# zam servis

# **Metal Detector HKP 6**



### **Description:**

After the passage of a metal object HKP 6 switches on a contact relay which most commonly stops a conveyor. The metal presence signal can also be used for turning over the flap in the trajectory of the material flow thus removing a part of the material containing the metal object. After its removal the flap returns to its original position and the material is resumed. Another possibility is to switch on an electromagnetic separator for the period necessary for removing the metal object only.

An evaluation unit is connected to the above-mentioned functions which can be controlled from the place by control elements or remotely, e.g. by a control system. The terminal board contains individual pushbuttons and LEDs for the determination of the HKP status.

The checked material can contain a trace amount of metals in its composition which can affect the level of sensitivity of HKP 6. These elements can be, to some extent, eliminated by decreasing the sensitivity or by a special modification of the unit which is only performed by the manufacturer. If in doubt or if there is a suspicion of the content of metal elements in the checked material, we recommend that a sample of 1-10 kg (1 10 l) is sent to the manufacture before ordering HKP 6. The manufacturer will perform tests and potential correction of the evaluation unit.

As standard, the aerial is manufactured according to the below-given drawing given. When using other diameters and shapes, the manufacturer follows from the basic parameters given in the manual and if needed, structural changes to the part of the aerial can be made.

#### Use:

The HKP 6 metal object sensor is intended for signalling the presence of metal objects in a non-metallic material, usually a pipeline. It certainly can also be used for other transport routes such as a specially modified belt conveyor. The sensor has an excellent sensitivity thanks to which it can sense a millimetre ball in the space with the diameter of 400 mm under certain conditions of the aerial location. The guaranteed sensitivity is a M5 nut in the whole internal aerial space.

Metal objects most often found in the checked material: iron and iron alloys, manganese alloy used at drilling sets, aluminium and its alloys, copper, brass, etc. The object need not have magnetic properties, i.e. a magnetic separator would not remove them. HKP 6 is able to indicate all such objects depending on their chemical composition and size in whole aerial space.

## **Technical parameters:**

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Supply voltage	230 V / 50 Hz
Input	50 VA
Relative humidity	up to 95%
Maximum achievable sensitivity	See the figure
Maximum distance between the sensor and the evaluation unit	15m
Ambient temperature	-30°C - +60°C, heating can be ordered for lower temperatures
Ambient temperature for the aerial	-58° - +60°C
Output	max. 50 W, 230 V AC, 8 A
Protection	IP 54
Dimensions	Aerial see the figure
	Cabinet VSHKP-5.1: 400x300x250 (h x w x d)

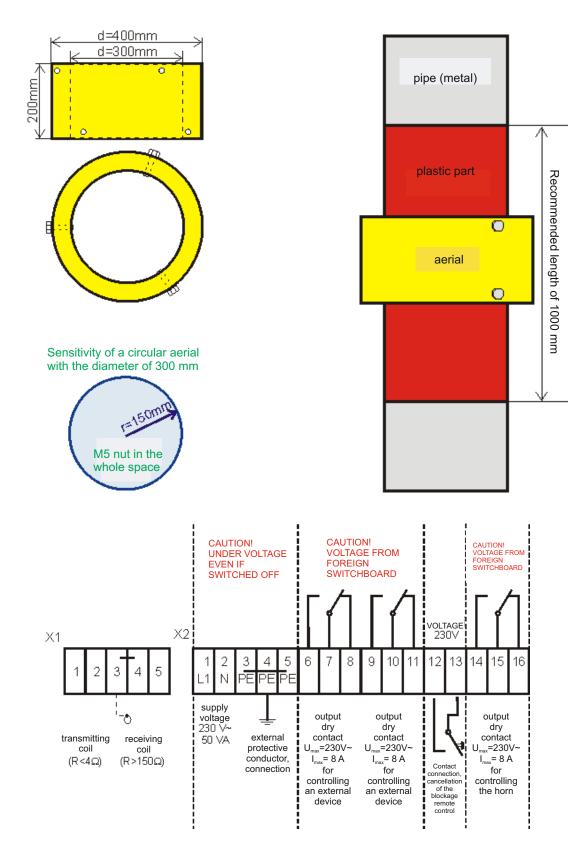


The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.

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