CABLES FOR POWER STATIONS AND HIGH-RISK SITES

ENERSYL® RH POWER

Single core power cables

HYDROCARBON RESISTANT CABLES



- 1 Stranded bare copper core, class 2 as per IEC 60228.

- 2 Optional separating tape.
 3 Insulation: PVC, type PVC/A as per IEC 60502-1.
 4 (optional) electrical screen: aluminium/PET tape + continuity wire (EG) / tin-plated copper braid (BE) / bare copper braid (BR).

 5 • (optional) Internal sheath: Hydrocarbon resistant PVC, type ST1 as per IEC 60502-1.

- 6 (optional) Bedding: waxed crepe paper.
 7 (optional) Armour: double steel tape (FA) / galvanized steel braid (BG).
 8 Outer sheath: Hydrocarbon resistant PVC, type ST1 as per IEC 60502-1.

Reference

• (example) ENERSYL® RH EG BG POWER 95 mm² RH: Hydrocarbon resistant EG, BE, BR: type of electrical screen FA, BG: type of armour POWER: power cable 95 mm²: cross-section in mm²

Approvals - standards

• IEC 60228 / IEC 60502-1. IEC 60332-1. Inspired by standard NF M 87-202 for oil industry.

Markings

• OMERIN - ENERSYL < RH xx xx POWER > < cross-section > - 600/1000V - < batch > - < year >

Standard products

• Sheath: grey. • Insulation: black.

Technical characteristics Thermal

• Continuous operating temperature: -30 °C to +80 °C.

Electrical

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

• Flame retardant – cable alone: IEC 60332-1-2 / NF EN 60332-1-2 / NF C 32-070 test C2.

Resistance of outer sheath to chemical attacks as per OMERIN test report NT140404-01:

- Good resistance to acid.
- Good resistance to base.
- Excellent resistance to aliphatic hydrocarbons as per NF M 87-202.
- Excellent resistance to mineral oil in IRM 902.
- Resistance to water: type AD7 as per IEC 60529 without immersion of ends.

Options

- FLEX: flexible tin-plated copper core, class 5 as per IEC 60228.
- Other colours: contact us.

For this product, please contact:

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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.

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					NON-SHIELDED CABLES			ARMOURED CABLES				
	Nominal cross-section (mm²)	Non stran		Nominal thickness of insulation (mm)	Nominal diameter of conductors (mm)	Nominal thickness of the sheath (mm)	Nominal outside diameter* (mm)	Approximate linear weight (kg/km)	Nominal thickness of the sheath (mm)	Nominal outside diameter* (mm)	Approximate linear weight (kg/km)	Max. linear resistance at 20 °C (Ω/km)
	1.5	7 /	0.52	0.8	3.1	1.4	6.3	58	1.4	10.7	175	12.1
	2.5	2.5 7/		0.8	3.6	1.4	6.8	73	1.4	11.2	197	7.41
	4	7 /	0.85	1.0	4.7	1.4	7.9	100	1.4	12.3	240	4.61
	6	7 /	1.04	1.0	5.1	1.4	8.4	124	1.4	12.7	268	3.08
	10	7 / 1.33		1.0	6.2	1.4	9.5	172	1.4	13.9	335	1.83
	16	7 /	1.68	1.0	7.3	1.4	10.6	237	1.4	15.0	416	1.15
	25	7 st	rands	1.2	8.7	1.4	12.0	335	1.4	16.5	538	0.727
	35	7 st	rands	1.2	9.5	1.4	12.8	432	1.5	17.5	655	0.524
	50	19 s	trands	1.4	11.0	1.4	14.3	575	1.5	19.0	821	0.387
	70	19 s	trands	1.4	12.8	1.4	16.2	770	1.6	21.1	1054	0.268
	95	19 strands		1.6	14.8	1.5	18.4	1052	1.7	23.3	1369	0.193
	120	19 s	trands	1.6	17.0	1.6	20.8	1328	1.7	25.5	1670	0.153
	150	19 s	trands	1.8	18.4	1.6	22.2	1593	1.8	27.3	1982	0.124
	185	37 s	trands	2.0	21.3	1.7	25.3	2004	1.8	30.2	2428	0.0991
	240	37 s	trands	2.2	23.5	1.8	27.7	2539	1.9	32.8	3016	0.0754
	300	61 s	trands	2.4	28.0	1.9	32.4	3235	2.0	37.5	3786	0.0601
	400	61 s	trands	2.6	31.0	2.0	35.6	4061	2.2	40.9	4681	0.0470

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

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