



# Traction cable

## RADOX TENUIS-TW 600V MM

### Product description:

RADOX TENUIS- TW 600V MM

Nominal voltage:

Multicore cables, unscreened

600 / 1000 V AC

Hazard level:

M (extra low temperature, extra oil and extra fuel resistant)

### General features:

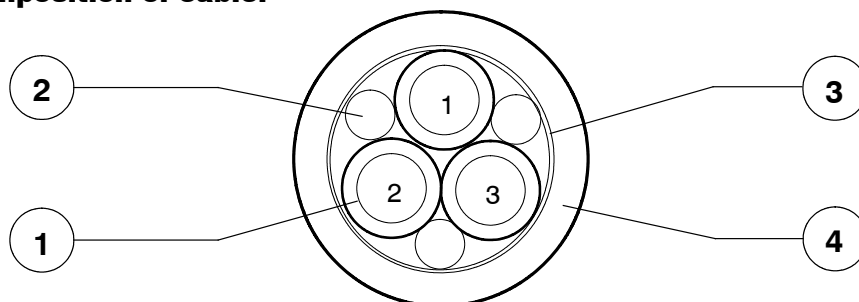
Halogen free, electron- beam cross- linked cables with improved behaviour in case of fire, easy to strip, soldering iron resistant and flexible.

### Application:

The cables are intended for permanent installation in rail vehicles or for applications in which a limited alternating bending stress occur during service.

Guidelines for selection and installation are described in the standards EN 50355 and EN 50343.

### General composition of cable:



1. Twisted cores  
RADOX TENUIS- TW 600V

Conductor: stranded tin plated copper, acc. to EN 50306- 2

Insulation: RADOX EI 303

Colours: white, black numbered  
other colours on request

2. Filler (optional)
3. Separator (optional)
4. Sheath

RADOX 125 REC

Tape

RADOX EM 104, acc. to EN 50264- 1

Colour: black, yellow marked

### Marking:

[a] HUBER+SUHNER RADOX TENUIS- TW 600V [b] MM [c]- [d] [e] [f]

|                                      |            |
|--------------------------------------|------------|
|                                      | example:   |
| [a] Meter marking (in m)             | = 1234 = m |
| [b] Construction                     | 3X1.5      |
| [c] Part number                      | 12345678   |
| [d] Batch number                     | 1234567    |
| [e] Production week and year         | 03- 2017   |
| [f] Production place (only if China) | CN         |

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The product fulfils the test and specification requirements described in this document for the stated areas of application and operating conditions. HUBER+SUHNER AG does not expressly or implicitly guarantee performance under additional or changed conditions. Deviations are to be agreed upon in writing.

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### Technical Data :

|                                                    |                   |      |            |
|----------------------------------------------------|-------------------|------|------------|
| Voltage rating cond.- earth                        | ..... $U_0$ ..... | 600  | ..... V AC |
| Voltage rating cond.- cond.                        | ..... $U$ .....   | 1000 | ..... V AC |
| maximum permissible Voltage rating AC cond.- earth | .....             | 720  | ..... V AC |
| maximum permissible Voltage rating AC cond.- cond. | ..... $U_m$ ..... | 1200 | ..... V AC |
| maximum permissible Voltage rating DC cond.- earth | ..... $V_0$ ..... | 900  | ..... V DC |
| maximum permissible Voltage rating DC cond.- cond. | .....             | 1500 | ..... V DC |
| Test voltage                                       | .....             | 3500 | ..... V AC |

### Temperature range

fixed installation ..... - 50 ... + 120 ..... °C

### Min. bending radius

|                    |                                   |             |
|--------------------|-----------------------------------|-------------|
| fixed installation | ..... cable diameter $\leq$ 12 mm | ..... 3 x D |
|                    | ..... cable diameter $>$ 12 mm    | ..... 4 x D |
| sporadic movement  | ..... cable diameter $\leq$ 12 mm | ..... 4 x D |
|                    | ..... cable diameter $>$ 12 mm    | ..... 5 x D |



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## RADOX TENUIS-TW 600V MM

### The cables are in conformity with:

|                                                                 |                                                                               |                                   |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------|
| <b>Fire protection on railway vehicles, category</b>            | <b>Ia, Ib, II</b>                                                             | <b>BS 6853, GM/RT 2130</b>        |
| Vertical flame spread                                           | $50 < L \leq 540 \text{ mm}$                                                  | EN 60332- 1- 2                    |
| Vertical flame spread, bunched                                  | $L \leq 2.5 \text{ m}$                                                        | EN 50266, BS 6853 An. D.8.7       |
| Smoke density                                                   | $A_0 \leq \text{BS 6853}$                                                     | BS 6853 An. D.8.7                 |
| Toxicity                                                        | $R \leq 1.0$                                                                  | BS 6853 An. B.1                   |
| <b>Fire protection on railway vehicles, hazard level</b>        | <b>HL1 - HL3</b>                                                              | <b>EN 45545</b>                   |
| Vertical flame spread                                           | $50 < L \leq 540 \text{ mm}$                                                  | EN 60332- 1- 2                    |
| Vertical flame spread, bunched, $D \leq 6 \text{ mm}$           | $L \leq 1.5 \text{ m}$                                                        | EN 50305, 9.1.2                   |
| Vertical flame spread, bunched, $6 < D < 12 \text{ mm}$         | $L \leq 2.5 \text{ m}$                                                        | EN 50305, 9.1.1 (EN 60332- 3- 25) |
| Vertical flame spread, bunched, $D \geq 12 \text{ mm}$          | $L \leq 2.5 \text{ m}$                                                        | EN 60332- 3- 24                   |
| Smoke density                                                   | $T \geq 70 \%$                                                                | EN 61034- 2                       |
| Toxicity                                                        | $\text{ITC} \leq 6$                                                           | EN 50305, 9.2                     |
| <b>Fire protection on railway vehicles, level of protection</b> | <b>1 - 4</b>                                                                  | <b>DIN 5510</b>                   |
| Vertical flame spread                                           | $50 < L \leq 540 \text{ mm}$                                                  | EN 60332- 1- 2                    |
| Vertical flame spread, bunched, $D \leq 6 \text{ mm}$           | $L \leq 1.5 \text{ m}$                                                        | EN 50305, 9.1.2                   |
| Vertical flame spread, bunched, $6 < D < 12 \text{ mm}$         | $L \leq 2.5 \text{ m}$                                                        | EN 60332- 3- 25                   |
| Vertical flame spread, bunched, $D \geq 12 \text{ mm}$          | $L \leq 2.5 \text{ m}$                                                        | EN 60332- 3- 24                   |
| Smoke density                                                   | $T \geq 60 \%$                                                                | EN 61034- 2                       |
| Corrosivity of combustion gases                                 | $\text{pH} \geq 4.3, C \leq 10 \mu\text{S/mm}$                                | EN 50267- 2- 2                    |
| Amount of halogen acid gas                                      | $\text{HCl} + \text{HBr} \leq 0.5 \%$                                         | EN 50267- 2- 1                    |
| Content of fluorine                                             | $\text{HF} \leq 0.1 \%$                                                       | EN 60684- 2, 45.2                 |
| Toxicity, insulation                                            | $\text{ITC} \leq 6$                                                           | EN 50305, 9.2                     |
| Toxicity, filler and sheath                                     | $\text{ITC} \leq 3$                                                           | EN 50305, 9.2                     |
| <b>Fire protection on railway vehicles, category</b>            | <b>A1, A2, B</b>                                                              | <b>NF F16- 101</b>                |
| Fire protection on railway vehicles, class                      | C / F1                                                                        | NF F16- 101                       |
| Vertical flame spread                                           | $50 < L \leq 540 \text{ mm}$                                                  | NF C32- 070, 2.1                  |
| Vertical flame spread, bunched                                  | $L \leq 300 \text{ mm}$                                                       | NF C32- 070, 2.2                  |
| Smoke index                                                     | $\text{I.F.} \leq 5$                                                          | X10- 702- 2, NF X70- 100- 1       |
| <b>Fire protection on railway vehicles</b>                      | <b>Fulfilled</b>                                                              | <b>NFPA 130</b>                   |
| Vertical flame spread, bunched                                  | $L \leq 1.5 \text{ m}$                                                        | UL 1685, 12 (FT4 exp.)            |
| Smoke density                                                   | $\text{TSR} \leq 150 \text{ m}^2, \text{PSRR} \leq 0.40 \text{ m}^2/\text{s}$ | UL 1685, 12 (FT4 exp.)            |
| <b>Fire protection on railway vehicles, hazard level</b>        | <b>LR1 - LR4</b>                                                              | <b>UNI CEI 11170</b>              |
| Vertical flame spread                                           | $50 < L \leq 540 \text{ mm}$                                                  | EN 60332- 1- 2                    |
| Vertical flame spread, bunched, $D \leq 6 \text{ mm}$           | $L \leq 1.5 \text{ m}$                                                        | EN 50305, 9.1.2                   |
| Vertical flame spread, bunched, $6 < D < 12 \text{ mm}$         | $L \leq 2.5 \text{ m}$                                                        | EN 60332- 3- 25                   |
| Vertical flame spread, bunched, $D \geq 12 \text{ mm}$          | $L \leq 2.5 \text{ m}$                                                        | EN 60332- 3- 24                   |
| Smoke density                                                   | $T \geq 70 \%$                                                                | EN 61034- 2                       |
| Corrosivity of combustion gases                                 | $\text{pH} \geq 4.3, C \leq 10 \mu\text{S/mm}$                                | EN 50267- 2- 2                    |
| Amount of halogen acid gas                                      | $\text{HCl} + \text{HBr} \leq 0.5 \%$                                         | EN 50267- 2- 1                    |
| Toxicity, insulation                                            | $\text{ITC} \leq 6$                                                           | EN 50305, 9.2                     |
| Toxicity, filler and sheath                                     | $\text{ITC} \leq 3$                                                           | EN 50305, 9.2                     |
| <b>Fire protection on railway vehicles</b>                      | <b>Fulfilled</b>                                                              | <b>NFPA 130</b>                   |
| Vertical flame spread, bunched                                  | $L \leq 1.5 \text{ m}$                                                        | UL 1685, 12 (FT4 exp.)            |
| Smoke density                                                   | $\text{TSR} \leq 150 \text{ m}^2, \text{PSRR} \leq 0.40 \text{ m}^2/\text{s}$ | UL 1685, 12 (FT4 exp.)            |

### Requirement of hazard level code M

(according to EN 50264- 1 or EN 50306- 1)

|                       |                     |
|-----------------------|---------------------|
| Extra low temperature | - 40°C              |
| Extra oil resistance  | IRM 902, 72h, 100°C |
| Extra fuel resistance | IRM 903, 168h, 70°C |

### Applicable documents:

581998 current rating for multi core cables



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| Construction <sup>1)</sup><br>n x mm <sup>2</sup> | Conductor<br>Dia. <sub>nom.</sub><br>mm | Core <sup>2)</sup><br>Dia. <sub>nom.</sub><br>mm | Cable<br>Dia.<br>mm | R <sub>20</sub> <sup>3)</sup><br>max.<br>Ω/km | Fireload<br>nom.<br>kJ/m | Weight <sub>nom.</sub><br>Copper Cable<br>kg / 100m |      | H+S<br>Part No. |    |
|---------------------------------------------------|-----------------------------------------|--------------------------------------------------|---------------------|-----------------------------------------------|--------------------------|-----------------------------------------------------|------|-----------------|----|
| 4x0.25                                            | 0.6                                     | 1.17                                             | 4.5 ± 0.3           | 88.5                                          | 322                      | 0.9                                                 | 3.0  | 85 064 923      |    |
| 4x0.25                                            | 0.6                                     | 1.17                                             | 4.95 ± 0.15         | 88.5                                          | 385                      | 0.9                                                 | 3.6  | 85 024 776      | 4) |
|                                                   |                                         |                                                  |                     |                                               |                          |                                                     |      |                 |    |
| 2x0.34                                            | 0.75                                    | 1.3                                              | 3.95 ± 0.3          | 54.7                                          | 236                      | 0.7                                                 | 2.4  | 85 027 193      |    |
| 16x0.34 +<br>3x1                                  | 0.75<br>1.2                             | 1.3<br>1.77                                      | 8.95 ± 0.3          | 54.7<br>20.0                                  | 1080                     | 8.3                                                 | 15.1 | 85 111 512      |    |
|                                                   |                                         |                                                  |                     |                                               |                          |                                                     |      |                 |    |
| 2x0.5                                             | 0.9                                     | 1.42                                             | 4.4 ± 0.2           | 40.1                                          | 290                      | 0.9                                                 | 3.1  | 12 568 036      |    |
| 3x0.5                                             | 0.9                                     | 1.42                                             | 4.6 ± 0.2           | 40.1                                          | 315                      | 1.4                                                 | 3.6  | 12 568 037      |    |
| 4x0.5                                             | 0.9                                     | 1.42                                             | 5.0 ± 0.2           | 40.1                                          | 365                      | 1.8                                                 | 4.4  | 12 568 038      |    |
| 5x0.5                                             | 0.9                                     | 1.42                                             | 5.5 ± 0.2           | 40.1                                          | 473                      | 2.3                                                 | 5.4  | 12 566 304      |    |
| 6x0.5                                             | 0.9                                     | 1.42                                             | 6.0 ± 0.2           | 40.1                                          | 569                      | 2.7                                                 | 6.4  | 12 568 039      |    |
| 9x0.5                                             | 0.9                                     | 1.42                                             | 7.3 ± 0.3           | 40.1                                          | 792                      | 4.1                                                 | 9.1  | 12 583 000      |    |
| 10x0.5                                            | 0.9                                     | 1.42                                             | 7.3 ± 0.3           | 40.1                                          | 760                      | 4.6                                                 | 9.6  | 85 073 536      |    |
| 12x0.5                                            | 0.9                                     | 1.42                                             | 7.6 ± 0.3           | 40.1                                          | 862                      | 5.5                                                 | 10.7 | 12 585 961      |    |
| 15x0.5                                            | 0.9                                     | 1.42                                             | 8.6 ± 0.3           | 40.1                                          | 1102                     | 6.9                                                 | 13.5 | 12 583 667      |    |
| 16x0.5                                            | 0.9                                     | 1.42                                             | 8.6 ± 0.3           | 40.1                                          | 1102                     | 7.3                                                 | 13.9 | 84 096 896      |    |
| 25x0.5                                            | 0.9                                     | 1.42                                             | 10.5 ± 0.4          | 40.1                                          | 1623                     | 11.5                                                | 20.9 | 12 583 001      |    |
| 2x2x0.5                                           | 0.9                                     | 1.42                                             | 6.8 ± 0.3           | 40.1                                          | 630                      | 1.8                                                 | 6.4  | 12 568 040      |    |
| 4x2x0.5                                           | 0.9                                     | 1.42                                             | 8.5 ± 0.3           | 40.1                                          | 966                      | 3.6                                                 | 10.3 | 12 568 041      |    |
| 6x2x0.5                                           | 0.9                                     | 1.42                                             | 10.2 ± 0.4          | 40.1                                          | 1451                     | 5.5                                                 | 14.9 | 84 097 766      |    |
|                                                   |                                         |                                                  |                     |                                               |                          |                                                     |      |                 |    |
| 2x0.75                                            | 1.1                                     | 1.62                                             | 4.75 ± 0.3          | 26.7                                          | 330                      | 1.4                                                 | 3.8  | 12 568 047      |    |
| 3x0.75                                            | 1.1                                     | 1.62                                             | 5.15 ± 0.3          | 26.7                                          | 380                      | 2.1                                                 | 4.8  | 12 568 048      |    |
| 3G0.75                                            | 1.1                                     | 1.62                                             | 5.15 ± 0.3          | 26.7                                          | 380                      | 2.1                                                 | 4.8  | 12 583 990      |    |
| 4x0.75                                            | 1.1                                     | 1.62                                             | 5.6 ± 0.3           | 26.7                                          | 468                      | 2.8                                                 | 5.9  | 12 568 049      |    |
| 4G0.75                                            | 1.1                                     | 1.62                                             | 5.6 ± 0.3           | 26.7                                          | 468                      | 2.8                                                 | 5.9  | 12 583 992      |    |
| 6x0.75                                            | 1.1                                     | 1.62                                             | 6.75 ± 0.3          | 26.7                                          | 707                      | 4.2                                                 | 8.7  | 12 568 050      |    |
| 8x0.75                                            | 1.1                                     | 1.62                                             | 7.8 ± 0.3           | 26.7                                          | 978                      | 5.6                                                 | 11.5 | 12 584 272      |    |
| 10x0.75                                           | 1.1                                     | 1.62                                             | 8.1 ± 0.3           | 26.7                                          | 935                      | 7.0                                                 | 12.8 | 12 585 274      |    |
| 12x0.75                                           | 1.1                                     | 1.62                                             | 8.4 ± 0.3           | 26.7                                          | 1006                     | 8.4                                                 | 14.5 | 84 111 116      |    |



# Traction cable

## RADOX TENUIS-TW 600V MM

| Construction<br>1)<br>n x mm <sup>2</sup> | Conductor<br>Dia.nom.<br>mm | Core 2)<br>Dia.-nom.<br>mm | Cable<br>Dia.<br>mm | R <sub>20</sub> 3)<br>max.<br>Ω/km | Fireload<br>nom.<br>kJ/m | Weight nom.<br>Copper Cable<br>kg / 100m |      | H+S<br>Part No. |  |
|-------------------------------------------|-----------------------------|----------------------------|---------------------|------------------------------------|--------------------------|------------------------------------------|------|-----------------|--|
| 4x2x0.75                                  | 1.1                         | 1.62                       | 9.5 ± 0.3           | 26.7                               | 1200                     | 5.6                                      | 13.9 | 84 097 783      |  |
| 36x0.75                                   | 1.1                         | 1.62                       | 14.1 ± 0.4          | 26.7                               | 2600                     | 25.5                                     | 41.6 | 85 070 303      |  |
|                                           |                             |                            |                     |                                    |                          |                                          |      |                 |  |
| 2x1                                       | 1.2                         | 1.77                       | 5.1 ± 0.2           | 20.0                               | 370                      | 1.8                                      | 4.5  | 12 568 052      |  |
| 3x1                                       | 1.2                         | 1.77                       | 5.4 ± 0.2           | 20.0                               | 434                      | 2.7                                      | 5.6  | 12 568 053      |  |
| 3G1                                       | 1.2                         | 1.77                       | 5.4 ± 0.2           | 20.0                               | 434                      | 2.7                                      | 5.6  | 85 093 498      |  |
| 4x1                                       | 1.2                         | 1.77                       | 5.8 ± 0.2           | 20.0                               | 445                      | 3.6                                      | 6.7  | 12 568 054      |  |
| 4G1                                       | 1.2                         | 1.77                       | 5.8 ± 0.2           | 20.0                               | 445                      | 3.6                                      | 6.7  | 85 106 526      |  |
| 5x1                                       | 1.2                         | 1.77                       | 6.65 ± 0.3          | 20.0                               | 580                      | 4.5                                      | 8.7  | 85 072 779      |  |
| 5G1                                       | 1.2                         | 1.77                       | 6.65 ± 0.3          | 20.0                               | 580                      | 4.5                                      | 8.7  | 85 103 631      |  |
| 6x1                                       | 1.2                         | 1.77                       | 7.3 ± 0.3           | 20.0                               | 814                      | 5.4                                      | 10.5 | 12 568 055      |  |
| 7x1                                       | 1.2                         | 1.77                       | 8.0 ± 0.3           | 20.0                               | 994                      | 6.3                                      | 12.4 | 12 585 459      |  |
| 8x1                                       | 1.2                         | 1.77                       | 8.3 ± 0.3           | 20.0                               | 1093                     | 7.2                                      | 13.8 | 84 121 018      |  |
| 9G1                                       | 1.2                         | 1.77                       | 8.65 ± 0.3          | 20.0                               | 1101                     | 8.1                                      | 15.0 | 85 110 070      |  |
| 10x1                                      | 1.2                         | 1.77                       | 8.7 ± 0.3           | 20.0                               | 1055                     | 9.0                                      | 15.5 | 12 581 348      |  |
| 12x1                                      | 1.2                         | 1.77                       | 9.1 ± 0.3           | 20.0                               | 1151                     | 10.8                                     | 17.7 | 12 584 271      |  |
| 16x1                                      | 1.2                         | 1.77                       | 10.4 ± 0.4          | 20.0                               | 1524                     | 14.4                                     | 23.5 | 12 584 654      |  |
| 19x1                                      | 1.2                         | 1.77                       | 11.6 ± 0.4          | 20.0                               | 1925                     | 17.2                                     | 28.4 | 12 585 980      |  |
| 25x1                                      | 1.2                         | 1.77                       | 12.8 ± 0.4          | 20.0                               | 2234                     | 22.6                                     | 35.6 | 12 581 349      |  |
| 37x1                                      | 1.2                         | 1.77                       | 15.7 ± 0.5          | 20.0                               | 3000                     | 33.5                                     | 52.5 | 85 095 097      |  |
| 2x2x1                                     | 1.2                         | 1.77                       | 8.0 ± 0.3           | 20.0                               | 886                      | 3.6                                      | 9.6  | 12 583 421      |  |
|                                           |                             |                            |                     |                                    |                          |                                          |      |                 |  |
| 2x1.5                                     | 1.5                         | 2.17                       | 6.0 ± 0.3           | 13.7                               | 520                      | 2.6                                      | 6.4  | 12 568 098      |  |
| 3x1.5                                     | 1.5                         | 2.17                       | 6.3 ± 0.3           | 13.7                               | 572                      | 3.9                                      | 7.8  | 12 568 099      |  |
| 3G1.5                                     | 1.5                         | 2.17                       | 6.3 ± 0.3           | 13.7                               | 572                      | 3.9                                      | 7.8  | 12 582 026      |  |
| 4x1.5                                     | 1.5                         | 2.17                       | 6.9 ± 0.3           | 13.7                               | 650                      | 5.2                                      | 9.6  | 12 568 100      |  |
| 4G1.5                                     | 1.5                         | 2.17                       | 6.9 ± 0.3           | 13.7                               | 650                      | 5.2                                      | 9.6  | 12 583 172      |  |
| 5x1.5                                     | 1.5                         | 2.17                       | 7.8 ± 0.3           | 13.7                               | 884                      | 6.6                                      | 12.2 | 12 581 350      |  |
| 5G1.5                                     | 1.5                         | 2.17                       | 7.8 ± 0.3           | 13.7                               | 884                      | 6.6                                      | 12.2 | 12 582 027      |  |
| 6x1.5                                     | 1.5                         | 2.17                       | 8.45 ± 0.3          | 13.7                               | 1058                     | 7.9                                      | 14.4 | 12 582 028      |  |
| 7x1.5                                     | 1.5                         | 2.17                       | 9.1 ± 0.3           | 13.7                               | 1253                     | 9.2                                      | 16.8 | 12 583 724      |  |
| 7G1.5                                     | 1.5                         | 2.17                       | 9.1 ± 0.3           | 13.7                               | 1253                     | 9.2                                      | 16.8 | 12 582 029      |  |



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| Construction<br>1)<br>n x mm <sup>2</sup> | Conductor<br>Dia.nom.<br>mm | Core 2)<br>Dia.nom.<br>mm | Cable<br>Dia.<br>mm | R <sub>20</sub> 3)<br>max.<br>Ω/km | Fireload<br>nom.<br>kJ/m | Weight nom.<br>Copper Cable<br>kg / 100m |       | H+S<br>Part No. |  |
|-------------------------------------------|-----------------------------|---------------------------|---------------------|------------------------------------|--------------------------|------------------------------------------|-------|-----------------|--|
| 8x1.5                                     | 1.5                         | 2.17                      | 10.3 ± 0.4          | 13.7                               | 1639                     | 10.6                                     | 20.5  | 12 582 030      |  |
| 9G1.5                                     | 1.5                         | 2.17                      | 10.6 ± 0.4          | 13.7                               | 1474                     | 11.9                                     | 21.1  | 12 584 489      |  |
| 10x1.5                                    | 1.5                         | 2.17                      | 10.6 ± 0.4          | 13.7                               | 1443                     | 13.2                                     | 22.1  | 12 582 031      |  |
| 12x1.5                                    | 1.5                         | 2.17                      | 11.1 ± 0.4          | 13.7                               | 1639                     | 15.8                                     | 25.8  | 12 583 725      |  |
| 16x1.5                                    | 1.5                         | 2.17                      | 12.6 ± 0.4          | 13.7                               | 2130                     | 21.1                                     | 33.8  | 12 583 726      |  |
| 18x1.5                                    | 1.5                         | 2.17                      | 13.4 ± 0.4          | 13.7                               | 2449                     | 23.8                                     | 38.2  | 85 063 742      |  |
| 25x1.5                                    | 1.5                         | 2.17                      | 15.5 ± 0.5          | 13.7                               | 3059                     | 33.1                                     | 51.0  | 84 103 977      |  |
| 25G1.5                                    | 1.5                         | 2.17                      | 15.5 ± 0.5          | 13.7                               | 3057                     | 33.1                                     | 51.0  | 12 582 033      |  |
| 30x1.5                                    | 1.5                         | 2.17                      | 16.7 ± 0.5          | 13.7                               | 3606                     | 39.7                                     | 60.6  | 12 586 298      |  |
| 50x1.5                                    | 1.5                         | 2.17                      | 21.5 ± 0.5          | 13.7                               | 5894                     | 66.4                                     | 99.8  | 85 063 739      |  |
| 58x1.5                                    | 1.5                         | 2.17                      | 22.6 ± 0.5          | 13.7                               | 6100                     | 76.7                                     | 113.6 | 85 070 511      |  |
|                                           |                             |                           |                     |                                    |                          |                                          |       |                 |  |
| 2x2.5                                     | 1.9                         | 2.75                      | 7.3 ± 0.3           | 8.21                               | 766                      | 4.4                                      | 9.8   | 12 568 101      |  |
| 3x2.5                                     | 1.9                         | 2.75                      | 7.8 ± 0.3           | 8.21                               | 854                      | 6.6                                      | 12.2  | 12 582 034      |  |
| 3G2.5                                     | 1.9                         | 2.75                      | 7.8 ± 0.3           | 8.21                               | 854                      | 6.6                                      | 12.2  | 12 582 035      |  |
| 4x2.5                                     | 1.9                         | 2.75                      | 8.7 ± 0.3           | 8.21                               | 1049                     | 8.8                                      | 15.5  | 12 566 306      |  |
| 4G2.5                                     | 1.9                         | 2.75                      | 8.7 ± 0.3           | 8.21                               | 1051                     | 8.8                                      | 15.6  | 12 583 173      |  |
| 5x2.5                                     | 1.9                         | 2.75                      | 9.4 ± 0.3           | 8.21                               | 1249                     | 11.0                                     | 18.7  | 12 581 346      |  |
| 5G2.5                                     | 1.9                         | 2.75                      | 9.4 ± 0.3           | 8.21                               | 1249                     | 11.0                                     | 18.7  | 12 585 007      |  |
| 6x2.5                                     | 1.9                         | 2.75                      | 10.6 ± 0.4          | 8.21                               | 1628                     | 13.2                                     | 23.2  | 12 581 347      |  |
| 7G2.5                                     | 1.9                         | 2.75                      | 11.5 ± 0.4          | 8.21                               | 1960                     | 15.4                                     | 27.3  | 12 583 995      |  |
| 16x2.5                                    | 1.9                         | 2.75                      | 15.8 ± 0.5          | 8.21                               | 3239                     | 35.3                                     | 54.6  | 85 002 904      |  |
| 18x2.5                                    | 1.9                         | 2.75                      | 16.8 ± 0.5          | 8.21                               | 3712                     | 39.7                                     | 61.6  | 85 063 743      |  |
| 20x2.5                                    | 1.9                         | 2.75                      | 17.6 ± 0.5          | 8.21                               | 4126                     | 44.1                                     | 68.1  | 12 585 070      |  |
| 30x2.5                                    | 1.9                         | 2.75                      | 20.9 ± 0.5          | 8.21                               | 5418                     | 66.2                                     | 97.5  | 12 584 363      |  |
| 36x2.5                                    | 1.9                         | 2.75                      | 22.5 ± 0.5          | 8.21                               | 6408                     | 79.6                                     | 115.8 | 12 584 406      |  |
|                                           |                             |                           |                     |                                    |                          |                                          |       |                 |  |
| 4x4                                       | 2.4                         | 3.35                      | 10.2 ± 0.4          | 5.09                               | 1442                     | 14.0                                     | 22.9  | 12 585 458      |  |
| 10x4                                      | 2.4                         | 3.35                      | 16.0 ± 0.5          | 5.09                               | 2108                     | 34.9                                     | 55.2  | 85 084 353      |  |



# Traction cable

## RADOX TENUIS-TW 600V MM

### Cables with coloured cores:

| Construction<br>1)<br>n x mm <sup>2</sup> | Con-<br>ductor<br>Dia. <sub>nom</sub><br>mm | Core<br>colours              | Core<br>2)<br>D <sub>nom</sub><br>mm | Cable<br>Dia.<br>mm | R <sub>20</sub> 3)<br>max<br>Ω/km | Fireload<br>nom.<br>kJ/m | Weight<br>Copper Cable<br>kg/100m |     | H + S<br>Part No. |  |
|-------------------------------------------|---------------------------------------------|------------------------------|--------------------------------------|---------------------|-----------------------------------|--------------------------|-----------------------------------|-----|-------------------|--|
| 2V0.5                                     | 0.9                                         | BN- BU                       | 1.42                                 | 4.4 ± 0.2           | 40.1                              | 290                      | 0.9                               | 3.1 | 12 584 136        |  |
| 3V0.5                                     | 0.9                                         | BN- BK-<br>BU                | 1.42                                 | 4.6 ± 0.2           | 40.1                              | 315                      | 1.4                               | 3.6 | 12 584 137        |  |
| 4V0.5                                     | 0.9                                         | BN- BK-<br>BU- WH            | 1.42                                 | 5.0 ± 0.2           | 40.1                              | 365                      | 1.8                               | 4.4 | 12 584 138        |  |
| 5V0.5                                     | 0.9                                         | BN- BK-<br>BU- WH-<br>GY     | 1.42                                 | 5.5 ± 0.2           | 40.1                              | 473                      | 2.3                               | 5.4 | 12 585 752        |  |
| 6V0.5                                     | 0.9                                         | BN- RD-<br>WH- BK-<br>GY- BU | 1.42                                 | 6.0 ± 0.2           | 40.1                              | 568                      | 2.8                               | 6.4 | 84 118 473        |  |
| 2V1                                       | 1.2                                         | BU- RD                       | 1.77                                 | 5.1 ± 0.2           | 20.0                              | 370                      | 1.8                               | 4.5 | 84 090 409        |  |

- 1) X: one colour, numbered  
G: one green- yellow core, others one colour, numbered  
V: various colours  
2) Cores : Core details according to H+S Datasheet 564 264  
3) R<sub>20</sub> : Conductor resistance according to EN 50306-2  
4) increased sheath thickness

### Colour Legend:

BK: black  
BN: brown  
RD: red  
OG: orange  
YE: yellow  
GN: green  
BU: blue  
VT: violet  
GNYE: green- yellow  
GY: grey  
WH: white  
PK: pink  
TQ: turquoise