

HYDROFRAME

Partnered with

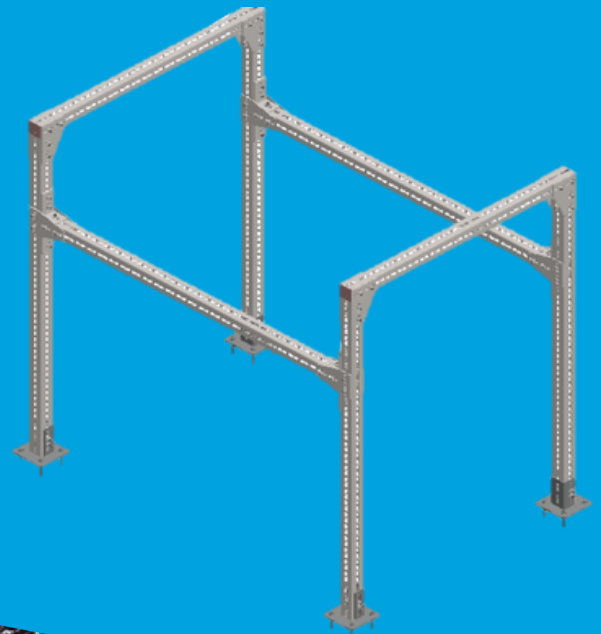
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FIXING SYSTEMS

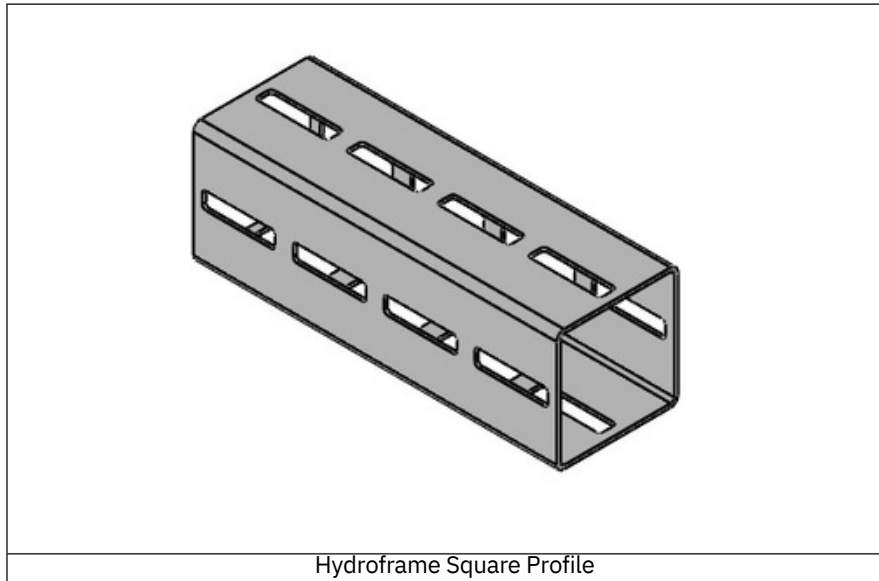
MODULAR SQUARE PROFILE SYSTEM

TECHNICAL SPECIFICATIONS

Compliances:

- EN1991
- NZS-3404
- NZS-4219
- NZS-4541
- NZS-4680
- RAL-GZ-655





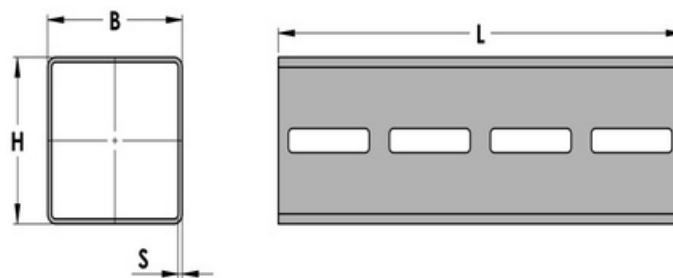
Hydroframe Square Profile

Specifications:

- Modular system
- 4-sided slotted connection with mounting parts
- Torsion stiffness
- High load capacity

Technical Data:

Material: Steel
 Material Type: S235JR(1.0038), Carbon Steel Acc. to EN 100025-2
 Surface-Finish: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M-ASTM A123/123M- EN ISO 1461/EN ISO 10684



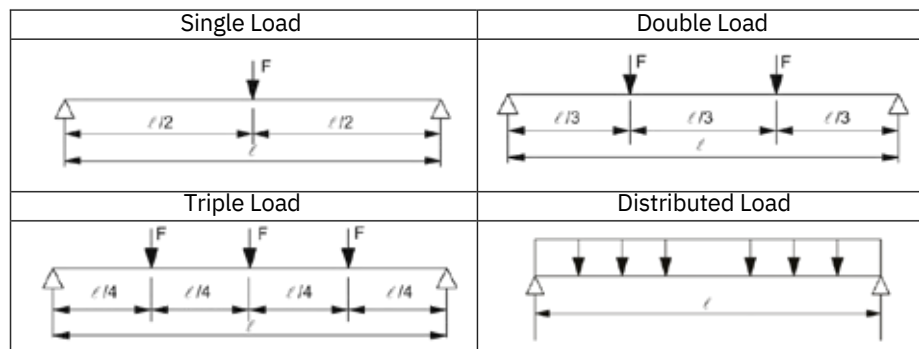
Description	Dimensions	Profile thickness	Perforation	Length	Weight	Product Code
	Hxb [mm]	s [mm]		L [m]	[kg/m]	
Square Profile 80x80	80x80	3	4-sided	6	6	HF80X3
Square Profile 100x100	100x100	3	4-sided	6	8	HF100X3

Hydroframe Square Profile Section Properties

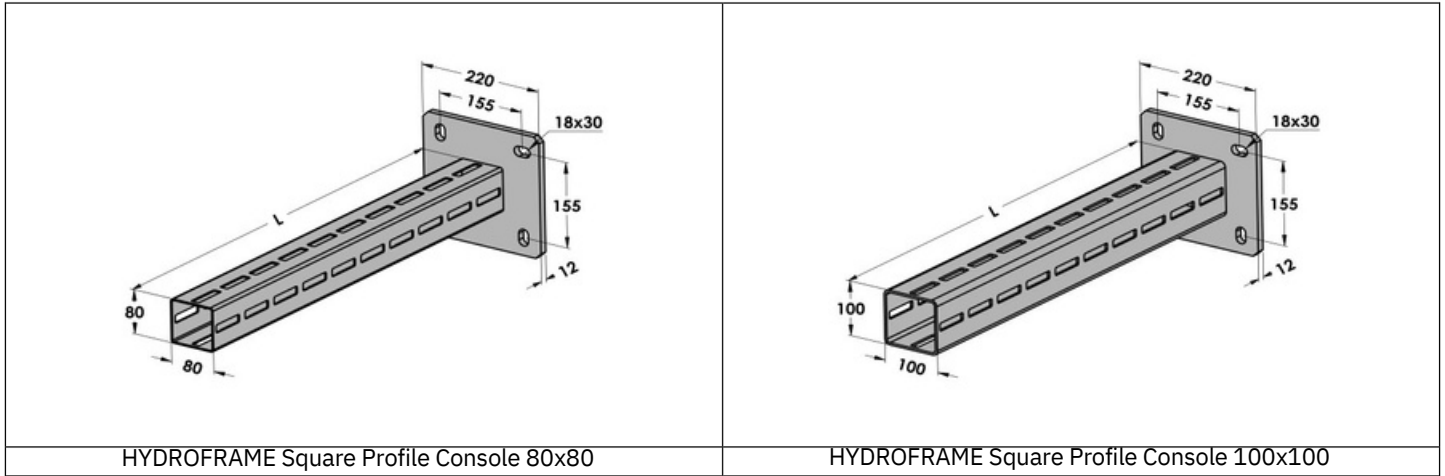
Description	Cross Section Area	Moment of Inertia		Section Modulus	
	A	I _{y-y}	I _{z-z}	W _{y-y}	W _{z-z}
	[cm ²]	[cm ⁴]	[cm ⁴]	[cm ³]	[cm ³]
Square Profile 80x80	7.55	78.42	78.42	19.6	19.6
Square Profile 100x100	9.85	160.36	160.36	32.07	32.07

Technical Data for Square Profiles

	HYDROFRAME SQUARE PROFILE 80x80				HYDROFRAME SQUARE PROFILE 100x100			
Length L	Single Load 1xF1	Double Load 1xF2	Triple Load 1xF3	Distributed Load 1xq0	Single Load 1xF1	Double Load 1xF2	Triple Load 1xF3	Distributed Load 1xq0
[mm]	[kN]	[kN]	[kN]	[kN/m]	[kN]	[kN]	[kN]	[kN/m]
500	19,70	15,50	11,00	85,00	36,00	25,00	18,00	130,00
750	13,25	10,65	7,10	38,00	21,00	16,50	11,00	62,00
1000	10,00	7,85	5,30	20,00	16,50	12,00	8,50	35,00
1250	8,00	5,75	3,90	12,00	13,00	9,00	6,50	22,00
1500	6,60	4,85	3,00	9,00	11,00	7,50	5,00	15,00
1750	5,75	3,90	2,50	6,00	9,50	6,00	4,00	9,00
2000	5,00	3,25	2,10	4,00	8,00	5,00	3,50	7,00
2250	4,25	2,50	1,70	3,10	6,50	4,00	2,75	5,00
2500	3,60	2,25	1,50	2,50	6,00	3,50	2,50	4,00
2750	3,10	1,90	1,30	1,80	5,00	3,00	2,00	3,00
3000	2,75	1,65	1,15	1,50	4,50	2,80	1,70	2,50
3250	2,40	1,45	1,00	1,20	3,80	2,30	1,50	2,00
3500	2,10	1,20	0,80	1,00	3,20	2,10	1,30	1,50
3750	1,80	1,00	0,70	0,70	3,00	1,90	1,20	1,30
4000	1,50	0,85	0,65	0,60	2,50	1,50	1,00	1,10
4250	1,30	0,75	0,55	0,50	2,20	1,40	0,90	0,90
4500	1,10	0,65	0,45	0,40	1,90	1,25	0,80	0,70
4750	0,90	0,50	0,40	0,30	1,70	1,10	0,70	0,60
5000	0,80	0,45	0,30	0,25	1,50	0,90	0,60	0,50
5250	0,60	0,40	0,25	0,20	1,30	0,90	0,55	0,45
5500	0,50	0,30	0,23	0,15	1,10	0,70	0,50	0,35
5750	0,40	0,25	0,20	0,13	1,00	0,65	0,40	0,30
6000	0,30	0,20	0,15	0,10	0,85	0,55	0,35	0,25



Square Profile Console



Specifications:

- Modular system
- 4-sided without raster in connection with mounting parts

Technical Data:

Material: Steel

Material Type: S235JR(1.0038), Carbon Steel Acc. to EN 100025-2

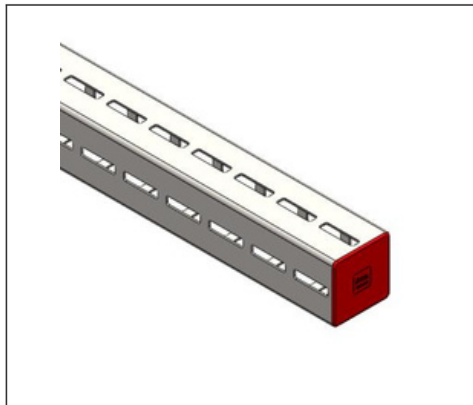
Surface-Finish: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M- ASTM A123/123M- EN ISO 1461/EN ISO 10684

Welding: Welding acc. to EN 3834-2 / ASME Section IX, AWS D1.1

Description	Length L [mm]	Max. Load 1 F1 [kN]	Max. Load 2 F2 [kN]	Max. Load 3 q0 [kN/m]	Weight [kg/pc]	Product Code
Square Profile 80x80	750	6,20	3,00	9,00	8,1	IWPK080080750H
Square Profile 100x100	750	10,00	5,30	13,00	11,9	IWPK100100750H
Square Profile 100x100	975	7,00	3,80	9,00	14,2	IWPK100100975H
Square Profile 100x100	1425	4,50	1,60	3,00	18,7	IWPK1001001425H

Max. Load 1 (F1)	Max. Load 2 (F2)	Max. Load 3 (F3)

Square Profile Cover



Hydroframe Square Profile Covers

Description:

Square Profile 80x80 Cover
Square Profile 100x100 Cover

Weight
[kg/pc]

0.03
0.04

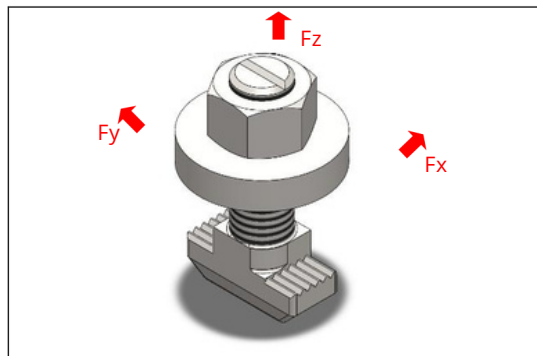
Product Code:

HF80PC
HF100PC

Technical Data:

For Profile Type: 80x80, 100x100
Material: Plastic
Material Type: PP
Colour: Red

T-Bolt



Hydroframe T-Bolt

Specifications:

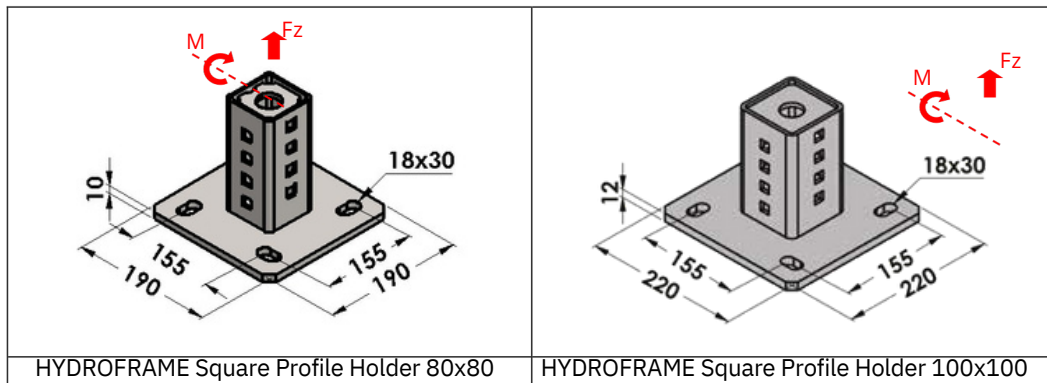
For profile type: 80x80, 100x100
Features: Frictional connection
Max. Load: [kN]
Fx FY FZ
2 2 6,5
Safety Factor: 2
Application: Square profile connector

Technical Data:

Material: Steel
Material Type: Carbon Steel – Grade 8.8 acc. to EN 898-1
Surface-Finish: Geomet Coating

Description	Material Class	Recommended Tightening Torque [N.m]	Weight [kg/pc.]	Product Code
T-Bolt M12x40	8.8	80	0.11	HFTBOLT

Square Profile 4 Sided Holder



Specifications:

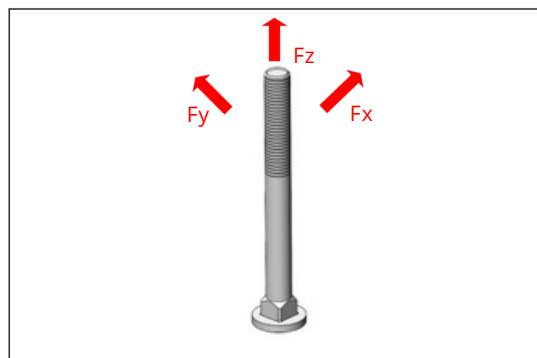
For profile type: 80x80, 100x100
 Required Accessory: 2xM12x120 Square Neck Bolt,
 2xM12 Washer, 2x M12 Nut

Technical Data:

Material: Steel
 Material Type: S235JR
 Surface-Finish: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M- ASTM A123/123M- EN ISO 1461/EN ISO 10684
 Safety Factor: 1.54

Description	Max. Load	Max. Torque	Plate	Plate	Plate	Weight	Product Code
	FZ	M	Width	Length	Thickness		
	[kN]	[kNm]	[mm]	[mm]	[mm]	[kg/pc]	
Square Profile Holder 80x80	35	5.5	190	190	10	3,8	HF80BP4
Square Profile Holder 100x100	45	7.5	220	220	12	6,3	HF100BP4

Square Neck Bolt



Square Neck Bolt

Specifications:

For profile type: 80x80, 100x100
 Features: Immovable and form locking connection
 Application: Square Profile Holder Connection

Technical Data:

Material: Steel
 Material Type: Carbon Steel – Grade 8.8 acc. to EN 898-1
 Surface-Finish: Geomet Coating

Max. Load: [kN]	Fx	Fy	Fz
	2	6,5	2
Safety Factor:	2		

Description	Material Class	Recommended Tightening Torque	Weight	Product Code
		[N.m]	[kg/pc.]	
Square Neck Bolt M12X120	8.8	80	0,13	HF80BP4
Square Neck Bolt M12X140	8.8	80	0,13	ZCKBP12140GP

Square Profile 3 Sided Base Plates

HYDROFRAME 3 Sided Base Plate 80x80	HYDROFRAME 3 Sided Base Plate 100x100	3 Sided Base Plate with Square Profile

Specifications:

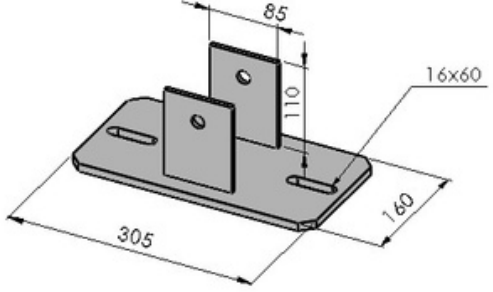
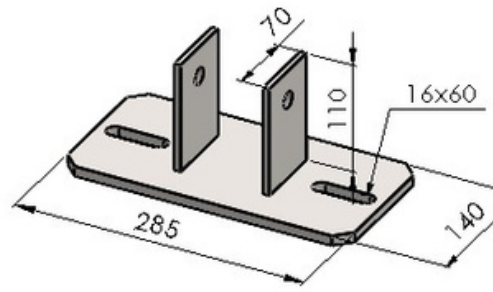
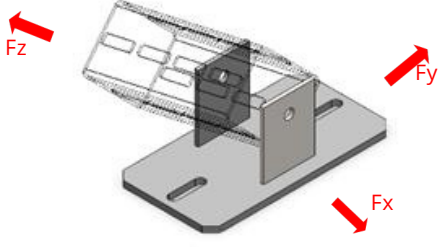
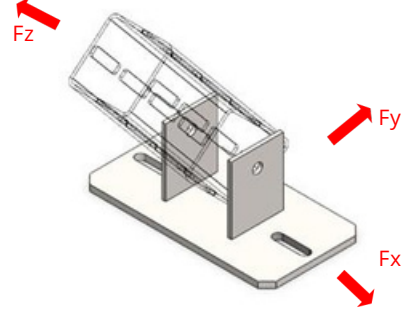
For profile type: 80x80, 100x100
Required Accessory: M12x40 T-Bolt

Technical Data:

Material: Steel
Material: S235JR
Type: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M-
Surface- ASTM A123/123M- EN ISO 1461/EN ISO 10684
Finish: 1.54
Safety Factor:

Description	Max. Load	Max. Torque	Plate	Plate	Plate	Weight	Product Code
	FZ	M	Width	Length	Thickness		
	[kN]	[kNm]	[mm]	[mm]	[mm]	[kg/pc]	
Square Profile Holder 80x80	16	2.6	200	200	10	4,5	HF80BP3
Square Profile Holder 100x100	25	4	220	220	12	6,3	HF100BP3

Square Profile Hinges

	
HYDROFRAME 100x100 Vertical Hinge	HYDROFRAME 80x80 Horizontal Hinge
	
HYDROFRAME Vertical Hinge with Square Profile	HYDROFRAME Horizontal Hinge with Square Profile

Specifications:

For profile type: 80x80, 100x100
 Required Accessory: M12 Rod(At least 120mm),
 2xM12 Nut, 2xM12 Washer

Tightening Torque 20 Nm

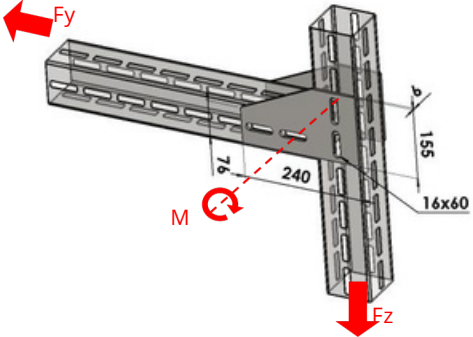
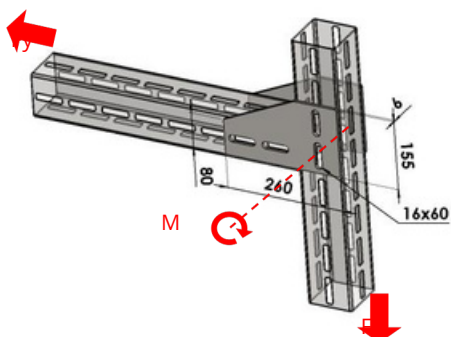
Technical Data:

Material: Steel
 Material Type: S235JR
 Surface-Finish: Hot Dipped Galvanized(HDG) acc. to
 ASTM A153/153M- ASTM A123/123M-
 EN ISO 1461/EN ISO 10684

Safety Factor: 1.54

Description	Max. Load			Center Hole Plate	Plate Dimensions	Weight	Product Code
	FX	FZ	FY				
	[kN]	[kN]	[kN]	[mm]	[mm]	[kg/pc]	
Vertical Hinge 80x80	1.25	4	2.25	205	285x140x10	3.7	HF80VH
Horizontal Hinge 80x80	1.5	5	2.75	205	285x140x10	3.7	HF80HH
Vertical Hinge 100x100	1.25	4	2.25	225	305x160x10	4.5	HF100VH
Horizontal Hinge 100x100	1.5	5	2.75	225	305x160x10	4.5	HF100HH

Corner Attachment Plate

	
HYDROFRAME 80x80 Corner Attachment Plate [use in pairs]	HYDROFRAME 100x100 Corner Attachment Plate [use in pairs]

Specifications:

For profile type: 80x80, 100x100
 Required 4x M12x40 T-Bolt
 Accessory:

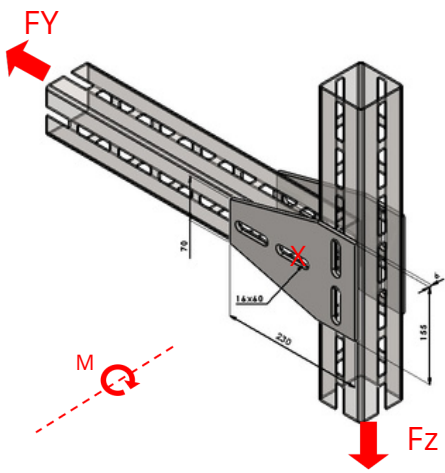
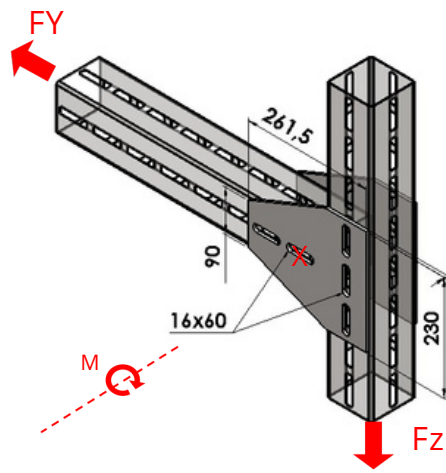
*by using all screw holes
 Remark: for $M = 0$ only one screw per side at X

Technical Data:

Material: Steel
 Material S235JR
 Type: Hot Dipped Galvanized(HDG) acc. to ASTM
 Surface-Finish: A153/153M- ASTM A123/123M- EN ISO
 Safety Factor: 1461/EN ISO 10684
 1.54

Description	Profile Type	Max. Load		Max. Limited Torque M^*	Weight [kg/pc]	Product Code
		Fy [kN]	Fz [kN]			
80x80 Corner Attachment Plate	80x80	12	12	0.4*	1.3	HF80CP
100x100 Corner Attachment Plate	100x100	20	20	0.65*	1.5	HF100CP

Tee Attachment Plate

 HYDROFRAME 80x80 Tee Attachment Plate [use in pairs]	 HYDROFRAME 100x100 Tee Attachment Plate [use in pairs]
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Specifications:

For profile type: 80x80, 100x100
 Required 4xM12x40 T-Bolt(80x80)
 Accessory: 5x M12x40 T-Bolt(100x100)

*by using all screw holes

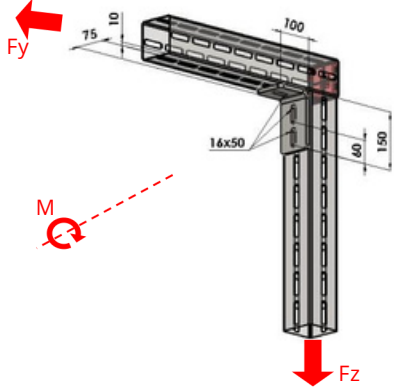
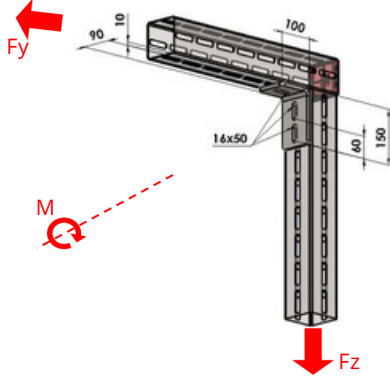
Remark: for M = 0 only one screw per side at X

Technical Data:

Material: Steel
 Material S235JR
 Type:
 Surface- Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M-
 Finish: ASTM A123/123M- EN ISO 1461/EN ISO 10684
 Safety Factor: 1.54

Description	Profile Type	Max. Load		Max. Limited Torque M*	Weight [kg/pc]	Product Code
		Fy [kN]	Fz [kN]			
80x80 Tee Attachment Plate (use in pairs)	80x80	12	12	0.40*	1.2	HF80TP
100x100 Tee Attachment Plate (use in pairs)	100x100	20	20	0.65*	2.1	HF100TP

Square Profile Connection Angles

	
HYDROFRAME 80x80 Square Profile Connection Angle Plate	HYDROFRAME 100x100 Square Profile Connection Angle Plate

Specifications:

For profile type: 80x80, 100x100
 Required Accessory: 3xM12x40 T-Bolt
 Function: Connection of Square Profiles

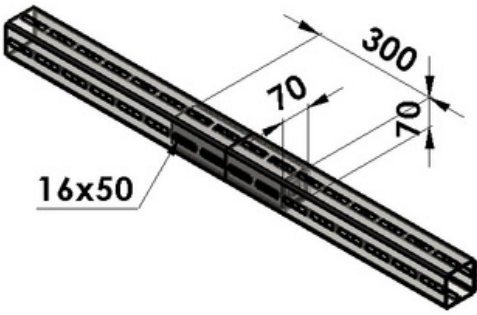
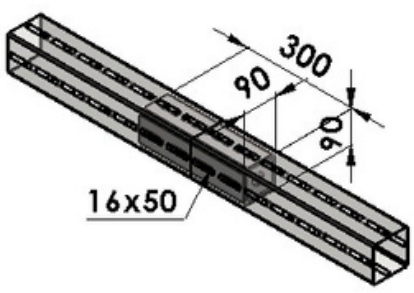
*by using all screw holes

Technical Data:

Material: Steel
 Material Type: S235JR
 Surface- Finish: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M- ASTM A123/123M- EN ISO 1461/EN ISO 10684

Description	Profile Type	Max. Load		Max. Limited Torque M	Weight	Product Code
		Fy	Fz			
		[kN]	[kN]	[kNm]	[kg/pc]	
80x80 Square Profile Connection Angle Plate	80x80	6	19	0.4*	1.3	HF80AB3
100x100 Square Profile Connection Angle Plate	100x100	7	22	0.5*	1.6	HF100AB3

Square Profile Connector

	
HYDROFRAME 80x80 Square Profile Connector	HYDROFRAME 100x100 Square Profile Connector

Specifications:

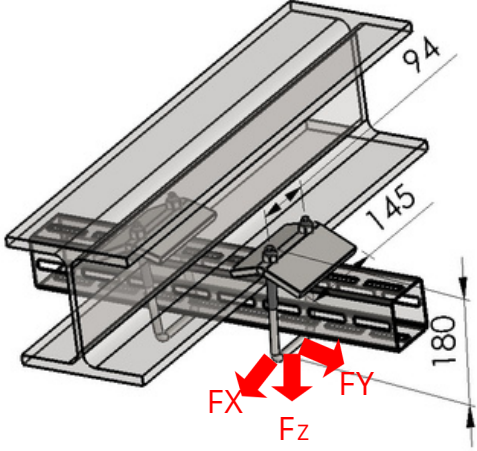
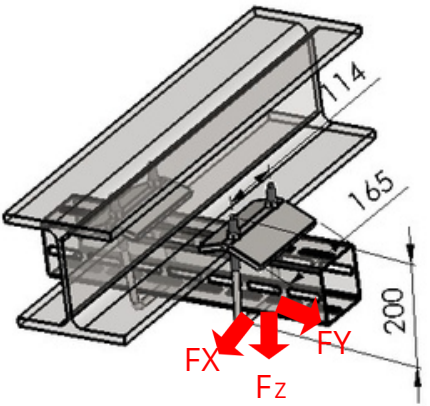
For profile type: 80x80, 100x100
 Required 8xM12x40 T-Bolt
 Accessory:

Technical Data:

Material: Steel
 Material S235JR
 Type: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M-
 Surface- ASTM A123/123M- EN ISO 1461/EN ISO 10684
 Finish:

Description	Profile Type	Limited Moment	Length	Width	Height	Weight	Product Code
		M		b	h		
		[kNm]	[mm]	[mm]	[mm]	[kg/pc]	
80x80 Square Profile Connector	80x80	1.8	300	70	70	2.4	IPKEB080H
100x100 Square Profile Connector	100x100	4	300	90	90	4	IPKEB100H

Square Profile Pressure Plates

	
HYDROFRAME 80x80 Square Profile Pressure Plate	HYDROFRAME 100x100 Square Profile Pressure Plate

Specifications:

For profile type: 80x80, 100x100
 Application Area: For mounting of Steel Profile rail on girder
 Set Consisting of :
 1 pc. x U-Bolt
 1 pc. x Angle tensioning bracket
 2 pcs. x M12 Nuts
 2 pcs. x M12 Washers

Technical Data:

Material: Steel
 Material Type: S235JR
 Surface-Finish: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M-ASTM A123/123M- EN ISO 1461/EN ISO 10684

Remark: Max. loads refer according to a pressure plate. Please notice max. loads of square profile rails.

Description	Thread U-Bolt	Max. Load			Tightening Torque (Per Bolt)	Weight [kg/pc]	Product Code
		FX [kN]	FY [kN]	FZ [kN]			
80x80 Square Profile Pressure Plate	80x80	3,5	3,5	12	30	1.7	IFPKC080H
100x100 Square Profile Pressure Plate	100x100	3,5	3,5	12	30	3.41	IFPKC100H

Rod Connection Brackets

HYDROFRAME 80x80 Square Profile Rod Connection Bracket	HYDROFRAME 100x100 Square Profile Rod Connection Bracket

Specifications:

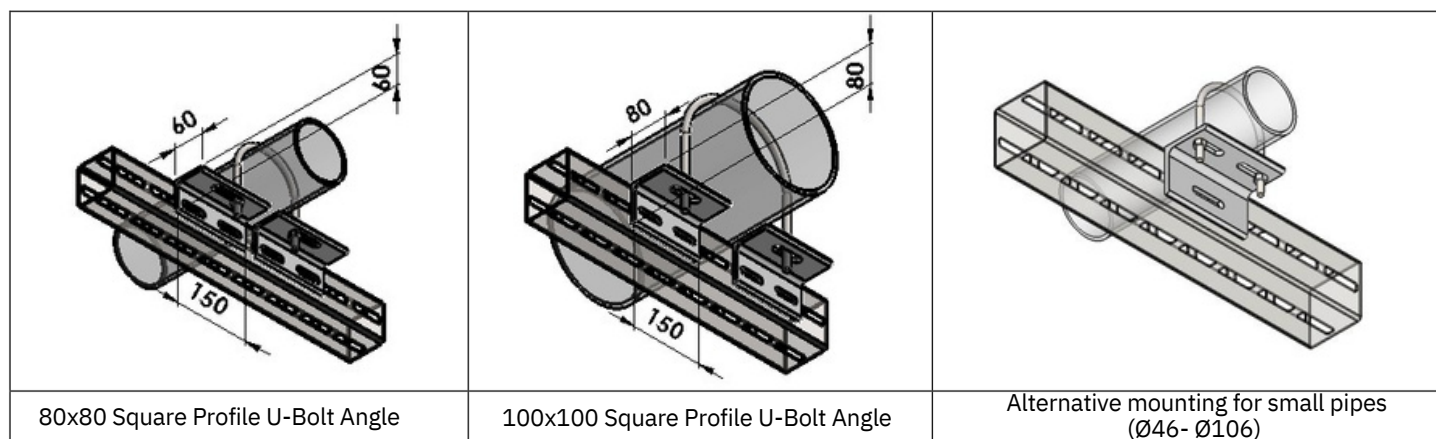
For profile type: 80x80, 100x100
 Required 2xM12x40 T-Bolt
 Accessory:

Technical Data:

Material: Steel
 Material S235JR
 Type: Hot Dipped Galvanized(HDG) acc. to ASTM A153/153M-
 Surface-Finish: ASTM A123/123M- EN ISO 1461/EN ISO 10684
 Safety Factor: 1.54

Description	Profile Type	Thread	Max. Load	H	h	Weight	Product Code
		M	Fzul				
			[kN]	[mm]	[mm]	[kg/pc]	
80x80 Rod Connection Bracket	80x80	M10	5	69	40	0.51	IFPKRB080M10H
80x80 Rod Connection Bracket	80x80	M12	5	69	40	0.51	HF80RCB
80x80 Rod Connection Bracket	80x80	M16	5	69	40	0.53	IFPKRB080M16H
80x80 Rod Connection Bracket	80x80	M20	5	69	40	0.57	IFPKRB080M20H
80x80 Rod Connection Bracket	80x80	M24	5	69	40	0.62	IFPKRB080M24H
100x100 Rod Connection Bracket	100x100	M10	5	79	50	0.61	IFPKRB100M10H
100x100 Rod Connection Bracket	100x100	M12	5	79	50	0.61	HF100RCB
100x100 Rod Connection Bracket	100x100	M16	5	79	50	0.63	IFPKRB100M16H
100x100 Rod Connection Bracket	100x100	M20	5	79	50	0.67	IFPKRB100M20H
100x100 Rod Connection Bracket	100x100	M24	5	79	50	0.72	IFPKRB100M24H

Square Profile U-Bolt Angle Bracket



Specifications:

Mounting instruction: Pipe must overlie
 Required Accessory: 2xM12x40 T-Bolt
 Advantage: Installation of different pipe diameter

Technical Data:

Material: Steel
 Material: S235JR
 Type: Hot Dipped Galvanized(HDG) acc. to ASTM
 Surface-Finish: A153/153M- ASTM A123/123M- EN ISO 1461/EN ISO 10684

Description	Profile Type	Thread M	Length	Height	Thickness	Slot size	Weight	Product Code
			[mm]	[mm]	[mm]	[mm]	[kg/pc]	
Square Profile U-Bolt Angle	80x80	M10	150	60	6	12x60	0.72	HF80UBB
Square Profile U-Bolt Angle	80x80	M12	150	60	6	14x60	0.71	IFPKK6060M12H
Square Profile U-Bolt Angle	80x80	M16	150	60	6	18x60	0.70	IFPKK6060M16H
Square Profile U-Bolt Angle	80x80	M20	150	60	6	22x60	0.69	IFPKK6060M20H
Square Profile U-Bolt Angle	80x80	M24	150	60	6	26x60	0.69	IFPKK6060M24H
Square Profile U-Bolt Angle	100x100	M10	150	80	8	12x60	1.32	IFPKK8080M10H
Square Profile U-Bolt Angle	100x100	M12	150	80	8	14x60	1.31	HF100UBB
Square Profile U-Bolt Angle	100x100	M16	150	80	8	18x60	1.30	IFPKK8080M10H
Square Profile U-Bolt Angle	100x100	M20	150	80	8	22x60	1.28	IFPKK8080M12H
Square Profile U-Bolt Angle	100x100	M24	150	80	8	26x60	1.27	IFPKK8080M10H

HYDROFLOW

PARTNERED WITH

TRUE SOLUTION / **INKA**
FIXING SYSTEMS

Penrose Warehouse and Fabrication Facility

40 Rockridge Avenue

Auckland

+64 9 448 5844

Auckland Head Office

221 Bush Road, Albany

021 882 826

Wellington

108 Nelson Street

Petone

+64 9 341 1048

Christchurch

58 Hammersmith Drive

Wigram Park

+64 9 280 2511

hydroflow.co.nz

orders@hydroflow.co.nz