

TOP CABLE TOPWELD<sup>®</sup> H01N2-D

## APPLICATION

Topweld<sup>®</sup> H01N2-D is a harmonized, flexible, rubber welding cable specially designed for transmitting high currents between the welding generator and the electrode.

Its flexibility makes using the welding tool easier and it also prevents knots from forming in the cable that could cause the internal conductor to break.

It can also be used in automatic welding and machine tools, conveyor systems and production or assembly lines, for example in automobile assembly lines.

- Welding.
- Industrial use.
- Mobile use.
- Robotics.
- Conveyors.

## CONSTRUCTION

### Conductor

Electrolytic annealed copper, class D (extra-flexible) according to EN 50525-2-81.

### Insulation

Flexible rubber, type EM5, according to EN 50363-2-2.  
Black colour.

## CHARACTERISTICS



### Electrical performance

Low voltage: 100/100 V.



### Thermal performance

Maximum conductor temperature: 85°C.

Maximum short-circuit temperature: 250°C (max. 5 s).

Minimum service temperature: -20°C (mobile use).



### Fire performance

Flame non-propagation according to EN 60332-1 / IEC 60332-1.



### Mechanical performance

Minimum bending radius: 5x cable diameter.

Impact resistance: AG2 Medium severity.



### Environmental performance

Chemical & Oil resistance: Excellent.

Grease & mineral oils resistance: Excellent.



### Installation conditions

Open Air.



### Other

Meter by meter marking.

## STANDARDS / COMPLIANCE



### According to

EN 50525-2-81



### Standards and approvals

HAR / AENOR / RoHS / CE



### DIMENSIONS & ADMISSIBLE INTENSITIES



| Cross-section<br>(mm <sup>2</sup> ) | Diameter<br>(mm) | Weight<br>(kg) | Current rating (A) for single cycle for 5 min. |     |       |       | Voltage drop<br>(V/100A · 10m) <sup>1</sup> |
|-------------------------------------|------------------|----------------|------------------------------------------------|-----|-------|-------|---------------------------------------------|
|                                     |                  |                | 100%                                           | 85% | 60%   | 35%   |                                             |
| 1 x 10                              | 8,0              | 140            | 100                                            | 103 | 108   | 122   | 2,450                                       |
| 1 x 16                              | 9,1              | 195            | 135                                            | 145 | 175   | 230   | 1,560                                       |
| 1 x 25                              | 10,3             | 280            | 180                                            | 195 | 230   | 300   | 0,998                                       |
| 1 x 35                              | 11,4             | 375            | 245                                            | 245 | 290   | 375   | 0,709                                       |
| 1 x 50                              | 13,4             | 520            | 285                                            | 305 | 365   | 480   | 0,493                                       |
| 1 x 70                              | 15,5             | 725            | 355                                            | 380 | 460   | 600   | 0,348                                       |
| 1 x 95                              | 17,4             | 945            | 430                                            | 470 | 560   | 730   | 0,264                                       |
| 1 x 120                             | 19,3             | 1.195          | 500                                            | 540 | 650   | 850   | 0,206                                       |
| 1 x 150                             | 21,4             | 1.475          | 580                                            | 630 | 750   | 980   | 0,166                                       |
| 1 x 185                             | 23,3             | 1.780          | 665                                            | 720 | 860   | 1.120 | 0,136                                       |
| 1 x 240                             | 26,4             | 2.300          | 780                                            | 845 | 1.005 | 1.320 | 0,101                                       |

Current-carrying capacities, in amperes, are calculated according to HD 516 and it is supposed an ambient temperature of 25 °C and single on-load period not exceeding 5 minutes. The on-load time period is expressed as a percentage of five minutes.

<sup>1</sup> For 10 metres of cable carrying 100 A. At 85°C conductor temperature and for direct current.

### CORRECTION FACTORS TEMPERATURE

| Air T. (°C) | 20   | 25 | 30   | 35   | 40   | 45   | 50   |
|-------------|------|----|------|------|------|------|------|
| Factor      | 1,04 | 1  | 0,96 | 0,91 | 0,87 | 0,82 | 0,76 |