



INDUSTRIAL RESEARCH INSTITUTE

Report Number: 5223/12/575517/2021

2/2

**IEC 60502-1:2004 Power cables with extruded insulation and their accessories
for rated voltages from 1 kV up to 30 kV**
Part 1: Cables for rated voltages of 1 kV and 3 kV

Clause	Requirement - Test	Result - Remark	Verdict ¹
6.2	Insulation thickness (mm)	Nominal thickness: 1,0	P
		Result: 1,0	
12.5	Correlation between cable diameters and armour dimensions (mm)	Nominal diameter of round armour wires: 1,6	P
		Result: 1,6	
13.3	Oversheath thickness (mm)	1,8	P
15.2	Electrical resistance of conductors (Ω/Km) (acc. to IEC 60228)	Max: 3,08	P
		Result: 2,61	
-	Maximum diameter of conductors (mm) (acc. to Annex C - IEC 60228)	Max: 3,3	P
		Result: 3,0	
16.8	Overall diameter (mm)	Result: 22,92	P

In house	Weight (Kg/m)	1,217
In house	Armoured nominal diameter (mm)	19,03
In house	Insulation diameter (mm)	5,1

1- Test case verdict: P = Pass, F = Fail, N/A = Case not apply to the test object.





INDUSTRIAL RESEARCH INSTITUTE

Report Number: 5223/11C3/571919/2021

1/2

Test Report

Customer name	Mediterranean cables company S.A.L.
Customer address	Zahrani - Saida - Lebanon

Date of item's reception	12.07.2021
Date or period of tests	From 13.07.2021 To 16.07.2021
Date of report issue	19.07.2021

Product description	Cables	
Manufacturer, brand name or trademark	MEDCABLES	Country of origin: Lebanon
Reference, model	NYRGBY 3*50 mm ² + 25 mm ²	
Product category	Power cables with extruded insulation and their accessories for rated voltages from 1 kV up to 30 kV	

Testing according to the requirements of :	IEC 60502-1:2004
General comments:	Conform Reference: Client's letter dated on 05/07/2021

Tested by (+ Signature)	Elie Dawaliby
Verified by (+ Signature)	Eng. Bilal Hussein Electrical laboratory head
Approved by (+ Signature)	Dr. Imad Hage Chehade Technology & Development Director

- Unless otherwise specified, the sampling was done by the client

- The tests carried out form a part of the related standard

Notes: * Results relate only to the item tested.

* This report is the exclusive property of the IRI. Any partial or total reproduction of any kind is forbidden without prior approval of the Industrial Research Institute management.

® Imad HAGE CHEHADE Ph.D.
Technology & Development
Director



IRI
INDUSTRIAL RESEARCH INSTITUTE



Report Number: 5223/11C3/571919/2021

2/2

**IEC 60502-1:2004 Power cables with extruded insulation and their accessories
for rated voltages from 1 kV up to 30 kV**
Part 1: Cables for rated voltages of 1 kV and 3 kV

Clause	Requirement - Test	Result - Remark		Verdict ¹
6.2	Insulation thickness (mm)	Nominal thickness: 1,4	Nominal thickness (neutral): 1,2	P
		Result: 1,4	Result: 1,2	
12.5	Correlation between cable diameters and armour dimensions (mm)	Nominal diameter of round armour wires: 2,0		P
		Result: 2,0		
13.3	Oversheath thickness (mm)	2,2		P
15.2	Electrical resistance of conductors (Ω/Km) (acc. to IEC 60228)	Max: 0,387	Max: 0,727 (neutral)	P
		Result: 0,367	Result: 0,688	
-	Maximum diameter of conductors (mm) (acc. to Annex C - IEC 60228)	Max: 9,1	Max: 6,6 (neutral)	P
		Result: 8	Result: 6	
16.8	Overall diameter (mm)	Result: 36,7		P

In house	Weight (Kg/m)	3,518	
In house	Armoured nominal diameter (mm)	32,1	
In house	Insulation diameter (mm)	10,8	(neutral) 8,8



HAGE CHEHADE Ph.D.
Technology & Development
Director





INDUSTRIAL RESEARCH INSTITUTE

Report Number: 5223/11A3/571919/2021

1/2

Test Report

Customer name	Mediterranean cables company S.A.L.
Customer address	Zahrani - Saida - Lebanon

Date of item's reception	12.07.2021
Date or period of tests	From 13.07.2021 To 16.07.2021
Date of report issue	19.07.2021

Product description	Cables	
Manufacturer, brand name or trademark	MEDCABLES	Country of origin: Lebanon
Reference, model	NYRGBY 3*10 mm ²	
Product category	Power cables with extruded insulation and their accessories for rated voltages from 1 kV up to 30 kV	

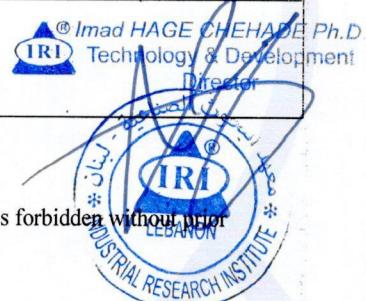
Testing according to the requirements of :	IEC 60502-1:2004
General comments:	Conform Reference: Client's letter dated on 05/07/2021

Tested by (+ Signature)	Elie Dawaliby	
Verified by (+ Signature)	Eng. Bilal Hussein Electrical laboratory head	
Approved by (+ Signature)	Dr. Imad Hage Chehade Technology & Development Director	 <small>IRI Imad HAGE CHEHADE Ph.D Technology & Development Director</small>

- Unless otherwise specified, the sampling was done by the client
- The tests carried out form a part of the related standard

Notes: * Results relate only to the item tested.

* This report is the exclusive property of the IRI. Any partial or total reproduction of any kind is forbidden without prior approval of the Industrial Research Institute management.



Report Number: 5223/11A3/571919/2021

2/2

**IEC 60502-1:2004 Power cables with extruded insulation and their accessories
for rated voltages from 1 kV up to 30 kV**
Part 1: Cables for rated voltages of 1 kV and 3 kV

Clause	Requirement - Test	Result - Remark	Verdict ¹
6.2	Insulation thickness (mm)	Nominal thickness: 1,0	P
		Result: 1,0	
12.5	Correlation between cable diameters and armour dimensions (mm)	Nominal diameter of round armour wires: 1,25	P
		Result: 1,25	
13.3	Oversheath thickness (mm)	1,8	P
15.2	Electrical resistance of conductors (Ω/Km) (acc. to IEC 60228)	Max: 1,83	P
		Result: 1,73	
-	Maximum diameter of conductors (mm) (acc. to Annex C - IEC 60228)	Max: 4,2	P
		Result: 4	
16.8	Overall diameter (mm)	Result: 21,95	P

In house	Weight (Kg/m)	1,062
In house	Armoured nominal diameter (mm)	17,98
In house	Insulation diameter (mm)	6

1- Test case verdict: P = Pass, F = Fail, N/A = Case not apply to the test object.





INDUSTRIAL RESEARCH INSTITUTE

Report Number: 5223/11B3/571919/2021

1/2

Test Report

Customer name	Mediterranean cables company S.A.L.
Customer address	Zahrani - Saida - Lebanon

Date of item's reception	12.07.2021
Date or period of tests	From 13.07.2021 To 16.07.2021
Date of report issue	19.07.2021

Product description	Cables	
Manufacturer, brand name or trademark	MEDCABLES	Country of origin: Lebanon
Reference, model	NYRGBY 4*25 mm ²	
Product category	Power cables with extruded insulation and their accessories for rated voltages from 1 kV up to 30 kV	

Testing according to the requirements of :	IEC 60502-1:2004
General comments:	Conform Reference: Client's letter dated on 05/07/2021

Tested by (+ Signature)	Elie Dawaliby
Verified by (+ Signature)	Eng. Bilal Hussein Electrical laboratory head
Approved by (+ Signature)	Dr. Imad Hage Chehade Technology & Development Director

- Unless otherwise specified, the sampling was done by the client

- The tests carried out form a part of the related standard

Notes: * Results relate only to the item tested.

* This report is the exclusive property of the IRI. Any partial or total reproduction of any kind is forbidden without prior approval of the Industrial Research Institute management.



Report Number: 5223/11B3/571919/2021

2/2

**IEC 60502-1:2004 Power cables with extruded insulation and their accessories
for rated voltages from 1 kV up to 30 kV**
Part 1: Cables for rated voltages of 1 kV and 3 kV

Clause	Requirement - Test	Result - Remark	Verdict ¹
6.2	Insulation thickness (mm)	Nominal thickness: 1,2	P
		Result: 1,2	
12.5	Correlation between cable diameters and armour dimensions (mm)	Nominal diameter of round armour wires: 1,6	P
		Result: 1,7	
13.3	Oversheath thickness (mm)	2,0	P
15.2	Electrical resistance of conductors (Ω/Km) (acc. to IEC 60228)	Max: 0,727	P
		Result: 0,691	
-	Maximum diameter of conductors (mm) (acc. to Annex C - IEC 60228)	Max: 6,6	P
		Result: 6	
16.8	Overall diameter (mm)	Result: 30,69	P

In house	Weight (Kg/m)	2,315
In house	Armoured nominal diameter (mm)	26,06
In house	Insulation diameter (mm)	8,3

1- Test case verdict: P = Pass, F = Fail, N/A = Case not apply to the test object.





INDUSTRIAL RESEARCH INSTITUTE

Report Number: 5223/12/575517/2021

1/2

Test Report

Customer name	Mediterranean cables company S.A.L.
Customer address	Zahrani - Saida - Lebanon

Date of item's reception	01.09.2021
Date or period of tests	From 01.09.2021 To 03.09.2021
Date of report issue	06.09.2021

Product description	Cables	
Manufacturer, brand name or trademark	MEDCABLES	Country of origin: Lebanon
Reference, model	NYRGBY 5*6 mm ²	
Product category	Power cables with extruded insulation and their accessories for rated voltages from 1 kV up to 30 kV	

Testing according to the requirements of :	IEC 60502-1:2004
General comments:	Conform Reference: Client's letter dated on 30/08/2021

Tested by (+ Signature)	Elie Dawaliby	
Verified by (+ Signature)	Eng. Bilal Hussein Electrical laboratory head	
Approved by (+ Signature)	Selim Kfouri Administrative & Financial Director	

- Unless otherwise specified, the sampling was done by the client
- The tests carried out form a part of the related standard

Notes: * Results relate only to the item tested.

* This report is the exclusive property of the IRI. Any partial or total reproduction of any kind is forbidden without prior approval of the Industrial Research Institute management.

