

### Flame Retardant, Sunlight Resistant

90 °C / 300 V

Single & Multi-Pair, XLPE-Insulation, Collective Screen, Armour, PVC-Sheath

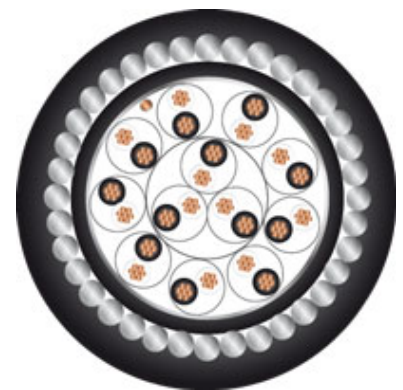
#### RE-2X(St)YSWAY-fi

#### Application

For transmission of analogue and digital signals in instrument and control systems; allowed for use in zone 1 and zone 2 group II classified areas (IEC 60079-14); not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Recommended for indoor and outdoor installation, on racks, trays, in conduits, in dry and wet locations; for direct burial.

#### Construction

Conductor.....	plain annealed copper wire, stranded, size: 0.5 mm <sup>2</sup> , 0.75 mm <sup>2</sup> , 1 mm <sup>2</sup> , 1.3 mm <sup>2</sup> , 1.5 mm <sup>2</sup> , 2.5 mm <sup>2</sup>
Insulation.....	cross-linked polyethylene XLPE
Colour code.....	black / white, continuously numbered on white core (1, 2, 3..) for multi-element
Wrapping.....	at least 1 layer of plastic tape
Collective screen.....	24 µm aluminium / PETP tape over tinned copper drain wire, 0.5 mm <sup>2</sup>
Inner sheath.....	polyvinyl chloride PVC, black
Armour.....	galvanised round steel wires
Outer sheath.....	polyvinyl chloride PVC, black, blue for intrinsically safe systems
Cable marking.....	LEONI KERPEN ICON INSTRUMENTATION CABLE SIZE 300V RP EN 50288-7 CE PRODUCTION LOT CODE LENGTH MARKING



#### Technical data

Flame propagation	
- Test on single cable	IEC 60332-1-2
- Test on bunched cables	IEC 60332-3-24 (Cat. C)
Limiting Oxygen Index (LOI)	ASTM D 2863 (min. 30 %)
Flammability temperature (FT)	ISO 4589-3 ann. A (min. +250 °C)
Amount of halogen acid gas	IEC 60754-1 (max. 23 %)
Oil resistance	ICEA S-73-532
Sunlight resistance	UL 1581 section 1200

Temperature range	-30°C up to +90°C (during operation) -5°C up to +50°C (during installation)
Minimum bending radius	10 x cable diameter

#### Abbreviations

RE-	Instrumentation Cable
2X	XLPE insulation
(St)	collective screen
Y	PVC inner sheath
SWA	steel wire armour
Y	PVC outer sheath
-fi	reduced flame propagation

#### Electrical Properties at 20 °C

	nom.	mm <sup>2</sup>	0.5	0.75	1	1.3	1.5	2.5
Conductor cross-section	nom.	mm <sup>2</sup>	0.5	0.75	1	1.3	1.5	2.5
Conductor resistance	max.	Ω/km	36.7	25.0	18.5	14.2	12.3	7.6
Insulation resistance	min.	MΩ x km	5000					
Mutual capacitance	max.	nF/km						
single element:			115	115	115	115	115	115
2 to 4 elements:			90	90	90	102	102	
above 4 elements:			75	75	75	85	85	
Inductance	max.	mH/km	1					
Capacitance unbalance	max.	pF/500 m	500					
L/R ratio	max.	µH/Ω	25		40		60	
Test voltage U <sub>rms</sub> (core : core)		V	1500					
Test voltage U <sub>rms</sub> (core : screen)		V	1500					
Operating voltage		V	300					

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No. of elements	RT of insulation nom. (mm)	RT of inner sheath nom. (mm)	Dia. over inner sheath approx. (mm)	Dia. of armour wire nom. (mm)	RT of outer sheath nom. (mm)	Outer dia. approx. (mm)	Weight approx. (kg/km)	Part No.  Colour black
<b>0.5 mm<sup>2</sup>/7</b>								
1	0.35	0.8	5.2	0.9	1.3	9.6	176	LKX7068E0010000
2	0.35	0.9	7.6	0.9	1.3	12.0	254	LKX7068E0040000
4	0.35	0.9	8.8	0.9	1.4	13.4	313	LKX7068E0070000
5	0.35	1.0	9.8	0.9	1.4	14.4	361	LKX7068E1510000
6	0.35	1.0	10.6	0.9	1.4	15.2	400	LKX7068E0100000
8	0.35	1.0	11.3	0.9	1.4	15.9	436	LKX7068E0130000
10	0.35	1.1	12.9	0.9	1.5	17.7	517	LKX7068E0160000
12	0.35	1.1	13.5	0.9	1.5	18.3	558	LKX7068E0190000
16	0.35	1.1	15.2	0.9	1.5	20.0	659	LKX7068E0220000
20	0.35	1.2	16.9	0.9	1.6	21.9	772	LKX7068E0250000
24	0.35	1.2	18.3	1.25	1.6	24.0	991	LKX7068E0280000
<b>0.75 mm<sup>2</sup>/7</b>								
1	0.38	0.8	5.6	0.9	1.3	10.0	194	LKX7068E0310000
2	0.38	0.9	8.5	0.9	1.4	13.1	296	LKX7068E0340000
4	0.38	1.0	10.0	0.9	1.4	14.6	368	LKX7068E0370000
5	0.38	1.0	10.9	0.9	1.4	15.5	419	LKX7068E1540000
6	0.38	1.0	11.8	0.9	1.4	16.4	464	LKX7068E0400000
8	0.38	1.1	12.8	0.9	1.5	17.6	529	LKX7068E0430000
10	0.38	1.1	14.5	0.9	1.5	19.3	614	LKX7068E0460000
12	0.38	1.1	15.1	0.9	1.5	19.9	665	LKX7068E0490000
16	0.38	1.2	17.3	0.9	1.6	22.3	817	LKX7068E0520000
20	0.38	1.3	19.2	1.25	1.6	24.9	1077	LKX7068E0550000
24	0.38	1.3	20.8	1.25	1.7	26.7	1216	LKX7068E0580000
<b>1 mm<sup>2</sup>/7</b>								
1	0.40	0.9	6.3	0.9	1.3	10.7	218	LKX7068E0610000
2	0.40	0.9	9.2	0.9	1.4	13.8	329	LKX7068E0640000
4	0.40	1.0	10.9	0.9	1.4	15.5	419	LKX7068E0670000
5	0.40	1.0	11.9	0.9	1.4	16.5	471	LKX7068E1570000
6	0.40	1.0	13.0	0.9	1.4	17.6	532	LKX7068E0700000
8	0.40	1.1	14.0	0.9	1.5	18.8	608	LKX7068E0730000
10	0.40	1.1	15.9	0.9	1.5	20.7	714	LKX7068E0760000
12	0.40	1.2	16.8	0.9	1.5	21.6	903	LKX7068E0790000
16	0.40	1.4	19.4	1.25	1.7	25.3	1129	LKX7068E0820000
20	0.40	1.3	21.1	1.25	1.7	27.0	1271	LKX7068E0850000
24	0.40	1.4	23.1	1.25	1.7	29.0	1451	LKX7068E0880000

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No. of elements	RT of insulation nom. (mm)	RT of inner sheath nom. (mm)	Dia. over inner sheath approx. (mm)	Dia. of armour wire nom. (mm)	RT of outer sheath nom. (mm)	Outer dia. approx. (mm)	Weight approx. (kg/km)	Part No.  Colour black
<b>1.3 mm<sup>2</sup>/7</b>								
1	0.45	0.9	6.8	0.9	1.3	11.2	240	LKX7068E0910000
2	0.45	1.0	10.4	0.9	1.4	15.0	380	LKX7068E0940000
4	0.45	1.0	12.0	0.9	1.4	16.6	474	LKX7068E0970000
5	0.45	1.1	13.4	0.9	1.5	18.2	562	LKX7068E1600000
6	0.45	1.2	14.8	0.9	1.6	19.8	651	LKX7068E1000000
8	0.45	1.2	15.7	1.25	1.6	21.4	839	LKX7068E1030000
10	0.45	1.2	17.9	1.25	1.6	23.8	974	LKX7068E1060000
12	0.45	1.3	18.9	1.25	1.6	24.6	1082	LKX7068E1090000
16	0.45	1.5	21.8	1.25	1.8	27.9	1407	LKX7068E1120000
20	0.45	1.5	24.0	1.25	1.8	30.1	1552	LKX7068E1150000
24	0.45	1.5	25.9	1.25	1.8	32.0	1737	LKX7068E1180000
<b>1.5 mm<sup>2</sup>/7</b>								
1	0.45	0.9	7.1	0.9	1.3	11.5	252	LKX7068E1210000
2	0.45	1.0	10.8	0.9	1.4	15.4	398	LKX7068E1240000
4	0.45	1.1	12.7	0.9	1.5	17.5	526	LKX7068E1270000
5	0.45	1.1	14.0	0.9	1.5	18.8	601	LKX7068E1630000
6	0.45	1.1	15.2	0.9	1.5	20.0	674	LKX7068E1300000
8	0.45	1.2	16.4	0.9	1.6	21.4	784	LKX7068E1330000
10	0.45	1.3	18.8	1.25	1.6	24.5	1059	LKX7068E1360000
12	0.45	1.3	19.7	1.25	1.7	25.6	1180	LKX7068E1390000
16	0.45	1.4	22.5	1.25	1.7	28.4	1426	LKX7068E1420000
20	0.45	1.5	25.0	1.25	1.8	31.1	1678	LKX7068E1450000
24	0.45	1.5	27.1	1.25	2.0	34.7	1925	LKX7068E1480000
<b>2.5 mm<sup>2</sup>/7</b>								
1	0.55	0.9	8.3	0.9	1.4	12.9	312	LKX706802300000

RT = Radial Thickness