

## BU(i) 150/250(300)V S13 Instr. cable, Unarmoured

Fire resistant, flame retardant halogen-free instrumentation cable. Mud resistant

### BU(i) 150/250(300)V MGT/EPR/EVA

NEK TS 606 CodeS13



Operating temperature : 90°C  
 Operating Voltage : 150/250(300)V

#### Standards applied

#### Application

Fixed installation for instrumentation, communication, control and alarm systems in both EX-(Zone 2) and safe areas, emergency and critical systems where requirement for fire resistance exists. Meets the mud resistant requirements in NEK TS 606:2009.

IEC 60092-376 (2003-05)	- Design
IEC 60228 class 2	- Conductor
IEC 60092-351	- Insulation
IEC 60092-359	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60331-21	- Fire Resistant
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

#### Construction

	Code Letter	
<b>Conductor</b>		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
<b>Insulation</b>	<b>B</b>	Mica-tape + EP-rubber, IEC 60092-351 (EPR)
<b>Pair / Triple / Quad twisting</b>		Color coded cores twisted together. Pairs/Triples are screened by copper backed polyester tape with tinned copper drain wire. Each pair/triple is wrapped with polyester tape to prevent electrical contact with adjacent pairs/triples. Pairs/triples are identified by numbered tape or by numbers printed directly on the insulated conductors.
<b>Lay up / Shielding</b>		Individually shielded pairs/triples/quads are laid up in concentric layers and wrapped with a PETP tape.
<b>Inner covering</b>		No inner covering. (Additional tapes may be applied)
<b>Armour/screen</b>		No armour.
<b>Outer sheath</b>	<b>U</b>	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-359)
<b>Marking text</b>		"meter" "year" DRAKA 01 BU(i) 250V S13 8 PAIR 0,75 mm <sup>2</sup> FLEX - FLAME IEC 60092-376 IEC 60331-21 IEC 60332-3-22
<b>Manufacturing unit</b>		DRAKA 01 = Draka Norsk Kabel,
<b>Outer sheath colour</b>		Grey or Blue

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### Core identification instrumentation cables

Pair - Black - Light Blue

Triple - Black - Light Blue - Brown

Quad - Black - Light Blue - Brown - Grey

### Range and dimensions

Number of elements	No of cores in element	Cross section core, mm <sup>2</sup>	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	2	0.75	1.1	0.6	1	7.5 ± 0.5	95	17
1	2	0.75	1.1	0.6	1	7.5 ± 0.5	95	17
2	2	0.75	1.1	0.6	1.2	11 ± 0.8	165	34
2	2	0.75	1.1	0.6	1.2	11 ± 0.8	165	34
4	2	0.75	1.1	0.6	1.2	13 ± 0.8	260	67
8	2	0.75	1.1	0.6	1.4	17.5 ± 0.8	490	133
12	2	0.75	1.1	0.6	1.6	21 ± 1	700	199
16	2	0.75	1.1	0.6	1.7	23.5 ± 1	900	265
24	2	0.75	1.1	0.6	1.9	29 ± 1	1300	397
1	3	0.75	1.1	0.6	1	7.5 ± 0.5	105	23
2	3	0.75	1.1	0.6	1.2	12 ± 0.8	200	47
4	3	0.75	1.1	0.6	1.3	14 ± 0.8	340	93
8	3	0.75	1.1	0.6	1.5	19.5 ± 0.8	640	185
12	3	0.75	1.1	0.6	1.7	23.5 ± 1	900	277
16	3	0.75	1.1	0.6	1.8	26 ± 1	1170	369
24	3	0.75	1.1	0.6	2.1	32.5 ± 1.5	1720	554
1	2	1.5	1.6	0.7	1	8.5 ± 0.5	130	34
1	2	1.5	1.6	0.7	1	8.5 ± 0.5	130	34
2	2	1.5	1.6	0.7	1.3	13.5 ± 0.8	250	68
2	2	1.5	1.6	0.7	1.3	13.5 ± 0.8	250	68
4	2	1.5	1.6	0.7	1.4	16 ± 0.8	420	136
4	2	1.5	1.6	0.7	1.4	16 ± 0.8	420	136
8	2	1.5	1.6	0.7	1.6	22 ± 1	770	271
8	2	1.5	1.6	0.7	1.6	22 ± 1	770	271
12	2	1.5	1.6	0.7	1.7	26 ± 1	1100	406
12	2	1.5	1.6	0.7	1.7	26 ± 1	1100	406
16	2	1.5	1.6	0.7	1.9	29.5 ± 1	1460	551
24	2	1.5	1.6	0.7	2.2	36.5 ± 1.5	2140	812
24	2	1.5	1.6	0.7	2.2	36.5 ± 1.5	2140	812
1	3	1.5	1.6	0.7	1.1	9.5 ± 0.5	165	48
1	3	1.5	1.6	0.7	1.1	9.5 ± 0.5	165	48
2	3	1.5	1.6	0.7	1.3	14.5 ± 0.8	320	98
4	3	1.5	1.6	0.7	1.4	17.5 ± 0.8	540	195
8	3	1.5	1.6	0.7	1.7	23.5 ± 1	1030	384
12	3	1.5	1.6	0.7	1.9	29 ± 1	1480	577
16	3	1.5	1.6	0.7	2	32.5 ± 1.5	1920	779
24	3	1.5	1.6	0.7	2.4	40.5 ± 2	2880	1168
1	2	2.5	2	0.7	1.1	9.5 ± 0.5	170	55

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### Electrical values instrumentation cables

Type	Capacitance, approx. (nF/km)	Inductance, approx. (mH/km)	Resistance at 20°C, max. (Ohm/km)	L/R ratio, (microH/Ohm)
Shielded pair 0,75 mm <sup>2</sup>	110	0,67	26,3	12,7
Shielded triple 0,75 mm <sup>2</sup>	110	0,67	26,3	12,7
Shielded pair 1,5 mm <sup>2</sup>	125	0,63	12,9	24,4
Shielded triple 1,5 mm <sup>2</sup>	125	0,63	12,9	24,4
Shielded pair 2,5 mm <sup>2</sup>	145	0,59	8,02	36,8
Shielded triple 2,5 mm <sup>2</sup>	145	0,59	8,02	36,8

### Ordering information

Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
896200	BU(I) 250V 1PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962000	1063500
896201	BU(I) 250V 1PAIR 0.75mm <sup>2</sup> S13	BLUE	-	7021528962017	1063501
896206	BU(I) 250V 2PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962062	1063506
896207	BU(I) 250V 2PAIR 0.75mm <sup>2</sup> S13	BLUE	-	7021528962079	1063507
896218	BU(I) 250V 4PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962185	1063518
896230	BU(I) 250V 8PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962307	1063530
896236	BU(I) 250V 12PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962369	1063536
896242	BU(I) 250V 16PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962420	1063542
896248	BU(I) 250V 24PAIR 0.75mm <sup>2</sup> S13	GREY	-	7021528962482	1063548
896260	BU(I) 250V 1TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528962604	1063560
896266	BU(I) 250V 2TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528962666	1063566
896278	BU(I) 250V 4TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528962789	1063578
896290	BU(I) 250V 8TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528962901	1063590
896296	BU(I) 250V 12TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528962963	1063596
896302	BU(I) 250V 16TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528963021	1063602
896308	BU(I) 250V 24TRIP 0.75mm <sup>2</sup> S13	GREY	-	7021528963083	1063608
896400	BU(I) 250V 1PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964004	1063700
896401	BU(I) 250V 1PAIR 1.5mm <sup>2</sup> S13	BLUE	-	7021528964011	1063701
896406	BU(I) 250V 2PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964066	1063706
896407	BU(I) 250V 2PAIR 1.5mm <sup>2</sup> S13	BLUE	-	7021528964073	1063707
896418	BU(I) 250V 4PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964189	1063718
896419	BU(I) 250V 4PAIR 1.5mm <sup>2</sup> S13	BLUE	-	7021528964196	-
896430	BU(I) 250V 8PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964301	1063730
896431	BU(I) 250V 8PAIR 1.5mm <sup>2</sup> S13	BLUE	-	7021528964318	-
896436	BU(I) 250V 12PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964363	1063736
896437	BU(I) 250V 12PAIR 1.5mm <sup>2</sup> S13	BLUE	-	7021528964370	1063737
896442	BU(I) 250V 16PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964424	1063742
896448	BU(I) 250V 24PAIR 1.5mm <sup>2</sup> S13	GREY	-	7021528964486	1063748
896449	BU(I) 250V 24PAIR 1.5mm <sup>2</sup> S13	BLUE	-	7021528964493	-
896460	BU(I) 250V 1TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528964608	1063760
896461	BU(I) 250V 1TRIP 1.5mm <sup>2</sup> S13	BLUE	-	7021528964615	1063761
896466	BU(I) 250V 2TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528964660	1063766
896478	BU(I) 250V 4TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528964783	1063778
896490	BU(I) 250V 8TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528964905	1063790
896496	BU(I) 250V 12TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528964967	1063796
896502	BU(I) 250V 16TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528965025	1063802
896508	BU(I) 250V 24TRIP 1.5mm <sup>2</sup> S13	GREY	-	7021528965087	1063808
896600	BU(I) 250V 1PAIR 2.5mm <sup>2</sup> S13	GREY	-	7021528966008	1063900

### Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	6 x D	50 N /mm <sup>2</sup>	-20°C