HAWKE | Transit System

DATA CENTERS

Specialist in sealing
of Data Centers

WWW.HAWKE-HTS.COM

CABLE AND PIPE PENETRATION SEALING SYSTEM

PROTECT YOUR INFORMATION

Assure the insulation of your facility with HAWKE the best Multi Cable & Pipe Transit System to protect your information located in data centers.

Avoid the risk of fire and flooding.

Prevent the air leakage and consequentially, additional expenses to keep the perfect temperature, humidity and climate in all your facility.

Using HAWKE, you are extending the lifetime of your facility and equipment.

HAWKE THE PERFECT SELAING SYSTEM FOR DATA CENTERS

The Hawke Transit System has been designed to meet the exacting demands of some of the most onerous hazardous areas that can be expected.

Company's rigorous and comprehensive testing regime has resulted in an impressive list of test reports and certificates issues by test houses and certification bodies worldwide.

Use Hawke to protect

- Cabinets
- Enclosures
- Electrical Equipment
- Generators
- HVAC Systems
- Junction Boxes
- Panels
- Power Systems
- Structural Facility
- Switchgear
- Transformers
- More...

ADVANTAGES OF HAWKE TRANSIT SYSTEM

When using Hawke products, the installation process is very simple: **select a specific Tolerant block and install it immediately onto the respective cable.** The speed of installation dramatically reduces labour costs when compared to alternative products.

FASTER INSTALLATION

No onsite modifications needed

With the special design of the Hawke Multidiameter blocks, you get 4 mm of tolerance in the same block.

Due each block is manufactured incorporing five sealing faces and four seling grooves along the the internal faces, which are displaced by the sealing process. The five sealing faces allows for correct sealing of cables or pipes with an inconsistent outer diameter or shape.

Modification of any product is a process that can lead to human error. Indeed, on a large project where thousands of blocks have to be modified, the probability to make a mistake, is quite high.

Errors in modification to any sealing block will result in the installation's integrity against; gas, water and fire protection being completely lost.

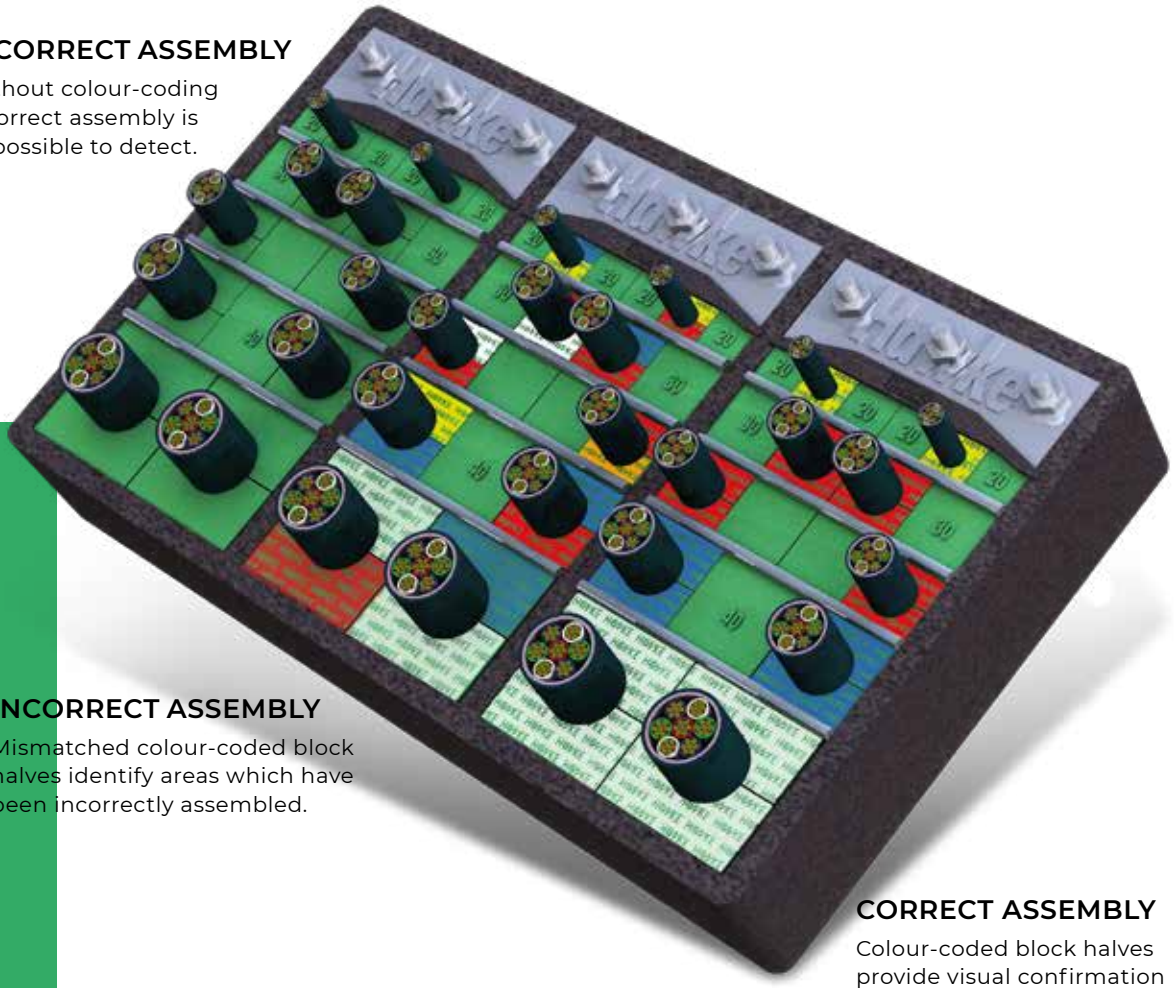
Total inspectability

The individual block halves are clearly colour-coded and they also display the maximun and minimum diameter of cable/pipe which it is designated to seal.

The colour-coding allows the inspector to clearly identify that the blocks have been correctly sized for the cable or pipe. Without colour-coding, it is extremely dificult to inspect/verify that the system has been installed correctly.

INCORRECT ASSEMBLY

Without colour-coding incorrect assembly is impossible to detect.



INCORRECT ASSEMBLY

Mismatched colour-coded block halves identify areas which have been incorrectly assembled.

CORRECT ASSEMBLY

Colour-coded block halves provide visual confirmation of correct assembly.

No waste material

Due to our Tolerant Blocks not need of any modification on site, there is therefore no junk material to dispose of.

This means that potential hazards and hidden cost associated with the disposal of waste product are removed.

ENVIRONMENT FRIENDLY

RECTANGULAR FRAMES

HAWKE FOR DATA CENTERS

Rectangular Standard

Hawke civil transit systems give protection to the cable/pipe entries wherever a wall, deck or bulkhead is penetrated by cable or pipe.

The transit system will maintain the integrity of the structure which is exposed to risks from hazards such as; fire, smoke, water ingress, toxic gases and attack by vermin.

Hawke frames can be cast within a concrete wall, cemented into a wall, bolted to a wall or welded or bolted to a metallic structure.

Made of mild steel, stainless steel or aluminium, upon request special frame material can be manufactured; a Hawke frame is manufactured and finished to the highest quality.

Each evenly packed row of blocks is held by a **Stayplate.** There must be a stayplate in contact with at least one side of the block to maintain the correct pressure rating for the system.

The final element of the system installation, the **Compression System** is inserted at the top of the aperture.

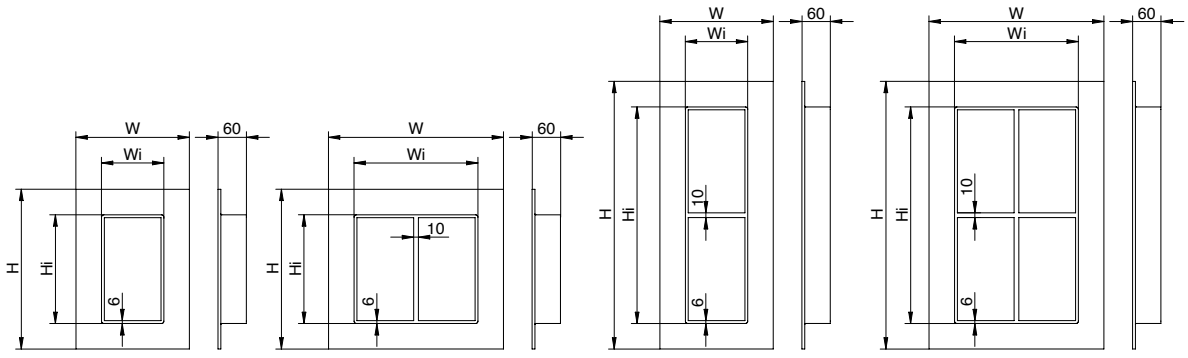
The compression system is used to apply and distribute compression thoughout the system.

HCXFrame

Rectangular Civil Frame with flange. Made in 6mm thickness steel with 60mm flange.

CHARACTERISTICS

- Available in four standard sizes 120 width, 2,4,6,8 and in four standard sizes 60mm width, 1,3,5,7. Multiple frames are available as combination of two or more apertures arranged horizontally, vertically or both combined.
- Designed to be bolted or casted.
- Materials: Mild Steel, Stainless Steel. Other materials under request.
- To be sealed with standard or EMC HF blocks, compression systems and accessories.



HCX M
HCX 6

HCX MxN
HCX 6x2

HCX M+P
HCX 6+6

HCX M+PxN
HCX 6+6x2

*Frame designation: M = size row 1; P = size row 2; N = number of columns.

ROUND SYSTEMS

HTS round transits effectively seal cables and pipes passing through circular apertures, giving protection against the same hazards as rectangular frames.

The seal is formed by tightening the compression bolts which expand the system radially, causing pressure to be exerted against the external sleeve or aperture and closing down onto the interior services, blocks or pipes.

Round transits are installed within sleeves. HRTOs (with blocks, for multiple cables/pipes) and HRSTs (without blocks, for single cables/pipes).

HRTO Frame

Hawke HRTO is a round sealing solution for multiple cables/pipes passing through a circular aperture in a wall or bulkhead/deck. The seal is formed by tightening the compression bolts which expand the system radially with no need of a compression system.

CHARACTERISTICS

- Designed to be installed using Hawke Sleeves (welded, bolted or casted) and standard HF blocks.
- Manufactured in intumescent elastomer polymer with stainless steel front and back plates. Plates also available in mild steel.
- HRTO is always supplied as an open frame. This enables the frame to be installed after cable/pipe installation.
- No extra tools are required for its installation.

HRST Family

Hawke HRST is a round sealing solution for a single cable/pipe passing through a wall or bulkhead/deck.

Each size of HRST frame can seal a large range of diameters without any onsite modifications.

CHARACTERISTICS

- Available to seal services from 4mm up to 170mm of external diameter (standard version).
- Tolerant up to 7 mm.
- Designed to be installed using Hawke Sleeves (welded, bolted or casted).
- Manufactured in intumescent elastomer polymer with stainless steel front and back plates. Each HRST frame has a gasket to prevent galvanic corrosion when installed within a mild steel sleeve.
- HRST is always supplied as an open frame. This enables the frame to be installed after cable/pipe installation.
- No extra tools are required for its installation. No extra tools are required for its installation.

SLEEVES

Made of mild steel, stainless steel or aluminium; Hawke sleeves are manufactured and finished to the highest quality.

Hawke sleeves can be cast within a concrete wall, cemented into a wall, bolted to a wall or welded or bolted to a metallic structure.

CB Sleeve

Sleeves with flange for Hawke Round transits.

CHARACTERISTICS

- Designed to be bolted or casted
- Materials: Mild Steel, Stainless Steel and Aluminium
- To be sealed with standard or EMC HRT/HRTO and HRST.

CBO Sleeve

Sleeve with flange and removable end which allows installation around existing cables. To be used with Hawke Round transits.

CHARACTERISTICS

- Designed to be bolted or casted
- Materials: Mild Steel, Stainless Steel and Aluminium
- To be sealed with standard or EMC HRT/HRTO and HRST.

ASSEMBLY PARTS

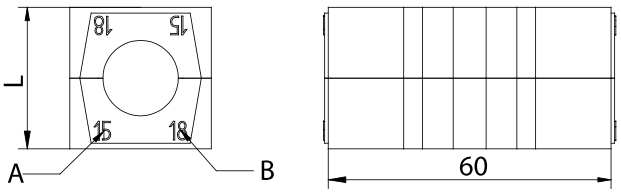
TOLERANT BLOCKS

Hawke HF tolerant blocks are designed to accommodate cables/pipes passing through the frame. Our special design incorporates five contact points which allows the blocks to accommodate a range of different diameters and accept variances in cable/pipe diameter. Each block that a sealing range of 3-4mm without the need for any onsite modifications.

Also, Hawke's unique inspectable colour code make installation easier, faster and allows a visual inspection of the transit when complete.

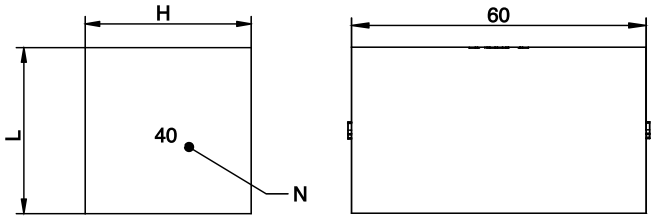
CHARACTERISTICS

- Made of zero halogen, intumescent elastomeric polymer.
- No modification of the block needed during installation. Zero waste material.
- Four sealing grooves within the internal faces ensure correct contact all along the cable/pipe.
- Minimum and maximum sealing range is marked on the blocks. Also, the colour-coding allows for correct visual inspection. Our system can be visually inspected at a glance.



BLANK BLOCKS

Hawke HF blank modules are designed to fill spaces within the frame which are not required for services, thus allowing spare capacity for future requirements.



COMPRESSION SYSTEM

The Unique Hawke Compression System is used in rectangular frames to compress and seal the installation of cables/pipes within HF modules. It is composed by:

- **Endpacker:** The final element of the frame installation, this is inserted above the compression plate. The tightening of the bolts and the steel insert pins provides pressure to the system and ensures correct sealing.

- **Compression plate:** Placed on top of the last row of blocks, this plate distributes the pressure from the endpacker to ensure the correct compression is applied to the system.

CHARACTERISTICS

- Available in 120 and 60mm width (for 120 and 60 mm frames).
- Designed to be installed in all rectangular apertures.
- Materials: Mild Steel, Stainless Steel.

STAYPLATES

Stayplates ensure the blocks in a Hawke rectangular system (tolerant and blank ones) are fixed in position after compression. A stayplate should be placed above each complete row of insert/filler blocks. However, never on the last top row (underneath the compression plate) and never below the last bottom row of blocks.

- Available in AISI 304 stainless steel. AISI 316 and other materials under request.
- High pressure stayplates (931P) are to be used in applications where the pressure requirement is greater than 3.5 bar.

CABINET SEALS

Hawke Cabinet Sealing Systems give IP- 66/67 protection to cable entries within an electrical cabinet/enclosure, avoiding water and dust to penetrate it thus protecting the equipment inside.

Its modular design allows modifications to be done exactly as in standard installations.

Using a H-DM is an easier and quicker alternative to using conventional gland plates.

SEALING AGAINST EXTERNAL CONDITIONS

Hawke Cabinet Sealing Systems are prepared to seal in different applications, such as; Electrical enclosures and switch boards, data centers and electrical rooms. Company rigorous and comprehensive testing regime has resulted in an impressive list of test reports and certificates issues by test houses and certification bodies worldwide.

Our Cabinet Sealing Systems give IP- 66/67 protection to cable entries within an electrical cabinet/enclosure, avoiding water and dust to penetrate it thus protecting the equipment inside.

Its modular design allows modifications to be done exactly as in standard installations. Using a H-DM is an easier and quicker alternative to using conventional gland plates.

H-DM

The modular design of the H-DM allows modifications to be done exactly as in standard installations.

Using a H-DM is an easier and quicker alternative to using conventional gland plates.

H-HC

Hawke H-HC is a sealing system for cables entering and outdoor electrical cabinets.

Using a H-HC is an easier and quicker alternative to using conventional gland plates.

H-HC System

The H-HC system is the perfect solution to seal any entering of cables an outdoor electrical cabinet. Following the same design as standard cabinet seals, Hawke H-HC systems is designed for electric boxes and cabinets with low dimensions.

Its certificated for: Fire, Water, Gas, Radiation, Chemicals, Explosion (EX), Smoke and Vermin.

This modular system is easily upgradeable. We don't need to make new holes in the case of adding cables.

With Hawke H-HC it is not necessary to strip the cable, making it suitable for applications subject to **"COLD FLOW"**, making the grounding by the traditional method, safer and more functional, inside the cabinet.

FEATURES OF THE HAWKE H-HC FRAME

Hawke Tolerant and Blank blocks

Made of zero halogen intumescent elastomer polymer, each block accepts a range of cable/pipe diameters without the need of any modifications, enabling the complete range of standard sizes to be covered by a small number of blocks. Filler Blocks are used to fill up unused space within the frame. This allows room for any future requirements.

HTS's unique inspectable colour coding shows that the correct sizes of blocks are selected, avoiding installation mistakes and allowing easy inspection.

Frame

Mild steel or stainless steel frame manufactured and finished to the highest quality. Available in two different sizes with 60 and 120 mm width (internal) and 5 cm flange. Hawke frames for cabinet sealing systems are designed to be bolted.

Compression System

The final element of the system installation, it is inserted at the top of the aperture. The Compression System is used to apply and distribute compression throughout the system. Endpacker unit applies pressure to seal the system, without the need of compression plate or the use of any compression tools.

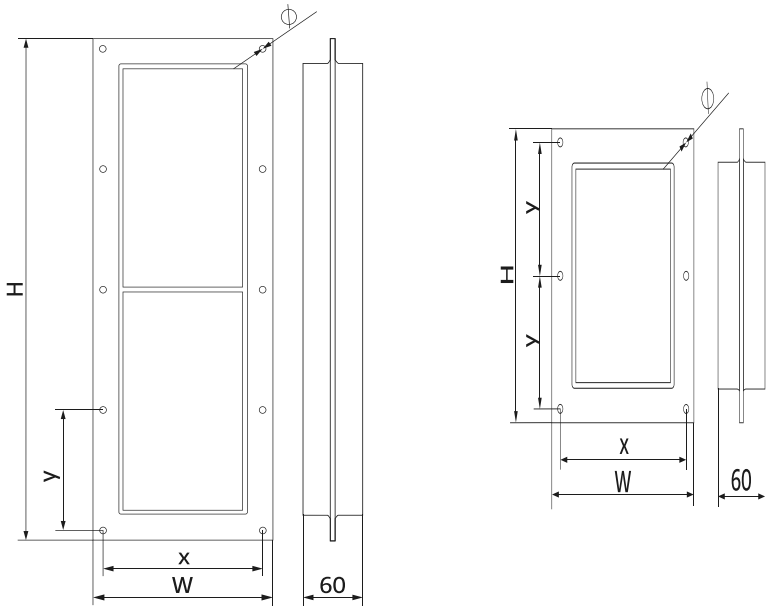
- To be installed (bolted) inside or outside the panels and cabinets.
- To be sealed with plugs and standard HAWKE compression system, stayplates and lubricant.
- No additional tools required for installation.
- Very easy assembly. The installer does not need to modify each block to adapt it to the diameter of the cable.
- A large number of cables can be sealed with a single hole, optimizing the useful space.

H-HC

The H-HC frame is manufactured with a 5 cm flange. This flange can be placed centrally in the frame or offset on one side. Available in two sizes, 60 and 120 mm wide (internal).

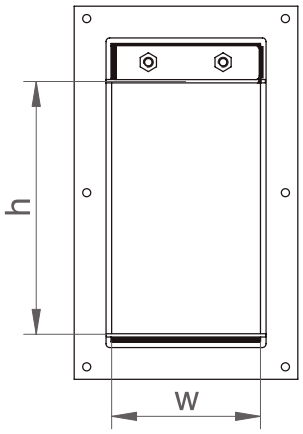
CHARACTERISTICS

- Material: Made of mild steel or stainless steel.
- To be installed (bolted) inside or outside the panels and cabinets.
- To be sealed with plugs and standard HAWKE compression system, stayplates and lubricant.
- Compression tool 60mm required for installation.



SEALING AREA

SIZE
Cabinet Seal H-HC 3
Cabinet Seal H-HC 4
Cabinet Seal H-HC 5
Cabinet Seal H-HC 5-3
Cabinet Seal H-HC 5-5
Cabinet Seal H-HC 7



H-DM System

With Hawke H-HC it is not necessary to strip the cable, making it suitable for applications subject to **"COLD FLOW"**, making the grounding by the traditional method, safer and more functional, inside the cabinet.

Hawke H-DM is a cable sealing solution for soft liquid and dust conditions (IP66 and IP67); specially designed for the sealing of electrical panelboards and cabinets.

To be installed with Hawke DM series: tolerant and blank sealing modules, compression system and stayplates.

The cable transit is:

- Available in five different frame sizes (1, 4, 5, 6.3 and 6+6).
- To be equipped with Hawke DM blocks.
- To be sealed using integrated compression unit.
- To be installed (bolted) inside or outside the panel boards and cabinets.

FEATURES OF THE HAWKE H-DM FRAME

Hawke Tolerant and Blank blocks

Made of zero halogen elastomer polymer, each block accepts a range of cable/pipe diameters without the need of any modifications, enabling the complete range of standard sizes to be covered by a small number of blocks. Filler Blocks are used to fill up unused space within the frame. This allows room for any future requirements.

HTS's unique inspectable colour coding shows that the correct sizes of blocks are selected, avoiding installation mistakes and allowing easy inspection.

Frame

Powder-coated aluminum frame manufactured and finished to the highest quality achieving a very low weight. Hawke frames for cabinet sealing systems are designed to be bolted.

Compression System

The final element of the system installation, it is inserted at the top of the aperture. The Compression System is used to apply and distribute compression throughout the system. Endpacker unit applies pressure to seal the system, without the need of compression plate or the use of any compression tools.

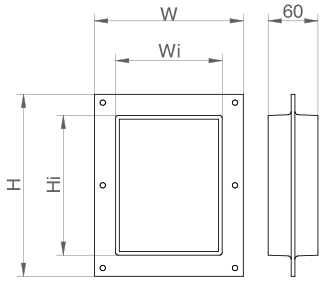
- Hawke H-DM is a sealing system for cables entering an INDOOR electrical cabinet.
- It's modular an easily upgradable system. We don't need to make new holes in the case of adding cables.
- Very easy assembly. The installer does not need to modify each block to adapt it to the diameter of the cable.
- A large number of cables can be sealed with a single hole, optimizing the useful space.
- We reduce installation time by 50% compared to cable glands.

H-DM

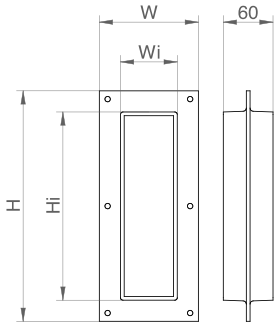
Hawke H-DM is a low weight cable sealing solution, designed for the sealing of electrical panel boards and cabinets against external conditions.

CHARACTERISTICS

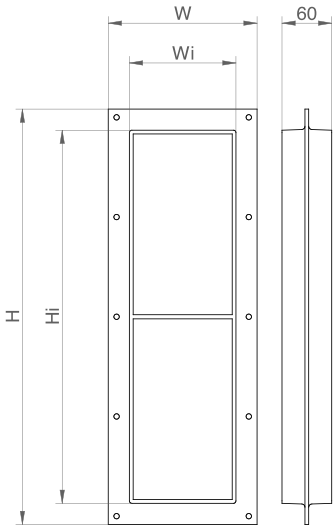
- Available in three standard 120 mm width (internal) sizes (4, 6.3 and 6+6) and in two standard 60mm width (internal) sizes (1 and 5).
- Designed to be bolted inside or outside the electrical panel board/cabinet.
- Materials: Aluminium.
- IP66 and IP67 protection.
- To be sealed with Hawke DM series: DM tolerant and blank sealing modules, CSDM compression system and stayplates.



H-DM 4



H-DM 5



H-DM 6+6

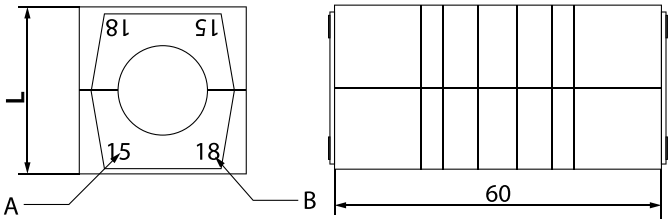
DESCRIPTION	EXTERNAL DIMENSIONS				Weight (kg)
	W (mm)	H (mm)	Wi (mm)	Hi (mm)	
H-DM 1	120	160	69	109	0,4
H-DM 4	180	220	129	169	0,7
H-DM 5	120	278	69	227	0,7
H-DM 6.3	180	300	129	249	0,9
H-DM 6+6	180	501	129	450	1,4

*All dimensions are nominal values

DM Tolerant blocks

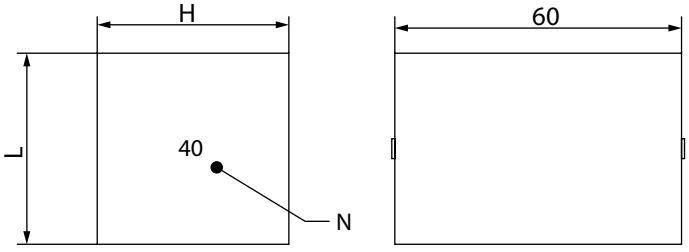
Hawke DM tolerant blocks are designed to accommodate different cable sizes passing through the frame.

Like all Hawke modules, its degree of flexibility allows cable diameter variances and its colour-coding feature allows easy installation and onsite inspection.



DM Blank blocks

Hawke DM blank modules are designed to fill spaces within the frame which are not required for services, thus allowing spare capacity for future requirements.



EMC SYSTEMS

EMC HAWKE TRANSIT SYSTEMS

EMC is achieved by reducing the Electromagnetic interference (EMI) to a level which in most applications will not disrupt the proper operation of the electronic devices.

The Hawke EMC Cable Transit System. Hawke's system has been further developed from the highly successful Civil and Marine Transits which are equally suitable for cables or pipes.

CHARACTERISTICS

- As well as acting as a certified fire, water and gas barrier, the Hawke EMC Multi Cable Transit System (EMC MCT) provide protection against electromagnetic pulses, electronic sabotage, noise, etc.
- Essential to ensure the integrity of electronic devices, computers and military communication systems.
- Just like HF blocks, EMC HF tolerant blocks have a cable sealing range of 3mm to 100mm without the need of any on-site modifications. EMC blocks are coated with a highly conductive silver-loaded paint to capture any airborne electrical noise.
- Copper tape provides a high conductive path from cable screen to frame, and stainless steel frames allow conductivity from blocks to earth.

EMC Frames

Hawke frames are attached to the structure and form the surround of the penetrations, allowing the systems to compress and content the pressure, and giving a conductive path from the cable screen and the surface of the blocks to the earth.

All standard HTS marine and civil frames are able to be used in EMC systems Stainless Steel is highly recommended for EMC applications.

TOLERANT BLOCKS

Hawke HF EMC tolerant blocks are designed to accommodate different cables passing through the frame.

Its special design with five contact points allows the blocks to accommodate different diameters within the same block and accept variances in cable/pipe diameters. Silver-loaded paint and copper strip wrapping ensures correct shielding.

CHARACTERISTICS

- Made of zero halogen, intumescent elastomeric polymer.
- No modification of the block needed during installation. Zero waste.
- Sealing grooves in the internal faces ensures correct contact all along your cable.

BLANK BLOCKS

Hawke HF EMC blank modules are designed to fill spaces within the frame which are not required for services, thus allowing spare capacity for future requirements. Silver-loaded paint and copper strip wrapping ensures correct shielding.

DEVELOP YOUR OWN MCT DESIGN

Hawke Design Software – HDS

Hawke Design Software makes easier and faster the design of your cable transit projects, calculating material list and distribution automatically, while maintaining traceability of all the cable data, percentages of saturation per area, etc.

With HDS is possible to import project and cable data from an extern file, managing thousands of cables and transits in few clicks and obtaining material lists, detailed transit drawings and different kind of project and transit reports.

The software allows to modify data and do the recalculation automatically, always giving best combination of frames and blocks in order to save money and time.

Installation drawings and cable layouts facilitates the installation showing the colour coded blocks, helping to save much time and maintaining traceability of the transits.

- Save time designing your projects.
- Manage big amount of cables and transits.
- Import cable schedule and project data.
- Calculate automatically or manually the best combination of materials.
- Export material list, reports and installation drawings.
- Modify cables position directly on the drawing.
- Preview the transit with colour coded blocks.
- Export a project summary for requesting a quotation quickly.
- Share the projects through internal server.

Efficient installation
Calculate the best combination of materials.

Manual configuration
Modify and adapt configurations manually.

Preferences selection
Export material list, reports and installations drawings.

Project preview
Preview the transit with colour coded blocks.

On-site modification
Modify cables positions directly on the drawings.

Project export
Export project summary for requesting a quotation quickly.

HAWKE INSTALLERS APP

Google play
Download on the App Store

Hawke Installers App makes easier and faster the installation of your transit projects, approaching all the necessary information to the construction point.

Designed to be launched from a portable device (smartphone or tablet), Installers App allows the installer to calculate automatically the best configuration for a transit, obtaining recommended distribution of the system, material list, drawings with colour code and other important information. All of this is obtained maintaining traceability of the cables and materials.

Also, the worker can consult product information, installation instruction and tips, watch the installation videos and contact with Hawke Transit System for technical support.

All these features help to reduce installation time and avoid potential installation mistakes.

- Save time installing your projects.
- Calculate automatically or manually the best combination of materials.
- Modify and adapt configurations manually.
- Export material list, reports and installation drawings.
- Modify cables position directly on the drawingt.
- Preview the transit with colour coded blocks.
- Export a project summary for requesting a quotation quickly.

TAILOR-MADE SOLUTIONS

EMC SYSTEMS

HAWKE INTEGRAL SERVICES

The Hawke technical support seervice offers a complete Installation Training program for your installers.

The Installation Training also enables your installers to learn the best installation techniques thus saving time and preventing installation mistakes.

The training also demostrates that Hawke can be installed much faster than other transit systems.

This training can include inspection and supervision support in order to detect possible installation mistakes and propose neccesary correct actions.

SUPPORT ALONG THE LIFECYCLE OF YOUR PROJECT

DESIGN	TECHNICAL ADVISE	HAWKE HDS
PURCHASING	DEMAND ANALYSIS	
SUPPLY	SPECIAL IDENTIFICATION	
INSTALLATION	HAWKE APP	TRAINING
INSPECTION	TECHNICAL SUPPORT ON SITE	
LIFE CYCLE	MAINTENANCE	QR IDENTIFICATION

EXTEND YOUR FACILITY LIFE CYCLE BEYOND USING HAWKE

HAWKE | Transit System

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