

METAL SHARK® FL

Conveyor installation below or above conveyed material

METAL SHARK® - The new generation in metal detecting technology

Introducing the METAL SHARK® presenting a completely new design in high sensitivity metal detectors. The METAL SHARK® provides outstanding sensitivity, accuracy, stability and precision product-effect-compensation.

The METAL SHARK® features the latest four channel DDS (direct digital synthesizer) and DSP (digital signal processor) technology. These technologies provide outstanding product-effect compensation. High processing speed, DDS and DSP makes the METAL SHARK® the leader in digital metal detection.

Digital balance control - levels temperature and humidity influences.

Auto calibration - fast and easy set-up.

Digital frequency & phase control avoid any drifts. Once calibrated keeps the set-up forever. No need for re-calibration.

Digital noise filters eliminate undesirable signals such as vibrations and shocks.

Multi-channel technology for the optimum recognition of all metals; ferrous, non-ferrous and stainless.

Power supply: Wide input 85-265 V AC works great even with unstable and poor power sources.

Automatic diagnostics - possible functional defects of the device are displayed on a separate output contact.



METAL SHARK® FL

Typically, the FL types are used in fleece, textile and foil production and provide highest performance in detecting magnetic and non-magnetic metals.

Industrial design

Sensor and control unit housing are made of sturdy stainless steel, appropriate for use in the food industry. With a maintenance free design and high quality construction, for reliable operation in the most challenging industrial environments.



Easy handling

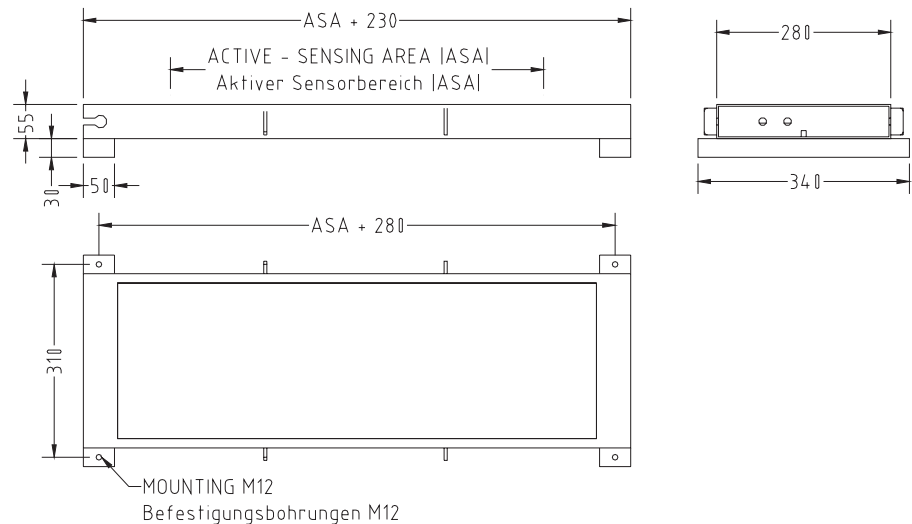
In practical use, settings of metal detectors often need to be checked quickly and reliably during production. Cassel attached great importance to user-friendliness: The software is self-explanatory: An interface-manager leads the user step by step through the menus that have to be adjusted. E.g. product teach is done with one-button-push.

Intuitive operation

The display shows only the information that is really required. Reduction to the essential makes operation clear and transparent.

Performance validation

According to HACCP the metal detector is a critical control point and therefore, it must be checked regularly. The performance validation automatically prompts the operator to test the performance of the Metal Shark at pre-set intervals.



Type	METAL SHARK® FL
Conveyor installation below or above conveyed material Applications: Plastic/foil production, panel board production, felt/textile/fleece production	
Best Sensitivity* *depending on product effects and proper installation	
Sensing width 200 - 1000 mm	
Height above sensor mm	10 20 30 40 50 60 70 80
Ferrous ball Ø mm	0,8 1,0 1,8 2,2 2,5 3,8 5,0 6,0
Sensing width 1000 - 4000 mm	
Height above sensor mm	10 20 30 40 50 60 70 80
Ferrous ball Ø mm	1,0 1,5 2,2 3,0 3,4 5,5 7,0 8,0
Non-Ferrous	1,2x Ferrous ball Ø
Stainless	1,5x Ferrous ball Ø
Installation	typical horizontal, but each angle is applicable
Metal free zone before/after detector	Fix metal = 250 mm Moving Metal = 500 mm

Power supply	85-264 V / 50-60 Hz
Power input	100 Watts
Ambient temperature	-10...+50 C/ 15...120 F
Product temperature	-20...+80 C
Degree of protection	Control unit IP65 (Nema 4x, 12) Sensor IP67 (Nema 6P, 12)
Sensor head	Stainless steel housing
Control unit	Stainless housing prepared for wall mounting with link cable
Link cable	2,5 m (8,2 feet) with cable protection tube, applies only with wall mounting option for the control unit
Conveyor speed	25 - 3000 mm/sec. (1"-6,6 feet/sec.)
Product effect compensation	Automatically, with teach mode