

## Chapter II

### GLASIL CABLES

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#### Introduction

1. Glasil cables are designed for aircraft electrical wiring in areas where high temperatures are likely to develop. They are suitable for voltages up to 250 volts (R.M.S.), 1,600 cycles per second, in ambient temperatures between 90 deg. C. and 150 deg. C; in addition, they may also be used in low temperature zones between -30 deg. C. and -75 deg. C. where considerable flexibility is required. They are not, however, impervious to fluids, and are therefore not suitable for wiring which is likely to come into contact with oil, fuel, hydraulic fluids, etc. The Prens range of cables is intended to be used where the temperature lies between -30 deg. C. and 90 deg. C.

#### DESCRIPTION

2. This type of cable, illustrated in fig. 1, consists of a stranded tinned copper conductor, with insulation of silicone rubber and with outer coverings of asbestos roving, and glass braiding impregnated with silicone varnish and coloured red.

3. Twin-core and three-core types consist of two or three single-core cables laid together

with a further impregnated glass braid applied overall. The glass braid over each core is coloured red or blue, or red, blue or yellow respectively for circuit identification, the overall braid being red as in single-core cables.

4. The range of Glasil cables is given in Tables 1 and 2. Indication of current rating is given by black numbers on the outer surface of the cable at intervals of five inches.

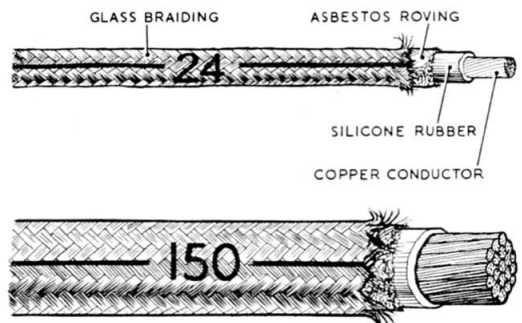


Fig. 1. Typical Uniglasil cables

**TABLE 1**  
**Range of single-core Glasil cables**

Cable	Stores Ref.	Overall dia. (in.) (max.)	Resistance at 60 deg.F. (ohms per 1,000 yd.)	Size of conductor (No. of wires/in.)
Uniglasil				
4	5E/3117	0.145	30.95	19/0-0076
9	5E/3118	0.165	14.66	40/0-0076
12	5E/3119	0.185	8.41	70/0-0076
18	5E/3129	0.200	5.34	110/0-0076
24	5E/3120	0.230	3.23	73/0-012
35	5E/3130	0.285	1.97	120/0-012
50	5E/3121	0.340	1.3	182/0-012
100	5E/3122	0.475	0.517	203/0-018
150	5E/3123	0.585	0.325	323/0-018
200	5E/3124	0.730	0.204	513/0-018

**TABLE 2**  
**Range of multi-core Glasil cables**

Cable	Stores Ref.	Overall dimensions (in.) (max.)
Duglasil		
4	5E/3676	0.313 × 0.175
9	5E/3677	0.353 × 0.195
12	5E/3678	0.393 × 0.215
Triglasil		
4	5E/3679	0.335
9	5E/3680	0.378
12	5E/3681	0.421

**RESTRICTED**