



Description

Pemsaband Vulcan Light Duty perforated metal cable tray with quick-connect system, available in 12 and 18 mm heights, made of steel with PG and AZ+ protection systems. The quick-connect system features tool-free fastening clips, saving on material and labor costs. Of 12 mm height, Width 50 mm, With PG protection system. The Pemsaband® Vulcan Perforated cable tray is designed for supporting and routing electrical and telecommunications cables for light duty loads. The Pemsaband Vulcan product range has been designed in accordance with the technical requirements of IEC 61537, Edition 3, and BS-EN 61537.

Advantages

High corrosion resistance. Available in PG and AZ+ protection systems. Class 3 and Class 8 according to BS EN 61537

Wide range of sizes and accessories. Dividers, Covers, Bends, T-joints, Crossovers, Risers, brackets and accessories for connecting lightnings or devices.

Hole pattern designed to facilitate cable fixing.

New design of profile and safety edge. The contact area increases by 80%. Increases the contact surface between the cable tray and cover, ensuring electrical continuity in accordance with Edition 3 of the IEC 61537 standard

VulcanFast quick-connect system with tool-free, quick-fixing clips saves on material and labor costs. Reduces installation time by 3 times.

Applications

A system designed for the management, support, transport, and distribution of cables in electrical and/or telecommunications installations. It is applicable to, among others, the following areas: - Buildings, including public buildings, shopping centers, and Data Centers (DCs) . - Civil works and infrastructure, such as tunnels, parking garages, airports, and subway and railway lines. - The service and industrial sectors, being suitable for applications in the manufacturing, chemical, and food industries. The system is suitable for rapid installation indoors in controlled atmospheres, as well as in outdoor installations or humid environments, selecting the appropriate protection and finishing system in each case based on the environmental and service conditions.

Solutions



Product data

ETIM 10		Material	Steel with surface coating
Huella de CO2. GWP A1-A3 (kg CO2 eq.)		Impact Strength (J)	20 J
Protection System	PG	Section (mm2)	542
Finish	PG3, Pregalvanised	IP	IP23
Resistance Class	Class 3	Working temperature range (°C)	-50 / 150 °C
Flange (mm)	12	Fire resistance	A1 No combustible
Width (mm)	50		
Length (m)	3		

Protection System

- CU** - Copper electroplated
- PG** - Pregalvanised
- EZ** - Electrogalvanised
- BC** - Electrogalvanised Bichromate
- BK8** - High Resistance Coating
- GC** - Hot Dip Galvanising
- INOX** - Stainless Steel
- PT** - Polyester Paint
- AL** - Aluminum
- LN** - Brass or Nickel-plated brass

Insulating materials

- PC+ABS** - Halogen Free Polycarbonate + ABS
- PVC** - Polyvinyl Chloride
- PP** - Halogen Free Polypropylene
- PA6** - Halogen Free Polyamide 6
- PA12** - Halogen Free Polyamide 12
- PU** - Polyurethane
- PE** - Polyethylene
- NBR** - NBR rubber
- PET** - Thermoplastic Polyester
- TPV** - Thermoplastic

Load diagrams

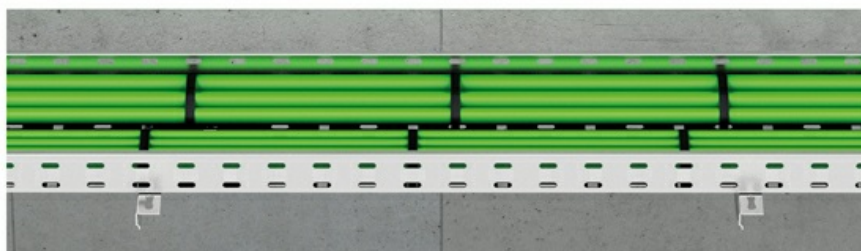


Technical data

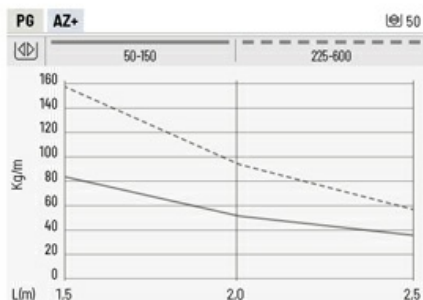
Test for safety working loads installed in the horizontal way

Values obtained in accordance with IEC 61537, edition 3, according to the horizontal tests of multiple spans listed in point 10.3.4 of this standard, with a safety factor of 170% and without collapse in any case.

The safety working loads test on the 750 and 900 mm wide cable trays were carried out in accordance with the test method set out in section 10.4, and also included a safety factor of 170%.



Working loads for widths of 750 and 900 mm on request



Working loads for widths of 750 and 900 mm on request



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Technical data

The technical data for the Pemsaband® Vulcan cable tray range, based on tests carried out in accordance with the international product standard IEC 61537, 3rd edition, is set out below.

Classification according to:  BS-EN 61537	
Type of material	Metallic
According to flame propagation	No flame propagation
Electrical continuity	With electrical continuity
Maximum impedance of a joint of cable trays	<50 mΩ
Maximum impedance along the length of a cable tray	<50 mΩ/m
Maximum impedance along the width of a cable tray	<50 mΩ
Maximum impedance between length and cover	<50 mΩ
Maximum impedance between the length and equipotential bonding (references 68000034 and 68000035, installed according to assembly instructions)	<50 mΩ
Electrical conductivity	Conductive
Resistance against corrosion	
Pregalvanized PG	Class 3
Hot Dip Galvanising GC	
AZ+ High resistance alloy	Class 8
Temperature of transport, storage, installation and use	
Minimum temperature	-50 °C
Maximum temperature	+150 °C
Perforation in the base area	
Pemsaband® Vulcan Perforated	B Classification
Impact strength	Up to 20 J
SWL test (Safety working loads)	
Horizontal SWL test	Spans 0.5, 1, 1.5, 2 and 2.5 meters





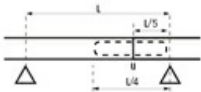
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Safe working load test conditions for cable trays EN61537

Support Span	0.5 m - 1 m - 1.5 m - 2 m - 2.5 (depending on cable tray height)
Longitudinal deflection	Less than 1% support span
Transverse deflection	Less than 5% of the cable tray width
Placement of joints	$(L/4) > u > (L/5)$ 
Increased safety coefficient	1.7 times the declared safe working load

The safety working loads test on the 750 and 900 mm wide cable trays were carried out in accordance with the test method set out in section 10.4, and also included a safety factor of 170%.

Maximum Fill Capacity

The load values shown in the load diagrams and tables above are tested and designed to allow operation at the maximum capacity based on the usable tray cross-section shown in the table below:



	50	75	100	150	225	300	450	600	750	900
	mm ²									
12..18	542	822	1102	1662	2502	5000				
25	1171	1776	2381	3591	5406	7083	10653	14223	17158	20608
50	2381	3611	4841	7301	10863	14523	21843	29163	35808	43008

Cable tray configurator and selector

For more precise and specific configurations involving electrical cables, and taking into account the maximum working capacity and the usable cross-sectional area of the trays, Pemsa offers Pemsa Pro, a product configurator that selects the most suitable tray for the user-defined cable configuration. For access and more information, scan this QR code.

