



EN 50525-2-81 & Low-Reactance Resistance Welding Cables

H01N2-D

Welding Cable

100/100 V EN 50525-2-81 Class D (0.20 mm wires) EM5 polychloroprene arc-welding electrode



100/100 V EN 50525-2-81

Class D Conductor (0.20 mm Ø)

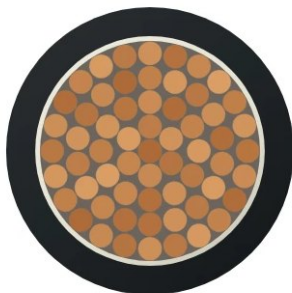
EM5 Polychloroprene Rubber

Application

H01N2-D is the harmonized European normal-flexibility arc-welding electrode and earth return cable per BS EN 50525-2-81 (formerly HD 22.6 S2) and IEC 60245-6. Built with an EN 60228 Class D rope-stranded bare copper conductor (max. 0.20 mm individual wire diam)

Typical uses: Shipbuilding & offshore yards, Structural steel fabrication, Manual MMA / MIG / TIG welding, Mobile generator & battery leads, Automotive body-in-white repair

Construction



Cross-section, not to scale

1	Class D flexible bare copper (EN 60228)	EN 60228
2	Polyester / paper separator tape	EN 50525-2-81
3	Type EM5 polychloroprene covering (N2)	EN 50363-2-2

Technical data

Typical values

Rated voltage (U0/U)	100 / 100 V AC (up to 150 V DC open-circuit welding voltage)	AC test voltage	1.0 kV rms for 15 minutes in water
Welding duty-cycle multipliers	Rated at 100 %, 85 %, 60 % and 35 % (5-minute base cycle)	Max. conductor operating temperature	+85 °C continuous · +250 °C short-circuit
Ambient operating temperature	-20 °C to +60 °C (flexing) · -40 °C to +80 °C (fixed)	Max. elementary wire diameter	0.20 mm (Class D normal flexibility per EN 60228)
Minimum bending radius	4 × D (10–25 mm ²) · 5 × D (35–95 mm ²) · 6 × D (≥120 mm ²)	Covering tensile strength & elongation	≥10.0 N/mm ² tensile · ≥300 % elongation at break (EM5)
Hot particle / weld spatter test	Passes hot-mandrel penetration and spatter resistance per EN 50525-2-81	Oil & chemical resistance	IRM 902 mineral oil immersion (+100 °C, 24 h) per EN 60811-404
Flame retardancy	Self-extinguishing per IEC 60332-1-2	Standards	BS EN 50525-2-81, HD 22.6, VDE 0285-525-2-81 & IEC 60245-6

Sizes

12 standard constructions

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

Designation	Cross-Section	Duty 60% / 100% A	Nom. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
H01N2-D size schedule 12 sizes						
☐ H01N2-D 1×10	1 × 10 mm ²	105 A / 95 A	8.00	96.0	125.0	40.0
☐ H01N2-D 1×16	1 × 16 mm ²	150 A / 135 A	9.00	153.6	185.0	45.0
☐ H01N2-D 1×25	1 × 25 mm ²	205 A / 180 A	10.20	240.0	275.0	51.0
☐ H01N2-D 1×35	1 × 35 mm ²	255 A / 225 A	11.40	336.0	375.0	57.0
☐ H01N2-D 1×50	1 × 50 mm ²	320 A / 285 A	13.20	480.0	530.0	66.0
☐ H01N2-D 1×70	1 × 70 mm ²	405 A / 355 A	15.00	672.0	725.0	75.0
☐ H01N2-D 1×95	1 × 95 mm ²	490 A / 430 A	17.10	912.0	975.0	85.5
☐ H01N2-D 1×120	1 × 120 mm ²	570 A / 500 A	19.00	1,152.0	1,220.0	95.0
☐ H01N2-D 1×150	1 × 150 mm ²	660 A / 580 A	21.00	1,440.0	1,520.0	105.0
☐ H01N2-D 1×185	1 × 185 mm ²	750 A / 660 A	23.00	1,776.0	1,860.0	115.0
☐ H01N2-D 1×240	1 × 240 mm ²	880 A / 775 A	25.80	2,304.0	2,410.0	129.0
☐ H01N2-D 1×300	1 × 300 mm ²	1020 A / 900 A	28.50	2,880.0	3,010.0	142.5

– Dimensions and tolerances conform to EN 50525-2-81 / HD 22.6 / IEC 60245-6.

Electrical data

12 sizes

Cross-Section	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
1 × 10 mm ²	1.910	95	76
1 × 16 mm ²	1.210	135	108
1 × 25 mm ²	0.780	180	144
1 × 35 mm ²	0.554	225	180
1 × 50 mm ²	0.386	285	228
1 × 70 mm ²	0.272	355	284
1 × 95 mm ²	0.206	430	344
1 × 120 mm ²	0.161	500	400
1 × 150 mm ²	0.129	580	464
1 × 185 mm ²	0.106	660	528
1 × 240 mm ²	0.080	775	620
1 × 300 mm ²	0.064	900	720

– Reference ampacities at +30 °C ambient; apply duty-cycle or grouping correction factors per standard.

Standards and approvals

- ✓ BS EN 50525-2-81 (HAR)
- ✓ VDE 0285-525-2-81
- ✓ IEC 60245-6
- ✓ CE / Low Voltage Directive
- ✓ RoHS 3 & REACH Compliant

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/h01n2-d-welding-cable



Typical values for this cable type, based on EN 50525-2-81 / HD 22.6 / IEC 60245-6. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.