

INFORMATION



DATA DISPLAY GROUP

MONITORS

Fire load and smoke-optimized

Safety through Fire Prevention



In the construction and furnishing of buildings, consideration is given to preventive and defensive fire protection. In particular, public areas in buildings, which are often designated as escape routes, must remain accessible in the event of a fire. Combustible and fume-gas-developing materials must not be installed in these areas. The European standard EN13501-1 is a classification system for the fire behavior of construction products with additional consideration of flue gas development and draining.

The requirements of preventive fire protection often conflict with the desire to install screens in public areas of buildings. Visitor guidance systems, guest or employee information systems or advertising monitors are some examples of the applications in industry and public facilities. Mostly, the places where screens are to be installed are also part of the designated escape routes. Standards for fire prevention are prohibiting the installation of such devices which are likely to contribute to fire load and flue gas development.

The FLO-Monitor: Fire and flame for your safety

The Data Display Group has been developing and manufacturing industrial monitors and display solutions for more than twenty years. Based on the POS-Line series, the Data Display Group has developed a series of monitors which has been specifically optimized for fire behavior and flue gas development. All plastic parts, adhesive tapes and other combustible parts have been eliminated as far as possible.

The housing has been completely made of metal.

In the absence of a classification system for electronic devices, the monitors were tested according to DIN EN 13501-1 using the SBI method according to EN 13823: 2015-02. The necessary fire test was carried out at the MFPA-Leipzig/Germany, which is a test body for material research and inspection authority for construction engineering industry. Tested results in accordance with the above mentioned standards were confirmed by an independent expert. The fire test has shown that the measured values are clearly below the class B-s1,d0, which makes the classification of the monitor in (B) which means hardly inflammable, and (s1) which means no or hardly flue gas development and (d0) no draining.

Monitor fitments

The fireload-optimized FLO series has either equipped as the PME series HDMI, DP, VGA, USB, audio line-out interfaces or an Intel® Atom PC. All FLO devices are available in the screen run 31.5", 42", 46", 54.6".

Note:

Electrical appliances cannot strictly be classified according to the standard DIN EN 13501-1 for building materials. Since an appropriate standard for electrical appliances is not available, was carried out the flammability test following DIN EN 13501-1 as a basis for comparison with building products.



Screen size	Fire load in kWh	Fire load in kg spruce wood
800.1 mm (31.5")	20,04	4,175
1066.8 mm (42.0")	35,53	7,402
1168.4 mm (46.0")	39,35	8,198
1386.8 mm (54.6")	45,13	9,402

- DISPLAYS FOR ESCAPE ROUTES ACCORDING B-s1,d0
- NO/ BARELY SMOKE GAS DEVELOPMENT
- NO BURNING DROPLETS
- INTEGRATED THERMAL SECURITY
- HALOGEN FREE POWER SUPPLY
- FIRE LOAD CERTIFICATE
- INTEGRATED PC
- FIRE PROTECTION GLASS
- HARDLY FLAMMABLE
- ROBUST METAL CHASSIS, VESA