



# G and B Series Maximum Wire Length Guide

rev 7-2021



**BOSCH**

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<b>Device</b>	<b>Max wire length</b>	<b>Maximum distance - UNSHIELDED wire size</b>
<b>B942</b>	SDI2 wiring with prox detector disabled	200 ft (61 m) - 22 AWG (0.65 mm) 520 ft (159 m) - 18 AWG (1.02 mm)
	SDI2 wiring with prox detector enabled	150 ft (46 m) - 22 AWG (0.65 mm) 390 ft (119 m) - 18 AWG (1.02 mm)
<b>B930</b>	SDI2 wiring	1000 ft (305 m) - 22 AWG (0.65mm)
<b>B921C</b>	SDI2 wiring	700 ft (213 m) - 22 AWG (0.65 mm)
		1000 ft (305 m) - 18 AWG (1.02 mm)
<b>B920</b>	SDI2 wiring	1000 ft (305 m) - 22 AWG (0.65mm)
<b>B208</b>	SDI2 wiring	1000 ft (305 m) - 22 AWG (0.65 mm)
		1000 ft (305 m) - 18 AWG (1.02 mm)
<b>B308</b>	SDI2 wiring	400 ft (122 m) - 22 AWG (0.65 mm)
		1000 ft (305 m) - 18 AWG (1.02 mm)
<b>B901</b>	SDI2/SDI wiring to B901 + Reader with external power supply	1000 ft (305 m) - 22 AWG (0.65 mm) 2500 ft (762 m)- 18 AWG (1.02 mm)
	SDI2/SDI wiring to B901 + Reader from control panel	175 ft (53 m) - 22 AWG (0.65 mm) 450 ft (137 m) -18 AWG (1.02 mm)
	Wiring distance from B901 to Reader	200 ft (61 m) - 22 AWG (0.65 mm) 500 ft (152 m) -18 AWG (1.02 mm) Reader dependant
<b>B520</b>	SDI2 wiring	1000 ft (305 m) - 22 AWG (0.6mm)
		1000 ft (305 m) - 18 AWG (1 mm) *Maximum wiring distance from the panel to the last SDI2 module can not exceed 1000 ft.
<b>B299</b>	SDI2 wiring	200 ft (60 m) - 22 AWG (0.65 mm) 500 ft (152 m) - 18 AWG (1.02 mm)
	POPIT loop wiring	1800 ft (548 m) 22 AWG (0.65mm) 4497 ft (1370 m) 18 AWG (1.02 mm)
<b>B600</b>	SDI wiring	Use the supplied interconnect cable (P/N: F01U079745)
	ZONEX wiring	Use the supplied ZONEX connection cable (P/N: F01U295103)
<b>B426</b>	Data bus wire length	150 m (500 ft) - 0.65 mm (22 AWG)
		300 m (1000 ft) - 1.02 mm (18 AWG)
<b>B450</b>	Bus wire length	22 AWG (0.65 mm) --> 12 m (40 ft)
		18 AWG (1.0 mm) --> 30 m (100 ft)
		16 AWG (1.3 mm) --> 48 m (158 ft)
		12 AWG (2.0 mm) --> 122 m (400 ft)
		Using a separate UL listed power supply, such as the B520 Auxiliary Power Supply Module, connected to the B450 within the specification listed above, the wire distance can be extended up to 300 m (1000 ft)

**NOTE: the maximum overall length of the SDI2 bus wiring is 7500', regardless of how many devices are on the bus.**

System Design Assistance:



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[G Series Installation Manual >>](#)



[B Series Installation Manual >>](#)