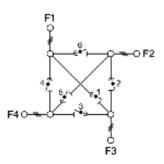


# **Network Link Boxes**

Secure, watertight, in-ground 6-switch / 4-circuit, 400 A link box with DIN-standard switch-disconnects







The Hiko Network Link Box uses
Weber EFEN switchgear and Langmatz
structural pits to provide a safe,
robust, reliable, flexible and futureproof solution for underground urban
distribution reticulation.

Langmatz pits are made in Germany and are engineered for a lifetime of over 40 years. Their use of structural foamed polycarbonate (SFPC) in a honeycomb modular design delivers outstanding performance under dynamic and static load conditions. The SFPC material is extremely strong, heat resistant, flame retardant, resistant to solvents including petrol, diesel and oil. It has been shown by independent testing to be completely nontoxic to ground water.

The Network Link Box is available with lids rated up to AS3996 Class E for application in roadways.

The design of the pit eliminates the need for a concrete vault or collar, reducing time and cost on site.

Installation is facilitated by the light weight of the SPFC structural pit elements, which can be easily separated into layers and reconnected if required, and by the provision of tool-free conduit knock-outs and an adjustable lid height.

The Weber EFEN LV switchgear in the Network Link Box is housed horizontally under a watertight composite "bell" which allows continuous operation even in flood conditions. Monitoring equipment can also be accommodated.

No special tools or spare parts are required.

The 6-switch / 4-circuit configuration delivers maximum flexibility to planners and operators alike to maximise the value and operability of LV networks.

A 3-switch / 3-circuit configuration is also available.

The Hiko Network Link Box takes asset lifecycle management to the next level, it future proofs the LV network and delivers an attractive cityscape.



#### Network Link Boxes

## Mechanical specifications

Specification	Test method	Requirement
Lid load class	AS 3996	Up to Class E400 (40 tonnes)
Transfer of vertical loads to ground base	DIN 1054:2005-01	min 200 kN/m <sup>2</sup>
Transfer of adjacent static and dynamic loads to ground base	DIN FB 101	Load class 2 (96 kN with area 40x40 cm using set up RStO road class)
Active ground pressure (transfer of vertical loads to pit elements)	DIN 4085	Ground types V1 to V3 acc to ATV-DVWK-A 127

#### Materials

Component	Material
Lid	Cast iron or galvanised steel
Frame	Hot dip galvanised steel (≥ 70 µm)
Bell	Composite
Structural pit elements	Structural foamed polycarbonate (PC/PBT blend with 6% GRP)

### Structural pit element material properties

Specification	Test method	Requirement				
Density	ISO 1183	0.95 – 1.25 g/cm <sup>3</sup>				
Water absorption	DIN 53495	< 0.5 %				
Hardness	ISO 2039/1	90 MPa				
Tensile strain at break	ISO 527	38 MPa				
Elongation at break	ISO 527	12 %				
Elastic modulus	ISO 527	2,000 MPa				
Notched impact strength	DIN 53453	6 kJ/m <sup>2</sup> (20°C), 4 kJ/m <sup>2</sup> (-20°C)				
Vicat softening temperature	ISO 306	110°C (B50 method)				
Flammability	(Surface flame)	Self-extinguishing after flame is withdrawn				
Groundwater compatibility	(Independent test)	Non-toxic (no leaching of heavy metals, phenol, polycyclic aromatic hydrocarbons or BTEX)				

## Configurations and Dimensions (mm)

Hiko Code	Network link box configuration		Internal length	Internal width	Nominal depth	Lidlaad	Approximate weights (kg)				Cable tails
	Circuits (3-phase feeders)	Switches (3x single phase)	(mm)	(mm)	(mm)	Lid load class	Total (exc cable tails)	Head- frame	Lid(s)	Switchgear	(mm²)
UDP10B400	4	6	800	800	700	В	300	40	2x 50	150	150-240
UDP10E400	4	6	800	800	700	E	300	40	2x 50	150	150-240
UDP07B400	3	3	800	400	700	В	125	25	15	80	150-240
UDP07E400	3	3	800	400	700	Е	125	25	50	80	150-240

#### **Options**

Lid load class, locking arrangement and material type (cast iron, galvanised steel, paveable / concrete fill)

Conduit knock-outs size (50, 110 and 160 mm dia) and arrangement in structural pit elements LV switchgear type, cable tails

For more information contact your Hiko Power Engineering representative Hiko Power Engineering reserve the right to amend product details

#### Other literature available on request

Type test reports, drawings, technical data sheets, installation instructions, O&M guidelines







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