

# Special Cables for High Mechanical Stress

## SAB 755 - Exploration

Highly flexible PUR control and power supply cable



Marking for SAB 755 - Exploration 7550715:

SAB BRÖCKSKES · D-VIERSEN · SAB 755-Exploration 7x1.5mm² cULus AWM Style 21233 80°C 1000V AWM I/II A/B 80°C 1000V FT1 FT2 0755-0715 CE

**Application:** Halogen-free, shielded connection and control cable applied for drilling equipment, compressors or pumps in especially rough and wet environments of machine tools and production lines.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX®
<b>Color code:</b>	up to 4 conductors: HD 308 (VDE 0293-308) see below; from 5 conductors: black with consecutive numbers acc. to EN 50334 + VDE 0293-334; and a green/yellow ground
<b>Shielding:</b>	tinned copper braiding
<b>Supporting screen:</b>	high-tech yarn
<b>Jacket material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Jacket color:</b>	black (RAL 9005)

### Outstanding features:

- UL/cUL recognized
- extremely large temperature range
- small outer diameter
- lighter cable weight
- application in Topside drilling loop

### Technical data:

<b>Nominal voltage:</b>	Uo/U 0.6/1 kV	
<b>Voltage UL/cUL:</b>	1000 V	
<b>Testing voltage:</b>	conductor/conductor:	4000 V
	conductor/shielding:	4000 V
<b>Current-carrying capacity:</b>	acc. to VDE 0298-4	
<b>Min. bending radius:</b>		
<i>fixed installation:</i>	6 x O.D.	
<i>flexible application:</i>	15 x O.D.	
<b>Temperature range:</b>	<b>DIN VDE</b>	<b>UL/cUL: up to +80°C</b>
<i>static:</i>	-50/+90°C	
<i>flexible:</i>	-45/+90°C	
<b>Cold resistance:</b>	-50°C acc. to DIN EN 60811-506	
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1	
<b>Burning characteristics:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 cUL FT1 FT2	
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>MUD resistance:</b>	very good - acc. to IEC 60992-360, IEC 61892-4 NEK TS 606	
<b>Tensile strength:</b>	max. 20 N/mm²	
<b>Sunlight resistance:</b>	acc. to HD 605	
<b>Ozone resistance:</b>	acc. to DIN EN 50396	
<b>Salt water resistance:</b>	acc. to UL 1309	
<b>Approvals:</b>	UR AWM, cUR AWM, CE, RoHS	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page O/30	

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
<b>▶ 16 AWG ▪ 1.50 mm²</b>				
7550715	7	0.445	11.3	140
7551215	12	0.520	13.2	194
7551515	15	0.598	15.2	260
7551815	18	0.626	15.9	293
7552515	25	0.748	19.0	386
<b>▶ 14 AWG ▪ 2.50 mm²</b>				
7550525	5	0.433	11.0	148
7550725	7	0.512	13.0	198
7551225	12	0.622	15.8	304
<b>▶ 12 AWG ▪ 4.00 mm²</b>				
7550340	3	0.437	11.1	136
7550440	4	0.480	12.2	182
7550540	5	0.524	13.3	216
<b>▶ 10 AWG ▪ 6.00 mm²</b>				
7550360	3	0.520	13.2	205
7550460	4	0.563	14.3	260
7550560	5	0.618	15.7	316
<b>▶ 8 AWG ▪ 10.00 mm²</b>				
7550361	3	0.630	16.0	323
7550461	4	0.654	16.6	377
7550561	5	0.752	19.1	480

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
<b>▶ 6 AWG ▪ 16.00 mm²</b>				
7550362	3	0.768	19.5	466
7550462	4	0.835	21.2	577
7550562	5	0.921	23.4	713
<b>▶ 4 AWG ▪ 25.00 mm²</b>				
7550363	3	0.902	22.9	683
7550463	4	0.984	25.0	857
7550563	5	1.087	27.6	1054
<b>▶ 2 AWG ▪ 35.00 mm²</b>				
7550164	1	0.610	15.5	314
7550364	3	1.035	26.3	958
7550464	4	1.134	28.8	1185
7550564	5	1.232	31.3	1451
<b>▶ 1 AWG ▪ 50.00 mm²</b>				
7550165	1	0.681	17.3	434
7550365	3	1.154	29.3	1299
7550465	4	1.268	32.2	1641
7550565	5	1.398	35.5	2020

item no.	no. of conductors incl. ground	outer-ø ±10% inch	outer-ø ±10% inch	cable weight ≈lbs/mft
<b>▶ 2/0 AWG ▪ 70.00 mm²</b>				
7550166	1	0.780	19.8	579
<b>▶ 3/0 AWG ▪ 95.00 mm²</b>				
7550167	1	0.909	23.1	792
<b>▶ 4/0 AWG ▪ 120.00 mm²</b>				
7550168	1	0.969	24.6	954
<b>▶ 250 MCM ▪ 150.00 mm²</b>				
7550169	1	1.063	27.0	1174
<b>▶ 350 MCM ▪ 185.00 mm²</b>				
7550170	1	1.142	29.0	1396
<b>▶ 450 MCM ▪ 240.00 mm²</b>				
7550171	1	1.350	34.3	1885
<b>▶ 550 MCM ▪ 300.00 mm²</b>				
7550172	1	1.476	37.5	2315

Other dimensions and colors are available on request



**Hybrid cable on request!**

