

Installation channel MM-C

The innovative channel system for light and medium-duty installations



Applications

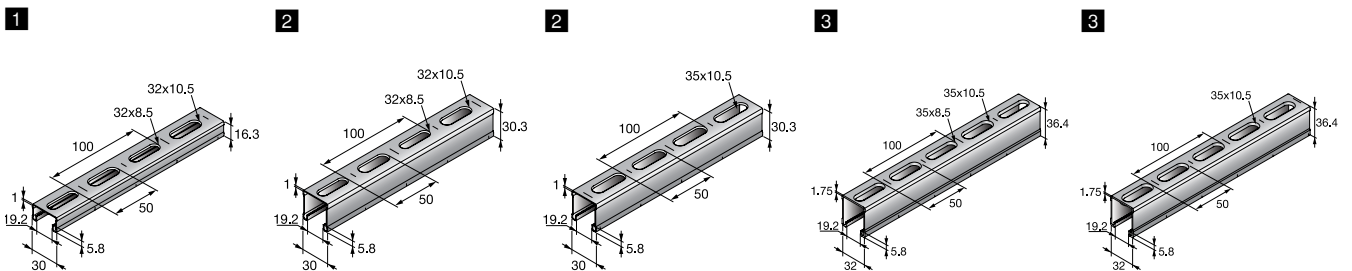
- Light and medium-duty pipe support systems
- Fastening ventilation ducts and cable trays

Advantages

- C-profile with serrated edges
- Reinforced slots for greater versatility
- Dimension marks assist installation
- Modular channel system

Technical data

MM-C	
Material composition	S250GD as per DIN EN 10346
Surface Finish	Sendzimir galvanized



Nr.	Height - H	Length - L	Thickness	Weight per m length	Order designation	Sales Quantity	Item Number
1	16 mm	2 m	1 mm	565 g	Install. channel MM-C-16 2m	16 m	00418748
2	30 mm	2 m	1 mm	779 g	Install. channel MM-C-30 2m	16 m	00418749
2	30 mm	3 m	1 mm	779 g	Install. channel MM-C-30 3m M10	18 m	00418776
3	36 mm	2 m	1.75 mm	1.29 kg	Install. channel MM-C-36 2m	16 m	00418750
3	36 mm	3 m	1.75 mm	1.29 kg	Install. channel MM-C-36 3m M10	18 m	00418751

Bracket

MM-B

High-quality bracket for various applications



Applications

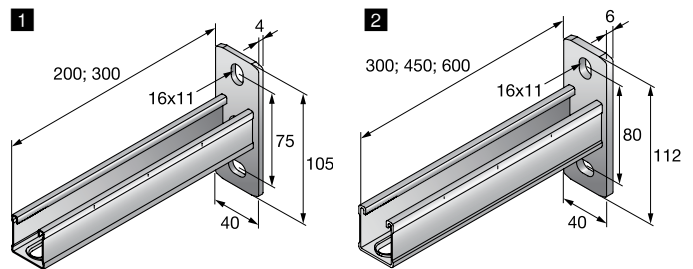
- Installation of pipe supports, air ducts and cable trays

Advantages

- Serrated C-section
- Reinforced slots for greater versatility and rigidity
- Matched to anchor loading capacity
- Dimension marks assist installation

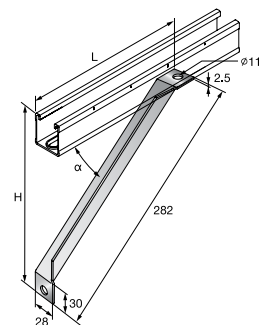
Technical data

MM-B	
Material composition	Material channel: S235 JR as per DIN EN 10025-2, Material plate: S355 MC as per DIN EN 10149-2
Surface Finish	Galvanized



Nr.	Length - L	Bar height	Weight	Order designation	Sales Quantity	Item Number
1	200 mm	30 mm	278 g	Bracket MM-B-30/200	10 pc	00418752
1	300 mm	30 mm	356 g	Bracket MM-B-30/300	10 pc	00418753
2	300 mm	36 mm	585 g	Bracket MM-B-36/300	10 pc	00418754
2	450 mm	36 mm	778 g	Bracket MM-B-36/450	10 pc	00418755
2	600 mm	36 mm	971 g	Bracket MM-B-36/600	10 pc	00418756

Angle brace MM-AB



Ordering

Length - L	Height - H	Angle	Weight	Order designation	Sales Quantity	Item Number
202 mm	202 mm	45 °	230 g	Angle brace MM-AB	10 pc	00418772

T-head bolt MM-ST

With a unique fastening mechanism for great versatility and higher productivity



Applications

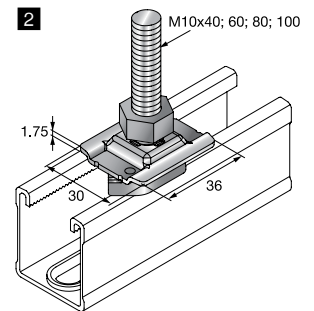
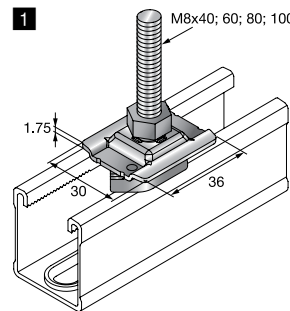
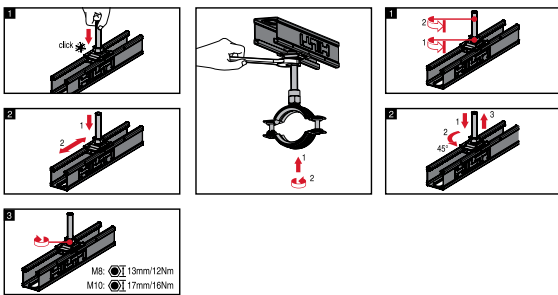
- Fastening light and medium-duty piping

Advantages

- Extremely fast installation thanks to the unique fastening mechanism
- Easy height adjustment within the installation channel
- Greater versatility thanks to various threaded rod lengths
- Serrated surfaces for easy, accurate adjustment

Technical data

MM-ST	
Material composition	Plate: DD11 as per DIN EN 10111, Nut: DC04 as per DIN EN 10130
Surface Finish	Galvanized



Nr.	Connection thread	Weight	Order designation	Sales Quantity	Item Number
1	M8	41.3 g	T-head bolt MM-ST M8x40	50 pc	00418777
1	M8	47.4 g	T-head bolt MM-ST M8x60	50 pc	00418778
1	M8	53.6 g	T-head bolt MM-ST M8x80	50 pc	00418779
1	M8	60.5 g	T-head bolt MM-ST M8x100	50 pc	00418780
2	M10	52.8 g	T-head bolt MM-ST M10x40	50 pc	00418782
2	M10	62.6 g	T-head bolt MM-ST M10x60	50 pc	00418791
2	M10	72.5 g	T-head bolt MM-ST M10x80	50 pc	00418792
2	M10	82.1 g	T-head bolt MM-ST M10x100	50 pc	00418793

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Item no.	Rec. tensile load, Zrec (N)		Rec. shear load, Qrec (N)		Bending moment, threaded rod 4.6 (Nm) ¹⁾	Tighting torque, Md (Nm)
	Channel I	Channel II	Channel I	Channel II		
MM-ST M8	1200	1500	1000	1000	6,4	12
MM-ST M10	1200	1500	1000	1000	12,8	16

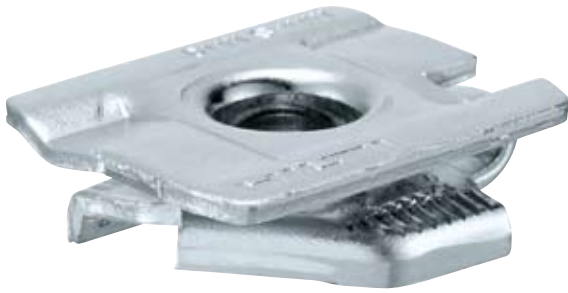
Channel I: MM-C-16, MM-C-30

Channel II: MM-C-36

¹⁾ Calculation as per DIBt

Pipe ring saddle MM-S

The superior solution for attaching threaded rods to channels

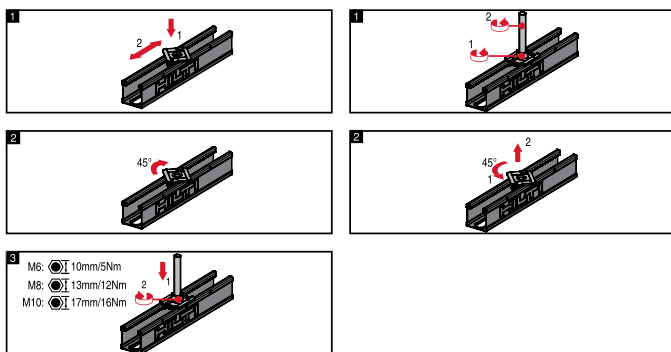


Applications

- Installing threaded rods for pipe and air duct suspension systems

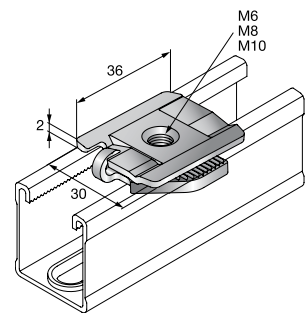
Advantages

- Suitable for all three MM channel profiles
- Can be fitted and removed without need for tools
- Easy alignment in the right position



Technical data

MM-S	
Material composition	S355 MC as per DIN EN 10149-2
Surface Finish	Galvanized



Connection thread	Weight	Order designation	Sales Quantity	Item Number
M6	25 g	Pipe ring saddle MM-S M6	25 pc	00418759
M8	25 g	Pipe ring saddle MM-S M8	25 pc	00418760
M10	24 g	Pipe ring saddle MM-S M10	25 pc	00418761

Item no.	Rec. tensile load, Zrec (N)		Rec. shear load, Qrec (N)		Bending moment, threaded rod 4.6 (Nm) ¹⁾	Tighting torque, Md (Nm)
	Channel I	Channel II	Channel I	Channel II		
MM-S M6	1200	1500	800	1000	2,6	5
MM-S M8	1200	1500	800	1000	6,4	12
MM-S M10	1200	1500	800	1000	12,8	16

Channel I: MM-C-16, MM-C-30

Channel II: MM-C-36

¹⁾ Calculation as per DIBt

Wing nut MM-WN

Handy, one-piece part for fitting connectors to channels



Applications

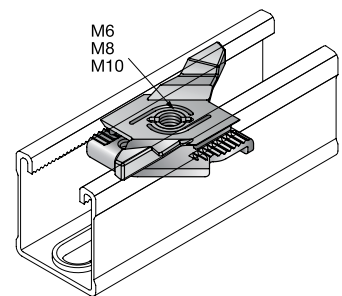
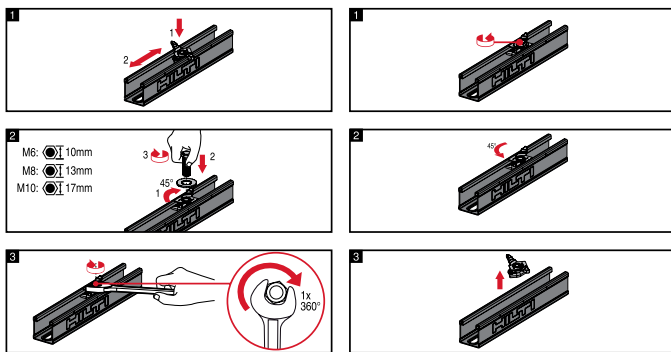
- Fitting connectors to installation channels

Advantages

- Makes in-plane installation on channels possible
- Allows direct attachment to channels
- Handy, one-piece part

Technical data

MM-WN	
Material composition	Nut: DC04 as per DIN EN 10130, Wing: PA
Surface Finish	Galvanized



Connection thread	Weight	Order designation	Sales Quantity	Item Number
M6	9.3 g	Wing nut MM-WN M6	50 pc	00418764
M8	9.6 g	Wing nut MM-WN M8	50 pc	00418765
M10	9.2 g	Wing nut MM-WN M10	50 pc	00418766

Item no.	Rec. tensile load, Zrec (N)		Rec. shear load, Qrec (N)		Tighting torque, Md (Nm)
	Channel I	Channel II	Channel I	Channel II	
MM-WN M6	1200	1200	700	1000	5
MM-WN M8	1200	1500	1000	1000	5
MM-WN M10	1200	1500	1000	1000	5

Channel I: MM-C-16, MM-C-30

Channel II: MM-C-36

Angle

MM-A-90 / MM-AH-90

Ideal for use with channels in various positions



Applications

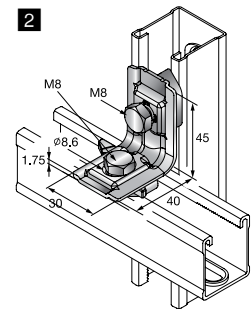
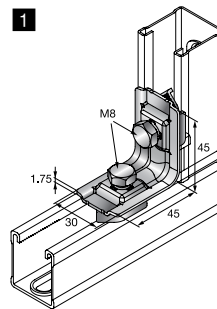
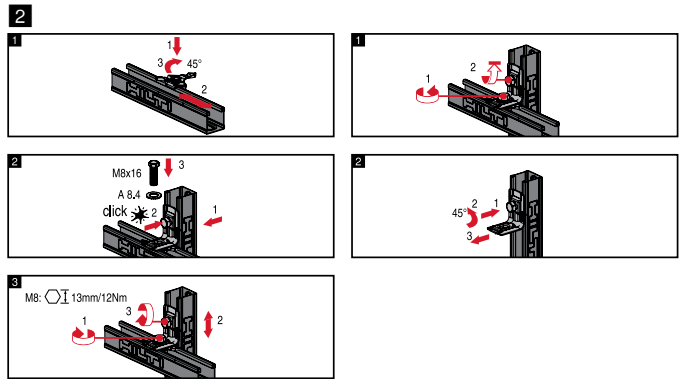
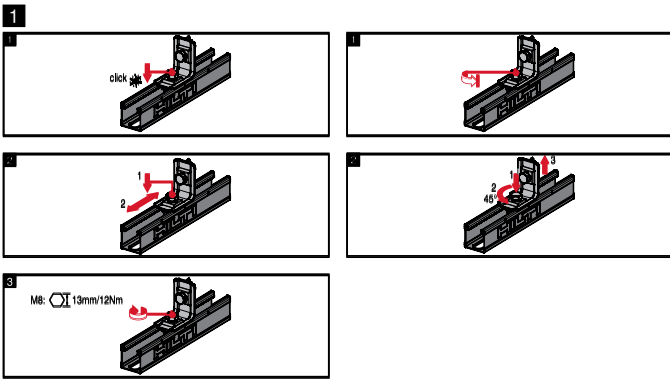
- Assembly of frames and supporting structures
- Joining channels at right angles
- Recommended for U-frame structures

Advantages

- Pre-assembled for rapid installation
- Can be fitted to channels in various positions

Technical data

MM-A-90	
Material composition	DC04 as per DIN EN 10130
Surface Finish	Galvanized
Additional product information	Pre-assembled bolts



Nr.	Angle	Weight	Order designation	Sales Quantity	Item Number
1	90 °	75 g	Angle MM-A-90	20 pc	00418757
2	90 °	52 g	Angle MM-AH-90	20 pc	00418758

Item no.	Rec. tensile load, Zrec (N)		Rec. shear load, Qrec (N)		Tighting torque, Md (Nm)
	Channel I	Channel II	Channel I	Channel II	
MM-A-90	1000	1000	1000	1000	12
MM-AH-90	500	500	500	500	12

Channel I: MM-C-16, MM-C-30

Channel II: MM-C-36



Rail support MM-R-16-36

Pre-assembled support for quick and reliable installation



Applications

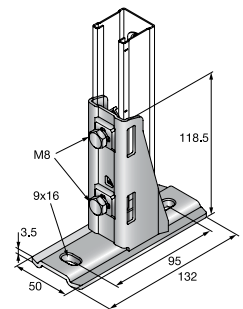
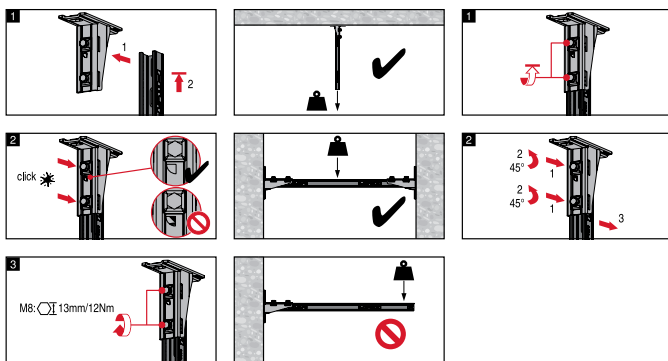
- Fastening channels to any base material

Advantages

- Pre-assembled for rapid installation
- Reliable and easy to use
- Very easy alignment of the pre-assembled system

Technical data

MM-R-16-36	
Material composition	Material: DC04 as per DIN EN 10130, Plate: DD11 as per DIN EN 10111
Surface Finish	Galvanized
Additional product information	Pre-assembled bolts
For use with	MM-C-16, MM-C-30, MM-C-36



Angle	Weight	Order designation	Sales Quantity	Item Number
90 °	390 g	Rail support MM-R-16-36	10 pc	00418762

Item no.	Rec. tensile load, Zrec (N)		Rec. shear load, Qrec (N)		Tighting torque, Md (Nm)
	Channel I	Channel II	Channel I	Channel II	
MM-R-16-36	1200	1500	1000	1000	12

Channel I: MM-C-16, MM-C-30

Channel II: MM-C-36

Beam clamp MM-T-16-36

New beam clamp allows fastening from both sides of the channel



Applications

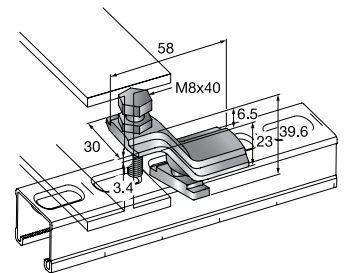
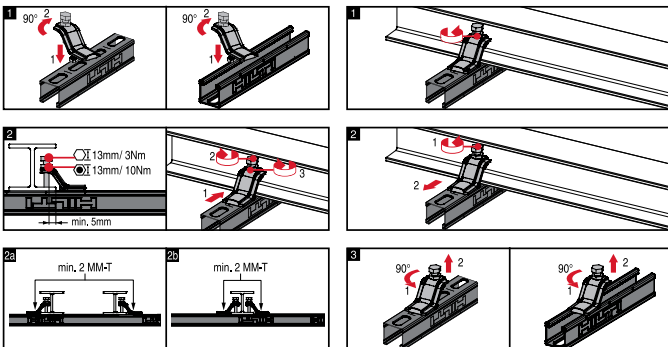
- Fastening all three types of MM channel profiles to steel beams
- The beam clamp set fits all common T-beams (max. clamping thickness 23mm)

Advantages

- Easy alignment in the right position

Technical data

MM-T-16-36	
Material composition	Material: EN-GJMB-550-4 as per DIN EN 1562, Screw: grade 8.8
Surface Finish	Galvanized
Additional product information	Extremely fast installation of MM-C-16, MM-C-30, MM-C-36 channels on steel beams without drilling or welding
For use with	MM-C-16, MM-C-30, MM-C-36



Weight	Order designation	Sales Quantity	Item Number
106 g	Beam clamp MM-T-16-36	20	00418763

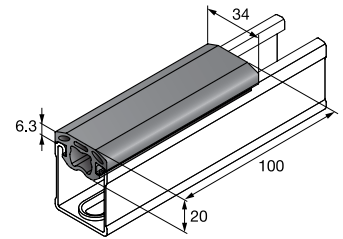
Item no.	Rec. tensile load, Zrec (N)		Tighting torque, Bolt Md (Nm)	Tighting torque, Counter nut Md (Nm)
	Channel I	Channel II		
MM-T-16-36	1200	2500	3	10

Channel I: MM-C-16, MM-C-30

Channel II: MM-C-36

Rubber inlay MM-RI

The ideal acoustic insulation inlay for air duct supports



Applications

- Acoustic insulation of MM channel air duct supports
- Insulating layer between M8 and M10 threaded rod and the ventilation duct

Advantages

- Suitable for all three types of MM channel profiles and M8/M10 threaded rods
- Prevents direct contact between the air duct and the channel
- Large contact area between the channel insulation profile and the air duct avoids transmission of vibration and structure-borne sound
- Quick and easy installation in the channel

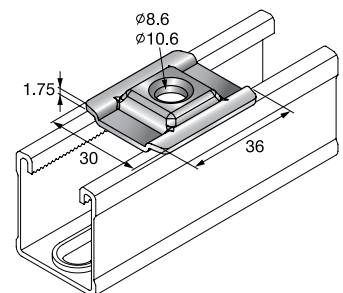
Technical data

MM-RI	
Material composition	EPDM
Hardness Insulation Material	55° +/- 5° Shore A
Temperature resistance temperature range	-40°C - 110°C
For use with	MM-C-16, MM-C-30, MM-C-36

Weight	Order designation	Sales Quantity	Item Number
333 g	Rubber inlay MM-RI 10cm	100	00418768
6.66 kg	Rubber inlay MM-RI 20m	1	00418767

Channel washer MM-CW

For easy installation of threaded rods



Applications

- Optimization of suspension systems using channels and threaded rods
- Used together with MM channels, wing nuts and brackets

Advantages

- Fits the MM channel system perfectly

Technical data

MM-CW	
Material composition	DD11 steel as per DIN EN 10111
Surface Finish	Galvanized
For use with	MM-C-16, MM-C-30, MM-C-36

Weight	Order designation	Sales Quantity	Item Number
15 g	Channel washer MM-CW M8	20 pc	00418769
15 g	Channel washer MM-CW M10	20 pc	00418770

Channel end cap MM-E

Suitable for all installation channels



Applications

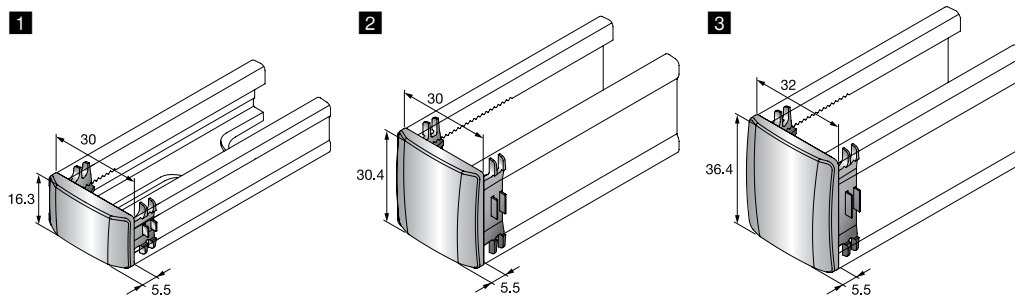
- Installation channel edge protection

Advantages

- Suitable for all installation channels

Technical data

MM-E	
Additional product information	Made of polypropylene (PP), suitable for all MM installation channels



Nr.	For use with	Weight	Order designation	Sales Quantity	Item Number
1	MM-C-16	2 g	Channel end cap MM-E-16	50 pc	00418773
2	MM-C-30	3.2 g	Channel end cap MM-E-30	50 pc	00418774
3	MM-C-36	4 g	Channel end cap MM-E-36	50 pc	00418775

Copper pipes for water (DIN 1786 and 1754 (bare))

Pipe DN	Number of pipes	Length of channel* [mm]	Span width [in m] (distance between channels)					Fastening on concrete						
			1	1.5	2	2.5	3							
								HUS-I 6	HKD M6x25	HKD M8x25	HKD M10x25	Direct fastening**	HUS-P 6	Direct fastening***
15	4	500						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	6	500						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	8	600						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
20	10	700						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	4	600						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	6	600						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
25	8	700						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	10	800						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	4	600						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
32	6	600						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	8	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	10	800						2	2	2	2	X-HS_DKH 48	2	XU-27
40	4	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	8	800						2	2	2	2	X-HS_DKH 48	2	XU-27
50	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	800						2	2	2	2	X-HS_DKH 48	2	XU-27
65	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	800						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	1000						2	2	2	2	X-HS_DKH 48	2	XU-27
80	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	1000						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	1200						3	3	3	3		3	
100	2	600						2	2	2	2		2	
	4	1000						3	3	3	3		3	

Metal pipes for water, with insulation (DIN 2440)

Pipe DN	Number of pipes	Length of channel* [mm]	Span width [in m] (distance between channels)					Fastening on concrete						
			1	1.5	2	2.5	3							
								HUS-I 6	HKD M6x25	HKD M8x25	HKD M10x25	Direct fastening**	HUS-P 6	Direct fastening***
15	4	500						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	6	500						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
	8	600						2	2	2	2	X-HS X-U 32/ DKH 48	2	GHP20/XU-27
20	10	700						2	2	2	2	X-HS_DKH 48	2	GHP20/XU-27
	4	600						2	2	2	2	X-HS_DKH 48	2	GHP20/XU-27
	6	600						2	2	2	2	X-HS_DKH 48	2	GHP20/XU-27
25	8	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	10	800						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	600						2	2	2	2	X-HS_DKH 48	2	XU-27
32	6	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	8	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	10	800						2	2	2	2	X-HS_DKH 48	2	XU-27
40	4	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	8	800						2	2	2	2	X-HS_DKH 48	2	XU-27
50	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	800						2	2	2	2	X-HS_DKH 48	2	XU-27
65	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	800						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	1000						3	3	3	3		3	
80	2	600						2	2	2	2		2	
	4	1000						3	3	3	3		3	
	6	1200						3	4	3	3		3	
100	2	600						2	2	2	2		2	
	4	1000						3	4	3	3		3	

- MM-C16
- MM-C30
- MM-C36
- For GX 120-ME

* Length of channel: Distance between fastening points; the channels can be 100 mm longer at each side.
 ** With respect to all relevant details for X-HS fasteners see technical data sheet: Fastening of MM-C channels with DX-fasteners. Valid for concrete strength up to C 30/37 (X-HS U 32) and C 50/60 (DX-Kwik with X-HS DKH).
 *** With respect to all relevant details see technical data sheet: Fastening of MM-C channels with DX-fasteners. Specifically to observe for channel fastenings directly to the ceiling:
 For GX 120-ME gas-actuated tool: At least 5 fastening points per channel. All visible failures when driving fasteners must be repeated. Applies to concrete grades up to C30/37.
 For DX 460-F8 powder-actuated fastening tool: At least 5 fastening points per channel. All visible failures when driving fasteners must be repeated. Applies to concrete grades up to C50/60.

Stainless steel pipes for water, with insulation (DIN 17455)

Pipe DN	Number of pipes	Length of channel* [mm]	Span width [in m] (distance between channels)					Fastening on concrete						
			1	1.5	2	2.5	3							
			HUS-I 6	HKD M6x25	HKD M8x25	HKD M10x25	Direct fastening**	HUS-P 6	Direct fastening***					
15	4	500						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	500						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	8	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
20	4	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	8	700						2	2	2	2	X-HS_DKH 48	2	GHP20/XU-27
25	4	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	8	700						2	2	2	2	X-HS_DKH 48	2	XU-27
32	4	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	8	800						2	2	2	2	X-HS_DKH 48	2	XU-27
40	4	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	8	800						2	2	2	2	X-HS_DKH 48	2	XU-27
50	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	700						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	800						2	2	2	2	X-HS_DKH 48	2	XU-27
65	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	800						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	1000						2	2	2	2	X-HS_DKH 48	2	XU-27
80	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	1000						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	1200						3	3	3	3	X-HS_DKH 48	2	XU-27
100	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	1000						3	3	3	3	X-HS_DKH 48	2	XU-27

Metal composite pipes (Geberit Mepla)

Pipe DN	Number of pipes	Length of channel* [mm]	Span width [in m] (distance between channels)					Fastening on concrete						
			1	1.5	2	2.5	3							
			HUS-I 6	HKD M6x25	HKD M8x25	HKD M10x25	Direct fastening**	HUS-P 6	Direct fastening***					
15	4	500						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	500						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	8	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
20	4	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	8	700						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
25	4	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	8	700						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
32	4	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	700						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	8	800						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
40	2	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	4	600						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
	6	700						2	2	2	2	X-HS_X-U 32/DKH 48	2	GHP20/XU-27
50	2	600						2	2	2	2	X-HS_DKH 48	2	GHP20/XU-27
	4	1000						2	2	2	2	X-HS_DKH 48	2	GHP20/XU-27
	6	1000						2	2	2	2	X-HS_DKH 48	2	XU-27
65	2	600						2	2	2	2	X-HS_DKH 48	2	XU-27
	4	1000						2	2	2	2	X-HS_DKH 48	2	XU-27
	6	1000						2	2	2	2	X-HS_DKH 48	2	XU-27

- MM-C16
- MM-C30
- For GX 120-ME

* Length of channel: Distance between fastening points; the channels can be 100 mm longer at each side.
 ** With respect to all relevant details for X-HS fasteners see technical data sheet: Fastening of MM-C channels with DX-fasteners
 Valid for concrete strength up to C 30/37 (X-HS U 32) and C 50/60 (DX-Kwik with X-HS DKH).
 *** With respect to all relevant details see technical data sheet: Fastening of MM-C channels with DX-fasteners
 Specifically to observe for channel fastenings directly to the ceiling:
 For GX 120-ME gas-actuated tool: At least 5 fastening points per channel. All visible failures when driving fasteners must be repeated. Applies to concrete grades up to C30/37.
 For DX 460-F8 powder-actuated fastening tool: At least 5 fastening points per channel. All visible failures when driving fasteners must be repeated. Applies to concrete grades up to C50/60.

Technical data		Channel sections		
Definition of axes 		<p>MM-C-16</p>	<p>MM-C-30</p>	<p>MM-C-36</p>
Channel wall thickness	t [mm]	1,0	1,0	1.75 / 1.0
Cross-sectional area	A [mm ²]	72,0	100,0	159,0
Channel weight	[g/m]	565,0	779,0	1287,0
Delivered length	[m]	2	2/3	2/3
Material				
Permissible stress	σ_{perm} [N/mm ²]	188,0	188,0	188,0
E-Modul	[N/mm ²]	190000	190000	190000
Surface				
Sendzimir galvanised		•	•	•
Cross-section values				
Y-axis				
Axis of gravity "open" ¹⁾	e ₁ [mm]	9,26	16,58	19,77
Axis of gravity	e ₂ [mm]	7,08	13,75	16,74
Moment of inertia	I _y [cm ⁴]	0,25	1,20	3,01
Section modulus "open"	W _{y1} [cm ³]	0,27	0,73	1,52
Section modulus	W _{y2} [cm ³]	0,35	0,88	1,71
Radius of gyration	i _y [cm]	0,59	1,10	1,38
Permissible moment ²⁾	M _y [Nm]	50,80	137,2	285,8
Z-axis				
Moment of inertia	I _z [cm ⁴]	1,03	1,58	2,73
Section modulus	W _z [cm ³]	0,69	1,05	1,71
Radius of gyration	i _z [cm]	1,20	1,25	1,31

Selection of channel section:

- The given data is based on a single span (simply-supported beam) bearing a single load, F(N), at mid span, L/2.
- If several loads are acting on a single span (simply-supported beam), these may be summated and regarded as a single load acting at mid span. By taking this approach, the design calculation is on the safe side. (→ Channel selection table).
- The permissible stress in the steel and the max. deflection, L/200, are not exceeded with the given max. span widths, L (mm).
- The permissible stress $\sigma_D / \gamma_{G/Q}$ where $\gamma = 1.4$. σ_D results from the higher yield strength (point) resulting from cold forming as per DAST-RILI 016 dated 1992: $\sigma_D = f_{yk} / \gamma_M = 1.1$

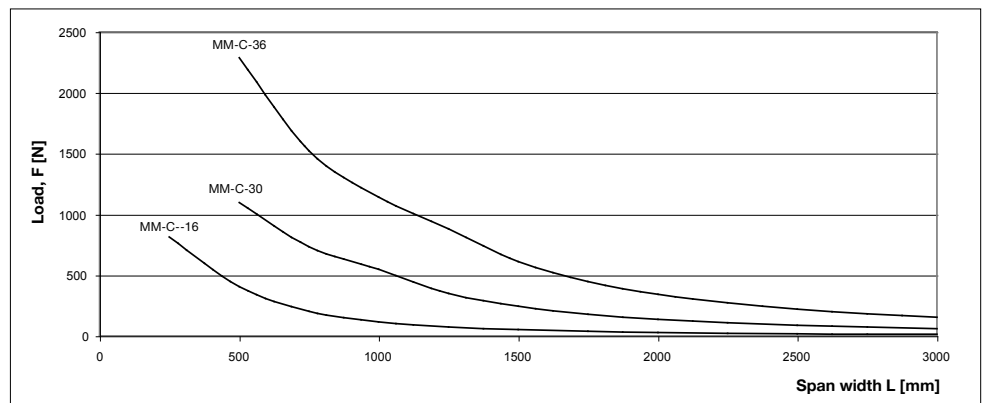
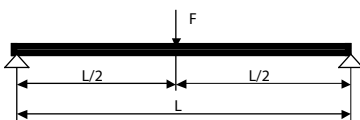
Channel selection diagram

Single span (simply supported)

with single load at mid span, L/2

All values were calculated for a permissible stress of σ_{perm}

(See technical data for channel section) and a deflection of L/200.



Technical data for brackets

		Type of load 1: uniform $F_1 = q \times l$ F1 [N]	Type of load 2: single F1 [N]	Type of load 3 F1 [N]	Type of load 4 F2 [N]	Type of load 5 F3 [N]
Bracket	Channel L (mm)	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8
MM-B-30/200	200	870	870	430	430	290
MM-B-30/300	300	580	580	290	290	190
MM-B-36/300	300	1230	1230	610	610	410
MM-B-36/450	450	810	810	400	400	270
MM-B-36/600	600	610	610	300	300	200

Technical data for brackets with angle brace (channel opening facing down)

		Type of load 1: uniform $F_z = q \times l$ F1 [N]	Type of load 2: single F1 [N]	Type of load 3 F1 [N]	Type of load 4 F2 [N]	Type of load 5 F3 [N]
Bracket	Channel L (mm)	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8
MM-B-30/200	200	2990	2730	1490	1490	990
MM-B-30/300	300	1990	1990	990	990	660
MM-B-36/300	300	1990	1990	990	990	660
MM-B-36/450	450	1320	1320	660	660	440
MM-B-36/600	600	990	990	470	490	330

Technical data for brackets with angle brace (channel opening facing up)

		Type of load 1: uniform $F_z = q \times l$ F1 [N]	Type of load 2: single F1 [N]	Type of load 3 F1 [N]	Type of load 4 F2 [N]	Type of load 5 F3 [N]
Bracket	Channel L (mm)	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8	HST M10 or HUS 8
MM-B-30/200	200	4590	2730	2290	2050	1360
MM-B-30/300	300	3060	3060	1360	1530	1020
MM-B-36/300	300	3060	3060	1530	1530	1020
MM-B-36/450	450	2030	2030	1010	1010	670
MM-B-36/600	600	1520	1520	470	760	500

Load values are for grade \geq C20/25 concrete.

The bracket's own weight has been allowed for.

The loads apply only if the bracket is fastened away from a building component edge (fastenings made at component edges must be designed separately).

Separate verification must be provided that forces are transferred to the respective base material, i.e. steel and concrete.

The application guidelines in anchor approvals must be observed. Loading values according to approval status January 2010.

The deflection (deformation) of L/150 was observed in all cases, this being measured at the point of load application.