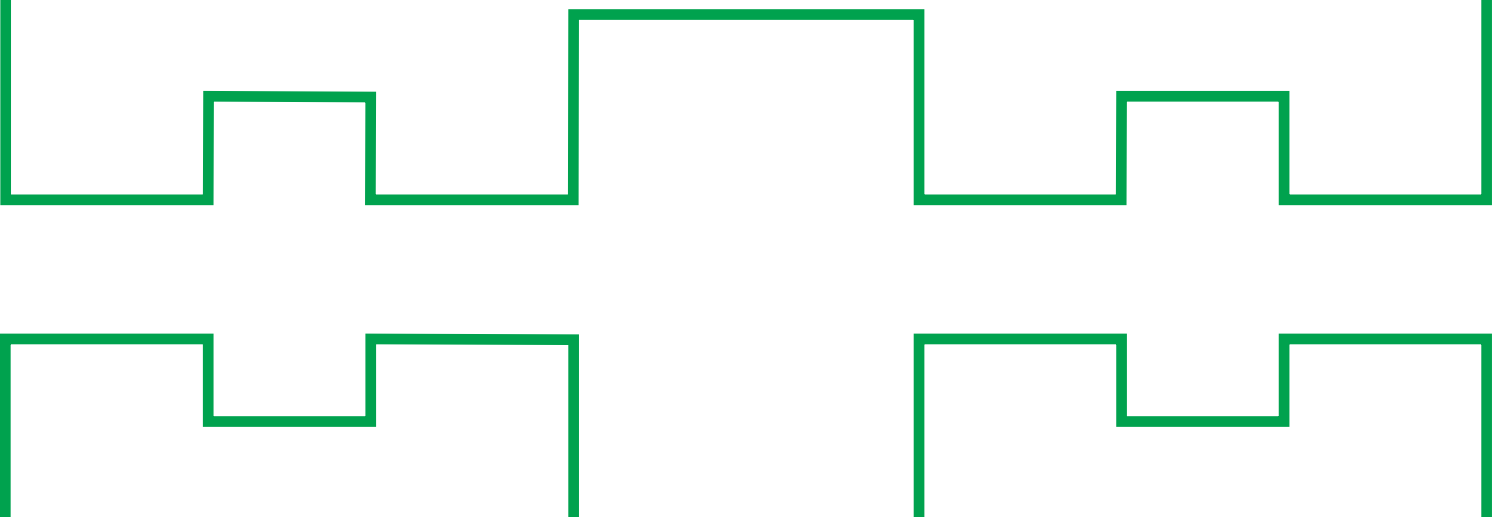




ASSEMBLY

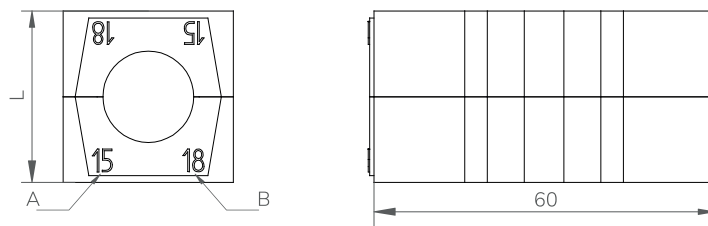
PARTS

TOLERANT BLOCKS

HTS 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 has a sealing range of 3-4mm without the need for any onsite modifications.

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.
- Ex available under request.



DESCRIPTION	L (mm)	CABLE AND PIPE DIAMETER		WEIGHT(Kg)	COLOR
		LABEL A	LABEL B		
		MINIMUM(mm)	MAXIMUM(mm)		
HF153	15	3	5	0,02	Red
HF155	15	5	7	0,02	White
HF157	15	7	9	0,01	Blue
HF203	20	3	6	0,03	Green
HF206	20	6	9	0,03	Pink
HF209	20	9	12	0,03	Brown
HF2011	20	11	14	0,02	Yellow
HF2013	20	13	16	0,02	Gold
HF3012	30	12	15	0,06	Red
HF3015	30	15	18	0,06	White
HF3018	30	18	21	0,05	Blue
HF3021	30	21	24	0,04	Orange
HF4012	40	12	15	0,12	Green
HF4015	40	15	18	0,12	Pink
HF4022	40	22	25	0,10	Red
HF4025	40	25	28	0,09	White
HF4028	40	28	31	0,08	Blue

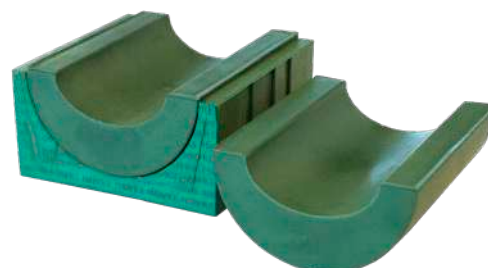
TOLERANT BLOCKS

DESCRIPTION	L (mm)	CABLE AND PIPE DIAMETER			COLOR
		LABEL A	LABEL B		
		MINIMUM(mm)	MAXIMUM(mm)		
HF4031	40	31	34	0,07	Orange
HF6031	60	31	34	0,22	Red
HF6034	60	34	37	0,21	White
HF6037	60	37	40	0,20	Blue
HF6040	60	40	43	0,19	Orange
HF6043	60	43	46	0,18	Purple
HF6046	60	46	49	0,16	Yellow
HF6049	60	49	52	0,14	Green
HF6052	60	52	54	0,11	Pink
HF9053	90	53	56	0,46	Red
HF9056	90	56	59	0,44	White
HF9059	90	59	62	0,42	Blue
HF9062	90	62	65	0,40	Orange
HF9065	90	65	68	0,39	Purple
HF9068	90	68	71	0,36	Yellow
HF12072	120	72	75	0,79	Red
HF12075	120	75	78	0,75	White
HF12078	120	78	81	0,71	Blue
HF12081	120	81	84	0,67	Orange
HF12084	120	84	87	0,64	Purple
HF12087	120	87	90	0,61	Yellow
HF12090	120	90	93	0,58	Green
HF12093	120	93	96	0,55	Pink
HF12096	120	96	100	0,52	Brown

WAVE GUIDES

- HTS manufacture a range of blocks to suit the most popular waveguides sizes. (See table) Please note that other sizes can be made to order. Please contact our Sales Department with details.
- HTS wave guide insert blocks are used inserted in standard HF Blocks.
- To ease assembly and guarantee system performance it is a requirement that cables enter and exit the aperture perpendicular in all axis to the face of the frame.
- Ex available under request.

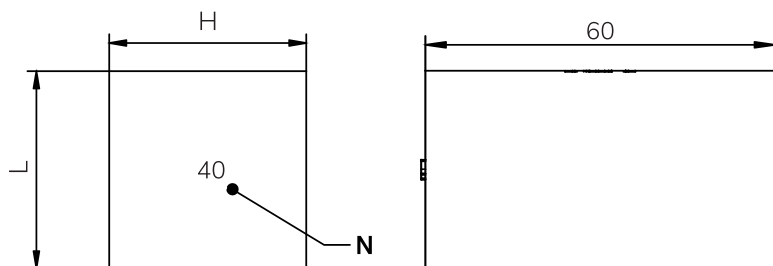
Ref - Elliptical Waveguide	Major Axis mm	Minor Axis mm	Standard Tolerant Block Size Required For E.W. Insert
EW220	17,8	11,2	4031
EW132	24,4	15,5	4031
EW127A	28,2	17,1	4031
EW85	33,5	22,9	6049
EW77	43,6	25,4	6049
EW64	48,5	28,4	6049



→ BLANK BLOCKS

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

Ex available under request.



→ Blank blocks

TYPE	H (mm)	W (mm)	LABEL (N)	WEIGHT (kg)
HF150/E	15	15	15	0,02
HF200/E	20	20	20	0,03
HF300/E	30	30	30	0,08
HF400/E	40	40	40	0,14
HF600/E	60	60	60	0,31
HF900/E	90	90	90	0,71
HF1200/E	120	120	120	1,24
HF90-30/E*	90	30	90-30	0,24

*HF90-30/E to be used along with a HF90 series tolerant block

→ Round corner blank blocks

TYPE	H (mm)	W (mm)	LABEL (kg)	R (mm)	WEIGHT (kg)
HF200 R20	20	20	20	20	0,03
HF300 R20	30	30	30	20	0,07

→ Filler strips

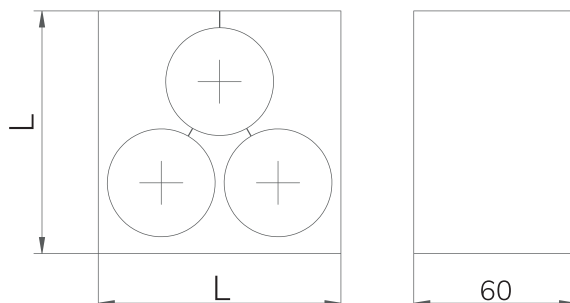
TYPE	H (mm)	W (mm)	WEIGHT (kg)
HF50	5	60	0,03
HF100	10	60	0,11
HF100 (12x10)*	10	60	0,11

* HF100 precut into 12 pieces of 10x10mm blocks.

→ TREFOIL BLOCKS

HTS trefoil blocks are used to accommodate three single phase power cables within the same block. This negates eddy currents being induced into a ferrous steel frame thus negating heat induction within the frame.

- Ex available under request.



DESCRIPTION	L (mm)	CABLES DIAMETER (MM)	WEIGHT (KG)	COLOR
HF80-3-28	80	28	-	Yellow
HF80-3-30	80	30	-	Purple
HF80-3-32	80	32	-	Brown
HF90-3-26	90	26	0,57	White
HF90-3-28	90	28	0,54	Blue
HF90-3-30	90	30	0,51	Pink
HF90-3-32	90	32	0,49	Red
HF90-3-34	90	34	0,46	Orange
HF90-3-36	90	36	0,43	Brown
HF90-3-38	90	38	0,4	Purple
HF90-3-40	90	40	0,37	Yellow
HF120-3-41	120	41	0,9	Red
HF120-3-43	120	43	0,86	White
HF120-3-45	120	45	0,83	Blue
HF120-3-47	120	47	0,79	Pink
HF120-3-49	120	49	0,75	Orange
HF120-3-51	120	51	0,71	Yellow

→ SPECIAL INSERT BLOCKS

- When HTS Transit Frames are penetrated by services that are shaped anything other than circular, e.g. busbars, special cables, earthtraps, etc. Special blocks can be manufactured.
- All special blocks are tested in our laboratory to ensure viability and performance.
- Please contact our Sales Department for more information.
- Ex available under request.



COMPRESSION SYSTEM

The Unique HTS 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.

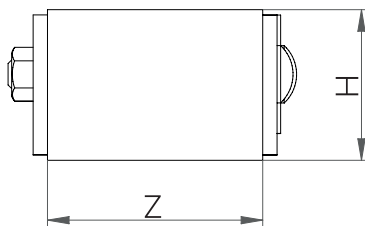
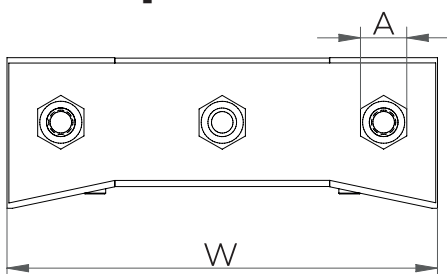
- Compression plate: Placed on top of the last row of blocks, this plate distributes the pressure from the endpacker to ensure the correct compression is applied to the system.



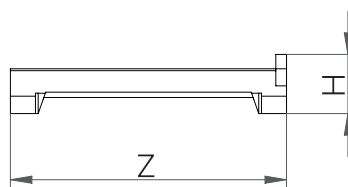
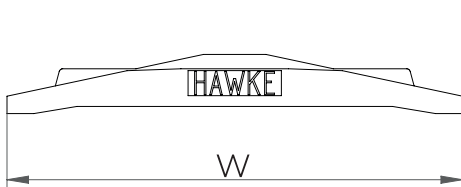
CHARACTERISTICS

- 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.
- Ex available under request.

Endpacker 1642B



Compression plate 1642A



DESCRIPTION		External dimensions				A	Weight (kg)	
		Qty	W [mm]	H [mm]	Z [mm]		Mild steel	Stainless steel
Compression System/1642 120 mm	Endpacker/1642B 120	1	120	42	60	13	0,8	0,8
	Compression Plate/1642A 120	1	127	17	77	-	0,4	0,4
Compression System/1642 60 mm	Endpacker/1642B 60	1	60	42	60	13	0,4	0,4
	Compression Plate/1642A 60	1	64	17	77	-	0,2	0,2
Compression System/962 180 mm	Endpacker/962B 180	1	180	42	60	13	1,2	1,2
	Compression Plate/962A 180	1	187	19	81	-	0,6	0,6
Compression System/963 240 mm	Endpacker/963B 240	1	240	42	60	13	1,5	1,5
	Compression Plate/963A 240	1	247	19	81	-	0,9	0,9
Compression System/964 360 mm	Endpacker/964B 360	1	360	42	60	13	2,3	2,3
	Compression Plate/964A 360	1	267	19	81	-	1,3	1,3

* For separate parts acquisition, contact sales department

ROUND CORNER COMPRESSION SYSTEM

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

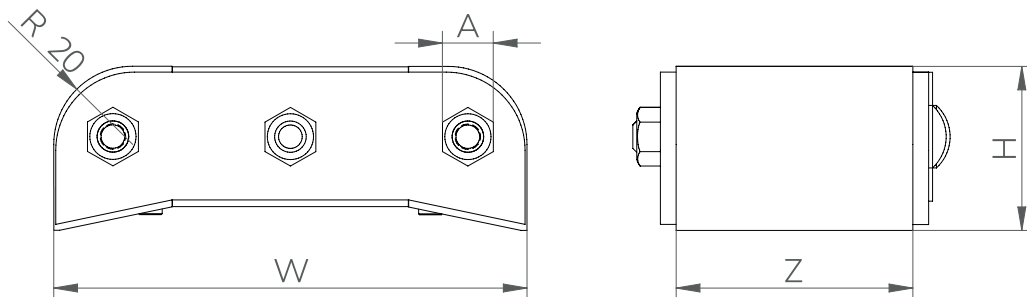
- Endpacker: The final element of the frame installation, this is inserted above the compression plate. The tightening of the bolts and the steel insert pins provides pressure to the system and ensures correct sealing.
- Compression plate: Placed on top of the last row of blocks, this plate distributes the pressure from the endpacker to ensure the correct compression is applied to the system.



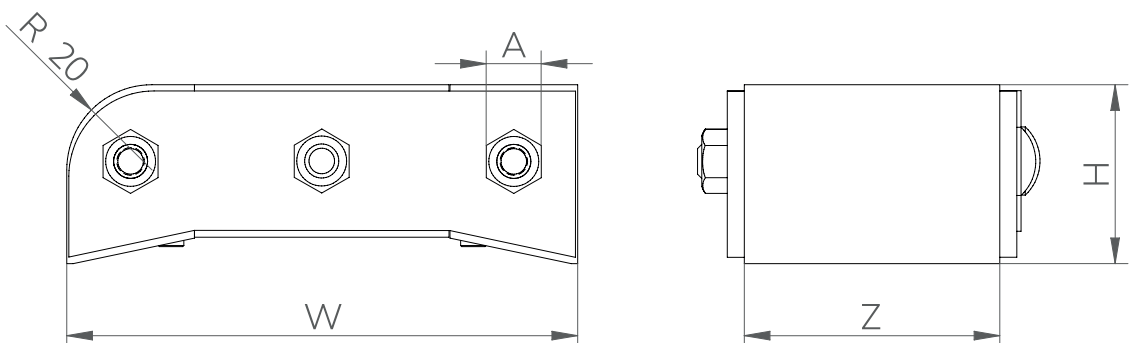
CHARACTERISTICS

- Available in the following variants; RR (Right round corner), LR (Left round corner) and DR (Double rounded), for the different kinds of apertures within a HMCX frame.
- Designed to be installed within HMCX apertures.
- Materials: Mild Steel, Stainless Steel.
- Ex available under request.

Endpacker double rounded 1642B DR



Endpacker left round corner 1642B LR

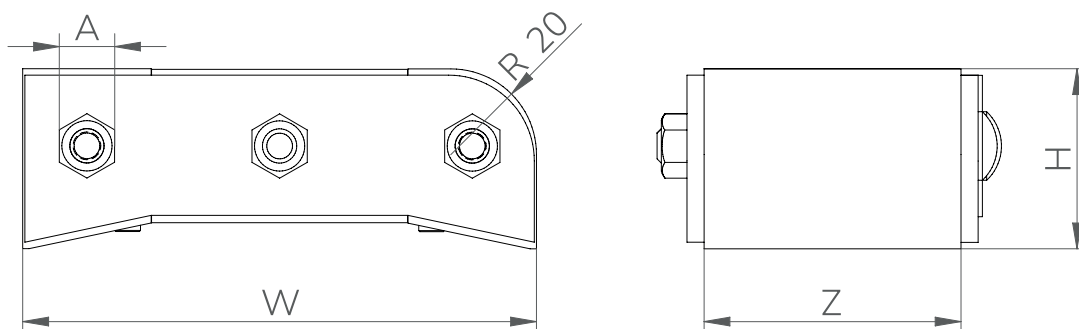




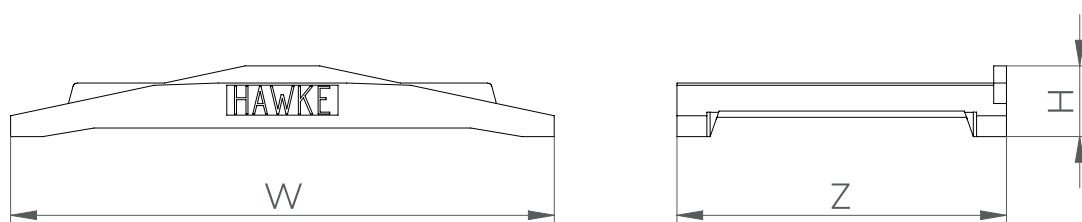
HTS

ROUND CORNER COMPRESSION SYSTEM

Endpacker right round corner 1642B RR



Compression plate 1642A



DESCRIPTION		External dimensions				A	Weight (kg)	
		Qty	W [mm]	H [mm]	Z [mm]		Mild steel	Stainless steel
Compression System Double Round/1642 DR	Endpacker/1642B DR	1	120	42		13	0,8	0,8
	Compression Plate/1642A	1	127	17	77	-	0,4	0,4
Compression System Left Round/1642 LR	Endpacker/1642B LR	1	120	42		13	0,8	0,8
	Compression Plate/1642A	1	127	17	77	-	0,4	0,4
Compression System Right Round/1642 RR	Endpacker/1642B RR	1	120	42		13	0,8	0,8
	Compression Plate/1642A	1	127	17	77	-	0,4	0,4

* For spare parts adquisition, contact sales department

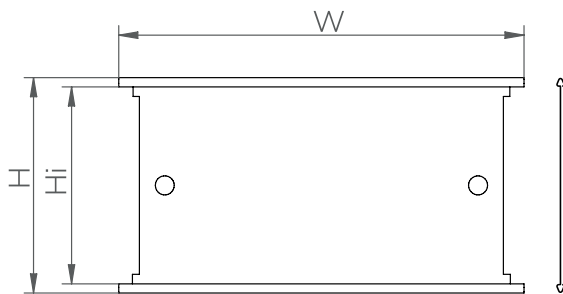
STAYPLATES

Stayplates ensure the blocks in a HTS 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.

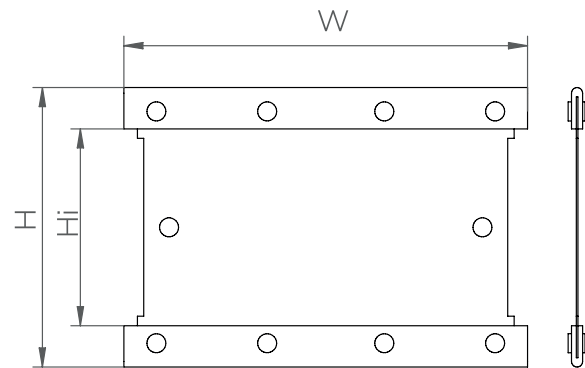


- Available in AISI 304 stainless steel. AISI 316 and other materials under request.
- High pressure stayplates (931P) are to be used in applications where the pressure requirement is greater than 3.5 bar.
- Ex available under request.

HTS standard Stayplate



HTS high pressure Stayplate



DESCRIPTION	W (mm)	H (mm)	Hi (mm)
Stayplate 931 60mm	68	68	62
Stayplate 931 120mm	128	68	62
High Pressure Stayplate 931/P 120mm	128	88	62
Stayplate 931 180mm	188	68	62
Stayplate 931 240mm	248	68	62
Stayplate 931 360mm	368	68	62