

Flame Retardant, Sunlight Resistant

90 °C / 300 V

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

ICON BASE PRO 60104 M1 OS

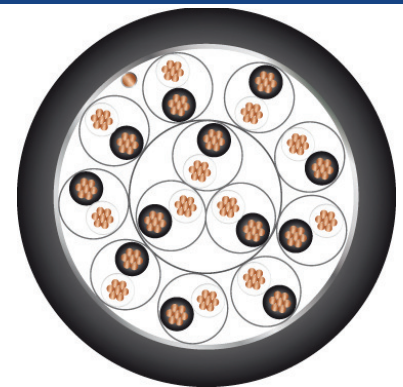
Application

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; not for direct burial. Indoor installation allowed to the local regulations. For the EU member States the below mentioned classification of the construction products regulation (CPR) acc. to EN 50575 has to be considered. (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
Outer sheath.....	polyvinyl chloride PVC, reinforced, black, blue for intrinsically safe systems
Cable marking.....	LEONI KERPEN ICON BASE PRO Type Code Size 300V RP GEN. TO EN 50288-7 Cca DoP CDESK 0000055 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)
CPR Classification	EN 50575 (Cca (s2, d0, a3))
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

Abbreviations

	ICON BASE PRO
OS	overall screen

Temperature range	-30°C up to +90°C (during operation) -5°C up to +50°C (during installation)
Minimum bending radius	7.5 x cable diameter

Electrical Properties at 20 °C

		mm ²	0.5	0.75	1.0	1.3	1.5	2.5
Conductor cross-section	nom.							
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 outer sheath nom. (mm)	Outer dia. approx. (mm)	Weight approx. (kg/km)	Part No. Colour black	
0.5 mm²/7						
1	0.26	1.8	7.0	62	LKX7328P0010000	
2	0.26	1.8	9.2	96	LKX7328P0040000	
4	0.26	1.8	10.3	126	LKX7328P0070000	
5	0.26	1.8	11.0	148	LKX7328P1510000	
6	0.26	1.8	11.8	169	LKX7328P0100000	
8	0.26	1.8	12.4	194	LKX7328P0130000	
10	0.26	1.8	13.8	236	LKX7328P0160000	
12	0.26	1.8	14.4	262	LKX7328P0190000	
16	0.26	1.8	16.0	326	LKX7328P0220000	
24	0.26	1.8	18.7	450	LKX7328P0280000	
0.75 mm²/7						
1	0.26	1.8	7.4	70	LKX7328P0310000	
2	0.26	1.8	9.9	113	LKX7328P0340000	
4	0.26	1.8	11.2	152	LKX7328P0370000	
5	0.26	1.8	12.0	180	LKX7328P1540000	
6	0.26	1.8	12.9	207	LKX7328P0400000	
8	0.26	1.8	13.7	241	LKX7328P0430000	
10	0.26	1.8	15.2	289	LKX7328P0460000	
12	0.26	1.8	15.9	327	LKX7328P0490000	
16	0.26	1.8	17.7	415	LKX7328P0520000	
20	0.26	1.8	19.3	493	LKX7328P0550000	
24	0.26	1.8	20.8	582	LKX7328P0580000	
1.0 mm²/7						
1	0.26	1.8	7.9	80	LKX7328P0610000	
2	0.26	1.8	10.7	131	LKX7328P0640000	
4	0.26	1.8	12.1	182	LKX7328P0670000	
5	0.26	1.8	13.1	220	LKX7328P1570000	
10	0.26	1.8	16.6	360	LKX7328P0760000	
12	0.26	1.8	17.3	412	LKX7328P0790000	
16	0.26	1.8	19.4	517	LKX7328P0820000	
20	0.26	1.8	21.3	629	LKX7328P0850000	
24	0.26	1.8	22.9	732	LKX7328P0880000	

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1.3 mm²/7					
1	0.35	1.8	8.4	92	LKX7328P0910000
2	0.35	1.8	11.6	155	LKX7328P0940000
4	0.35	1.8	13.2	220	LKX7328P0970000
6	0.35	1.8	15.5	310	LKX7328P1000000
8	0.35	1.8	16.4	365	LKX7328P1030000
10	0.35	1.8	18.4	444	LKX7328P1060000
12	0.35	1.8	19.2	510	LKX7328P1090000
16	0.35	1.8	21.6	650	LKX7328P1120000
20	0.35	1.8	23.7	780	LKX7328P1150000
24	0.35	1.8	25.6	916	LKX7328P1180000
1.5 mm²/7					
1	0.35	1.8	8.7	99	LKX7328P1210000
2	0.35	1.8	12.0	169	LKX7328P1240000
4	0.35	1.8	13.7	244	LKX7328P1270000
6	0.35	1.8	16.1	343	LKX7328P1300000
8	0.35	1.8	17.6	419	LKX7328P1330000
10	0.35	1.8	19.2	507	LKX7328P1360000
12	0.35	1.8	20.0	570	LKX7328P1390000
16	0.35	1.8	22.5	733	LKX7328P1420000
20	0.35	1.8	24.7	887	LKX7328P1450000
24	0.35	1.8	26.7	1041	LKX7328P1480000
2.5 mm²/7					
1	0.44	1.8	9.9	131	LKX7328P9550000
2	0.44	1.8	14.1	190	LKX7328P9560000
4	0.44	1.8	16.2	346	LKX7328P9570000
5	0.44	1.8	17.8	423	LKX7328P9580000
6	0.44	1.8	19.3	493	LKX7328P9590000
8	0.44	1.8	20.5	599	LKX7328P9600000
10	0.44	1.8	23.2	746	LKX7328P9610000
12	0.44	1.8	24.2	851	LKX7328P9620000
16	0.44	1.8	27.4	1105	LKX7328P9630000
20	0.44	1.8	30.2	1336	LKX7328P9640000
24	0.44	1.8	32.7	1572	LKX7328P9650000

RT = Radial Thickness