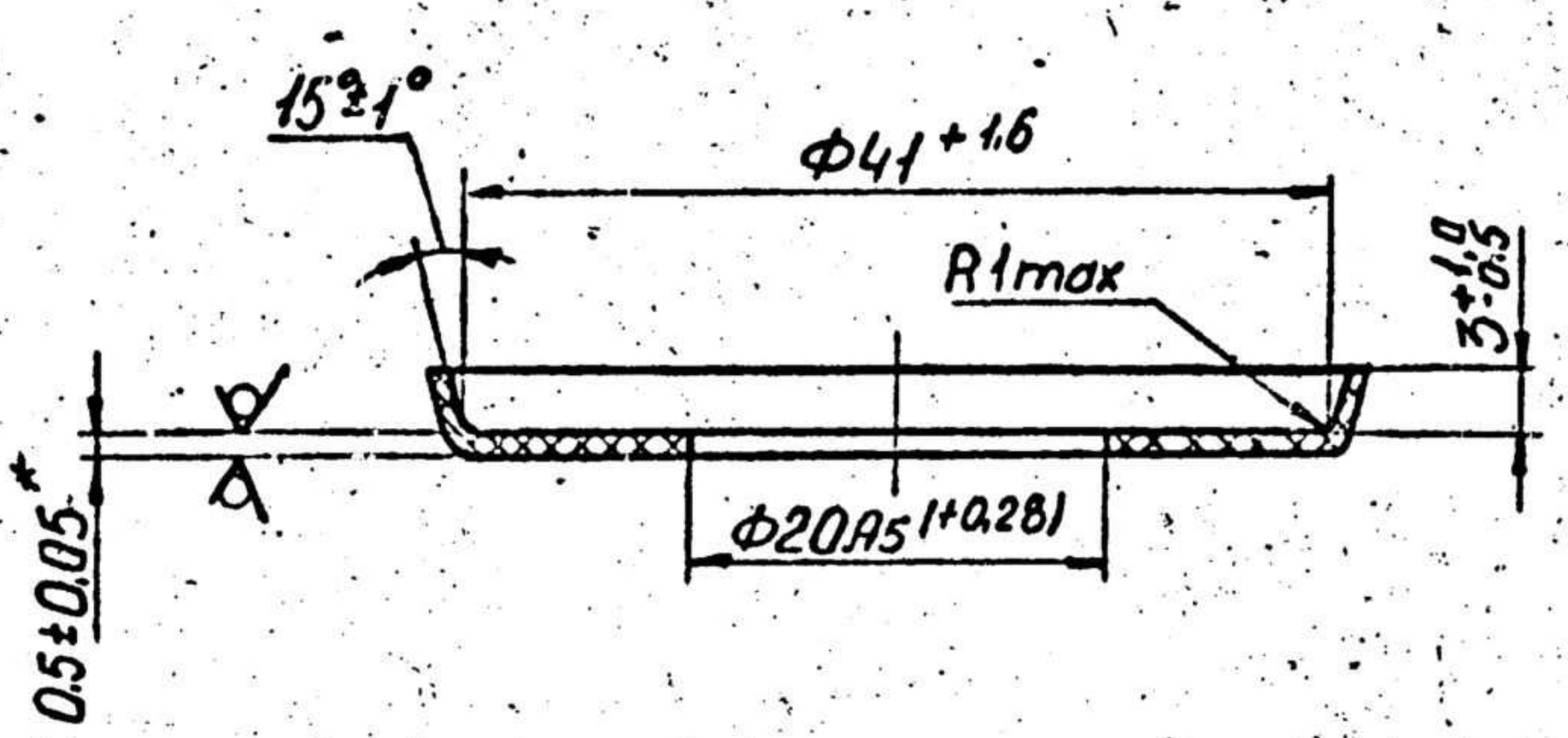
THREE SAMPLES SHALL BE SUBMITTED TO CIFE, PUNE FOR THEIR TEST AND APPROVAL BEFORE COMMENCEMENT OF BULK SUPPLY.

(R. VEERA RAGHAVAN)
SSO-II

46/D2079

APPROVED MVABU	MB 67. 140 CB		
CHECKED		WEIGHT	SCALE
CONTROLLERATE OF INSPECTION (ICV)	BRUSH ASSEMBLY DRAWING	11.16	2:1
		SHT - SHTS 1	

MB-169-49



1. * Size for reference.
2. Provide for other sizes by appropriate tools.

REFER TO DRG NO A 25-016 FOR EXPLANATORY NOTES

SURFACE FINISH

▽ - INDICATES REMOVAL OF MATERIAL IS NOT PERMITTED ON BOTH SIDE OF THE JOB

(R VEERARAGHAVAN)
SSO II

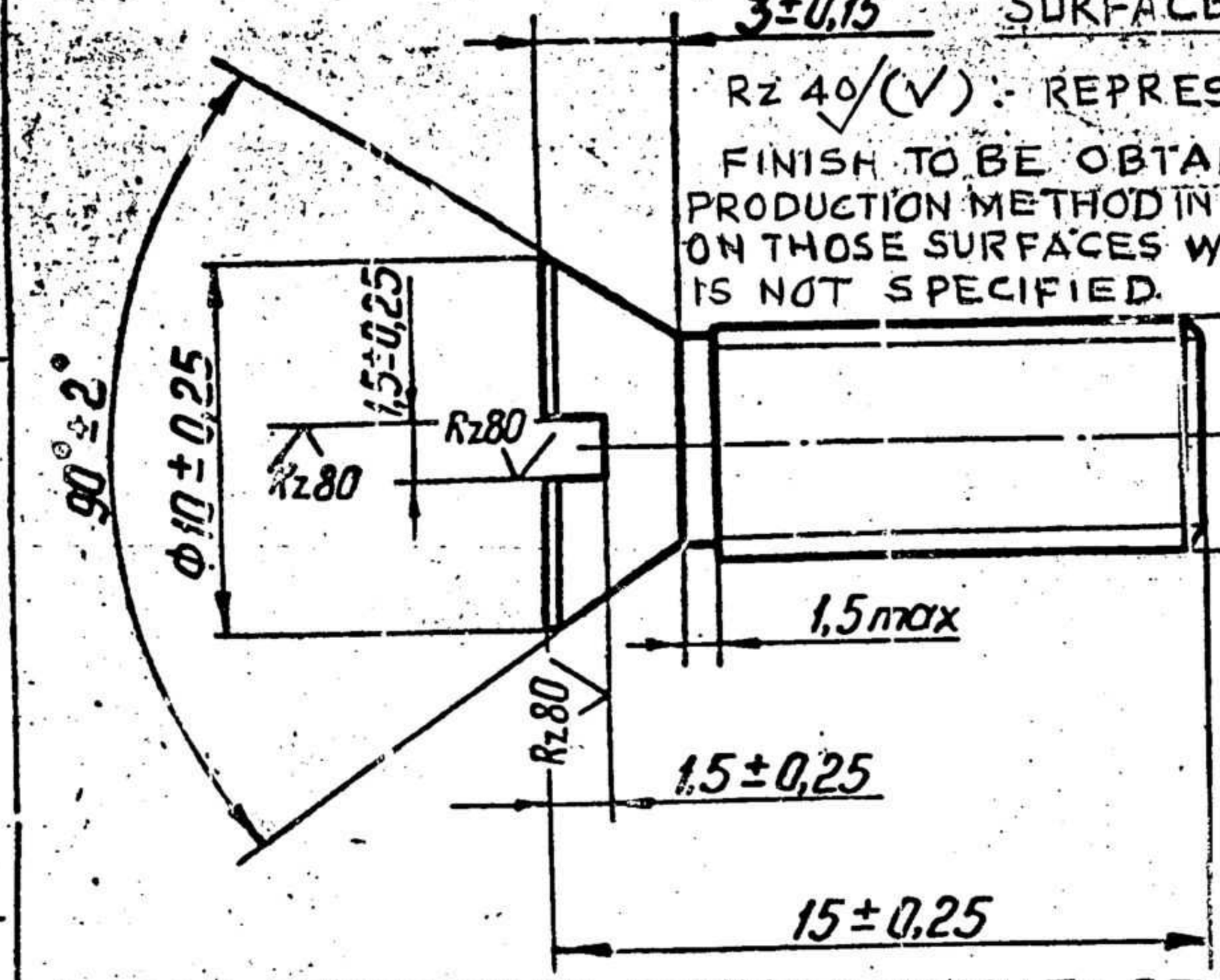
97/D2073

APPROVED	MB-169-49		
CHECKED.		WEIGHT	SCALE
CONTROLLERATE OF INSPECTION FE (I C V) PUNE	SPECIAL WASHER	0.7g	2:1
		SHT	SHTS. 1
	BOARD 3B 0.5 ГОСТ 2824-75		1-4-14

Инв.№ подл. | Подп. и дата | Взам. инв.№ | Инв.№ дубл. | Подп. и дата

X1-111-31

Rz40 √(√)



SURFACE FINISH

Rz 40 √(√) :- REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN Rz VALUE 40 µ MAX ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED.

Rz 80 √ :- REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN Rz VALUE 80 µ MAX.

Designation	Coating
X1-111-31	Zinc plating 6 followed by chromate treatment

TECHNICAL CONDITIONS

" REFER DRG No X2-4392 FOR MATERIAL "

1. Tolerable misalignment of the head and slot axes relative to the rod axis is 0.4 mm.
2. Caseharden by cyaniding or carburize h 0.1 to 0.3 mm; HRC ≥ 54.
3. Technical requirements as per ГОСТ 1759-70.

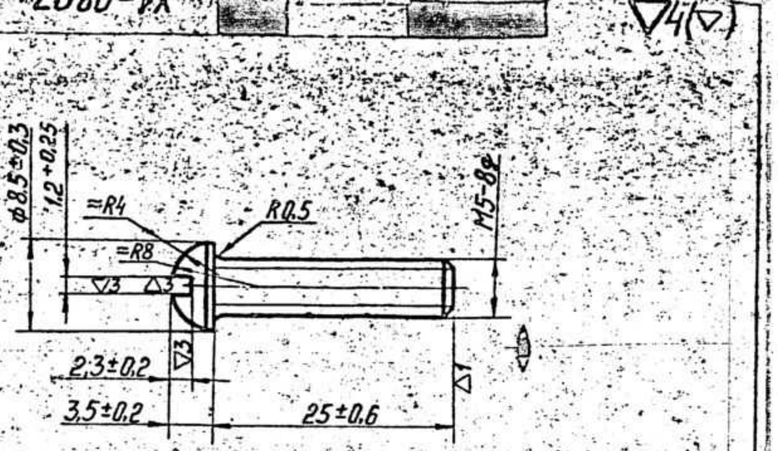
(R.VEERARAGHAVAN)
SSO II

95/D2073

Инв. № подл. 4053 | Подпись и дата | Взам. инв. № | Инв. № дубл. | Подпись и дата

Восстановлен с подлинника. Верно:

APPROVED	X1-111-31	
CHECKED		WEIGHT: 3.42g; SCALE: 4:1
CONTROLLERATE OF INSPECTION FE (I C V) PUNE	SCREW	SHT SHTS 1
	STEEL 10 ГОСТ1050-74	1-4-4



TECHNICAL CONDITIONS

1. Tolerable misalignment of the head and the slot axes relative to the rod axis is within 0.3 mm.
2. Other technical requirements as per ГОСТ 1759-70.

Designation	Coating
X1-9897	Zinc plating 6 followed by chromate treatment

APPROVED	X1-9897		
CHECKED		WEIGHT	SCALE
	SCREW	4.222 g	2:1
		SHT	SHTS 1
	WIRE 4.4-10 ГОСТ 5663-79		

98/R2073

L686-1X

EXPLANATORY NOTES TO TECHNICAL CONDITIONS

I) SCREW SHOULD BE MANUFACTURED FROM COLD HEADING CARBON STEEL WIRE 4.4 mm DIAMETER GRADE-10 WITH STANDARD ACCURACY TO GOST 5663-79 HAVING THE FOLLOWING CHEMICAL COMPOSITION (AS PER GOST 1050-74 REFERRED IN GOST 10702-78)

CARBON	SILICON	MANGANESE	CHROMIUM
0.07-0.14%	0.17 - 0.37%	0.35 - 0.65%	0.15% (Max.)

II) MECHANICAL PROPERTIES (AS PER GOST 5663-74)

ULTIMATE TENSILE STRENGTH, Kgf/mm²	RELATIVE CONTRACTION %
60 (Max.)	55 (Min.)

III) SURFACE FINISH

▽1 REPRESENTS SURFACE FINISH TO BE OBTAINED IN Ra VALUE 80 μ Max.

▽3 REPRESENTS SURFACE FINISH TO BE OBTAINED IN Ra VALUE 20 μ Max.

▽4(▽) REPRESENTS SURFACE FINISH TO BE OBTAINED IN Ra VALUE 10 μ Max. ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED.

DC(I)	DATE	ZONE	BRIEF RECORD	SIGN.

INSCRIBED	dhavan	DRG. NOT TO BE SCALED
CHECKED		ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF
APPROVED		ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED
DATE	5 NOV 86	

TOLERANCE UNLESS OTHERWISE SPECIFIED
GEN. DEC. ANG.

SCREW

SCALE: —

CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT. PUNE

PERTAINS TO

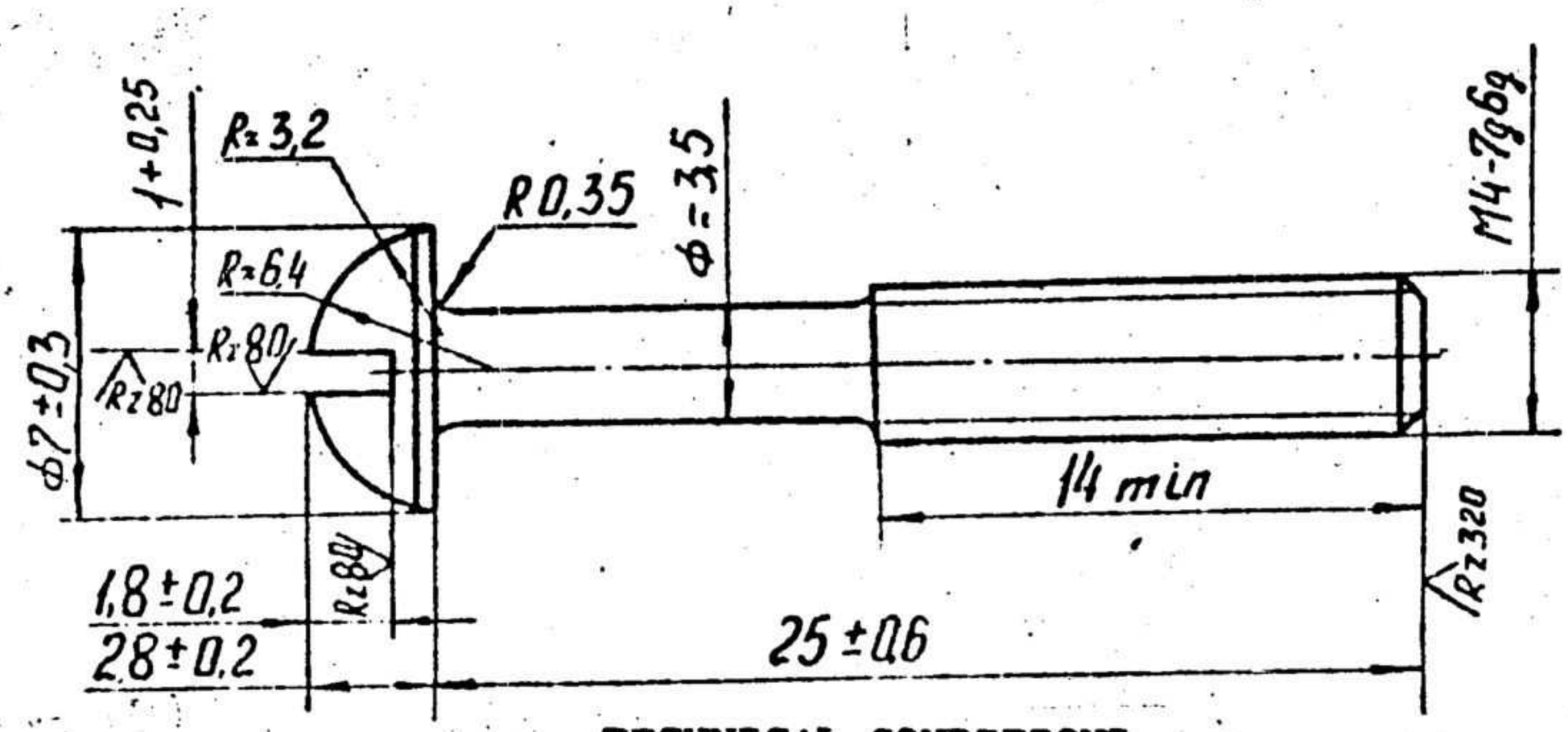
X1-9897

X1-10277

Rz 40/ (V)

"REFER DRG NO X2-4392 FOR MATERIAL"

Rz 320/ SURFACE FINISH TO BE OBTAINED OF Rz VALUE 320 μ (MAX.)



TECHNICAL CONDITIONS

1. Tolerable misalignment of head and slot axes relative to the rod axis is within 0.3 mm.
2. Coating: zinc plating 6, followed by chromate treatment.
3. Other technical requirements as per ГОСТ 1759-70.

HARDNESS - BHN (143 MAXIMUM)

SURFACE FINISH

Rz 80/ :- REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN Rz VALUE 80 μ MAX.

Rz. 40/ (V) :- REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN Rz VALUE 40 μ MAX. ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED.

79

CR YEERARAGHAVAN SSO II 90/D2073

APPROVED MVABV

CHECKED Y. Balachandra

CONTROLLERATE OF INSPECTION FE (ICV) PUNE

X1-10277

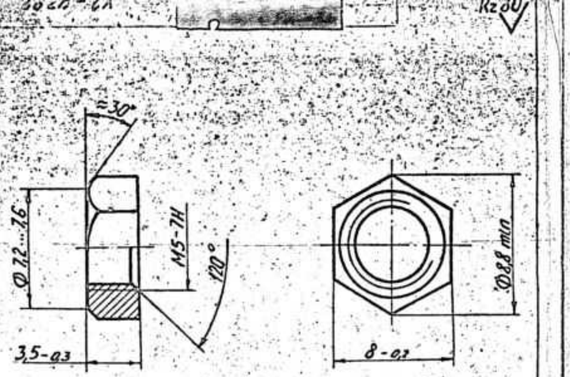
SCREW M4-7g6g X25-36016 ГОСТ 17473-72

STEEL 10 GOST 1050-74

	WEIGHT	SCALE
	2.506g	4:1

SHT SHTS 1

1-4-A



Designation	Coating
X2-4392	Zinc plating 6 followed by chromate treatment

TECHNICAL CONDITIONS

1. Tolerable displacement of hole axis relative to edges is within 0.4 mm.
2. Technical requirements as per ГОСТ 1759-70.

06/D2073

APPROVED	X2-4392		
CHECKED		WEIGHT	SCALE
	NUT	0.9g	5:1
		SHT	SHTS 1
	STEEL 10 ГОСТ 1050-74		

X2-4392

EXPLANATORY NOTES TO TECHNICAL CONDITIONS

(I) NUT, ~~SCREW~~, ~~RIVET~~ SHOULD BE MANUFACTURED FROM CARBON STRUCTURAL HOT ROLLED STEEL OF GRADE 10, OF GOST 1050-74. ~~B~~ HAVING THE FOLLOWING CHEMICAL COMPOSITION.

STEEL OF GRADE	CONTENT OF ELEMENT%			
	CARBON	SILICON	MANGANESE	CHROMIUM (MAX)
10	0·07-0·14	0·17-0·37	0·35-0·65	0·15

(II) MECHANICAL PROPERTIES OF STEEL GRADE 10, OF GOST 1050-74 IS GIVEN BELOW.

HEAT TREATMENT OF BLANKS	NORMALISING
YIELD POINT	21 kgf/mm² (MIN)
ULTIMATE TENSILE STRENGTH	34 kgf/mm² (MIN)
PERCENTAGE ELONGATION	31% (MIN)
REDUCTION OF AREA	55% (MIN)

(III) THE RECOMMENDED HEATING TEMPERATURE DURING HEAT TREATMENT OF BLANKS. CARRYING OUT THE TESTS OF MECHANICAL PROPERTIES OF STEEL GRADE IS GIVEN BELOW.

STEEL GRADE	NORMALISING
10	920°C

RECOMMENDED MINIMUM HOLDING PERIOD IN NORMALISING — 30 MINUTES

(IV) SURFACE FINISH

Rz 80 REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN Rz VALUE 80 μ MAX. ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED.

DC(I)	DATE	ZONE	BRIEF RECORD	SIGN

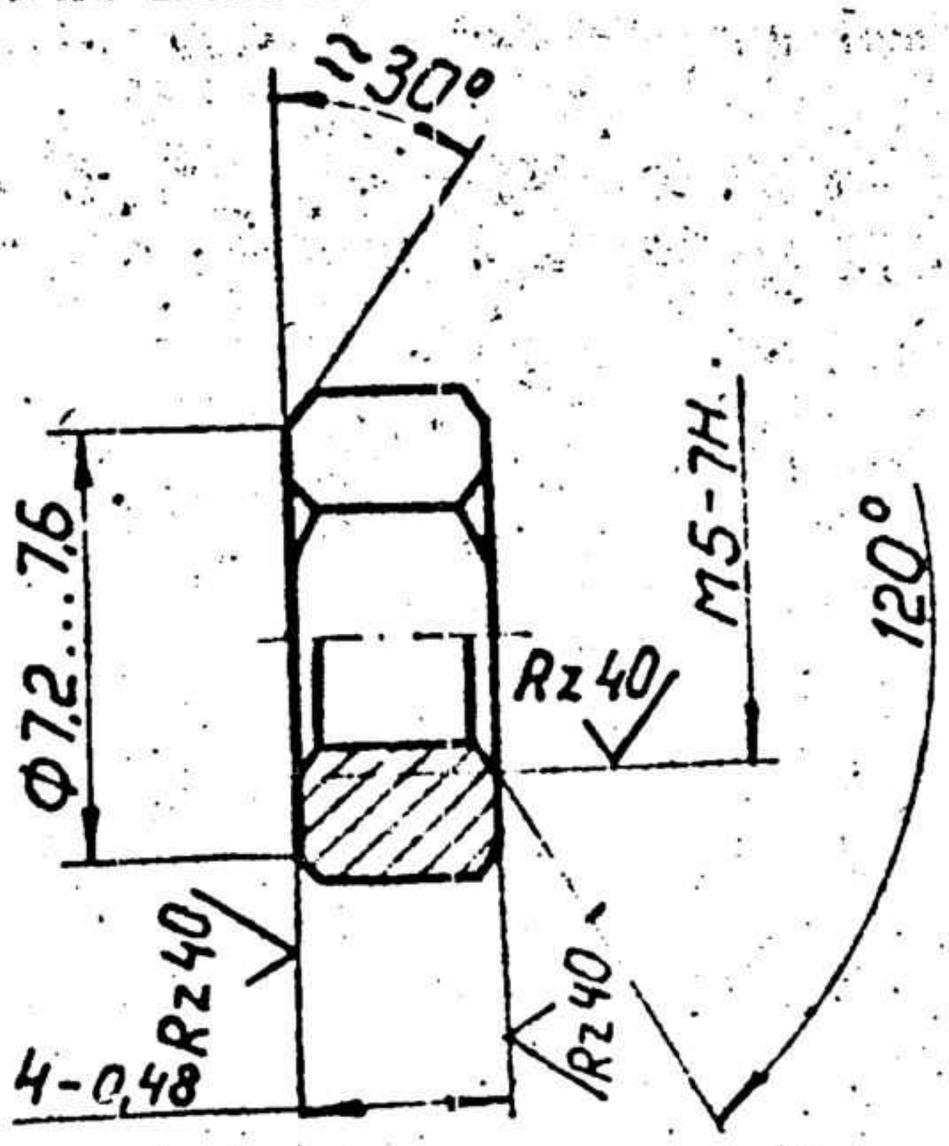
INSCRIBED	Amul	DRG NOT TO BE SCALED
CHECKED	[illegible]	ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF.
APPROVED	[illegible]	ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED
DATE	5.7.80	NUT
TOLERANCE UNLESS OTHERWISE SPECIFIED	GEN ; DEC ; ANG	SCALE:- —

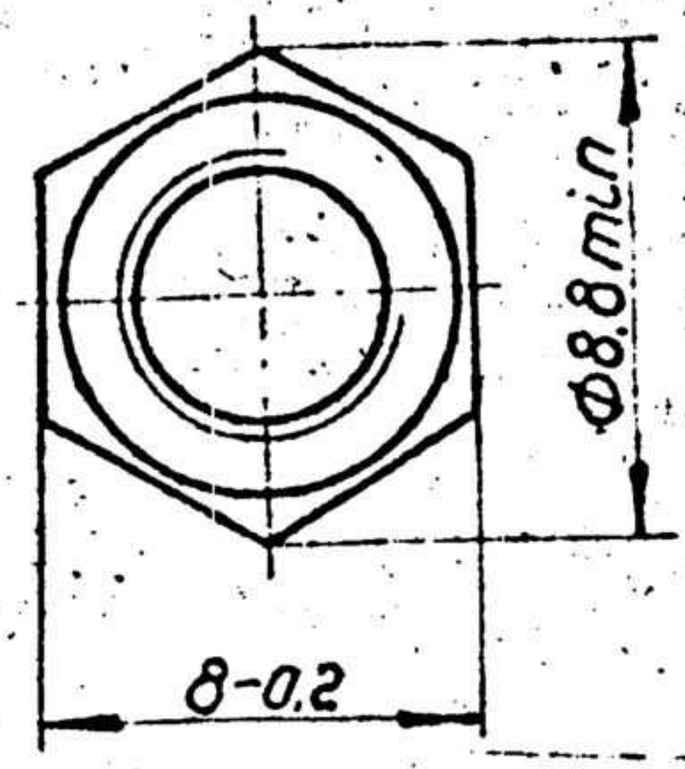
PERTAINS TO X2-4392

CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT PUNE

X2-10630

Rz80 (V)





Designation	Coating
X2-10630	Zinc plating 6 followed by chromate treatment

TECHNICAL CONDITIONS

1. Material subsitute: Steel 10 ГОСТ 1050-74.
2. Tolerable displacement of the hole axis relative to the edges is within 0.25 mm.
4. Other technical requirements as per ГОСТ 1759-70.

"REFER TO DRG. No ЭД 25.101 FOR EXPLANATORY NOTES"

R VEERARAGHAVAN
SSO-II

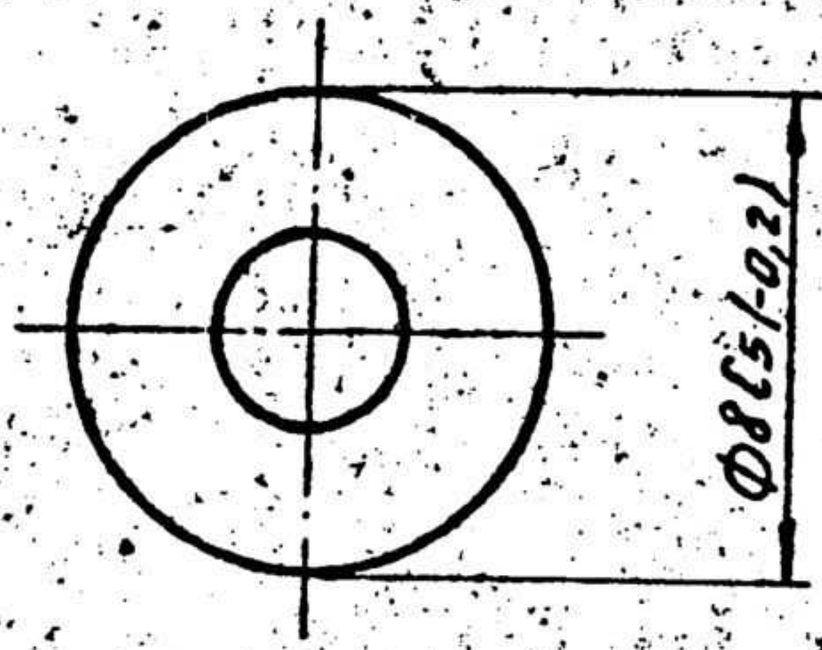
93 | D2073

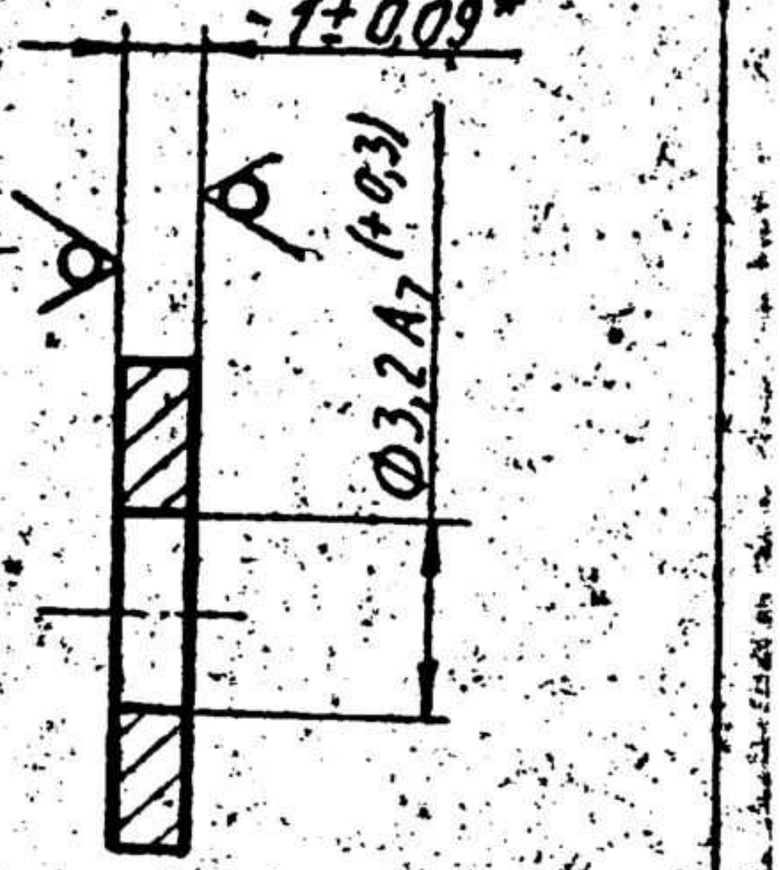
APPROVED	X2-10630		
CHECKED		WEIGHT	SCALE
CONTROLLERATE OF INSPECTION FE (I C V) PUNE	NUT	1.2g	4:1
		SHT	SHTS 1
	STEEL A12 ГОСТ 1414-75		1--4-4

X3-9675

[redacted]

Rz 80 √(V)





Designation	Coating
X3-9675	Zinc plating 6 followed by chromate treatment

1. *Size for reference.

"REFER TO DRG NO 3M 25.005 FOR EXPLANATORY NOTES."

SURFACE FINISH

✓ REPRESENTS SURFACE FINISH TO BE OBTAINED BY WITHOUT REMOVAL OF MATERIAL ON BOTH SIDES OF THE JOB

Rz 80 √(V) REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN RZ VALUE 80 μ Max, ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED.

(R. VEERARAGHAVAN) SSO-II

87/D2073

APPROVED [signature]

CHECKED [signature]

CONTROLLERATE OF INSPECTION

FE [redacted] PUNE

X3-9675

WASHER

	WEIGHT	SCALE
	0.6g	5:1
SHT	SH'TS 1.	

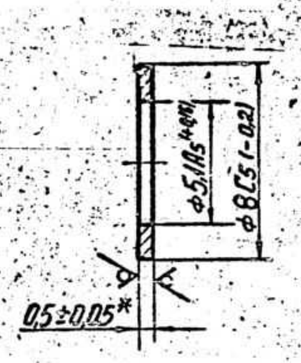
SHEET 4-II-10 БІ ГОСТ 19904-74 / ГОСТ 16523-70

1-4-4

X3-10323

Rz 80/(V)

Designation	Coating
X3-10323	Zinc plating 6 followed by chromate treatment



1. Material substitute: Band 10-M-HT-2-0,5 ГОСТ 503-71.
2. *Size for reference.

D.CO	DT.	ZONE	BRIEF RECORD	SIGN			

APPROVED	MWASL	X3-10323	
CHECKED			
		WEIGHT	SCALE
	WASHER	0.15g	5:1
		SHT	SHTS. 1
SHEET	⌀0.5 ГОСТ 19904-74 / 4-П-10 ГОСТ 16523-70		

91/D2073

X3-10323

EXPLANATORY NOTES TO TECHNICAL CONDITIONS

WASHER SHOULD BE MANUFACTURED FROM COLD ROLLED QUALITY CARBON STEEL TO GRADE 10 OF SHEET 0·5 mm THICK WITH STANDARED ROLLING ACCURACY (B) CATAGORY A) HIGH SURFACE FINISH (II) OR SHOULD BE MANUFACTURED FROM COLD ROLLED LOW CARBON STEEL BAND OF GRADE 10 SOFT (m), COLD WORKED WITH INCREASED MANUFACTURING ACCURACY IN THICKNESS (NT) AND SECOND GROUP SURFACE QUALITY WITH TRIMMED EDGE HAVING THE DIMENSIONS OF SIZE CHEMICAL COMPOSITIONS AND MECHANICAL PROPERTIES CONFORMING TO GOST 19904-74, GOST-16523-70, GOST-503-81 AND GOST 1050-74 AS GIVEN BELOW

(I) CHEMICAL COMPOSITION TO GOST 1050-74 (AS REFFERED IN GOST 16523-70 AND GOST 503-71)

CHEMICAL ELEMENTS %			
CARBON	SILICON	MANGANESE	CHROMIUM
0·07 – 0·14	0·17 - 037	0·35 – 0·65	0·15 (MAX)

(II) MECHANICAL PROPERTIES TO GOST 16523-70 AND GOST 503-71

GOST NO	TENSILE STRENGTH	RELATIVE ELONGATION
GOST 16523-70	30-42 kgf/mm²	28 % (MIN)
GOST 503 – 71	32-45 kgf/mm²	17% (MIN)

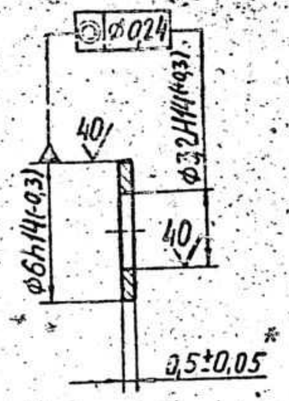
SURFACE FINISH

▽|▽ :- REPRESENTS SURFACE FINISH TO BE OBTAINED WITHOUT REMOVEL OF MATERIAL ON THOSE BOTH SIDE OF JOB.

Rz 80/(V) :- REPRESENTS SURFACE FINISH TO BE OBTAINED BY RAW PRODUCTION METHOD IN Rz VALUE OF 80 μ ON THOSE SURFACE WHERE SURFACE FINISH IS NOT SPECIFIED.

INSCRIBED		DRG NOT TO BE SCALED	PERTAINS TO
CHECKED	MW / [illegible]	ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF.	
APPROVED	[illegible]	ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED	
DATE	17.11.88	WASHER	X3-10323
TOLERANCE UNLESS OTHERWISE SPECIFIED GEN I DEC I ANG		SCALE:-	
		CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT PUNE	

X3-10482



Designation	*	Coating
X3-10482	016	Zinc plating 6 followed by chromate treatment

TECHNICAL CONDITIONS

1. Material substitute: Band 08-М-НТ-2-0,5 ГОСТ 503-71
2. *Size for reference.
4. Other technical requirements as per ГОСТ 18123-72.

92/D2073

APPROVED	X3-10482		
CHECKED	WASHER 3-01* ГОСТ 10450-78	WEIGHT 0.079	SCALE 5:1
		SHT	SHTS 1
	SHEET Б0-5 ГОСТ 19904-74 / П-ВГ-0-8КП 9045-80		

X3-10482

EXPLANATORY NOTES TO TECH CONDITIONS

WASHER SHOULD BE MANUFACTURED FROM COLD ROLLED THIN SHEET OUT OF LOW CARBON ALLOY STEEL OF HIGH SURFACE FINISH, EXTREMELY DEEP DRAWN OF GRADE 08 КП TO GOST 9045-80.

(I) CHEMICAL COMPOSITION

CONTENT OF ELEMENTS %							
CARBON	MANGANESE	SULPHUR	PHOSPHORUS	SILICON	CHROMIUM	NICKEL	COPPER
0.10 (Max)	0.20 – 0.40	0.030 (Max)	0.025 (Max)	0.03 (Max)	0.10 (Max)	0.10 (Max)	0.15 (Max)

(II) MECHANICAL PROPERTIES

ULTIMATE STRENGTH, kgf/mm²	RELATIVE ELONGATION %
26 – 37	28

(III) DEEP DRAWING TEST
DEPTH OF SPHERICAL INDENTATION NOT LESS THAN 9.0 mm.

(IV) SYMBOL
⌖ Ø0.24 CONCENTRICITY OF HOLE DIA 3.2 H14 TO BE WITHIN 0.24 mm WITH REFERENCE TO BASE DIA 6 h 14

(V) SURFACE FINISH
40 – REPRESENTS SURFACE FINISH TO BE OBTAINED BY ANY PRODUCTION METHOD IN Ra VALUE 40 μ MAXIMUM
∅(√) – REPRESENTS SURFACE FINISH TO BE OBTAINED WITHOUT REMOVAL OF MATERIAL, ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED

DCC(I)	DATE	ZONE	BRIEF RECORD	SIGN

INSCRIBED	
CHECKED	
APPROVED	
DATE	5 MAY 86
TOLERANCE UNLESS OTHERWISE SPECIFIED GEN / DEC / ANG	

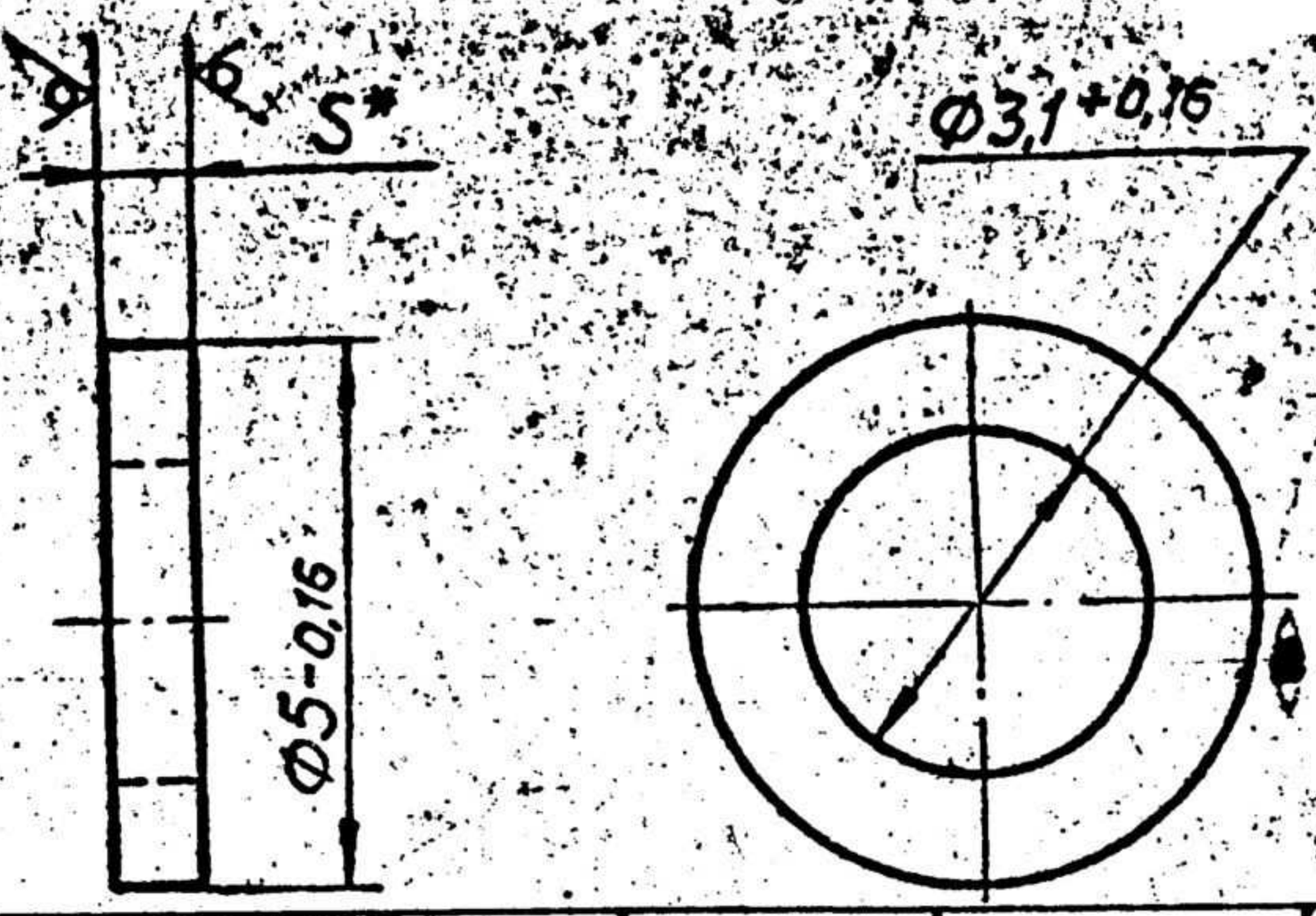
DRG NOT TO BE SCALED
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF.
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED
WASHER 3-01 GOST 10450-78
SCALE :-

PERTAINS TO
X3-10482

CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT PUNE.

X5-29-48

See table



Designation	S*	Material	Coating	Material substitute	Mass, kg	Rz
X5-29-48						
X5-29-48-01	0.5±0.15	Glass-cloth base laminate СТ-I-0,5 ГОСТ 12652-74	Varnish ГФ-95(1) ГОСТ 8018-70	Glass-cloth-base laminate СТЭФ-1-0,5 ГОСТ 12652-74	0.01	320

TECHNICAL CONDITIONS

(3) 1. *Size for reference.

2. Varnish МЛ-92(1) ГОСТ 15865-70 may be also used.

REFER TO DRG NO ЭЯ 25·003 FOR EXPLANATORY NOTES

SURFACE FINISH

9/6 INDICATES REMOVAL OF MATERIAL IS NOT PERMITTED ON BOTH SIDE OF THE JOB

(R. VEERARAGHAVAN)
SSO-II

Перепечатано с подлинника

Подпись и дата

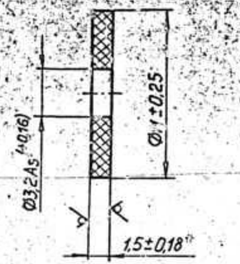
Инв. № дубл.

Инв. № подл. 7143

84/D2073

APPROVED	X5-29-48		
CHECKED.		WEIGHT	SCALE
CONTROLLERATE OF INSPECTION FE (PUNE	INSULATING WASHER	SEE TABLE	10:1
		SHT	SHTS. 1
	SEE TABLE		1-4-4

X5-114-53-01 Rz80/ √(√)



Designation	Material	Material substitute	Coating
X5-114-53-01	Glass-cloth-base laminate CT-1-1,5 ГОСТ 12652-74		

TECHNICAL CONDITIONS

1. *Size for reference.
2. Varnish МЛ-92(1) ГОСТ 15865-70 may be also used.

96/D2073

APPROVED MVBR	X5-114-53		
CHECKED	WASHER	WEIGHT 0.17g	SCALE 5:1
		SHT	SHTS. 1
	SEE TABLE		

X5 114 53

EXPLANATORY NOTES TO TECHNICAL CONDITIONS

(1) WASHER SHOULD BE MADE FROM GLASS TEXTOLITE OF GRADE CT-1- OF THICKNESS 1.5 M·M AS PER GOST 12652-74. HAVING THE TECHNICAL REQUIRMENTS AS ARE AS FOLLOWS.

1) ELECTRICAL QUALITY TEXTOLITE SHEET IS A PRESSED MATERIAL CONSISTING OF TWO OR MORE LAYERS OF GLASS FIBRE CLOTH IMPREGNATED WITH THERMOACTIVE RESIN.

2) GLASS TEXTOLITE OF THICKNESS UP TO 2.0 M·M IN THE HEATED CONDITION MUST BE SUITABLE FOR STAMPING OPERATION.

(11) GLASS TEXTOLITE OF GRADE CT-1-1·5 HAVING THE PHYSICAL, MECHANICAL AND ELECTRICAL REQUIREMENTS AS PER GOST 12652-74.

1) DENSITY — 1·60 – 1·90 g/cm³

2) RESISTANCE TO SHORT-DURATION HEATING — 200 OHM (MINIMUM)

3) RESISTANCE TO ACTION OF OIL — IN TRANSFORMER OIL FOR 4 HOURS AT NOT LESS THAN 130°C

4) WATER ABSORPTION NOT MORE THAN-1%

5) SURFACE RESISTIVITY, OHMS. NOT LESS THAN 1×10^3 AT RELATIVE HUMIDITY 45 TO 75% AND 15 TO 35°C

6) 1×10^{12} AFTER SOAKING FOR 24 HOURS IN A HUMIDITY CHAMBER AT RELATIVE HUMIDITY OF 95 ± 2% AND 20 ± 2°C

7) VOLUME RESISTIVITY, OHM. CM NOT LESS THAN 1×10^3 AT RELATIVE HUMIDITY OF 45 TO 75% AND 15 TO 35°C

8) 1×10^{12} AFTER SOAKING FOR 24 HOURS IN A HUMIDITY CHAMBER AT RELATIVE HUMIDITY OF 95 ± 2% AND 20 ± 2°C.

9) DISSIPATION FACTOR AT 50 Hz A RELATIVE HUMIDITY 45 TO 75% AND 15 TO 35°C – 0·03 (MAXIMUM)

10) DIELECTRIC STRENGTH PEPENDICULAR TO THE LAYERS AT 50 Hz IN TRANSFORMER OIL AT 90 + 7°C – 27 KVEFT (MINIMUM)

REF NO·2

(111) PHYSICO – CHEMICAL PROPERTIES OF THE VARNISH GRADE МЛ-92 AS PER GOST 15865-70 AS ARE AS FOLLOWS

1) VISCOSITY AS PER VISCOSIMETER B3-4 AT 20°C IN SEC } 25 MINIMUM

2) CONTENT OF DRY-RESIDUE IN % – 50 – 55

3) ACID NO IS MG OF KOH – 10 (MAXIMUM)

4) CONTENT OF SEPERATE FORMALDEHYDE IN % } 0·6 (MAXIMUM)

5) TIME OF DESICCATION AT 105–110°C IN HRS } – 1 (MAXIMUM)

6) DRYING – CAPACITY OF VARNISH IN THICK-LAYER AT 115 –120°C IN HRS } – 16 (MAXIMUM)

7) THERMO ELASTICITY OF LAYER AT 150°C IN HRS } – 48 (MINIMUM)

8) HARDNESS OF LAYER AS PER PENDULUM INSTRUMENT AT 20±1°C } – 0·40 (MINIMUM)

9) OIL-RESISTANCE OF FILM IN kg – 8 (MINIMUM)

10) ELECTRICAL STRENGTH OF FILM IN K VOLT/MIN AT 20± 2°C } – 65 MINIMUM
AFTER THE ACTION OF WATER FOR A PERIOD OF 24 HRS AT 20± 2°C } – 30

11) SPECIFIC – VOLUMERIC ELECTRIC RESISTANCE OF FILM IN CM } $1 \cdot 10^{14}$ (MINIMUM)

12) AFTER THE ACTION OF WATER FOR A PERIOD OF 24 HRS AT 20 ± 2°C } $5 \cdot 10^{12}$

SURFACE FINISH

▽ :- REPRESENT SURFACE FINISH TO BE OBTAINED BY WITHOUT REMOVAL OF MATERIA ON BOTH SIDE OF JOB.

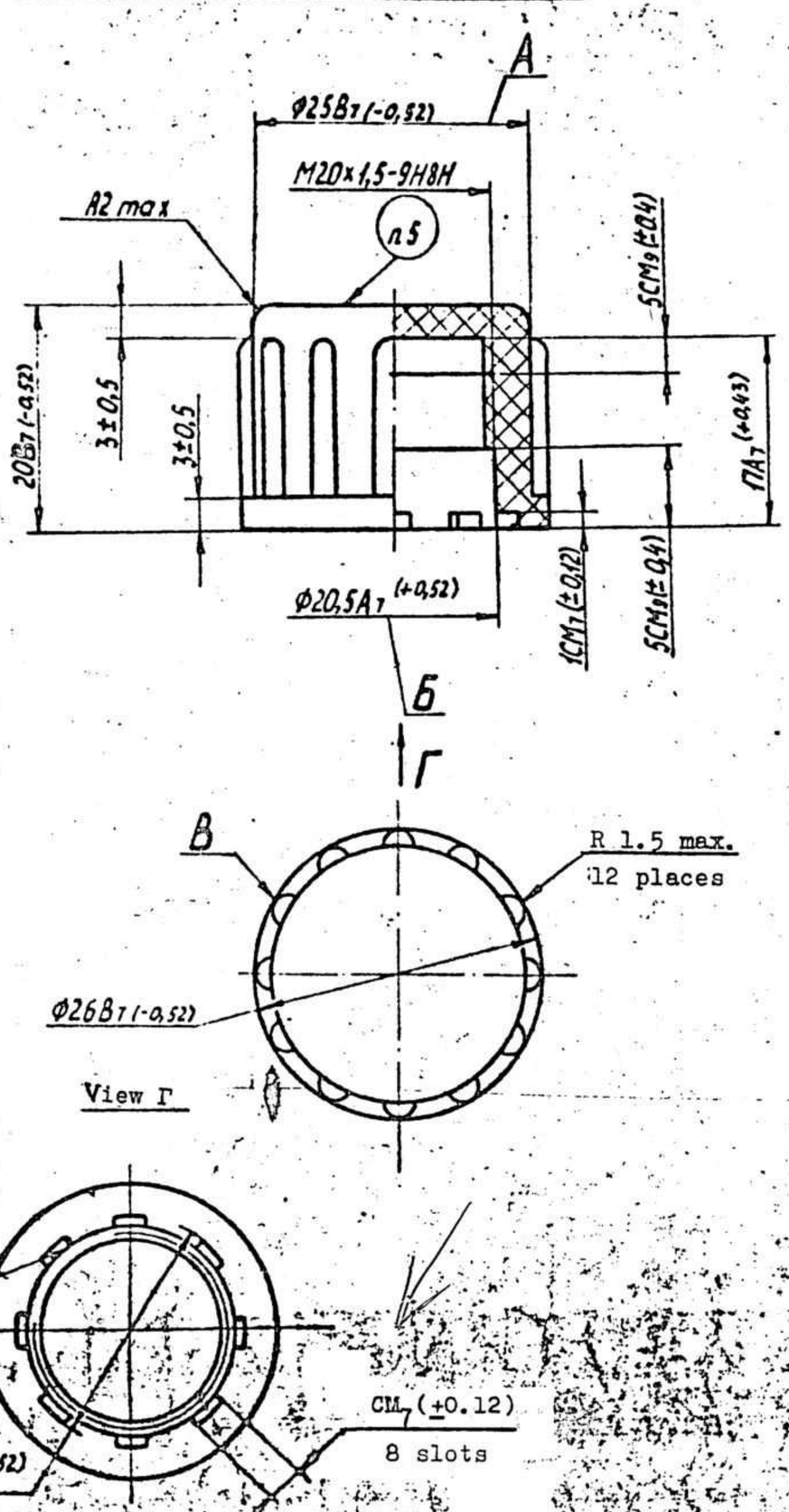
Rz 80/(√) :- REPRESENTS Rz VALUE OF SURFACE FINISH OF 80 MICRONS ON THOSE SURFACES WHERE SURFACE FINISH IS NOT SPECIFIED

D·CS	D·T	ZONE	BRIEF RECORD	SIGN

INSCRIBED		DRG NOT TO BE SCALED	PERTAINS TO
CHECKED		ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF	
APPROVED		ALL DIMENSION ARE IN m·m UNLESS OTHERWISE SPECIFIED	
DATE	17.11.84	WASHER	X5-114-53
TOLERANCE OTHERWISE GENI DES	UNLESS SPECIFIED ANG	SCALE :-	
		CONTROLLERATE OF INSPECTION FIRE FIGHTING EQPT PUNE	

1-4-4

X9-10949



2,5

TECHNICAL CONDITIONS

1. Material substitute: Polyethylene 210-01, grade 1, ГОСТ 16338-77.
2. Taper of 1° in decreasing order of size A and of 4° in increasing order of size Б is allowed.
3. Radii 1 mm, max., unless otherwise specified.
4. Angular displacement of ribs B is within $\pm 1^{\circ}$ from the nominal position.
5. Mark the mould seat and part designation with convex lettering 4.
7. Provide for sizes by appropriate tools.
8. Tolerable angular displacements of slots Ж is $\pm 1^{\circ}$.

"TRANSPORTATION CAP SHOULD BE MANUFACTURED FROM HIGH DENSITY POLYETHYLENE HIGH QUALITY TO GOST 16338-77 "

SURFACE FINISH

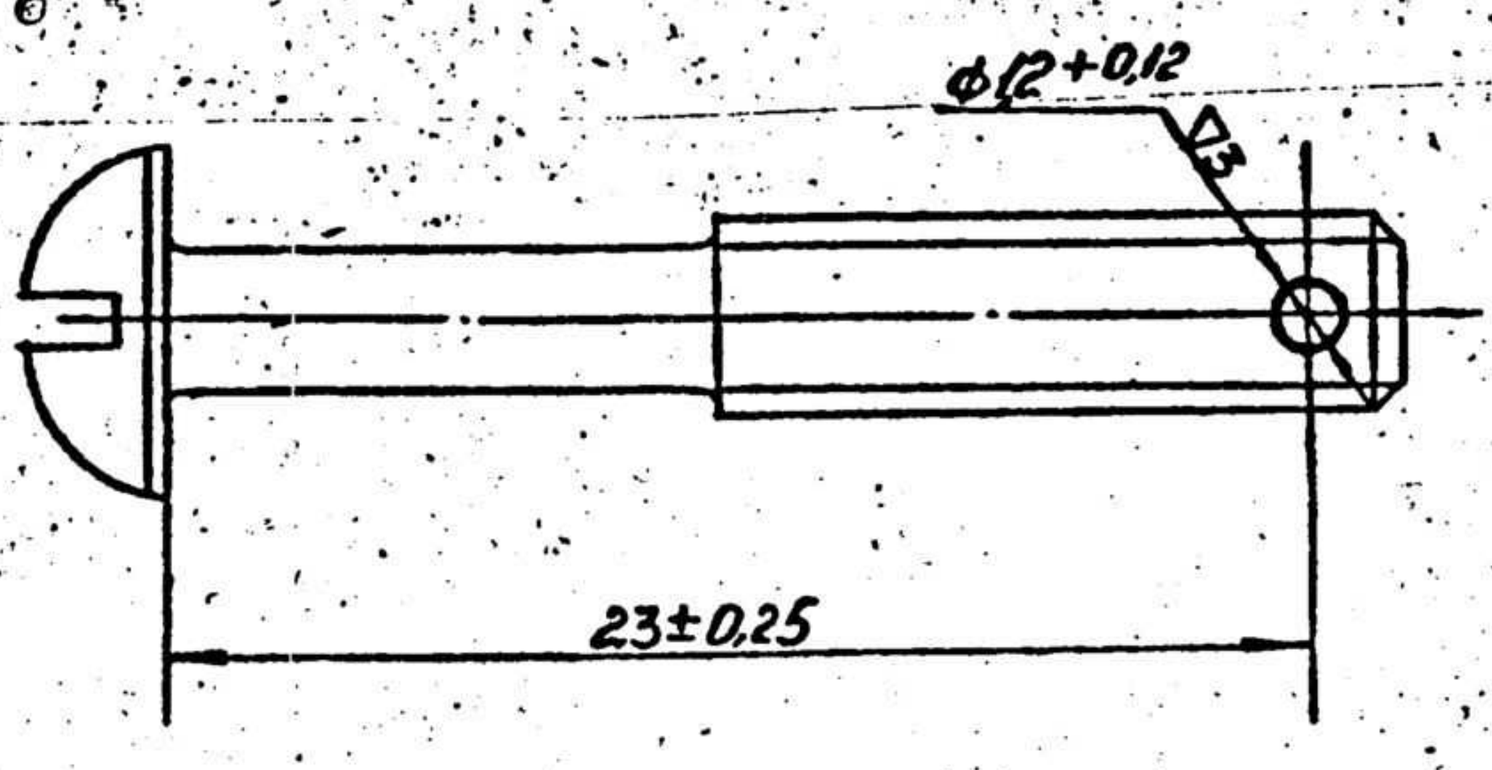
2.5 REPRESENTS SURFACE FINISH TO BE OBTAINED WITHOUT REMOVAL OF MATERIAL, IN Ra VALUE. 2.5 µ MAX. ALL OVER

(R VEERARAGHAVAN)
SSO II

94/D2073

APPROVED	X9-10949		
CHECKED.	TRANSPORTATION CAP	WEIGHT	SCALE
CONTROLLERATE OF INSPECTION FE (TCV) PUNE	POLYETHYLENE 209-01, GRADE 1, ГОСТ 16338-77	3.8g	2:1
		SHT	SHTS. 1

X-10020



TECHNICAL CONDITIONS

1. Blank has no coating.
2. Coating: zinc plating 6 followed by chromate treatment.

89/D2073

APPROVED	X-10020		
CHECKED		WEIGHT	SCALE
CONTROLLERATE OF INSPECTION FE PUNE	SCREW	2.2g	4:1
		SHT	SHTS 1
	BLANK X1-10277		1-4-24