



MEV 282

The MEV 282 is suitable for 4-stroke diesel engines in the field of power generating plants or ship propulsion. The system is standard available in 2 versions, MEV282013 without crankcase pressure measurement and MEV282113 with crankcase pressure measurement whereas the crankcase pressure sensor mounted in the tube electronic box with two ranges, MEV282203 0..25mbar and MEV282213 -25 ... +25mbar.

All various units come together with customer designed measuring tubes type TGL015xx without pressure measurement or type TGL017xx with pressure measurement.

A system which has been retrofitted from former type MEV281... to new type MEV282... will be changed for the tube to TGL018xx.

The units have own sensors to collect data. With the help of software, the data are combined and analysed to allow fast reactions to give pre-alarms or auto-stop orders to the relevant engine control devices.

The following data are collected by the MEV282013

- ✍ Engine run information delivered by a contact from the engine control system
- ✍ Oil mist information taken by an optical line mounted in the TGL015xx which is part of the crankcase ventilation tube



OIL MIST DETECTOR

The following data are collected by the MEV282113/203/213

- ✍ Engine run information delivered by a contact out of the engine control system
- ✍ Oil mist information delivered by an optical line mounted in the TGL017xx which is part of the crankcase ventilation tube
- ✍ Crankcase pressure information taken by a sensor placed on the tube or in the tube electronic box

The oil mist information is to be seen as the last line of defense. Based on the fact that the oil mist protection starts around 250°C, heavy damage on running engine parts has already started to take place.

Technical Data:

Power supply
24VDC +/- 25%

Power consumption: approx. 25W

Operating temperature: 0 .. 75°C

Storage temperature : -10 ... +80°C

Weight : Electronic box 1.2 tube element depending on size between 5 to 15 kg

EMC Standard : generics no. 50.081 and 50 082-2 safety rules acc. EN 61 010

Certificates : GL, ABS, LR, DNV, RINA, BV.

Inputs:

Digital input : High level >15 VDC; low level <8 VDC

Design : Galvanic isolated

Outputs :

Analogue output : current 4 .. 20 mA load <=500 Ohm

Resolution : PWM / Current conversion with 10000 steps

Linearity : =< +/- 0.25% of final value

Reaction time : approximately 300 ms

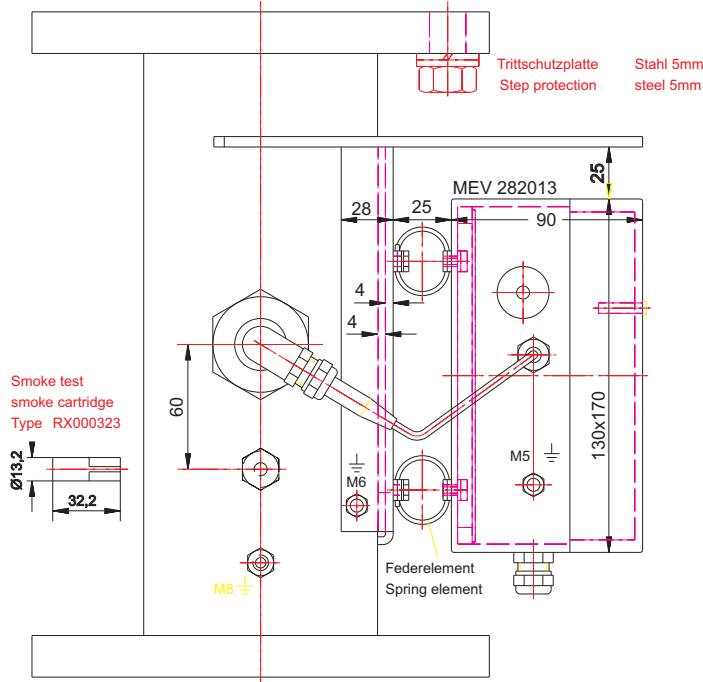
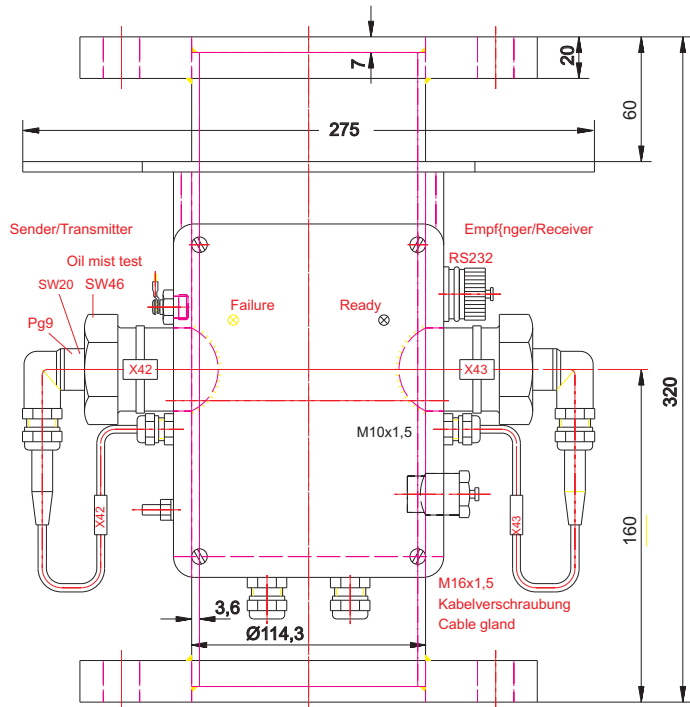
Design : Galvanic isolated

Relay outputs :

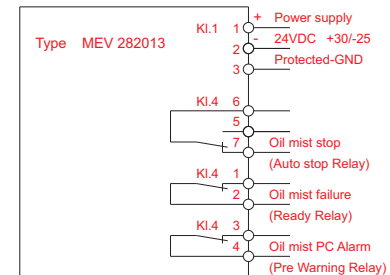
K1, K2 PhotoMOS relay Max switch 0.35A max switch voltage 60VAC / 60 VDC

K3 Electromagnetic relay Max 2A, 220VDC, 250VAC

Diese Zeichnung ist unser Eigentum. Weitergabe ist unzulässig.



Connection diagram/Anschlu-plan



Technical Data

- Supply voltage: 24VDC +30/-25
- Humidial hum max.: 5
- Supply current: = <4A (external fuse requested)
- Input: Signal "engine is running"
 - High level: 15...32VDC
 - Low level: < 8VDC
- Outputs: Oil mist sensor: 4...20mA analog output
- Failure: Relay contact NO
- Pre-warning: Relay contact NO
- Shutdown: Relay contact NO/NC, contact data 1A / 24VDC, 0,2A / 110VAC, Switching voltage max. 125VAC / 125VDC
- Operating temperature: 0...+70°C
- Storage temperature: -25...+85°C, non condensing
- Environmental: Mounting an diesel engines class "B", vibration acc. to curve 2 "GL" acc. to classification specs IP 54 (DIN 40050)

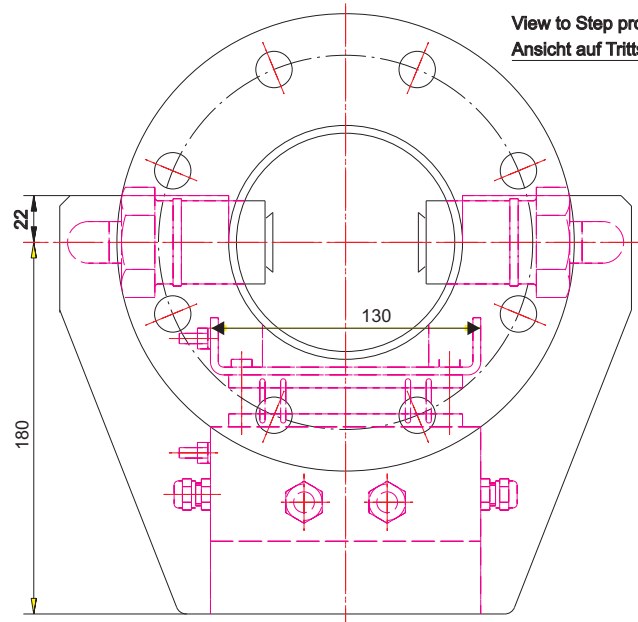
SURFACE PREPARATION:

PRIMER:
 Maskinalkyd, vejrbestandig, 2x 40my farve fri
 Engine alkyd, weather resistant, 2x 40micron, colour free
 Primer Material Quality: Fa. Jotun's Conseal Primer

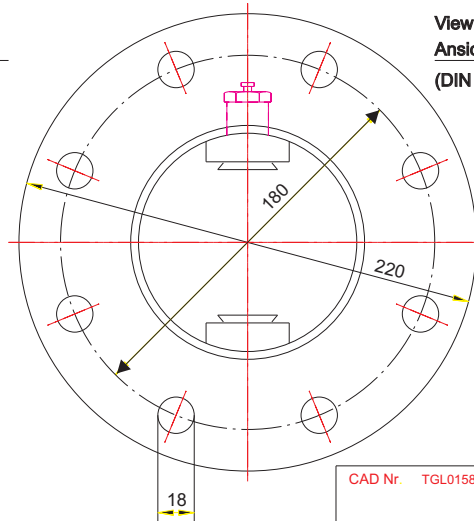
FINAL PAINTING:


Alkyd, bestandigt over for saltvand og olie, 1x 30my
 Alkyd, resistant to salt water and oil, 1x 30micron
 Paint Material Quality: Fa. Jotun's Pilot II Fehgrau RAL 7000

**View to Step protection
Ansicht auf Trittschutzplatte**



**View to Flange
Ansicht auf Flansch
(DIN 2576)**



CAD Nr. TGL01581			04	Tag	Name	Z-Nr.	Ma-stab
			Gez.	24.08.	HWJ.	TGL01581	1:2,5
			Gepr.			Benennung	
			Norm			Compact oil mist detector	
e			 Dr. E. Horn GmbH D-71101 Schönaich		Ersatz für		
d		Ersetzt durch					
c							
b							
a							
	Änderung	Tag	Name				