



HKP 5.1 metal detector



Description:

The HKP 5.1 metal detector is designed to signalize the presence of a metal object in non-metallic materials, usually on a conveyor belt.

The most frequently found metal objects are: iron and ferro-alloys, manganese alloy used for drilling rigs, aluminium and aluminium alloys, copper, brass, etc. These objects may not have magnetic properties and thus cannot be removed by a magnetic separator. HKP 5.1 is able to indicate all these object independently of their chemical composition, their size and their distance from the antenna.

If a metal object passes through, HKP 5.1 will switch a relay contact and the conveyor belt will stop. The metal presence signal can also be used to turn over the flap in the material flow and thus remove a part of the material following the metal object. When the material is removed, the flap will return and the flow will continue. Another possibility is to switch on the magnetic separator only if a metal object needs to be removed.

HKP 5.1 can also be used for spillways, pneumatic transportation in pipes, etc., as all sorts of antenna shapes (such as U-shaped, arch-shaped, V-shaped antennas) can be manufactured. If other shapes are used, they are based on the parameters in this manual and the construction part of the antenna will be designed individually.



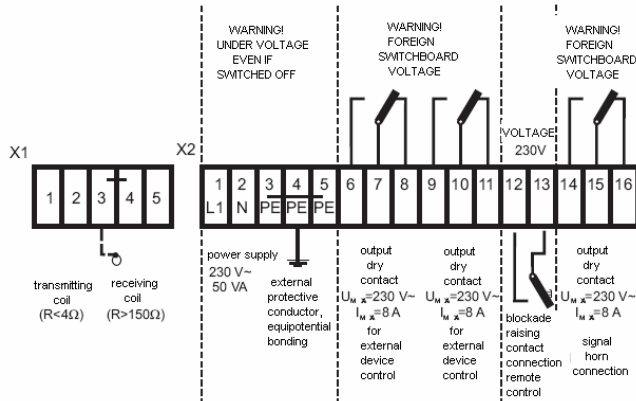
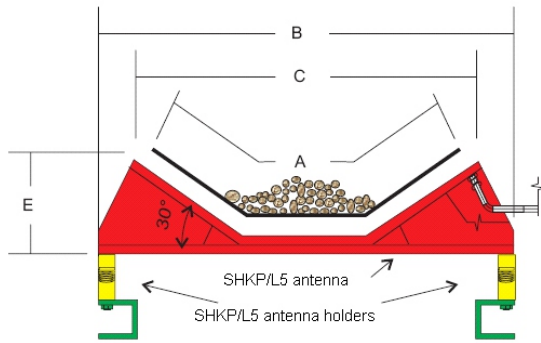
Technical parameters:

Power supply	230V/50Hz
Input power	50 VA
Relative humidity	up to 95%
Max. attainable sensitivity	see the picture
Max. distance between the sensor and the evaluation unit	15m
Ambient temperature	-30°C to +60°C heating available for lower temperatures
Ambient temperature for the antenna	-58°C to +60°C
Output	max. 50W, 230V AC, 8A
Protection	IP 54
Dimensions	Antenna-see tab. Casing VSHKP-5,1: 400x300x250 (h x w x d)

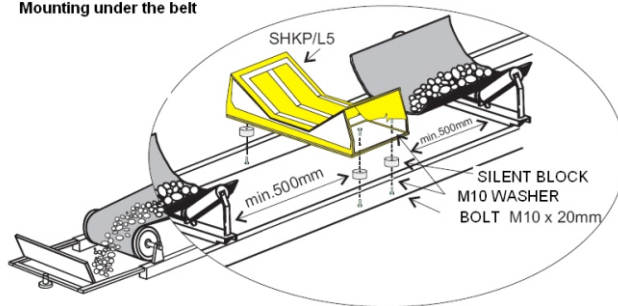
The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.



HKP 5.1 metal detector



Mounting under the belt



Mounting above the belt

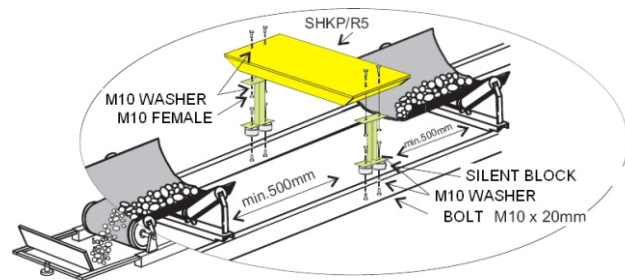


Table of sensitivity of the HKP 5.1 metal object guard

Distance from the antenna

Metal ball diameter - Fe material

500	☒	500	500	500	500	500	500	500	500	500	☒	☒	☒	☒	☒		
400	☒	350	350	350	350	350	350	350	350	350	☒	☒	☒	☒	☒		
300	☒	200	200	200	200	200	200	200	200	200	☒	☒	☒	☒	☒		
250	☒	150	150	150	150	150	150	150	150	150	☒	☒	☒	☒	☒		
200	☒	100	100	100	100	100	100	100	100	100	☒	☒	☒	☒	☒		
150	☒	50	50	50	50	50	50	50	50	50	☒	☒	☒	☒	☒		
120	☒	25	25	25	25	25	50	50	50	50	☒	☒	☒	☒	☒		
100	☒	12	12	12	12	12	25	25	25	25	☒	☒	☒	☒	☒		
70	☒	10	10	10	10	10	12	12	12	12	☒	☒	☒	☒	☒		
50	☒	8	8	8	8	8	10	10	10	10	☒	☒	☒	☒	☒		
40	☒	8	8	8	8	8	10	10	10	10	☒	☒	☒	☒	☒		
30	☒	5	5	5	5	5	10	10	10	10	☒	☒	☒	☒	☒		
20	☒	5	5	5	5	5	10	10	10	10	☒	☒	☒	☒	☒		
0	☒	5	5	5	5	5	5	5	5	5	☒	☒	☒	☒	☒		
Band width		400	500	650	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200

All dimensions are in mm

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