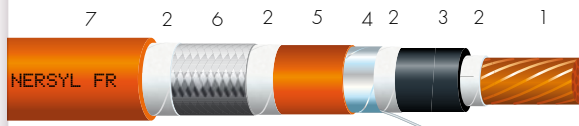


**ENERSYL® FR  
POWER****Single core power cables****Reference**

- (example) ENERSYL® FR EG BG POWER 150 mm<sup>2</sup>  
FR : fire resistant  
EG, BE, BR: type of electrical screen  
BG, FA: type of armour  
POWER: power cable  
150 mm<sup>2</sup>: cross-section in mm<sup>2</sup>

**Approvals - standards**

- IEC 60228 / NF C 32-090.
- IEC 60332-1 / IEC 60332-3 / NF C 32-070 test C1.
- IEC 60331-21 / NF EN 50200.
- IEC 61034-2 / IEC 60754-1 / IEC 60754-2.

**Markings**

- OMERIN – ENERSYL < FR xx xx POWER >  
< cross-section > – 600/1000V – < batch > – < year >

**Standard products**

- Sheath: orange.
- Insulation: black.

**Technical characteristics****Thermal**

- Continuous operating temperature: -30 °C to +80 °C.
- Maximum core temperature: +90 °C.

**Electrical**

- Rated voltage: 600/1000 V.
- Test voltage: 3500 V.

**Smoke - fire**

- Flame retardant – cable alone:  
IEC 60332-1-2 / NF EN 60332-1-2 / NF C 32-070 test C2.
- Flame retardant – bunched cable:  
IEC 60332-3-22 cat. A / NF EN 60332-3-22 cat. A.
- Fire retardant: NF C 32-070 test C1.
- Fire resistant: IEC 60331-21 / NF EN 50200.
- Low smoke density: IEC 61034-2 / NF EN 61034-2.
- Halogen-free: IEC 60754-1 / NF EN 60754-1.
- Low corrosivity of gas emissions: IEC 60754-2 / NF EN 60754-2.

**Resistance of outer sheath to chemical attacks  
as per OMERIN test report NT140220-01:**

- Good resistance to acid.
- Good resistance to base.
- Fairly good resistance to aliphatic hydrocarbons.
- Resistance to water: type AD7 as per IEC 60529 without immersion of ends.
- Resistance to UV ≥ 2000 hours as per EN 16472.

**Options**

- FLEX: flexible tin-plated copper core, class 5 as per IEC 60228.
- Other colours: contact us.
- 105 °C cable: contact us.
- ATEX as per NF C 15-100 part 4-42 / EN 60079-14.  
Particularly suited for static facilities in potentially explosive environments, excluding the "i" intrinsic safety protection mode.  
> ENERSYL® FR BG EX POWER : with a HFFR sheath under the armour and without hygroscopic separating tape.

For this product, please contact:

OMERIN division principale   
Zone Industrielle - F 63600 Ambert  
Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10  
omerin@omerin.com

OMERIN division silisol   
BP 87 - ZI du Devev - F 42000 Saint-Étienne  
Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 37 00  
silisol@omerin.com

[www.omerin.com](http://www.omerin.com)

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.  
For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.  
® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.

Nominal cross-section (mm <sup>2</sup> )	Nominal stranding	Nominal thickness of insulation (mm)	Nominal diameter of conductors (mm)	NON-SHIELDED CABLES			ARMoured CABLES			Max. linear resistance at 20 °C (Ω/km)
				Nominal thickness of the sheath (mm)	Nominal outside diameter*	Approximate linear weight (kg/km)	Nominal thickness of the sheath (mm)	Nominal outside diameter*	Approximate linear weight (kg/km)	
1.5	7 / 0.52	0.8	3.1	0.6	4.7	36	1.0	7.8	101	12.1
2.5	7 / 0.67	0.8	3.6	0.6	5.2	49	1.0	8.3	120	7.41
4	7 / 0.85	0.8	4.2	0.6	5.8	66	1.0	8.9	144	4.61
6	7 / 1.04	1.0	5.2	0.6	6.8	95	1.0	9.9	185	3.08
10	7 / 1.33	1.1	6.4	0.7	8.2	145	1.0	11.4	253	1.83
16	7 / 1.68	1.1	7.4	0.7	9.2	205	1.0	12.4	325	1.15
25	7 strands	1.2	8.6	0.8	10.7	302	1.1	14.1	447	0.727
35	7 strands	1.3	9.7	1.0	12.2	417	1.2	15.8	587	0.524
50	19 strands	1.4	11.5	1.1	14.2	574	1.2	17.9	775	0.387
70	19 strands	1.4	12.7	1.2	15.6	753	1.2	19.5	992	0.268
95	19 strands	1.6	14.8	1.2	17.8	1032	1.3	21.9	1313	0.193
120	19 strands	1.5	16.4	1.2	19.4	1271	1.3	23.5	1575	0.153
150	19 strands	1.5	18.3	1.3	21.5	1566	1.4	25.8	1913	0.124
185	37 strands	1.6	20.7	1.3	23.9	1936	1.4	28.2	2320	0.0991
240	37 strands	1.8	23.4	1.4	26.8	2495	1.5	31.3	2938	0.0754
300	61 strands	2.0	27.0	1.5	30.6	3123	1.6	35.3	3641	0.0601
400	61 strands	2.4	30.4	1.5	34.0	3952	1.6	38.7	4526	0.0470

\* The rated outer diameter of cables may vary by +/- 15% depending on the options selected (excluding FLEX option +/- 25%).

For this product, please contact:

OMERIN division principale

Zone Industrielle - F 63600 Ambert

Tel. +33 (0)4 73 82 50 00 - Fax +33 (0)4 73 82 50 10

omerin@omerin.com

OMERIN division silisol

BP 87 - ZI du Devey - F 42000 Saint-Étienne

Tel. +33 (0)4 77 81 36 00 - Fax +33 (0)4 77 81 37 00

silisol@omerin.com

[www.omerin.com](http://www.omerin.com)

**omerin**  
LES CABLES DE L'EXTREME

The information provided in this technical data sheet is indicative and may be modified without prior notice, laying, wiring and electrical conditions and the environment of the cable can not be fully considered in our studies. In no way the company OMERIN shall be held responsible for any incidents in the case of inappropriate uses, particularly in the case of wiring conditions that do not respect the good practice and the standards in force.

For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.

® Registered trademark of the OMERIN Group. Drawings and photos are not contractual. Reproduction is prohibited without the prior agreement of OMERIN.