

Flame Retardant, Sunlight Resistant

90 °C / 300 V

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

ICON BASE PRO 60110 M1 OS

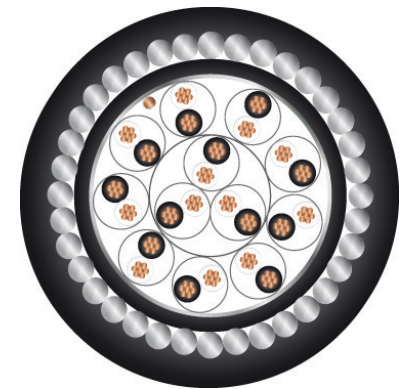
Application

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. (Please note possible additional or special installation requirements of IEC 60079-14).

Recommended for indoor and outdoor installation, on racks, trays, in conduits, in dry and wet locations; for direct burial. Indoor installation is allowed in areas where the construction products regulation (CPR) acc. to EN 50575 of fire class is not required. (Please note the relevant legal / local installation requirements)

Construction

Conductor.....	plain annealed copper wire, stranded, size: 0.5 mm ² , 0.75 mm ² , 1.0 mm ² , 1.3 mm ² , 1.5 mm ² , 2.5 mm ²
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.....	aluminium polyester foil in contact with stranded tinned copper drain wire
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 BASE PRO Type Code Size 300V RP GEN. TO EN 50288-7 Production Lot Code Year 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. 17 %)
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

OS	ICON BASE PRO overall screen
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Electrical Properties at 20 °C

	nom.	mm ²	0.5	0.75	1.0	1.3	1.5	2.5
Conductor cross-section	nom.	mm ²	0.5	0.75	1.0	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	150	150	150	150	150	150
Inductance	max.	mH/km	1					
Capacitance unbalance	max.	pF/500 m	500					
L/R ratio	max.	μH/Ω	25			40		60
Test voltage U _{rms} (core : core)		V	1500					
Test voltage U _{rms} (core : screen)		V	1500					
Operating voltage		V	300					

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No. of elements	RT of insulation min. (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
0.5 mm²/7								
1	0.26	0.8	5.0	0.9	1.3	9.4	168	LKX7068P0010000
2	0.26	0.9	7.4	0.9	1.3	11.8	248	LKX7068P0040000
4	0.26	0.9	8.5	0.9	1.4	13.1	301	LKX7068P0070000
5	0.26	1.0	9.4	0.9	1.4	14.0	343	LKX7068P1510000
6	0.26	1.0	10.2	0.9	1.4	14.8	382	LKX7068P0100000
8	0.26	1.0	10.8	0.9	1.4	15.4	418	LKX7068P0130000
10	0.26	1.1	12.4	0.9	1.5	17.2	501	LKX7068P0160000
12	0.26	1.1	13.0	0.9	1.5	17.8	543	LKX7068P0190000
16	0.26	1.1	14.6	0.9	1.5	19.4	638	LKX7068P0220000
20	0.26	1.2	16.2	0.9	1.6	21.2	747	LKX7068P0250000
24	0.26	1.2	17.5	0.9	1.6	22.5	836	LKX7068P0280000
30	0.26	1.4	20.5	1.25	1.7	26.4	1192	LKX706810100000
0.75 mm²/7								
1	0.26	0.8	5.4	0.9	1.3	9.8	182	LKX7068P0310000
2	0.26	0.9	8.1	0.9	1.4	12.7	281	LKX7068P0340000
4	0.26	1.0	9.6	0.9	1.4	14.2	353	LKX7068P0370000
5	0.26	1.0	10.4	0.9	1.4	15.0	397	LKX7068P1540000
6	0.26	1.0	11.3	0.9	1.4	15.9	442	LKX7068P0400000
8	0.26	1.1	12.2	0.9	1.5	17.0	506	LKX7068P0430000
10	0.26	1.1	13.8	0.9	1.5	18.6	583	LKX7068P0460000
12	0.26	1.1	14.5	0.9	1.5	19.3	640	LKX7068P0490000
16	0.26	1.2	16.5	0.9	1.6	21.5	782	LKX7068P0520000
20	0.26	1.3	18.3	0.9	1.6	23.3	908	LKX7068P0550000
24	0.26	1.3	19.8	1.25	1.7	25.7	1165	LKX7068P0580000
1.0 mm²/7								
1	0.26	0.9	6.1	0.9	1.3	10.5	206	LKX7068P0610000
2	0.26	0.9	8.9	0.9	1.4	13.5	316	LKX7068P0640000
4	0.26	1.0	10.5	0.9	1.4	15.1	401	LKX7068P0670000
5	0.26	1.0	11.5	0.9	1.4	16.1	456	LKX7068P1570000
6	0.26	1.0	12.5	0.9	1.4	17.1	509	LKX7068P0700000
8	0.26	1.1	13.5	0.9	1.5	18.3	587	LKX7068P0730000
10	0.26	1.1	15.2	0.9	1.5	20.0	691	LKX7068P0760000
12	0.26	1.2	16.1	0.9	1.5	20.9	758	LKX7068P0790000
16	0.26	1.2	18.2	0.9	1.6	23.2	1053	LKX7068P0820000
20	0.26	1.3	20.3	1.25	1.7	26.2	1229	LKX7068P0850000
24	0.26	1.4	22.1	1.25	1.7	28.0	1385	LKX7068P0880000

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1.3 mm²/7								
1	0.35	0.9	6.6	0.9	1.3	11.0	228	LKX7068P0910000
2	0.35	1.0	10.0	0.9	1.4	14.6	362	LKX7068P0940000
4	0.35	1.0	11.6	0.9	1.4	16.2	462	LKX7068P0970000
5	0.35	1.1	12.9	0.9	1.5	17.7	542	LKX7068P1600000
6	0.35	1.1	14.1	0.9	1.5	18.9	610	LKX7068P1000000
8	0.35	1.2	15.2	0.9	1.5	20.0	703	LKX7068P1030000
10	0.35	1.2	17.2	0.9	1.6	22.2	959	LKX7068P1060000
12	0.35	1.3	18.2	0.9	1.6	23.2	1046	LKX7068P1090000
16	0.35	1.3	20.6	1.25	1.7	26.5	1272	LKX7068P1120000
20	0.35	1.4	22.9	1.25	1.8	29.0	1489	LKX7068P1150000
24	0.35	1.5	25.0	1.25	1.8	31.1	1708	LKX7068P1180000
1.5 mm²/7								
1	0.35	0.9	6.9	0.9	1.3	11.3	239	LKX7068P1210000
2	0.35	1.0	10.5	0.9	1.4	15.1	383	LKX7068P1240000
4	0.35	1.1	12.3	0.9	1.5	17.1	502	LKX7068P1270000
5	0.35	1.1	13.5	0.9	1.5	18.3	574	LKX7068P1630000
6	0.35	1.1	14.7	0.9	1.5	19.5	646	LKX7068P1300000
8	0.35	1.2	15.9	0.9	1.6	20.9	757	LKX7068P1330000
10	0.35	1.3	18.2	0.9	1.6	23.2	1025	LKX7068P1360000
12	0.35	1.3	19.0	0.9	1.7	24.2	997	LKX7068P1390000
16	0.35	1.4	21.7	1.25	1.7	27.6	1364	LKX7068P1420000
20	0.35	1.5	24.1	1.25	1.8	30.2	1615	LKX7068P1450000
24	0.35	1.5	26.1	1.25	1.8	32.2	1829	LKX7068P1480000
2.5 mm²/7								
1	0.44	0.9	8.1	0.9	1.3	12.5	293	LKX7068P9550000
2	0.44	1.1	12.7	0.9	1.5	17.5	508	LKX7068P9560000
4	0.44	1.1	14.8	0.9	1.5	19.6	660	LKX7068P9570000
5	0.44	1.2	16.6	0.9	1.6	21.6	800	LKX7068P9580000
6	0.44	1.2	18.1	0.9	1.6	23.1	892	LKX7068P9590000
8	0.44	1.3	19.5	1.25	1.7	25.4	1184	LKX7068P9600000
10	0.44	1.4	22.4	1.25	1.8	28.5	1438	LKX7068P9610000
12	0.44	1.5	23.6	1.25	1.8	29.7	1577	LKX7068P9620000
16	0.44	1.5	26.8	1.25	1.8	32.9	1935	LKX7068P9630000
20	0.44	1.6	29.8	1.6	2.0	37.0	2502	LKX7068P9640000
24	0.44	1.6	32.3	1.6	2.0	39.5	2806	LKX7068P9650000

RT = Radial Thickness