

M.E.P Hanger and Supports

Catalogue/2025, Ver 1,01,25

www.starduct.vn

Introduction to

STAR ASIA Technology Investment Joint Stock Company

About Us

Star Asia Technology Investment Joint Stock Company (NSCA), under the Starduct brand, is one of the leading manufacturers and suppliers of technical auxiliary products for MEP systems in Vietnam. With over 20 years of experience, NSCA has built a strong reputation in both domestic and international markets. In 2024, NSCA's revenue surpassed 10 million USD, highlighting its sustainable growth and competitive strength in the HVAC and construction auxiliary industries, even during challenging times such as the post-COVID era and global crises.

NSCA not only meets the high technical requirements of major domestic projects but also actively promotes exports to international markets, gradually establishing the position of Vietnamese products on the global stage. With the mission "Creating quality, elevating Vietnamese value," NSCA has always been a trusted partner for customers both at home and abroad.

Certifications and Achievements

- ISO 9001:2015: International quality management system certification.
- UL 203/FM 1950/CE Certification: For suspension and support systems, meeting stringent fire safety standards.
- National Certification for Fire Safety Equipment: For fire-rated ducts and dampers, compliant with QCVN 06:2023/BXD standards.
- National Patents: Two patents awarded in 2024 in the field of fire safety.
- AHRI 880 Certification: Awarded in 2024 for VAV boxes.
- AMCA Membership: The sole representative from Vietnam in the Global Air Movement and Control Association since 2019.
- Longtime Member of the Vietnam Mechanical Enterprises Association: Actively contributing to the development of Vietnam's mechanical industry.
- Member of ASHRAE: Since 2016, with internationally recognized and certified products.

Major Projects in 2024:

NSCA has supplied products to key projects such as Long Thanh Airport, Tan Son Nhat Terminal 3, Noi Bai Terminal 2, Hanoi and Ho Chi Minh City metro lines, government headquarters, and major industrial zones such as Hoa Phat Dung Quat, Luxshare, Foxconn, and Amkor.

Investment and Development

NSCA has invested in a new factory covering over 15,000 square meters, along with a modern headquarters of nearly 1,000 square meters. Additionally, the company has equipped testing labs to evaluate acoustic performance for products like silencers and acoustic louvers, as well as airflow performance for dampers, grilles, and weather louvers. These labs comply with international technical standards (ASTM 477/ISO 7025), ensuring the superior quality of NSCA's products.

Vision and Commitment

NSCA is committed to serving the "Era of Vietnam's Rise" by contributing to national projects such as metro lines, railway stations, airports, high-class office buildings, and advanced industrial zones. Additionally, NSCA is seizing □Golden opportunities□ to expand exports in the renewable energy sector, targeting an export ratio of 40-50% of annual revenue.

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UNISTAR PIPE SUPPORTS

The Unistar® pipe support systems covers an extensive range of hangers, pipe clips, pipe clamps ferrules and cushioning, hanger fittings, beam clamps, beam attachments, and support brackets. The range covers from small bore tubing through to pipes in excess of 600mm diameter.

UNISTAR SPRINKLER PIPE SUPPORTS

In addition to our standard range of pipe supports for general industry, mechanical services and others, the Unistar® range also includes pipe supports specifically designed for the fire protection industry.

PIPE HANGER AND SUPPORTS

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Loop Hanger UTT 40

Clevis Hanger UTT30

Rubber Lined Pipe Clamp UUTT61

Plain Pipe Clamp UTT62

Two-piece Pipe Clamp UTT80

PIPE HANGER AND SUPPORTS

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Insulation Pipe Clamp UTT8003

U bolts UTT81

Standard Saddle Clamp UTT12C

Riser Clamp UTT50

Standard Pipe Clamp UTT60

SWAY BRACE FITTING



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Pipe clamp

Pipe clamp UTT20Q

Pipe clamp UTT13

Pipe clamp UTT18

STRUCTURE ATTACHMENT FITTING AND ADAPTERS







FM

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Structure Attachment UTT10Q



Structure Attachment UTTH10



Structure Attachment **UTT071**



Structure Attachment UTT11



Structure Attachment UTTBC4







Model: UTTH10

Structure Attachment

- Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTTF10 structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.
- Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454
- Size: One size fits braced pipe up to Dn200, With M12 Bolt hole for structure.
- Material: Carbon Steel Finish: Electro-galvanized
- Approvals:







UL Maximum Design Load								
Brace lbs. kN Weight Each Piece								
Member	103.	KIN	lbs.	kg				
Dn25 (1") SCH40 Pipe	1885	(8.38)	1.54	(0.7)				

FM Maximum Design Load									
Brace Member		ntal load nstallation 30º44°	ratings in	ntal load nstallation e 45°59°	Weight Each Piece				
Member	lbs.	kN	lbs.	kN	lbs.	kg			
Dn25 (1") SCH40 Pipe	1490	(6.62)	1980	(8.80)	1.54	(0.7)			



The connection mode of base part connected with the building. The accessories connected with the base part is sch40 1 inch pipe. The pipe must be clamped to the bottom of the base part, then fixed with the shear bolt. Tighten the shear bolt until heads break off.

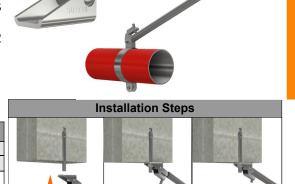
Structure Attachment

- Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTTF10Q structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.
- Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS
- Size: One size fits braced pipe up to Dn200, With M12 Bolt hole for structure.
- Material: Carbon Steel Finish: Electro-galvanized
- Approvals:



	UL Maximum Design Load									
Brace	lbs.	kN	Weight Ea	ich Piece						
Member	103.	KIN	lbs.	kg						
Dn25 (1") SCH40 Pipe	1885	(8.38)	1.82	(0.83)						





The connection mode of base part connected with the building. The accessories connected with the base part is sch40 1 inch pipe. The pipe must be clamped to the bottom of the base part, then fixed with the shear bolt. Tighten the shear bolt until heads break off.

Step 2

Step 1

Step 3





Beam Adapter

• Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTT11 structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.

 Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454

• **Size:** One size fits braced pipe up to Dn200, With M12 Bolt hole for structure.

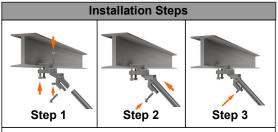
Material: Ductile iron Qt45Finish: Electro-galvanized



Model: UTT11

UL Maximum Design Load									
Brace	lbs.	kN	Weight Ea	ich Piece					
Member	103.	NIN	lbs.	kg					
Dn25 (1") SCH40 Pipe	1890	(4.84)	1.94	(0.88)					

FM Maximum Design Load									
Brace Member	ratings in	ntal load nstallation : 30°44°	ratings i	ntal load nstallation e 45°59°	Weight Each Piece				
Member	lbs.	kN	lbs.	kN	lbs.	kg			
Dn25 (1") SCH40 Pipe	970	(4.31)	1660	(7.38)	1.94	(0.88)			



The installation procedure of SUTT11 accessories as shown in the figure, the connecting accessories use the SUTT11, The installation torque of bolt is 50-60Nm. Tighten the shear bolt until heads break of after gripping the H steel. The maximum thickness of H beam steel is 16mm

Model: UTT071

Structure Attachment

- Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTT071 structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.
- Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454
- Size: One size fits braced pipe up to Dn200, With M12 Bolt hole for structure.

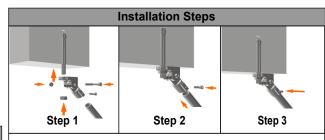
Material: Ductile iron Qt45

Finish: Electro-galvanized

Approvals: (UL) (

UL Maximum Design Load									
Brace	lbs.	kN	Weight Each Piece						
Member	100.	14.1	lbs.	kg					
Dn25 (1") SCH40 Pipe	1885	8.38	2.22	1.01					





The installation mode of SUTT071 base part confined with the building, the installation torque of bolt M12 is 50-60Nm. The accessories of SUTT071 base part use sch40-1 inch pipe. The connecting pipe should be inserted into the bttom according to the direction shown in the figure, and tighten with shear bolt until heads break off.







Model: UTT18

U Lateral Bracing Clamp

Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTT18 structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.

Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454

Size: For pipe size from 2" (Dn50) to 8" (Dn200)

Material: Ductile iron Qt50 Finish: Electro-galvanized

Approvals: (L)







Install:

The pipe clamp with pipe and other accessories's connection is as shown in the figure. The accessories of SUTT18 use the sch40 1 inch pipe. Tighten the nuts intil 40-45 Nm once the four nuts are installed, the installation is complete.

Model: UTT13

Quick Lateral Bracing Clamp

- Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTT13 structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.
- Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454
- Size: For pipe size from 2" (Dn50) to 8" (Dn200)
- Material: Carbon Steel Finish: Electro-galvanized



	UL Maximum Design Load								
Dina Cina			Weight Ea	ach Piece					
Pipe Size in/(mm)	lbs.	kN	1" (25mm) l	Brace Pipe					
111/(111111)			lbs.	kg					
1"(25)	680	3.02	0.71	0.35					
1".1/4(32)	680	3.02	0.81	0.37					
1. 1/2"(40)	680	3.02	0.86	0.39					
2" (50)	680	3.02	0.92	0.42					
2.1/2"(65)	680	3.02	1.01	0.46					
3" (80)	680	3.02	1.08	0.49					
4" (100)	680	3.02	1.21	0.55					
5" (125)	1090	4.84	1.37	0.62					
6" (150)	1370	6.09	1.52	0.69					
8" (200)	1370	6.09	1.81	0.82					

FM Maximum Design Load									
Brace	Horizontal load ratings installation			ntal load nstallation	Weight Each Piece				
Member		30°-44°		45°59°	1"(25mm) E	Brace Pipe			
Member	lbs.	kN	lbs.	kN	lbs.	kg			
2" (50)	590	2.62	840	3.73	0.92	0.42			
2.1/2"(65)	710	3.15	1010	4.49	1.01	0.46			
3" (80)	540	2.40	770	3.42	1.08	0.49			
4" (100)	540	2.40	770	3.42	1.21	0.55			
6" (150)	270	1.20	390 1.73		1.52	0.69			
8" (200)	210	0.93	290 1.28		1.81	0.82			

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PIPE CLAMP

 Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTT20 structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.

Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454

• **Size:** For pipe size from 2" (Dn50) to 8" (Dn200)

Material: Carbon SteelFinish: Electro-galvanized

Approvals:

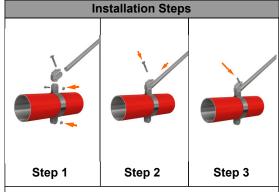




FM Maximum Design Load									
Pipe Size	Horizontal load ra	atings installation 30°44°	Horizontal load ratings installation angle 45°59°						
in/(mm)	lbs.	kN	lbs.	kN					
2" (50)	1070	4.75	1440	6.40					
2.1/2"(65)	840	3.73	1120	4.98					
3" (80)	1030	4.58	1560	6.93					
4" (100)	650	2.89	890	3.95					
6" (150)	830	3.69	1250	5.56					
8" (200)	880	3.91	1150	5.11					



Model: UTT20



Install the pipe clamp to the pipe, then install the bolt and nuts as the shown picture @ step 1.

The accessories of SUTT20 use the sch40 1 inch pipe, the nuts torque of SUTT20 need to reach 100~115 Nm to make akk green marking lines visible in the bolts

After the installation of bolts and nuts and other accessories, the pipe must be lamped to the bottom of the accessories

PIPE CLAMP

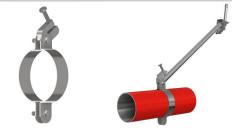
- Functions: Design for bracing pipe against sway and seismic disturbance. The pipe attachment of a sway brace system used in conjunction with UTT20Q structural attachment fitting and joint together with a bracing pipe element forms a complete sway NFPA 13 and the manufacture's installation instructions.
- Type: Sprinkler Pipe Sch 10, Sch 40, GB/T 3091, JIS G3454
- Size: For pipe size from 2" (Dn50) to 8" (Dn200)
- Material: Carbon Steel and ductile iron Qt50
- · Finish: Electro-galvanized

Approvals:



	UL Maximum Design Load								
D: 0:			Weight Ea	Weight Each Piece					
Pipe Size	lbs.	kN	1" (25mm)	Brace Pipe					
in/(mm)			lbs.	kg					
2" (50)	680	3.02	2.33	1.06					
2.1/2"(65)	680	3.02	2.42	1.1					
3" (80)	680	3.02	2.55	1.16					
4" (100)	680	3.02	2.73	1.24					
5" (125)	1090	4.84	3.92	1.78					
6" (150)	1370	6.09	4.29	1.95					
8" (200)	1370	6.09	4.93	2.24					







Install the pipe clamp to the pipe, then install the bolt and nuts as the shown picture $\textcircled{\mbox{\bf @}}$ step 1.

The accessories of SUTT20 use the sch40 1 inch pipe, the nuts torque of SUTT20 need to reach 100~115 Nm to make akk green marking lines visible in the bolts

After the installation of bolts and nuts and other accessories, the pipe must be lamped to the bottom of the accessories



MODEL: UTT 30

CLEVIS HANGER

Function:

Recommend for suspension of non-insulated stationary pipe line.

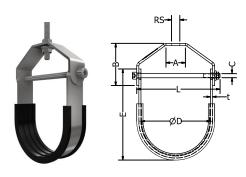
Size: 1/2" to 12"

Material: Carbon Steel

Finish: Black, Powder coating, Galvanized

Approvals: Non

, , , pp. ,	Approvate: Noti										
S	ize	Α	В	С	D	E	Т	L	RS	Max R	ec. Load
in	mm	mm	mm	mm	mm	mm	mm	mm	mm	lbs	KN
1/2"	DN15	30	28	M6	21.3	41	2.5	50	M10	610	2.71
3/4"	DN20	35	30	M6	26.7	51	2.5	55	M10	610	2.71
1"	DN25	42	32	M6	33.4	56	2.5	60	M12	730	3.24
1-1/4"	DN32	51	40	M6	42.2	68	2.5	70	M12	760	3.24
1-1/2"	DN40	24	43.5	M6	48.2	70	2.5	80	M12	730	3.24
2"	DN50	25	45.5	M6	60.3	82	3	90	M12	730	3.24
2-1/2"	DN65	32	56	M10	73	107	3	110	M12	1350	6.00
2-1/2"	DN65	40	56	M10	76	107	3	110	M12	1350	6.00
3"	DN80	40	61	M10	88.9	121	3	120	M12	1350	6.00
3-1/2"	DN90	40	64	M10	101.6	135	4	140	M12	1350	6.00
4"	DN100	45	73.5	M10	114.3	148	4	150	M18	1350	6.36
5"	DN125	50	89.5	M12	141.3	183	5	180	M16	1430	6.36
6"	DN150	50	89	M12	168.3	217	5	220	M20	1940	8.63
8"	DN200	57	104	M16	219.1	275	5	280	M20	2000	8.89
10"	DN250	57	115.5	M16	273	339	6	340	M22	3600	16.00
12"	DN300	57	119.5	M18	323.9	389	6	380	M22	3800	16.90





LOOP HANGER

Function:

Recommend for suspension of non-insulated stationary pipe line.

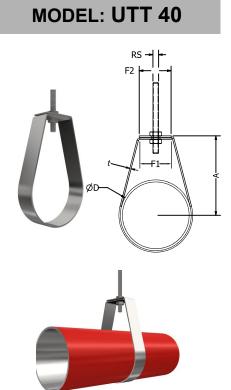
Size: 1/2" to 12"

Material: Carbon Steel

Finish: Black, Powder coating, Galvanized

Approvals: Non

	Cine A D 4 E4 E0 DC Mov. De								
S	ize	Α	D	t	F1	F2	RS	Max Re	c. Load
in	mm	mm	mm	mm	mm	mm	mm	lbs	KN
1/2"	DN15	41.50	21.30	1.20	24.50	24.50	M10	300.00	1.33
3/4"	DN20	45.30	26.70	1.20	24.50	24.50	M10	300.00	1.33
1"	DN25	49.50	33.40	1.20	26.00	26.00	M10	300.00	1.33
1-1/4"	DN32	54.20	42.20	1.20	26.00	26.00	M10	300.00	1.33
1-1/2"	DN40	56.50	48.30	1.20	26.00	26.00	M10	300.00	1.33
2"	DN50	62.20	60.30	1.20	26.00	26.00	M10	300.00	1.33
2-1/2"	DN65	92.90	73.00	2.00	26.00	26.00	M10	525.00	2.33
3"	DN80	100.50	88.90	2.00	26.00	26.00	M10	525.00	2.33
3-1/2"	DN90	100.50	101.60	2.00	26.00	26.00	M10	585.00	2.60
4"	DN100	113.40	114.30	2.00	26.00	26.00	M10	650.00	2.89
5"	DN125	135.70	141.30	3.00	31.00	31.00	M12	1,000.00	4.45
6"	DN150	154.10	168.30	3.00	31.00	31.00	M12	1,000.00	4.45
8"	DN200	192.40	219.10	3.00	31.00	31.00	M12	1,000.00	4.45
10"	DN250	236.00	273.00	5.00	40.00	40.00	M16	1,000.00	4.45
12"	DN300	282.00	323.90	5.00	40.00	40.00	M16	1,000.00	4.45



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STANDARD PIPE CLAMP

Function:

Recommend for suspension of cold or hot lines where no insulation is required.

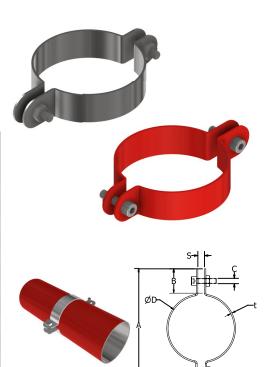
Size: 1/2" to 8"

Material: Carbon Steel

Finish: Black, Powder coating, Galvanized

Approvals: Non

App	Approvais: Non										
S	Size A		В	С	D	S	t	w	L	Max Rec.	Load
in	mm	mm	mm	mm	mm	mm	mm	mm	mm	lbs	KN
1/2"	DN15	78.00	9.90	M10	21.30	9.50	4.00	24.00	40.00	500.00	2.23
3/4"	DN20	81.00	11.80	M10	26.70	11.10	4.00	24.00	40.00	500.00	2.23
1"	DN25	95.00	15.10	M10	33.40	11.20	4.00	24.00	40.00	500.00	2.23
1-1/4"	DN32	99.00	19.50	M10	42.20	11.20	4.00	24.00	40.00	500.00	3.56
1-1/2"	DN40	108.00	22.50	M10	48.30	11.30	4.00	24.00	40.00	800.00	4.63
2"	DN50	138.00	28.50	M12	60.30	15.30	4.00	24.00	50.00	1,040.00	4.63
2-1/2"	DN65	165.00	35.00	M12	73.00	15.00	6.00	24.00	50.00	1,040.00	4.63
2-1/2"	DN65	165.00	35.00	M12	76.00	18.00	6.00	24.00	50.00	1,040.00	4.63
3"	DN80	185.00	42.00	M12	88.90	16.90	6.00	24.00	50.00	1,040.00	4.63
3-1/2"	DN90	196.00	48.00	M12	101.60	17.60	6.00	24.00	50.00	1,040.00	4.63
4"	DN100	223.00	54.00	M12	114.30	18.30	6.00	30.00	50.00	1,040.00	4.63
5"	DN125	238.00	68.00	M12	141.30	17.30	6.00	30.00	50.00	1,040.00	4.63
6"	DN150	264.00	81.00	M12	168.30	22.30	6.00	40.00	50.00	1,615.00	7.19
8"	DN200	315.00	106.50	M16	219.10	22.10	8.00	40.00	70.00	1,615.00	7.19



MODEL: UTT 60

RISER CLAMP

Function:

Recommend for suspension of cold or hot lines where no insulation is required.

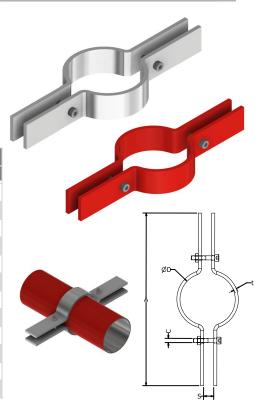
Size: 1/2" to 8"

Material: Carbon Steel

Finish: Black, Powder coating, Galvanized

Approvals: Non

ı	S	ize	Α	В	С	D	s	t	w	L	Max Rec.	Load
	in	mm	mm	mm	mm	mm	mm	mm	mm	mm	lbs	KN
	1/2"	DN15	216.00	64.00	M10	24.00	10.00	5.00	25.00	35.00	220.00	0.98
	3/4"	DN20	223.00	73.00	M10	29.00	10.00	5.00	25.00	35.00	220.00	0.98
	1"	DN25	229.00	79.00	M10	36.00	10.00	5.00	25.00	38.00	220.00	0.98
1	-1/4"	DN32	240.00	89.00	M10	44.00	10.00	5.00	25.00	35.00	250.00	1.12
1	-1/2"	DN40	250.00	98.00	M10	52.00	10.00	5.00	25.00	35.00	250.00	1.12
	2"	DN50	260.00	108.00	M12	62.00	10.00	5.00	30.00	35.00	300.00	1.34
2	2-1/2"	DN65	280.00	122.00	M12	77.00	12.00	5.00	30.00	45.00	400.00	1.78
	3"	DN80	300.00	140.00	M12	92.00	12.00	5.00	30.00	45.00	500.00	2.23
	4"	DN100	330.00	178.00	M12	114.00	12.00	6.00	40.00	60.00	750.00	3.24
	5"	DN125	368.00	203.00	M12	141.00	12.00	6.00	40.00	60.00	1,500.00	6.68
	6"	DN150	406.00	229.00	M12	168.00	12.00	6.00	40.00	60.00	1,600.00	7.12
	8"	DN200	464.00	305.00	M16	220.00	19.00	8.00	50.00	70.00	2,500.00	11.20



MODEL: UTT 50

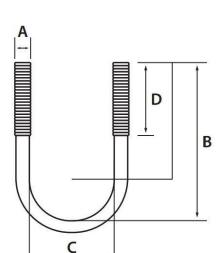
M.E.P Hanger And Support Unistar - 10 --



MODEL: UTT81

GENERAL FIXINGS, U BOLTS

Thread	В	С	D	Thread	В	С	D
Diameter (A)		(mm)	(MM)	Diameter (A)	(mm)		(MM)
M6	32	14	13	M10	90	60	40
М6	32	14	16	M10	92	49	45
М6	36	18	16	M10	100	76	40
М6	37	18	14	M10	105	76	40
М6	40	22	18	M10	110	61	53
М6	40	23	16	M10	116	90	40
М6	48	21	30	M10	138	77	70
М6	53	27	30	M10	140	114	40
М 6	55	28	27	M10	143	89	70
М6	60	34	30	M10	150	124	40
М6	65	35	30	M10	150	129	40
М8	42	23	16	M10	156	115	55
М8	45	27	25	M10	168	140	40
М8	50	21	30	M10	180	154	40
М8	52	27	25	M10	185	140	70
М8	53	27	25	M10	202	170	40
М8	53	27	30	M10	240	204	40
М8	58	28	25	M10	268	220	60
М8	60	34	25	M12	107	76	40
М8	64	34	30	M12	110	61	53
М8	68	35	32	M12	115	90	40
М8	68	43	25	M12	116	90	40
М8	70	42	40	M12	138	77	70
М8	70	48	28	M12	140	114	40
М8	70	49	28	M12	143	89	70
M 8	80	55	35	M12	163	102	75
M8	81	43	41	M12	165	140	40
M8	82	61	28	M12	170	140	40
M8	90	49	46	M12	175	115	75
M8	90	60	40	M12	200	170	50
M8	98	77	28	M12	202	170	40
M8	100	71	40	M12	210	168	70
M8	106 110	65	35	M12	270	220	60
M8 M8	110	61 75	53 40	M12 M14	315	276	40
M8	110	89	28	M14	270 315	220 274	60 60
M8	119	85	40	M16	143	112	50
M8	144	105	40	M16	175	140	50
M10	52	21	30	M16	205	170	55
M10	55	27	30	M16	260	225	50
M10	64	34	32	M16	270	220	60
M10	70	42	40	M16	315	276	50
M10	70	45	40	M16	360	324	50
M10	71	35	34	M16	395	365	75
M10	75	51	40	M16	495	415	85
M10	80	50	40	M16	535	465	85
M10	81	43	41	M16	595	520	85
M10	85	60	40	M 20	645	570	90
9	- 55	- 55		M20	695	620	90
				.TI & U	555	520	50



U Bolts

U bolts available in a range of sizes and finishes to support different loads, torque requirements and environments.

A U-bolt is an industrial fastener in the shape of the letter U with two threaded arms (or legs) extending from a curved base. U bolts are typically used to support pipework or to attach a part to a pole, beam or wall, where the "u" shape keeps it firmly in place, adding stability to the support.

The threaded ends are designed for use with washers and screws, and can also be used with a crosspiece spanning both threaded arms of the bolt, to make it more secure in certain settings and uses. Ubolts are designed to be inserted through holes that have already been drilled or punched.

Often used as framing fasteners and anchors for foundations and roofs, pipe and conduit holders and bolts for motor and engine shaft components.

U-bolt specifications include

- 1. Material Type (For example: zinc plated mild steel)
- 2. Thread dimensions (For example: M12*50 mm)
- 3. Inside diameter (For example: 50 mm the distance between the legs)
- Inside height (For example: 120 mm) Suitable for automotive, plumbing, construction and other home and industrial applications.

M.E.P Hanger And Support



Material:

Zinmag

Zinmag®

Pre-Galvanized Steel.

Hot-Deep Galvanized Steel.

C chanel Hole size: D12-L27. 50mm hole to hole

Square tube hole size: D12. 50mm hole to hole

C CHANEL SUPPORTS

Pre-Galvanized Steel.

Page 12-13







2121 C Chanel UC2121-1

2121 C Chanel UC2121-0

4141 C Chanel UC4141-0

4141 C Chnael UC4141-1

C CHANEL SUPPORTS









Double 2121 C Chanel **UCD2121-1**

Double 4121 C Chanel **UCD4121-1**

Double 4141 C Chanel UCD4141-1

C CHANEL SUPPORTS

Page 14-16



Hot-Deep Galvanized Steel.







6241 C Chnael UC6241-0

6241 C Chanel UC6241-1

8241 C Chanel UC8241-1

8241 C Chanel UC8241-0

PERFORATED SQUARE TUBE

Page 17-19

Hot-Deep Galvanized Steel.



5050 Square Tube USQ50-1



Double Square Tube USQ50x2-1

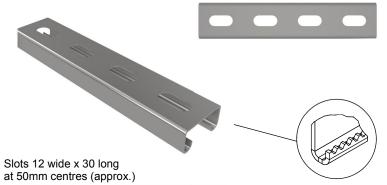


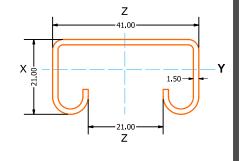
Four Square Tube Combined USQ50x4-1

Unistar —— 12 —— M.E.P Hanger And Support



PERFORATED C CHANEL MODEL: UC2121-1





L(mm)	F				
	σ=175 N/mm²		f=1/200L	f=1/360L	F _(8N)
_	Fmax(kN)	fmax(mm)	F (kN)	F (kN)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
250	3.976	0.51	-	-	-
500	1.988	2.02	=	1.364	-
750	1.325	4.55	1.092	0.606	-
1000	0.994	8.09	0.614	0.341	-
1250	0.795	12.65	0.393	0.218	-
1500	0.663	18.21	0.273	-	-
1750	0.568	24.79	=	-	-
2000	0.497	32.38	-	-	-
	•				

Y 、	
. 6	
VA	<u> </u>

Mass: 1.095kg/m

= 1.34 cm² $^{\circ}_{\mathbf{m}}$ /m = 1.16 kg/m

 $I y-y = 0.78 \text{ cm}^4$

 $Z y-y = 0.71 cm^3$ r y-y = 0.76 cm

 $I z-z = 3.66 \text{ cm}^4$ $Z z-z = 1.77 cm^3$

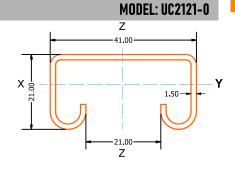
rz-z = 1.65 cm

Part No. Length M Finish P2000T P4000T10



GAL.

NON-PERFORATED C CHANEL



Mass: 1.165kg/m

L(mm)	F	8			
	<u> </u>	σ=175 N/mm²	f=1/200L	f=1/360L	F _{OM} $\overline{\Psi}$
	Fmax(kN)	fmax(mm)	F (kN)	F (kN)	<i>1111111111111111111111111111111111111</i>
250	3.976	0.51	•	•	-
500	1.988	2.02	=	1.364	-
750	1.325	4.55	1.092	0.606	-
1000	0.994	8.09	0.614	0.341	-
1250	0.795	12.65	0.393	0.218	-
1500	0.663	18.21	0.273	-	-
1750	0.568	24.79	=	-	-
2000	0.497	32.38	-	-	-



= 1.34 cm² $^{\circ}_{\mathbf{m}}$ /m = 1.16 kg/m

 $l y-y = 0.78 cm^4$

 $Z y-y = 0.71 cm^3$ r y-y = 0.76 cm

 $1 z-z = 3.66 \text{ cm}^4$ $Z z-z = 1.77 cm^3$

r z-z = 1.65 cm

Part No.	Lenç	yth M		Finish	
	3	6	P0	PG	HG
P2000T	•	•	•	•	•
P4000T10	•	•		•	

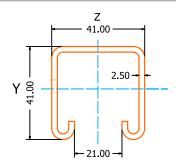
Zinmag® GAL.

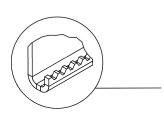


PERFORATED C CHANEL

MODEL: SC4141-1

Slots 12 wide x 30 long at 50mm centres (approx.)







Mass: 2.52 kg/m



A = 1.92 cm^2 $\frac{8}{100}$ /m = 1.72 kg/mI y-y = 4.24 cm^4 Z y-y = 2.04 cm^3

r y-y = 1.48 cm l z-z = 6.10 cm⁴

 $Z z-z = 2.95 \text{ cm}^3$ r z-z = 1.78 cm

Zinmag®

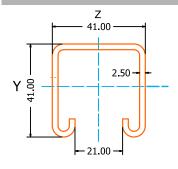
GAL.

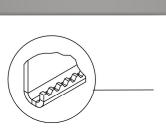
L(mm)	F σ=175 N/mm²		f=1/ _{200L}	f=1/ _{360L}	F ₍₄₄₎
	Fmax(kN)	fmax(mm)	F (kN)	F (kN)	<i>1111111111111111111111111111111111111</i>
250	11.42	0.26	-	-	11.35
500	5.71	1.06	-	=	10.87
750	3.81	2.40	-	3.30	10.65
1000	2.85	4.27	*-	1.85	9.30
1250	2.28	6.68	2.13	1.18	7.79
1500	1.90	9.62	1.48	0.82	6.54
1750	1.63	13.10	1.09	0.60	5.55
2000	1.42	17.11	0.83	0.46	4.78
2250	1.27	21.65	0.66	0.36	4.17
2500	1.14	26.73	0.53	0.29	3.69
2750	1.03	32.35	0.43	0.24	3.30*
3000	0.95	38.50	0.36	0.21	3.05*

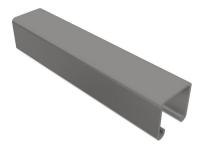
^{*} K. L/r = >180 < 250

NON-PERFORATED C CHANEL

MODEL: UC4141-0







Mass: 2.63 kg/m

, ~ (➣	
X	₹Z	Y
Α	=	1.92 cm ²
₾ /m	=	1.72 kg/m
l y-y	=	4.24 cm ⁴
Z y-y	=	2.04 cm ³
r y-y	=	1.48 cm
l z-z	=	6.10 cm ⁴
7 7-7	_	2 95 cm ³

r z-z

Zinmag®	GAL.

1.78 cm

L(mm)	F	σ=175 N/mm²	f=1/ _{200L}	f= ¹ / _{360L}	F ₆₀₀ \overline{ullet}	
•	Fmax(kN)	fmax(mm)	F (kN)	F (kN)	<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	
250	11.42	0.26	•	-	11.35	
500	5.71	1.06	-	-	10.87	
750	3.81	2.40	-	3.30	10.65	
1000	2.85	4.27	*_	1.85	9.30	
1250	2.28	6.68	2.13	1.18	7.79	
1500	1.90	9.62	1.48	0.82	6.54	
1750	1.63	13.10	1.09	0.60	5.55	
2000	1.42	17.11	0.83	0.46	4.78	
2250	1.27	21.65	0.66	0.36	4.17	
2500	1.14	26.73	0.53	0.29	3.69	
2750	1.03	32.35	0.43	0.24	3.30*	
3000	0.95	38.50	0.36	0.21	3.05*	

^{*} K. L/r = >180< 250



41 00

COMBINATION PERFORATED C CHANEL

MODEL: UCD4141-1



Fmax(kN)

16.383

12.292

8.191

7.024

6.141

5.454

4.915

4.464

4.091

Length M

σ=175 N/mm²

1.21

2.15

4.84

6.59

8.61

10.89

13.45

16.27

19.37



f=1/360L

F (kN)

7.044

5.170

3.963

3.129

2.531

2.090

1.756

SS

 $f=1/_{200L}$

F (kN)

4.562

3.767

3.169

Finish

Slots 12 wide x 30 long at 50mm centres (approx.)

250

500

750

1000

1500

1750

2000

2250

2500

2750

3000

Part No.

P1001 P1001T

ŀkg/m

F,624 ₹

28.253

28.096

27.792

27.301

26.438

25.025

23.220

21.288

19.394

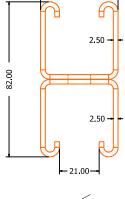
17.619

15.990

14.519*

Slot Size (T)

D12*L30





= 6.70 cm²

5.77 kg/m = 36.27 cm⁴ l y-y

= 8.78 cm³ Z y-y

= 2.32 cm

l z-z = 18.46 cm⁴

Z z-z = 8.94 cm³

rz-z = 1.66 cm

Zinmag

GAL.

COMBINATION NON-PERFORATED C CHANEL

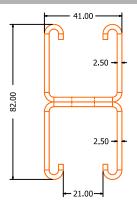
MODEL: UCD4141-0





Slots 12 wide x 30 long at 50mm centres (approx.)

Mass: 5.26 kg/m







 $= 6.70 \text{ cm}^2$ = 5.77 kg/m

= 36.27 cm⁴

 $= 8.78 \text{ cm}^3$ = 2.32 cm

l z-z = 18.46 cm⁴

 $Z z-z = 8.94 cm^3$ = 1.66 cmr z-z

Zinmag® GAL.

at somm centres (approx.)						ivia	ss: 5.∠6 kg/m
L(mm)		F σ=175 N/mm²		f=1)	f=1/ _{200L} f=		F _{IMO} $\overline{\Psi}$
_	Fmax	(kN)	fmax(mm)	F (I	kN)	F (kN)	<i>111111</i> 111111111
250		-	-			-	28.253
500		-	-		-	-	28.096
750	16	.383	1.21		-	-	27.792
1000	12	.292	2.15		-	-	27.301
1250	9.8	830	3.36		-	-	26.438
1500	8.	191	4.84	,	-	7.044	25.025
1750	7.	024	6.59	,	-	5.170	23.220
2000	6.	141	8.61		-	3.963	21.288
2250	5.	454	10.89		-	3.129	19.394
2500	4.	915	13.45	4.5	62	2.531	17.619
2750	4.	464	16.27	3.7	67	2.090	15.990
3000	4.	091	19.37	3.1	69	1.756	14.519*
Part No.	Leng	th M	_	Fi	nish		Slot Size (T)
	3	6	P0	PG	HG	SS	D12*L30
P1001	•	•	•	•	•	•	
P1001T	•	•	•	•	•	•	•



COMBINATION PERFORATED C CHANEL

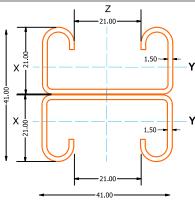
MODEL: UCD2121-1

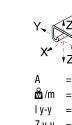




Slots 12 wide x 30 long at 50mm centres (approx.)

Mass:	2.19	ka/m





Α	=	4.09 cm ²
☆ /m	=	3.53 kg/m
l y-y	=	6.42 cm ⁴
Z y-y	=	2.97 cm ³
r y-y	=	1.25 cm
l z-z	=	10.64 cm⁴
Z z-z	=	5.14 cm ³
r z-z	=	1.61 cm

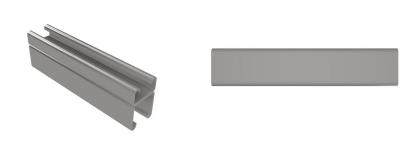
Zinma	g	GAL.
		1.61 cm
Z z-z	=	5.14 cm ³

	F				
L(mm)	Fmax(kN)	σ=175 N/mm² fmax(mm)	f= ¹ / _{200L} F (kN)	f= ¹ / _{360L} F (kN)	F ₍₀₀₎ V
250	16.632	0.26	- (1014)	- (101)	17.266
				-	
500	8.316	1.03	-	-	17.030
750	5.544	2.31	-	4.991	16.599
1000	4.158	4.11	=	2.808	15.667
1250	3.326	6.43	3.234	1.797	14.156
1500	2.772	9.26	2.246	1.248	12.478
1750	2.376	12.60	1.650	0.917	10.899
2000	2.079	16.45	1.263	0.702	9.496
2250	1.848	20.83	0.998	0.555	8.289*
2500	1.663	25.71	0.809	0.449	7.250*
2750	1.512	31.11	0.668	0.371	6.377*
3000	1.386	37.02	0.562	0.312	-

Part No.	Len	gth M		Fir	iish	
	3	6	PO	PG	HG	SS
P4001T	•	•	•	•	•	•

COMBINATION NON-PERFORATED C CHANEL

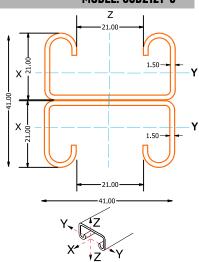
MODEL: UCD2121-0



Mass: 2.33 kg/m

				ivido	. 2.00 kg/iii
L(mm)	Fmax(kN)	σ=175 N/mm² fmax(mm)	f= ¹ / _{200L} F (kN)	f= ¹ / _{360L} F (kN)	F _{axs} $\sqrt{}$
250	16.632	0.26	-	-	17.266
500	8.316	1.03	-	-	17.030
750	5.544	2.31	-	4.991	16.599
1000	4.158	4.11	-	2.808	15.667
1250	3.326	6.43	3.234	1.797	14.156
1500	2.772	9.26	2.246	1.248	12.478
1750	2.376	12.60	1.650	0.917	10.899
2000	2.079	16.45	1.263	0.702	9.496
2250	1.848	20.83	0.998	0.555	8.289*
2500	1.663	25.71	0.809	0.449	7.250*
2750	1.512	31.11	0.668	0.371	6.377*
3000	1.386	37.02	0.562	0.312	-

Part No.	Length M			Finish		
	3	6	P0	PG	HG	SS
P3301T10	•	•	•	•	•	•



Α	=	4.09 cm ²
<u>&</u> /m	=	3.53 kg/m
l y-y	=	6.42 cm ⁴
Z y-y	=	2.97 cm ³
r y-y	=	1.25 cm

 $Iz-z = 10.64 \text{ cm}^4$ $Z z-z = 5.14 cm^3$ rz-z = 1.61 cm

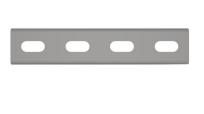
Zinmag® GAL.

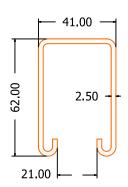


PERFORATED 62X41 C CHANEL

MODEL: UC6241-1







Slots 12 wide x 30 long at 50mm centres (approx.)

Mass: 3.36 kg/m

at sommiss (approxi)							
L(mm)	F σ=167 N/mm²		f=1/200L	f=1/ _{360L}	F ₀₈₀ V		
	Fmax(kN)	fmax(mm)	F (kN)	F (kN)	71111111111111111		
250	-	=	=	-	20.277		
500	-	-	-	-	20.081		
750	9.928	1.50	-	-	18.443		
1000	7.446	2.67	-	-	15.245		
1250	5.955	4.18	-	4.944	12.557		
1500	4.964	6.02	-	3.434	10.507		
1750	4.248	8.19	-	2.521	8.966		
2000	3.718	10.70	3.473	1.923	7.789		
2250	3.306	13.55	2.747	1.521	6.867		
2500	2.972	16.73	2.217	1.236	6.141		
2750	2.708	20.24	1.834	1.020	5.543		
3000	2.482	24.09	1.540	0.853	5.042		



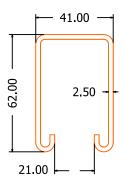
 $= 4.03 \text{ cm}^2$ \mathbf{m} /m = 3.60 kg/m $I y-y = 17.57 \text{ cm}^4$ $\mbox{ Z y-y } = \mbox{ 5.59 cm}^{\mbox{\tiny 3}}$ r y-y = 2.09 cm $Iz-z = 13.07 \text{ cm}^4$ $Z z-z = 6.33 cm^3$ r z-z = 1.79 cmGAL.

Zinmag®

MODEL: UC6241-0

NON-PERFORATED 61X41 C CHANEL





Mass: 3.50 kg/m

L(mm)	σ=167 N/mm²		f= ¹ / _{200L}	f=1/ _{360L}	For V
	Fmax(kN)	fmax(mm)	F (kN)	F (kN)	711111111111111111111111111111111111111
250	-	-	-	-	20.277
500	-	-	-	-	20.081
750	9.928	1.50	-	-	18.443
1000	7.446	2.67	-	-	15.245
1250	5.955	4.18	-	4.944	12.557
1500	4.964	6.02	-	3.434	10.507
1750	4.248	8.19	-	2.521	8.966
2000	3.718	10.70	3.473	1.923	7.789
2250	3.306	13.55	2.747	1.521	6.867
2500	2.972	16.73	2.217	1.236	6.141
2750	2.708	20.24	1.834	1.020	5.543
3000	2.482	24.09	1.540	0.853	5.042



= 4.03 cm² $\frac{\circ}{m}$ /m = 3.60 kg/m $I y-y = 17.57 \text{ cm}^4$ $Z y-y = 5.59 cm^3$ r y-y = 2.09 cm $I z-z = 13.07 \text{ cm}^4$ $Z z-z = 6.33 \text{ cm}^3$

rz-z = 1.79 cmZinmag®

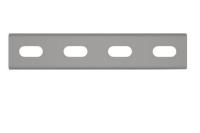
GAL.

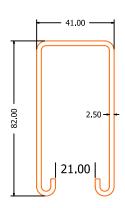


PERFORATED 82X41 C CHANEL

MODEL: UC8241-1



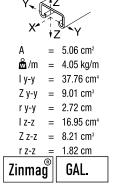




Slots 12 wide x 30 long at 50mm centres (approx.)

Mass: 4.17 kg/m

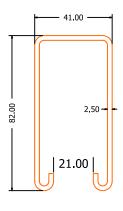
L(mm)	F Fmax(kN)	σ=132 Wmm² fmax(mm)	f=1/ _{200L} F (kN)	f=1/ _{360L} F (kN)	F _(N) ¥
250	-	-	-		19.620
500	-	=	-	-	19.355
750	12.596	0.89	-	=	16.422
1000	9.447	1.59	-	-	12.822
1250	7.554	2.48	-	=	10.124
1500	6.298	3.58	-	-	8.182
1750	5.396	4.86	-	-	6.769
2000	4.719	6.36	-	4.120	5.719
2250	4.199	8.05	-	3.257	4.934
2500	3.777	9.93	-	2.639	4.326
2750	3.434	12.02	-	2.178	3.846
3000	3.149	14.31	-	1.834	3.453



NON-PERFORATED 82X41 C CHANEL

MODEL: UC8241-0





Mass: 4.30 kg/m

				IVIUS	3. +.00 kg/iii
L(mm)	F Fmax(kN)	σ=132 N/mm² fmax(mm)	f= ¹ / _{200L} F (kN)	f=1/ _{360L} F (kN)	F _(AN)
250	ē	-	-	-	19.620
500	-	-	-	-	19.355
750	12.596	0.89	-	-	16.422
1000	9.447	1.59	-	-	12.822
1250	7.554	2.48	-	-	10.124
1500	6.298	3.58	-	-	8.182
1750	5.396	4.86	-	-	6.769
2000	4.719	6.36	-	4.120	5.719
2250	4.199	8.05	-	3.257	4.934
2500	3.777	9.93	-	2.639	4.326
2750	3.434	12.02	-	2.178	3.846
3000	3.149	14.31	-	1.834	3.453



r y-y = 2.72 cm l z-z = 16.95 cm⁴

 $Z z-z = 8.21 cm^3$ r z-z = 1.82 cm

Zinmag® GAL.



MODEL: UTT 80

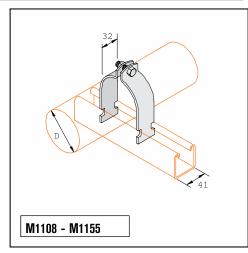
PIPE AND CONDUIT CLAMPS

Pipe and Conduit Clamps

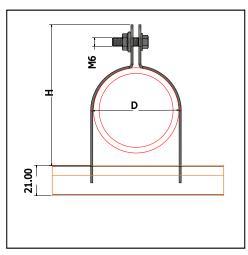
- Safety Factor of 5
- Add PA to suffix for pre-assembled pipe clamps
- Includes Combination Recess Hex Head Machine Screw and Square Nut
- Material: 16 Ga. (1.5), 14 Ga. (1.9), 12 Ga. (2.6) ASTM A1011 33,000 PSI min. yield and 11 Ga. (3.0) ASTM A1011 HSLA Gr. 50
- Standard finishes: ZN, HDG, SS4, SS6, AL

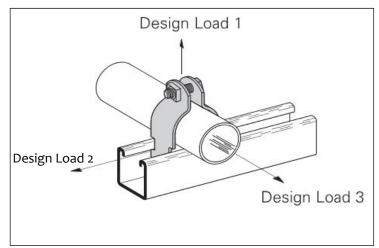
Note: For EMT sizes 21/2" and larger use rigid conduit sizes.

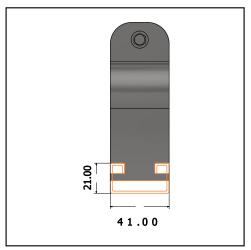
					_					
Thinwa	II Condu	it Clamps								
Cond	uit Size	Material Thickness	Design 1	Load	•	n Load 2	•	n Load 3	Wi	t. 100
in	mm	mm	lbf	kN	lbf	kN	lbf	kN	lbs	kg
3/8"	DN10	1.50	400	1.78	50	0.22	50	0.22	10	4.50
1/2"	DN15	1.50	400	1.78	50	0.22	50	0.22	10	4.50
3/4"	DN20	1.90	400	1.78	50	0.22	75	0.22	11	5.00
1"	DN25	2.00	600	2.67	75	0.33	75	0.33	16	7.20
1-1/4"	DN32	2.00	600	2.67	75	0.33	75	0.33	19	8.60
1-1/2"	DN40	2.50	800	3.56	125	0.56	125	0.56	28	12.70
2.00	DN50	2.50	800	3.56	125	0.56	125	0.56	33	14.90



Rigid o	r Condui	it or Pipe Cl	amps							
Cond	uit Size	Material Thickness	Design 1	Load	Design 2	n Load 2		n Load 3	Wt	. 100
in	mm	mm	lbf	kN	lbf	kN	lbf	kN	lbs	kg
3/8"	DN10	1.50	400	1.78	50	0.22	50	0.22	10	4.50
1/2"	DN15	1.50	400	1.78	50	0.22	50	0.22	11	5.00
3/4"	DN20	2.00	600	2.67	75	0.33	75	0.33	15	6.80
1"	DN25	2.00	600	2.67	75	0.33	75	0.33	16	7.20
1-1/4"	DN32	2.00	800	2.67	75	0.33	75	0.33	20	9.10
1-1/2"	DN40	2.50	800	3.56	125	0.56	125	0.56	30	13.60
2.00	DN50	2.50	800	3.56	125	0.56	125	0.56	34	15.40
2-1/2"	DN65	2.50	800	3.56	125	0.56	125	0.56	38	17.20
3"	DN80	2.50	1,000	3.56	125	0.56	125	0.56	44	19.90
3-1/2"	DN90	3.00	1,000	4.45	200	0.89	150	0.67	61	27.60
4.00	DN100	3.00	1,000	4.45	200	0.89	150	0.67	66	29.90
4-1/2"	DN115	3.00	1,000	4.45	200	0.89	150	0.67	70	31.70
5"	DN125	3.00	1,000	4.45	200	0.89	150	0.67	77	34.90
6"	DN150	3.03	1,000	4.45	200	1.11	150	0.67	100	45.30
7"	DN175	3.00	1,000	4.45	250	1.11	200	0.89	115	52.10
8"	DN200	3.00	1,000	4.45	250	1.11	200	0.89	128	58.00
10"	DN250	3.00	1,000	4.45	250	1.11	200	0.89	160	72.60
12"	DN300	3.00	1,000	4.45	250	1.11	200	0.89	185	83.90







Unistar —— 19 —— M.E.P Hanger And Support



Base and Wing fittings



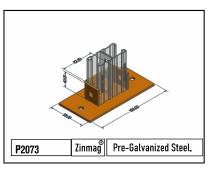
P2072-S2	Zinmag® Pre-Galvanized Steel.

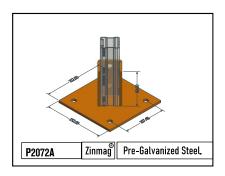
P2072-S3	Zinmag® Pre-Galvanized Steel.

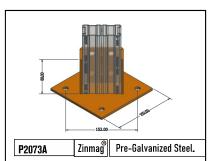
Part No.	Finish		٥	
	ZAM	GAL.	W	
P2072-S1	•	•	0.48	10

Part No.	Fir	Finish		$\overline{\mathcal{A}}$	
	ZAM	GAL.		— /	
P2072-S2	•	•	0.33	10	

Part No.	Finish	<u>&</u>	7
	ZAM GAL.	ш	
P2072-S3	•	0.30	10



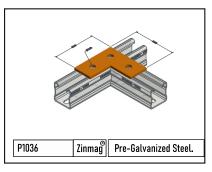


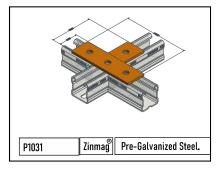


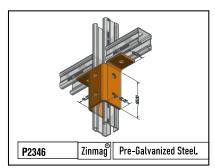
Part No.	Fi	Finish		
	ZAM	GAL.		
P2073	•	•	0.98	10

Part No.	Fi	nish	<u>A</u>	\nearrow
	ZAM	GAL.		— /
P2072A	٠	•	1.70	10

Part No.	Fir	nish	<u> </u>	
	ZAM	GAL.	W	
P2073A	•	•	1.80	10



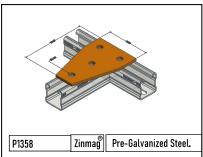


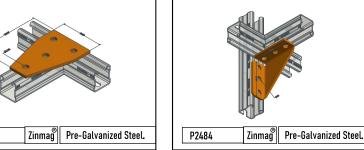


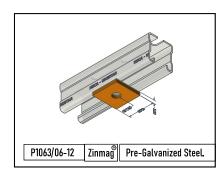
Part No.	Fin	ish	٥	7
	ZAM	GAL.	₩.	
P2348-S1	•	•	1.95	1

Part No.	Fir	nish	٥		
	ZAM	GAL.	₩.		
P2348-S2	•	•	2.15	1	

Part No.	Fir	nish	٥	
	ZAM	GAL.	₩.	
P2346	•	•	0.68	10







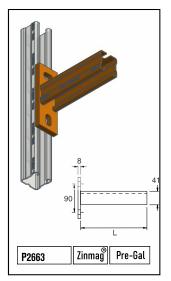
Part No.	Fir	nish	٥		
	ZAM	GAL.	₩.		
P2341R	•	•	0.21	25	

Part No.	Fir	nish	٥	7	
	ZAM	GAL.	₩.		
P2341L	•	•	0.21	25	

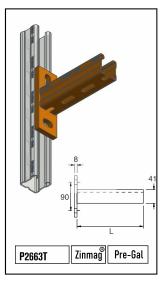
Part No.	Fi	nish	٥	$\overline{}$
	ZAM	GAL.	•	
P2223	•	•	0.35	25



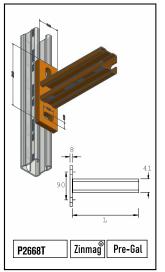
Cantilever arms



					L F1		.F1 .F2 .F2	F3 F3 F3
Part No.	Finish		Finish L		L L	1/3L 1/3L 1/3L L	1/4 V 1/4 V 1/4 I V1/41	
P2663/150	•	•	0.77	150	6.20 kN	3.10 kN	3.10 kN	2.06 kN
P2663/300	•	•	1.20	300	3.20 kN	1.60 kN	1.60 kN	1.06 kN
P2663/450	•	•	1.63	450	2.15 kN	1.07 kN	1.07 kN	0.71 kN
P2663/600	•	•	2.07	600	1.62 kN	0.81 kN	0.81 kN	0.54 kN
P2663/750	•	•	2.50	750	1.30 kN	0.65 kN	0.65 kN	0.43 kN



		Finish		0	L	1/2 L VF1 1/2 L		V ^{F1} 1/31√ F2 F2 1/31√ 1/31	1/4 1 F3 F3 F3 F3 1/4 1 1/41
Part No.	ZAM	/GAL.	ZP		(mm)	L	L	L	L
P2663T/150	•	•	•	0.75	150	6.12 kN	3.06 kN	3.06 kN	2.04 kN
P2663T/300	•	•	•	1.16	300	3.06 kN	1.53 kN	1.53 kN	1.02 kN
P2663T/450	•	•	•	1.57	450	2.04 kN	1.02 kN	1.02 kN	0.68 kN
P2663T/600	•	•	•	1.98	600	1.53 kN	0.76 kN	0.76 kN	0.50 kN
P2663T/750	•	•	•	2.39	750	1.22 kN	0.61 kN	0.61 kN	0.40 kN



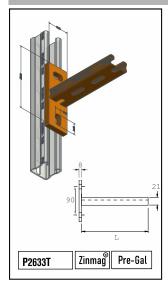
Part No.	Finish zam /gal.		1/2 L V ^{F1} 1/2 L			F1 1/31 F2 F2 1/3L F2 1/3L	1/4 \ F3 F3 F3 F3 1/41 \\ L
			(mm)	0.00 LN	=	=	
P2668T/150	•	• 0.75	150	6.20 kN	3.10 kN	3.10 kN	2.06 kN
P2668T/300	•	• 1.16	300	3.20 kN	1.60 kN	1.60 kN	1.06 kN
P2668T/450	•	• 1.57	450	2.15 kN	1.07 kN	1.07 kN	0.71 kN
P2668T/600	•	• 1.98	600	1.62 kN	0.81 kN	0.81 kN	0.54 kN

Loadings indicated are only applicable when 2 fixings per cantilever arms are used. Stated loadings apply to mild steel products only.

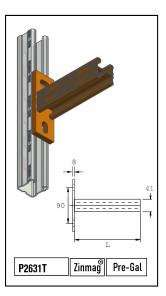
Unistar —— 21 —— M.E.P Hanger And Support



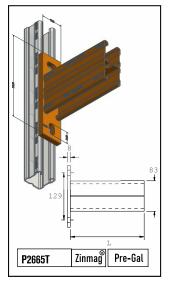
Cantilever arms



Dort No.	Finish L zam gal 🛱 (mr		L (mm)	1/2 L F1 1/2 L	1/31 V 1/31 V 1/31 1/41 V 1/41 V 1/41		F3 F	
Part No.	ZAM	GAL.		(mm)	ь	ь	ь	ь
P2633T/150	•	•	0.60	150	1.94 kN	0.97 kN	0.97 kN	0.64 kN
P2633T/300	•	•	0.87	300	1.00 kN	0.50 kN	0.50 kN	0.33 kN
P2633T/450	•	•	1.13	450	0.67 kN	0.33 kN	0.33 kN	0.22 kN



	Fin	ish	_	L	1/2 L V 1/2 L		V ^{F1} 1/3L V ^{F2} 1/3L V ^{F2} 1/3L	1/41 1/41 1/41 1/41
Part No.	ZAM	GAL.	å	(mm)	T .	L	L C	L L
P2631T/150	•	•	0.87	150	5.95 kN	2.97 kN	2.97 kN	1.98 kN
P2631T/300	•	•	1.40	300	3.07 kN	1.53 kN	1.53 kN	1.02 kN
P2631T/450	•	•	1.93	450	2.06 kN	1.03 kN	1.03 kN	0.68 kN
P2631T/600	•	•	2.46	600	1.56 kN	0.78 kN	0.78 kN	0.52 kN
P2631T/750	•	•	2.99	750	1.25 kN	0.62 kN	0.62 kN	0.41 kN

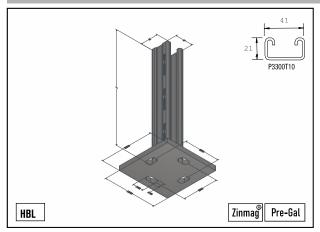


	Finish . L				L 1/2 L F1 1/3 L F2 1/3 L F2 1/4 L 1					
Part No.	ZAM	GAL.	ů	(mm)	L	L	→ L	L L		
P2665T/150	•	•	1.44	150	8.82 kN	4.41 kN	4.41 kN	2.94 kN		
P2665T/300	•	•	2.21	300	6.47 kN	3.23 kN	3.24 kN	2.15 kN		
P2665T/450	•	•	3.09	450	4.31 kN	2.15 kN	2.15 kN	1.43 kN		
P2665T/600	•	•	3.72	600	3.23 kN	1.61 kN	1.61 kN	1.07 kN		
P2665T/750	•	•	4.73	750	2.58 kN	1.29 kN	1.29 kN	0.86 kN		

Loadings indicated are only applicable when 2 fixings per cantilever arms are used. Stated loadings apply to mild steel products only.



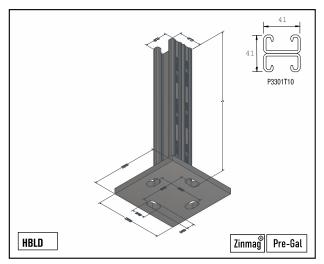
Vertical support with single and double channel

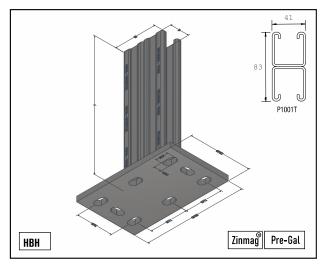


	41 P1000T
НВМ	 Zinmag® Pre-Gal

Part No.	Finish zam /gal.	L (mm)	å
HBL/500	•	525	2.00
HBL/750	•	775	2.44
HBL/1000	•	1025	2.88
HBL/1250	ě	1275	3.32

Part No.	Finish ZAM /GAL.	L (mm)	۵
HBM/500	•	525	2.51
HBM/750	•	775	3.19
HBM/1000	•	1025	3.88
HBM/1250	•	1275	4.30





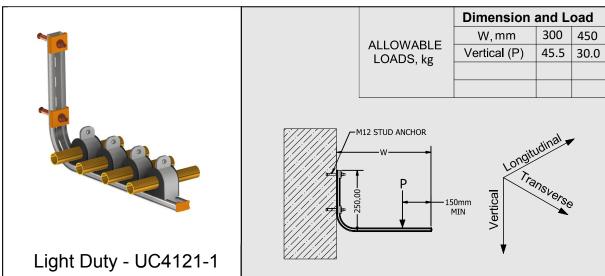
Part No.	Finish	L (mm)	٥
	ZAM GAL.		₩
HBLD/500	•	525	2.93
HBLD/750	•	775	3.81
HBLD/1000	•	1025	4.70
HBLD/1250	•	1275	5.58
HBLD/1500	•	1525	6.46
HBLD/2000	•	2025	8.23

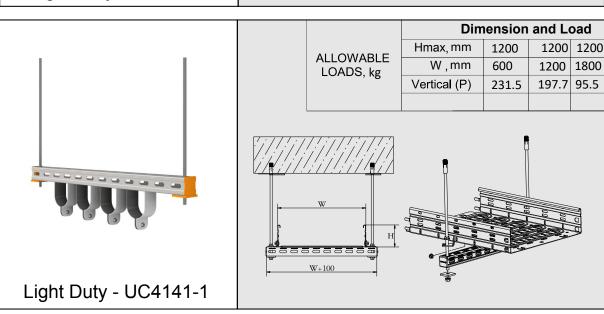
Part No.	Finish Zam Gal.	L (mm)	å
HBH/500	•	525	4.60
HBH/750	•	775	5.97
HBH/1000	•	1025	7.33
HBH/1250	•	1275	8.70
HBH/1500	•	1525	10.07
HBH/2000	•	2025	12.80

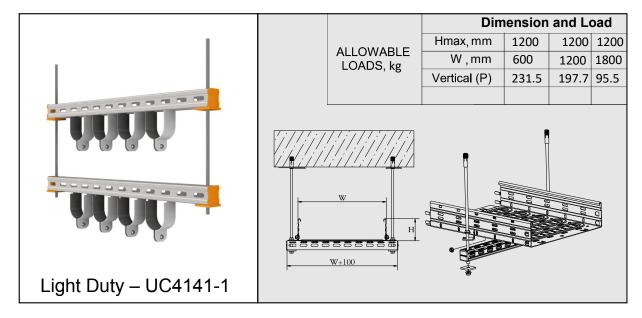
Unistar —— 23 —— M.E.P Hanger And Support



LIGHT DUTY C CHANEL BRACKET

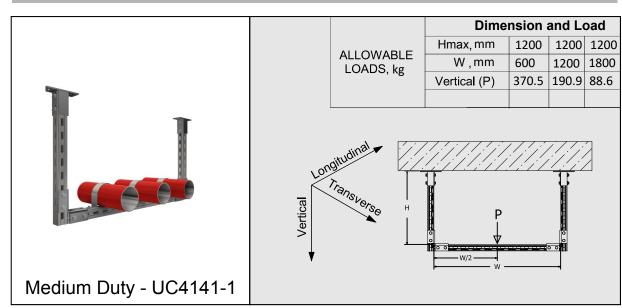


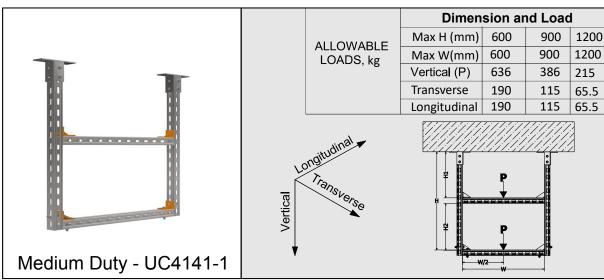


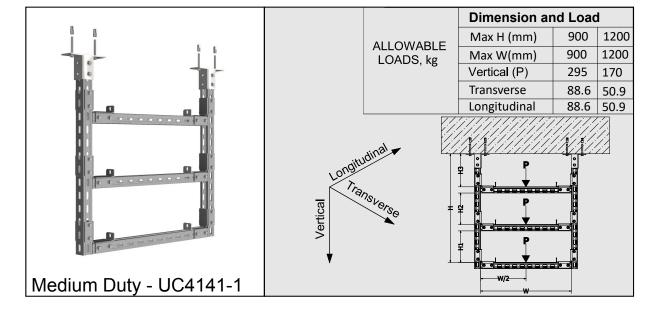




MEDIUM DUTY C CHANEL TREPEZE BRACKET



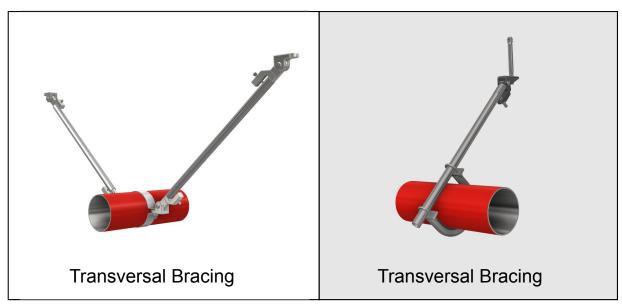


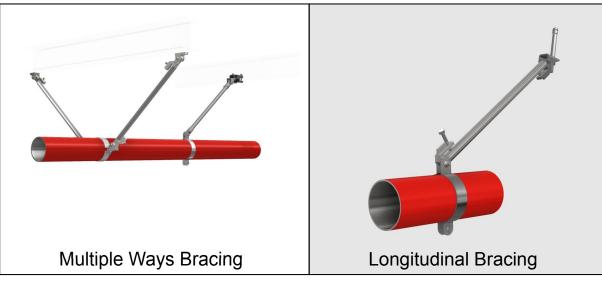


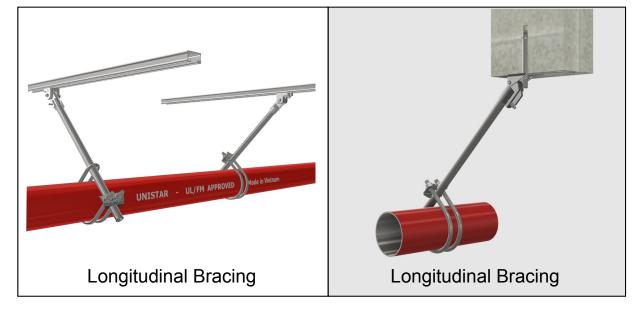
Unistar _____ 25 ____ M.E.P Hanger And Support



SEISMIC BRACING WITH 1" PIPE AND CLAMP

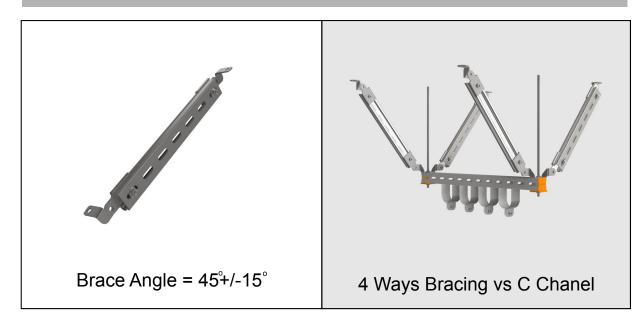


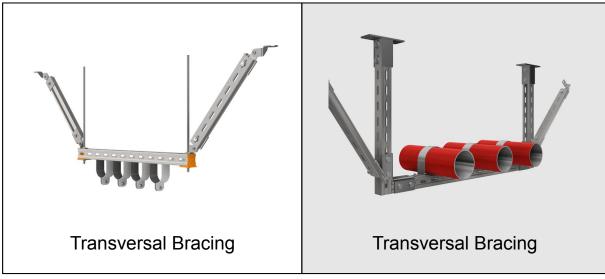


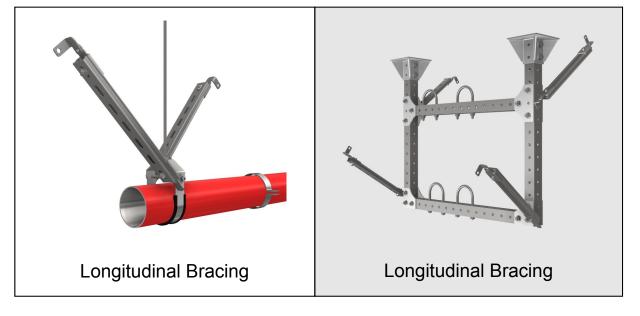




SEISMIC BRACING WITH C CHANEL

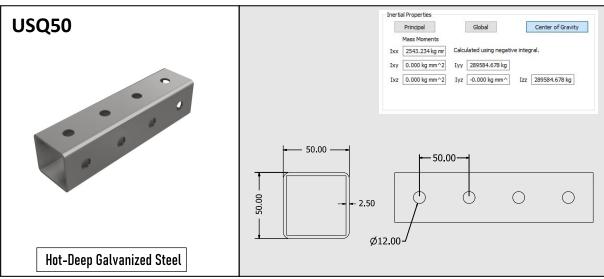


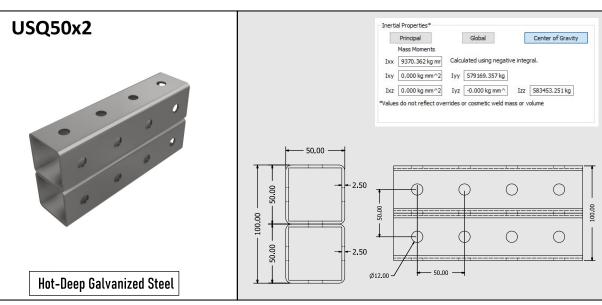


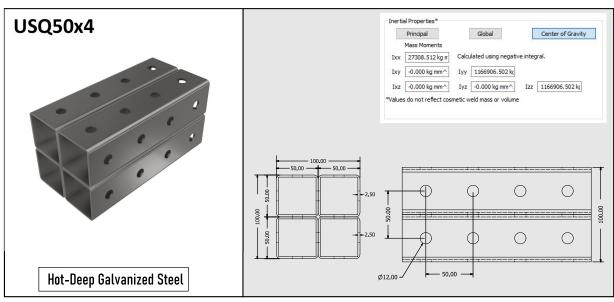




PERFORATED SQUARE TUBE



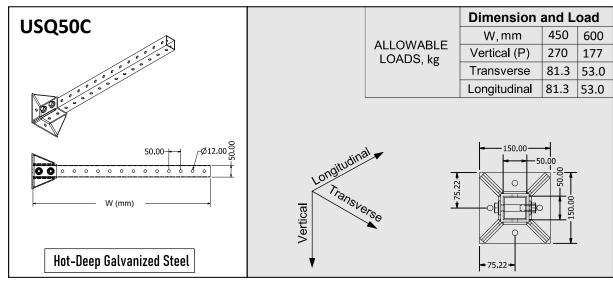


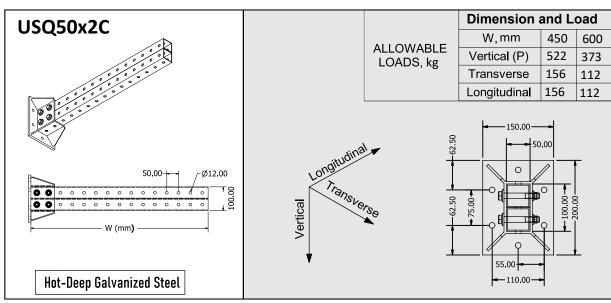


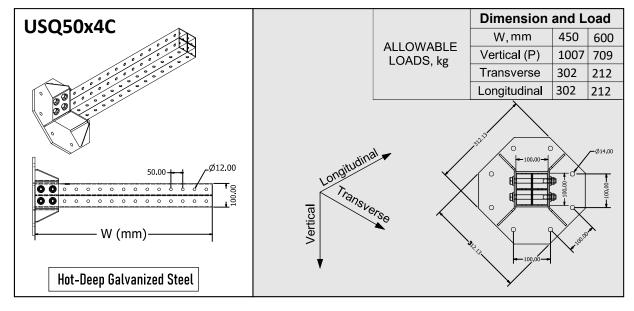
Unistar —— 28 —— M.E.P Hanger And Support



PERFORATED SQUARE TUBE CANTILEVER



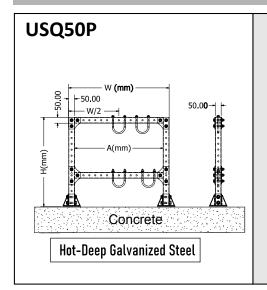


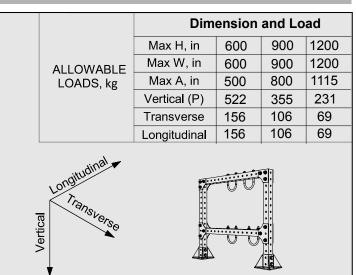


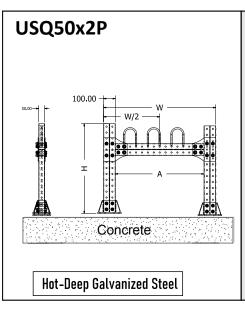
Unistar _____ 29 ____ M.E.P Hanger And Support

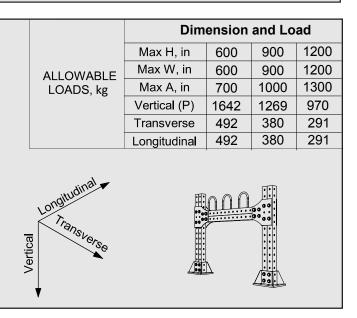


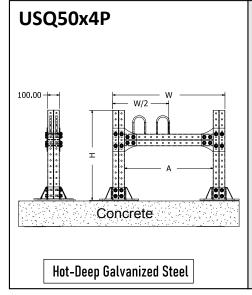
PERFORATED SQUARE TUBE GOAL POST

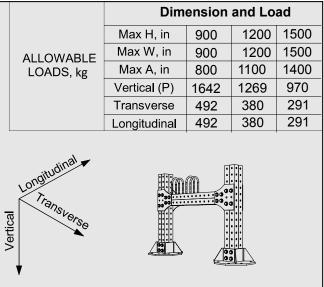






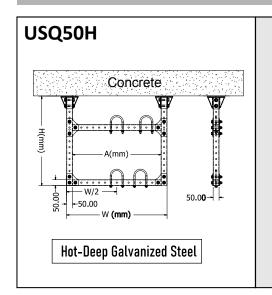


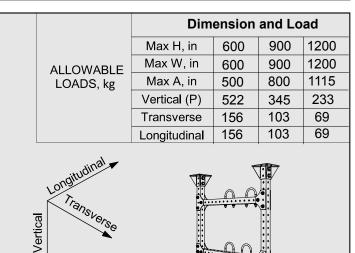


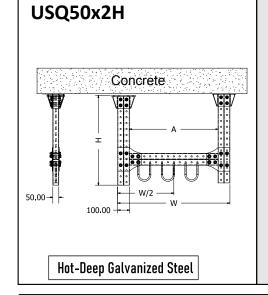


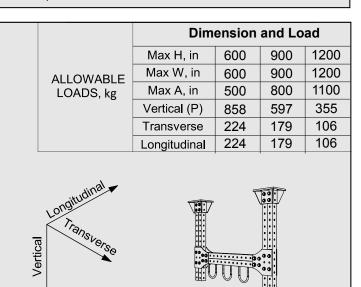


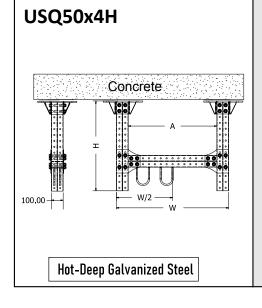
PERFORATED SQUARE TUBE HANGING FRAME

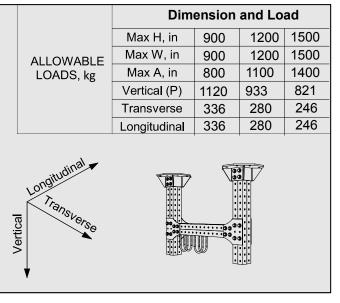








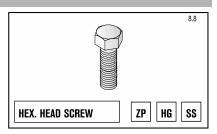




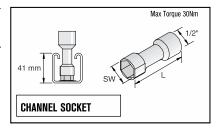


NUT, BOLT AND WASHERS

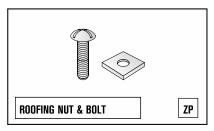
Part No.	Part No.	Part No.	Part No.		Finish		
M6	M8	M10	M12	ZP	HG	SS	
M6x12HS	M8x20HS	M10x20HS	M12x22HS	•	•	•	100
M6x16HS	M8x25HS	M10x25HS	M12x25HS	•	•	•	100
M6x20HS	M8x30HS	M10x30HS	M12x30HS	•	•	•	100
M6x25HS	M8x35HS	M10x40HS	M12x40HS	•	•	•	100
M6x30HS	M8x40HS	M10x50HS	M12x50HS	•	•	•	100
M6x35HS	M8x45HS	M10x60HS	M12x60HS	•	•	•	100
M6x40HS	M8x50HS	M10x80HS	M12x80HS	•	•	•	100
M6x60HS	M8x60HS	M10x100HS	M12x100HS	•	•	•	100



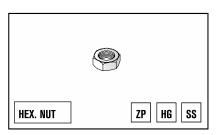
Part No.	Part No.
M10	M12
17AF	
	19AF



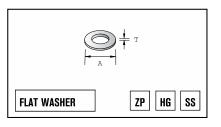
Part No.	Finish	L (mm)	۵	$\overline{\mathcal{D}}$
	ZP		™ /100	
M6x12RB	•	12	1.0	100
M6x16RB	•	16	1.0	100
M6x20RB	•	20	1.0	100
M6x25RB	•	25	1.0	100
M6x30RB	•	30	1.0	100
M6x40RB	•	40	1.0	100
M6x50RB	•	50	1.0	100
M6x60RB	•	60	1.0	100



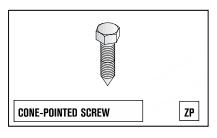
Part No.		Finish		$\overline{\mathcal{D}}$				
M6	M8	M10	M12	M16	ZP	HG	SS	
M6HN	M8HN	M10HN	M12HN	M16HN	•	•	•	100



Part No.	Part No.	Part No.	Part No.	Part No.	J
M6	M8	M10	M12	M16	
M6FW	M8FW	M10FW	M12FW	M16FW	
(A=12.5mm)	(A=17mm)	(A=21mm)	(A=24mm)	(A=30mm)	100
(T=1.6mm)	(T=2.0mm)	(T=2.5mm)	(T=3.0mm)	(T=3.0mm)	100

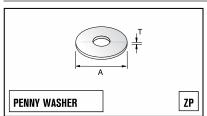


Part No.	Finish ZP	₾/100	abla
M10x40CP	•	2.5	100
M12x40CP	•	3.9	100

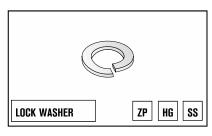




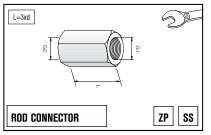
WASHERS AND THREAD ROD CONNECTORS



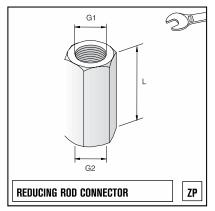
Part No. Part No. Part No. Finish	
M6 M8 M10 ZP A T	
M6x25PW M8x25PW M10x25PW • 25 1.	5 100
M6x32PW M8x32PW M10x32PW • 32 1.	5 100



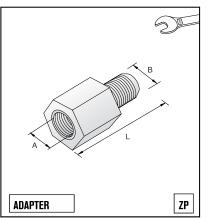
Part No.		Finish						
M6	M8	M10	M12	M16	ZP	HG	SS	
M6LW	M8LW	M10LW	M12LW	M16LW	•	•	•	100



				S		
Part No.	Fin ZP	iish SS	G	SW	L	abla
6334M6	∠r •	•	M6	mm 10	mm 18	50
6334M8	•	•	M8	13	24	50
6334M10	•	•	M10	17	30	50
6334M12	•	•	M12	19	36	50
6334M16	•	•	M16	24	48	50
SP3838	•		3/8"	19	35	50
SP1212	•		1/2"	27	35	50



				T.		
Part No.	Finish	G1	G2	SW	L	
	ZP			mm	mm	
SPM8M10	•	M8	M10	13	30	50
SPM10M12	•	M10	M12	17	30	50

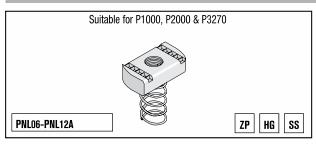


				F		
Part No.	Finish ZP	Α	В	SW mm	L mm	
310810	•	M8	M10	13	21	50
310812	•	M8	M12	13	23	50
311008	•	M10	M8	13	23	50
311012	•	M10	M12	13	23	50
311016	•	M10	M16	19	32	50
311208	•	M12	M8	17	23	50
311210	•	M12	M10	17	25	50
311216	•	M12	M16	19	32	50
311610	•	M16	M10	24	32	50
311612	•	M16	M12	24	32	50
1482210	•	1/2"	M10	24	30	100
1482212	•	1/2"	M12	24	30	100
1482216	•	1/2"	M16	30	35	100

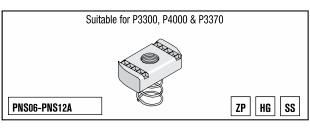
Unistar — 33 — M.E.P Hanger And Support



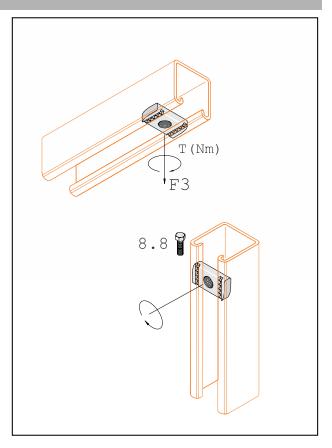
C CHANEL NUTS

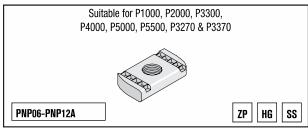


Part No.		Finish		Thread Size	۵	
	ZP	HG	SS		△ /100	
PNL06	•	•	•	M6	3.26	100
PNL08	•	•	•	M8	3.53	100
PNL10	•	•	•	M10	3.95	100
PNL12	•	•		M12	4.78	100
PNL12A	•	•	•	M12	3.43	100



Part No.		Finish		Thread Size	۵	
	ZP	HG	SS		△ /100	
PNS06	•	•	•	M6	3.1	100
PNS08	•	•	•	M8	3.5	100
PNS10	•	•	•	M10	3.9	100
PNS12A	•	•	•	M12	3.6	100

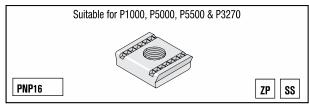




Part No.		Finish		Thread Size	0	7
	ZP	HG	SS		△ /100	
PNP06	•	•	•	M6	3.10	100
PNP08	•	•	•	M8	3.40	100
PNP10	•	•	•	M10	3.80	100
PNP12*	•	•		M12	4.68	100
PNP12A	•	•	•	M12	3.43	100

	Part No.	Т	F3
		(Nm)	kN
P1000	PNP06	12	4.70
	PNP08	28	5.28
P 9	PNP10	55	6.86
41	PNP12	95	8.82
	PNP16	125	10.30
41	M16SN*	95	8.82
P3300	PNP06	12	4.70
	PNP08	28	5.78
	PNP10	55	6.86
P 9 21	PNP12A	60	6.86
	M16SN*	95	8.82
P4000	PNP06	12	3.33
	PNP08	28	3.53
	PNP10	40	3.92
	PNP12A	40	4.41
@ @ a	M16SN*	40	3.92
		•	•
41			

^{*} PNP12 is not suitable for Unistrut channels P3300, P4000 & P3370



Part No.	Fini	sh	Thread Size	0	77
	ZP	SS		△ /100	
PNP16*	•	•	M16	8.00	100

	Part No.	T (Nm)	F3 kN
P1000	PNP06	6.5	2.45
n n	PNP08	16	4.41
41	PNP10	31.5	6.86
	PNP12A	55	6.86
41	PNP16	125	10.30
P3300	PNP06	6.5	2.45
	PNP08	16	4.41
<u> </u>	PNP10	31.5	6.86
41	PNP12A	55	6.86

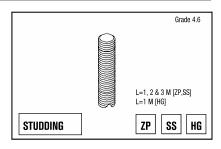
*M16SN Hot forged

Unistar M.E.P Hanger And Support — 34 ——

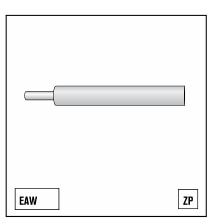


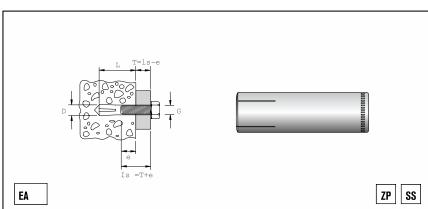
THREADED RODS AND STUDS

Part No.		Finish					
M6	M8	M10	M12	M16	ZP	SS	HG
M6x1M	M8X1M	M10X1M	M12X1M	M16X1M	•	•	•
M6x2M	M8X2M	M10X2M	M12X2M	M16X2M	•	•	•
M6x3M	M8X3M	M10X3M	M12X3M	M16X3M	•	•	•



Non drill anchors



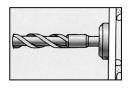


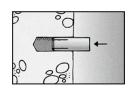
Part No.	Part No.
EAWH6	EAM6
EAWH8	EAM8
EAWH8x40	EAM8x40
EAWH10	EAM10
EAWH12	EAM12
EAWH16	EAM16
EAWH20	EAM20

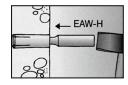
Part No.	Finish	Class	D	L	_223	G	e (n	nm)		Appr	oval:
	ZP		mm	mm	ø mm		min	max	= /	Appr	uvai.
EAM6	•	-	8	25	8	M6	6	11	100		
EAM8	•	1.8kN*	10	30	10	M8	8	13	100	VdS	
EAM8x40	•	3kN*	10	40	10	M8	8	13	50	VdS	FM
EAM10	•	3.6kN*	12	40	12	M10	10	17	50	VdS	FM
EAM12	•	5.7kN*	15	50	15	M12	12	18	25	VdS	FM
EAM16	•	7.4kN*	20	65	20	M16	16	21	20	VdS	FM
EAM20	•	11.3kN*	25	80	25	M20	20	30	10	VdS	FM

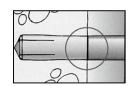
Part No.	Finish	Class	D	L	_223	G	e (r	nm)	7	Ann	oval:
	SS		mm	mm	ø mm		min	max		uhhi	ovai.
EAM6	•	-	8	25	8	M6	6	11	100		
EAM8	•	-	10	30	10	M8	8	13	100		
EAM10	•	3.0kN*	12	40	12	M10	10	17	50	VdS	FM
EAM12	•	3.6kN*	15	50	15	M12	12	18	25		FM
EAM16	•	5.7kN*	20	65	20	M16	16	21	20		FM

 * Loading data is applicable for concrete pressure zone only (B=25 N/mm²)













ENGINEERING DATA - MASS CHARTS

COPPER TUBE

Nom. Size Actual Size 0.D. (AUS)		Actual Size O.D. (NZ)	Mass of Pipe kg/m	Mass of Pipe filled with water kg/m
15 x 0.9	12.7	14.7	0.30	0.39
18 x 1.0	15.9		0.43	0.58
20 x 1.0	19.0	21.0	0.52	0.75
25 x 1.2	25.4	27.4	0.83	1.25
32 x 1.2	31.8	34.1	1.05	1.72
40 x 1.2	38.1	40.6	1.27	2.27
45 x 1.2	44.5		1.48	2.87
50 x 1.2	51.2	53.3	1.70	3.57
65 x 1.2	63.5	65.0	2.14	5.07
80 x 1.6	76.2	79.4	3.42	7.60
90 x 1.6	88.9	92.5	4.00	9.76
100 x 1.6	101.6	105.6	4.58	12.18
125 x 1.6	127.0	130.2	5.74	17.77
150 x 2.0	152.4	158.0	8.58	25.86
175 x 2.0	177.8		10.03	33.74
200 x 2.0	203.2		11.48	42.63
225 x 2.6	228.6		16.77	56.94

PRESSURE PIPE

Nom. Pipe Size	Actual Size O.D. x Wall	Mass of Pipe kg/m	Mass of Pipe filled with water kg/m		
8	13.7 x 3.02	0.80	0.85		
10	17.1 x 3.20	1.10	1.19		
15	21.3 x 3.73	1.62	1.77		
20	26.7 x 3.91	2.19	2.47		
25	33.4 x 4.55	3.23	3.69		
32	42.2 x 4.85	4.47	5.30		
40	48.3 x 5.08	5.41	6.55		
50	60.3 x 5.54	7.48	9.38		
65	73.0 x 7.01	11.41	14.4		
80	88.9 x 7.62	15.27	19.53		
90	101.6 x 8.08	18.63	24.36		
100	114.3 x 8.56	22.37	29.73		
125	141.3 x 9.53	30.95	42.69		
150	168.3 x 10.97	42.56	59.38		
200	219.1 x 12.70	64.63	94.10		
250	273.0 x 12.70	81.54	129.70		
300	323.9 x 12.70	97.44	167.4		
350	355.6 x 12.70	107.38	193.00		
400	406.4 x 12.70	123.29	234.30		
450	457.0 x 12.70	139.19	285.50		
500	508 0 x 12 70	155.10	337.00		

PRESSURE PIPE

Mass of Mass of Actual Size O.D. x Wall Nom. Pipe Size Pipe kg/m Pipe filled with water kg/m 13.7 x 2.24 0.69 17.1 x 2.31 0.85 0.97 21.3 x 2.77 1.27 15 1.47 2.11 20 26.7 x 2.87 1.68 33.4 x 3.38 2.50 3.06 3.38 4.35 32 42.2 x 3.56 40 48.3 x 3.68 4.05 5.37 50 60.3 x 3.91 5.44 7.60 73.0 x 5.16 8.62 11.71 16.06 88.9 x 5.49 11.29 90 101.6 x 5.74 13.57 19.95 114.3 x 6.02 16.07 24.28 100 125 141.3 x 6.55 21.78 34.69 150 168.3 x 7.11 28.26 46.91 200 219.1 x 8.18 42.53 74.81 273.0 x 9.27 60.29 111.14 300 323.9 x 9.53 73.82 146.81 350 355.6 x 9.53 81.28 170.23 400 406.4 x 9.53 93.21 211.05 457.0 x 9.53 105.14 255.75

GALVANISED PIPE

Nom. Size	Actual Size O.D. x Wall	Mass of Pipe kg/m	Mass of Pipe filled with water kg/m
8 N.B Med.	13.5 x 2.3	0.68	0.74
10 N.B Med.	17.2 x 2.3	0.89	1.01
15 N.B Med.	21.3 x 2.6	1.27	1.47
20 N.B Med.	26.9 x 2.6	1.65	2.02
25 N.B Med.	33.7 x 3.2	2.52	3.11
32 N.B Med.	42.4 x 3.2	3.24	4.26
40 N.B Med.	48.3 x 3.2	3.73	5.11
50 N.B Med.	60.3 x 3.6	5.24	7.46
65 N.B Med.	76.1 x 3.6	6.69	10.42
80 N.B Med.	88.9 x 4.0	8.68	13.82
100 N.B Med.	114.3 x 4.5	12.40	21.11
125 N.B Med.	139.7 x 4.9	16.50	29.75
150 N.B Med.	165.1 x 4.9	19.60	38.55

PVC PRESSURE PIPE - CLASS 15

600 609.6 x 12.70 186.92

Nom. Size	Actual Size O.D. x Wall	Mass of Pipe kg/m	Mass of Pipe filled with water kg/m
15	21.3 x 1.5	0.14	0.40
20	26.7 x 1.9	0.22	0.61
25	33.5 x 2.3	0.33	0.99
32	42.2 x 2.9	0.54	1.58
40	48.2 x 3.3	0.69	2.05
50	60.3 x 4.1	1.07	3.20
65	75.3 x 5.1	1.66	5.00
80	88.9 x 6.1	2.31	6.93
100	114.3 x 7.7	3.83	11.51
125	140.2 x 9.4	5.76	17.34
150	168.2 x 11.3	8.28	24.93
200	219.1 x 14.8	14.12	42.32

DVC DDESCRIDE DIDE CLASS &

117.07

140.94

304.85

414.85

508.0 x 9.53

609.6 x 9.53

500

455.00

Nom. Size	Actual Size O.D. x Wall	Mass of Pipe kg/m	Mass of Pipe filled with water kg/m
40	48.2 x 1.5	0.31	1.91
50	60.3 x 1.8	0.48	3.00
65	75.3 x 2.2	0.75	4.70
80	88.9 x 2.6	1.03	6.53
100	114.3 x 3.2	1.70	10.84
125	140.2 x 4.0	2.55	16.28
150	168.2 x 4.8	3.65	23.41
200	219.1 x 6.2	6.19	39.75

CAST IRON PIPES CLASS K9

Nom. Size	Actual Size O.D. x Wall	Mass of Pipe kg/m	Pipe and Water kg/m	Concrete Lining Thickness	Mass of Lined Pipe kg/m	Mass of Lined Pipe and Water kg/m
80	95.5 x 6.0	12.36	17.84	6.0	15.64	19.66
100	121.9 x 6.1	16.55	26.00	6.0	21.09	28.59
150	177.3 x 6.3	25.09	46.39	6.0	31.82	50.13
200	232.2 x 6.4	34.18	71.89	8.0	46.18	78.67
225	259.1 x 6.6	39.45	86.94	8.0	52.91	94.42
250	286.0 x 6.8	44.73	103.00	8.0	60.00	111.63
300	345.4 x 7.2	57.09	143.24	10.0	81.45	157.42
375	426.2 x 7.9	79.27	211.55	10.0	109.45	229.15
400	507.0 x 8.6	107.82	290.24	10.0	138.73	312.08
500	560.3 x 9.0	117.82	347.95	10.0	158.91	373.16

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