



GENERAL INFORMATION

Optimum's EP series features M-PP insulation. Designed for shallow and non-challenging wells, EP offers a cost-effective option for budget-conscious applications.

EP APPLICATION GUIDE

Good For	Not Suitable For
✓ Budget conscious applications	✗ Deep wells with temperature > 200F
✓ Dynamic wells environment	✗ High H2S, CO2 wells

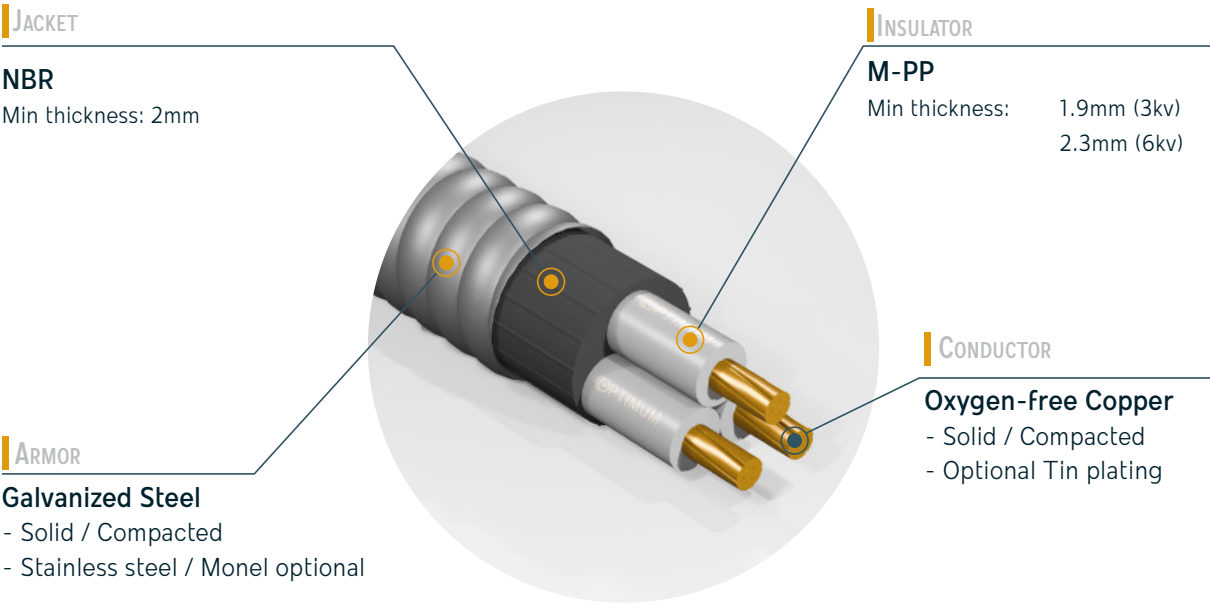
EP PRODUCT LIST

Name	Shape	Insulation	Reinforcement	Temp. Ratings
EP 200F	Flat	M-PP	NBR + PTFE + Fabric Barrier	194F / 90C
EP 200R	Round	M-PP	NBR	194F / 90C

EP SERIES

ESP POWER CABLE DATASHEET

EP 200R



DESIGN & CONSTRUCTION

Description	EP-200R ESP power cable with oxygen-free copper conductor, modified polypropylene insulation, nitrile rubber jacket, fully galvanized steel interlocking armor, round type.
Temperature Rating	194F / 90C
Voltage Rating	3KV, 6KV
Conductor	Solid drawn bare copper, solid or compacted diameter tolerance ± 1%
Insulation	M-PP (Modified Polypropylene) min thickness 1.9mm (3KV), 2.3mm (6KV)
Jacket	NBR (Nitrile Butadiene Rubber) min thickness 1.3mm
Armor	Fully galvanized steel, interlocking Stainless steel, Monel optional

3KV EP200R SPECIFICATION

Gauge	Nominal Conductor Diameter		Nominal Cable Diameter		Nominal Cable Weight		Insulation Resistance	Leakage Current	DC Voltage Test 5min
AWG	in	mm	in	mm	lbs/1000F	kg/km	MΩ · km	μA/kmV	kV
5	0.18	4.62	1.06	27	1034	1539	4500	0.278	27
4	0.2	5.19	1.10	28	1152	1714	3380	0.295	27
2	0.26	6.54	1.26	32	1464	2179	2530	0.394	27
1	0.29	7.35	1.34	34	1468	2185	2300	0.427	27

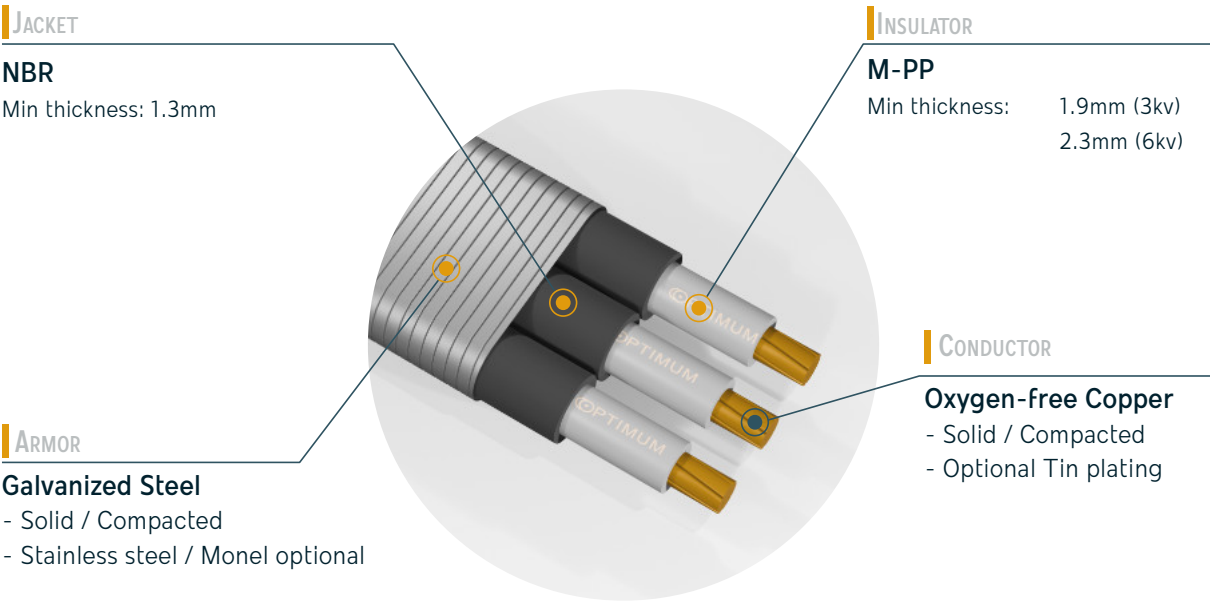
6KV EP200R SPECIFICATION

Conductor Gauge	Nominal Conductor Diameter		Nominal Cable Diameter		Nominal Cable Weight		Insulation Resistance	Leakage Current	DC Voltage Test 5min
AWG	in	mm	in	mm	lbs/1000F	kg/km	MΩ · km	μA/kmV	kV
5	0.18	4.62	1.14	29	1099	1636	5400	0.246	35
4	0.2	5.19	1.22	31	1219	1814	3869	0.262	35
2	0.26	6.54	1.34	34	1533	2282	2922	0.328	35
1	0.29	7.35	1.46	37	1748	2602	2658	0.361	35

ADDITIONAL INFO

Standards and Approvals	• IEEE 1018 • API RP 11S 5 • API RP 11S 6
Packaging	Steel corrugated reels with fixed base Protective outside wrapping
Options	Armor - Galvanized steel / Stainless steel / Monel Conductor - Solid Copper / Tin plating
Customization	Capillary Tube Control Wires Marking Tape

EP 200F



DESIGN & CONSTRUCTION

Description	EP-200F ESP power cable with oxygen-free copper conductor, modified polypropylene insulation, nitrile rubber jacket, fully galvanized steel interlocking armor, flat type.
Temperature Rating	194F / 90C
Voltage Rating	3KV, 6KV
Conductor	Solid drawn bare copper, solid or compacted diameter tolerance ± 1%
Insulation	M-PP (Modified Polypropylene) min thickness 1.9mm (3KV), 2.3mm (6KV)
Jacket	NBR (Nitrile Butadiene Rubber) min thickness 1.3mm
Armor	Fully galvanized steel, interlocking Stainless steel, Monel optional

3KV EP200F SPECIFICATION

Conductor Gauge AWG*	Nominal Conductor Dimension		Nominal Cable Dimension		Nominal Cable Weight		Insulation Resistance	Leakage Current	DC Voltage Test 5min
	in	mm	in	mm	lbs/1000F	kg/km	MΩ · km	μAkmkV	kv
5	0.18	4.62	0.5x1.4	12x35	866	1289	4500	0.278	27
4	0.2	5.19	0.5x1.5	13x37	978	1456	3380	0.295	27
2	0.26	6.54	0.6x1.6	15x41	1279	1904	2530	0.394	27
1	0.29	7.35	0.6x1.7	16x44	1484	2209	2300	0.427	27

6KV EP200F SPECIFICATION

Conductor Gauge AWG*	Nominal Conductor Diameter		Nominal Cable Dimension		Nominal Cable Weight		Insulation Resistance	Leakage Current	DC Voltage Test 5min
	in	mm	in	mm	lbs/1000F	kg/km	MΩ · km	μAkmkV	kv
5	0.18	4.62	0.6x1.5	14x38	923	1373	5400	0.246	35
4	0.2	5.19	0.6x1.6	15x40	1037	1543	3869	0.262	35
2	0.26	6.54	0.6x1.7	16x43	1341	1995	2922	0.328	35
1	0.29	7.35	0.7x1.8	17x46	1548	2303	2658	0.361	35

ADDITIONAL INFO

Standards and Approvals	• IEEE 1018 • API RP 11S 5 • API RP 11S 6
Packaging	Steel corrugated reels with fixed base Protective outside wrapping
Options	Armor - Galvanized steel / Stainless steel / Monel Conductor - Solid Copper / Tin plating
Customization	Capillary Tube Control Wires Marking Tape



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