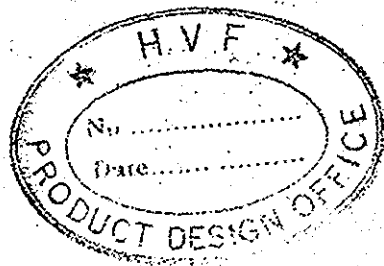


63
FY

63
FY

88



CONNECTORS TYPE 2PMΓ , 2PMΓΔ

SPECIFICATIONS

Γ ΕΘ. 364.140 ΤΥ

(EXTRACT)

Note: - Do not deviate to the specifications.

2

Translated by	Authenticated by	ARMoured VEHICLE PROJECT AVADI
INSDOC	BYKOVA	
Date 13.10.84	Checked by	SPECIFICATION NO: Γ ΕΘ. 364.140 ΤΥ
	<i>[Signature]</i>	
	Page No: 1 of 9	Approved: <i>[Signature]</i>

These specifications pertain to low frequency connectors voltage upto 1500 V, cylindrical and sealed, ~~classified as~~ types 2PMI, 2PM7A, meant for operation in a.c and d.c (frequency upto 3 MHz) circuits at load currents and voltages specified in the

Appendix. Coating of the contacts of connector plugs -Nickel, *chemical*

1. CLASSIFICATION, CONVENTIONAL DESIGNATION.

1.1. Conventional designations (codes) consisting of the following classification signs are ~~allotted~~ ^{assigned} to the plugs:

Type of connectors.	2PM	I	II	24	B	10	III	5	E	25
Sealed										
For long lines										
Conventional dimension of body										
Type of housing - block (modular) ^{unit type} "B"										
No. of contacts										
Connector-plug part (III -for Pins)										
Combination of contacts - Conventional No. If all contacts are $\phi 1$ -digit 1, $\phi 1.5$ -digit 5, if contacts are $\phi 1$ and $\phi 1.5$ -digit 2, $\phi 1.5$ and $\phi 3$ -6, $\phi 1.5$ and $\phi 2$ and $\phi 3$ -7, $\phi 2$ and $\phi 3$ -3, $\phi 1$ and $\phi 3$ -4.										
Type of coating -chem. nickel										
Heat resistance										

1.2. Presence of letter "B" in the designation indicates absence of left-hand thread ~~locating steps~~ ^{and fixed bases} on the connector housing.

1.3. Plugs are manufactured in the climatic version suitable for operation only in the regions with moderate and cold climate.

1.4. Designation of plug while placing order and in the design documents, must consist of word "Plug", conventional designation of design and designation of these standards. Example:

Plug 2PMI22510III1E25 IEO.364.140 TY.

IEO. 364.140TY

2. BASIC TECHNICAL REQUIREMENTS AND THEIR CHARACTERISTICS .

2.1. The appearance, over-all, setting and connecting dimensions of the plugs must correspond to Figure 1 and the tables.

2.2. The lay-out diagram of ~~the~~ contacts in insulators, number of contacts and their diameter are given in Appendix 2.

2.3. The disconnecting (unmating) forces of connectors must not be more than the values specified in Appendix 2.

2.4. Leakage of air is not permitted for plugs at pressure drop up to 147099.8 Pa (1.5 atm).

2.5. THE contact stems permit connection of wires with maximum cross sections:

- For plugs of type 2PMR in accordance with this table:

Diameter of contacts, mm.	1	1.5	2	3
Diameter and depth of hole for soldering, mm	1	1.3	1.7	3.5
Maximum wire section, mm	0.35	1	1.5	6

-For plugs of type 2PMFA in accordance with table:

Diameter of contacts, mm	1.5	2	3
Diameter and depth of hole for soldering, mm	1.3 4	2.2 6	4.9 6
Maximum wire section, mm ²	1	2.5	10

2.6 Connection of wires to the contact stems- by soldreing.

2.7. Fixation of connected position is ensured by one guide key.

2.8. Electrical parameters:

2.8.1. Resistance of contacts must not be more than the value specified in the table.

PEO. 364.140TY

3

Type of connector	Diameter of contact, mm	Resistance of contact, MOhm.
2PMГ	1	15
2PMГ, 2PMГΔ	1.5	10
2PMГ, 2PMГΔ	2	5
2PMГ, 2PMГΔ	3	3

2.8.2 The capacitance must not be more than 6 pf.

2.8.3. The insulation resistance in normal climatic conditions must not be less than 1000 MOhm, at maximum positive temperature it must be 20 MOhm, in case of prolonged excessive humidity - not less than 5 MOhm (in case of short spell of excessive humidity -not less than 20 MOhm.)

2.8.4. Maximum total current load on the connector must not be more than the values specified in Appendix 2. During this the overheating temperature of contacts must not exceed 50 C.

2.8.5. The maximum working current on single contact must not be more than the values specified in Appendix 2.

2.8.6. The maximum permissible short-duration currents on the contact and connector must not be more than double the value, specified in Appendix 2, time -not more than 5minutes.

2.9. Stability under mechanical actions:

- vibration in the frequency range from 5 to 5000 with acceleration not more than 490 m/sec². (50g),
- multiple impacts with acceleration not more than 980 m/sec² (100g) at impact duration not more than 3 msec, total number of impacts - 4000,
- single impacts with acceleration not more than 4905 m/sec² (500g) at impact duration not more than 2 msec, total number of impacts -9,

ГЕО. 364.140 ТУ

- linear centrifugal loads with acceleration not more than 1962 m/sec^2 (200g),
- acoustic noises, with level not more than 170 dB.

2.10. Stability under climatic actions:

- temperature of ambient medium from minus 60 to plus 200°C,
- relative humidity of air 98% at temperature plus 25°C,
- atmospheric pressure from 107200 to 1.34×10^{-10} Pa (from 800 to 10^{-12} mm of mercury),
- temperature change from minus 60 C to plus 250 C (over heating temperature of contacts is taken into account).

2.11. Minimum operating time of connector 1000 hours.

During this period the connector must withstand 500 connections and disconnections.

2.12. Quality keeping period -15 years.

3. STORAGE.

3.1. The quality keeping period of connectors in the supplier's packing is 9 years when stored in places without heating facilities, and 3 years when stored in sheds/hangers.

Storage in open air is not permitted.

4. GUARANTEE.

4.1. The supplier guarantees the confirmity of each connector being supplied to the requirements of these specifications for the quality keeping period (para 2.12) or the minimum operating period (para 2.11) within the limits of the quality-keeping period provided that the customer observes the operating modes and conditions.

@@@@@@@@@@@

Appendix 1. Sealed block type plugs 2PM ,2PM .

1-D left, 2- 4 holes $\phi 3.5A$, 3- Fig 1, 4- Dimensions,mm, 6- Ratings, 5- Weight, g,not more than.

ГЕО. 364. 140TY.

Appendix 2

- 1- Conventional dimension of the housing,
- 2- Diagram of lay out of contacts in insulators,
- 3- Conventional designation of contacts,
- 4- Diameter of contacts, mm,
- 5- No. of connections of contacts,
- 6- Connection No. of contacts,
- 7- Contact No. for measuring the over heating temperature,
- 8- Current load, A, not more than,
- 9- Maximum on single contact,
- 10- Total on the connector,
- 11- d.c, voltage or amplitude value of a.c. voltage, V not more than,
- 12- Working, 13- Test,
- 14- In normal climatic conditions,
- 15- At pressure 400 Pa (3 mm of mercury),
- 16- Disconnecting force H (kgf), not more than,
- 17- The potential difference between any adjacent contacts, and also between the body and the contact adjacent to it must not exceed the working voltage 560 V.
- 18- Conventional numbering of the contacts - one starting from the side of stem portion.

□ E0 . 364 . 140 . TY

b

SEALED BLOCK TYPE PLUGS 2PMГ, 2PMГД

Вилки блочные герметичные
 типов 2PMГ, 2PMГД

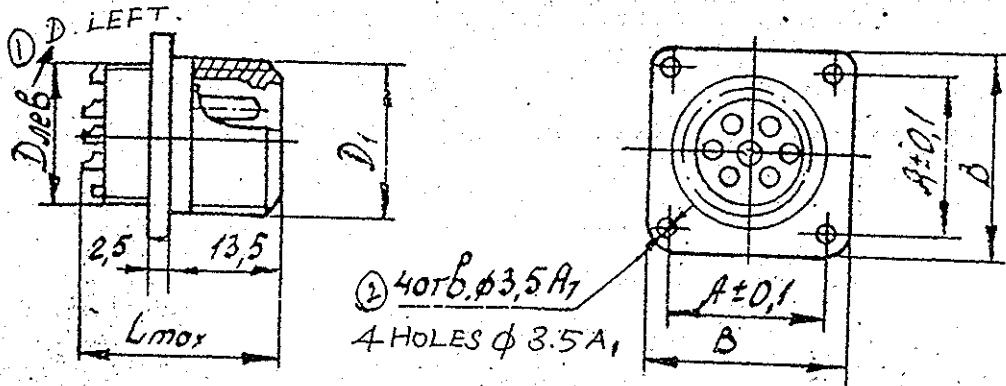
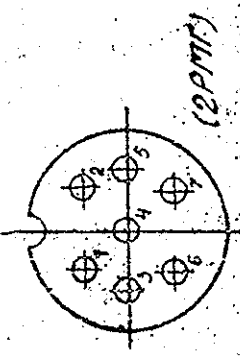
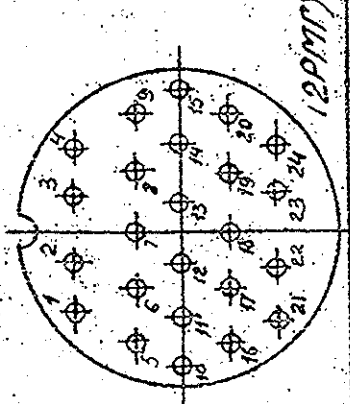
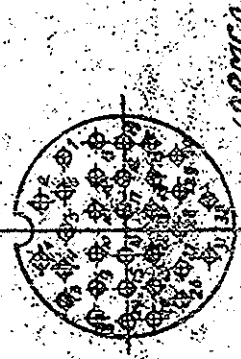


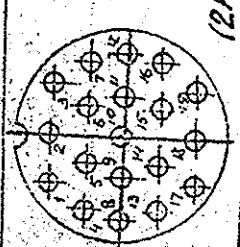
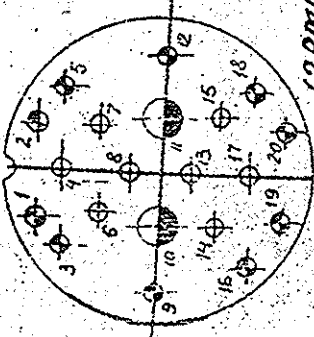
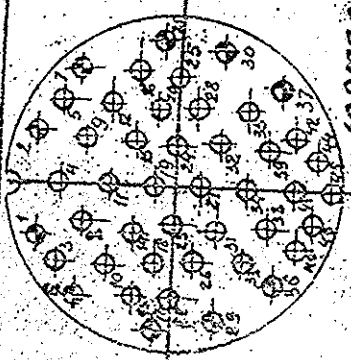
Рис. 1
 FIG: 1.

RATINGS Типономиналы	DIMENSION, MM. РАЗМЕРЫ, MM					WEIGHT, МОССО, NOT MORE НЕ БОЛЕЕ ЧЕМ
	A	B	L	D	D ₁	
2PMГ27Б24Ш1Е2	29	36	26,5	M27×1	M30×1,5	47,0
2PMГД27Б19Ш5Е2	29	36	26,5	M27×1	M30×1,5	49,5
2PMГД33Б32Ш5Е2	32	40	26,5	M33×1	M35×1,5	66,5
2PMГД36Б20Ш5Е2	35	43	26,5	M36×1	M39×1,5	58,0
2PMГД42Б45Ш5Е2	40	49	26,5	M42×1	M45×1,5	89,0

CONVENTIONAL DIMENSION OF THE HOUSING	CONVENTIONAL DIAGRAM OF LAYOUT OF CONTACTS IN INSULATORS.	TYPICAL DESIGNATION OF CONTACTS	NO OF CONTACTS	NO OF CONTACTS OF CONTACTS	TYPICAL NO OF CONTACTS	NO MEASURING THE HEATING TEMPERATURE	CURRENT LOAD, A.	P.S. VOLTAGE OR AMPLITUDE VALUE OF A.C. VOLTAGE		DISCOUNTING FORCE H (KGF)
								WORKING	TEST	
18		Φ	7	1	4		5	560	1850	72,6 (74)
27		Φ	24	1	12 (13)		4	560	1850	247,2 (25,2)
33		Φ	32	5	16 (17)		5	560	1850	439,5 (443)

THE POTENTIAL DIFFERENCE BETWEEN ANY ADJACENT CONTACTS, AND ALSO BETWEEN THE BODY AND THE CONTACT ADJACENT TO IT MUST NOT EXCEED THE WORKING VOLTAGE 560V.

SR 1'E.O. 364. 140TY.

CONVENTIONAL DIMENSIONS OF THE HOUSING	DIAGRAM OF LAYOUT OF CONTACTS IN INSULATORS	CONVENTIONAL DESIGNATION OF CONTACTS	DIAMETER OF CONTACTS, MM.	NO. OF CONTACTS	CONNECTING CONTACTS	CONTACT NO. FOR MEASURING THE OVERHEATING TEMPERATURE	CURRENT LOAD, A		WORKING IN NORMAL CLIMATIC CONDITIONS	TEST AT PRESSURE 400 Pa 3mm OF MERCURY	AMPLITUDE VALUE OF A.C. VOLTAGE OF A.C. VOLTAGE FORCE NOT MORE THAN H. (KGF)	
							MAXIMUM ON SINGLE CONTACT CONNECTOR	TOTAL ON THE CONNECTOR				
27		⊕	1,5	19	5	10	6	95	560	1850	350	261 (26,6)
36		⊕	1,5	8					560	1850	350	302,1 30,8
		⊕	1,5	10	6	8	8	120	700	2300	450	
		⊕	3	2			10 (11)	20		560	1850	
42		⊕	1,5	35					560	1850	350	618 163
		⊕	1,5	10	5	19 (127)	4	150	700	2300	450	

СРАВНИТЕЛЬ НУМЕРАЦИЯ КОНТАКТОВ ОРАНА СО СТОРОНЫ АВТОМОБИЛЬ ЧАСТИ

CONVENTIONAL NUMBERING OF THE CONTACTS ONE STARTING FROM THE SIDE OF SYSTEM POSITION

ГГО. 364.140 TV 191