

Special Cables for High Mechanical Stress

SAB S 745 - Exploration

Continuous flex oil resistant PUR control cable



Marking for SAB S 745 - Exploration 7451815:

SAB BRÖCKSKES · D-VIERSEN · SAB S 745 - Exploration 18x1.5mm² cULus AWM Style 21233 80°C 1000V AWM III A/B 80°C 1000V FT1 FT2 745-0715 CE

Application: Halogen-free, shielded control cable for continuous flexible use in cable chains in rough environments for example drilling equipment or wet areas of machine tools and production lines. Appropriate for outdoor and indoor areas.

Construction:

| | |
|-------------------------|--|
| Conductor: | bare copper strands acc. to IEC 60228, VDE 0295, class 6 |
| Insulation: | SABIX® |
| Color code: | black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334; and a green/yellow ground |
| Inner jacket: | SABIX® (only for multi-conductor cables) |
| Shielding: | tinned copper braiding |
| Jacket material: | PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 |
| Jacket color: | black (RAL 9005) |

Outstanding features:



- UL/cUL recognized
- extremely large temperature range
- small outer diameter
- lighter cable weight
- long travels possible
- very good EMC characteristics

Technical data:

| | | |
|--|---|----------------------------|
| Nominal voltage: | Uo/U 300/500 V | |
| Voltage UL/cUL: | 600 V | |
| Testing voltage: | conductor/conductor: | 2000 V |
| | conductor/shielding: | 2000 V |
| Min. bending radius: <i>continuously flexible:</i> | 10 x O.D. | |
| Temperature range: <i>fixed installation:</i> | DIN VDE | UL/cUL: up to +80°C |
| <i>flexible application*:</i> | -50/+90°C | |
| Cold resistance: | -50°C acc. to DIN EN 60811-506 | |
| Halogen-free: | acc. to IEC 60754-1 + VDE 0482-754-1 | |
| Burning characteristics: | flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 cUL FT1 FT2 | |
| Oil resistance: | very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 | |
| MUD resistance: | very good - acc. to IEC 60992-360, IEC 61892-4 NEK TS 606 | |
| Sunlight resistance: | acc. to HD 605 | |
| Ozone resistance: | acc. to DIN EN 50396 | |
| Salt water resistance: | acc. to UL 1309 | |
| Approvals: | UR AWM, cUR AWM, CE, RoHS | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union see page O/30 | |
| | *protected installation | |

| item no. | no. of conductors incl. ground | outer-ø ±10% inch | outer-ø ±10% inch | cable weight ≈lbs/mft |
|----------------------------|--------------------------------|-------------------|-------------------|-----------------------|
| ▶ 16 AWG ▪ 1.50 mm² | | | | |
| 7450315 | 3 | 0.307 | 7.8 | 65 |
| 7450515 | 5 | 0.358 | 9.1 | 91 |
| 7451815 | 18 | 0.610 | 15.5 | 270 |
| 7452515 | 25 | 0.748 | 19.0 | 409 |
| ▶ 14 AWG ▪ 2.50 mm² | | | | |
| 7450325 | 3 | 0.398 | 10.1 | 105 |
| 7450525 | 5 | 0.445 | 11.3 | 157 |
| 7451825 | 18 | 0.717 | 18.2 | 472 |
| 7452525 | 25 | 0.850 | 21.6 | 665 |

| item no. | no. of conductors incl. ground | outer-ø ±10% inch | outer-ø ±10% inch | cable weight ≈lbs/mft |
|----------------------------|--------------------------------|-------------------|-------------------|-----------------------|
| ▶ 12 AWG ▪ 4.00 mm² | | | | |
| 7450440 | 4 | 0.492 | 12.5 | 182 |
| ▶ 10 AWG ▪ 6.00 mm² | | | | |
| 7450160 | 1 | 0.252 | 6.4 | 59 |
| 7450460 | 4 | 0.602 | 15.3 | 284 |
| ▶ 8 AWG ▪ 10.00 mm² | | | | |
| 7450161 | 1 | 0.291 | 7.4 | 91 |

| item no. | no. of conductors incl. ground | outer-ø ±10% inch | outer-ø ±10% inch | cable weight ≈lbs/mft |
|----------------------------|--------------------------------|-------------------|-------------------|-----------------------|
| ▶ 6 AWG ▪ 16.00 mm² | | | | |
| 7450162 | 1 | 0.339 | 8.6 | 133 |
| 7450462 | 4 | 0.878 | 22.3 | 656 |
| ▶ 4 AWG ▪ 25.00 mm² | | | | |
| 7450163 | 1 | 0.417 | 10.6 | 204 |
| ▶ 1 AWG ▪ 50.00 mm² | | | | |
| 7450165 | 1 | 0.579 | 14.7 | 406 |

Other dimensions and colors are available on request



Hybrid cable on request!

