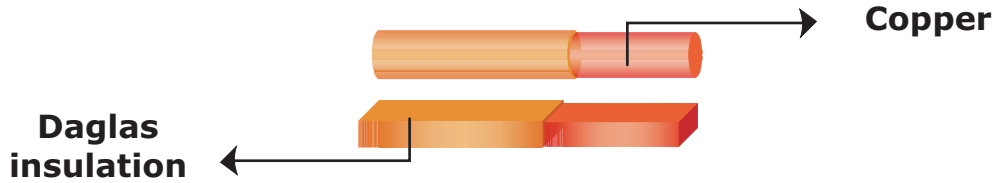




FIOS ESMALTADOS

POLIGLAS POL - MW 51C, MW 52C

PRODUCT CONSTRUCTION



GENERAL INFORMATION

INSULATION

One or two layers of Daglas over bare wire and Polyester varnish impregnated

MAIN USES

- Electromagnets
- Generators

REFERENCES

Round wires
MW-51C

Square and rectangular Wires
MW-52C

AVAILABILITY

Round wires
04 to 18 AWG

Square and rectangular wires
See Graph

PROPERTIES

- High thermal stability and good mechanical strenght

TYPICAL PROPERTIES

MECHANICAL PROPERTIES

Flexibility after 20% elongation

<u>Rectangular Wires</u>	<u>Round Wires</u>
No cracks in the insulation	-

Flexibility by bending in mandrel 4x thickness (**)

<u>Rectangular Wires</u>	<u>Round Wires</u>
No cracks in the insulation	-

Flexibility by bending in mandrel 4x width (**)

<u>Rectangular Wires</u>	<u>Round Wires</u>
No cracks in the insulation	-

Adherence and flexibility after bending in mandrel 5d or 10d

<u>Rectangular Wires</u>	<u>Round Wires</u>
-	Don't exposure the bare wire

Adherence after 25% elongation or to its breaking point

<u>Rectangular Wires</u>	<u>Round Wires</u>
-	Don't loss the insulation adherence

Elongation to rupture in 250mm

<u>Rectangular Wires</u>	<u>Round Wires</u>
38 to 43% (NEMA-Min.30%)	In median 30% above specification (NEMA-20 to 40% depending the diameter)

Springback

<u>Rectangular Wires</u>	<u>Round Wires</u>
2° to 3° (NEMA-Max.5°)	2° to 3° (NEMA-Max.5°)

THERMAL PROPERTIES

Thermal Class

180°C

Heat Shock: 20% elongation and 175°C/30min(**)

<u>Rectangular Wires</u>	<u>Round Wires</u>
No cracks in the insulation	-

ELECTRICAL PROPERTIES

Dielectric Breakdown to rupture

<u>Rectangular Wires</u>	<u>Round Wires</u>
4500 to 6000 V/mm (NEMA-Min.2000 V/mm)	In median 50% above specification (NEMA-150 to 400 V depending on the dimension and insulation build)

Dielectric breakdown after bending in mandrel 7x thickness and 4 x width (**)

<u>Rectangular Wires</u>	<u>Round Wires</u>
4000 to 6000 V/mm	-

(**) Don't prescribed in NEMA specification