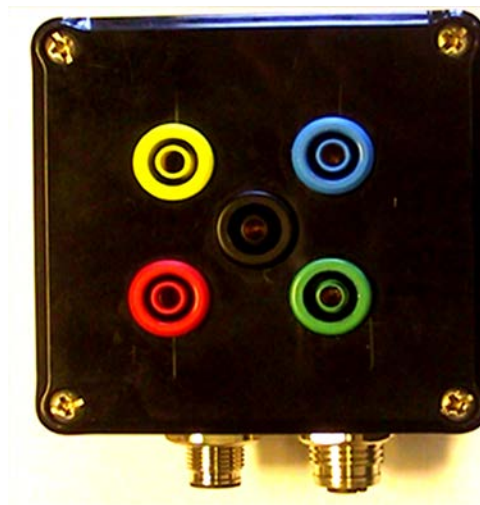


Diagnostic Box

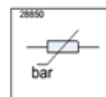
As a consequence of the increased use of M8 and M12 electric plugs in the electric system of the cranes, it has become more difficult to carry out control measurements of supply, signal and CAN bus voltages on the CAN Bus-modules and sensors of the crane.

To facilitate troubleshooting on the electric systems of the cranes, HMF now offers a Diagnostic Box (auxiliary tool for measuring of CAN bus, analogue and digital signals), HMF part number **29675**. The box has built-in M12 plugs and adapter cables for M8 electric plugs that come with the box so that it is easy to place it between cables and modules/sensors anywhere on the crane where a control measurement by means of a multimeter is required.



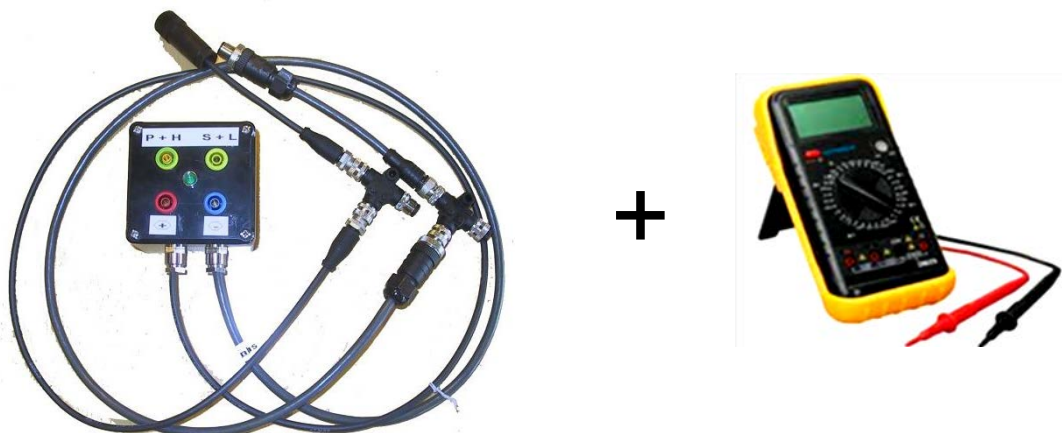
Examples of use:

- Digital sensors, e.g. HMF part numbers 29447, 28980, 28210 etc.
- Analogue sensors, e.g. HMF part number 28850.
- CAN bus units, e.g. CR2033, HMF part number 29470.



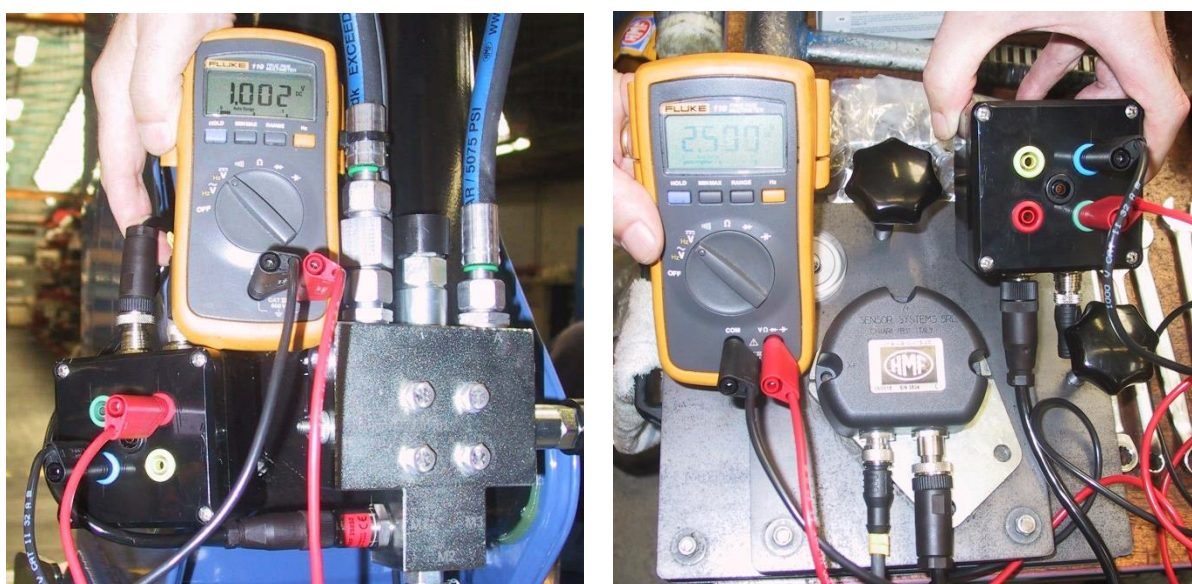
Practical application

The Diagnostic Box is used together with a universal multimeter of a quality that corresponds to the task.



Dismount the M8/M12 plug from the sensor/the module that you wish to diagnose and then place the Diagnostic Box between the plug and sensor/CAN bus module by means of the cable that comes with the box.

When connecting M8 plugs, also use the M8-M12 adapter cables that come with the box.



It is now possible to measure the voltage (Volt) according to the below table:

Diagnostic Box test plug	CAN bus	Analogue/digital
Yellow	Shield	(+)
Red	(+)	Signal
Blue	(-)	(-)
Green	CAN High	Signal
Black	CAN Low	