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MIDFIX MX CHANNEL SYSTEM

MX

MIDFIX MX Channel System is designed to answer the needs of the M&E sector for a quality assured support system for building services installations. Supports are a key element in every building services installation and crucial to the integrity of the systems they support and safety of the building occupants.

Typically building services supports will combine channel and bracketry of unproven performance from a variety of sources into a single installation. As more attention is given to reducing risk and raising standards within the industry, it is becoming increasingly common that contractors are required to provide design verification for the loads of the supports. In turn this requires that the engineer has dependable information and load data for the components and connections used in the design and importantly that it can be evidenced that the products specified by the engineer are those which are actually used on site.

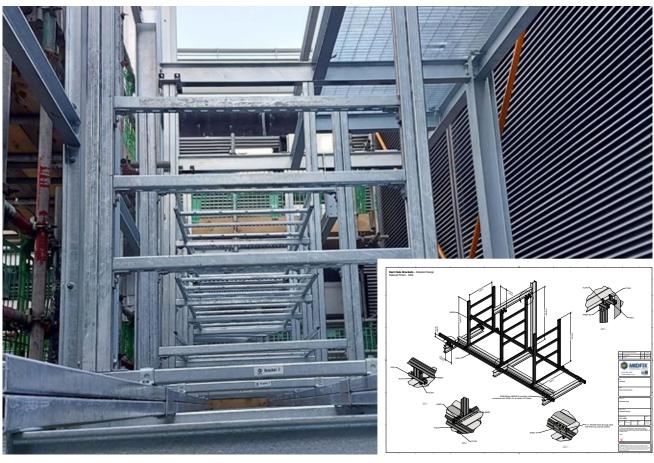
"When challenged, can you demonstrate that the structure you have installed can take the load applied to it, and that the supports and fixings are fit for purpose?"

MIDFIX MX answers this question and provides the specifier and contractor with a tested system of quality products identifiable by the MIDFIX stamp for on-site verification of system integrity. Another important consideration is that it is usual in the industry for supports to be considered in isolation from the anchors they are installed with. The MX Channel System integrates with the MIDFIX Anchor Programme into a single source solution. Contractors using the MX system can demonstrate the supports they have installed will safely take the service load applied and that both the supports and fixings are fit for purpose.

MIDFIX MX – the quality assured channel support system with competitive pricing and dependable supply for contractors committed to following industry best practice.







TESTING

MX

MX channels and bracket connections are extensively tested by an independent UKAS accredited test facility for proven performance. Our comprehensive and reliable load data is the outcome of real-life tests and invaluable for engineers designing supports and validating the integrity of an installation.



QUALITY

MX

MX products are manufactured to MIDFIX product specifications and undergo a detailed quality inspection process to ensure consistently high quality, performance, and finish. Using MX means not only guaranteed performance but also a quality look and feel to the installation.



SYSTEM IDENTIFICATION

MX

MX is intended to be used as a system and each component carries the MIDFIX name for onsite verification of system integrity. Installing MX as an integrated system following the MIDFIX installation criteria substantiates the design load of the supports.



INSTALLER TRAINING

MX

How to ensure that supports are installed to the required standard is a key concern for the industry and requires that installers and supervisors understand and follow basic installation principles.

MIDFIX are the first to address the need for installer training with the MIDFIX Academy, our specialist online learning platform for upskilling the M&E sector. MIDFIX Academy gives installers access to the training they need to confidently install the MX channel system to the correct standards. Trainees successfully completing the training and online assessments receive digital certification to show they have undertaken MX installer training and achieved the necessary level of competence.



DESIGN SERVICE

MX

The MX system is backed-up by the unique MIDFIX 'inhouse' design and engineering service. Using the latest software we design and engineer a wide range of building services supports. Engineering drawings and reports allow the contractor to evidence the design process and prove the supports are adequate for the loads they support.



OFFSITE FABRICATION

MX

The MIDFIX fabrication facility complements the MIDFIX design service to manufacture and prefabricate building services supports to the design specifications. Channel based supports are all designed and fabricated using the MX channel system. Using a tested system for both design and manufacture means we can stand behind the design loads and guarantee that the products used in the design are used in the finished product.

The many benefits of offsite fabrication, including labour, time, and material savings, are now widely recognised. In addition to these, when using MIDFIX, the contractor can prove that the supports are designed and manufactured to take the loads in question.



SUPPLY

MX

When specifying a support system, cost and reliability of supply are important considerations. MX ticks all the boxes and combines a quality assured system with competitive pricing and dependable supply that ensures there are no frustrations and costly hold-ups on site.



CHANNEL SECTIONS

MX channel sections are manufactured in the UK to the highest industry standards. MX channel is manufactured by a cold rolling process to the requirements of BS 6946:1988 and marked at regular intervals along each length with the MIDFIX name and BS number as required by the standard. The British Standard ensures the channel conforms with the following criteria:

- Steel type
- Minimum yield strength
- · Load values

- · Coating requirements
- · Dimensions and tolerances
- · Product marking



CHANNEL TYPES

Pre-galvanised Channels (PG) PRE-GALVANISED

Pre-galvanised channel is the industry standard finish that is used for the majority of building services applications. MX pre-galvanised channel is manufactured from continuously hot-dip zinc coated steel strip conforming to BS EN 10346:2009.

- Material Standard: BS EN 10346:2009 • Material Specification: S280GD + Z275 Minimum Yield Stress: 280N/mm²
- Minimum Zinc Coating Mass: 275g/m²
- Typical Zinc Coating Thickness: 20µm



HDG channels are manufactured from uncoated hot-rolled steel strip and hot-dip galvanised after manufacture. This achieves a thicker zinc coating than with pre-galvanising and means all the edges of the channel and slots are zinc coated. Hot-dip galvanised channels give increased corrosion protection for use in external applications and more demanding environments.

- Material Standard: BS EN 10025-2:2019
- Material Specification: S275JR
- Minimum Yield Strength: 275N/mm²
- Hot Dip Galvanising to: BS EN 1461:2009
- Minimum Average Coating Thickness: 55µm





Stainless Steel

Stainless steel channel products can be found listed separately in the MIDFIX catalogue. Loads for stainless steel products should not be assumed as being equivalent to those published in these pages.

CHANNEL BRACKETS

Manufactured from steel with a minimum yield stress of 275N/mm² and hot dip galvanised after manufacture unless indicated otherwise. MX brackets are stamped with the MIDFIX name and identifiable as genuine system components.

- *Material Thickness: 5mm
- Minimum Yield Strength: 275N/mm²
- *Hot Dip Galvanised: 55µm minimum coating thickness

*Unless indicated otherwise





CHANNEL NUTS

Manufactured from steel with a minimum yield stress of 275N/mm² and available in Zinc Plated and Hot Dip Galvanised finishes. Channel nuts carry the MX stamp for identification as genuine system components.

- Minimum Yield Strength: 275N/mm²
- Finishes Electro Zinc Plated: 5µm minimum plating thickness

Hot Dip Galvanised: 55µm minimum

coating thickness



LOAD DATA & TESTING

Channel Sections

Comprehensive safe working loads for MX channel sections are calculated in accordance with BS EN 1993-1-3: 2006 (Eurocode 3) Design of Steel Structures and published in the channel load tables.

Beam loads - published beam loads are calculated for simply supported beams provided with adequate lateral restraint over the span of the channel. Alternative loads are provided in the load tables for a range of common load scenarios.

Column loads - in practice column loads are usually applied to the column through the bracket connections mounted to the face of the channel. This creates an eccentric load which has a substantial effect on the load carrying capacity of the column. Column loads published in the load tables are based on eccentric loads.

Channel Connections

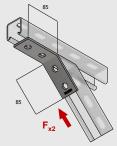
Channel connections are arrangements of brackets, channel nuts and fasteners used to connect the channel sections together in a support structure or to connect channel sections to steelwork. MX channel connections are independently tested in a UKAS accredited test facility to establish safe loads for an extensive range of connection designs.

The MIDFIX product testing programme combines test procedures, safety coefficients and deflection limits to establish dependable load data for engineers designing support structures. The design of the bracket connection and directional load information is shown on the product drawings.

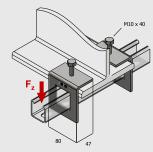
MX cantilever arms are tested when bolted to channel and when directly fixed to a substrate and establish safe loads for each application within the stress and deflection limits of the arms. Alternative load data is provided for uniform loads, centre point loads and loads applied to the end of the arm.

All MX load data is for static and quasi-static loads. For dynamic loads consult MIDFIX Design and Engineering.









HS41 41 x 41 x 2.5 SLOTTED



PRE-GALVANISED

CODE	MF CODE
HS41/3M	1303441
HS41/4M	1304441
HS41/6M	1306441
PRE-CUT	LENGTHS
HS41/200	13014020
HS41/250	13014025
H\$41/300	13014030
HS41/350	13014035
H\$41/400	13014040
HS41/450	13014045
H\$41/500	13014050
HS41/550	13014055
H\$41/600	13014060
HS41/650	13014065
HS41/700	13014070

CODE	MF CODE
H\$41/750	13014075
H\$41/800	13014080
HS41/850	13014085
H\$41/900	13014090
HS41/1000	13014100
HS41/1100	13014110
HS41/1200	13014120
H\$41/1300	13014130
HS41/1400	13014140
HS41/1500	13014150
HS41/1600	13014160
HS41/1700	13014170
HS41/1800	13014180
HS41/1900	13014190
HS41/2000	13014200

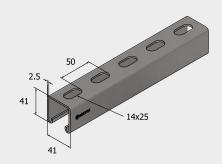
TECHNICAL DATA

Material Standard: BS EN 10346:2009 Material Specification: S280GD + Z275 Minimum Yield Stress: 280N/mm²

Finish: Pre-galvanised

- 275g/m² min. coating weight
- 20µm average coating thickness

- Product Weights:
 HS41 2.41 kg/m
 HP41 2.53 kg/m





HP41 41 x 41 x 2.5 PLAIN



MF CODE

1303341

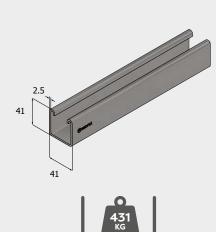
1306341

CODE

HP41/3M

HP41/6M

PRE-GALVANISED







HS21 41 x 21 x 2.5 SLOTTED



PRE-GALVANISED

CODE	MF CODE
HS21/2M	1302421
HS21/3M	1303421
HS21/6M	1306421
PRE-CUT	LENGTHS
HS21/200	13017020
HS21/250	13017025
HS21/300	13017030
HS21/350	13017035
HS21/400	13017040
HS21/450	13017045
HS21/500	13017050
HS21/550	13017055
HS21/600	13017060
HS21/650	13017065

CODE	MF CODE
HS21/700	13017070
HS21/750	13017075
HS21/800	13017080
HS21/850	13017085
HS21/900	13017090
HS21/1000	13017100
HS21/1100	13017110
HS21/1200	13017120
HS21/1300	13017130
HS21/1400	13017140
HS21/1500	13017150
HS21/1600	13017160
HS21/1700	13017170
HS21/1800	13017180

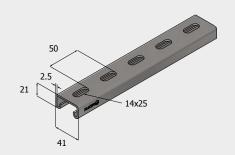
TECHNICAL DATA

Material Standard: BS EN 10346:2009 Material Specification: S280GD + Z275 Minimum Yield Stress: 280N/mm²

Finish: Pre-galvanised

- 275g/m² min. coating weight
- 20µm average coating thickness

- Product Weights:
 HS21 1.62 kg/m
 HP21 1.73 kg/m



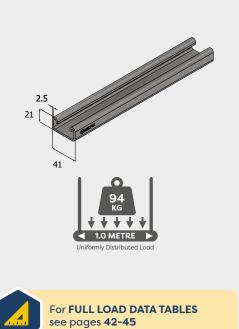


HP21 41 x 21 x 2.5 PLAIN



CODE MF CODE HP21/3M 1303321 HP21/6M 1306321

PRE-GALVANISED



HB41/S

41 x 41 x 2.5 BACK TO BACK SLOTTED



PRE-GALVANISED

CODE	MF CODE
HB41/S/3M	1303541
HB41/S/6M	1306541

HB41/P

41 x 41 x 2.5 BACK TO BACK PLAIN

PRE-GALVANISED



3//

CODE	MF CODE
HB41/P/3M	1303741
HB41/P/6M	1306741

HS82

41 x 82 x 2.5 SLOTTED

PRE-GALVANISED



CODE	MF CODE
H\$82/6M	1306482

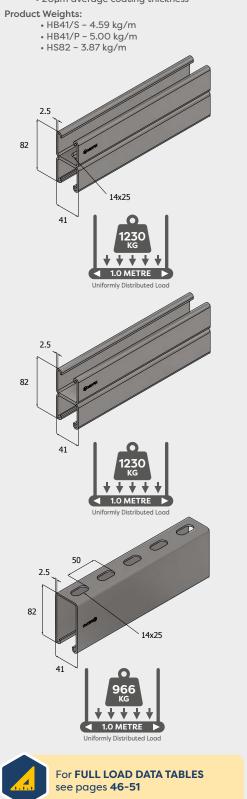
Not MIDFIX stamped

TECHNICAL DATA

Material Standard: BS EN 10346:2009 Material Specification: S280GD + Z275 Minimum Yield Stress: 280N/mm²

Finish: Pre-galvanised

- 275g/m² min. coating weight
- 20µm average coating thickness



LS41 41 x 41 x 1.5 SLOTTED



PRE-GALVANISED

CODE LS41/3M MF CODE 1303241

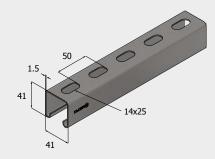
TECHNICAL DATA

Material Standard: BS EN 10346:2009 Material Specification: S280GD + Z275 Minimum Yield Stress: 280N/mm²

Finish: Pre-galvanised

- 275g/m² min. coating weight
- 20µm average coating thickness

- **Product Weights:** LS41 1.52 kg/m
 LS21 0.97 kg/m



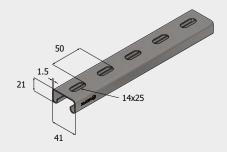


LS21 41 x 21 x 1.5 SLOTTED



PRE-GALVANISED

CODE MF CODE LS21/3M 1303221







HS41G 41 x 41 x 2.5 SLOTTED



HOT DIP GALVANISED

CODE	MF CODE
HS41G/3M	1350441
HS41G/6M	1351441

HP41G 41 x 41 x 2.5 PLAIN



HOT DIP GALVANISED

HOT DIP GALVANISED

CODE	MF CODE
HP41G/3M	1350341
HP41G/6M	1351341

HS21G 41 x 21 x 2.5 SLOTTED



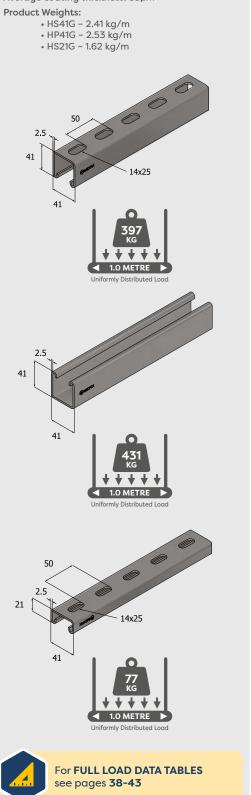
CODE	MF CODE
HS21G/3M	1350421
HS21G/6M	1351421

TECHNICAL DATA

Material Standard: BS EN 10025-2:2019

Material Specification: S275JR Minimum Yield Stress: 275N/mm² Finish: Hot Dip Galvanised to BS EN 1461:2009

Average coating thickness: 55µm



HB41G/S

HB41G/P

41 x 41 x 2.5 BACK TO BACK SLOTTED



HOT DIP GALVANISED

CODE	MF CODE
HB41G/S/3M	1350541
HB41G/S/6M	1351541

TECHNICAL DATA

Material Standard: BS EN 10025-2:2019

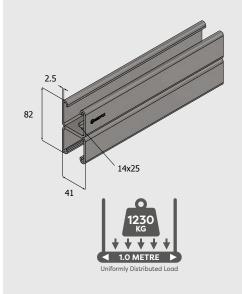
Material Specification: S275JR Minimum Yield Stress: 275N/mm² Finish: Hot Dip Galvanised to BS EN 1461:2009

Average coating thickness: 55µm

Product Weights:

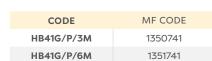
• HB41G/S - 4.59 kg/m

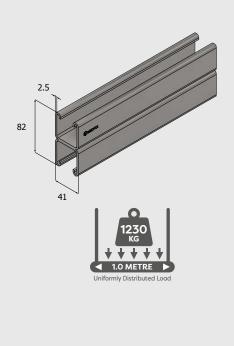
• HB41G/P - 5.00 kg/m













MX THREADED ROD - ZINC PLATED



SIZE	MF CODE	*1 MAX SAFE LOAD F _Z (KG)	*2 MAX SAFE LOAD F _z (KG)	PACK QTY
M8 x 1m	1601081	447	400	50
M8 x 3m	1601083	447	400	25
M10 x 500mm	1605485	793	584	50
M10 x 1m 1601101		793	584	25
M10 x 2m	1601102	793	584	20
M10 x 3m	1601103	793	584	20
M12 x 1m	1601121	1443	584	20
M12 x 3m	1601123	1443	584	10

MX THREADED ROD - GALVANISED



SIZE	ME CODE		*2 MAX SAFE LOAD F _z (KG)	PACK QTY
M10 x 3m	M10 x 3m 1604103		584	50
M12 x 3m	1604123	1443	584	25

MX STUD PROTECTION CAPS



SIZE	DEPTH	BLACK MF CODE	WHITE MF CODE	PACK QTY
M8	12	1615008	1615108	100
M10	15	1615010	1615110	100
M12	18	1615012	1615112	100

MX threaded rod is manufactured to MIDFIX specification with guaranteed product weight, thread size and material strength. It is independently tested for safe allowable loads and identifiable by the distinctive coloured wrapping and MIDFIX labels.

TECHNICAL DATA

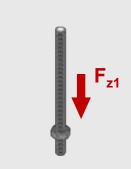
Strength Classification: 4.8 - minimum ultimate tensile strength 420N/mm²

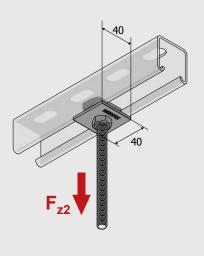
Finishes: Electro zinc plated - 5µm minimum coating thickness

Galvanised - 50µm average coating thickness

MAXIMUM SAFE LOADS

- *1 Load safe static tensile load for MX threaded rod combined with DIN 934 Grade 8 nut.
- *2 Load safe static tensile load for MX threaded rod combined with:
 - 1) MX 2.5mm channel
 - 2) MX Channel Nut
 - 3) MX FB101 Channel Plate Washer





CHANNEL NUTS - ZINC PLATED

BZP



No Spring

CODE	MF CODE	BOX QTY
MNP6	1309006	100
MNP8	1309008	100
MNP10	1309010	100
MNP12	1309012	100
MNP16*	1309016	100



Short Spring

CODE	MF CODE	BOX QTY
MNS6	1309106	100
MNS8	1309108	100
MNS10	1309110	100



Long Spring

CODE	MF CODE	BOX QTY
MNL6	1309206	100
MNL8	1309208	100
MNL10	1309210	100
MNL12	1309212	100

^{*}Part not MIDFIX stamped

TECHNICAL DATA Steel Minimum Yield

Steel Minimum Yield Stress: 275N/mm²

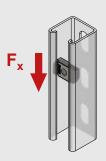
Finishes: Electro Zinc Plated -5µm minimum coating thickness Hot Dip Galvanised - 55µm minimum average coating thickness

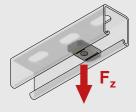
MAXIMUM SAFE LOADS

Loads apply to channel nuts assembled with:

- 1) MX 2.5mm channel
- 2) FB101 Channel Plate Washer
- 3) Grade 8.8 fastener
- 4) Torque settings as indicated in the table

SIZE	TIGHTENING TORQUE (NM)	MAX SAFE LOAD F _X (KG)	MAX SAFE LOAD Fz (KG)
M8	25	163	588
M10	55	289	673
M12	55	305	673





CHANNEL NUTS - HOT DIP GALVANISED

GALVANISED



No Spring

CODE	MF CODE	BOX QTY
HNP6	1310006	100
HNP8	1310008	100
HNP10	1310010	100
HNP12*	1310012	100



Long Spring

CODE	MF CODE	BOX QTY
HNL6	1310206	100
HNL8*	1310208	100
HNL10	1310210	100
HNL12*	1310212	100

^{*}Parts not MIDFIX stamped

QWIKSTUDS

Combined channel nut, stud and lipped washer fitted with two nuts for locking off. Top spring for fast push and twist installation - hugely time saving product for installing pipe clamps.





CODE	MF CODE	STUD SIZE	$\begin{array}{c} MAX \; SAFE \; LOAD \\ F_{z} \; (KG) \end{array}$	BOX QTY
QST1040	1312040	M10 x 40	856	50
QST1050	1312050	M10 x 50	856	50
QST1060	1312060	M10 x 60	856	50

QWIKNUTS

Combined channel nut and plate washer for fast one-handed installation.



CODE	MF CODE	SIZE	MAX SAFE LOAD F _Z (KG)	BOX QTY
QSN10	1313710	M10	405	50

QST TECHNICAL DATA

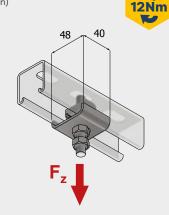
Steel Minimum Yield Stress: 275N/mm²
Finish: Electro Zinc Plated -5µm minimum coating thickness

MAXIMUM SAFE LOAD

Load applies in tension as indicated with MX 2.5mm channel

RECOMMENDED TORQUE SETTING

12Nm (Torque is not critical to the load in tension)



QSN TECHNICAL DATA

Steel Minimum Yield Stress: 275N/mm²
Finish: Electro Zinc Plated -5µm minimum
coating thickness

MAXIMUM SAFE LOAD

Load applies in tension as indicated with:

1) MX 2.5mm channel

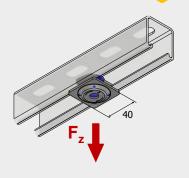
2) MX threaded rod

RECOMMENDED TORQUE SETTING

12Nm

(Torque is not critical to the load in tension)





CHANNEL PLATES



Lipped Washer 3mm thick - BZP

CODE	MF CODE	SIZE	THICKNESS	FINISH	BOX QTY
FB099/10	1320010	M10	3mm	Bright Zinc Plated	100



CODE	MF CODE	SIZE	THICKNESS	FINISH	BOX QTY
FB100/6	1321006	М6	3mm	Bright Zinc Plated	100
FB100/8	1321008	M8	3mm	Bright Zinc Plated	100
FB100/10	1321010	M10	3mm	Bright Zinc Plated	100



CODE	MF CODE	SIZE	THICKNESS	FINISH	BOX QTY
FB101/8	1323008	M8	5mm	Bright Zinc Plated	100
FB101/10	1323010	M10	5mm	Bright Zinc Plated	100
FB101/12	1323012	M12	5mm	Bright Zinc Plated	100



CODE	MF CODE	SIZE	THICKNESS	FINISH	BOX QTY
FB101/6HDG*	1324006	М6	5mm	Hot Dip Galvanised	100
FB101/8HDG*	1324008	M8	5mm	Hot Dip Galvanised	100
FB101/10HDG	1324010	M10	5mm	Hot Dip Galvanised	100
FB101/12HDG	1324012	M12	5mm	Hot Dip Galvanised	100

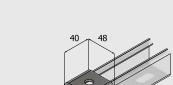
^{*}Parts not MIDFIX stamped

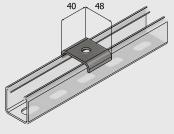
TECHNICAL DATA

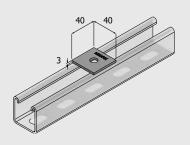
Steel Thickness: 3.0mm and 5.0mm Minimum Yield Stress: 275N/mm²

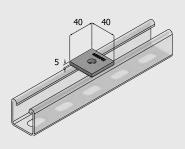
Finish: Electro Zinc Plated - 5µm minimum coating thickness

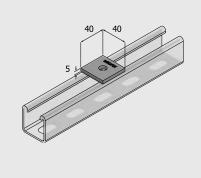
Hot Dip Galvanised - 55µm minimum coating thickness











FLAT BRACKETS



CODE	MF CODE	BOX QTY	
FB102	1325102	80	



CODE	MF CODE	BOX QTY	
FB103	1325103	60	



CODE	MF CODE	BOX QTY	
FB104	1325104	40	



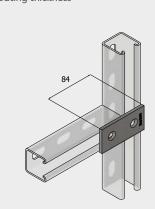
CODE	MF CODE	BOX QTY
FB105	1325105	80

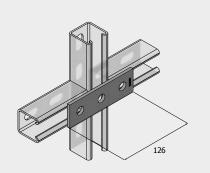
TECHNICAL DATA

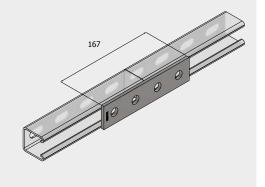
Steel Thickness: 5.0mm

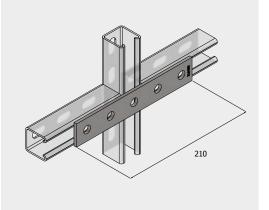
Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum coating thickness









FLAT BRACKETS



COI	DE	MF CODE	$\begin{array}{c} MAX \; SAFE \; LOAD \\ F_{x} \; (KG) \end{array}$	BOX QTY
FB1	07	1325107	212	70



CODE	MF CODE	*MAX SAFE LOAD F _X 1 (KG)	MAX SAFE LOAD F _X 2 (KG)	THICKNESS
FB108	1325108	212	244	35

^{*}Total combined load for connection



CODE	MF CODE	*MAX SAFE LOAD F _x (KG)	BOX QTY
FB109	1325109	244	25

^{*}Total combined load for connection



CODE	MF CODE	BOX QTY
FB110	1325110	25

Part not MIDFIX stamped

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

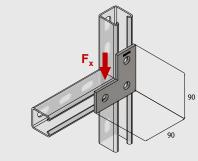
coating thickness

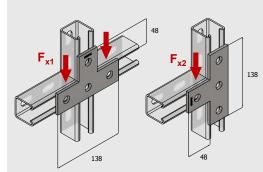
MAXIMUM SAFE LOADS

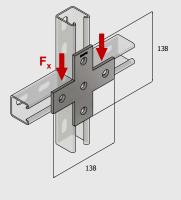
Loads apply to the channel connection shown assembled with:

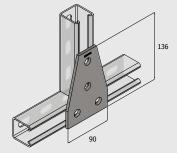
- 1) MX 2.5mm channel
- 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers
- 3) 55Nm torque setting













CODE	MF CODE	*1 MAX SAFE LOAD F _X (KG)	*2 MAX SAFE LOAD F _X (KG)	BOX QTY
AB200	1327200	270	79	50



CODE	MF CODE	*1 MAX SAFE LOAD F _X (KG)	*2 MAX SAFE LOAD F _X (KG)	BOX QTY
AB201	1327201	270	105	50



CODE	MF CODE	*1 MAX SAFE LOAD F _X (KG)	*2 MAX SAFE LOAD F _X (KG)	BOX QTY
AB202	1327202	500	105	50

TECHNICAL DATA

Steel Thickness: 5.0mm

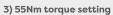
Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

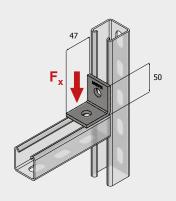
MAXIMUM SAFE LOADS

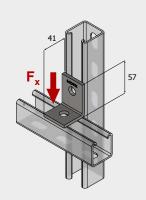
- *1 Load applies to the channel connection shown assembled with:
 - 1) MX HS/HP41 channel
 - 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers

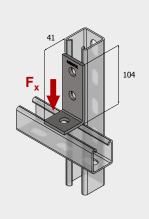




*2 Load applies to bracket only without channel









CODE	MF CODE	*1 MAX SAFE LOAD F _X (KG)	*2 MAX SAFE LOAD F _X (KG)	BOX QTY
AB203	1327203	500	74	50



CODE	MF CODE	*1 MAX SAFE LOAD F _X (KG)	BOX QTY
AB205	1327205	500	50



CODE	MF CODE	BOX QTY
AB206	1327206	50

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

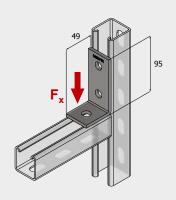
coating thickness

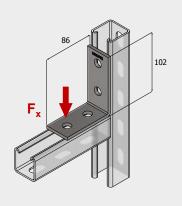
MAXIMUM SAFE LOADS

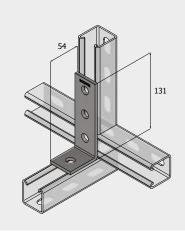
- *1 Load applies to the channel connection shown assembled with:
 - 1) MX HS/HP41 channel
 - 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers
 - 3) 55Nm torque setting



*2 Load applies to bracket only without channel









CODE	MF CODE	*1 MAX SAFE LOAD F _X (KG)	*2 MAX SAFE LOAD F _X (KG)	BOX QTY
AB207	1327207	660	316	40



CODE	MF CODE	BOX QTY
AB209	1327209	50

Part not MIDFIX stamped



CODE	MF CODE	BOX QTY
AB213	1327213	25

Part not MIDFIX stamped

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

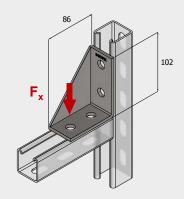
MAXIMUM SAFE LOADS

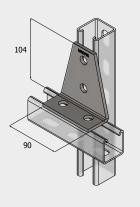
- *1 Load applies to the channel connection shown assembled with:
 - 1) MX HS/HP41 channel
 - 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers

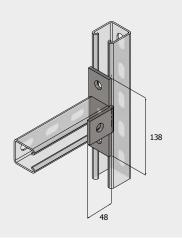




*2 Load applies to bracket only without channel









CODE	MF CODE	BOX QTY
AB216	1327216	10

Part not MIDFIX stamped



CODE	MF CODE	BOX QTY
AB217	1327217	10

Part not MIDFIX stamped



CODE	ODE MF CODE ANGLE		MAX SAFE LOAD F _X 1 (KG)	MAX SAFE LOAD F _x 2 (KG)	BOX QTY
AB218	1327218	45°	179	655	100

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

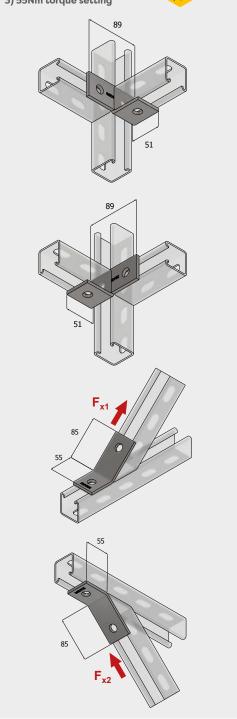
Finish: Hot Dip Galvanised - 55µm minimum coating thickness

MAXIMUM SAFE LOADS

Load applies to the channel connection shown assembled with:

- 1) MX HS/HP41 channel
- 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers
- 3) 55Nm torque setting







CODE	MF CODE	ANGLE	MAX SAFE LOAD F _X 1 (KG)	MAX SAFE LOAD F _X 2 (KG)	BOX QTY
AB219	1327219	45°	118	430	100



CODE	MF CODE	ANGLE	MAX SAFE LOAD F _X 1 (KG)	MAX SAFE LOAD F _x 2 (KG)	BOX QTY
AB220	1327220	45°	488	750	100



CODE	MF CODE	MAX SAFE LOAD F_x (KG)	BOX QTY
AB222	1327222	203	50

Part not MIDFIX stamped

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

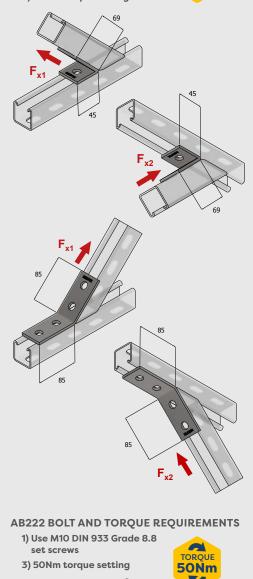
Finish: Hot Dip Galvanised - 55µm minimum coating thickness

MAXIMUM SAFE LOADS

Load applies to the channel connection shown assembled with:

- 1) MX HS/HP41 channel
- 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers
- 3) 55Nm torque setting





U BRACKETS



CODE	MF CODE	DEPTH	MAX SAFE LOAD F _X (KG)	MAX SAFE LOAD F _Z (KG)	BOX QTY
UB400	1331400	21	576	965	50

Part not MIDFIX stamped



CODE	MF CODE	DEPTH	MAX SAFE LOAD F _X (KG)	MAX SAFE LOAD F _z (KG)	BOX QTY
UB401	1331401	41	576	965	50



CODE	MF CODE	DEPTH	BOX QTY
UB402	1331402	41 X 82	25

Part not MIDFIX stamped



CODE	MF CODE	DEPTH	MAX SAFE LOAD F _Z (KG)	BOX QTY
UB403	1331403	82	965	25

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

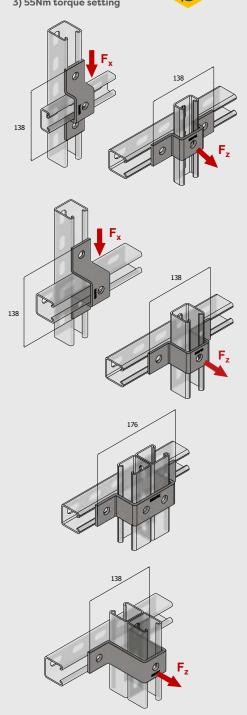
coating thickness

MAXIMUM SAFE LOADS

Load applies to the channel connection shown assembled with:

- 1) MX 2.5mm channel
- 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers
- 3) 55Nm torque setting





ZED BRACKETS



CODE	MF CODE	DEPTH	BOX QTY
ZB300	1329300	21	50

Part not MIDFIX stamped



CODE	MF CODE	DEPTH	BOX QTY
ZB301	1329301	41	50



CODE	MF CODE	DEPTH	BOX QTY
ZB302	1329302	82	25

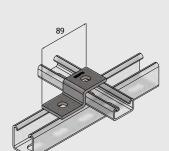
Part not MIDFIX stamped

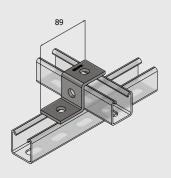
TECHNICAL DATA

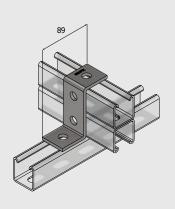
Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum coating thickness







FRAMING BRACKETS



CODE	MF CODE	*MAX SAFE LOAD F_X (KG)	BOX QTY
SB801	1339801	546	30

^{*}Total combined load for connection



CODE	MF CODE	*MAX SAFE LOAD F _X (KG)	BOX QTY
SB802	1339802	546	30

^{*}Total combined load for connection



CODE	MF CODE	*MAX SAFE LOAD F _X (KG)	BOX QTY
SB804	1339804	270	25

Part not MIDFIX stamped

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

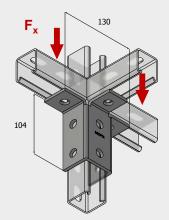
Finish: Hot Dip Galvanised - 55µm minimum coating thickness

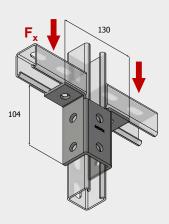
MAXIMUM SAFE LOADS

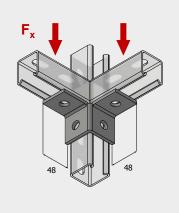
Load applies to the channel connection shown assembled with:

- 1) MX HS/HP41 channel
- 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers
- 3) 55Nm torque setting









^{*}Total combined load for connection

C BRACKET



CODE	MF CODE	*MAX SAFE LOAD F_z (KG)	BOX QTY
SB803	1339803	54	50

INTERNAL CHANNEL SPLICES



CODE	MF CODE	FOR CHANNEL	BOX QTY
SP500/21	1333501	21mm	25
SP500/41	1333502	41mm	70

EXTERNAL CHANNEL SPLICES



CODE	MF CODE	FOR CHANNEL	BOX QTY
SP501/41	1333512	41mm	20

SB803 TECHNICAL DATA

Steel Thickness: 5.0mm

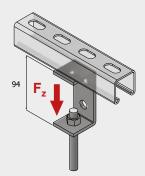
Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

MAXIMUM SAFE LOAD

*Load applies to bracket only without channel



SP500 TECHNICAL DATA

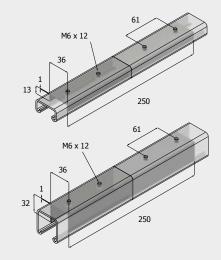
Steel Thickness: 1.0mm

Minimum Yield Stress: 275N/mm²

Finish: Pre-galvanised - 20µm

coating thickness

Screws: Supplied with electro zinc plated locking screws

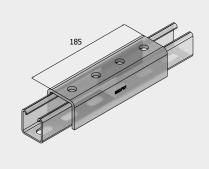


SP501 TECHNICAL DATA

Steel Thickness: 5.0mm

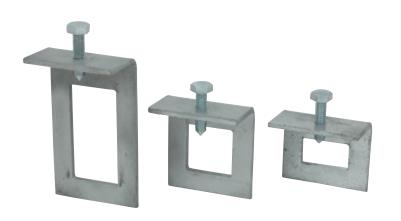
Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum coating thickness





BEAM CLAMPS



CODE	MF CODE	FOR CHANNEL	MAX FLANGE THICKNESS	MAX SAFE LOAD F _z (KG)	BOX QTY
BC700/21	1337702	21mm	20	202	50
BC700/41	1337704	41mm	20	202	50
BC700/82	1337708	82mm	25	202	40



CODE	MF CODE	FOR CHANNEL	MAX FLANGE THICKNESS	MAX SAFE LOAD F _z (KG)	BOX QTY
BC701/41	1337714	21 & 41mm	22	668	40
BC701/82	1337718	82mm	22	668	30

- Fully assembled ready to install
- · All parts hot dip galvanised

BC700 TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

Screw: M10 \times 40 electro zinc plated cone point

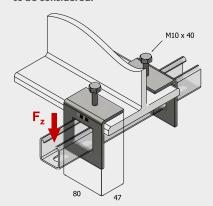
screw - grade 8.8

MAXIMUM SAFE LOADS

BC700 must be used in pairs - maximum safe load is:

- 1) Per pair of beam clamps
- 2) Using MX 2.5mm channel
- 3) 10Nm torque setting for screws
- 4) The bending moment of the channel may need to be considered.





BC701 TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

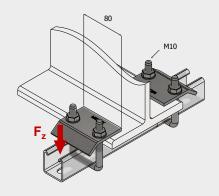
U-Bolt: M10 with Hot Dip Galvanised finish

MAXIMUM SAFE LOADS

BC701 must be used in pairs – maximum safe load is:

- 1) Per pair of beam clamps
- 2) Using MX 2.5mm channel
- 3) 20Nm torque setting for nuts
- 4) The bending moment of the channel may need to be considered.





BEAM CLAMPS



CODE	MF CODE	FOR CHANNEL	MAX FLANGE THICKNESS	MAX SAFE LOAD F _z (KG)	BOX QTY
BC703	1338703	All sizes	20	382	100



CODE	MF CODE	FOR CHANNEL	MAX FLANGE THICKNESS	MAX SAFE LOAD F _z (KG)	BOX QTY
BC705	1338705	All sizes	22	187	50

BC703 TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

Requires: M10 x 40 set screw

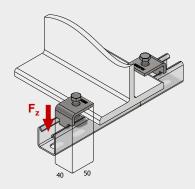
MAXIMUM SAFE LOADS

BC703 must be used in pairs - maximum safe load is:

- 1) Per pair of beam clamps
- 2) Using MX 2.5mm channel
- 3) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers



- 4) 20Nm torque setting
- 5) The bending moment of the channel may need to be considered.



BC705 TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

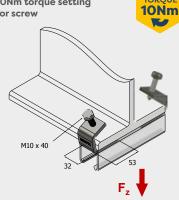
Screw: M10 x 40 electro zinc plated cone point

screw - grade 8.8

MAXIMUM SAFE LOADS

BC705 must be used in pairs - maximum safe load is:

- 1) Per pair of beam clamps
- 2) Using MX 2.5mm channel
- 3) 10Nm torque setting for screw



BEAM CLAMPS



CODE	MF CODE	FOR CHANNEL	MAX FLANGE THICKNESS	MAX SAFE LOAD F _z (KG)	BOX QTY
BC706	1338706	41mm	20	381	50



CODE	MF CODE	FOR CHANNEL	MAX SAFE LOAD F _x (KG)	MAX SAFE LOAD F _Z (KG)	BOX QTY
BC707	1338707	41mm	94	131	50

Supplied in pairs

BC706 TECHNICAL DATA

Steel Thickness: 10mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

Screw: M10 \times 40 electro zinc plated cone point

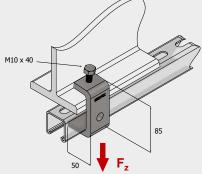
screw - grade 8.8

MAXIMUM SAFE LOADS

Maximum safe load applies to beam clamp with:

- 1) Load applied in the direction indicated
- 2) MX HS/HP41 channel
- 3) 10Nm torque setting for cone point screw
- 4) Bolted connection to channel





BC707 TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

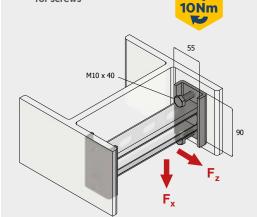
coating thickness

Screw: M10 x 40 electro zinc plated cone point screw – grade 8.8

MAXIMUM SAFE LOADS

Loads should be applied in one direction only Maximum safe load is for a pair of beam clamps with:

- 1) Load applied in the direction indicated
- 2) MX HS/HP41 channel
- 3) 400mm maximum steel size between flanges
- 4) 10Nm torque setting for screws



BASE PLATES



CODE	MF CODE	CHANNEL SIZE	BOX QTY
FP601	1335601	41	36



CODE	MF CODE	CHANNEL SIZE	BOX QTY
FP602	1335602	82	20



CODE	MF CODE	CHANNEL SIZE	BOX QTY
FP603/41	1335634	41	10

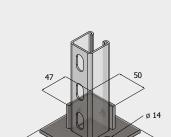
TECHNICAL DATA

Steel Thickness: 5.0mm

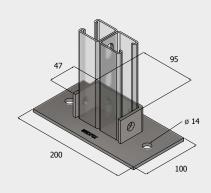
Minimum Yield Stress: 275N/mm²

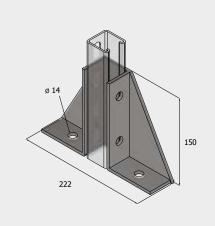
100

Finish: Hot Dip Galvanised - 55µm minimum coating thickness



100





BASE PLATES



CODE	MF CODE	CHANNEL SIZE	BOX QTY
FP603/82	1335638	82	8



CODE	MF CODE	CHANNEL SIZE	MAX SAFE LOAD F _x (KG)	BOX QTY
FP604/41	1335644	41	689	10



CODE	MF CODE	CHANNEL SIZE	MAX SAFE LOAD F_X (KG)	BOX QTY
FP604/82	1335648	82	741	10

TECHNICAL DATA

Steel Thickness: 5.0mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

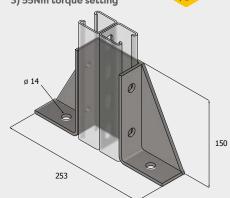
coating thickness

MAXIMUM SAFE LOADS

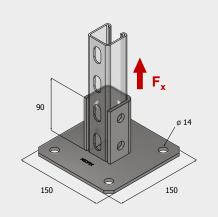
Loads apply to the channel connection shown assembled with:

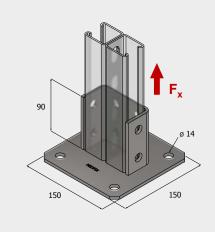
- 1) MX 2.5mm channel
- 2) M10 DIN 933 Grade 8.8 set screws with M10 DIN 125 washers

3) 55Nm torque setting



55Nm





CANTILEVER ARMS - SINGLE



CODE	MF CODE	LENGTH	
SCA4/150	1341150	150	
SCA4/300	1341300	300	
SCA4/450	1341450	450	
SCA4/600	1341600	600	
SCA4/750	1341750	750	
SCA4/900	1341900	900	
SCA4/1000	13411000	1000	

	M	AX SAFE LOA	DS		
CODE	LOAD 1	LOAD 2	LOAD 3		
	F (KG)	F (KG)	F (KG)		
SCA4/150	479.9*	479.9*	240.0		
SCA4/300	240.0	240.0	120.0		
SCA4/450	160.0	160.0	80.0		
SCA4/600	120.0	120.0	60.0		
SCA4/750	96.0	96.0	48.0		
SCA4/900	80.0	80.0	36.7		
SCA4/1000	72.0	72.0	29.6		

*SCA4/150 - maximum load when bolted to channel is 295KG

Notes to Cantilever Arm Load Data

MX Cantilever Arms are comprehensively tested. Published load data considers each of the following criteria:

- Maximum yield strength of the channel section
- Deflection limit of the channel section = L/150
- Maximum yield strength of the back plate
- Safety factored failure load of the arm under test
- Maximum permitted deflection of the arm under test
- Factored slip load for arms bolted to channel

TECHNICAL DATA

Steel Thickness: Back Plate 8.0mm; Channel 2.5mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55μm minimum coating thickness

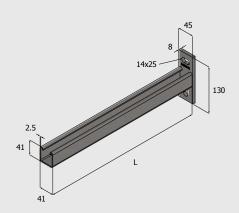
Back Plates: Slotted pattern for easy alignment

MAXIMUM SAFE LOADS

Loads apply to

- 1. Arms fixed to a load bearing substrate with appropriate M12 Anchors
- 2. Arms bolted to:
- MX 2.5mm channel with:
- M12 Grade 8.8 hex head set screws
- M12 DIN 125 washers
- 60Nm torque setting





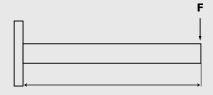
Load 1 - Uniformly Distributed Load



Load 2 - Centre Point Load



Load 3 - End Point Load



CANTILEVER ARMS - DOUBLE



CODE	MF CODE	LENGTH
DCA5/450	1343450	450
DCA5/600	1343600	600
DCA5/750	1343750	750
DCA5/900	1343900	900

	MAX SAFE LOADS				
CODE	LOAD 1	LOAD 2	LOAD 3		
	F (KG)	F (KG)	F (KG)		
DCA5/450	236.6	236.6	118.3		
DCA5/600	177.4	177.4	88.7		
DCA5/750	141.9	141.9	71.0		
DCA5/900	118.3	118.3	59.1		

Notes to Cantilever Arm Load Data

MX Cantilever Arms are comprehensively tested. Published load data considers each of the following criteria:

- Maximum yield strength of the channel section
- Deflection limit of the channel section = L/150
- Maximum yield strength of the back plate
- Safety factored failure load of the arm under test
- Maximum permitted deflection of the arm under test
- Factored slip load for arms bolted to channel

TECHNICAL DATA

Steel Thickness: Back Plate 8.0mm;

Channel 2.5mm

Minimum Yield Stress: 275N/mm²

Finish: Hot Dip Galvanised - 55µm minimum

coating thickness

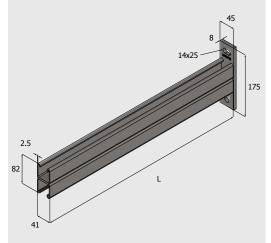
Back Plates: Slotted pattern for easy alignment

MAXIMUM SAFE LOADS

Loads apply to

- 1. Arms fixed to a load bearing substrate with appropriate M12 Anchors
- 2. Arms bolted to:
- MX 2.5mm channel with:
- M12 Grade 8.8 hex head set screws
- M12 DIN 125 washers
- 60Nm torque setting

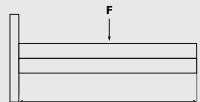




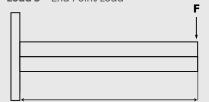
Load 1 – Uniformly Distributed Load



Load 2 - Centre Point Load



Load 3 - End Point Load



CHANNEL END CAPS

Channel end caps are designed to use with 2.5mm gauge channels.

Technical Data

Halogen free LDPE plastic

CODE	MF CODE	DESCRIPTION
EC21/B	1315621	Black End Caps – 21mm
EC21/W	1315721	White End Caps - 21mm
EC41/B	1315641	Black End Caps – 41mm
EC41/W	1315741	White End Caps - 41mm





CHANNEL COVER STRIP

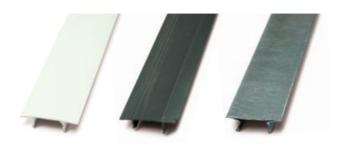
Closure lids for all standard 41mm channel profiles.

Technical Data

Plastic - Rigid PVC for internal and external use

Steel - 20mµ pre-galvanised finish

CODE	MF CODE	DESCRIPTION
CSP/W	1314103	White Plastic Cover Strip x 3m
CSP/B	1314203	Black Plastic Cover Strip x 3m
CSP/G	1314303	Galvanised Cover Strip x 3m





CHANNEL SOCKETS

Specially shaped $1\!\!/\!\!2$ drive sockets for accessing bolts within channel profiles.

CODE	MF CODE	SIZE	BOLT SIZE
C\$15	2549915	15mm	
CS17	2549917	17mm	M10
CS19	2549919	19mm	M12





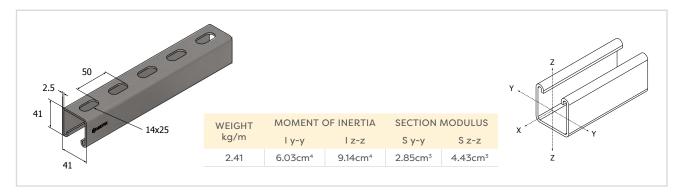
LOAD DATA



HS41 41 x 2.5 SLOTTED

PRE-GALVANISED

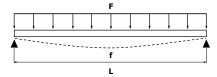
GALVANISED



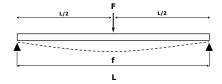
Beam Loads

Dealii Loc	bediii Lodds					
		TE LOADS OAD 1		DESIGN LOADS		
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
LENGTH L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	1597.0	0.3	1597.0	798.5	598.9	399.2
500	797.6	1.0	797.6	398.8	299.1	199.4
750	530.7	2.3	530.7	265.3	199.0	132.7
1000	396.9	4.0	396.9	198.5	148.9	99.2
1250	316.4	6.2	314.1	158.2	115.2	79.1
1500	262.6	8.9	216.6	131.3	79.4	57.0
1750	223.9	12.1	157.5	98.4	57.8	41.5
2000	194.8	15.7	119.0	74.4	43.6	31.3
2250	172.0	19.8	92.4	57.7	33.9	24.3
2500	153.6	24.2	73.1	45.7	26.8	19.3
2750	138.5	29.1	58.8	36.7	21.6	15.5
3000	125.8	34.3	47.7	29.8	17.5	12.6
3250	114.9	39.8	38.9	24.3	14.3	10.3
3500	105.5	45.6	31.9	19.9	11.7	_
3750	97.3	51.8	26.0	16.3	-	_
4000	90.0	58.1	21.1	13.2	-	_
4250	83.5	64.7	17.0	10.6	_	_
4500	77.7	71.4	13.4	_	_	_
4750	72.4	78.3	10.3	_	-	_
5000	67.6	85.3	_	_	_	_
5250	63.2	92.2	-	_	-	_
5500	59.1	99.2	_	-	-	-
5750	55.3	106.1	-	_	-	-
6000	51.8	112.9	-	_	-	-

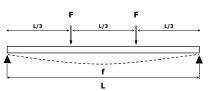
Load 1 – Uniformly Distributed Load



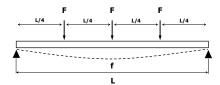
Load 2 - Centre Point Load



Load 3 – Two Point Loads



Load 4 - Three Point Loads



- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted.
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

HS41 41 x 2.5 SLOTTED

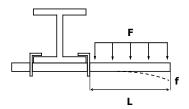
PRE-GALVANISED

GALVANISED

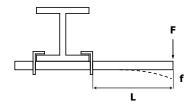
Cantilever Loads

	DESIGN LOADS		
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)	
100	998.2	499.1	
200	498.8	249.4	
300	332.1	166.0	
400	248.6	120.9	
500	198.5	77.3	
600	141.9	53.6	
700	103.6	39.3	
800	78.7	30.0	
900	61.5	23.6	
1000	49.2	19.1	
1100	40.0	15.7	
1200	32.9	13.1	
1300	27.4	11.1	
1400	22.9	-	
1500	19.3	_	

Load 1 - Uniformly Distributed Load



Load 2 - Point Load



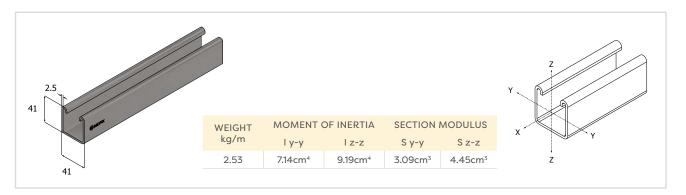
- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =1.6)
- Load capacity of beam clamps must be considered



HP41 41 x 2.5 PLAIN

PRE-GALVANISED

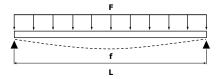
GALVANISED



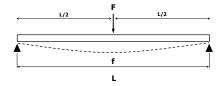
Beam Loads

Beam Loads						
		TE LOADS OAD 1		DESIGN LOADS		
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	1731.8	0.2	1731.8	865.9	649.4	432.9
500	864.9	0.9	864.9	432.5	324.3	216.2
750	575.5	2.1	575.5	287.8	215.8	143.9
1000	430.5	3.7	430.5	215.3	161.4	107.6
1250	343.3	5.7	343.3	171.6	128.7	85.8
1500	284.9	8.2	257.3	142.4	94.4	67.7
1750	243.0	11.1	187.4	117.1	68.7	49.3
2000	211.4	14.4	141.8	88.6	52.0	37.3
2250	186.7	18.1	110.3	68.9	40.5	29.0
2500	166.8	22.2	87.6	54.7	32.1	23.1
2750	150.4	26.6	70.6	44.1	25.9	18.6
3000	136.6	31.4	57.6	36.0	21.1	15.2
3250	124.9	36.5	47.3	29.5	17.3	12.4
3500	114.7	41.8	38.9	24.3	14.3	10.3
3750	105.8	47.5	32.1	20.1	11.8	_
4000	98.0	53.3	26.4	16.5	_	_
4250	90.9	59.4	21.6	13.5	_	_
4500	84.6	65.6	17.4	10.9	_	_
4750	78.9	72.0	13.8	_	_	_
5000	73.7	78.4	10.6	_	_	_
5250	69.0	84.9	_	_	_	_
5500	64.6	91.4	_	-	-	_
5750	60.5	97.9	_	_	_	_
6000	56.7	104.2	_	_	_	_

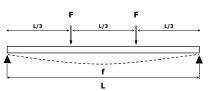
Load 1 – Uniformly Distributed Load



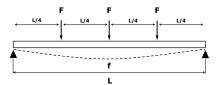
Load 2 - Centre Point Load



Load 3 – Two Point Loads



Load 4 - Three Point Loads



- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

HP41 41 x 2.5 PLAIN

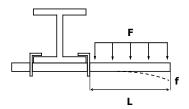
PRE-GALVANISED

GALVANISED

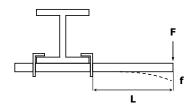
Cantilever Loads

	DESIGN LOADS		
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)	
100	1082.5	541.3	
200	540.9	270.4	
300	360.2	180.1	
400	269.7	134.8	
500	215.3	91.7	
600	168.5	63.6	
700	123.1	46.6	
800	93.6	35.6	
900	73.3	28.0	
1000	58.6	22.6	
1100	47.8	18.6	
1200	39.4	15.6	
1300	32.9	13.2	
1400	27.6	11.3	
1500	23.3	-	

Load 1 - Uniformly Distributed Load



Load 2 - Point Load

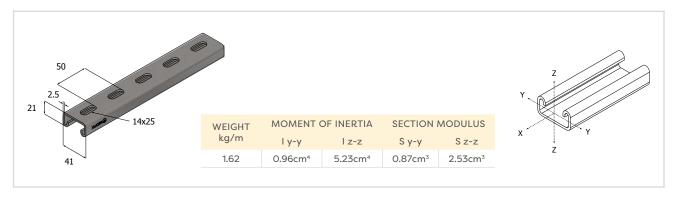


- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =1.6)
- Load capacity of beam clamps must be considered

HS21 41 x 21 x 2.5 SLOTTED

PRE-GALVANISED

GALVANISED

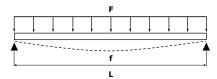


Beam Loads

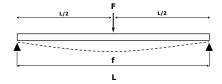
		ULTIMATE LOADS - LOAD 1		DESIGN LOADS		
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	491.4	0.5	491.4	245.7	184.3	122.9
500	245.1	1.9	245.1	122.6	91.9	61.3
750	162.7	4.4	138.9	81.4	51.0	36.6
1000	121.3	7.7	77.2	48.2	28.3	20.3
1250	96.3	11.9	48.4	30.2	17.7	12.7
1500	79.5	17.0	32.6	20.3	11.9	_
1750	67.4	22.9	22.8	14.3	_	_
2000	58.2	29.5	16.4	10.3	_	_
2250	50.9	36.8	11.9	_	_	_
2500	45.1	44.7	_	-	_	_
2750	40.2	53.0	_	_	_	_
3000	36.0	61.7	_	_	_	_

- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

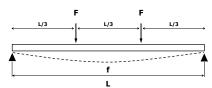
Load 1 – Uniformly Distributed Load



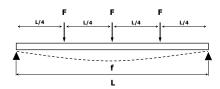
Load 2 - Centre Point Load



Load 3 – Two Point Loads



Load 4 - Three Point Loads



HS21 41 x 21 x 2.5 SLOTTED

PRE-GALVANISED

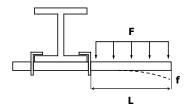
GALVANISED

Cantilever Loads

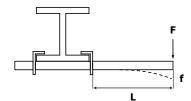
	DESIGN LOADS			
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)		
100	307.2	153.6		
200	153.4	76.7		
300	90.7	34.2		
400	50.7	19.2		
500	32.0	12.2		
600	21.8	-		
700	15.6	_		
800	11.5	-		

- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =1.6)
- Load capacity of beam clamps must be considered

Load 1 - Uniformly Distributed Load



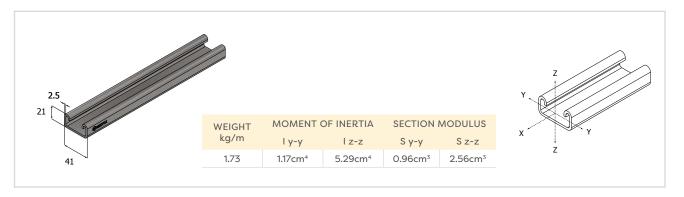
Load 2 - Point Load



HP21 41 x 21 x 2.5 PLAIN

PRE-GALVANISED

GALVANISED

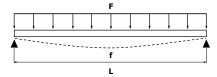


Beam Loads

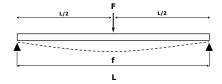
	0 = 1 11111	TE LOADS OAD 1		DESIGN LOADS		
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	537.4	0.4	537.4	268.7	201.5	134.4
500	268.1	1.7	268.1	134.0	100.5	67.0
750	178.0	3.9	178.5	89.0	62.3	44.5
1000	132.7	6.9	94.5	59.1	34.7	24.9
1250	105.4	10.7	59.4	37.1	21.8	15.6
1500	87.0	15.2	40.1	25.1	14.7	10.6
1750	73.8	20.5	28.4	17.7	10.4	_
2000	63.7	26.5	20.5	12.8	-	_
2250	55.8	33.0	15.0	_	_	_
2500	49.4	40.1	11.0	-	-	_
2750	44.0	47.6	_	_	_	_
3000	39.5	55.4	_	_	-	-

- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

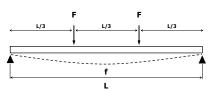
Load 1 – Uniformly Distributed Load



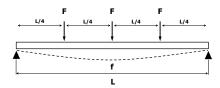
Load 2 - Centre Point Load



Load 3 – Two Point Loads



Load 4 - Three Point Loads



HP21 41 x 21 x 2.5 PLAIN

PRE-GALVANISED

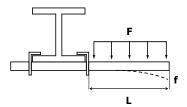
GALVANISED

Cantilever Loads

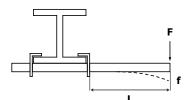
	DESIGN	LOADS
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)
100	336.0	168.0
200	167.7	83.9
300	110.9	41.7
400	62.0	23.4
500	39.2	14.9
600	26.8	10.3
700	19.2	_
800	14.3	-

- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =1.6)
- Load capacity of beam clamps must be considered

Load 1 - Uniformly Distributed Load



Load 2 - Point Load

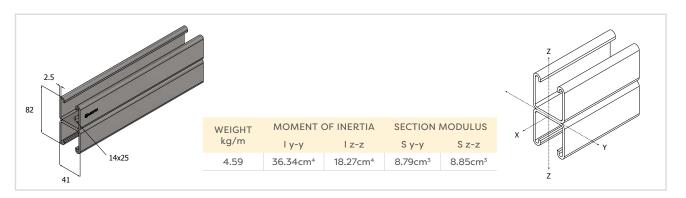


HB41/S

41 x 41 x 2.5 BACK TO BACK SLOTTED

PRE-GALVANISE

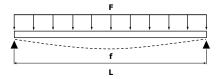
GALVANISED



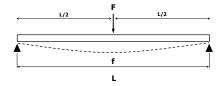
Beam Loads

Beam Loc						
		TE LOADS OAD 1		DESIGN	LOADS	
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
LENGTH L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	4931.5	0.1	4931.5	2465.7	1849.3	1232.9
500	2464.0	0.5	2464.0	1232.0	924.0	616.0
750	1640.7	1.2	1640.7	820.4	615.3	410.2
1000	1228.5	2.1	1228.5	614.2	460.7	307.1
1250	980.7	3.2	980.7	490.3	367.8	245.2
1500	815.1	4.6	815.1	407.5	305.7	203.8
1750	696.5	6.2	696.5	348.2	261.2	174.1
2000	607.2	8.1	607.2	303.6	227.7	151.8
2250	537.5	10.2	537.5	268.8	201.6	134.4
2500	481.6	12.6	466.2	240.8	171.0	120.4
2750	435.6	15.2	382.1	217.8	140.2	100.6
3000	397.0	17.9	317.8	198.5	116.6	83.7
3250	364.2	20.9	267.6	167.2	98.2	70.4
3500	336.0	24.1	227.5	142.2	83.4	59.9
3750	311.3	27.5	194.9	121.8	71.5	51.3
4000	289.6	31.0	168.0	105.0	61.6	44.2
4250	270.3	34.7	145.5	90.9	53.4	38.3
4500	253.0	38.6	126.4	79.0	46.4	33.3
4750	237.4	42.6	110.2	68.8	40.4	29.0
5000	223.2	46.7	96.1	60.1	35.2	25.3
5250	210.3	50.9	83.8	52.4	30.7	22.1
5500	198.5	55.3	73.0	45.6	26.8	19.2
5750	187.6	59.7	63.4	39.6	23.3	16.7
6000	177.5	64.2	54.9	34.3	20.1	14.5

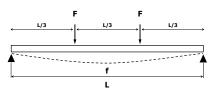
Load 1 – Uniformly Distributed Load



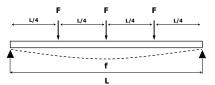
Load 2 - Centre Point Load



Load 3 - Two Point Loads



Load 4 – Three Point Loads



- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

HB41/S

41 x 41 x 2.5 BACK TO BACK SLOTTED

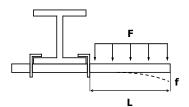


GALVANISED

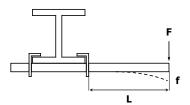
Cantilever Loads

	DESIGN	LOADS
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)
100	3082.4	1541.2
200	1540.5	770.3
300	1026.2	513.1
400	768.9	384.4
500	614.2	307.1
600	511.0	255.5
700	437.1	218.6
800	381.6	181.8
900	338.3	143.5
1000	303.6	116.1
1100	252.0	95.8
1200	210.4	80.3
1300	178.0	68.3
1400	152.2	58.7
1500	131.3	51.0

Load 1 - Uniformly Distributed Load



Load 2 - Point Load



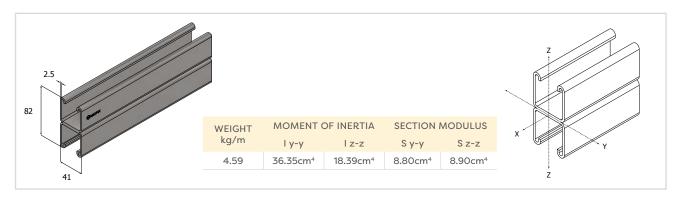
- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =1.6)
- Load capacity of beam clamps must be considered

HB41/P

$41 \times 41 \times 2.5$ BACK TO BACK PLAIN

PRE-GALVANISEI

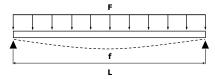
GALVANISED



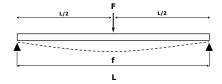
Beam Loads

beam Loc	aus					
		TE LOADS OAD 1		DESIGN	LOADS	
LENCTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
LENGTH L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	4933.3	0.1	4933.3	2466.7	1850.0	1233.3
500	2464.8	0.5	2464.8	1232.4	924.3	616.2
750	1641.0	1.2	1641.0	820.5	615.4	410.3
1000	1228.6	2.1	1228.6	614.3	460.7	307.1
1250	980.6	3.2	980.6	490.3	367.7	245.1
1500	814.8	4.6	814.8	407.4	305.5	203.7
1750	696.0	6.2	696.0	348.0	261.0	174.0
2000	606.6	8.1	606.6	303.3	227.5	151.7
2250	536.8	10.2	536.8	268.4	201.3	134.2
2500	480.7	12.6	465.3	240.4	170.7	120.2
2750	434.6	15.1	381.1	217.3	139.8	100.3
3000	395.9	17.9	316.7	197.9	116.2	83.4
3250	363.0	20.9	266.3	166.5	97.7	70.1
3500	334.6	24.0	226.1	141.3	82.9	59.5
3750	309.9	27.3	193.4	120.9	70.9	50.9
4000	288.0	30.8	166.4	104.0	61.0	43.8
4250	268.6	34.5	143.8	89.9	52.7	37.9
4500	251.2	38.3	124.6	77.9	45.7	32.8
4750	235.5	42.2	108.2	67.6	39.7	28.5
5000	221.2	46.3	94.0	58.8	34.5	24.8
5250	208.2	50.4	81.7	51.0	30.0	21.5
5500	196.3	54.6	70.7	44.2	26.0	18.6
5750	185.2	58.9	61.1	38.2	22.4	16.1
6000	175.0	63.3	52.4	32.8	19.2	13.8

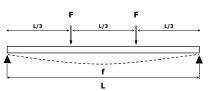
Load 1 – Uniformly Distributed Load



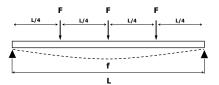
Load 2 - Centre Point Load



Load 3 – Two Point Loads



Load 4 - Three Point Loads



- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

HB41/P

41 x 41 x 2.5 BACK TO BACK PLAIN

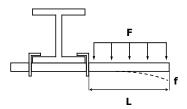
PRE-GALVANISED

GALVANISED

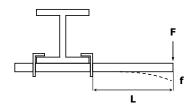
Cantilever Loads

	DESIGN	LOADS
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)
100	3083.6	1541.8
200	1541.0	770.5
300	1026.5	513.3
400	769.0	384.5
500	614.3	307.1
600	511.0	255.5
700	437.0	218.5
800	381.4	181.9
900	338.1	143.5
1000	303.3	116.1
1100	251.6	95.8
1200	210.0	80.3
1300	177.6	68.2
1400	151.7	58.7
1500	130.7	50.9

Load 1 - Uniformly Distributed Load



Load 2 - Point Load



- Yield Stress = 275N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =1.6)
- Load capacity of beam clamps must be considered

H\$82 41 x 82 x 2.5 SLOTTED

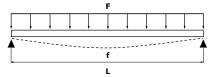
PRE-GALVANISED



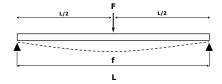
Beam Loads

Ream Loc	aas					
		TE LOADS OAD 1		DESIGN	LOADS	
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	3871.5	0.1	3871.5	1935.8	1451.8	967.9
500	1934.3	0.4	1934.3	967.1	725.4	483.6
750	1287.9	0.9	1287.9	643.9	483.0	322.0
1000	964.2	1.6	964.2	482.1	361.6	241.0
1250	769.6	2.4	769.6	384.8	288.6	192.4
1500	639.5	3.5	639.5	319.8	239.8	159.9
1750	546.3	4.8	546.3	273.2	204.9	136.6
2000	476.2	6.2	476.2	238.1	178.6	119.0
2250	421.4	7.8	421.4	210.7	158.0	105.4
2500	377.4	9.6	377.4	188.7	141.5	94.3
2750	341.2	11.5	341.2	170.6	127.9	85.3
3000	310.9	13.6	310.9	155.4	116.6	77.7
3250	285.1	15.9	279.0	142.5	102.3	71.3
3500	262.8	18.3	237.8	131.4	87.2	62.6
3750	243.4	20.8	204.4	121.7	75.0	53.8
4000	226.3	23.5	176.8	110.5	64.9	46.6
4250	211.0	26.3	153.9	96.2	56.4	40.5
4500	197.4	29.2	134.4	84.0	49.3	35.4
4750	185.1	32.2	117.9	73.7	43.2	31.0
5000	173.9	35.3	103.6	64.7	38.0	27.3
5250	163.7	38.4	91.1	56.9	33.4	24.0
5500	154.3	41.7	80.2	50.1	29.4	21.1
5750	145.7	44.9	70.5	44.1	25.9	18.6
6000	137.7	48.2	61.9	38.7	22.7	16.3

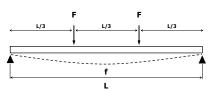
Load 1 – Uniformly Distributed Load



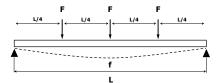
Load 2 - Centre Point Load



Load 3 – Two Point Loads



Load 4 - Three Point Loads



- Yield Stress = 280N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =2.12
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

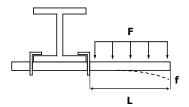
HS82 41 x 82 x 2.5 SLOTTED

PRE-GALVANISED

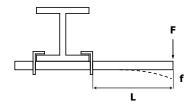
Cantilever Loads

	DESIGN	LOADS
LENGTH L (mm)	LOAD 1 F (KG)	LOAD 2 F (KG)
100	2419.9	1210.0
200	1209.4	604.7
300	805.6	402.8
400	603.5	301.8
500	482.1	241.0
600	401.0	200.5
700	343.0	171.5
800	299.4	149.7
900	265.4	132.7
1000	238.1	119.0
1100	215.7	99.0
1200	197.0	83.0
1300	181.1	70.6
1400	158.3	60.7
1500	136.8	52.8

Load 1 - Uniformly Distributed Load



Load 2 - Point Load



- Yield Stress = 280N/mm²
- Modulus of elasticity: E = 210000N/mm²
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress using safety coefficient =2.12)
- Load capacity of beam clamps must be considered

LS41 41 x 1.5 SLOTTED

PRE-GALVANISED

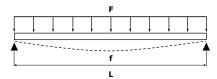


Beam Loads

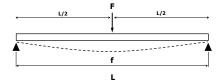
	0 = 1 11111	TE LOADS OAD 1		DESIGN	LOADS	
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	1078.7	0.3	1078.7	539.3	404.5	269.7
500	539.0	1.0	539.0	269.5	202.1	134.7
750	358.9	2.3	358.9	179.5	134.6	89.7
1000	268.8	4.1	268.8	134.4	100.8	67.2
1250	214.6	6.4	206.4	107.3	75.7	53.6
1500	178.4	9.2	142.3	89.0	52.2	37.5
1750	152.4	12.5	103.6	64.7	38.0	27.3
2000	132.9	16.3	78.3	48.9	28.7	20.6
2250	117.7	20.6	60.8	38.0	22.3	16.0
2500	105.5	25.3	48.2	30.1	17.7	12.7
2750	95.4	30.5	38.8	24.2	14.2	10.2
3000	87.0	36.1	31.5	19.7	11.6	_

- Yield Stress = 280N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

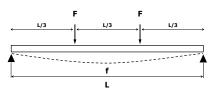
Load 1 – Uniformly Distributed Load



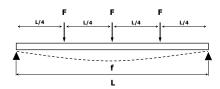
Load 2 - Centre Point Load



Load 3 – Two Point Loads

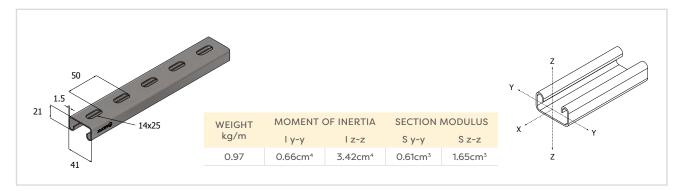


Load 4 - Three Point Loads



LS21 41 x 21 x 1.5 SLOTTED

PRE-GALVANISED

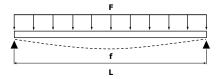


Beam Loads

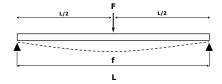
		TE LOADS OAD 1		DESIGN	LOADS	
LENGTH	LOAD	DEFLECTION	LOAD 1	LOAD 2	LOAD 3	LOAD 4
L (mm)	Fmax (KG)	Fmax (mm)	F (KG)	F (KG)	F (KG)	F (KG)
250	352.9	0.5	352.9	176.4	132.3	88.2
500	176.1	2.0	176.1	88.0	66.0	44.0
750	117.0	4.5	97.0	58.5	35.6	25.5
1000	87.3	7.9	54.0	33.7	19.8	14.2
1250	69.4	12.3	34.0	21.2	12.5	_
1500	57.4	17.6	23.0	14.3	_	_
1750	48.7	23.7	16.2	10.1	_	_
2000	42.2	30.7	11.8	-	_	_
2250	37.0	38.3	_	_	_	_
2500	32.8	46.7	-	-	-	-
2750	29.4	55.6	_	_	_	_
3000	26.5	65.0	_	_	_	_

- Yield Stress = 280N/mm²
- Modulus of elasticity: E = 210000N/mm²
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted
- Ultimate Loads maximum uniformly distributed load limited by stress using safety coefficient =1.6
- Design Loads maximum loads limited by deflection: f = L/200. (Values in italics are limited by stress not deflection)

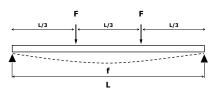
Load 1 – Uniformly Distributed Load



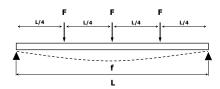
Load 2 - Centre Point Load



Load 3 – Two Point Loads

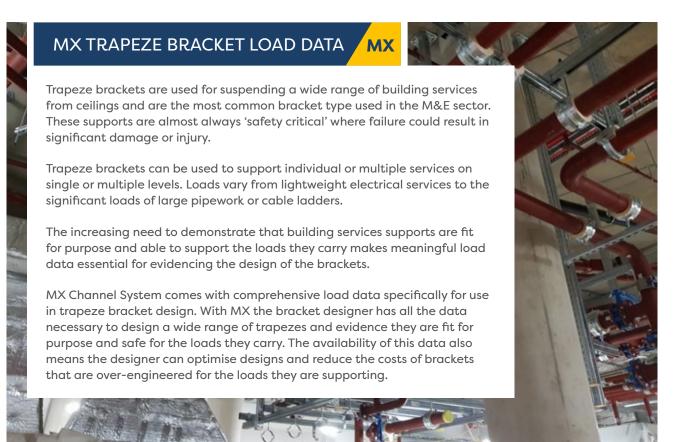


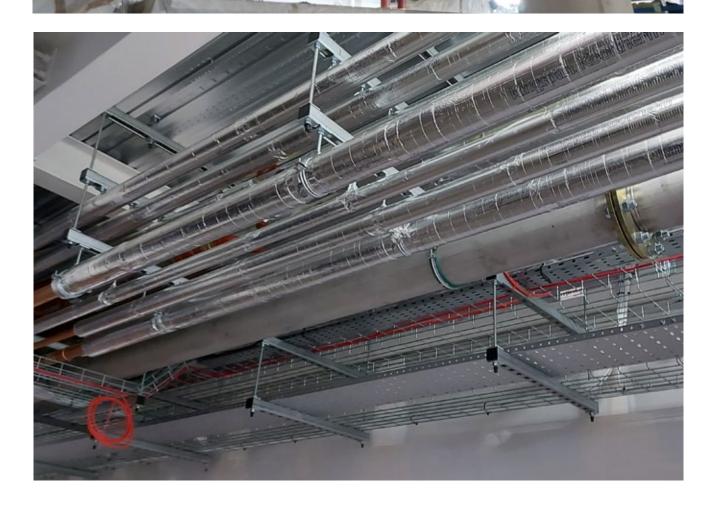
Load 4 - Three Point Loads





LOAD DATA

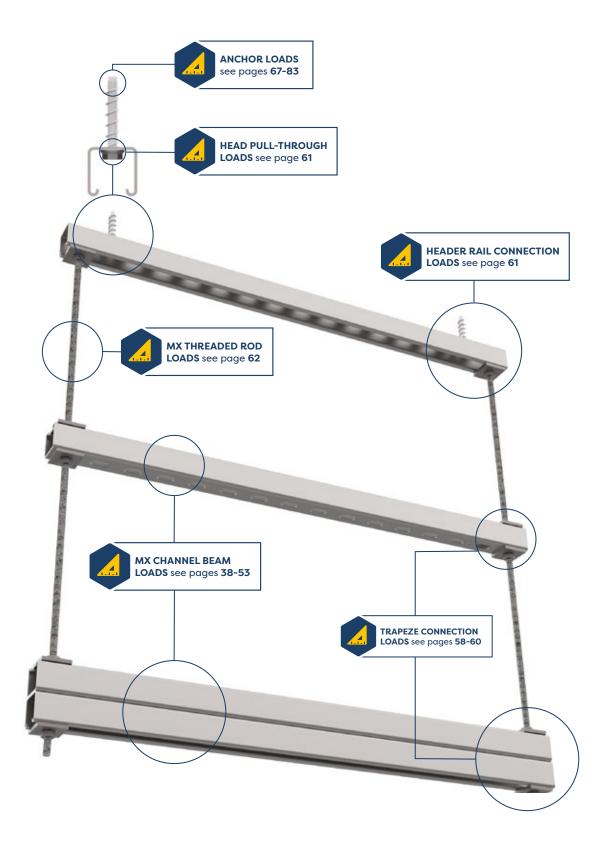






TRAPEZE BRACKETS THREADED ROD TYPE

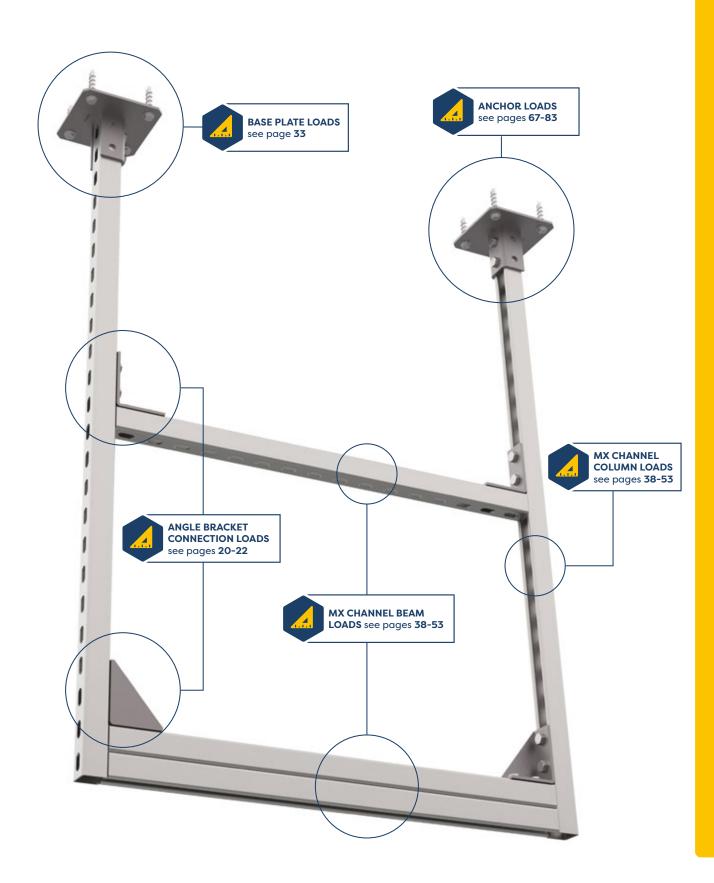
Representative design referenced to the relevant load data page for each element of a MX threaded rod trapeze bracket.





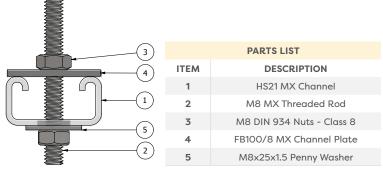
TRAPEZE BRACKETS CHANNEL TYPE

Representative design referenced to the relevant load data page for each element of a MX channel trapeze bracket.

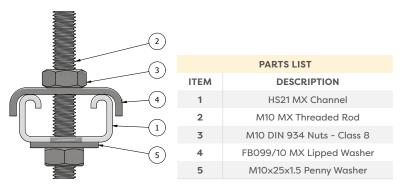


TRAPEZE CONNECTION LOADS

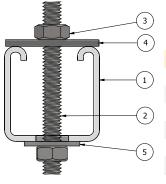
CONNECTION REFERENCE	MAX SAFE LOAD F _Z (KG)
M8TBC1	237



CONNECTION	MAX SAFE LOAD
REFERENCE	F _Z (KG)
М10ТВС1	326



CONNECTION	MAX SAFE LOAD
REFERENCE	F _Z (KG)
M8TBC2	237

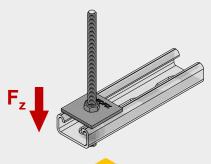


	PARTS LIST			
ITEM	DESCRIPTION			
1	HS41 MX Channel			
2	M8 MX Threaded Rod			
3	M8 DIN 934 Nuts - Class 8			
4	FB100/8 MX Channel Plate			
5	M8x25x1.5 Penny Washer			

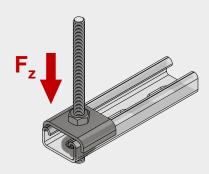
MAXIMUM SAFE LOADS

Loads apply to the specific connection designs illustrated with:

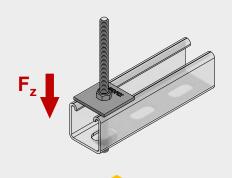
- 1) Components as specified
- 2) Torque values as specified
- 3) Threaded rod enclosed within full slot





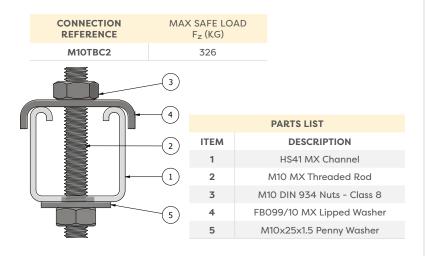


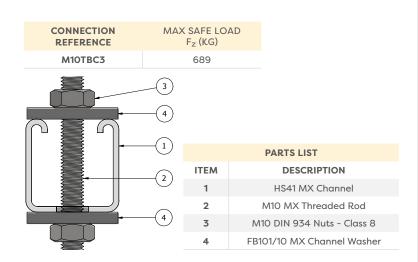


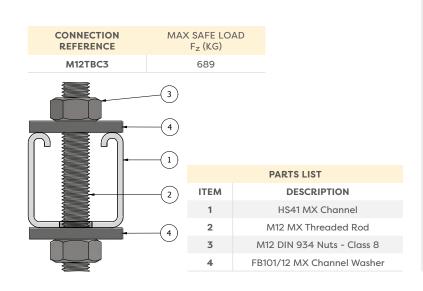




TRAPEZE CONNECTION LOADS



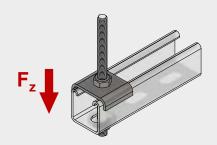




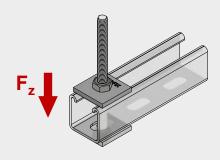
MAXIMUM SAFE LOADS

Loads apply to the specific connection designs illustrated with:

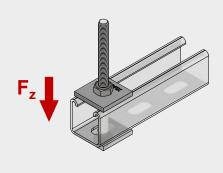
- 1) Components as specified
- 2) Torque values as specified
- 3) Threaded rod enclosed within full slot







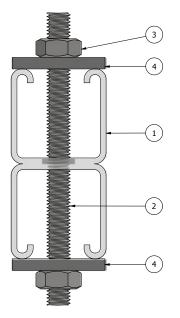






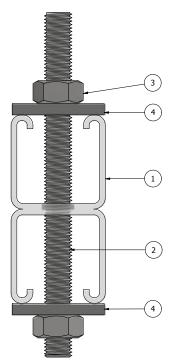
TRAPEZE CONNECTION LOADS

CONNECTION	MAX SAFE LOAD
REFERENCE	F _Z (KG)
M10TBC4	703



	PARTS LIST
ITEM	DESCRIPTION
1	HB41S MX Channel
2	M10 MX Threaded Rod
3	M10 DIN 934 Nuts - Class 8
4	FB101/10 MX Channel Washer

CONNECTION	MAX SAFE LOAD
REFERENCE	F _z (KG)
M12TBC4	703

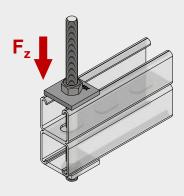


PARTS LIST			
ITEM	DESCRIPTION		
1	HB41S MX Channel		
2	M12 MX Threaded Rod		
3	M12 DIN 934 Nuts - Class 8		
4	FB101/12 MX Channel Washer		

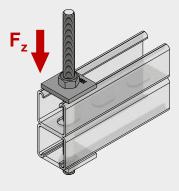
MAXIMUM SAFE LOADS

Loads apply to the specific connection designs illustrated with:

- 1) Components as specified
- 2) Torque values as specified
- 3) Threaded rod enclosed within full slot



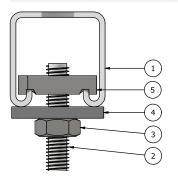






HEADER RAIL CONNECTION LOADS

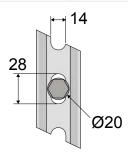
ROD SIZE	TORQUE NM	MAX SAFE LOAD F _z (KG)
M8	10	400
M10	25	584
M12	25	584



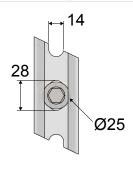
PARTS LIST			
ITEM	DESCRIPTION		
1	MX 2.5mm Channel		
2	MX Threaded Rod		
3	DIN 934 Nut - Class 8		
4	FB101 MX Channel Washer		
5	MX Channel Nut		

ANCHOR HEAD PULL-THROUGH LOADS

REFERENCE	FIXING OPTIONS FIXING WASHER		*MAX SAFE LOAD F _Z (KN)	*MAX SAFE LOAD F _z (KG)
D20-APT	M10 Hexagon Set Screw	M10 DIN 125		466
	M10 Throughbolt	M10 DIN 125	4.57	
	MCS10-HX MIDFIX Concrete Screw	Not Required		



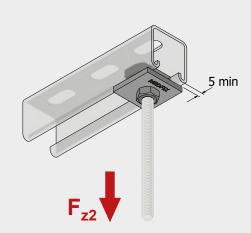
DEFEDENCE	FIXING OPTION		*MAX SAFE	
REFERENCE	FIXING	WASHER	LOAD F _z (KN)	LOAD F _z (KG)
D25-APT	MCS6-HX MIDFIX Concrete Screw	M8x25x1.5 Penny Washer		527
	MCS8-HX MIDFIX Concrete Screw	M10x25x1.5 Penny Washer	5.17	
	MCS6-LP MIDFIX Concrete Screw	M8x25x1.5 Penny Washer		



MAXIMUM SAFE LOADS

Loads apply to connection design illustrated with:

- 1) Components as specified
- 2) Torque values as specified



MAXIMUM SAFE LOADS

These loads solely apply to the head of the fixing or anchor pulling through the slot of the channel.

IT IS ALSO ESSENTIAL TO CONSIDER THE APPROVED LOAD FOR THE ANCHOR TO DETERMINE THE LIMITING FACTOR THAT APPLIES.

Loads apply to:

- 1) The fixing/washer combinations listed
- 2) MX 2.5mm slotted channel



MX THREADED ROD LOADS



SIZE	*1 MAX SAFE LOAD F _z (KG)	*2 MAX SAFE LOAD F _z (KG)
M8	447	400
M10	793	584
M12	1443	584

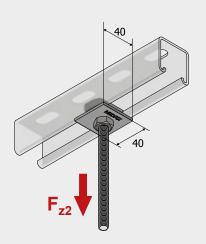


MAXIMUM SAFE LOADS

FOR MX THREADED ROD WITH ZINC PLATED AND GALVANISED FINISHES.

- *1 Load safe static tensile load for MX threaded rod combined with DIN 934 Grade 8 nut.
- *2 Load safe static tensile load for MX threaded rod combined with:
 - 1) MX 2.5mm channel
 - 2) MX Channel Nut
 - 3) MX FB101 Channel Plate Washer









pboar F?

Are you aware of the need for Anchor Fixing Compliance and Best Practice?

Anchors are a small component to which little consideration is frequently given but which are absolutely vital to preventing the collapse of the structure or installation that depends on them.

Failure of anchors can have serious consequences and yet time constraints and monetary considerations have made it common industry practice to routinely risk such failure. Often this will be through choosing incorrect, inadequate or low quality products, and even more frequently that the installer has not been trained in the correct installation of the anchor.

As the construction industry moves towards a tested, traceable and compliant future, increasing scrutiny is now being given to whole subject of achieving compliance and best practice in the selection, supply, installation and testing of anchors.

In this context there are several pieces of legislation that need to be considered:

1. 'Golden Thread' Legislation

The amendments to the building safety bill will bring the 'golden thread' legislation into practice. Defined as: 'the information that allows you to understand a building and the steps needed to keep both the building and people safe, now and in the future'.

This will have an impact on the whole of the anchor supply and installation process with an

increasing requirement for contractors to provide evidence that the anchors used are fit for purpose and installed correctly by competent installers trained to carry out compliant installations.

BS 8539:2012 Code of practice for selection and installation of anchors in concrete and masonry

This important document has become the industry standard for achieving safe and compliant anchor installations. BS 8539 sets out the roles and responsibilities for all parties from specifier to installer involved in the use of anchors in safety critical applications.

BS 8539 is a code of practice and while not legally binding it clearly establishes anchor 'best practice' for the industry. Contractors following the procedures and recommendations of the standard can demonstrate they are following best practice procedures and mitigate the risk of anchor failure on their projects.

3. Construction Products Regulation

The CPR requires that all anchors placed in the market for 'safety critical applications' are suitably approved. These approvals are called ETAs or European Technical Assessments and are awarded after the anchor has undergone rigorous testing.

Approved anchors will display the approval, carry the CE mark and have the manufacturer's 'Declaration of Performance', which is a guarantee of the loads they will carry when correctly installed in the relevant substrate.



ANCHOR FIXING AWARENESS



About European Technical Assessments

To achieve an ETA, a product must undergo a complex testing programme against defined testing criteria to determine its suitability for use in the specified application. The ETA certifies the quality, suitability and performance of the anchor and is the basis for the product being awarded the CE mark.

The ETA defines the anchor, the intended use of the anchor, the materials it can be used in and how it is to be installed. ETA approved products carry the ETA/CE mark, the ETA assessment number and the installation instructions on the product label or product information sheet.

MIDFIX has a comprehensive range of ETA approved anchors particularly suited to the requirements of the building services contractor. The ETA badges shown against the products identify the applications they are approved for.

Example of an ETA badge

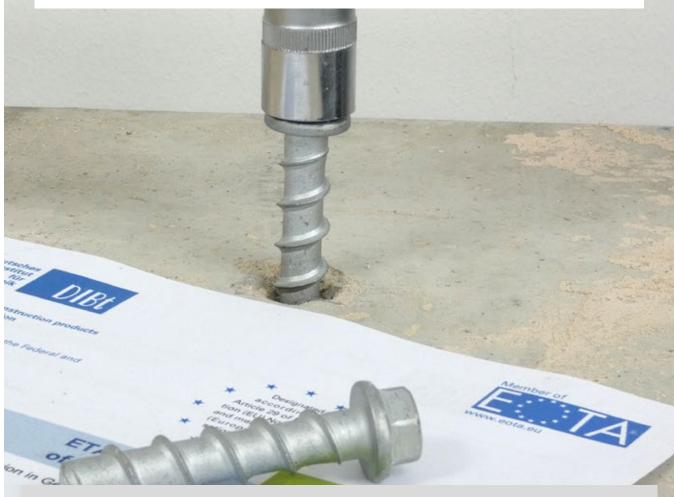




ETA-16/0123

For multiple use in concrete for non-structural applications

Identifies the product as having an ETA assessment and CE mark. The badge shows the unique ETA assessment number and the use the anchor has been assessed for.



CONCRETE - CRACKED OR UNCRACKED?

Anchors are qualified for use in either cracked or uncracked concrete. So what is cracked concrete? Any concrete in tension, such as the underside of ceilings and tension areas within walls, will have numerous, mostly invisible, small cracks and is called 'cracked concrete' – this is the nature of concrete.

Anchors used for suspending services from concrete ceilings need to have an ETA that covers cracked concrete.

MCS-RH MIDFIX ETA ROD HANGERS

Features

- Thread cutting anchors with dual M8/M10 internal thread
- For hanging building services from solid and hollow concrete ceilings
- · High load capacity in cracked and uncracked concrete
- Two lengths standard and short for reduced embedment
- Advantages small drill diameter, non-expanding, fast installation

Testing & approvals

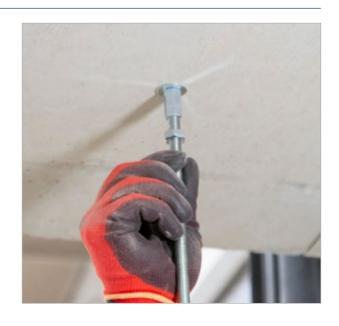
- European Technical Assessments ETA-15/0514 & ETA-16/0123
- Approved for use as a multiple fixing in cracked and uncracked concrete
- Approved for use as a multiple fixing in pre-stressed concrete floor slabs
- Approved for use as a single fixing in uncracked concrete
- · Fire resistance tested in concrete











MRH Rod Hangers

CODE	MF CODE	ANCHOR LENGTH	DRILL Ø x DEPTH	BOX QTY
MCS6x35RH	0293735	35	6 x 40	100
MCS6x55RH	0293755	55	6 x 60	100



Installation Tool

- Magnetic drive socket with ¼" shank
- Suits cordless drills and impact drivers

CODE	MF CODE	SIZE	DRIVE	PACK QTY
MOP13	2394213	13	1/4" Hex	1



TOOLBOX TALK

THREAD CUTTING ANCHORS

Over-tightening thread cutting anchors can strip the thread. As a rule of thumb, turn the anchor by no more than ½ turn from when the head makes contact with the fixture or substrate.





MCS-RH MIDFIX ETA ROD HANGERS

TECHNICAL DATA

For cracked and non-cracked concrete

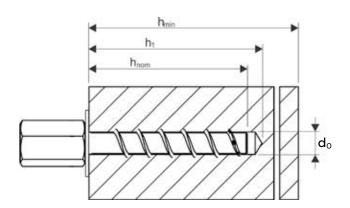
Extract from Permissible Service Conditions of European Technical Assessment ETA-16/0123

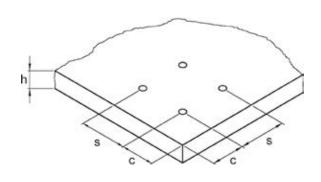
For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For anchor design, loads at reduced edge and spacing distances and loads under fire exposure the full ETA has to be considered.



LOADS AND PERFORMANCE DATA			6×35	6×55				
Cracked and non-cracked concrete								
Permissible tension load (c20/25 to c50/60)		[kN]	1.4	3.6				
Spacing and edge distance								
Nominal embedment depth	hnom	[mm]	35	55				
Required spacing*	S	[mm]	81	132				
Required edge distance*	С	[mm]	41	66				
Minimum thickness of concrete	h _{min}	[mm]	80	100				
Installation parameters								
Drill hole diameter	d _o	[mm]	6	6				
Depth of drill hole	h ₁	[mm]	40	60				
Installation torque		[Nm]	10	10				
Maximum torque (with impact screwdriver)		[Nm]	160	160				

^{*}For maximum loads





MCS-RH MIDFIX ETA ROD HANGERS

TECHNICAL DATA

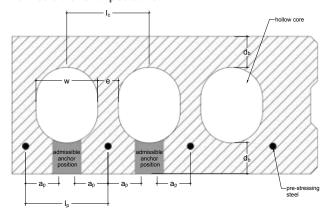
For precast pre-stressed hollow core slabs

Extract from Permissible Service Conditions of European Technical Assessment ETA-16/0123
For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For full design information consult ETA-16/0123.

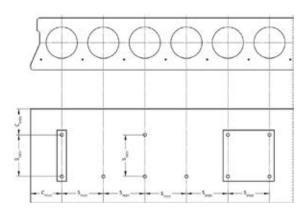


LOADS AND PERFORMANCE DATA	6×35						
Flange thickness	d _b	[mm]	min 25	min 35			
Permissible tension load		[kN]	0.5 1.0				
Spacing and edge distance							
Minimum spacing	S	[mm]	100				
Minimum edge distance	С	[mm]	100				
Minimum hollow core centres	I _c	[mm]	100				
Minimum reinforcement distance	I _p	[mm]	100				
Minimum distance between anchor & reinforcement	ap	[mm]	50				
Maximum hollow core/bridge width ratio	w/e		< 4,2				
Installation parameters							
Drill hole diameter		[mm]	6				
Depth of drill hole		[mm]	30	35	40		
Installation torque		[Nm]	10				
Maximum torque (with impact screwdriver)		[Nm]	160				

Admissible anchor positions



Minimum spacing and edge distance



MCS-HX MIDFIX ETA CONCRETE SCREWS

Features

- · Hexagon head thread cutting anchors
- European manufactured
- High load capacity in cracked and uncracked concrete
- Zinc flake coating for good corrosion resistance
- Fast installation using impact wrench
- Head markings for product identification
- ETA approval on all sizes including short embedment versions

Testing & approvals

- European Technical Assessments ETA-15/0514 & ETA-16/0123
- · Approved for use in cracked and uncracked concrete
- + $6 \times 40 \text{mm}$ version approved for use as a multiple fixing in pre-stressed concrete floor slabs
- Fire resistance approval







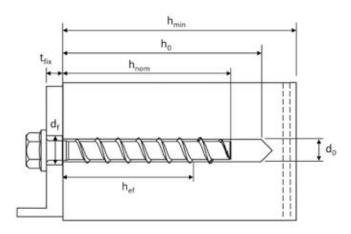




CODE	MF CODE	DRILL Ø	DRIVE	HEAD Ø	BOX QTY
MCS6x40HX	02938220	6	HEX 13	15	100
MCS8x50HX	02938325	8	HEX 13	16	50
MCS8x70HX	02938335	8	HEX 13	16	50
MCS10x60HX	02938430	10	HEX 15	20	50
MCS10x80HX	02938440	10	HEX 15	20	50

Fixing Thickness and Embedment Options

	FIXING THICKNESS			EMBEDMENT DEPTH OF ANCHOR			DRILL DEPTH			
CODE	$t_{fi \times 1}$	t_{fix2}	$t_{fi \times 3}$	h _{nom1}	h _{nom2}	h _{nom3}	h ₁	h ₂	h ₃	
MCS6x40HX	5	-	-	35	-	-	40	-	-	
MCS8x50HX	5	-	-	45	-	-	55	-	-	
MCS8x70HX	25	15	5	45	55	65	55	65	75	
MCS10x60HX	5	-	-	55	-	-	65	-	-	
MCS10x80HX	25	5	-	55	75	-	65	85	-	





MCS-HX MIDFIX ETA CONCRETE SCREWS

TECHNICAL DATA

For cracked and non-cracked concrete

MCS8 & MCS10 - Maximum permissible loads according to ETA-15/0514 for single anchors without spacing or edge distance considerations.

MCS6 - Maximum permissible loads according to ETA-16/0123. Only approved for multiple use for non-structural applications. Typical of building services installations where the load is shared between multiple fixings.

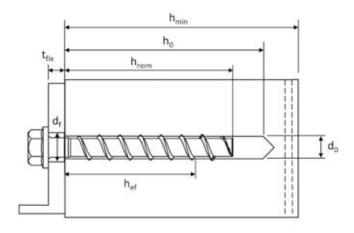
For anchor design, loads at reduced edge and spacing distances and loads under fire exposure the full ETA must be considered.

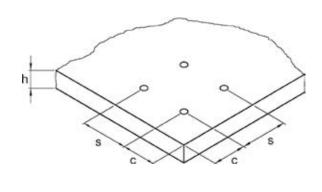




LOADS AND PERFORMANCE DATA (FOR CONCRETE C20/25)		MCS6		MCS8		MC	S10	
Embedment Depth	hnom		h _{nom1}	h _{nom1}	h _{nom2}	h _{nom3}	hnom1	h _{nom2}
Embedment Depth	Tinom	[mm]	35	45	55	65	55	75
Permissible tension load in Cracked Concrete		[kN]	1.4	2.4	4.3	5.7	4.3	7.6
Permissible shear load in Cracked Concrete		[kN]	2.4	3.5	4.6	6.1	4.6	15.2
Permissible tension load in Non-cracked Concrete		[kN]	1.4	3.6	5.7	7.6	5.7	9.5
Permissible shear load in Non-cracked Concrete		[kN]	3.4	5.0	6.6	8.8	6.6	19.4
Spacing and edge distance								
Required spacing*	S	[mm]	81	105	129	156	129	180
Required edge distance*	С	[mm]	41	53	65	78	65	90
Minimum thickness of concrete	hmin	[mm]	80	100	100	120	100	130
Installation parameters								
Drill hole diameter	d。	[mm]	6		8		10)
Depth of drill hole	h _。	[mm]	40	55	65	75	65	85
Installation torque		[Nm]	10	10 20		4	0	
Maximum torque (with impact screwdriver)		[Nm]	160		300		40	00

^{*}For maximum loads







MCS-HX MIDFIX ETA CONCRETE SCREWS

TECHNICAL DATA

For precast pre-stressed hollow core slabs

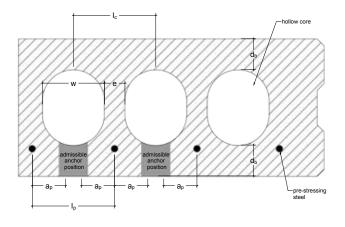
Maximum permissible loads according to ETA-16/0123 for anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings.

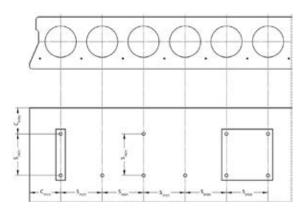




LOADS AND PERFORMANCE DATA				MCS6×40H	,	
Maximum fixing thickness		[MM]		5.0		
Flange thickness	d _b	[mm]	min 25	min 30	min 35	
Permissible tension load (C30/37 to C50/60)		[kN]	0.5	1.0	1.4	
Spacing and edge distance						
Minimum spacing	S	[mm]		100		
Minimum edge distance	С	[mm]	100			
Minimum hollow core centres	I _c	[mm]	100			
Minimum reinforcement centres	I _p	[mm]		100		
Minimum distance between anchor & reinforcement	ap	[mm]		50		
Maximum Hollow core/bridge width ratio	w/e			< 4,2		
Installation parameters						
Drill hole diameter		[mm]	6			
Depth of drill hole		[mm]	40			
Installation torque		[Nm]	10			
Maximum torque (with impact screwdriver)		[Nm]		160		

Admissible anchor positions





MCS-LP MIDFIX ETA CONCRETE SCREWS

Features

- Thread cutting anchors for cracked and uncracked concrete
- 17mm large pan head with torx drive ideal for fixing slotted channel
- Two lengths 28mm shallow embedment version for low risk of reinforcement hits
- Small drill diameter and fast installation

Testing & approvals

- European Technical Assessments ETA-15/0055 & ETA-16/0123
- · Approved for use as a multiple fixing in cracked and uncracked concrete
- 40mm version approved for use as a multiple fixing in pre-stressed concrete floor slabs
- Fire resistance tested in concrete









MCS-LP Concrete Screws

CODE	MF CODE	MAX THICKNESS	DRILL Ø	DRIVE	BOX QTY
MCS6x28LP	0293928	3	6	TX 30	100
MCS6x40LP	0293940	5	6	TX 30	100

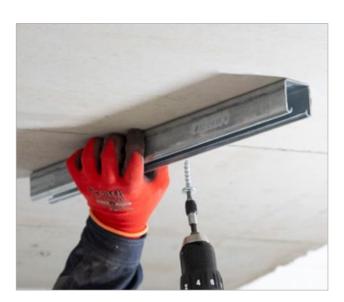


TOOLBOX TALK DRILLING

It is critical when installing anchors that holes are drilled to the correct diameter and depth.

Using a worn drill bit results in undersized holes, making installation difficult and increasing stresses in the anchor material and potentially leading to a failure – inspect drill bits frequently and replace when worn.

Removing dust from holes is also important to prevent the anchor bottoming on the compacted dust.







MCS-LP MIDFIX ETA CONCRETE SCREWS

TECHNICAL DATA

For cracked and non-cracked concrete

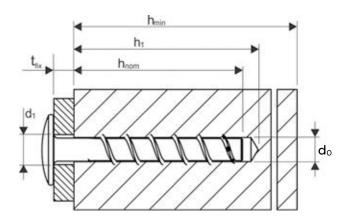
Extract from Permissible Service Conditions of European Technical Assessments ETA-15/0055 & ETA-16/0123
For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For anchor design, loads at reduced edge and spacing distances and loads under fire exposure the full ETA has to be considered.

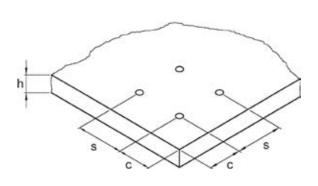




LOADS AND PERFORMANCE DATA			6×28	6×40
Cracked and non-cracked concrete				
Permissible tension load (C20/25 to C50/60)		[kN]	0.43	1.4
Spacing and edge distance				
Nominal embedment depth	h _{nom}	[mm]	25	35
Required spacing*	S	[mm]	57	81
Required edge distance*	С	[mm]	29	41
Minimum thickness of concrete	hmin	[mm]	80	80
Installation parameters				
Drill hole diameter	d _o	[mm]	6	6
Depth of drill hole	h ₁	[mm]	28	40
Installation torque		[Nm]	10	10
Maximum torque (with impact screwdriver)		[Nm]	**	160

^{*}For maximum loads ** Impact screwdriver should not be used





MCS-LP MIDFIX ETA CONCRETE SCREWS

TECHNICAL DATA

For precast pre-stressed hollow core slabs

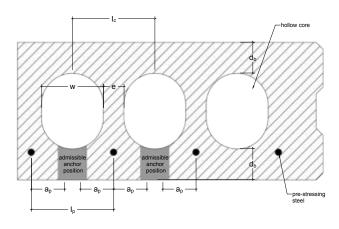
Extract from Permissible Service Conditions of European Technical Assessment ETA-16/0123

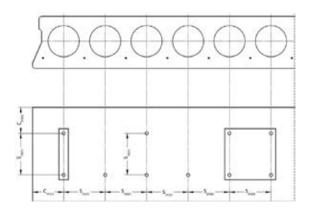
For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For full design information and loads under fire exposure consult ETA-16/0123.



LOADS AND PERFORMANCE DATA				6×40	
Flange thickness	d _b	[mm]	min 25	min 30	min 35
Permissible tension load (C30/37 to C50/60)		[kN]	0.5	1.0	1.4
Spacing and edge distance					
Minimum spacing	S	[mm]		100	
Minimum edge distance	С	[mm]		100	
Minimum hollow core centres	I _c	[mm]		100	
Minimum reinforcement centres	I _p	[mm]		100	
Minimum distance between anchor & reinforcement	ap	[mm]		50	
Maximum Hollow core/bridge width ratio	w/e			< 4,2	
Installation parameters					
Drill hole diameter		[mm]		6	
Depth of drill hole		[mm]	40		
Installation torque		[Nm]	10		
Maximum torque (with impact screwdriver)		[Nm]		160	

Admissible anchor positions





Features

- · High performance internally threaded anchors for concrete
- 25mm shallow embedment versions for low risk of reinforcement hits
- · Rimmed design for flush setting
- Reliably set by means of manual or SDS setting tools
- Brilliant SDS stop-drill bit with plug-on setting tool for quick and effortless, high volume installations

Testing & approvals

- European Technical Assessments ETA-02/0020 & ETA-05/0116
- Approved for use as a multiple fixing in cracked and uncracked concrete
- Approved for use as a multiple fixing in pre-stressed concrete floor slabs
- · Approved for use as a single fixing in uncracked concrete
- Fire resistance tested in concrete









MWA Wedge Anchors

CODE MF CODE DRILL Ø × DEPTH THREAD Ø × LENGTH BOX QTY MWA6x25 02120625 8 x 25 M6 x 12 100 MWA8x25 02120825 10 x 25 M8 x 12 100 MWA8x30 02120830 10 x 30 M8 x 13 100 MWA10x25 02121025 12 x 25 M10 x 12 100 MWA10x30 02121030 12 x 30 M10 x 12 100 MWA12x25 02121225 15 x 25 M12 x 12 100 MWA12x50 02121250 15 x 50 M12 x 18 100	•				
MWA8x25 02120825 10 x 25 M8 x 12 100 MWA8x30 02120830 10 x 30 M8 x 13 100 MWA10x25 02121025 12 x 25 M10 x 12 100 MWA10x30 02121030 12 x 30 M10 x 12 100 MWA12x25 02121225 15 x 25 M12 x 12 100	CODE	MF CODE			BOX QTY
MWA8x30 02120830 10 x 30 M8 x 13 100 MWA10x25 02121025 12 x 25 M10 x 12 100 MWA10x30 02121030 12 x 30 M10 x 12 100 MWA12x25 02121225 15 x 25 M12 x 12 100	MWA6x25	02120625	8 x 25	M6 x 12	100
MWA10x25 02121025 12 x 25 M10 x 12 100 MWA10x30 02121030 12 x 30 M10 x 12 100 MWA12x25 02121225 15 x 25 M12 x 12 100	MWA8x25	02120825	10 x 25	M8 x 12	100
MWA10x30 02121030 12 x 30 M10 x 12 100 MWA12x25 02121225 15 x 25 M12 x 12 100	MWA8x30	02120830	10 x 30	M8 x 13	100
MWA12x25 02121225 15 x 25 M12 x 12 100	MWA10x25	02121025	12 x 25	M10 x 12	100
	MWA10x30	02121030	12 x 30	M10 x 12	100
MWA12x50 02121250 15 x 50 M12 x 18 100	MWA12x25	02121225	15 x 25	M12 x 12	100
	MWA12x50	02121250	15 x 50	M12 x 18	100



MBB SDS Stop-Drill Bits

- Facilitate repetitive drilling to correct hole depth
- · Reduced risk of reinforcement hits

CODE	MF CODE	SUITS WEDGE ANCHORS	SUITS PLUG-ON SETTING KIT	PACK QTY
MBB10x25	0216310	MWA8x25	MSK8×25	1
MBB10x30	0216320	MWA8x30	MSK8x30	1
MBB12x25	0216312	MWA10x25	MSK10×25	1
MBB12x30	0216322	MWA10x30	MSK10x30	1
MBB15x25	0216315	MWA12x25		1





TOOLBOX TALK SETTING TOOLS

To ensure wedge anchors are correctly set use only the setting tools supplied by the manufacturer. Using an SDS setting tool generally achieves better results than can be achieved by hand especially in overhead situations.

MSK Plug-on Setting Kit

- Comprises of MBB SDS stop-drill with plug-on setting tool for drilling and setting in one easy and effortless operation
- Use just one drilling machine to drill and set the anchors without changing over drill, plug-on and set.
- Specially recommended for repetitive overhead installations
- Just replace MBB Stop-drills when worn

CODE	MF CODE	SUITS WEDGE ANCHOR	PACK QTY
MSK8X25	02160825	MWA8x25	1
MSK8X30	02160830	MWA8x30	1
MSK10X25	02161025	MWA10x25	1
MSK10X30	02161030	MWA10x30	1





MSD SDS Setting Tool

• Standard SDS tools for hammer drill setting

CODE	MF CODE	SUITS WEDGE ANCHOR	PACK QTY
MSD8x25	0216385	MWA8×25	1
MSD8x30	0216390	MWA8x30	1
MSD10x25	0216415	MWA10x25	1
MSD10x30	0216420	MWA10x30	1
MSD12x25	0216525	MWA12×25	1
MSD12x50	0216550	MWA12x50	1



MSS Safety Setting Tool

• Manual setting tool with safety handle

CODE	MF CODE	SUITS WEDGE ANCHOR	PACK QTY
MSS6x25	0216706	MWA6x25	1
MSS8x25	0216708	MWA8x25	1
MSS8x30	0216718	MWA 8x30	1
MSS10x25	0216710	MWA10x25	1
MSS10x30	0216720	MWA10x30	1
MSS12x25	0216712	MWA12x25	1
MSS12x50	0216732	MWA 12x50	1





TECHNICAL DATA

For cracked and non-cracked concrete

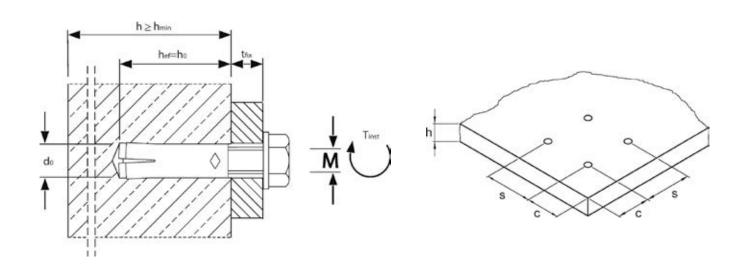
Extract from Permissible Service Conditions of European Technical Assessment ETA-05/0116

For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For anchor design, loads at reduced edge and spacing distances and loads under fire exposure the full ETA has to be considered.



LOADS AND PERFORMANCE DATA	M6×25	M8×25	M8×30	M10×25	M10×30	M12×25	M12×50		
					Cracked an	d non-crack	ed concrete		
Approved loads (C20/25 to C50/60)		[kN]	1.7	1.9	1.7	2.1	2.0	2.1	2.4
Spacing and edge distance									
Effective anchorage depth	hef	[mm]	25	25	30	25	30	25	50
Required spacing*	S	[mm]	75	75	180	75	230	100	170
Required edge distance*	С	[mm]	60	100	95	100	115	110	165
Minimum thickness of concrete	hmin	[mm]	100	100	100	100	120	100	130
Installation parameters									
Drill hole diameter	d _o	[mm]	8	10	10	12	12	15	15
Diameter of clearance hole in the fixture	d _r	[mm]	7	9	9	12	12	14	14
Depth of drill hole	ho	[mm]	25	25	30	25	30	25	50
Installation torque	Tinst ≤	[Nm]	4	8	8	15	15	35	35
Minimum screwing depth		[mm]	6	8	9	10	10	12	13
Maximum screwing depth		[mm]	12	12	13	12	12	12	18

^{*}For maximum loads



TECHNICAL DATA

For precast pre-stressed hollow core slabs

Extract from Permissible Service Conditions of European Technical Assessment ETA-05/0116

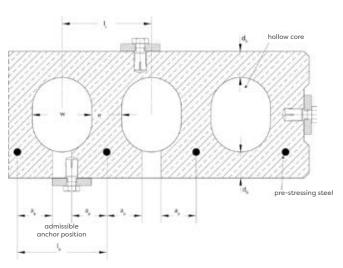
For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For full design information consult ETA-05/116.

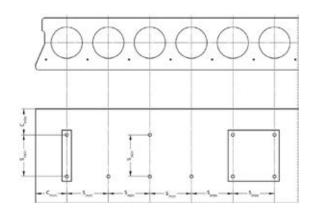


LOADS AND PERFORMANCE DATA			M6×25	M8×25	M10×25	M12×25		
	Precast	Precast pre-stressed hollow core slabs C30/37 to C50/60						
Flange thickness	d _b	[mm]		3	5*			
Approved loads		[kN]	1.7	1.9	2.1	2.1		
Spacing and edge distance								
Minimum spacing	S	[mm]		20	00			
Minimum edge distance	С	[mm]		150				
Minimum hollow core centres	I _c	[mm]		100				
Minimum reinforcement centres	l _p	[mm]		10	00			
Minimum distance between anchor & reinforcement	a _p	[mm]		5	60			
Maximum hollow core/bridge width ratio	w/e			:	2			
Installation parameters								
Drill hole diameter	d。	[mm]	8	10	12	15		
Diameter of clearance hole in the fixture	dr	[mm]	7	9	12	14		
Depth of drill hole*	ho	[mm]	25 25 25 25					
Installation torque	Tinst ≤	[Nm]	4 8 15 35			35		
Minimum screwing depth		[mm]	6	8	10	12		
Maximum screwing depth		[mm]	12 12 12 12					

^{*}Drill hole must not enter hollow core

Admissible anchor positions





ETA THROUGHBOLTS - ZINC FLAKE

Features

- · High performance throughbolt for safety critical applications
- Suitable for overhead fixings into cracked concrete
- Zinc flake coating for extra corrosion resistance
- Through fixing for easy installation

Testing & approvals

- European Technical Assessment ETA-17/0184
- Approved for structural use in cracked and non-cracked concrete
- Fire resistance tested up to 120 minutes







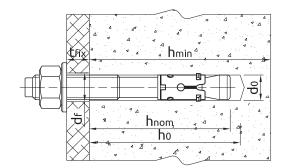
	FIXING THICKNESS					
SIZE	MF CODE	tfi×1	tfix2	DRILL Ø	BOX QTY	
M8 X 65	02442332	15	-	8	100	
M10 X 65	02442432	5	-	10	50	
M10 X 80	02442440	20	-	10	50	
M10 X 95	02442447	35	15	10	50	
M10 X 115	02442452	55	35	10	50	
M12 X 80	02442540	5	-	12	50	
M12 X 100	02442550	25	5	12	50	
M12 X 120	02442554	45	25	12	50	
M16 X 140	02442658	40	20	16	25	



TOOLBOX TALK TORQUE WRENCHES

BS8539 stipulates that anchors should be tightened to the manufacturer's recommended torque settings.

This will ensure that anchors are consistently set to achieve the maximum load and the anchor material is not over-stressed.







ETA THROUGHBOLTS - ZINC FLAKE

TECHNICAL DATA

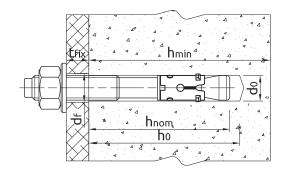
For cracked and non-cracked concrete

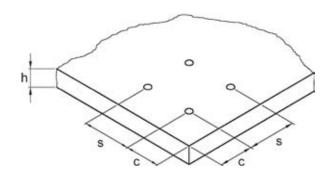
Maximum allowable loads for single anchor in C20/25 concrete without spacing or edge distance considerations. For anchor design, loads at reduced edge and spacing distances and loads under fire exposure the full ETA has to be considered.



LOADS AND PERFORMANCE DATA (CONCRETE C20/25)			N	18	M10		M12		M16	
Fush advant Booth	hnom		tfix1	tfix2	tfix1	tfix2	tfix1	tfix2	tfix1	tfix2
Embedment Depth	Tinom	[mm]	40	55	49	69	60	80	80	100
Permissible tension load in Cracked Concrete		[kN]	1.2	2.0	2.4	4.3	4.3	5.7	7.6	9.5
Permissible shear load in Cracked Concrete		[kN]	3.0	5.2	4.0	7.4	5.5	13.5	17.2	25.7
Permissible tension load in Non-cracked Concrete		[kN]	3.0	3.6	3.6	5.7	5.7	9.5	12.3	16.6
Permissible shear load in Non-cracked Concrete		[kN]	4.2	5.2	5.7	9.0	7.8	13.5	24.6	26.9
Spacing and edge distance										
Minimum spacing*	S	[mm]	55	50	75	70	150	90	190	160
Minimum edge distance*	С	[mm]	45	40	60	50	80	65	110	90
Minimum thickness of concrete	h	[mm]	100	100	100	120	100	140	130	170
Installation parameters										
Drill hole diameter	d _o	[mm]	8	В	1	0	1	2	1	6
Depth of drill hole	h _o	[mm]	50	65	59	79	70	90	90	110
Installation torque		[Nm]	1	0	2	0	4	0	10	00

^{*}For maximum loads





HCA ETA HOLLOW CONCRETE ANCHORS

Features

- High load performance anchors for hollow concrete ceiling slabs
- High expansion capacity
- Female thread for accepting bolts and threaded rod
- Ideal for building services installations

Testing & approvals

- European Technical Assessment ETA-15/0912
- Approved for use as a multiple fixing in pre-stressed concrete floor slabs
- Fire resistance tested







HCA Hollow Concrete Anchors

CODE	MF CODE	ANCHOR LENGTH	DRILL Ø	BOX QTY
HCA M8	0211308	44	12	50
HCA M10	0211310	53	16	25



TOOLBOX TALK TORQUE WRENCHES

 ${\sf BS8539}$ stipulates that anchors should be tightened to the manufacturer's recommended torque settings.

This will ensure that anchors are consistently set to achieve the maximum load and the anchor material is not over-stressed.

HCA ETA HOLLOW CONCRETE ANCHORS

TECHNICAL DATA

For precast pre-stressed hollow core slabs

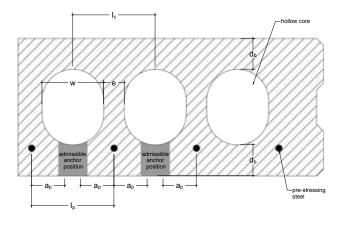
Extract from European Technical Assessment ETA-15/0912

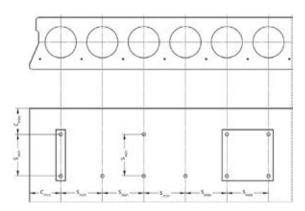
For anchors used in multiple for non-structural applications. Typical of building services installations where the load of the installation is shared between multiple fixings. Total safety factor as per ETAG 001 included. For full design information consult ETA-15/0912.



LOADS AND PERFORMANCE DATA			HCA M8	HCA M10
	d _b - min 25mm	[kN]	1.98	3.17
Permissible tension load (≥ C40/50)	d _b - min 30mm	[kN]	3.96	3.96
	d _b - min 40mm	[kN]	4.56	5.55
Spacing and edge distance				
Minimum spacing	S	[mm]	200	200
Minimum edge distance	С	[mm]	100	100
Minimum hollow core centres	I _c	[mm]	100	100
Minimum reinforcement centres	I _p	[mm]	100	100
Minimum distance between anchor & reinforcement	a _p	[mm]	50	50
Maximum Hollow core/bridge width ratio	w/e		2	2
Installation parameters				
Drill hole diameter ≥				16
Depth of drill hole			50	60
Installation torque [Nm			20	30
Minimum class of bolt			6.8	

Admissible anchor positions









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