



## optoelectronic safety edge SIGNAL

- integrated diagnostic system with a visual display
- LED indicator for switching state
- larger gate-width possible
- less sensitive to wind load and bending
- high electromagnetic interference immunity
- resistant against voltage reversal and short-circuits
- regulated transmit power
- compatible with all common door controls

### Technical data

Range	1...12m
Operating voltage	10...16VDC,
Current consumption	approx. 40mA
Type of light	infrared, 880nm pulsed
Diagnostics display	yellow ring-shaped LED for rubber profile diagnostics, flashes with 1...16 impulses
Operation display	yellow ring-shaped LED is on when safety edge is triggered
Output	transistor-output, max. load 20mA, short-circuit-protected
Output voltage	rectangular signal low: 0...1V high: 3...5V
Output frequency	typ. 900Hz (0,5...2kHz)
Housing material	Transmitter, plastic PA6 Receiver, Lexan, IR transparent
Wire	3x0,14mm <sup>2</sup> , ø 3,4mm, PUR, halogen free, acid- and oil-resistant
Degree of protection	IP67 according to EN60529, filled with 2K-epoxy resin
Operating temperature	-25...+75°C
Storage temperature	-25...+75°C
Weight	approx. 21g with 1m cable approx. 155g with 10.5m cable
Size	ø12x39mm

### Declaration of conformity

EMC directive 89/336/EEC  
EN 61000-6-2 and EN 61000-6-4  
Safety devices for power operated doors and gates  
EN 12978



## Diagnostics interpretation

The „**SIGNAL**“ safety edge has a new diagnostic system innovatively integrated. To realise this, the transmitter has got an all around visible yellow ring LED.

When switched on, the optical values of the rubber profile are measured and indicated with a flash code with 1...16 impulses.

1 impulse is the best value and 16 impulses indicates, that the limit of the optoelectronic system is reached. After displaying the diagnostic value the „**SIGNAL**“ changes to the normal operation mode. Now the triggering of the safety edge is displayed by the LED.

Always after switching on the power:

- 1...6 flashes = optimal condition
- 7...14 flashes = good condition
- 15...16 flashes = operational limit reached

## Ordering details

### SIGNAL12

Version with open ends	Order number
Transmitter (standard cable lengths: 0,5m / 1,0m)	SIGNAL12T 1.114 120/Xm
Receiver (standard cable lengths: 0,5m / 1,0m / 10,5m)	SIGNAL12R 1.114 130/Xm
Version with Molex connector	Order number
Transmitter (standard cable lengths: 0,5m / 1,0m)	SIGNAL12T 1.114 125/Xm
Receiver (standard cable lengths: 0,5m / 1,0m / 10,5m)	SIGNAL12R 1.114 135/Xm

### SIGNAL15

Version with open ends	Order number
Transmitter (standard cable lengths: 0,5m / 1,0m)	SIGNAL15T 1.114 150/Xm
Receiver (standard cable lengths: 1,0m / 10,5m / 13,0m)	SIGNAL15R 1.114 160/Xm
Version with Molex connector	Order number
Transmitter (standard cable lengths: 0,5m / 1,0m)	SIGNAL15T 1.114 155/Xm
Receiver (standard cable lengths: 1,0m / 10,5m / 13,0m)	SIGNAL15R 1.114 165/Xm

Sample:

<b>SIGNAL12</b> transmitter with 1m cable	SIGNAL12T 1.114 120/010
<b>SIGNAL12</b> receiver with 10,5m (Molex)	SIGNAL12R 1.114 135/105

The entire **SIGNAL** series can be supplied in series with other cable lengths.