THE TASK
Automatic doors in busses and trains require a door edge protection to prevent the unintentional trapping of passengers. These sensors must be fitted in available clearances in the door control boxes. They must not be obstructive and should be protected against vandalism where possible.

Abb. 1: Tür-Sicherungssensoren in Bussen

IMPLEMENTATION
For door applications in busses and trains optoelectronic sensors have a very good track record as there is only limited space for accommodating the sensors depending on the door design. Pepperl+Fuchs offers two different solutions:

SOLUTION 1
Here, two multi-beam photoelectric sensors "PROSCAN-T" are integrated into the upper door corners and monitor the total door area in a fan-shaped pattern with 6 light beams each. The overlapping light fan ensure a maximum of reliability with smallest beam distances.
SOLUTION 2
Here, the infrared light grille “TOPSCAN” is being employed. Up to 5 light sensors with background elimination are incorporated in a light strip covering the whole door width. They cover the door area from above up to approx. 200 mm above the floor. Their function is therefore safeguarded even where ground conditions change.

Fig. 2: corner arrangement PROSCAN
CLIENT BENEFIT
The user receives a reliable low-maintenance system for protecting the door edge.