

**EDDYSENSOR**

**Product catalogue**





PRÜFTECHNIK

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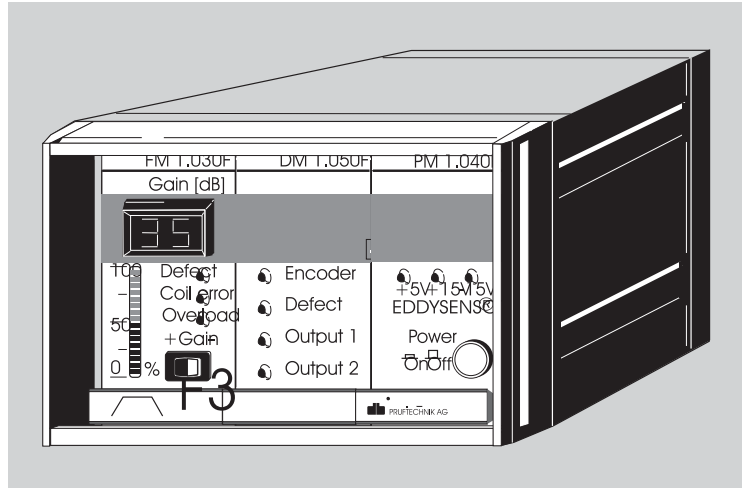
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## System description

The EDDYSENSOR is a simple yet complete single-channel eddycurrent testing equipment.

The EDDYSENSOR consists of a minimum configuration of two units\* with a third optional unit\* in a table-top housing.

The minimum configuration is made up of the Front-End Unit (FM1030F3 and FI 1030BA) and the Power Unit (PM 1040FE and PI 1040BA) where the back module of the Power Unit is supplied already built into the LAB 1004 housing for safety reasons.



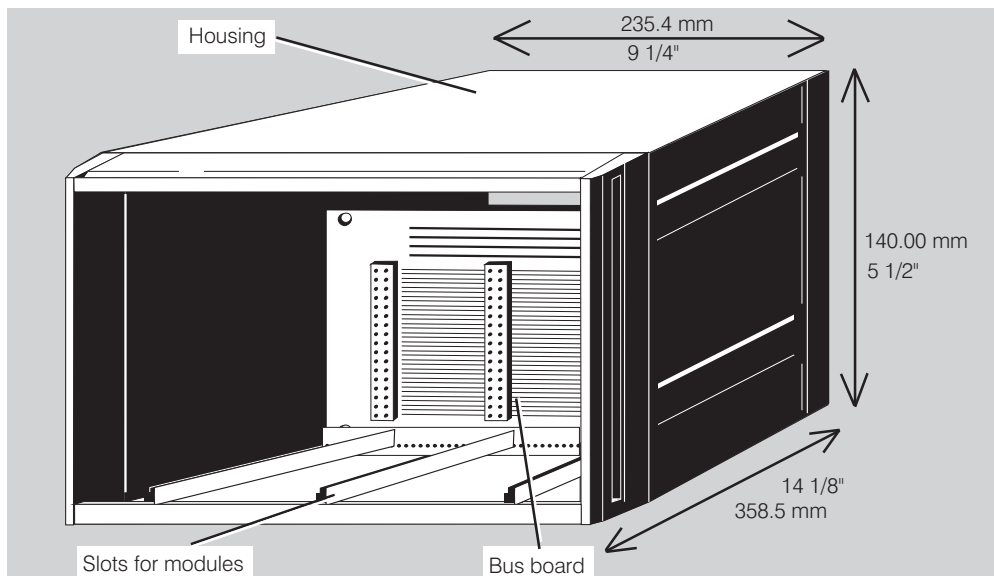
The optional unit is the Delay Unit (DM 1050F and DI 1050BA) that can be included for paint marking, warning and/or sorting.

## Table-top housing for up to 3 modules

## LAB 1004

showing bus board and slots for modules.

The housing and bus board together with the plug-in modules form a complete unit that can be used either as a table-top device or built into an electrical control cabinet. The back module of the Power Unit is supplied already built into the housing for safety reasons.



\* Each unit consists of a front module and a corresponding back module, each with its own identifying number.

### Coils

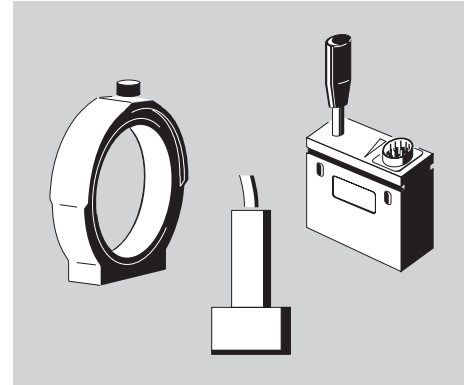
### LAB 39xx

The EDDYSENSOR has been developed in such a way that it can implement any one of, or a combination of, the full range of PRÜFTECHNIK coils\*.

- Segment coil:  
Ø15 mm - flat material
- Encircling coil: 0.2 – 230 mm
- Probes

Our sales department will readily assist in selecting the types required by your application.

\* All coils assembled with the new connector.  
Coils without this connector require an adapter.



### Coil cable

### LAB 3996

The PRÜFTECHNIK coil cable is a special cable produced to meet the highest standards:

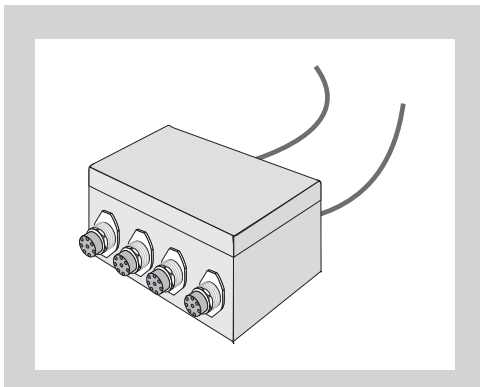
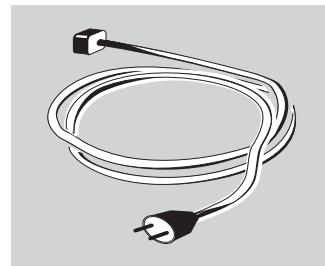
- Multiple shielded cable
- Jacket material withstands temperatures of -55°C to +125°C
- Highly flame retardant
- Resistant to fuels, oils and greases
- Maximum length 20 m (65 ft)



### Power cable

### LAB 4450

The power cable is used to connect the EDDYSENSOR with the mains power supply.



### Connection box

### LAB 1100

The connection box enables standard peripherals (marker, horn etc.) to be connected directly to the EDDYSENSOR without any rewiring.

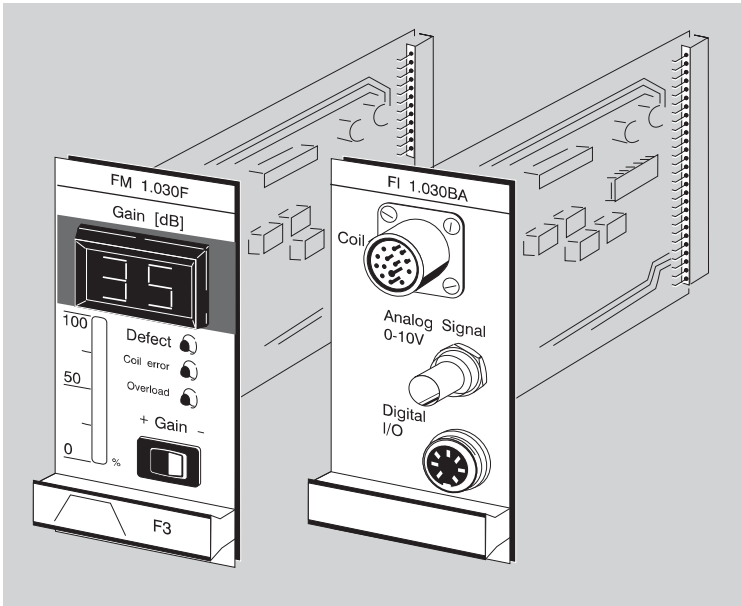
#### **Please note:**

For further information on this and other products for use with EDDYSENSOR in your application, please request our *Accessories Product Catalogue*.

The minimum number of units required for an EDDYSENSOR configuration are the two units described below. The optional unit is described on the facing page and is selected according to application requirements.\*

## Front-End Unit

Front module **FM 1030F3**    Back module **FI 1030BA**



The Front-End Unit consists of FM 1030F3 and FI 1030BA and is the basic testing unit that amplifies the signal from the coil, detects and displays defects and monitors the coil. The front module filter F3 is a simple bandpass filter that can be set to one of two speed ranges:

- 1 – 60 m/min or • 30 – 300 m/min (~ 3 – 196 ft/min or ~98 – 980 ft/min).

The back module FI 1030BA provides an I/O for the coil signal and outputs for the analog defect signal and the digital defect level for a quick balance function.

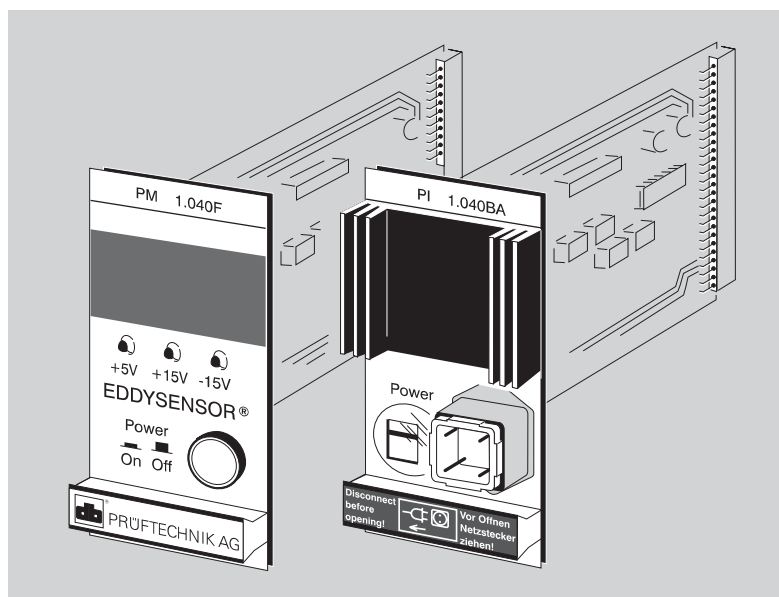
This unit is also supplied in a number of frequency versions: 5 - 10 - 20 - 50 - 100 - 250 kHz  
Option: Filter F1 is a universal bandpass filter with 256 steps to cover a speed range of up to 150 m/s (500 ft/s).

## Power Unit

The Power Unit consists of Front module **PM 1040FE**    Back module **PI 1040BA**

PM 1040FE and PI 1040BA and provides the different voltage levels required by the EDDYSENSOR. The power module is switched ON or OFF by a switch on the front panel. LEDs on the front panel monitor the presence of the voltages.

The back module PI 1040BA of this unit provides a socket for the mains supply and a switch for a supply of 115V or 230V as required. This module is supplied already built into the LAB 1004 housing for safety reasons.



\* There is also a blank frontplate and backplate available for any unoccupied position.

The unit described below is optional and is selected according to the application.\*

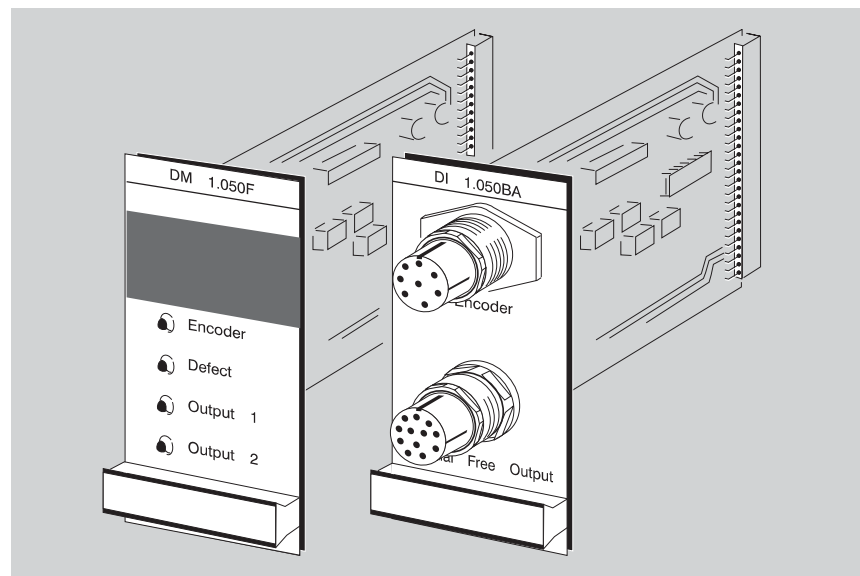
### Delay Unit

The Delay Unit consists of DM 1050F and DI 1050BA and provides two delayed signals and one undelayed signal to control peripheral equipment and accessories such as marking or switching (delayed) and warning (undelayed).

The back module DI 1050BA of this unit provides a socket for the encoder input and the delayed and undelayed signals are on a potential-free output.

Front module DM 1050F

Back module DI 1050BA



### List of system components

### Order numbers

Standard housing with bus board + PI 1040BA		
Modules	Front-end unit	FM 1030F3 FI 1030BA
	Power unit	PM 1040FE PI 1040BA
	Delay unit	DM 1050F DI 1050BA
	Blank plates**	-full width front -half width front -full width back -half width back
Connection box		
Coil range		
Coil cable		
Power cable		

LAB 1004 + LAB 1040BA
LAB 1030F3
LAB 1030BA
LAB 1040FE
LAB 1040BA
LAB 1050F
LAB 1050BA
LAB 1010
LAB 1011
LAB 1012
LAB 1013
LAB 1100
LAB 39xx
LAB 3996
LAB 4450

\* There is also a blank frontplate and backplate available for any unoccupied position.  
 \*\* Full width = 3U 12HP      Half width = 3U 6HP



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