

Application Note

Replacing the LS/VIS 29

Manuel Frey, November 2020

- The LS29 / VS29 is phased out by end of 2020

- 50080860 VS 29/44.8
- 50080861 LS 29 SE-L
- 50080862 LS 29 E-L

Comparison:



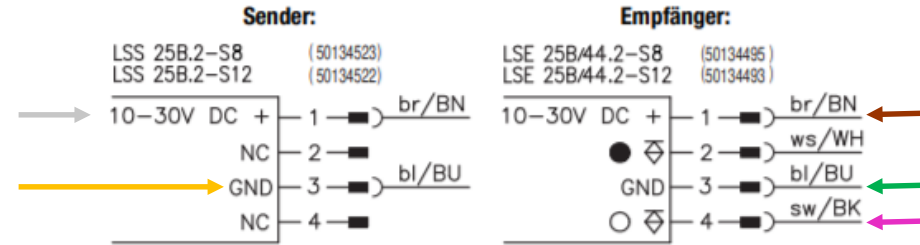
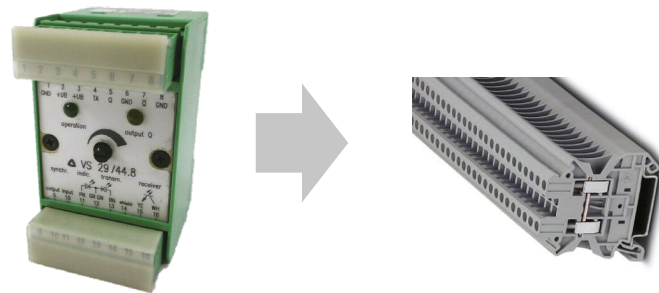
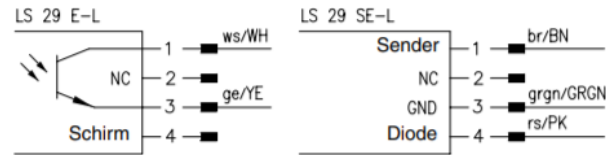
vs.



- There is no replacement on hand since today's sensors are based on different designs.
- For the case that a through beam sensor of today's portfolio (e.g. Series 25) fulfills the sensor requirement of the application, integration might be simplified.
- One requirement is that the customer has single-sensor application and not a cascade of LS29 sensors. This means that the proposal explained on the next slide might work for applications where only one LS29 pair is installed, because the proposal is sensitive on crosstalk.
- Remark:
 - it's recommended to change existing cables and use cables recommended for the replacement sensor.
 - If an exchange of cables is not possible, it can be tried to reuse existing cables (proper functionality not guaranteed). The next slide explains how existing cables (initially recommended for the LS/VS29) might be reused.

Proposal for single-sensor applications

Comparison of Pinout between LS29 and LSS 25B.X (example as replacement)



Reference: LSS 25B.X-S12

1. Replace VS29 amplifier at top-hat rail in control cabinet by a standard feed-through terminal.
2. Take a through beam sensor pair as replacement for the LS 29 (Leuze can give an application specific recommendation). **This sensor is typically not robust against crosstalk!**
3. Since the new sensor has all control electronics integrated, feed the switching signal and the power supply through the terminal block as explained in the connection table.

Pinout sensor	Terminal Block	External connection
	Ref: LS29	Terminal Pin
→ Pin1 sender	White	1
→ Pin1 receiver	Brown	2
→ Pin3 sender	Yellow	3
→ Pin3 receiver	Green	4
→ Pin4 receiver	Pink	5
	shield	6
	Output	7
	input	8