SECRET/CLASSIFIED	NUMBER Ty 16-505.967-77
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	SUPERSEDES..

SPECIAL FLEXIBLE WIRES FOR AUTOMOTIVE ELECTRICAL EQUIPMENT SPECIFICATIONS TY 16-505.967-77.

T 2188

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The present specifications refer to special flexible wires, further in after referred to as "wires", for automative electrical equipment.

Wires are intended for tapping automotive electrical equipment and operation at an ambient temperature from minus 60 to plus 80°C.

Example for designating the wire of grade ПОГО with nominal cross-section of current-conducting core of 1,00MM^2 while placing order and in documents for other item:

"Wire ПОГО-1,00 Ty 16-505.967-77."

1. TECHNICAL REQUIREMENTS.

1.1. Wires should comply with the requirements of present specifications.

1.2. Grades and dimensions,

1.2.1. Wires are made of grades:

ПОГДО - special flexible wire, insulated with two layers of winding and one braiding layer made of cotton thread;

ПОГДО - special flexible wire, insulated with one layer of winding made of lavsan threads and one braiding layer made of cotton thread;

ПФГО - Special flexible wire, insulated with one braiding layer made of cotton thread;

ПОГОО- Special flexible wire, insulated with one winding layer and one braiding layer made of cotton thread;

ПОГСО- Special foexible wire, insulated with one braiding layer made of cotton thread.

NOTE: Thread of any colour may be used as braid.

1.2.2, NOminal section of core, maximum diameters of wires, should be as indicated in table 1.

1.2.3. Mirimum mass of wire length should be as indicated in table 2.

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TABLE 1/--

Nominal section of copper core, mm²	Maximum external diameters of wires of grades, MM.			
	ПОГО	ПОГЛО, ПОГОО	ПОГДО	ПОГСО
0,30[x]	1,8	2,3	2,8	-
0,35	1,9	2,4	2,9	-
0,50	2,0	2,5	3,0	-
0,70	2,2	2,7	3,2	-
0,75[x]	2,3	2,8	3,3	-
1,00	2,5	3,0	3,5	2,6
1,50[x]	2,9	3,4	3,9	2,8
1,60	3,1	3,6	4,1	-
2,50	3,4	3,9	4,4	3,6
4,00	4,1	4,6	5,1	-
6,00	5,0	5,5	6,0	-
10,00	6,3	6,8	7,3	-

x) Not used in new designs.

TABLE 2/--

Nominal section of copper core, mm²	Minimum mass of one wire length Kg, min.
0,30 - 0,75	0,10
1,00 - 1,60	0,15
2,50 - 4,00	0,30
6,00 - 10,00	0,80

It is allowed to submit wires with the mass of separate length not less than 50% of that indicated in table 2 if their number is not more than 10% of the mass of submitted batch.

1.3. DESIGN

1.3.1 Current-conducting of core wires, grades ПОГДО, ПОГЛО, ПОГО and ПОГОО should comply with the requirements of GOST 9125-74 for wire, grade ПЩ, and that of wire, grade ПОГСО should comply with the requirements of GOST for wire grade ПЩС.

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1.3.2. Current-conducting core should be insulated with: cotton threads - for wires of grades ПОГД 0, ПОГО, ПОГОО and, ПОГСО; lavsan thread and cotton threads - for wires of grade ПОГМО.

1.3.3. Insulation in the form of winding made of cotton thread or lavsan threads and braiding made of cotton thread on the wire of grades ПОГД0, ПОГО, ПОГОО, ПОГСО and ПОГД0 should be tightly wound.

Negligible unevenness of wires is allowed along the pitch of a strand.

1.3.4. Increase in wire diameters against maximum wire diameters specified in table 1, is allowed at the places where the leas are dressed. The number of thickned places of insulation over length of 25 m of wire should not exceed one.

1.3.5. The direction of windings should be mutually opposite for wires of grade ПОГД0.

1.3.6. Insulation in the form of braiding made of cotton thread should have density factor of braiding of not less than 85%.

1.3.7. Materials used for making the wires should correspond to:

- Current-conducting core - to the wires of grades ПЩ and ПЩС, GOST 9125-74;
- Cotton thread - GOST 6904-70, GOST 9092-71 and GOST 1119 - 70
- lavsan silk, II tex - as per the documents approved in specified order.

1.4. Marking.

1.4.1. Marking of wire should comply with the requirements of GOST 18690-73.

1.4.2. A label containing the following details should be attached to each coil or bundle of wires;
grade of wire;
section of current-conducting strand in MM^2;
Net mass and gross mass in kg (gross mass while supplying the wire in a coil);
Manufacturing date (year, mouth);
designation of present specifications.

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1.5. Packing

1.5.1. Packing of wire should be in accordance with the requirements of GOST 18690-73.

1.5.2. Wires should be supplied in coils or bundles.

2. TESTING PROCEDURES.

2.1. All the tests should be carried out under normal climatic conditions; at an ambient temperature of $293^{\circ}K \pm 10^{\circ}k$ ($25^{\circ}C \pm 10^{\circ}C$), relative humidity of 45% to 80% , and atmospheric pressure of 84 KPa to 107 KPa (630 mm Hg, to 800 mm. Hg.), if not specified otherwise.

2.2. Checking of designs.

2.2.1. The geometrical dimensions (item 1.2.2.) should be checked by taking measurements as per GOST 12177-72.

2.2.2. Design of current-conducting core (item 1.3.1.) should be checked as per GOST 9125-74.

2.2.3. Mass of wire length (item 1.2.3.) should be checked by weighing with an error of max 5%.

2.2.4. Compliance for requirements to insulation design (Items 1.3.2, 1.3.3 and 1.3.5) should be checked visually or by disassembling the sample when necessary, without using the magnifying device.

2.3. Checking for marking and packing.

2.3.1. Marking and packing (items 1.4.1, 1.4.2, 1.5.1 and 1.5.2) should be checked visually.

3. TRANSPORTATION AND SQORAGE

3.1. Transportation and storage should comply with the requirements of GOST 18690-73.

4. MANUFACTURER'S GUARANTEE.

4.1. The manufacturer guarantees the compliance of wires with the requirements of present specifications provided the consumer observes the conditions for transportation and storage, specified in present specifications.

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4.2. GUARANTEE PERIOD FOR storage is 6 months.

Guarantee period for storage is valid from the day of receiving wires by the consumer.