

Halogen-free, unarmoured mud resistant instrumentation cable RU(i) 150/250(300)V, S11



Flame retardant halogen-free instrumentation cable. Mud resistant

RU(i) 150/250(300)V

EPR/EVA

NEK TS 606 CodeS11

Operating temperature
Operating Voltage

: 90°C
: 150/250(300)V

Standards applied

Application

Fixed installation for instrumentation, communication, Control and alarm systems in both EX- (Zone 2) and safe areas. Meets the mud resistant requirements in NEK TS 606:2009.

IEC 60092-376 (2003-05)
IEC 60228 class 2
IEC 60092-360
IEC 60092-360
IEC 60332-1-2
IEC 60332-3-22
IEC 60754-1,2
IEC 61034-1,2

- Design
- Conductor
- Insulation
- Sheath
- Flame Retardant
- Flame Retardant
- Halogen Free
- Low Smoke

Construction

	Code Letter	
Conductor		Tinned annealed stranded circular copper (STCC), IEC 60228 class 2
Insulation	R	EP-rubber, IEC 60092-360 (EPR)
Pair / Triple / Quad twisting		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.
Lay up / Shielding		Individually shielded pairs/triples/quads are laid up in concentric layers and wrapped with a PETP tape.
Inner covering		No inner covering. (Additional tapes may be applied)
Armour/screen		No armour.
Outer sheath	U	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
Marking text		E.g. "meter" "year" DRAKA 01 RU(i) 250V S11 2 pair 0,75 mm ² IEC 60092-376 IEC 60332-3-22
Manufacturing unit		DRAKA 01 = Draka Norsk Kabel,
Outer sheath colour		Grey or Blue

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 ²	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	6.5 ± 0.5	85	17
1	2	0.75	1.1	0.6	1	6.5 ± 0.5	85	17
2	2	0.75	1.1	0.6	1.1	10 ± 0.8	140	34
2	2	0.75	1.1	0.6	1.1	10 ± 0.8	140	34
4	2	0.75	1.1	0.6	1.2	11.5 ± 0.8	235	67
8	2	0.75	1.1	0.6	1.3	15.5 ± 0.8	420	133
12	2	0.75	1.1	0.6	1.4	18.5 ± 0.8	590	199
16	2	0.75	1.1	0.6	1.5	21 ± 1	760	265
24	2	0.75	1.1	0.6	1.7	25.5 ± 1	1120	397
1	3	0.75	1.1	0.6	1	7 ± 0.5	95	23
2	3	0.75	1.1	0.6	1.1	11 ± 0.8	175	46
4	3	0.75	1.1	0.6	1.2	13 ± 0.8	290	92
8	3	0.75	1.1	0.6	1.4	18 ± 0.8	540	184
12	3	0.75	1.1	0.6	1.5	21 ± 1	770	276
16	3	0.75	1.1	0.6	1.6	23.5 ± 1	990	368
24	3	0.75	1.1	0.6	1.8	29 ± 1	1460	551
1	2	1.5	1.6	0.7	1	8 ± 0.5	120	34
1	2	1.5	1.6	0.7	1	8 ± 0.5	120	34
2	2	1.5	1.6	0.7	1.2	12 ± 0.8	215	68
2	2	1.5	1.6	0.7	1.2	12 ± 0.8	215	68
4	2	1.5	1.6	0.7	1.3	14.5 ± 0.8	370	136
8	2	1.5	1.6	0.7	1.5	20 ± 1	690	271
12	2	1.5	1.6	0.7	1.6	23.5 ± 1	970	406
16	2	1.5	1.6	0.7	1.7	26.5 ± 1	1260	541
24	2	1.5	1.6	0.7	2	32.5 ± 1.5	1880	811
1	3	1.5	1.6	0.7	1	8.5 ± 0.5	140	48
2	3	1.5	1.6	0.7	1.3	14 ± 0.8	285	96
4	3	1.5	1.6	0.7	1.3	16 ± 0.8	470	192
8	3	1.5	1.6	0.7	1.6	22.5 ± 1	900	383
16	3	1.5	1.6	0.7	1.9	30 ± 1.5	1700	765
24	3	1.5	1.6	0.7	2.2	37 ± 1.5	2520	1148

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 ²	110	0,67	26,3	12,7
Shielded triple 0,75 mm ²	110	0,67	26,3	12,7
Shielded pair 1,5 mm ²	125	0,63	12,9	24,4
Shielded triple 1,5 mm ²	125	0,63	12,9	24,4
Shielded pair 2,5 mm ²	145	0,59	8,02	36,8
Shielded triple 2,5 mm ²	145	0,59	8,02	36,8

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
20111817		RU(I) 250V 1PAIR 0.75mm ² S11	GREY	-	7021528950007	1062100
20109512		RU(I) 250V 1PAIR 0.75mm ² S11	BLUE	-	7021528950014	1062101
	895006	RU(I) 250V 2PAIR 0.75mm ² S11	GREY	-	7021528950069	1062106
20112238		RU(I) 250V 2PAIR 0.75mm ² S11	BLUE	-	7021528950076	1062107
	895018	RU(I) 250V 4PAIR 0.75mm ² S11	GREY	-	7021528950182	1062118
	895030	RU(I) 250V 8PAIR 0.75mm ² S11	GREY	-	7021528950304	1062130
	895036	RU(I) 250V 12PAIR 0.75mm ² S11	GREY	-	7021528950366	1062136
	895042	RU(I) 250V 16PAIR 0.75mm ² S11	GREY	-	7021528950427	1062142
	895048	RU(I) 250V 24PAIR 0.75mm ² S11	GREY	-	7021528950489	1062148

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
20112177		RU(I) 250V 1TRIP 0.75mm ² S11	GREY	-	7021528950601	1062160
	895066	RU(I) 250V 2TRIP 0.75mm ² S11	GREY	-	7021528950663	1062166
	895078	RU(I) 250V 4TRIP 0.75mm ² S11	GREY	-	7021528950786	1062178
	895090	RU(I) 250V 8TRIP 0.75mm ² S11	GREY	-	7021528950908	1062190
	895096	RU(I) 250V 12TRIP 0.75mm ² S11	GREY	-	7021528950960	1062194
	895102	RU(I) 250V 16TRIP 0.75mm ² S11	GREY	-	7021528951028	1062196
	895108	RU(I) 250V 24TRIP 0.75mm ² S11	GREY	-	7021528951080	1062198
	895200	RU(I) 250V 1PAIR 1.5mm ² S11	GREY	-	7021528952001	1062200
	895201	RU(I) 250V 1PAIR 1.5mm ² S11	BLUE	-	7021528952018	1062201
20110870		RU(I) 250V 2PAIR 1.5mm ² S11	GREY	-	7021528952063	1062206
20110871		RU(I) 250V 2PAIR 1.5mm ² S11	BLUE	-	7021528952070	1062207
20110782		RU(I) 250V 4PAIR 1.5mm ² S11	GREY	-	7021528952186	1062218
	895230	RU(I) 250V 8PAIR 1.5mm ² S11	GREY	-	7021528952308	1062230
	895236	RU(I) 250V 12PAIR 1.5mm ² S11	GREY	-	7021528952360	1062236
	895242	RU(I) 250V 16PAIR 1.5mm ² S11	GREY	-	7021528952421	1062242
	895248	RU(I) 250V 24PAIR 1.5mm ² S11	GREY	-	7021528952483	1062248
	895260	RU(I) 250V 1TRIP 1.5mm ² S11	GREY	-	7021528952605	1062260
	895266	RU(I) 250V 2TRIP 1.5mm ² S11	GREY	-	7021528952667	1062266
	895278	RU(I) 250V 4TRIP 1.5mm ² S11	GREY	-	7021528952780	1062278
	895290	RU(I) 250V 8TRIP 1.5mm ² S11	GREY	-	7021528952902	1062290
	895302	RU(I) 250V 16TRIP 1.5mm ² S11	GREY	-	7021528953022	1062296
	895308	RU(I) 250V 24TRIP 1.5mm ² S11	GREY	-	7021528953084	1062298

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 ²	-20°C