

<b>Expertise</b>		 <span style="font-size: 1.2em; font-weight: bold;">eurofins</span>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">E&amp;E</div>
ExTR Reference Number..... : --- ExTR Free Reference Number ..... : 20CH-00778.X01 Tested by + signature (ExTL)..... : Thomas Köhntopp <span style="float: right; text-align: right;">                       .....                 </span> Product Qualification Reviewed by + signature (ExTL)... : Christian Ettlin <span style="float: right; text-align: right;">                       .....                 </span> Product Qualification Date of issue ..... : 2020-05-07			
Ex Testing Laboratory (ExTL) ..... : Eurofins Electric & Electronic Product Testing AG Address ..... : Luppenstrasse 3, 8320 Fehraltorf, SWITZERLAND			
Applicant's name ..... : LEITRONIC AG Address ..... : Engelostrasse 16, CH-5621 Zufikon, SWITZERLAND Standards ..... : Refer to test description Test procedure ..... : ATEX and IECEx System			
<b>Possible test case verdicts:</b> - test case does not apply to the test item ..... : N / A - test item does meet the requirement ..... : Pass			
Test item description ..... : Emergency call phone Model/type reference ..... : LMK70-ATEX <span style="padding-left: 100px;">ATEX-BARRIERE</span>			
<b>Particulars: Test item vs. Test requirements</b> IP degree to be tested..... : N / A Rated ambient temperature range (°C)..... : N / A Maximum service temperature ..... : N / A			
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### Maximum cable length for emergency call phone

Based on the special conditions of safe use in EC-Type Examination Certificate SEV 13 ATEX 0179 X the following maximum cable inductance respective capacitance is allowed:

Maximum cable inductance of connecting cable:		
Gas-Group	One LMK70-ATEX	Two LMK70-ATEX
IIC	0.55 mH	0.2 mH
IIB	4.15 mH	3.8 mH
IIA	8.15 mH	7.8 mH

Maximum cable capacitance of connecting cable:		
Gas-Group	One LMK70-ATEX	Two LMK70-ATEX
IIC	32 $\mu$ F	21 $\mu$ F
IIB & IIA	489 $\mu$ F	478 $\mu$ F

The maximum cable length is calculated based on this values for the following cables:

#### CAT.7 lift cable 4x2x0.14(AWG26/7) halogenfree, with 2 steel supp. Elements from Stelec GmbH:

Values according data sheet:

Capacity: <52 nF/km

Inductivity: 0.72  $\mu$ H/m

Gas-Group	One LMK70-ATEX	Two LMK70-ATEX
IIC	0.55 mH : 0.72 $\mu$ H/m = 763 m 32 $\mu$ F : 52 pF/m = 615384 m <b>Maximum length: 763 m</b>	0.2 mH : 0.72 $\mu$ H/m = 277 m 21 $\mu$ F : 52 pF/m = 403846 m <b>Maximum length: 277 m</b>
IIB	4.15 mH : 0.72 $\mu$ H/m = 5763 m 489 $\mu$ F : 52 pF/m = 9403846 m <b>Maximum length: 5763 m</b>	3.8 mH : 0.72 $\mu$ H/m = 5277 m 478 $\mu$ F : 52 pF/m = 9192307 m <b>Maximum length: 5277 m</b>
IIA	8.15 mH : 0.72 $\mu$ H/m = 11319 m 489 $\mu$ F : 52 pF/m = 9403846 m <b>Maximum length: 11319 m</b>	7.8 mH : 0.72 $\mu$ H/m = 10833 m 478 $\mu$ F : 52 pF/m = 9192307 m <b>Maximum length: 10833 m</b>

#### CAT.7 lift cable 4x2x0.25(AWG24/7) PVC, with 2 steel supp. Elements from Stelec GmbH:

Values according data sheet:

Capacity: 43 pF/m

Inductivity: 0.85  $\mu$ H/m

Gas-Group	One LMK70-ATEX	Two LMK70-ATEX
IIC	0.55 mH : 0.85 $\mu$ H/m = 647 m 32 $\mu$ F : 43 pF/m = 744186 m <b>Maximum length: 647 m</b>	0.2 mH : 0.85 $\mu$ H/m = 235 m 21 $\mu$ F : 43 pF/m = 488372 m <b>Maximum length: 235 m</b>
IIB	4.15 mH : 0.85 $\mu$ H/m = 4882 m 489 $\mu$ F : 43 pF/m = 11372093 m <b>Maximum length: 4882 m</b>	3.8 mH : 0.85 $\mu$ H/m = 4470 m 478 $\mu$ F : 43 pF/m = 11116279 m <b>Maximum length: 4470 m</b>
IIA	8.15 mH : 0.85 $\mu$ H/m = 9588 m 489 $\mu$ F : 43 pF/m = 11372093 m <b>Maximum length: 9588 m</b>	7.8 mH : 0.85 $\mu$ H/m = 9176 m 478 $\mu$ F : 43 pF/m = 11116279 m <b>Maximum length: 9176 m</b>

**Maximum cable length for emergency call phone****CAT.7 lift cable 4x2x0.25(AWG24/7) halogenfree, with 2 steel supp. Elements from Stelec GmbH:**

Values according data sheet:

Capacity: 43 pF/m

Inductivity: 1.04  $\mu$ H/m

Gas-Group	One LMK70-ATEX	Two LMK70-ATEX
IIC	0.55 mH : 1.04 $\mu$ H/m = 528 m 32 $\mu$ F : 43 pF/m = 744186 m <b>Maximum length: 528 m</b>	0.2 mH : 1.04 $\mu$ H/m = 192 m 21 $\mu$ F : 43 pF/m = 488372 m <b>Maximum length: 192 m</b>
IIB	4.15 mH : 1.04 $\mu$ H/m = 3990 m 489 $\mu$ F : 43 pF/m = 11372093 m <b>Maximum length: 3990 m</b>	3.8 mH : 1.04 $\mu$ H/m = 3653 m 478 $\mu$ F : 43 pF/m = 11116279 m <b>Maximum length: 3653 m</b>
IIA	8.15 mH : 1.04 $\mu$ H/m = 7836 m 489 $\mu$ F : 43 pF/m = 11372093 m <b>Maximum length: 7836 m</b>	7.8 mH : 1.04 $\mu$ H/m = 7500 m 478 $\mu$ F : 43 pF/m = 11116279 m <b>Maximum length: 7500 m</b>

**YSSTCY 4x2x0.34 from TKD:**

Measured values refer to Measurement Report 20CH-00778.X01:

Capacity: 213 pF/m

Inductivity: 0.68  $\mu$ H/m

Gas-Group	One LMK70-ATEX	Two LMK70-ATEX
IIC	0.55 mH : 0.68 $\mu$ H/m = 808 m 32 $\mu$ F : 213 pF/m = 150305 m <b>Maximum length: 808 m</b>	0.2 mH : 0.68 $\mu$ H/m = 294 m 21 $\mu$ F : 213 pF/m = 98637 m <b>Maximum length: 294 m</b>
IIB	4.15 mH : 0.68 $\mu$ H/m = 6102 m 489 $\mu$ F : 213 pF/m = 2296852 m <b>Maximum length: 6102 m</b>	3.8 mH : 0.68 $\mu$ H/m = 5588 m 478 $\mu$ F : 213 pF/m = 2245185 m <b>Maximum length: 5588 m</b>
IIA	8.15 mH : 0.68 $\mu$ H/m = 11985 m 489 $\mu$ F : 213 pF/m = 2296852 m <b>Maximum length: 11985 m</b>	7.8 mH : 0.68 $\mu$ H/m = 11470 m 478 $\mu$ F : 213 pF/m = 2245185 m <b>Maximum length: 11470 m</b>