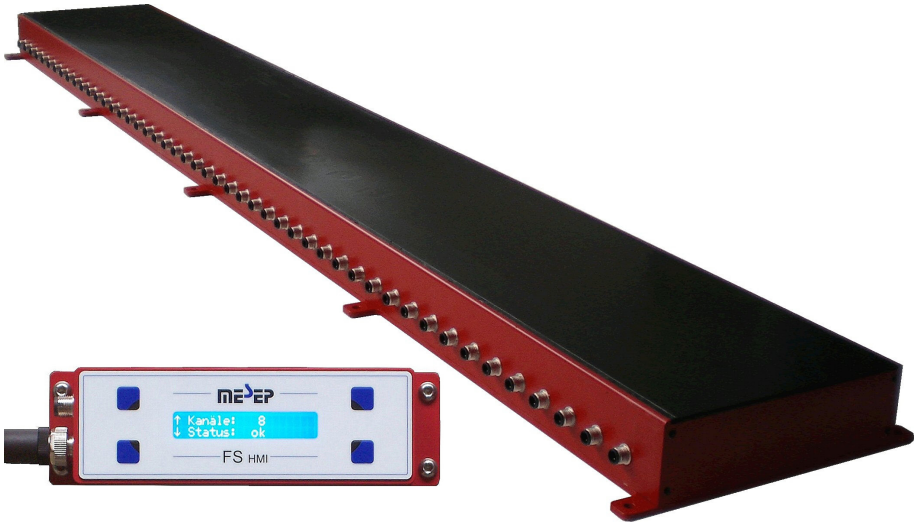
Flat sensor with spatial resolution

Type: MESEP® FS2



APPLICATION

These high-sensitivity flat sensors stand out for their localized resolution of smallest metallic pieces. This implies that metallic residua is not only detected but also localized in the sensor. Thus this detector type particularly is appropriate for the use in the recycling industry. It enables the user to separate metallic contamination precisely accurate from the material stream. Granulate or hackled material can be sorted easily. The sensor can be used in conveyor belts, slides or in free-fall applications.

SPECIFIC CHARACTERISTICS

- ☑ different sensor widths available (50 mm – 2,000 mm)
- ☑ various resolutions (12,5 mm – 100 mm)
- ☑ ejectors or flaps internally controlled
- ☑ no metal-free zones necessary
- ☑ stable and torsion-free aluminium housing
- ☑ easy mounting
- ☑ separate control element available
- ☑ interface for PC or PLC
- ☑ protection class IP65
- ☑ sensitivity adjustable via control electronics
- ☑ alignable variants on request

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ANLAGENTECHNIK

Type: MESEP® FS2

FUNCTION

The sensor has a dynamic working principle which means it only detects moving metallic pieces in the sensor range. If a non-moving metal piece is situated in the detection range, it does not excite a signal and therefore is not detected. Contrary to sensors with a static workling principle this system allows operation with a much higher sensitivity. The sensor provides several channels which are arranged parallely. Each of them is equipped with an own sensor coil and evaluation unit. By this the position of the metallic object can also be detected. Operation is realised via a separate control element or via pc. The control system can also be realised using a PLC.

TECHNICAL DATA

Type	**MESEP® FS2**
Mechanical data	
Dimensions	L x W x H: Length x 210 x 60,5 mm
Number of channels	4 – 160 pieces
Resolution (Width of each channel)	12,5 – 120 mm
Length	ca (Number of channels + 1) x Resolution+10 mm (max. 2,000 mm)
Housing	Aluminium – strand profil
Active surface	PA 6.6 | GF30
Minimum distance	1200 mm (to next sensor)
Electrical data	
Supply voltage	20 – 25 VDC
Power consumption	typ 10 mA/channel
Output	switching output for each channel; PNP / normally open ; 24 VDC; 700 mA
Interface	RS232 (for PC or PLC)
Connector[1]	switching outputs/ Power supply: Male connector Harting HAN 108, size 24 B Control unit: Male connector M12; 4pins Interface: Male connector M12; 4pins
Conditions of use	
Storage temperature	-10°C – 70°C
Operating temperature	-10°C – 60°C
Protection class	IP65
Speed	6 – 300 m/min (0,1 – 5 m/s)

SENSITIVITY

Type	**FS2 12,5 – 19**	**FS2 20 – 49**	**FS2 50 – 120**
Test piece			
Ferrous-ball Ø 4,5 mm	on request	24 mm	30 mm
Ferrous-ball Ø 3,0 mm	on request	15 mm	20 mm
Ferrous-ball Ø 2,5 mm	on request	11 mm	14 mm
Ferrous-ball Ø 2,0 mm	on request	7 mm	8 mm

The data refers to the clear distance between test object and the upper edge of the sensor. The values are valid for the entire temperature range and for speeds from 6 to 300m/min.

1) Devices with cable or other jacks at request.

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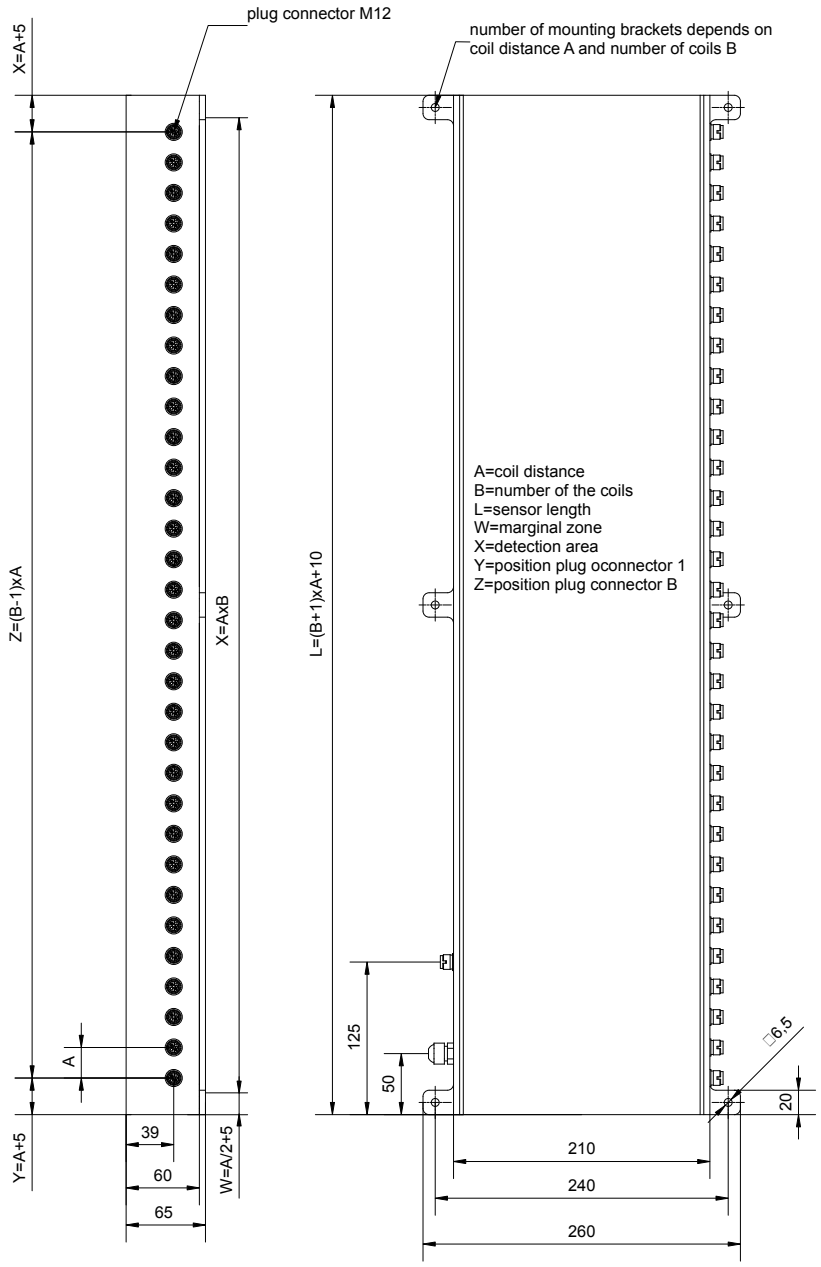
ACCESSORIES

Designation	Article number
Control unit with cable	MESEP® FS2 HMI
Connecting cable for PC	08900102709

Ordering code: type MESEP® FS2 | resolution [mm] 35 | number of channels 12 (e.g.: MESEP® FS2 35 – 12)

When selecting the resolution and the number of channels please do not exceed the maximum sensor length of 2 m.

DIMENSIONS MESEP® FS2 (EXAMPLE)



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