



Industrial heating & heat-tracing cables

Parallel Constant-Wattage Heating Cable

230 / 400 Vac zone-parallel NiCr resistance trace heating cable, 10–60 W/m

RDP / HDP Zone-Parallel

230 V & 400 V · 10–60 W/m

Maintain +205 °C · Exp +250 °C

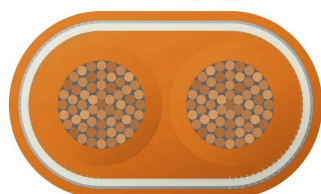
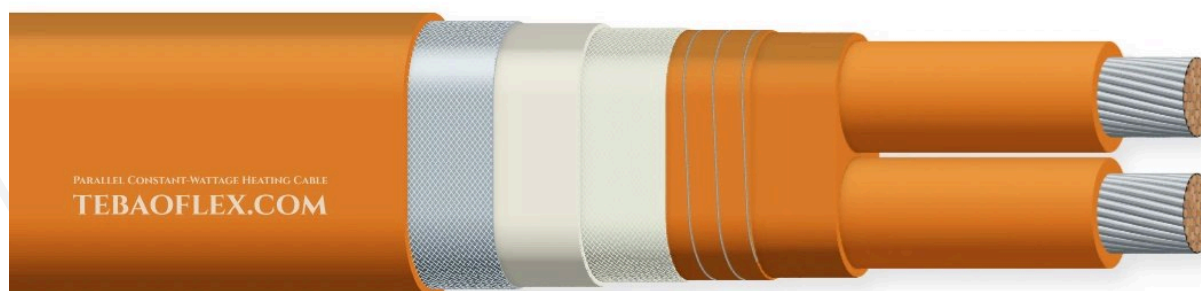


Application

Industrial zone-parallel constant-wattage heating cable (RDP / HDP) to IEC/IEEE 60079-30-1, IEC 62395-1 and IEEE 515, with a NiCr 80/20 heating coil wound over 2.5–3.3 mm² fluoropolymer-insulated bus wires for +150 to +205 °C maintain.

Typical uses: Refinery heavy-oil, bitumen & sulphur transfer piping, Chemical & polymer reactor feed lines up to +205 °C, Steam-purged process headers & instrumentation impulse tubes, Tank-farm manifold & loading-arm freeze/viscosity tracing, Power plant flue-gas desulphurisation & ash-hopper heating, Offshore topside process modules & FPSO decks

Construction



Cross-section, not to scale

1	Parallel tinned / nickel-plated copper bus wires	IEC 60228 / ASTM B33 / B355
2	Primary bus-wire insulation with zone notches	IEC 60079-30-1
3	Spirally wound NiCr 80/20 resistance heating wire	IEC 60079-30-1 / IEEE 515
4	Inner fluoropolymer dielectric jacket	IEC 60079-30-1
5	Tinned-copper protective earthing braid	IEC 60079-30-1 Clause 4.4
6	Fluoropolymer (PFA / FEP) outer sheath	IEC 60079-30-1 / IEEE 515

Technical data

Typical values

Rated supply voltage	230 Vac single-phase & 400 Vac phase-to-phase	Linear power output	10, 15, 20, 30, 40, 50 & 60 W/m (constant)
Cold-start inrush	Zero inrush current rise (1.0 × steady state)	Dielectric withstand	2.5 kV AC for 1 min (bus to metallic braid)
Max. maintain temp.	RDP (FEP): +150 °C · HDP (PFA): +205 °C	Max. exposure temp.	RDP: +200 °C · HDP: +250 °C (power off)
Min. installation T	−60 °C (fluoropolymer FEP / PFA construction)	Temperature class	T4 (+135 °C), T3 (+200 °C) or T2 (+300 °C)
Bus wire cross-section	2 × 2.5 mm ² (RDP) or 2 × 3.3 mm ² / 12 AWG	Heating zone length	0.5 m to 1.5 m between bus contact nodes
Min. bending radius	30 mm (avoid bending on contact nodes)	Overlap rule	Do not overlap; maintain ≥ 25 mm clearance
Flame retardance	IEC 60332-1-2 & UL VW-1 flame retardant	Chemical resistance	Inert to strong acids, alkalis, oils & steam
Water & ingress	Non-hygroscopic PFA/FEP wall; IP66/IP67 kits	UV & weathering	Permanent UV & ozone immunity (FEP / PFA)
Standards	IEC/IEEE 60079-30-1, IEC 62395-1 & IEEE 515		

Sizes

14 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Model designation	Rated Vac	Output W/m	Bus wire mm ²	Zone length m	Max circuit m	Max maintain °C	Max exposure °C	Width × Thick. mm	Mass ≈ kg/km
☐ 10RDP2-FEP · 230 V	230 Vac	10	2.5	1.00	220	150	200	9.6 × 6.4	145
☐ 15RDP2-FEP · 230 V	230 Vac	15	2.5	1.00	180	150	200	9.6 × 6.4	146
☐ 20RDP2-FEP · 230 V	230 Vac	20	2.5	1.00	155	150	200	9.6 × 6.4	148
☐ 30RDP2-FEP · 230 V	230 Vac	30	2.5	1.00	125	150	200	9.8 × 6.6	152
☐ 40RDP2-FEP · 230 V	230 Vac	40	2.5	0.75	108	150	200	9.8 × 6.6	155
☐ 50RDP2-FEP · 230 V	230 Vac	50	2.5	0.75	95	150	200	10.0 × 6.8	158
☐ 10HDP2-PFA · 230 V	230 Vac	10	3.3	1.20	255	205	250	10.4 × 7.0	172
☐ 20HDP2-PFA · 230 V	230 Vac	20	3.3	1.00	180	205	250	10.4 × 7.0	175
☐ 30HDP2-PFA · 230 V	230 Vac	30	3.3	1.00	145	205	250	10.6 × 7.2	178
☐ 40HDP2-PFA · 230 V	230 Vac	40	3.3	0.75	125	205	250	10.6 × 7.2	182
☐ 50HDP2-PFA · 230 V	230 Vac	50	3.3	0.75	110	205	250	10.8 × 7.4	186
☐ 60HDP2-PFA · 230 V	230 Vac	60	3.3	0.50	95	205	250	10.8 × 7.4	190
☐ 30HDP4-PFA · 400 V	400 Vac	30	3.3	1.50	250	205	250	10.6 × 7.2	180
☐ 50HDP4-PFA · 400 V	400 Vac	50	3.3	1.20	190	205	250	10.8 × 7.4	188

– Cut only midway between contact node indentations; up to one trailing dead zone (0.5–1.5 m) at the end termination remains unheated.

Maximum pipe maintenance temperature vs linear output (HDP PFA series)

6 sizes

Model designation	Linear power W/m	Max pipe T for T4 (+135 °C class)	Max pipe T for T3 (+200 °C class)	Max pipe T for T2 (+300 °C class)	Power-off exposure °C
10HDP2-PFA	10	+115 °C	+180 °C	+205 °C	250
20HDP2-PFA	20	+95 °C	+165 °C	+205 °C	250
30HDP2-PFA	30	+75 °C	+145 °C	+195 °C	250
40HDP2-PFA	40	+55 °C	+125 °C	+180 °C	250
50HDP2-PFA	50	— (Use T3/T2)	+105 °C	+165 °C	250
60HDP2-PFA	60	— (Use T3/T2)	+85 °C	+150 °C	250

- Constant-wattage trace heaters require active pipe temperature sensing and high-limit cut-off per IEC/IEEE 60079-30-2 to maintain T-class compliance.

Standards and approvals

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/parallel-constant-wattage-heating-cable



Typical values for this cable type, based on IEC/IEEE 60079-30-1 & IEEE 515. Values for your order are confirmed in the quotation. Subject to change without notice.
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