

Overfill Protection System

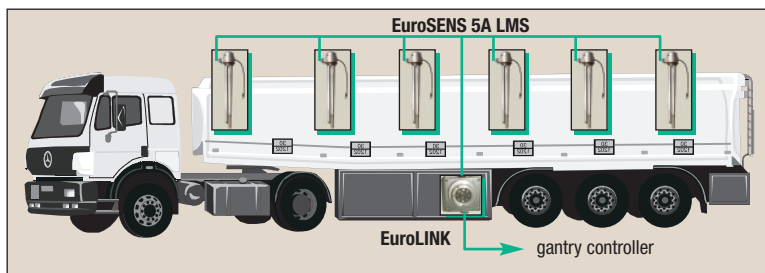
to VOC guideline and TRbF



Alfons Haar

A fail safe Overfill Prevention System to European Norm EN 13922 is required on all bottom loaded tank trucks since the VOC – guideline 94/63/EG has become national law in all European countries and elsewhere.

This enables tank trucks to load at any depot since all other required interfaces are standardised.



TKW with EuroSENS 5A LMS and EuroLINK

The Overfill Prevention System requires a gantry controller to European Norm EN 13922 controlling both 2-wire and 5-wire optic sensors. A 10 pin plug connects to the EuroLINK socket installed on the tanker. Each tanker compartment is to be equipped with a EuroSENS or EuroSENS 5A LMS.



EuroSENS to EN 13922

EuroSENS

This is the standard optic sensor to EN 13922 to be installed in each tanker compartment.

The fail safe optic sensor prevents compartment overfilling.

As the sensors are to be installed in series as shown on the approved installation diagram the gantry will stop bottom loading when any sensor becomes wet.

For ultimate safety, it is required to lower the product level in the overfilled compartment before loading can recommence.

Accurate pre-setting in combination with wet leg sensors prevents such a situation.

EuroSENS 5A LMS

The EuroSENS 5A LMS combines both the optic EuroSENS for the gantry side and the additional optical level sensor for the truck side which is e.g. required for bottom loading on depots without gantry controller or for self loading.

When specifying the EuroSENS 5A LMS, pressure balanced foot valves or line valves are required for each compartment.



EuroSENS 5A LMS

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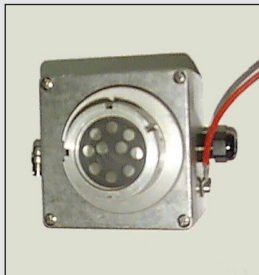
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GENERAL

Tankers equipped with **EuroSENS 5A LMS** can load at **depots equipped with gantry controllers** as required by the VOC- guideline and **depots without gantry controller**.

The approved **EuroSENS 5A LMS** (controlled from both, the EuroSENS 5A from the gantry controller, the LMS from the on-board controller X-MASTER) with its optical sensors to EN 13922 meets the VOC requirements for **self loading** (on-board overfill prevention in conjunction with pressure balanced foot valve).

EUROLINK



EuroLINK socket

The EuroLINK is the tanker mounted socket for connection of the gantry controller.

It may be equipped with a pneumatic pressure switch which is activated by the interlock switch of the vapour recovery adapter.

This assures that a permissive signal can only be generated if the vapour recovery hose is connected.

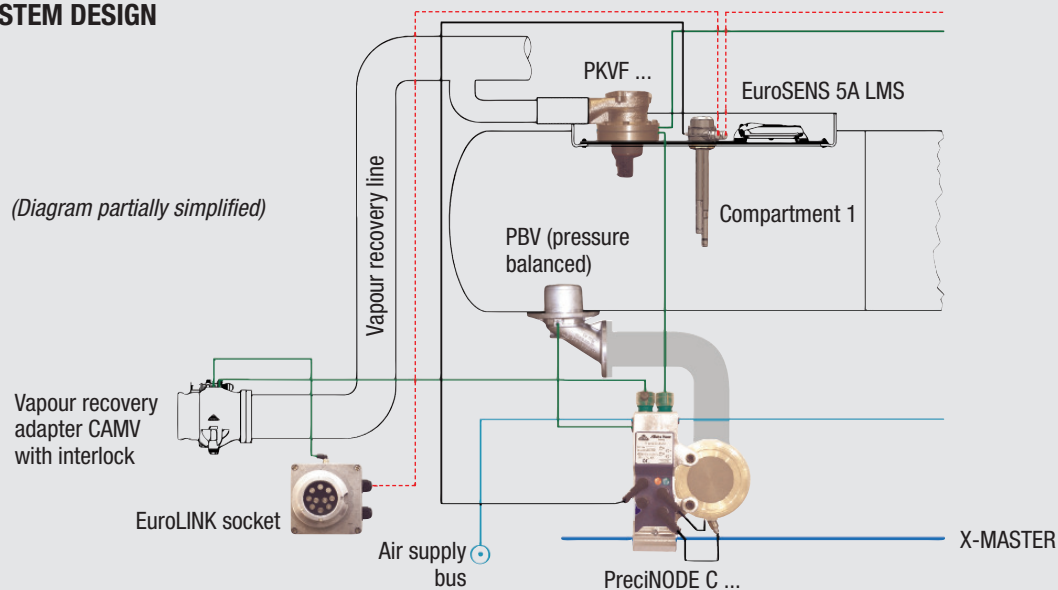
The interlock function may be used also for wet-leg sensor systems which allows loading only when all compartments are empty.



Vapour Recovery Adapter CAMV with interlock

SYSTEM DESIGN

(Diagram partially simplified)



EuroSENS 5A LMS, the fail-safe overfill prevention system, approved to meet all your bottom loading and self loading requirements