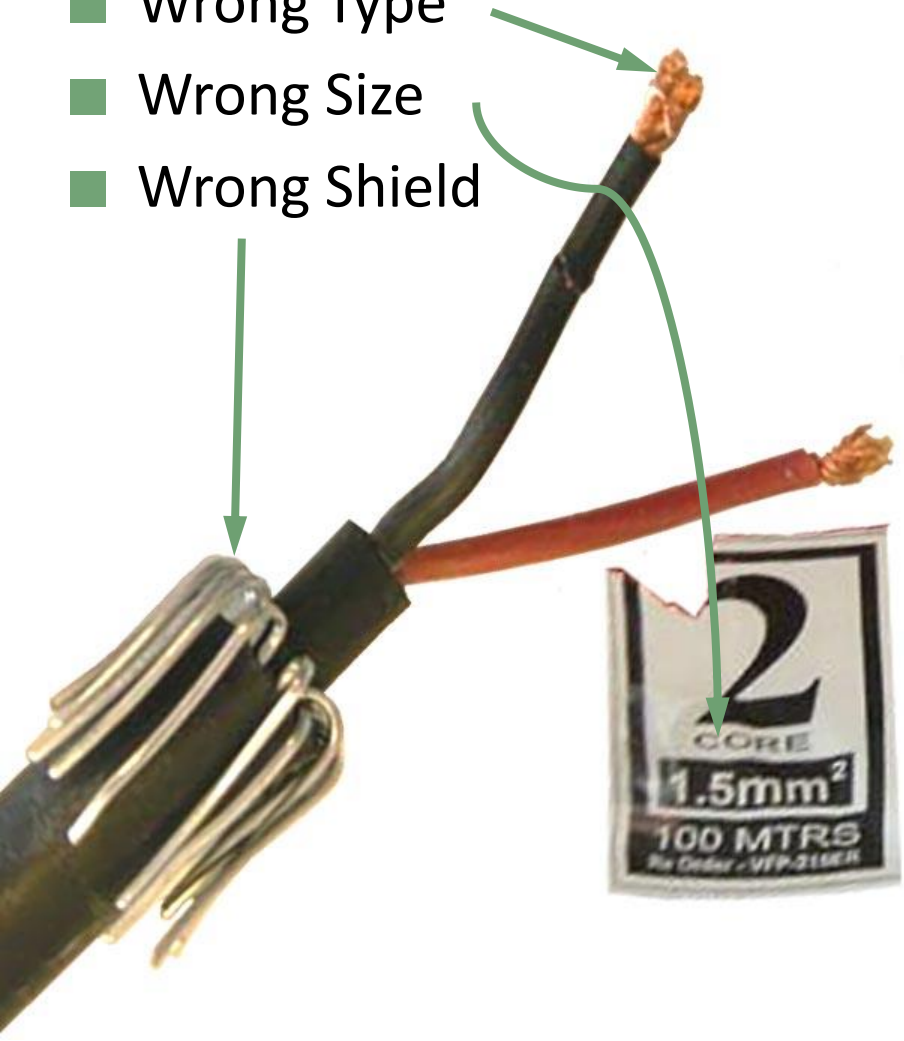
The Loop

Chose the cable wisely

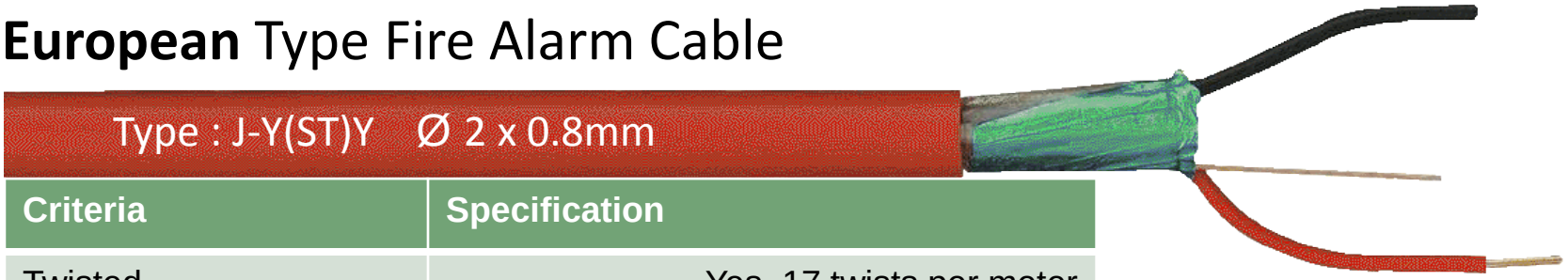
These cables won't work!

- Wrong Type
- Wrong Size
- Wrong Shield



The European Cable

European Type Fire Alarm Cable



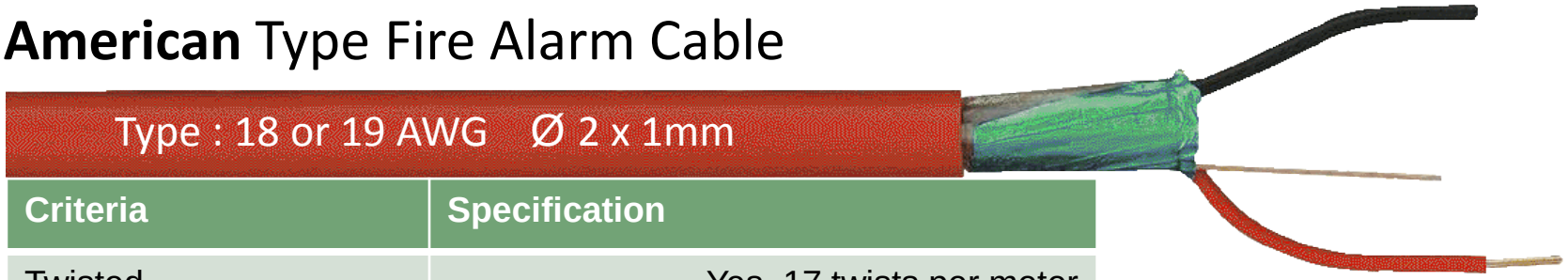
Criteria	Specification
Twisted	Yes, 17 twists per meter
Jacket	Low smoke, zero halogen polyolefin
Conductor flexibility	solid
Conductor material	Bare annealed copper
Screen	Alu or copper tape + copper drain wire
Conductor diameter	0.8mm
Conductor cross-section	0.5mm^2
Wire to wire capacity	Max. 100pF/m
Compliance	EN 50265 / 50267 / 50268 / 502667 VDE 0815, IEC 60034 / 60332 / 60754

Not adhering to this specification means «inviting troubles» due to interference!

Source locally for proper type of cable.

Sources:
www.daetwyler-cables.com
www.lappkabel.com
www.fscables.com
www.bekon.de
www.tk-neva.ru
www.eliancecables.com

American Type Fire Alarm Cable



Criteria	Specification
Twisted	Yes, 17 twists per meter
Jacket	Low smoke, zero halogen polyolefin
Conductor flexibility	solid
Conductor material	Bare annealed copper
Screen	Alu or copper tape + copper drain wire
Conductor diameter	0.4” / 1.03mm
Conductor cross-section	0.8mm^2
Wire to wire capacity	Max. 100pF/m
Compliance	2-hour fire rated to UL 2196 for installation to NFPA 72, Article 760

Not adhering to this specification means «inviting troubles» due to interference!

Source locally for proper type of cable.

Sources: www.tappanwire.com www.showmecables.com www.honeywellcable.com www.belden.com www.tycab.com www.pentair.com

The Loop — Length vs Quantity vs Plausibility

Loop Device	@3500	Max.	Loop Length @ Max.	Power Cons. Q / Alarm
MCD 573X	79	217	1’318m	150µA / 2.5mA
MCD 573X	79	**250***	**861**m*	150µA / 2.5mA
MCP 545X	91	234	1’428m	120µA / 2.5mA
BX-OI3	27	64	1’500m	550µA / - n.a. -
BX-REL4	28	64	1’500m	510µA / - n.a. -
BX-IM4	31	64	1’500m	450µA / - n.a. -
BX-IOM	32	64	1’500m	430µA / - n.a. -
BX-02I4	22	64	1’500m	630µA / - n.a. -
BX-SOL	7	60	418m	500µA / 4.7mA
BX-FOL	5	40	628m	500µA / 6.5mA

Note: Maximum numbers are exclusive, meaning that

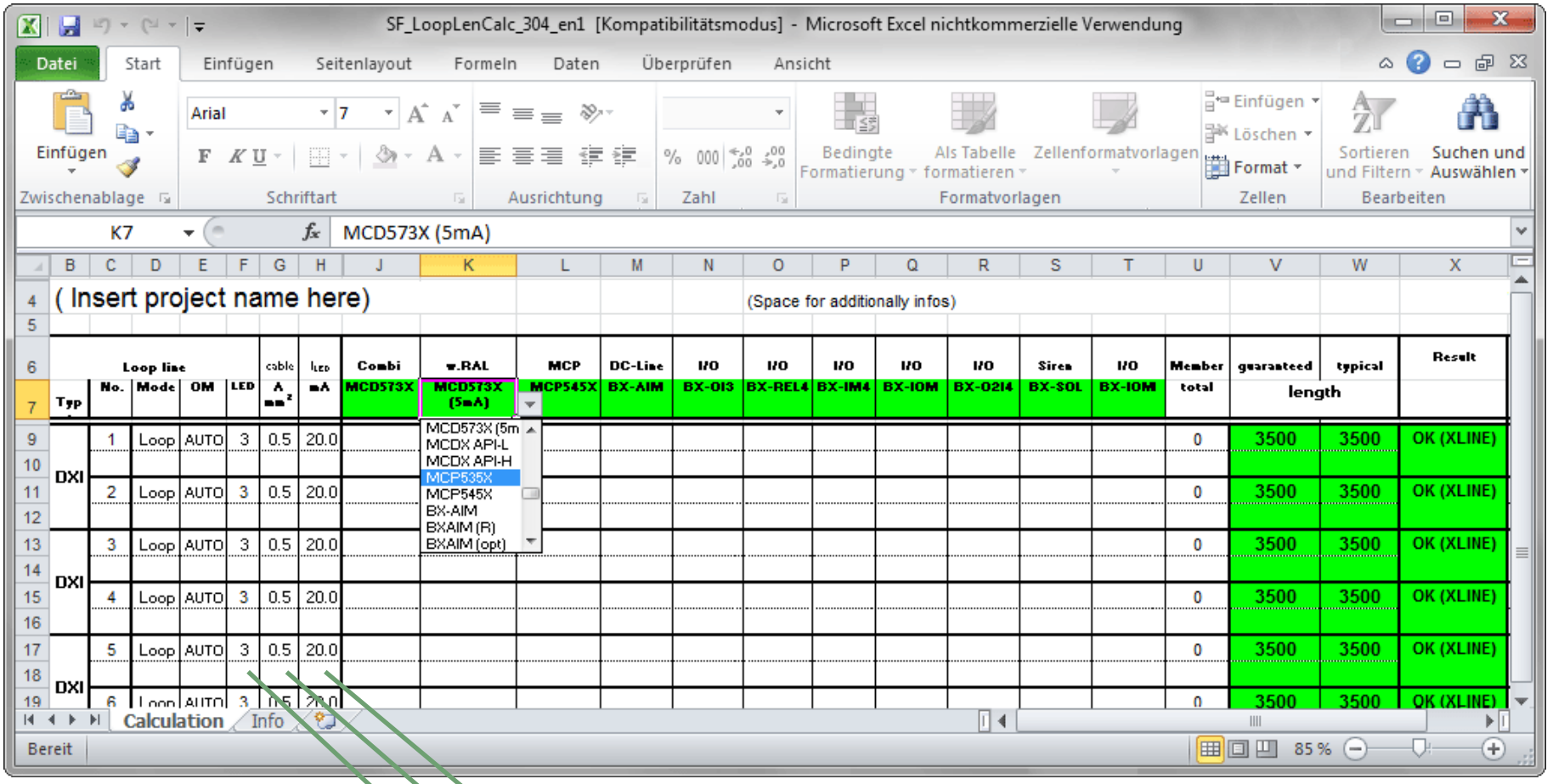
a) max. number is lower, if other devices are added

b) if max. number is reached, no other device can be added

* Does not make sense because it results in 1 detector every 3.4m

The Loop

Loop Length Calculator



Number of LED indicators to be activated in case of an incident (Detector LED, MCP LED, LED of Room Indication Lamps, etc.). This number is defined by local regulation or code of practice.

Part of the totally 90mA per loop allocated to drive the LED indicators.

Wire Size (mm^2)

SECURITON