

Application Note

Replacement for “Mini”-Sensors in combination with an amplifier

General Information

- All Mini-Sensors which used to work only in combination with an external amplifier have been discontinued and need to be replaced:
- Either with a standard-sensor that includes optical- and electronically components in one housing
- or, if the space is very limited with fiber-optics + fiber-optic-amplifiers

- Mini-Sensors have been available as:

- Pair of Through-Beam-Sensors: **LS ... Se + LS ... E**



- Retro-Reflective-Sensors, or Diffuse Energetic-Sensors: **RK ...**



- All Mini-Sensors have been connected to an Amplifier: **(I)VS ...**



- How to find out, if the sensor is “Mini”:
- If the type-name of the sensor includes **no slash (/)** it will be a Mini-sensor.

Example: LS 72 SE,3000: MINI

LS 72/2 SE,6000: not MINI

- The electrical behavior of the Mini-system was settled by means of the amplifier → for best possible replacement, always try to find out the type of the amplifier!!!

Amplifiers:
Example:
IVS 28/44.8

- I: optional Warning-output PNP
- VS: Amplifier
- 28: Series
- /44: Electrical basics → see here on the right
- .8: optional Activating-input
 - Z: optional Time delay

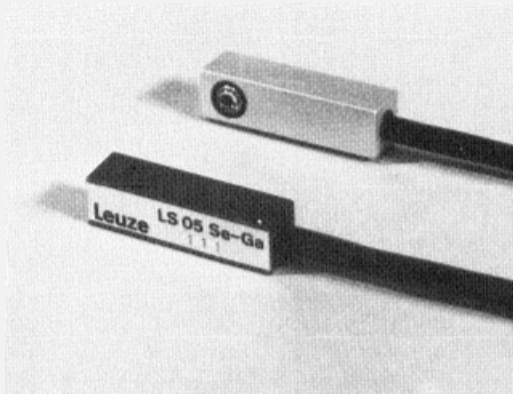
Electrical basics:

- /2: 24 Volt DC; 1 NPN-output
- /22: 24 Volt DC; 2 NPN-outputs
- /4: 24 Volt DC; 1 PNP-output
- /44: 24 Volt DC; 2 PNP-outputs
- /24: 24 Volt DC; 1 NPN-output 1 PNP-output
- /R: 24 Volt DC; Relais-output
- /7: **different Voltage AC!!!**; Relais-output

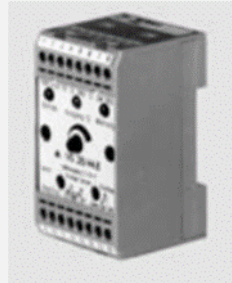
LS 05 GA-G + Amplifier possible solution with a standard sensor

Leuze

DISCONTINUED



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REPLACEMENT

LSR 2



Specification

No amplifier!

Voltage: 10-30VDC

Output: 1x NPN, 1x PNP

Transmitter

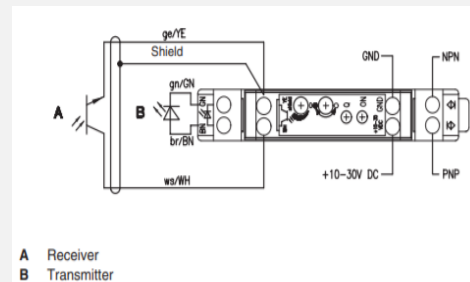
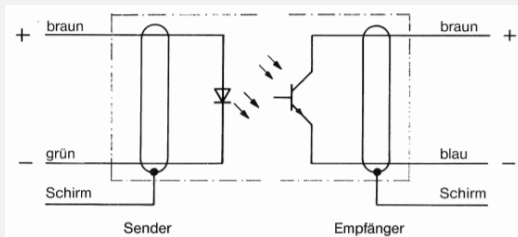
LSSR 2

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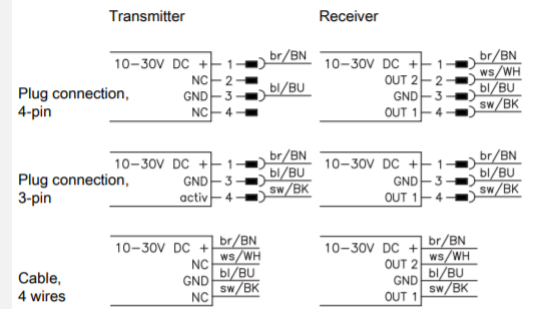
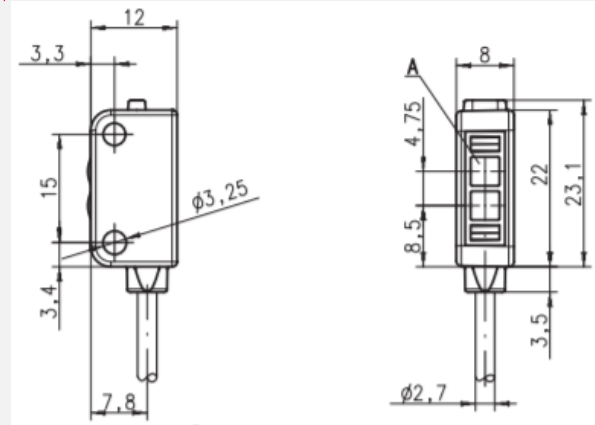
receiver

LSER 2/42

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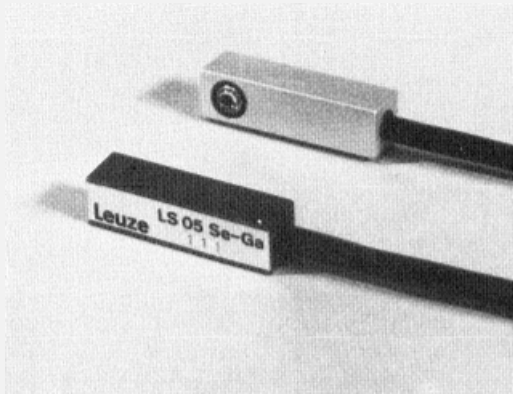


A Receiver
B Transmitter



LS 05 GA-G + Amplifier possible solution with fiber-optics

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REPLACEMENT



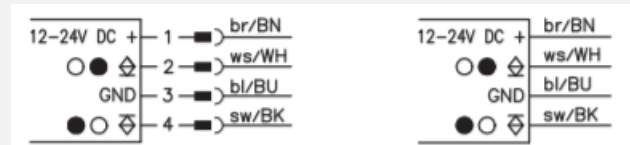
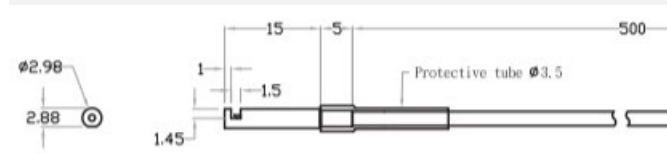
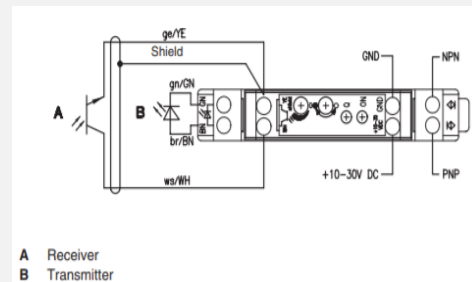
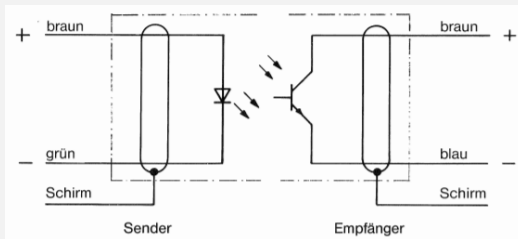
Part description

KF-LH-305-D - Plastic fiber optics for throughbeam operation



Part description

LV461.1/P2 - Fiber optic amplifier





**For further support
please contact our
service hotline.**



Technical Hotline

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