

UNITRONIC® 300 S

Multi-Conductor Foil & Braid Shielded
300V Flexible Industrial Signal and Control Cable



The UNITRONIC® 300 Series of signal and control cables have been carefully engineered to provide the highest performance and ease of installation in industrial signal and control applications. Available shielding options provide EMC protection in the harshest industrial environments.

Recommended Applications:

Process Instrumentation, Low Voltage control interconnect.

Application Advantages:

- Extended temperature rating of -25°C to +105°C
- Flexible design for ease of routing
- Suitable for use in cable tray
- Oil and UV resistant (Oil Res I)
- Sequential foot marking for ease of installation
- All items available from inventory in 100, 500, and 1,000 ft. put ups

UNITRONIC® 300 S Construction:

Finely stranded tinned copper conductors with drain wire; PVC blended insulation; tri-laminated foil shield and tinned copper braid (75%); oil resistant gray PVC jacket.

Control Cable (20 AWG - 16 AWG)

UNITRONIC® 300 CY (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Signal Cable (28 AWG* - 22 AWG)

UNITRONIC® 300 S (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V RoHS



Cable Attributes, See Page 653

| | | | |
|--|--------------------------|--|---------------------------------|
| | Oil Resistance: OR-02 | | Flame Resistance: FR-03 |
| | Motion Type: FL-01 | | Mechanical Properties: MP-03 |

Availability:



Standard put-ups are 100ft, 500ft, and 1,000ft.

Complete the installation with:

| | | | |
|--|-------------------------------------|--|-------------------------------|
| | SKINTOP® Strain Relief: Page 486 | | EPIC® Connectors: Page 251 |
| | OLFLEX® Tubing: Page 546 | | Assemblies: Page 627 |

Technical Data:

Minimum Bending Radius
- for installation: 4 x cable diameter
- with shield: 6 x cable diameter

Temperature Range: -25°C to +105°C

Nominal Voltage: 300V

Test Voltage: 2000V

Conductor Stranding: Class 5

Color Code: 28 - 22 AWG- Chart 4, Page 672
20 - 16 AWG- Chart 5, Page 672

Approvals: UL: - CMG, PLTC*, Exposed Run**
- AWM 2464 Oil Res I
CSA: - CMG/FT4
- AWM II A/B

* 28 AWG, 26 AWG, 24 AWG not PLTC

** Exposed run for 18 AWG & 16 AWG

Meets NEC Art. 725, 760, & 800. Also Class I Div. 2 (PLTC only)

UNITRONIC® 300 S

Multi-Conductor Foil & Braid Shielded

300V Flexible Industrial Signal and Control Cable



UNITRONIC® 300 S: Foil & Braid Shielded Multi-Conductor Control & Signal Cable

| Part Number | Number of Conductors includes ground | Nominal Outer Diameter inches | mm | Copper Weight lbs/mft | Approx. Weight lbs/mft | kg/km | Part Number | Number of Conductors includes ground | Nominal Outer Diameter inches | mm | Copper Weight lbs/mft | Approx. Weight lbs/mft | kg/km |
|---|--------------------------------------|-------------------------------|------|-----------------------|------------------------|-------|---|--------------------------------------|-------------------------------|------|-----------------------|------------------------|-------|
| 28 AWG (19/40) 0.08 mm² | | | | | | | 20 AWG (19/32) 0.75 mm² | | | | | | |
| 302802S | 2 | .176 | 4.5 | 4 | 11 | 17 | 302002S | 2 | .252 | 6.4 | 19 | 49 | 73 |
| 302803S | 3 | .182 | 4.6 | 5 | 15 | 22 | 302003S | 3 | .264 | 6.7 | 23 | 52 | 77 |
| 302804S | 4 | .191 | 4.9 | 6 | 18 | 26 | 302004S | 4 | .283 | 7.2 | 27 | 62 | 92 |
| 302806S | 6 | .212 | 5.4 | 8 | 24 | 36 | 302006S | 6 | .335 | 8.5 | 37 | 80 | 119 |
| 302808S | 8 | .223 | 5.7 | 10 | 25 | 38 | 302008S | 8 | .358 | 9.1 | 46 | 107 | 158 |
| 302810S | 10 | .248 | 6.3 | 12 | 29 | 44 | 302010S | 10 | .408 | 10.4 | 56 | 115 | 171 |
| 302815S | 15 | .273 | 6.9 | 16 | 36 | 54 | 302015S | 15 | .485 | 12.3 | 80 | 144 | 214 |
| 302820S | 20 | .295 | 7.5 | 20 | 45 | 67 | 302020S | 20 | .530 | 13.5 | 88 | 202 | 301 |
| 302825S | 25 | .334 | 8.5 | 25 | 53 | 79 | 302025S | 25 | .587 | 14.9 | 126 | 270 | 402 |
| 302830S | 30 | .345 | 8.8 | 29 | 60 | 89 | 302030S | 30 | .610 | 15.5 | 150 | 319 | 475 |
| 302840S | 40 | .377 | 9.6 | 37 | 75 | 112 | 302040S | 40 | .695 | 17.7 | 192 | 417 | 621 |
| 302850S | 50 | .442 | 11.2 | 45 | 89 | 132 | 302050S | 50 | .775 | 19.7 | 225 | 507 | 754 |
| 26 AWG (19/38) 0.14mm² | | | | | | | 18 AWG (19/30) 1.00 mm² | | | | | | |
| 302602S | 2 | .182 | 4.6 | 6 | 16 | 24 | 301802S | 2 | .270 | 6.9 | 25 | 54 | 80 |
| 302603S | 3 | .188 | 4.8 | 7 | 18 | 27 | 301803S | 3 | .283 | 7.2 | 33 | 58 | 86 |
| 302604S | 4 | .198 | 5.0 | 8 | 21 | 31 | 301804S | 4 | .314 | 8.0 | 40 | 69 | 103 |
| 302606S | 6 | .221 | 5.6 | 11 | 26 | 38 | 301806S | 6 | .362 | 9.2 | 55 | 88 | 131 |
| 302608S | 8 | .233 | 5.9 | 13 | 29 | 43 | 301808S | 8 | .387 | 9.8 | 68 | 114 | 170 |
| 302610S | 10 | .260 | 6.6 | 16 | 35 | 52 | 301810S | 10 | .470 | 11.9 | 83 | 154 | 229 |
| 302615S | 15 | .287 | 7.3 | 21 | 44 | 65 | 301815S | 15 | .527 | 13.4 | 121 | 197 | 293 |
| 302620S | 20 | .321 | 8.2 | 27 | 53 | 79 | 301820S | 20 | .577 | 14.7 | 156 | 257 | 382 |
| 302625S | 25 | .352 | 8.9 | 33 | 63 | 94 | 301825S | 25 | .662 | 16.8 | 187 | 311 | 463 |
| 302630S | 30 | .364 | 9.2 | 38 | 73 | 109 | 301830S | 30 | .688 | 17.5 | 216 | 397 | 590 |
| 302640S | 40 | .399 | 10.1 | 49 | 91 | 136 | 301840S | 40 | .761 | 19.3 | 280 | 521 | 775 |
| 302650S | 50 | .468 | 11.9 | 60 | 112 | 167 | 301850S | 50 | .851 | 21.6 | 340 | 641 | 954 |
| 24 AWG (19/36) 0.25 mm² | | | | | | | 16 AWG (26/30) 1.50 mm² | | | | | | |
| 302402S | 2 | .192 | 4.9 | 10 | 20 | 29 | 301602S | 2 | .292 | 7.4 | 34 | 74 | 110 |
| 302403S | 3 | .199 | 5.1 | 11 | 22 | 32 | 301603S | 3 | .317 | 8.0 | 42 | 78 | 116 |
| 302404S | 4 | .210 | 5.3 | 13 | 25 | 38 | 301604S | 4 | .341 | 8.7 | 52 | 93 | 138 |
| 302406S | 6 | .236 | 6.0 | 18 | 32 | 47 | 301606S | 6 | .395 | 10.0 | 71 | 132 | 196 |
| 302408S | 8 | .250 | 6.3 | 21 | 37 | 56 | 301608S | 8 | .450 | 11.4 | 91 | 190 | 283 |
| 302410S | 10 | .280 | 7.1 | 26 | 45 | 67 | 301610S | 10 | .514 | 13.1 | 114 | 213 | 317 |
| 302415S | 15 | .311 | 7.9 | 35 | 58 | 87 | 301615S | 15 | .579 | 14.7 | 156 | 277 | 412 |
| 302420S | 20 | .348 | 8.8 | 43 | 72 | 106 | 301620S | 20 | .636 | 16.2 | 201 | 369 | 549 |
| 302425S | 25 | .382 | 9.7 | 53 | 86 | 127 | 301625S | 25 | .729 | 18.5 | 246 | 452 | 673 |
| 302430S | 30 | .396 | 10.1 | 62 | 105 | 156 | 301630S | 30 | .758 | 19.3 | 288 | 532 | 792 |
| 302440S | 40 | .441 | 11.2 | 80 | 137 | 204 | 301640S | 40 | .841 | 21.4 | 368 | 694 | 1033 |
| 302450S | 50 | .510 | 12.9 | 98 | 169 | 252 | 301650S | 50 | .950 | 24.1 | 450 | 857 | 1275 |
| 22 AWG (19/34) 0.34 mm² | | | | | | | | | | | | | |
| 302202S | 2 | .206 | 5.2 | 13 | 23 | 34 | | | | | | | |
| 302203S | 3 | .214 | 5.4 | 15 | 27 | 40 | | | | | | | |
| 302204S | 4 | .227 | 5.8 | 18 | 31 | 46 | | | | | | | |
| 302206S | 6 | .256 | 6.5 | 24 | 41 | 61 | | | | | | | |
| 302208S | 8 | .272 | 6.9 | 30 | 48 | 71 | | | | | | | |
| 302210S | 10 | .316 | 8.0 | 36 | 58 | 86 | | | | | | | |
| 302215S | 15 | .351 | 8.9 | 52 | 78 | 115 | | | | | | | |
| 302220S | 20 | .382 | 9.7 | 63 | 94 | 140 | | | | | | | |
| 302225S | 25 | .447 | 11.4 | 81 | 117 | 174 | | | | | | | |
| 302230S | 30 | .463 | 11.7 | 93 | 140 | 209 | | | | | | | |
| 302240S | 40 | .507 | 12.9 | 120 | 183 | 272 | | | | | | | |
| 302250S | 50 | .562 | 14.3 | 145 | 224 | 333 | | | | | | | |