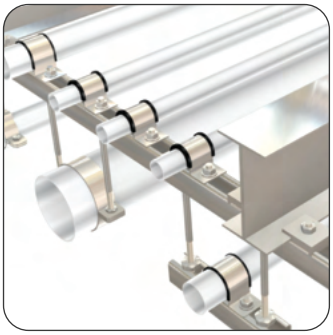
Framing Channels
Technical Catalogue
HAZ-FC-EN/05.25

HAZ METAL

Your Fixing Systems Specialist

Framing Channels

Product Technical Catalogue



Contents

HMP Framing Channels - Introduction

HMP Framing systems with channels and various accessories are used to build steel constructions for the installation of various types of sub structures. Efficient modular support structures are built quickly and easily. Flexible and low cost application is achieved.

Framing systems consist of cold formed steel and stainless steel channels which are supplied with suitable T bolts and lock nuts to build secondary structures for various types of applications in construction. Attachments of any kind of elements are achieved with T bolts or lock nuts. Bolting is made freely at the desired position along the length of the channels. Some of the areas of use consist of pipe and duct installation, machinery set ups, mechanical and electrical installations. The use of framing systems eliminates drilling and welding on site therefore resulting in safe and quick commencement of construction works.

Channels are supplied either plain or with perforated slotted or round drilled holes. Galvanized steel and stainless steel is available.

HMPB C Channels

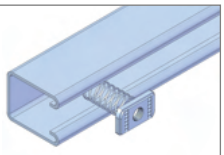
HMPC C Channels

HMPD C Channels

HMPA U Channels

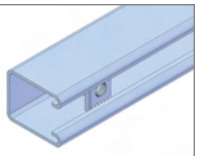
HMPL L Channels

1



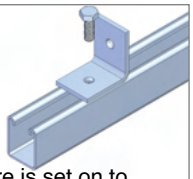
A spring lock nut is inserted in to a HMPC channel at desired position.

2



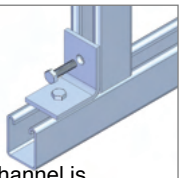
The lock nut is turned 90 degrees clockwise until locked.

3



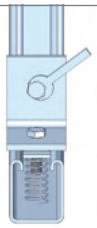
The fixture is set on to channel and is fixed with a set screw and a lock nut.

4



Another channel is connected using the same steps.

5



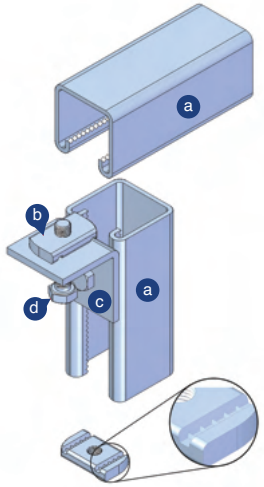
Channels are fixed to each other by tightening the set screws.

a. HMPS Channel

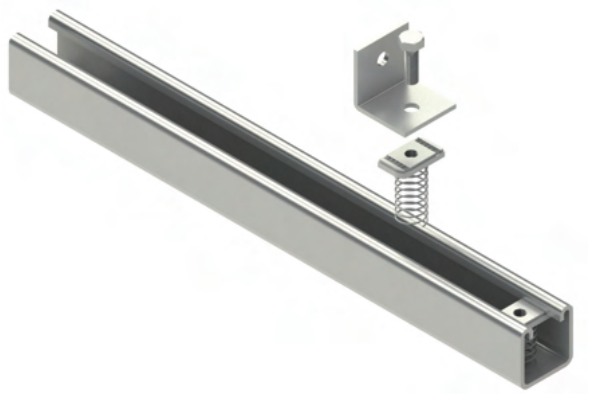
b. HMLN Lock nut

c. HCC Channel connection

d. DIN 933 Set screw



HMP Framing Channels - Introduction

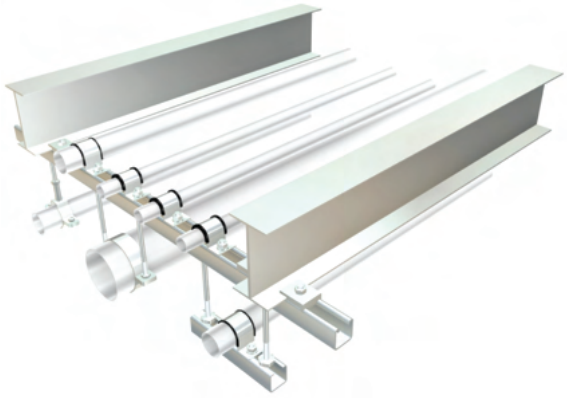


Advantages:

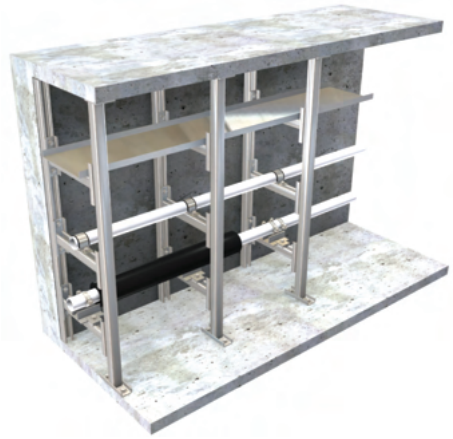
- Fast and Secure fixing.
- No time consuming welding and hole setting.
- No use of welding and drilling equipment.
- Adjustable and nonslip point fixing.
- Cost effective and flexible.
- Quick and easy fixing.
- Can be re-used.
- No special tools.

HAZ Metal manufactures cold rolled channels up to 6 metres in length in stainless steel and hot dip galvanised steel. Various accessories such as brackets, connection parts, lock nuts are available to complete the framing systems.

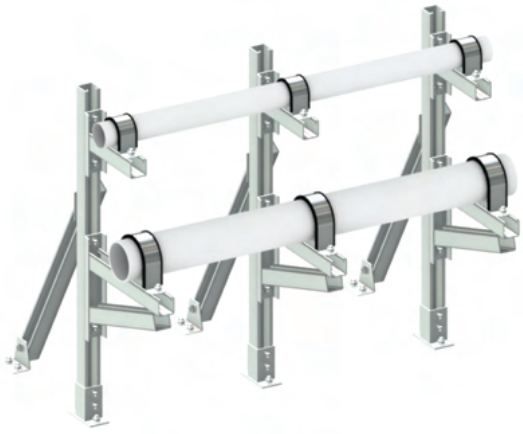
Framing systems are assembled without the need of welding. Suitable connection parts, lock nuts and DIN 933 set screws are used together to assemble the channels together formulating a steel construction. Various formations can be made to withstand the loads required.



Framing systems are widely used for the installation of pipes. Channels are fixed on to steel beams with connection elements. Fixing of pipe clamps with threaded rods are quickly and easily made on to the channels using lock nuts. The adjustability of this system is ideal for economic installation.



Mechanical, plumbing and electrical utilities are installed using framing systems. Channel systems and its accessories provide easy and efficient solutions to meet any project's requirement. The flexibility of the framing systems offers endless formation to suit any type of application.



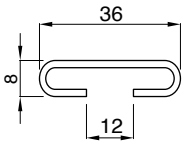
The combination of channels, brackets and channel connections allows the building of frames that are self standing. The frame work can be fixed on to the concrete ground. The modular frame works provide efficient and reliable solutions for various applications such as pipeline installation, machinery assembly and electrical fittings.

HMP Framing Channels - Product Range

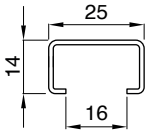
HMPB type C channels - cold rolled

Cold rolled framing channels with 90 degree inclined lips suitable for light duty loads. HMPB type C channels are produced plain and with slotted holes in maximum 6 metre lengths. Available in stainless steel grade 1.4301 & 1.4401 and hot dip & electro galvanized mild steel.

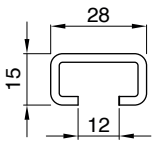
HMPB-36/8



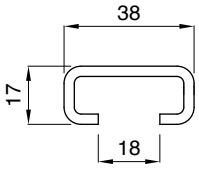
HMPB-25/14



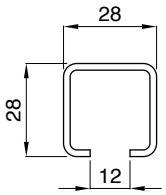
HMPB-28/15



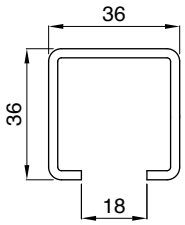
HMPB-38/17

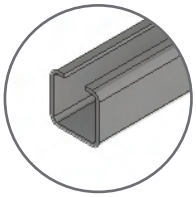


HMPB-28/28

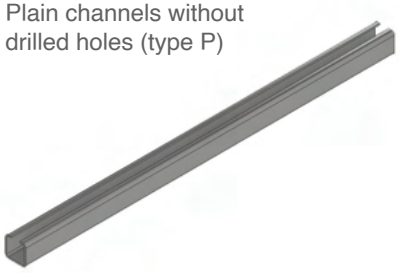


HMPB-36/36

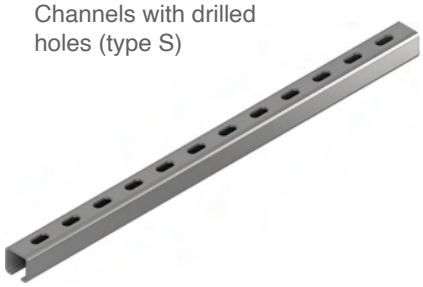




Plain channels without drilled holes (type P)



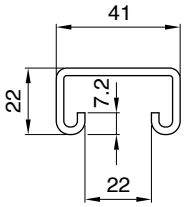
Channels with drilled holes (type S)



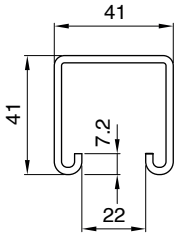
HMPC & HMPS type C channels - cold rolled

Cold rolled channels with 180 degree inclined lips suitable for medium duty loads. HMPC channels are produced plain, with slotted holes and in back to back versions. Channels are supplied up to a maximum of 6 metre lengths. Available in stainless steel grade 1.4301 & 1.4401 and hot dip & electro galvanized mild steel.

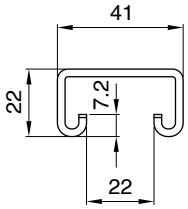
HMPC-41/22



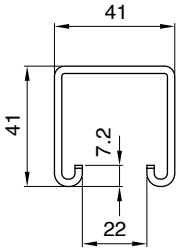
HMPC-41/41



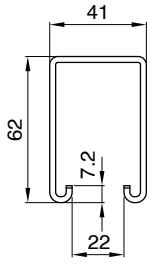
HMPS-41/22 Toothed channel

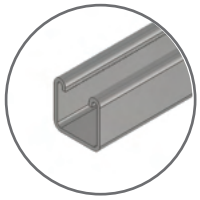


HMPS-41/41 Toothed channel

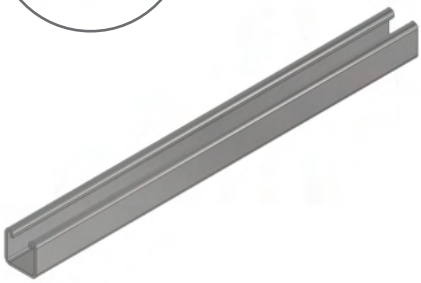


HMPS-41/62 Toothed channel



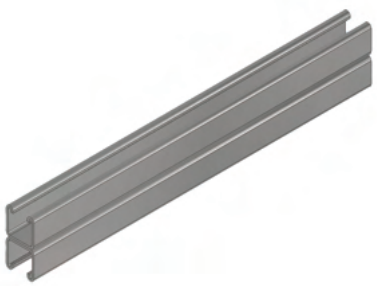


Plain channels without drilled holes (type P)



Channels with drilled holes (type S)

Back to back channels (type B)

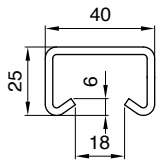


HMP Framing Channels - Product Range

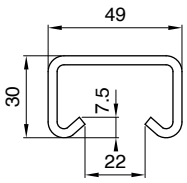
HMPD type channels - cold rolled

Channels with 135 degree inclined lips suitable for heavy duty loads. HMPD channels are available plain and in back to back versions which can be supplied in maximum 6 metre lengths. Available in stainless steel grade 1.4301 & 1.4401 and hot dip galvanized mild steel.

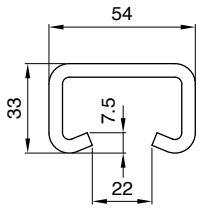
HMPD-40/25



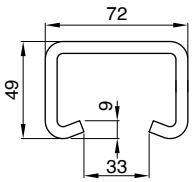
HMPD-49/30

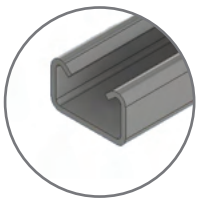


HMPD-54/33

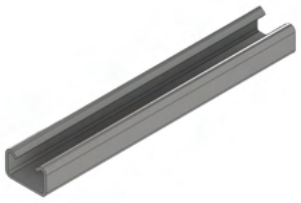


HMPD-72/49





Plain channels without drilled holes (type P)

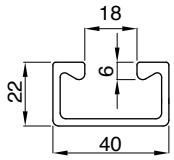


Back to back channels (type B)

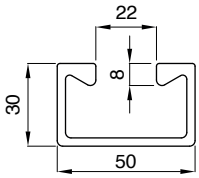
HMPH type channels - hot rolled

HMPH hot rolled framing channels are used for heavy duty loads and are available in plain and back to back versions. These channels are supplied in a maximum length of 6 metres. Available in hot dip galvanized mild steel.

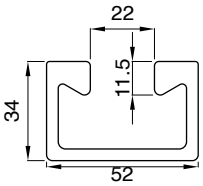
HMPD-H-40/22

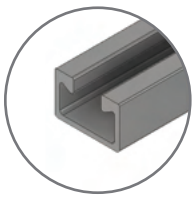


HMPD-H-50/30



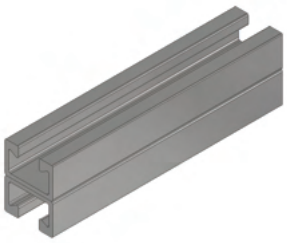
HMPD-H-52/34





Plain channels without drilled holes (type P)

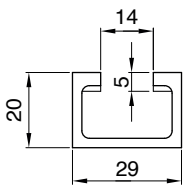
Back to back channels (type B)



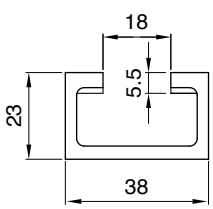
HMPZ type channels - hot rolled & toothed

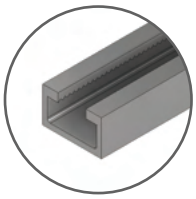
HMPZ toothed hot rolled framing channels are used for heavy duty loads. Toothed feature provides load resistance along the length of the channel. These channels are produced in plain and back to back versions. These channels are supplied in a maximum length of 6 metres. Available in hot dip galvanized mild steel.

HMPD-Z-29/20

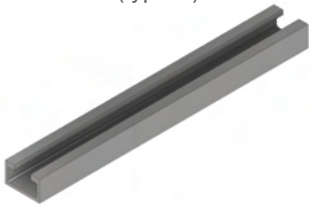


HMPD-Z-38/23

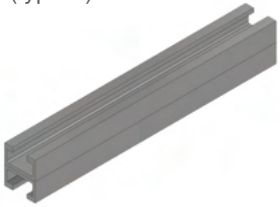




Plain channels without drilled holes (type P)



Back to back channels (type B)



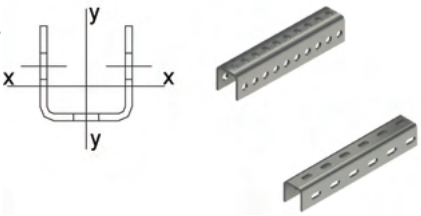
HMP Framing Systems - Product Range

HMPA U Channel & HMPL L Channel

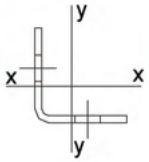
Channels are available in drilled or slotted hole versions in maximum 6 metre lengths. Allowable loads are available for submittal upon the request of the project.

Available in stainless steel grade 1.4301 & 1.4401 and hot dip & electro galvanized mild steel.

HMPA



HMPL



HMC Brackets

Brackets are available in a variety of types and sets for the assembly of framing systems on to any kind of substructures. Allowable loads are available for submittal upon the request of the project.

Available in stainless steel grade 1.4301 & 1.4401 and hot dip & electro galvanized mild steel.

HMC-A

HMC-B

HMC-C

HC-U

HC-L

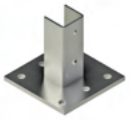
HC-C

HCC Channel Connections

Channel connections are available in a variety of types to be used with HMPB 36/36 and HMPC 41/41 C channels.

Available in stainless steel grade 1.4301 & 1.4401 and hot dip & electro galvanized mild steel.

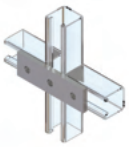
HCC-A



HCC-B

HCC-C

HCC-E



HCC-H

HCC-J

HCC-O

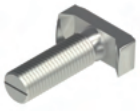
HCC-Q

Accessories

Various types of accessories are available for the connection of the framing system elements. Types and sizes are determined according to the framing system used and the loads which are required. Stainless steel and galvanized materials are available.

HTB-28 & 38

HTB-40, 50 & 72

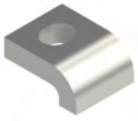


HTB-Z

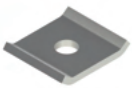
HBC-U

HUTB

HBC-P



HLW



HMLN-B

HMLN-D

HMLN

HMLN-S

HTR

HIRB

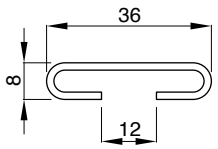
HIRN

HHRC

HRCS

HMPB C Channels - Product Details

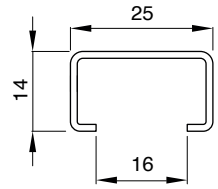
HMPB-36/8 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPB-P-36/8	0.11	0.099	1.67	0.021	0.092	2.5	0.29	0.145	0.095



* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPB-25/14 C Channel

Plain Channel Type									
HMPB-P-25/14	0.71	0.192	0.679	0.023	0.0543	3.9	0.31	0.155	0.1

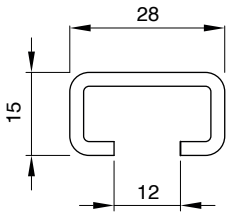


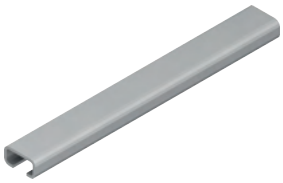
* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPB-P-2.5x25/14-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	23,00	23,00	21,8	15,2
750	23,00	21,9	14,00	9,7
1000	18,6	12,3	7,9	5,5
1250	11,9	7,9	5,1	3,5
1500	8,3	5,5	3,5	2,4
1750	6,1	4,00	2,6	1,8
2000	4,6	3,1	2,00	1,35

HMPB-P-2.5x25/14-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	0,96	3,6	0,66	0,48	0,31
750	0,75	5,4	0,42	0,32	0,2
1000	0,59	10,4	0,23	0,16	0,12
1250	0,45	15	0,14	0,1	0,062
1500	0,37	22,4	0,09	0,06	0,034
1750	0,31	29,7	0,06	0,04	0,019
2000	0,276	41,1	0,04	0,02	0,01

HMPB-28/15 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPB-P-28/15	1.36	0.37	1.37	0.42	0.98	3.90	0.81	0.21	0.09





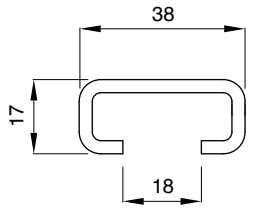
* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPB-P-28/15-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	22,00	22,00	22,00	17,20
750	22,00	22,00	15,80	11,00
1000	21,10	13,90	8,90	6,20
1250	13,50	8,90	5,70	4,00
1500	9,40	6,20	3,96	2,75
1750	6,90	4,50	2,90	2,00
2000	5,30	3,50	2,20	1,50
2250	4,20	2,75	1,76	1,20
2500	3,40	2,20	1,40	0,99
2750	2,80	1,80	1,20	0,81

HMPB-P-2.5x25/14-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	0,99	3,2	0,75	0,57	0,37
750	0,79	4,8	0,48	0,35	0,23
1000	0,58	8,7	0,26	0,19	0,12
1250	0,46	13,6	0,16	0,12	0,08
1500	0,38	19,8	0,11	0,08	0,043
1750	0,32	26,9	0,07	0,05	0,02
2000	0,27	35,1	0,04	0,02	NR
2500	0,21	53,5	0,1	NR	NR
3000	0,17	80,6	NR	NR	NR

HMPB C Channels - Product Details

HMPB-38/17 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)



Plain Channel Type

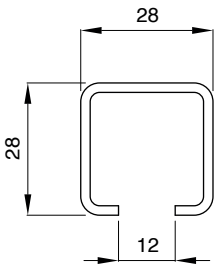
HMPB-P-38/17	2.22	0.76	4.02	0.75	2.12	4.80	1.40	0.40	0.19

* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPB-P-38/17-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	36,00	36,00	36,00	34,80
750	36,00	36,00	32,10	22,30
1000	36,00	28,20	18,00	12,50
1250	27,30	18,00	11,50	8,00
1500	18,90	12,50	8,00	5,60
1750	13,90	9,20	5,80	4,10
2000	10,70	7,00	4,50	3,10
2250	8,40	5,60	3,60	2,50
2500	6,80	4,50	2,90	2,00
2750	5,60	3,70	2,40	1,70

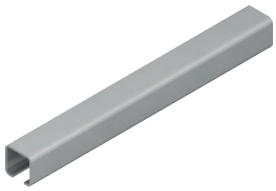
HMPB-P-38/17-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	1,68	2,8	1,5	1,15	0,75
750	1,35	4,3	0,98	0,71	0,47
1000	1	7,8	0,53	0,39	0,26
1250	0,79	11,8	0,34	0,24	0,15
1500	0,66	17	0,22	0,15	0,04
1750	0,56	23,7	0,15	0,1	0,06
2000	0,47	30,3	0,1	0,07	0,03
2500	0,36	47,7	0,04	NR	NR
3000	0,29	68,6	NR	NR	NR

HMPB-28/28 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)



Plain Channel Type

HMPB-P-28/28	1.73	1.70	2.13	1.08	1.52	3.00	1.90	0.90	0.40



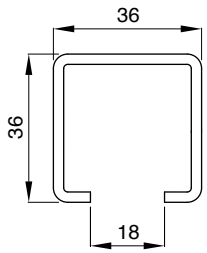
* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPB-P-2x28/28-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	28,00	28,00	28,00	28,00
750	28,00	28,00	28,00	28,00
1000	28,00	28,00	28,00	27,3
1250	28,00	28,00	25,2	17,5
1500	28,00	27,3	17,5	12,2
1750	28,00	20,00	12,9	8,9
2000	23,3	15,4	9,8	6,8
2250	18,4	12,1	7,7	5,4
2500	14,9	9,8	6,3	4,4
2750	12,3	8,1	5,2	3,6

HMPB-P-2x28/28-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	2,4	1,8	2,4	2,4	2,3
750	1,87	2,8	1,87	1,55	1,05
1000	1,4	4,9	1,15	0,85	0,57
1250	1,12	7,7	0,75	0,56	0,37
1500	0,93	11	0,49	0,37	0,24
1750	0,78	14,6	0,35	0,28	0,16
2000	0,68	20	0,26	0,19	0,12
2500	0,55	31,4	0,15	0,1	0,06
3000	0,42	42,3	0,09	0,06	0,03

HMPB & HMPC C Channels - Product Details

HMPB-36/36 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPB-P-36/36	2.76	4.40	5.75	2.12	3.19	4.40	3.90	1.90	1.00

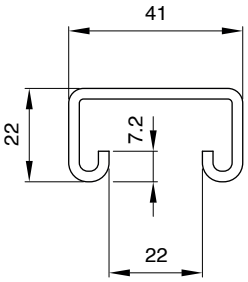


* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPB-P-2,5x36/36-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	43,5	43,5	43,5	43,5
750	43,5	43,5	43,5	43,5
1000	43,5	43,5	43,5	43,5
1250	43,5	43,5	43,5	43,5
1500	43,5	43,5	43,5	30,9
1750	43,5	43,5	32,8	22,7
2000	43,5	39,2	25,1	17,4
2250	43,5	30,9	19,8	13,7
2500	38,00	25,1	16,00	11,1
2750	31,4	20,7	13,3	9,2

HMPB-P-2,5x36/36-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	4,6	1,4	4,6	4,6	4,2
750	3,7	2,1	3,7	3,7	2,62
1000	2,75	3,8	2,75	2,25	1,5
1250	2,2	5,9	1,94	1,44	0,94
1500	1,8	8,4	1,3	0,98	0,65
1750	1,56	11,3	0,96	0,7	0,45
2000	1,34	14,5	0,72	0,52	0,34
2500	1,07	22,7	0,43	0,31	0,19
3000	0,87	34,1	0,27	0,19	0,1

HMPC-41/22 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPC-P-41/22	2.37	1.28	5.56	1.05	2.69	5.60	1.90	0.90	0.40



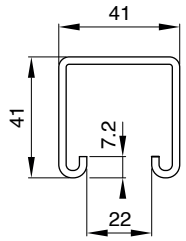
* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPC-P-41/22-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	35,00	35,00	35,00	35,00
750	35,00	35,00	35,00	35,00
1000	35,00	35,00	28,60	19,86
1250	35,00	28,60	18,30	12,70
1500	30,10	19,90	12,70	8,80
1750	22,10	14,60	9,30	6,50
2000	16,90	11,20	7,10	4,90
2250	13,40	8,80	5,60	3,90
2500	10,80	7,10	4,60	3,20
2750	8,90	5,90	3,80	2,60

HMPC-P-41/22-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	2,10	2,20	2,10	1,80	1,20
750	1,70	3,40	1,54	1,13	0,75
1000	1,25	6,00	0,85	0,63	0,42
1250	1,00	9,80	0,54	0,39	0,25
1500	0,82	13,60	0,30	0.21	0,13
1750	0,70	18,50	0,25	0,18	0,11
2000	0.6	24,00	0,18	0,12	0,07
2500	0,45	36,80	0,09	0,06	0,02
3000	0,36	52,70	0,04	NR	NR

HMPC & HMPS C Channels - Product Details

HMPC-41/41 C Channel	Technical Details								
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPC-P-41/41	3.31	7.00	8.93	3.04	4.36	5.60	5.60	2.80	1.90

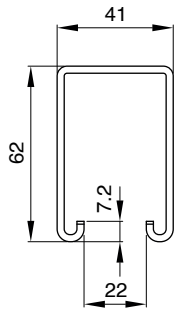


* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPC-P-2.5x41/41-A2 - Column Loading (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	49,50	49,50	49,50	49,50
750	49,50	49,50	49,50	49,50
1000	49,50	49,50	49,50	49,50
1250	49,50	49,50	49,50	49,50
1500	49,50	49,50	49,50	44,60
1750	49,50	49,50	47,20	32,80
2000	49,50	49,50	36,20	25,10
2250	49,50	44,70	28,60	19,80
2500	49,50	36,20	23,10	16,10
2750	45,30	29,90	19,10	13,30

HMPC-P-2.5x41/41-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	6	1,2	6	6	6
750	4,75	1,9	4,75	4,75	3,83
1000	3,6	3,4	3,6	3,25	2,1
1250	2,9	5,3	2,75	2,06	1,37
1500	2,4	7,7	1,9	1,41	0,93
1750	2,01	10,3	1,4	1,02	0,67
2000	1,76	13,5	1,04	0,76	0,5
2500	1,38	21	0,63	0,46	0.29
3000	1,14	30,7	0,41	0,29	0,16

HMPS-41/62 C Channel	Technical Details								
	Product	Cross Section	Moment of inertia			Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPS-P-41/62	4.46	20.90	13.34	7.62	6.40	5.60	5.30	2.60	1.60



* Plain Channels
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

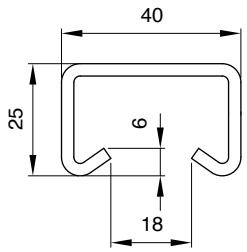
HMPS-P-2.5x41/62-A2 - Column Loadin (Metric)				
Unbraced Height (mm)	Maximum Column Load Applied at C.G.			
	K= 0.65 (kN)	K= 0.80 (kN)	K= 1.0 (kN)	K= 1.2 (kN)
600	65,00	65,00	65,00	65,00
750	65,00	65,00	65,00	65,00
1000	65,00	65,00	65,00	65,00
1250	65,00	65,00	65,00	65,00
1500	65,00	65,00	65,00	65,00
1750	65,00	65,00	65,00	65,00
2000	65,00	65,00	65,00	65,00
2250	65,00	65,00	65,00	57,40
2500	65,00	65,00	65,00	46,50
2750	65,00	65,00	55,40	38,40

HMPS-P-2.5x41/62-A2 - Beam Loading (Metric)					
Span (mm)	Max Allowable Uniform Load (kN)	Deflection at Uniform Load (mm)	Uniform Loading at Deflection		
			Span/180 (kN)	Span/240 (kN)	Span/360 (kN)
600	11,7	0,9	11,7	11,7	11,7
750	9,4	1,3	9,4	9,4	9,4
1000	7	2,3	7	7	6,2
1250	5,63	3,6	5,63	5,63	4
1500	4,65	5,2	4,65	4,2	2,78
1750	4,03	7,1	4,03	3	1,98
2000	3,46	9,1	3,1	2,3	1,5
2500	2,75	14,3	1,95	1,45	0,94
3000	2,25	20,5	1,32	0,96	0,6

HMPD C Channels - Product Details

HMPD-40/25 C Channel

Technical Details									
Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
	A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
Plain Channel Type									
HMPD-P-40/25	2.66	2.02	6.08	1.37	3.04	8.00	2.40	1.20	0.60

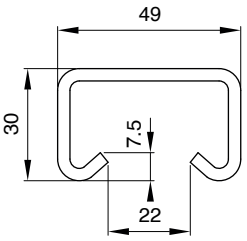


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPD-49/30 C Channel

Technical Details									
Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
	A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
Plain Channel Type									
HMPD-P-49/30	3.85	4.27	13.10	2.50	5.35	12.00	4.50	2.20	1.40

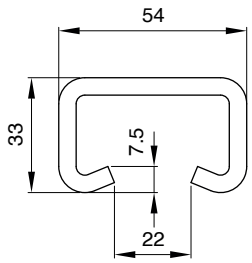


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPD-54/33 C Channel

Technical Details									
Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
	A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
Plain Channel Type									
HMPD-P-54/33	6.12	7.74	23.66	3.98	8.76	25.00	7.10	3.60	2.40

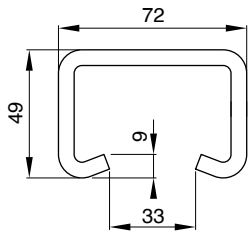


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPD-72/49 C Channel

Technical Details									
Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
	A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
Plain Channel Type									
HMPD-P-72/49	1.03	2.84	7.7	0.09	0.21	27	11.7	5.8	3.9

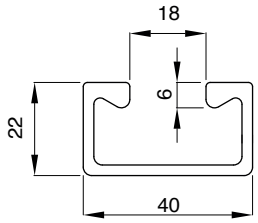


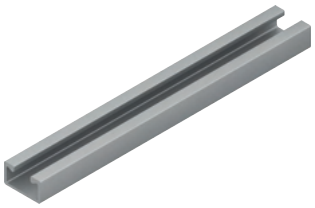
* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPH C Channels - Product Details

HMPH-P-40/2 2C Channel	Technical Details									
	Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPH-P-40/22	2.66	2.02	6.08	1.37	3.04	8.00	2.40	1.20	0.60

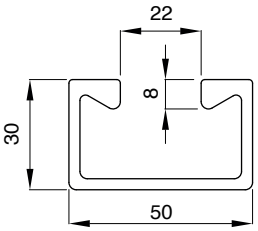


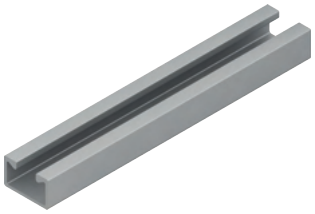


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPH-P-50/30 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPH-P-50/30	3.85	4.27	13.10	2.50	5.35	12.00	4.50	2.20	1.40

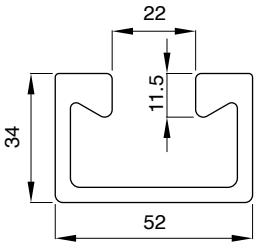


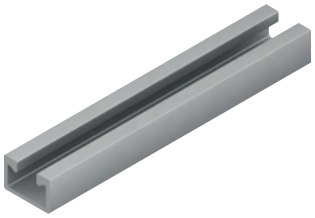


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPH-P-52/34 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPH-P-52/34	6.12	7.74	23.66	3.98	8.76	25.00	7.10	3.60	2.40



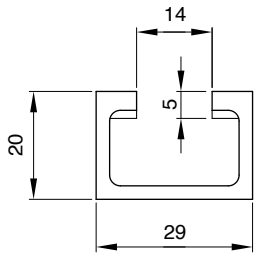


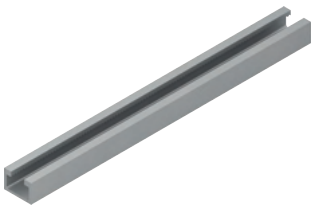
* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPZ C Channels - Product Details

HMPZ-P-29/20 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPH-P-40/22	2.66	2.02	6.08	1.37	3.04	8.00	2.40	1.20	0.60

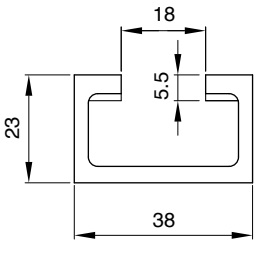


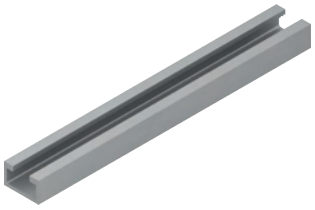


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPZ-P-38/23 C Channel	Technical Details									
	Product	Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	Plain Channel Type									
	HMPH-P-52/34	6.12	7.74	23.66	3.98	8.76	25.00	7.10	3.60	2.40



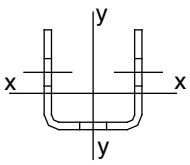


* Plain Channels

* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

HMPA & HMPL Channels - Product Details

HMPA U Channel



Plain Channel Type

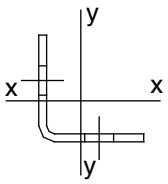
Product Code	Dimensions			X-X Axis			Y-Y Axis		
	Thickness T (mm)	Width W (mm)	Height H (mm)	IXX (cm4)	ZX (cm3)	X (mm)	IYY (cm4)	ZY (cm3)	Y (mm)
HMPA-2,54040	2.5	40.00	40.00	3.63	1.40	20	5.42	4.31	14.06
HMPA-34040	3	40.00	40.00	4.22	1.63	20	6.30	3.15	14.07
HMPA-44040	4	40.00	40.00	5.15	2.01	20	7.67	3.84	14.37
HMPA-45050	4	50.00	50.00	11.57	3.61	25	17.50	7.00	17.94
HMPA-55050	5	50.00	50.00	13.66	4.30	25	20.53	8.21	18.20

* The values given above have been calculated for Ø13mm hole on channels.

* Channel with ø9, 11 or 13 mm drilled holes.
* Spacing is 20 mm at hole centers.
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

* Channel with ø9x30, 11x40 or 14x28 slotted holes.
* Spacing is 50 mm at hole centers.

HMPL Channel



Plain Channel Type

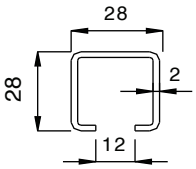
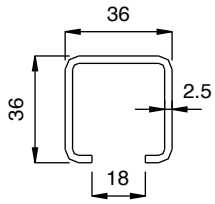
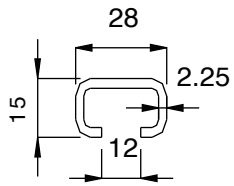
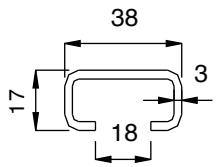
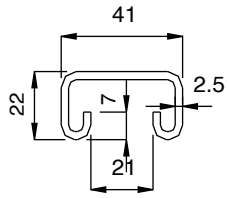
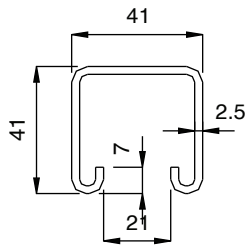
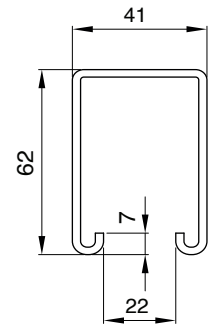
Product Code	Dimensions			X-X Axis			Y-Y Axis		
	Thickness T (mm)	Width W (mm)	Height H (mm)	IXX (cm4)	ZX (cm3)	X (mm)	IYY (cm4)	ZY (cm3)	Y (mm)
HMPL-2,54040	2.5	40.00	40.00	2.23	0.76	20	2.23	0.76	10.63
HMPL-34040	3	40.00	40.00	2.58	0.88	20	2.58	0.88	10.74
HMPL-44040	4	40.00	40.00	3.18	1.09	20	3.18	1.09	10.94
HMPL-45050	4	50.00	50.00	7.17	1.97	25	7.17	1.97	13.65
HMPL-55050	5	50.00	50.00	8.50	2.35	25	8.50	2.35	13.90

* The values given above have been calculated for Ø13mm hole on channels.

* Channel with ø9, 11 or 13 mm drilled holes.
* Spacing is 20 mm at hole centers.
* Standard lengths are 3 or 6 meters.
* Available in Stainless steel grade 1.4301 & 1.4401 and hot dip and electro galvanized mild steel.

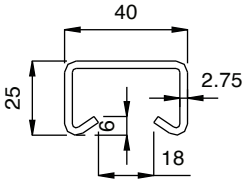
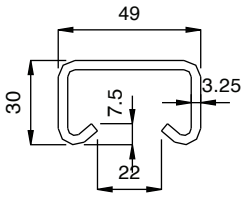
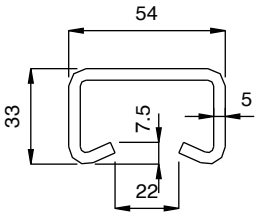
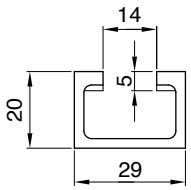
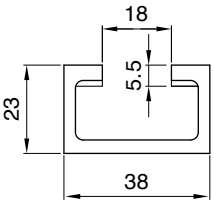
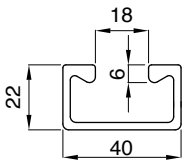
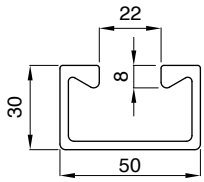
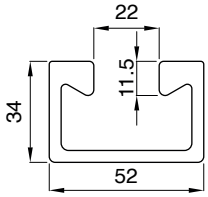
* Channel with ø9x30, 11x40 or 14x28 slotted holes.
* Spacing is 50 mm at hole centers.

HMP Framing Systems - Product Details

Channel Type	Product	Technical Details								
		Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	HMPB-S-28/28	1.48	1.32	2.10	0.95	1.50	3.00	1.50	0.70	0.30
	HMPB-P-28/28	1.73	1.70	2.13	1.08	1.52	3.00	1.90	0.90	0.40
	HMPB-S-36/36	2.39	3.55	5.68	1.92	3.15	4.40	3.30	1.60	0.80
	HMPB-P-36/36	2.76	4.40	5.75	2.12	3.19	4.40	3.90	1.90	1.00
	HMPB-S-28/15	1.16	0.31	1.35	0.39	0.96	3.90	0.69	0.17	0.08
	HMPB-P-28/15	1.36	0.37	1.37	0.42	0.98	3.90	0.81	0.21	0.09
	HMPB-S-38/17	1.76	0.60	3.93	0.68	2.07	4.80	1.28	0.36	0.18
	HMPB-P-38/17	2.22	0.76	4.02	0.75	2.12	4.80	1.40	0.40	0.19
	HMPC-S-41/22	1.95	0.99	5.27	0.89	2.55	5.60	1.60	0.70	0.30
	HMPC-P-41/22	2.37	1.28	5.56	1.05	2.69	5.60	1.90	0.90	0.40
	HMPC-B-41/22	4.75	6.02	11.11	2.91	5.38	5.60	2.50	1.70	1.00
	HMPC-S-41/41	2.96	5.90	8.88	2.82	4.33	5.60	4.70	2.30	1.40
	HMPC-P-41/41	3.31	7.00	8.93	3.04	4.36	5.60	5.60	2.80	1.90
	HMPC-B-41/41	6.81	37.60	18.80	9.10	9.14	5.60	7.60	5.10	3.18
	HMPC-S-41/62	4.18	17.20	13.03	5.47	6.30	5.60	4.50	2.20	1.30
	HMPC-P-41/62	4.46	20.90	13.34	7.62	6.40	5.60	5.30	2.60	1.60
	HMPC-B-41/62	8.88	112.88	26.68	18.21	12.92	5.60	15.30	10.2	7.70

- Standard lengths are 3 or 6 meters
- Load values are according to Euro codes EN 1993-1
- Point load capacity is of the channel lips
- Structural calculations submitted upon request
- For more detailed technical information refer to the technical catalogue
- Available in Stainless steel grade 1.4301 & 1.4401 and galvanized mild steel

HMP Framing Systems - Product Details

Channel Type	Product	Technical Details								
		Cross Section	Moment of inertia		Section Modulus		Point loading	Bending cap.		
		A cm2	Ix cm4	Iy cm4	Wx cm3	Wy cm3	kN Span cm	0.5 (kN)	1 (kN)	1.5 (kN)
	HMPD-P-40/25	2.66	2.02	6.08	1.37	3.04	8.00	2.40	1.20	0.60
	HMPD-P-49/30	3.85	4.27	13.10	2.50	5.35	12.00	4.50	2.20	1.40
	HMPD-P-54/33	6.12	7.74	23.66	3.98	8.76	25.00	7.10	3.60	2.40
	HMPZ-P-29/20	1.98	1.02	2.42	0.91	1.66	8.00	2.41	0.70	0.30
	HMPZ-B-29/20	3.97	5.12	4.84	2.56	3.34	8.00	3.20	0.90	0.40
	HMPZ-P-38/23	3.09	2.11	6.17	1.59	3.25	12.8	4.20	1.40	0.60
	HMPZ-P-38/23	6.19	10.04	12.35	4.36	6.50	12.8	5.50	1.70	0.7
	HMPH-P-40/22	2.70	1.98	5.77	1.59	2.92	10.3	2.60	1.30	0.60
	HMPH-P-40/22	5.33	10.06	11.61	4.38	5.88	10.3	3.50	1.70	0.80
	HMPH-P-50/30	4.15	5.19	13.99	3.24	5.67	15.10	5.30	2.70	1.6
	HMPH-B-50/30	8.27	26.56	28.14	8.85	11.49	15.10	7.00	3.50	2.00
	HMPH-P-52/34	6.35	9.33	23.74	5.36	9.04	27.00	8.80	4.40	2.80
	HMPH-B-52/34	12.70	51.49	47.48	15.37	18.09	27.00	12.50	6.20	3.80

- Standard lengths are 3 or 6 meters
- Load values are according to Euro codes EN 1993-1
- Point load capacity is of the channel lips
- Structural calculations submitted upon request
- For more detailed technical information refer to the technical catalogue
- Available in Stainless steel grade 1.4301 & 1.4401 and galvanized mild steel

HMC Cantiliver Brackets - Introduction

HMC Cantilever brackets are used to install framing systems on to walls. The brackets are installed on to concrete walls with expansion bolts and also with T head bolts into cast in channels. The brackets act as load transferring units where various types of installation can be made.

Each item has a certain load capacity and can be applied for different offset distances. High quality welding is made in order to guarantee load bearing capacity.

Materials available are stainless steel type 1.4301 & 1.4401 and galvanized mild steel.

Advantages

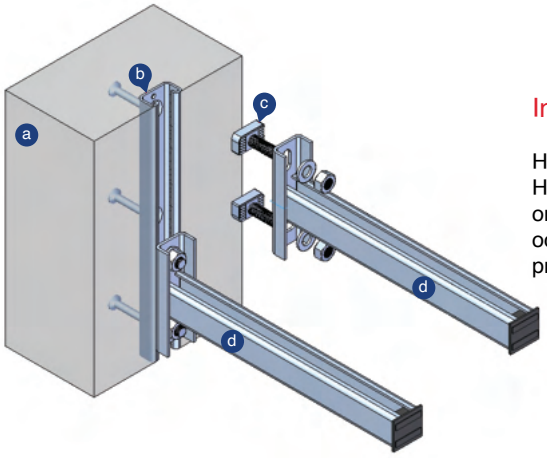
- Fast and Secure fixing.
- Adjustable and easy fixing.
- Cost effective and flexible.
- Can be re-used.
- Compatible with HMP framing.
- Assembly with T bolts or lock nuts.

a. Concrete wall

b. HMPR-S toothed Cast-in channel

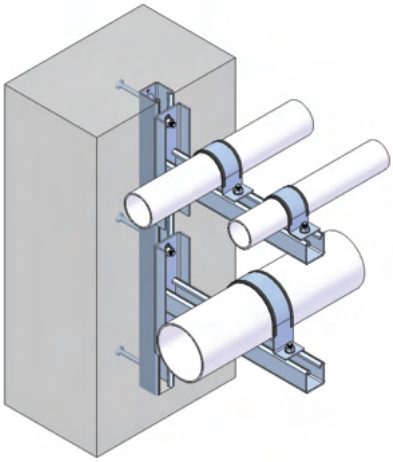
c. HTB-41 T head bolt

d. HMC Bracket

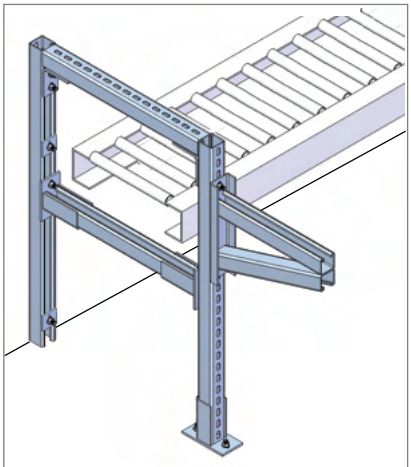


In Combination With HMP and HMPR Channels

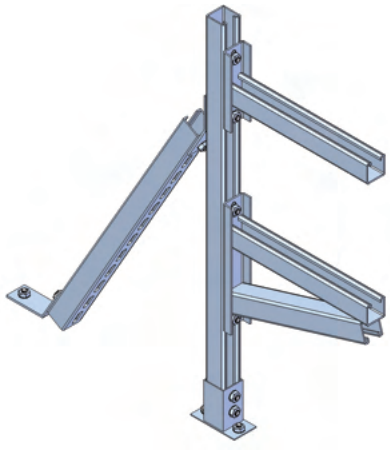
HMC Brackets provide full adjustability when used with HMP framing and HMPR cast in channels. When installing on to cast in channels with lock nuts or T bolts, no damage occurs to the concrete walls. Easy and quick installation is provided.



Installation of pipes made easy when using HMC brackets fixed on to HMPR cast in channels.



Mounting of assembly lines using framing and brackets.



Self supporting structures mounted with framing channels and HMC brackets.

HMC Cantaliver Brackets - Product Details

Product	Product Code			Allowable Loads (kN)			
	Type	Height	Length	F1 L2 L2	F1 L	F2 F2 L3 L3 L3	F3 F3 F3 L4 L4 L4 L4
HMC-A 41 Bracket	HMC-A 41	180	175	5.35	2.65	2.65	1.75
			325	2.65	1.30	1.30	0.85
			475	1.75	0.85	0.85	0.55
HMC-B 41 Bracket	HMC-B 41	180	325	5.60	2.80	2.80	1.85
			475	3.70	1.85	1.85	1.20
			625	2.80	1.40	1.40	0.90
HMC-C 41 Bracket	HMC-C 41	270	325	7.50	4.90	4.80	3.40
		330	475	5.00	4.75	3.70	2.45
		380	625	3.50	3.50	2.75	1.85
		430	775	2.65	2.65	2.05	1.40
HMC-A 36 Bracket	HMC-A 36	180	300	2.00	1.00	1.00	0.70
			400	1.50	0.75	0.75	0.50
			500	1.20	0.60	0.60	0.40
			600	1.00	0.50	0.50	0.33
HMC-B 36 Bracket	HMC-B 36	180	300	4.20	2.00	2.00	1.50
			400	3.00	1.60	1.60	1.00
			500	2.50	1.30	1.30	0.80
			600	2.10	1.10	1.10	0.70
HMC-C 36 Bracket	HMC-C 36	225	300	5.00	4.20	4.00	2.65
		280	400	4.15	4.10	3.15	2.10
		310	500	3.15	3.05	2.50	1.65
		340	600	2.55	3.35	2.00	1.30
		370	700	2.10	3.15	1.65	1.10

HC Brackets

Brackets for light weight installations are available in stainless steel and galvanized steel.

HC-C Bracket

HC-U Bracket

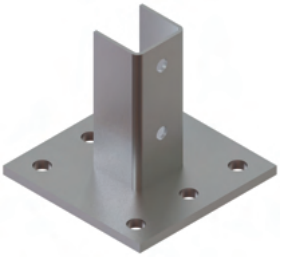
HC-L Bracket

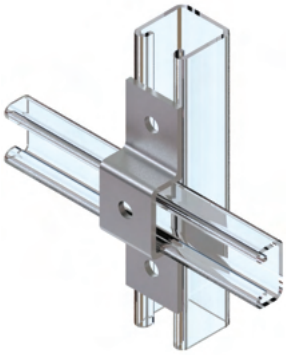
HCC Channel Connections - Introduction

HCC channel connections are used to mount framing systems together. Lock nuts and set screws are used to build support structures for various applications.

The HC channel connections are available in three series to be used with channels HMPB & HMPC. The series are 28 for channel type 28/15 and 28/28; 36 for channel type 36/36; and serious 41 for channel type 41/41 and 41/21.

Material Available are stainless steel type 1.4301 & 1.4401 and galvanized mild steel.



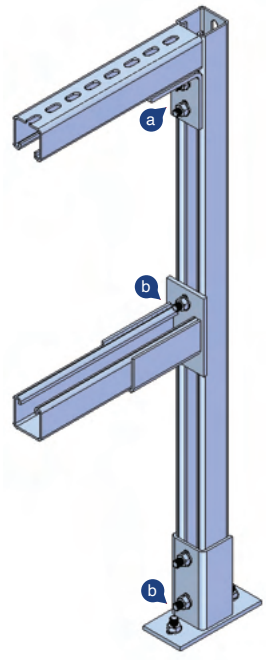


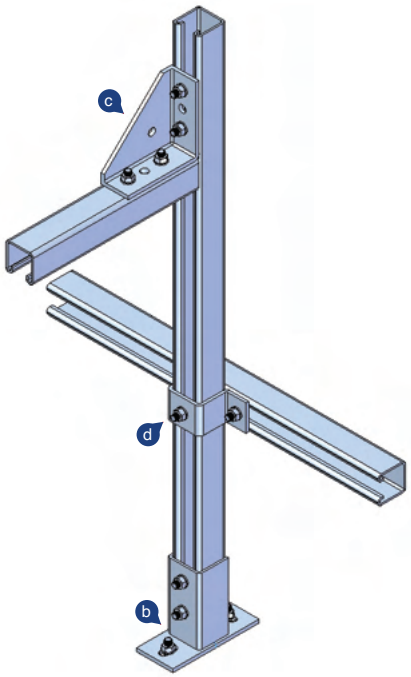
Advantages

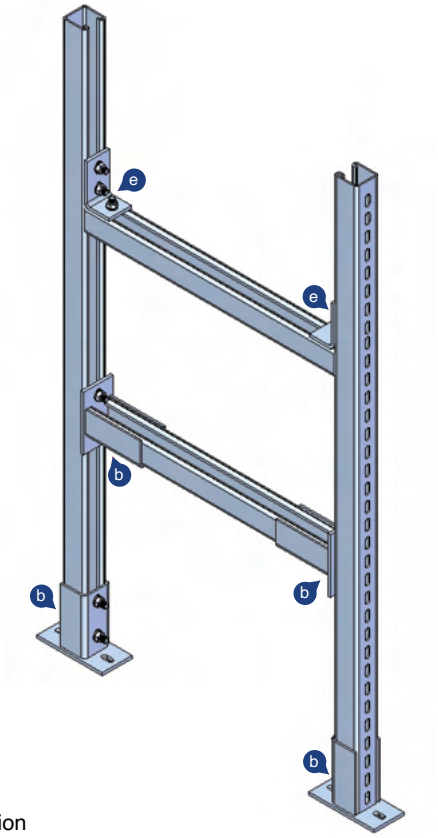
- Fast and secure fixing.
- Adjustable and easy fixing.
- Cost effective and flexible.
- Can be re-used.
- Compatible with HMP framing.
- Assembly with T bolts or lock nuts.

In Combination With HMP and HMPR Channels

HCC channel connections are used in combination with the HMP and HMPR channels to build structures to be used in a wide range of construction applications. HCC channel connections and HMP channels and HMPR cast in channels are connected to each other with HTB T bolts or HMLN lock nuts.







a. HCC-I Channel Connection

b. HCC-B Channel Connection

c. HCC-O Channel Connection

d. HCC-K Channel Connection

e. HCC-H Channel Connection

HCC Channel Connections - Introduction

Channel connections are available in three series which are used with channels HMPC-41/41, HMPC 41/21; HMPB 36/36; HMPB 28/28 and HMPB 28/15. The following product codes should be used when ordering.

Product Code

HCC - A - 41

- Series
- Type
- Code

Series 41

For channels:
HMPC 41/41
HMPC 41/21

Series 36

For channels:
HMPB 36/36

Series 28

For channels:
HMPB 28/28
HMPB 28/15


HCC-A


HCC-F


HCC-K


HCC-P


HCC-B


HCC-G


HCC-L


HCC-Q


HCC-C

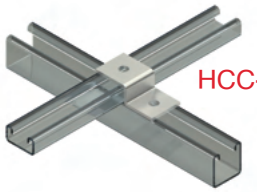

HCC-H


HCC-M


HCC-R

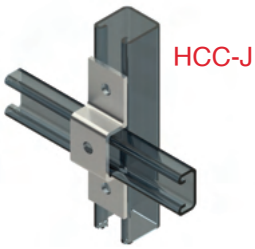

HCC-D


HCC-I


HCC-N


HCC-S


HCC-E


HCC-J


HCC-O

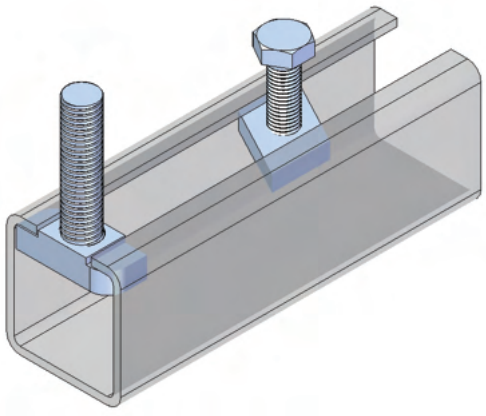

HCC-T

HTB T Head Bolts & HMLN Lock Nuts - Product Details

HTB T bolts and HMLN lock nuts for attachments in to HMP channels are specially designed for a perfect fit into the section of the channels. Insertion is made and after a 90 degree turn clockwise the fixing is made. Correct torque values must be applied in order to achieve secure connections.

T bolts and lock nuts are available in stainless steel 1.4401 and hot dip galvanised steel strength class 4.6 & 8.8.

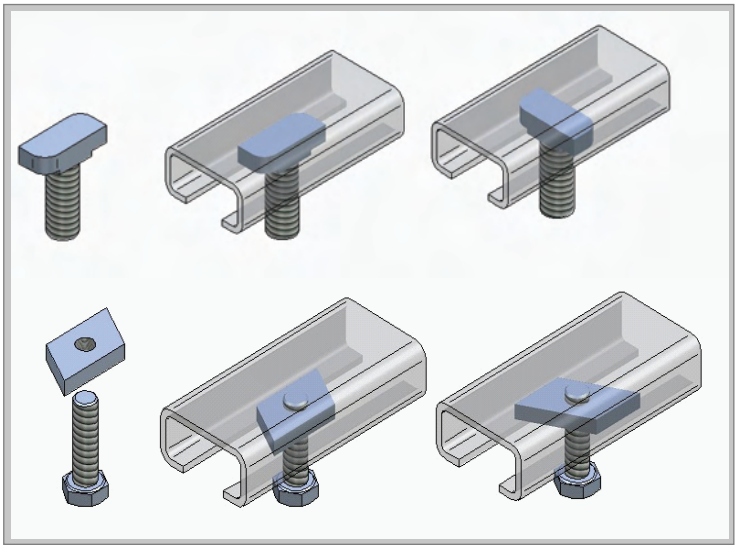
Metric Size	Loading Table for T Head Bolts (kN)													Max Torque Loads (Nm)			
	Grade	4.6 Class Steel			8.8 Class Steel			Stainless Steel W 1.4401/A4-50			Stainless Steel W 1.4401/A4-70			4.6 Class Steel	8.8 Class Steel	W 1.4401 / A4 - 50	W 1.4401 / A4 - 70
	Loads	Tensile & Shear	Bending Moment	Longitudinal Load	Tensile & Shear	Bending Moment	Longitudinal Load	Tensile & Shear	Bending Moment	Longitudinal Load	Tensile & Shear	Bending Moment	Longitudinal Load				
M6	all.F	2.2	2.0	0.10	-	-	-	2.2	1.8	0.1	3.0	3.8	0.1	3	-	3	4
M8	all.F	4.0	5.0	0.20	-	-	-	4.0	4.4	0.2	5.5	9.4	0.3	8	-	8	10
M10	all.F	6.4	10.0	0.30	13.3	24.9	1.1	6.4	8.7	0.3	8.7	18.7	0.4	15	48	15	20
M12	all.F	9.3	17.5	0.50	19.4	43.7	1.6	9.3	15.3	0.5	12.6	32.8	0.7	25	70	25	35
M16	all.F	17.3	44.4	0.90	36.1	110.0	3.0	17.3	38.8	0.9	23.6	83.3	1.2	60	200	60	80
M20	all.F	27.0	86.5	1.40	56.4	216.4	4.7	27.0	75.7	1.4	36.8	163.3	1.9	120	400	120	160



HTB T bolts and HMLN Lock nuts are fixed on to HMP channels at desired positions along the length of the channels and are fixed by turning 90 degrees.

Allowable Loads For Locknuts	
Lock Nut Type	Tensile (kN)
HMLN-28-6	1,9
HMLN-28-8	2,8
HMLN-28-10	3,0
HMLN-38-8	4,0
HMLN-38-10	4,1
HMLN-38-12	5,7
HMLN-41-6	4,0
HMLN-41-8	4,0
HMLN-41-10	6,4
HMLN-41-12	9,3
HMLN-40-8	4,0
HMLN-40-10	6,4
HMLN-40-12	9,3
HMLN-50-10	6,4
HMLN-50-12	9,3
HMLN-50-16	9,3

Lock Nut Type	Shear (kN)
HMLN-41-6	2,2
HMLN-41-8	4,0
HMLN-41-10	5,0
HMLN-41-12	5,0

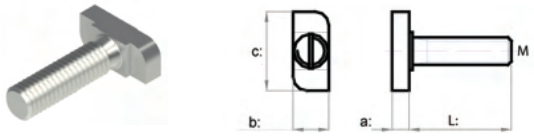


HTB T Head Bolts & HMLN Lock Nuts - Product Details

HTB T-bolts and HMLN lock nuts are designed for secure attachments to HMP channels. Each type features a head geometry that ensures a precise fit within the channel sections. Installation involves inserting the bolt and turning it 90 degrees clockwise to secure it. A nut and washer must be used for tighting the fixture in to place. To achieve reliable connections, it is essential to apply the correct torque values. For further technical details, please refer to the

HTB-28 & 38 type T head bolts

T head bolts with head geometry to suit channel types 28/28, 28/15, 36/36 & 38/17. Supplied in stainless steel 1.4401 and hot dip galvanised steel strength class 8.8.



HTB-28

a:4 mm
b:10.5 mm
c:23 mm

Code	Size (MxL) mm
HTB-28-8/30	M8x30
HTB-28-10/40	M10x40
HTB-28-12/50	M12x50

For channel types HMP-28/15 & 28/28

HTB-38

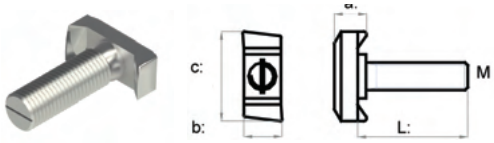
a:7 mm
b:13 mm
c:30.5 mm

Code	Size (MxL) mm
HTB-38-10/40	M10x40
HTB-38-12/50	M12x50
HTB-38-16/60	M16x60

For channel type HMP-38/17 & 36/36

HTB-40, 50 & 72 type T head bolts

T head bolts with head geometry to suit channel types 40/22, 40/25, 49/30, 50/30, 54/33, 52/34 & 72/49. Supplied in stainless steel 1.4401 and hot dip galvanised steel strength class 8.8.



HTB-40

a:12 mm
b:14 mm
c:34 mm

Code	Size (MxL) mm
HTB-40-10/40	M10x40
HTB-40-12/50	M12x50
HTB-40-16/60	M16x60

For channel type HMP-40/25 & HMPH-40/22

HTB-50

a:13 mm
b:17.5 mm
c:42 mm

Code	Size (MxL) mm
HTB-50-12/50	M12x50
HTB-50-16/60	M16x60
HTB-50-20/80	M20x80

For channel type HMP-49/30, 54/33 & HMPH-50/30 & 52/34

HTB-72

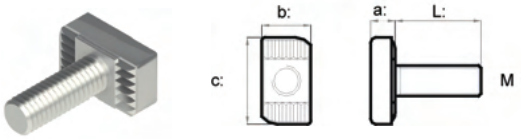
a:19 mm
b:23.5 mm
c:58 mm

HTB-72-20/60	M20x60
HTB-72-20/80	M20x80
HTB-72-20/100	M20x100

For channel type HMP-72/49

HTB-41 type T head bolts

T head bolts with head geometry to suit channel type 41/21, 41/41 and 41/62. Supplied in stainless steel 1.4401 and hot dip galvanised steel strength class 8.8.



HTB-41 - T Bolt

a:10 mm
b:20 mm
c:34 mm

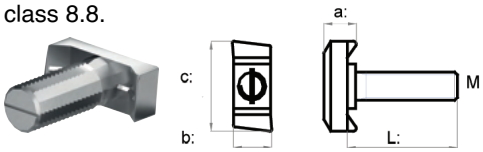
Code	Size (MxL) mm
HTB-C-41-12/50	M12x50
HTB-C-41-16/60	M16x60

For toothed channel type HMPS-41/22, 41/41 & 41/62

HTB T Head Bolts & HMLN Lock Nuts - Product Details

HTB-N-40 & 50 type T head bolts

Nibbed T head bolts with head geometry to suit hot rolled channel types 40/22, 50/30 & 52/34. Supplied in hot dip galvanised steel strength class 8.8.



HTB-N-40

a: 11.1mm
b: 14mm
c: 34,5mm

Code	Size (MxL) mm
HTB-N-40-10/40	M10x40
HTB-N-40 -12/50	M12x50

For channel type HMPH-40/22

HTN-N-50

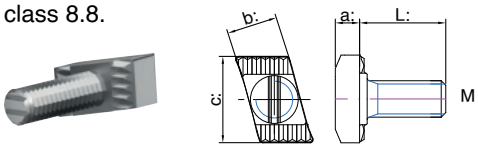
a: 14.5mm
b: 17mm
c: 43mm

Code	Size (MxL) mm
HTB-N-50-12/50	M12x50
HTB-N-50 -16/60	M16x60

For channel type HMPH-50/30 & 52/34

HTB-Z 29 & 38 type T head bolts

Toothed T head bolts with head geometry to suit toothed and hot rolled channel types 29/20 & 38/23. Supplied in hot dip galvanised steel strength class 8.8.



HTB-Z-29

a: 6,5mm
b: 13,4mm
c: 21 mm

Code	Size (MxL) mm
HTB-Z-29-10/40	M10x40
HTB-Z-29 -12/50	M12x50

For channel type HMPZ-29/20

HTB-Z-38

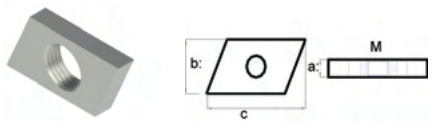
a:8mm
b: 17,2mm
c: 29 mm

Code	Size (MxL) mm
HTB-Z-38-12/50	M12x50
HTB-Z-38 -16/60	M16x60

For channel type HMPZ-38/23

HMLN-28 & 38 type lock nuts

Lock nuts to suit channel types 28/15, 28/28, 38/17 & 36/36. Supplied in stainless steel and galvanzied steel.



HMLN-28

a:4 mm
b:13 mm
c:24.5 mm

Code	Size (MxL) mm
HTB-28-6	M6
HTB-28-8	M8
HTB-28-10	M10

For channel type HMP-28/15 & 28/28

HMLN-38

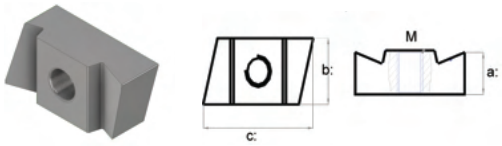
a:6 mm
b:17.5 mm
c:31.5 mm

Code	Size (MxL) mm
HTB-38-10	M10
HTB-38-12	M12
HTB-38-16	M16

For channel type HMPR-38/17 & 36/36

HMLN-40 & 50 type lock nuts

Lock nuts to suit channel types 40/22, 40/25, 49/30, 50/30, 54/33 & 52/34. Supplied in hot dip galvanzied steel.



HMLN-40

a:10.8 mm
b:17 mm
c:34.5 mm

Code	Size (MxL) mm
HTB-28-6	M6
HTB-28-8	M8
HTB-28-10	M10

For channel type HMP-40/25 & HMPH-40/22

HMLN-50

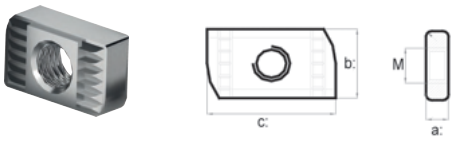
a:11.7 mm
b:21 mm
c:43.5 mm

Code	Size (MxL) mm
HTB-49-10	M10
HTB-49-12	M12
HTB-49-16	M16

For channel type HMP-49/30, HMP-54/33, HMPH-50/30 & HMPH-52/34

HMLN-Z type lock nuts

Lock nuts to suit channel types 41 series. Supplied in stainless steel and galvanzied steel.



HMLN-Z 41

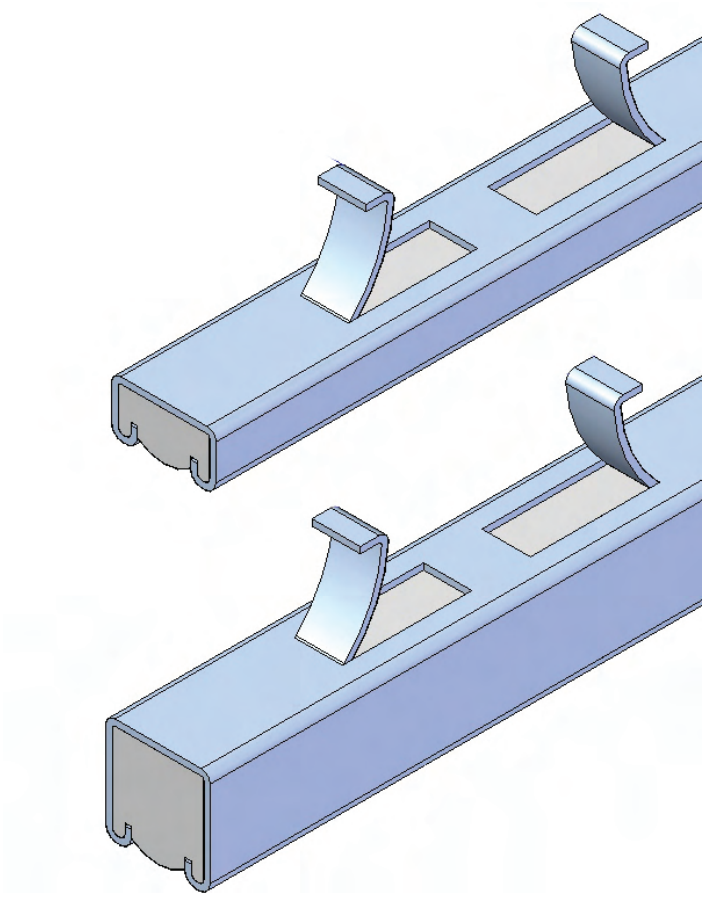
Code	Size (MxL) mm	M
HMLN-Z 41-6	6x20x34	M6
HMLN-Z 41-8	8x20x34	M8
HMLN-Z 41-10	10x20x34	M10
HMLN-Z 41-12	10x20x34	M12

For toothed channel type HMPS-41/22, 41/41 & 41/62

HMLN-S-41

HMP Steel Sub Channel Application Pictures

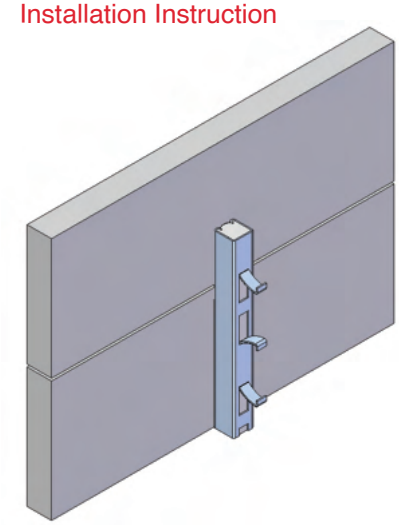
HMCI concrete inserts are produced from 41/41 & 41/21 C channels with pressed out strips that are punched out at 100 mm centres. These channels are used for casting in to concrete to enable connections without drilling. Various applications for connections to floors, walls, and ceilings are made for the installation of secondary structures. HMLN lock nuts can be inserted anywhere along the length of the channels. The channels are supplied with an easily removable strip, which prevents the ingress of grout and cement. Concrete inserts can be supplied in electro galvanised, hot dip galvanised and stainless steel finishes.



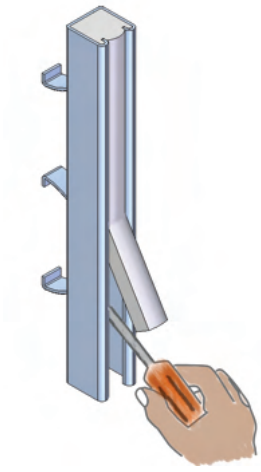
Advantages

* No Drilling
* Fast and easy fixing
* No need for electricity
* No dust when constructing.
* Economic through less workmanship

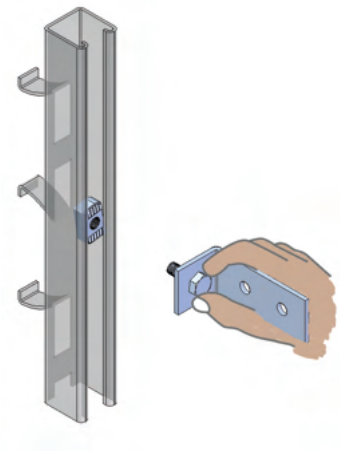
Installation Instruction



1.) HMCI concrete inserts are nailed on to the form work at the required location, prior to casting of the concrete.



2.) After the concrete has dried, then the filler is removed by using a screw driver or similar tool.



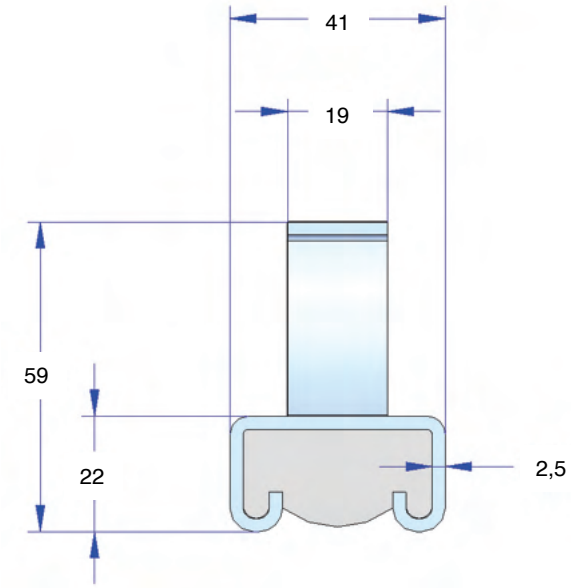
3.) Fixing is done at the desired position along the length of the channel. Installation is made with lock nuts and set screws.

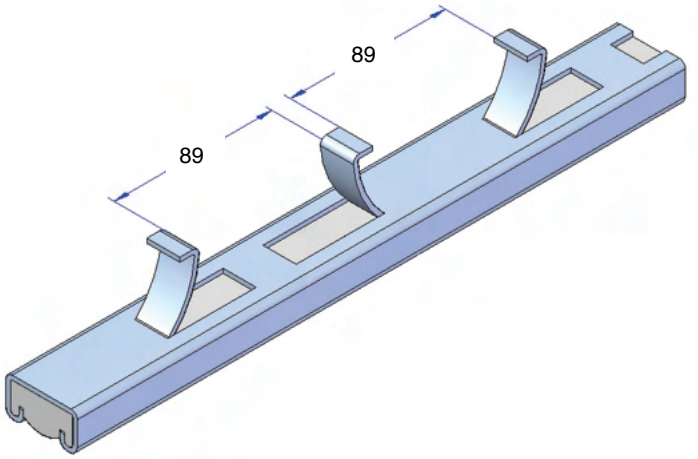
The strips pressed out of the back of the HMCI concrete inserts are designed to provide positive anchoring in to the concrete. Distortion of the pressed strips is not recommended as it will severely reduce the performance of the insert. HMCI concrete inserts are either point welded or wired to steel reinforcement. HMCI concrete inserts are supplied with a filler to prevent the ingress of grout and cement in to the channel slot.

HMCI Concrete Inserts - Technical Details

HMCI-41/21 Concrete Insert

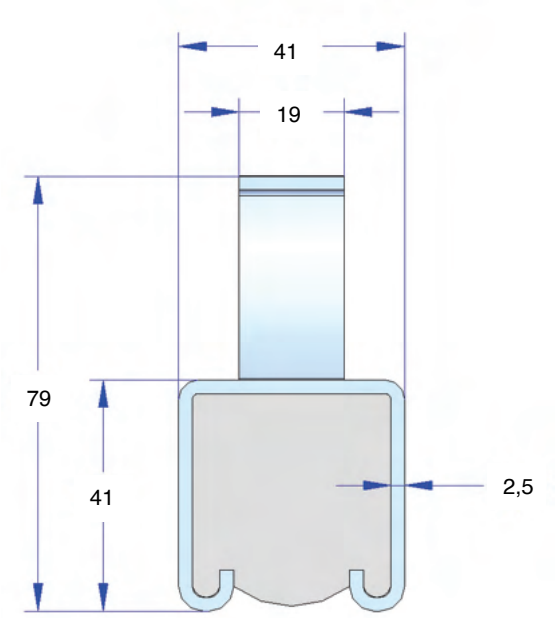
6.7 kN pull out admissible load per 300 mm span

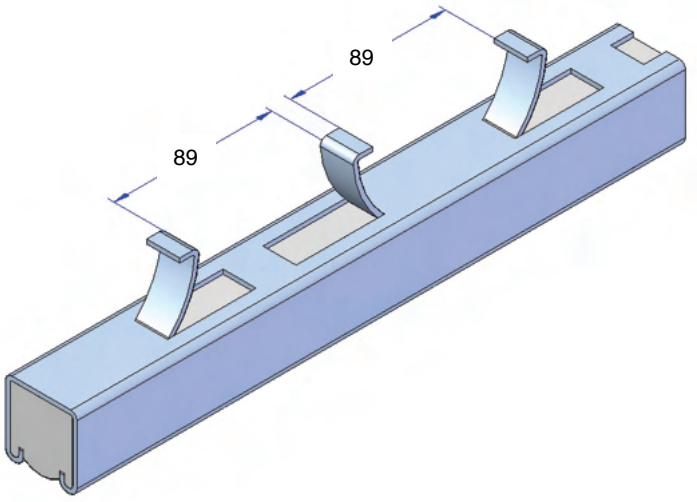




HMCI-41/41 Concrete Insert

8.8 kN pull out admissible load per 300 mm span





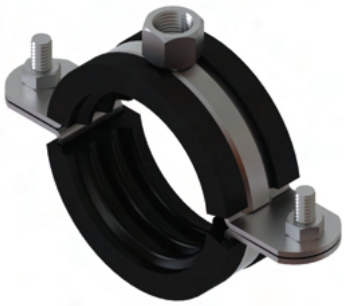
Code	Size	Length
HMCI-41/21	2,5x41/21	6000
HMCI-41/41	2,5x41/41	6000

- M6, M8, M10, M12 size lock nuts are used for fastening fixtures on to the concrete inserts.
- Standard stock lengths are 6000 mm. Special length fabrication can be made upon request.
- Material: A2: Stainless steel EN 1.4301, A4 Stainless steel EN 1.4401, HDG hot dip galvanized mild steel 1.0038 (S235JR), EG Electro galvanized mild steel 1.0038 (S235JR).

HPCL Pipe Clamps - Introduction

HPCL pipe clamps are designed to be used in combination with HMP framing channel systems. Optimum material efficiency is provided through dimensioning according to related requirements.

The HPCL pipe clamps are available in a range between 13 mm to 508 mm. When using HPCL pipe clamps in combination with the HMP framing channels, spatial adjustability in all directions is enabled.



Advantages

- Quick and easy fixing.
- Cost effective and flexible.
- Compatible with HMP framing.
- Assembly with T bolts or lock nuts.
- Full adjustabilty when used in combination with HMP channels.

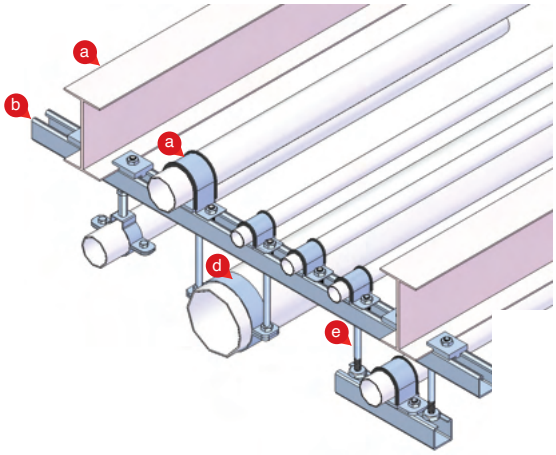
a. Steel beam

b. HMPC Channel

c. HPCL-S pipe clamp

d. HPCL pipe clamp

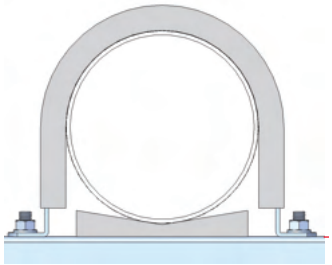
e. HTR Threaded rod

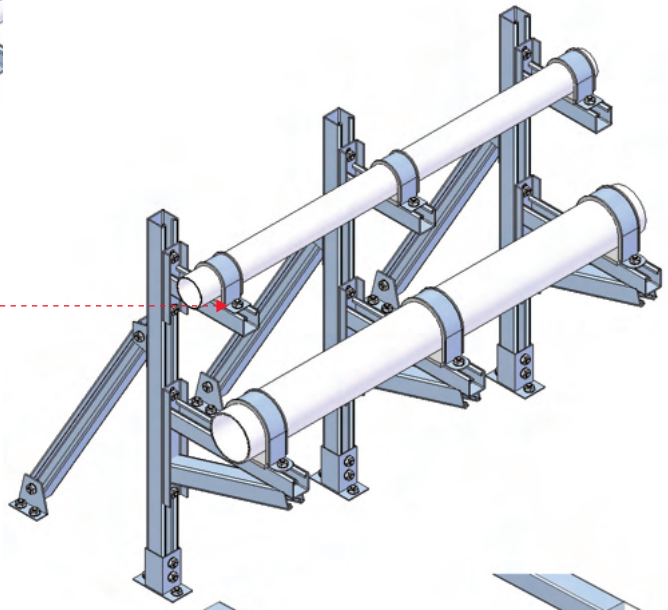


In combination with HMP and HMPR channels

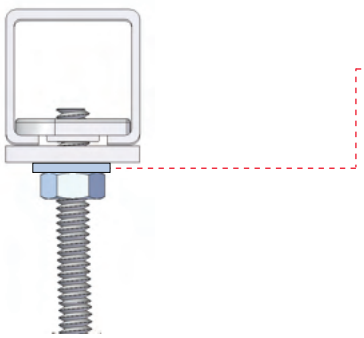
HPCL pipe clamps are fixed on to HMP and HMPR channels with HMLN lock nuts, HTB T bolts and HTR Threaded rods. Easy and quick fixing is enabled.

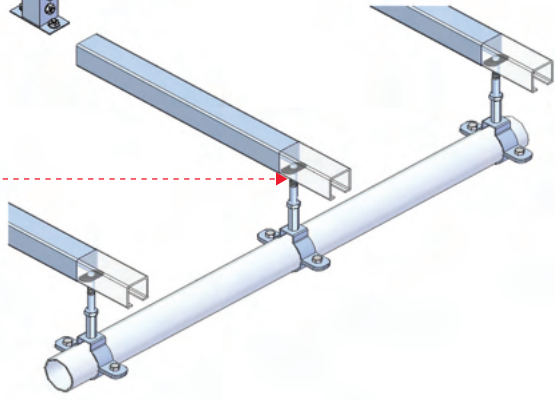
Pipe line installation made on self supporting structures that are built with HMP framing systems. HPCL-S pipe clamps are fixed on to the HMC brackets with lock nuts or T bolts.



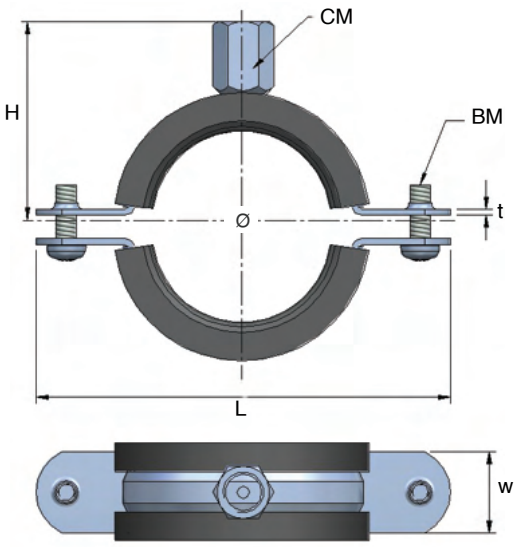


Pipe line installation suspended on HMP C channels. HPCL pipe clamps are suspended on to the channels with HTR threaded rods and HMLN lock nuts.





HPCL Pipe Clamps - Product Details



Specifications

- Used for the installation of pipe lines on to walls and framing systems.
- Fixing is made through M8/M10 combi nuts. Normal nuts also available.
- Easy and safe assembly with combi screws.
- Side screws are protected against loss during assembly with plastic washers.
- Electro galvanized for corrosion resistance (Plating thickness 8-10 micron).
- Available with sound insulation rubber or without rubber.

Technical Details							
Product Type	Diameter	Spanning Range	Length	Height	Bolt	Dimensions	Combi Nut
	Ø (mm)	(mm)	L (mm)	H (mm)	BM	txw (mm)	(cm)
HPCL-13	13	11-15	54,5	32	M5	1.5x20	M8 / M10
HPCL-18	18	16-20	58,5	34	M5	1.5x20	M8 / M10
HPCL-21,5	21,5	20-24	62,5	36	M5	1.5x20	M8 / M10
HPCL-27	27	25-30	68,5	39	M5	1.5x20	M8 / M10
HPCL-34	34	32-38	76	42,5	M5	1.5x20	M8 / M10
HPCL-42,5	42,5	39-46	91,5	47	M6	1.5x20	M8 / M10
HPCL-50	50	48-53	99	50,5	M6	1.5x20	M8 / M10
HPCL-56	56	54-58	105	53,5	M6	1.5x20	M8 / M10
HPCL-64	64	59-66	112	57	M6	1.5x20	M8 / M10
HPCL-70	70	67-73	125	62	M6	2x25	M8 / M10
HPCL-77	77	74-80	134	66	M6	2x25	M8 / M10
HPCL-84	84	80-87	141	70	M6	2x25	M8 / M10
HPCL-89	89	87-94	146,5	71,5	M6	2x25	M8 / M10
HPCL-95	95	95-98	151	75,5	M6	2x25	M8 / M10
HPCL-105	105	99-108	159,5	79,5	M6	2x25	M8 / M10
HPCL-110	110	108-116	173	85	M6	2.5x25	M8 / M10
HPCL-125	125	120-129	186	91,5	M6	2.5x25	M8 / M10
HPCL-131	131	129-135	192	94,5	M6	2.5x25	M8 / M10
HPCL-137	137	135-143	199	98	M6	2.5x25	M8 / M10
HPCL-150	150	149-168	215	106	M6	2.5x25	M8 / M10
HPCL-160	160	162-170	227	110,5	M6	2.5x25	M8 / M10
HPCL-200	200	198-207	264	131	M6	2.5x25	M8 / M10
HPCL-212	212	206-220	280,7	138	M6	2.5x25	M8 / M10

Loading Table		
Size	Breaking Load	Allowable Load
Ø (mm)	(kN)	(kN)
13-34	3,9	1,3
42,5-64	4,8	1,6
70-105	7,8	2,6
110-212	7,8	2,6

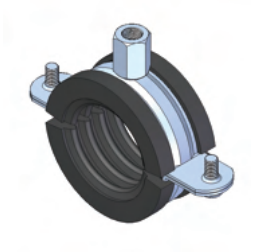
Product Code

HPCL - 13 - A

- A — Variation
- 13 — Size
- HPCL — Type

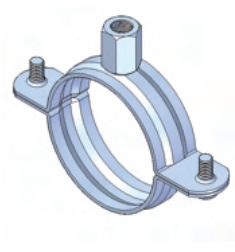
Variation A

With combi nut and rubber



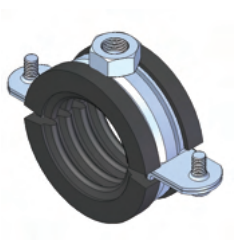
Variation B

With combi nut and without rubber



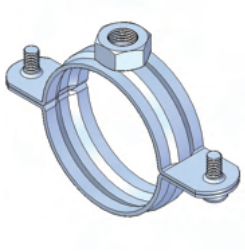
Variation C

With normal nut and rubber

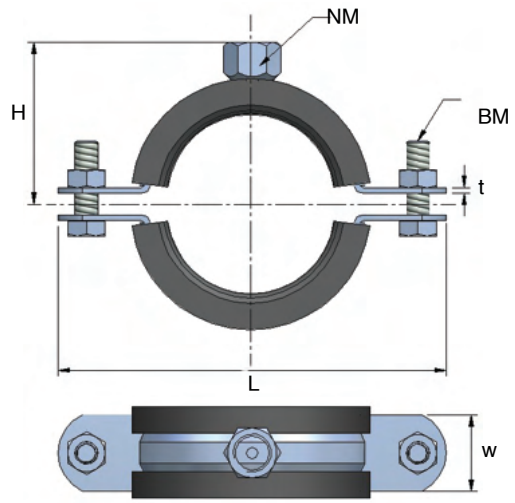


Variation D

With normal nut and without rubber



HPCL-H Pipe Clamps - Product Details



Specifications

- Used for the installation of pipe lines on to walls and framing systems.
- Used for high load pipe lining installations.
- Fixing is made through M12 & M16 nuts.
- Electro galvanized for corrosion resistance (Plating thickness 8-10 micron).
- Stainless steel is also available.
- Available with & without sound insulation rubber.

Technical Details							
Product Type	Diameter	Spanning Range	Length	Height	Bolt	Dimensions	Nut
	Ø (mm)	(mm)	L (mm)	H (mm)	BM	txw (mm)	(cm)
HPCL-H 21,5	21,5	20-24	84	32	M8	2.5x30	M12
HPCL-H 27	27	25-30	90	35	M8	2.5x30	M12
HPCL-H 34	34	32-38	98	39	M8	2.5x30	M12
HPCL-H 42,5	42,5	39-46	106	43	M8	2.5x30	M12
HPCL-H 50	50	48-53	114,5	47	M8	2.5x30	M12
HPCL-H 56	56	54-58	120,5	50	M8	2.5x30	M12
HPCL-H 64	64	59-66	127	53	M8	2.5x30	M12
HPCL-H 70	70	67-73	143,5	58	M10	3x30	M12
HPCL-H 77	77	74-80	152	62	M10	3x30	M12
HPCL-H 84	84	80-87	160	66	M10	3x30	M12
HPCL-H 89	89	87-94	163	67,5	M10	3x30	M12
HPCL-H 96	96	95-98	171	71,5	M10	3x30	M12
HPCL-H 105	105	99-108	179	75,5	M10	3x30	M12
HPCL-H 110	110	108-116	188	80	M10	3x30	M12
HPCL-H 125	125	120-129	201	86,5	M10	3x30	M12
HPCL-H 131	131	129-135	226,5	95,5	M12	4x40	M16
HPCL-H 137	137	135-143	233,5	99	M12	4x40	M16
HPCL-H 160	160	162-168	256,5	106,5	M12	4x40	M16
HPCL-H 212	212	206-220	316	133	M12	4x40	M16
HPCL-H 267	267	260-274	365	160,5	M12	4x40	M16
HPCL-H 326	326	324	421	186	M16	5x50	M16
HPCL-H 355	355	355,6	453	201,5	M16	5x50	M16
HPCL-H 406	406	406,4	504,5	227,5	M16	5x50	M16
HPCL-H 457	457	457	564,2	244,5	M16	7x70	M16
HPCL-H 508	508	508	621,5	273,5	M16	7x70	M16

Loading Table		
Size	Breaking Load	Allowable Load
	(kN)	(kN)
21,5-60	11	2,75
70 - 125	15	3,75
131 - 267	24	6
326-508	35,1	11,7

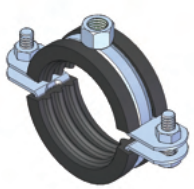
Product Code

HPCL-H- 21,5 - A

- A — Variation
- 21,5 — Size
- HPCL-H — Type

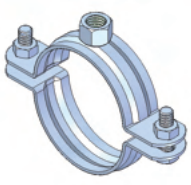
Variation A

With nut and rubber



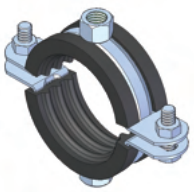
Variation B

With nut and without rubber



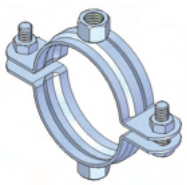
Variation C

With two nuts and rubber



Variation D

With two nuts and without rubber

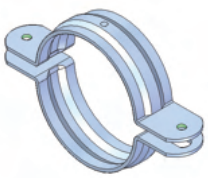


Variation E

Without nut and with rubber

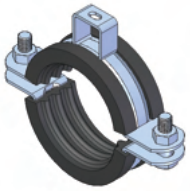
Variation F

Without nut and rubber

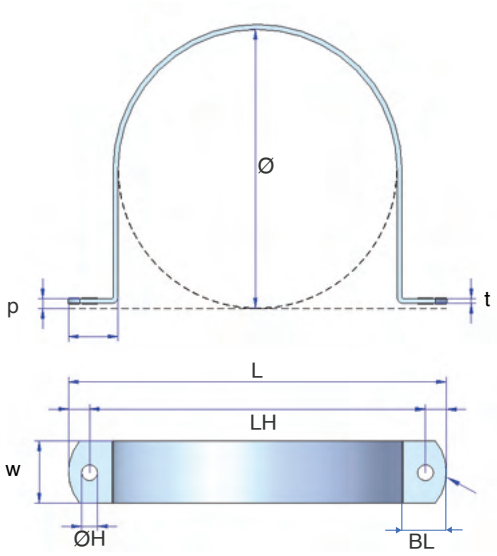


Variation G

With welded bracket and rubber



HPCL-S Pipe Clamps - Product Details

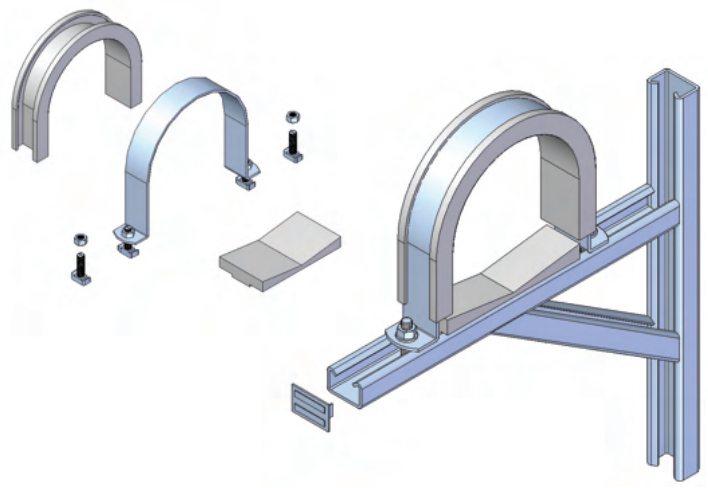


Specifications

- Used for the installation of pipe lines on to HMC Brackets and HMP Framing systems.
- Fixing is made with T bolts or lock nuts.
- Rubber base is available for placing between pipe clamp and ground base.
- Electro galvanized for corrosion resistance (Coating thickness 8-10 micron).
- Stainless steel is also available.
- Available with sound insulation rubber or without rubber.

Technical Details

Product Type	Clamp Diameter	Span Range	Length	Distance Between Holes	Hole Diameter	Dimensions	Base Length	Pretension Dimension
	Ø (mm)	(mm)	L (mm)	LH (mm)	ØH (mm)	txw (mm)	BL (mm)	p (mm)
HPCL-S 21,5	21,5	20-24	77	55	11	3x25	30	2,75
HPCL-S 27	27	25-30	87	61	11	3x25	30	2,75
HPCL-S 33,5	33,5	33,5	93,5	67,5	11	3x25	30	2,75
HPCL-S 42,5	42,5	39-46	102,5	76,5	11	3x25	30	2,75
HPCL-S 50	50	48-53	110	84	11	3x25	30	2,75
HPCL-S 60	60	59-66	120	94	11	3x25	30	2,75
HPCL-S 77	77	74-80	111	137	11	3x25	30	2,75
HPCL-S 89	89	87-94	149	123	11	3x25	30	2,75
HPCL-S 110	110	108-116	170	144	11	4x30	30	4
HPCL-S 137	137	135-143	197	171	11	4x30	30	4
HPCL-S 160	160	158-162	240	208	13	4x40	40	4
HPCL-S 212	212	210-214	292	260	13	4x40	40	4
HPCL-S 267	267	265-269	367	317	17	5x50	50	5
HPCL-S 326	326	324-328	426	376	17	5x50	50	5
HPCL-S 355	355	355,6	455	405	17	5x50	50	5
HPCL-S 406	406	406,4	506	456	17	5x50	50	5
HPCL-S 508	508	508	608	558	17	5x50	50	5

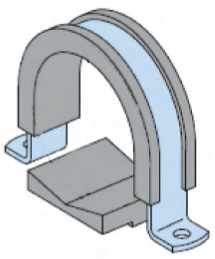


Rubber base available for placing below the pipes for sound installation and firmer fixing on to channels or brackets.

Product Code

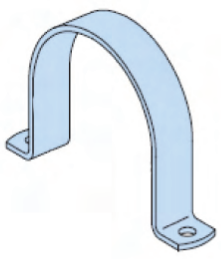
HPCL - S - 21,5 - A

- Variation
- Size
- Type



Variation A

With combi nut and rubber

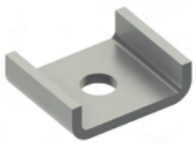


Variation B

With combi nut and without rubber

Accessories - Product Details

HLW3 Lock Washer

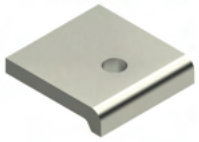


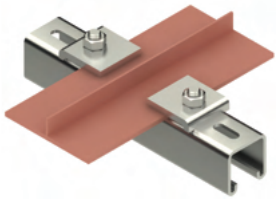
- Lock nut used to firmly stabilize any fixture made on the channels with lock nuts or T blots.
- For Channels 28/15, 28/28, 38/17, 36/36, 41/21 & 41/41

HUB U Shape Bolt

- U Bolts are used for the connection of pipes to structures for lateral fixing.
- Sizes available in M6, M8, M10, M12, M16 to suit diameter sizes up to 355mm

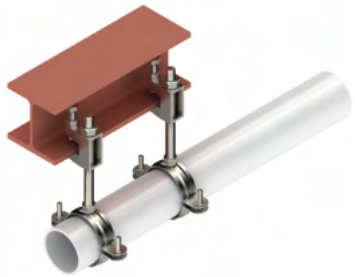
HBC-P Beam Clamp





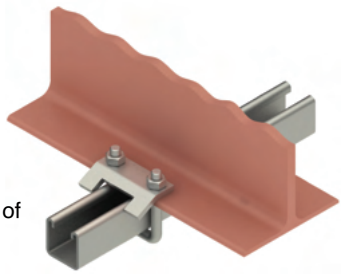
- Beam clamp is used for connection of slotted channels to steel beams.
- Applicable for all channels with slotted holes.
- Maximum load is 7.0 kN.

HBC-M Beam Clamp



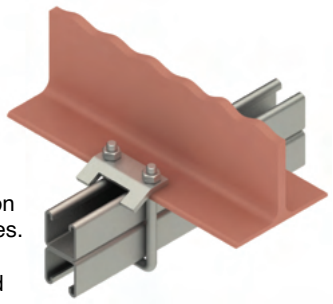
- Beam clamp is used for the connection of threaded rods to steel beams.
- Applicable for M8 and M10 threaded rods.
- Maximum load is 2.5 KN.

HBC-U Beam Clamp



- Beam clamps for the connection of channels without slotted holes.
- For Channels 41/41 B & 40/25 B.

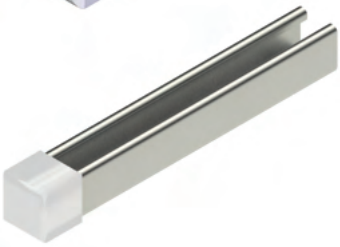
HBC-U 127 Beam Clamp



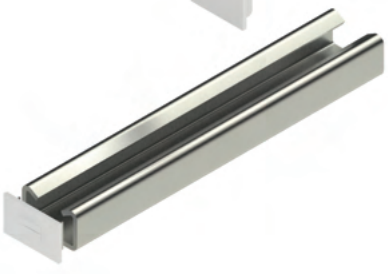
- Beam clamps for the connection of channels without slotted holes.
- For Channels 41/21, 41/41 and 40/25.

HEC-1 End Cap

- Channel end caps available for channels 28/28, 36/36, 41/21, 41/41 & 40/25.



HEC-2 End Cap



HSI Sound Isolator

- Sound isolator sleeve available for channels 28/28, 36/36, 41/21 & 41/41.

Accessories - Product Details

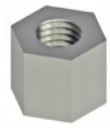
HTR Threaded Rod

Code	Metric Size	Tensile Load (kN)
HTR-6	M6	2.2
HTR-8	M8	4.0
HTR-10	M10	6.4
HTR-12	M12	9.3
HTR-16	M16	17.3

HRSL Ring Sleeve

Code	Metric Size	Tensile Load (kN)
HRSL-6	M6	1.6
HRSL-8	M8	2.0
HRSL-10	M10	4.0
HRSL-12	M12	4.6
HRSL-16	M16	8.3

HHCS Hex Coupler



Code	Metric Size	Tensile Load (kN)
HHCS-6	M6	2.2
HHCS-8	M8	4.0
HHCS-10	M10	6.4
HHCS-12	M12	9.3
HHCS-16	M16	17.3

HRCS Round Coupler Sleeve

Code	Metric Size	Tensile Load (kN)
HCS-6	M6	1.6
HCS-8	M8	2.0
HCS-10	M10	4.0
HCS-12	M12	4.6
HCS-16	M16	8.3

HTBC Turnbuckle

Code	Metric Size	Tensile Load (kN)
HTBC-6	M6	2.2
HTBC-8	M8	4.0
HTBC-10	M10	6.4
HTBC-12	M12	9.3

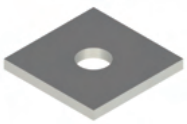
HRB Ring Bolt

Code	Metric Size	Tensile Load (kN)
HRB-6	M6	2.2
HRB-8	M8	4.0
HRB-10	M10	6.4
HRB-12	M12	9.3

HIRN Ring Nut

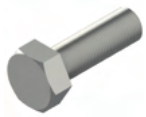
Code	Metric Size	Tensile Load (kN)
HIRN-6	M6	2.2
HIRN-8	M8	4.0
HIRN-10	M10	6.4
HIRN-12	M12	9.3

HLW1 Lock Washer



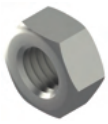
Code	Metric Size	Tensile Load (kN)
HLW1-340-9	ø9	3x40x40
HLW1-340-11	ø11	5x50x50
HLW1-440-11	ø11	5x50x50
HLW1-440-13	ø13	5x50x50
HLW1-440-17	ø17	5x50x50

DIN933 Hex Bolt



Code	Metric Size
DIN933-6/30	M6x30
DIN933-8/30	M8x30
DIN933-10/40	M10x40
DIN933-12/50	M12x50
DIN933-16/60	M16x60

DIN934 Hex Nut



Code	Metric Size
DIN934-6	M6
DIN934-8	M8
DIN934-10	M10
DIN934-12	M12
DIN934-16	M16

DIN125 Round Washer

Code	Metric Size
DIN125-6	M6
DIN125-8	M8
DIN125-10	M10
DIN125-12	M12
DIN125-16	M16

DIN 9021 Wide Washer

Code	Metric Size
DIN9021-6	M6
DIN9021-8	M8
DIN9021-10	M10
DIN9021-12	M12
DIN9021-16	M16

HMP Framing Systems - Application Examples

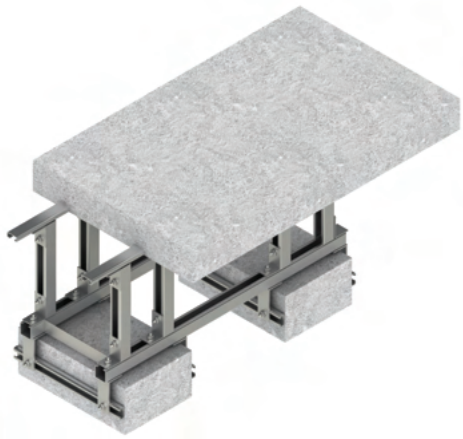
HMP Framing systems with channels and various accessories are used to build steel construction for the installation various type of structures. Efficient modular support structures are built quickly and easily. Flexible and low cost application is achieved.

Advantages:

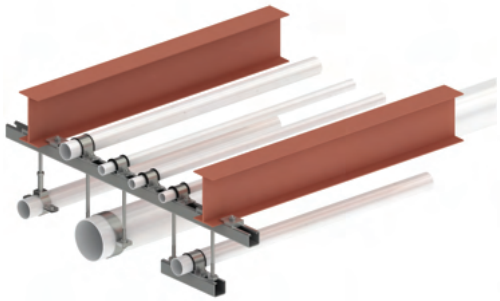
- Fast and Secure fixing.
- No time consuming welding and hole setting.
- No use of welding and drilling equipment.
- Adjustable and no slip point fixing.
- Cost effective and flexible.
- Quick and easy fixing.

• Installation of infrastructure utilities.

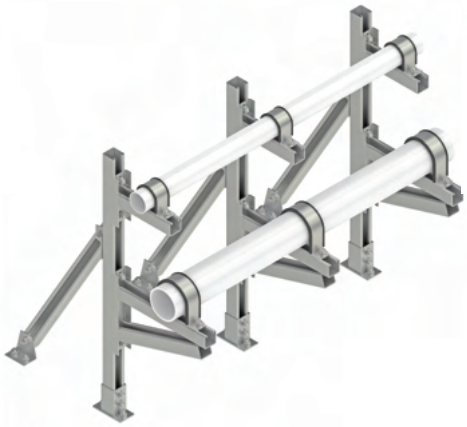
• Installation of electrical cables.



• Installation of lighting systems.



• Assembly made on to steel beams.



• Assembly made on to concrete floors.

• Assembly made on to cast in channels.

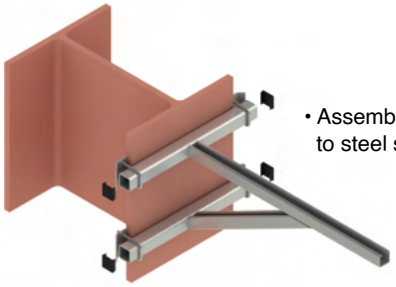
HMP Framing Systems - Application Examples

• Installation of pipe and duct systems.

• Pipe connections to lateral walls.

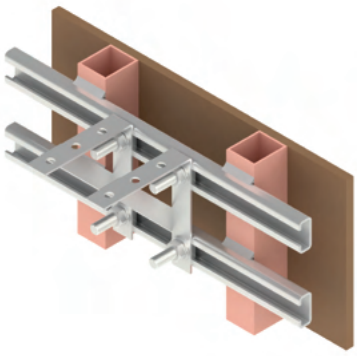
• Assembly for connection to concrete floor.

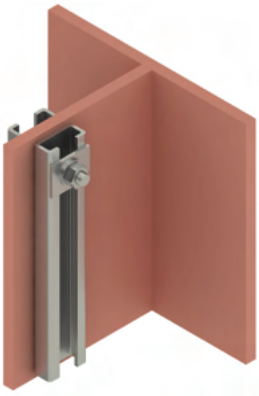
• Assembly for connection to steel beam.



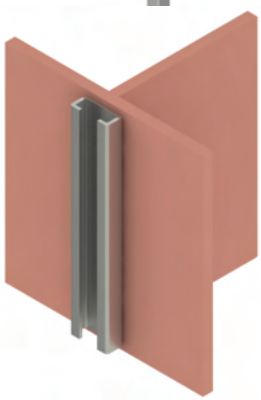
• Assembly for connection to steel structure.

• Assembly for connection to column.



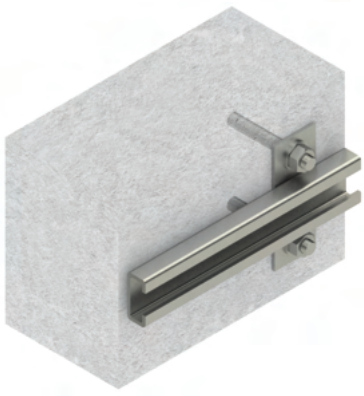


• Bolt connection to steel.



• Weld connection to steel.

• Bolt connection to block work.



• Bolt connection to concrete.

Since its beginning in 1993, HAZ Metal has proved its reliability by successfully completing challenging projects. HAZ Metal has established a reputation for being a reliable supplier of structural components for facade construction.

Prestigious and large scale projects around the world have been supplied with high quality fixing systems designed and manufactured by HAZ Metal.

Always at the forefront of fixing technology, HAZ METAL has established a wide product portfolio to complement its fixing systems targeted for the specialist external wall cladding market. Designing and engineering high integrity and quality products for facade applications made HAZ a worldwide known brand in the construction industry.

HAZ METAL combines the very latest international technology with its own research and development team to establish a technical excellence within the industry. HAZ METAL readily embraces the responsibility of a major producer and shares its expertise with problem solving solutions.

HAZ METAL

HAZ Metal is certified with integrated management systems by TUV SUD for ISO 9001 & OHSAS 18001

HAZ
Group of Companies
Establishment
www.hazgrp.com

HAZ Metal A.S.
is a member of HAZ Group of Companies

HAZ METAL SANAYİ VE TİCARET A.Ş.
Şehit Er Çıracı Caddesi No. 10
Akçay Sanayi Bölgesi 31200 İskenderun
Hatay, TÜRKİYE
Tel : +90 (0) 326 626 20 50
Fax : +90 (0) 326 626 20 45
www.hazmetal.com
info@hazmetal.com

HAZ METAL UK LTD
154 Great North Road Hatfield
Herts. AL9 5JN England
Tel: +44 (0) 1707 - 260 180
www.hazmetal.co.uk
info@hazmetal.co.uk

HAZ PAZARLAMA İÇ & DIŞ TİC. A.Ş.
İçerenköy Mh. Çayır Cd. Özce Center
No:3 K:12 34752 Ataşehir
İstanbul, TÜRKİYE
Tel: +90 (0) 216 410 72 06
info@hazgrp.com

HAZ METAL DEUTSCHLAND GmbH
Alfred-Zippe-Straße 1
97877 Wertheim, GERMANY
Tel: +49 (0) 9342 9359
www.hazmetal.eu
info@hazmetal.de