electrical fittings



Innovative installation of junction boxes on cable trays

The structure of electrical installations in industrial buildings depends on the needs resulting from their intended use. It is necessary to route wires and cables in a manner that will protect them against mechanical damage and ensure the possibility of their replacement without the need to change the structure of the facility. Cable trays enable the routing of electrical installations to any chosen location. The connection and distribution fittings used in the trays should ensure the best possible functioning of such installation.

Simet SA introduces a new series of surface iunction boxes called Fastbox&Hook, which are designed for the installation on cable routes. These junction boxes are innovative in terms of their installation technology.

Series of junction boxes

The Fastbox&Hook series includes the following junction boxes: NS5, NS6, NS7, NS8, as well as the HNS hook. The body of these junction boxes is made of polyethylene (PE). The self-locking cover, which is made of polypropylene (PP), results in the fact that after closing, the body of the junction box is stiff. The smooth surface allows for placement of a legible description of the installation. The hook is made of polyamide (PA6). Moreover, the body includes round conical grommets intended for inserting pipes, cables or electrical conduits.

mounting brackets for inserting hooks, which allow easy installation of the junction box on the cable tray. Also, there is an integrated bracket at the bottom of the body, which enables traditional installation of the junction boxes using screws or cable ties (without the

The junction box's bottom includes two use of hooks). Holes for mounting screws have been increased to a diameter of Ø6mm. Due to their Ingress Protection Code IP54, the junction boxes provide high protection against unfavourable weather conditions. They are characterised by high resistance to dust and

significant protection against the effects of





Photo of the NS6 junction box with





Photo 3 Installation of the NS junction box with the use of hooks on the cable tray.

water ingress. The materials used to manufacture these junction boxes are selfextinguishing, halogen-free and resistant to heat up to 650°C (incandescent loop test). Dimensions of the junctions boxes are as follows: NS5 75x75 mm, NS6 85x85 mm, NS7 100x100 mm, NS8 45x85 mm. With the exception of NS8, all junction boxes can be mounted with the use of hooks. Moreover, these junction boxes meet the safety requirements determined in PN-EN 60670-22, PN-EN60670-1, while their quality has been confirmed by the positive results of tests carried out by BBJ.

Benefits of using a hook - installation in less than 10 seconds

Conditions in the scope of designing and installing electrical installations in buildings and industry are constantly changing. Also, the work safety requirements are getting more demanding. Installation of electrical installations in cable trays is often carried out at high altitudes, and therefore it carries a high HNS hook is an added value, compared to the risk of work safety. NS5, NS6 and NS7 junction boxes with HNS hooks guarantee quick, safe and reliable installation on the cable tray. The type of material used to manufacture the hook is of crucial

importance - polyamide (PA6). The increased mechanical strength of PA6 results in the fact that the junction box is rigidly fixed on the cable tray. Exceptional thermal properties, chemical resistance and high resistance to corrosion make the route fastening system stable and ensure that it will not be subject to deformations. The greatest advantage of this material is its durability and unchanging shape at high temperatures.

The surface junction box of Fastbox&Hook series, which is equipped with hooks, can be easily fitted to the cable route. without the need to move cables in the cable tray.



Moreover, the installation of junction boxes in the route using hooks does not damage the cable sheath in any way. This innovative method of installation takes the fitter less than 10 seconds. We place two hooks in special holes in the junction box's bottom, then attach the junction box with hooks to the edge of the cable tray, and press the hooks against the body of the junction box. This installation method has been reserved in the Patent Office.



Photo 4 Hook – HNS.

Concept of the HOOK

There are many surface junction boxes available on the market that differ in terms of their parameters. Compared to other surface junction boxes available on the market, the junction boxes of Fastbox&Hook series are distinguished by a favourable price-quality ratio. As a result of the above-mentioned innovative technology, the installation using the previous series of Fastbox junction boxes.

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