

FD3 Filament Detector

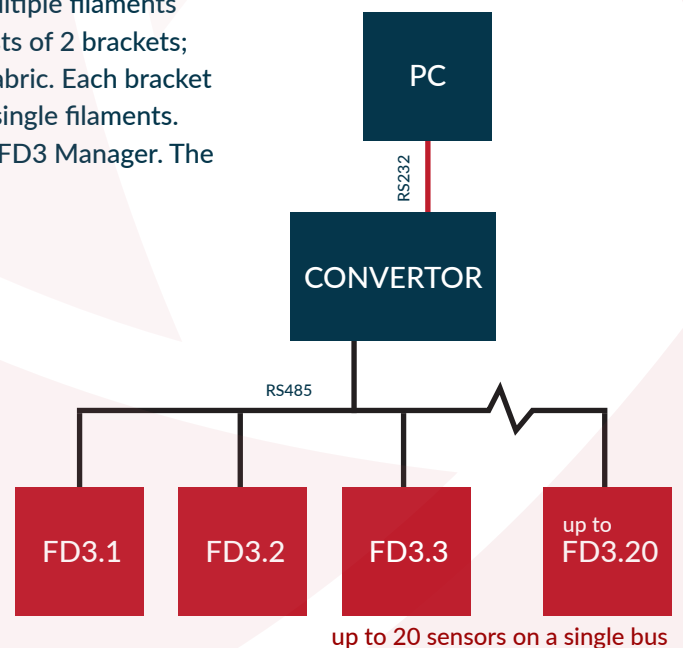


The industrial standard for detection of broken filaments on narrow fabric

The Filament Detector (FD3) detects large and small single or multiple filaments on webbing with a maximum width of 55 millimeters. FD3 consists of 2 brackets; one for the top side and the second for the bottom side of the fabric. Each bracket has two outputs, one for small multi filaments and one for large single filaments. The sensitivity for these outputs is adjustable individually via de FD3 Manager. The output signals can be used for machine control directly.

FD3 models:

- The first model is for filament check on webbing which is transported with a constantspeed.
- The second model can be used for filament check on webbing which is transported with a variable speed. This type of Filament Detector is equipped with an encoder.



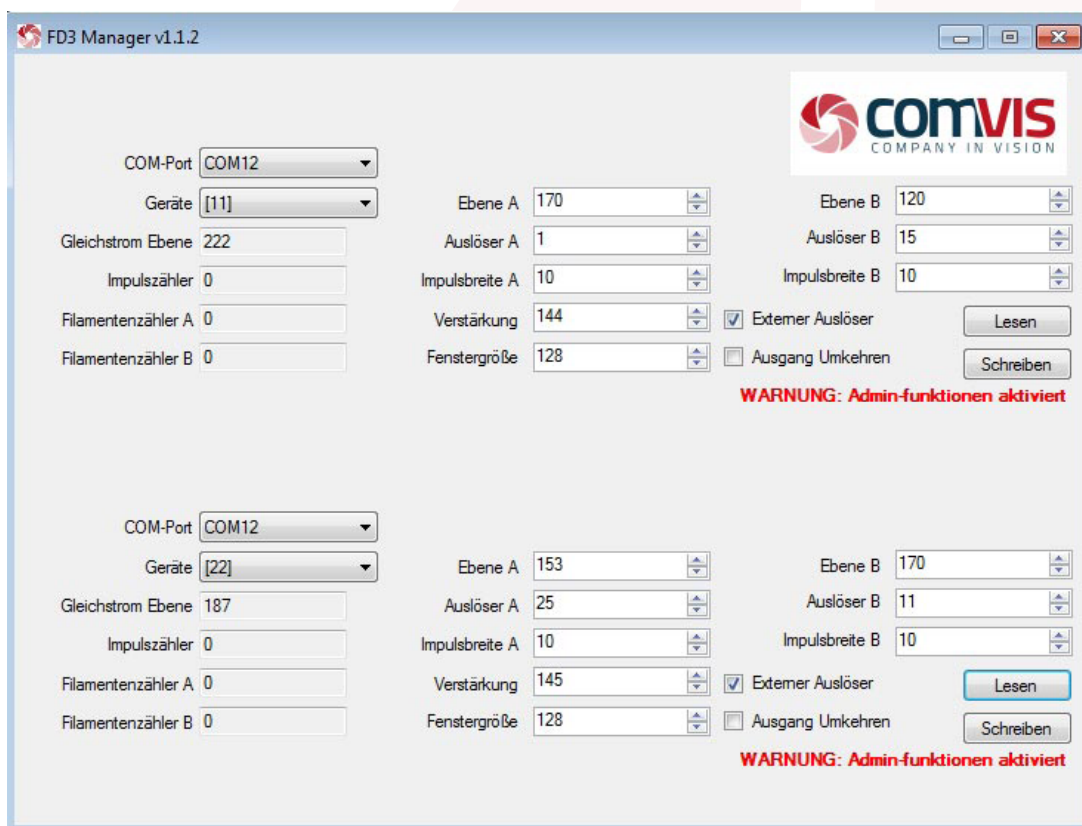
FD3 Filament Detector

FD3 Manager - Easy to use software for configuration

With the use of the FD3 Manager application, users are able to configure and setup the FD3 filament detection sensors under Windows software. The user interface of the software is easy in use. Settings are made directly with the push of a button.

Depending on the level of authorization, operators or managers see different functions in the FD3 Manager. The manager functions are appear after login with personal login and password.

FD3 Manager is available in different kind of languages, for example German, Dutch, English, Chinese, French and Spanish.



Specifications

General specifications	FD3	FD3+enc
Functional description	Broken filament detection sensor for continuous speed	Broken filament detection sensor for variable speed
Fabric width	8 - 55 mm.	8 - 55 mm.
Fabric speed	max. 120 m/min	max. 120 m/min
Min. filament size	> 10 µm	> 10 µm
Electrical specifications		
Supply voltage	+24 Vdc	+24 Vdc
Voltage ripple	+/- 10 %	+/- 10 %
Current consumption	2 x 75 mA	2 x 75 mA
Laser class	2	2
Output power	< 1 mW	< 1 mW
Wavelength	635 - 670 nm	635 - 670 nm
Max. output frequency	500 Hz	500 Hz
Communication protocol	RS485	RS485
Max. FD3's on single multidrop	20	20
Digital outputs	2 x 2 (PNP/NPN NO+NC)	2 x 2 (PNP/NPN NO+NC)
Triggering	internal & external (max. 15 kHz) (software selectable)	internal & external (max. 15 kHz) (software selectable)
Small (multiple) filament indicator	Green LED	Green LED
Large (single) filament indicator	Yellow LED	Yellow LED
Connector	2x Binder 712 series (8-pin M9 female)	2x Binder 712 series (8-pin M9 female)
Mechanical specifications		
Operation temperature	0°C - +50°C	0°C - +50°C
Storage temperature	0°C - +50°C	0°C - +50°C
Sealing class	IP20	IP20
Housing material bracket	Aluminium	Aluminium
Webbing contact material	Stainless steel	Stainless steel