

LED Indicator Arrow Signal (FILED)



The LED Indicator Arrow Signal (FILED) is a signal used to assist station departure signals (external and internal) placed on the right of the track they command, in all cases where there is another running track on the right of the same track.

The FILED is the technological evolution of the previous generation "Arrow Indicator Signal" through a LED technology signal and SIL4 control with the same dimensions and installation mode. The control device is replaced by a Differential Detector (RD) for SDO signals, which carries out the integrity check of the signal in safety through the verification of current absorption.

The applicable operating environment is that of ACEI and ACC systems in accordance with **RFI DTCCCS SR IS 03 007 1 A**.

FILED is made up of two sub-components which can be replaced directly on site:

- Metal Cap as a protection against external agents;
- Optical Module, contained in an hexagonal aluminum structure of protection fixed to the cap which contains both the LED light sources and the electronic parts necessary to its Power & Control.

Il FILED è conforme alle caratteristiche elettriche e meccaniche di seguito riportate:

ELECTRICAL CHARACTERISTICS	
Supply voltage:	150 Vac -15% ÷ +10%
Frequency: :	50 Hz ±2%
Nominal absorption in absence of alarm:	150 mA
Reduction of current absorption (ΔI) in Alarm and Lock state:	$\Delta I_{All} \geq 62$ mA

CARATTERISTICHE MECCANICHE	
Height (H):	549 mm ± 10 mm
Width (L):	592 mm ± 10 mm
Depth (P):	200 mm ± 10 mm



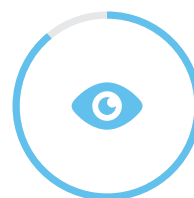
SAFETY

The FILED of Marini Impianti Industriali is made with a safety architecture able to ensure a level of integrity equal to SIL4, according to Cenelec standards EN 50129 and EN 50126.



RELIABILITY

The use of LED technology significantly improves visibility and reliability. This eliminates the need for cyclical maintenance of the lamp change.



CONTROL

The following parameters are checked safely:

- Estimated number of LEDs (number of LEDs on);
- Measurement of the Cluster Currents (LED driving current).