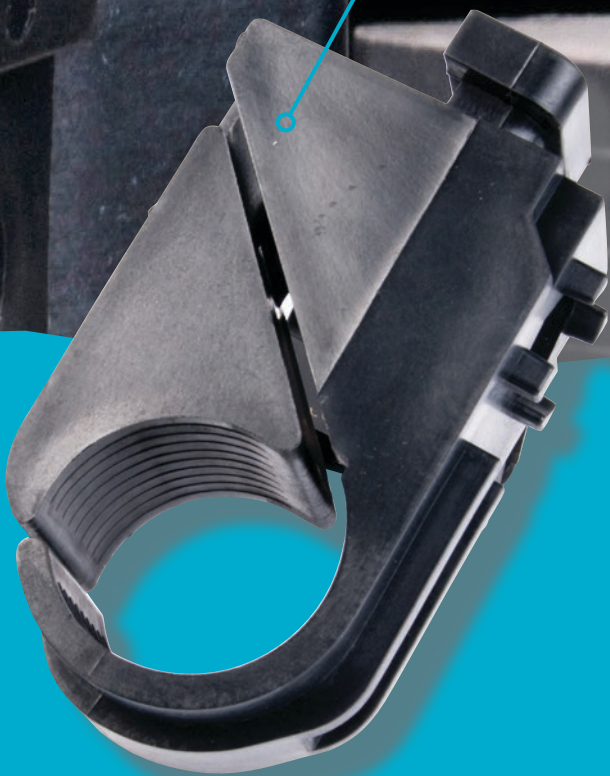# UNI-J CABLE CLAMPS

Power and control electrical cable clamps.

Product, Installation & Technical Information

UNI-J CLAMP

ABOUT GRAPHICSHOW
CABLE ACCESSORIES

GRAPHICSHOW CABLE ACCESSORIES (GCA) LTD WAS INCORPORATED IN 1998. GCA DESIGN AND MANUFACTURE INTELLIGENT CLAMPING SOLUTIONS FOR INDUSTRY. THEY DISTRIBUTE A FULL RANGE OF SUPPORTING CABLE MANAGEMENT PRODUCTS AND INSTALLATION CONSUMABLES.

GCA Ltd has become the leading provider of specialist clamping systems for the wireless telecoms sector. Its patented graphiclamp system revolutionised the quality, versatility and installation times for antenna construction and was immediately approved by all UK network operators.

Today GCA Ltd has built on its success to provide an extensive range of proprietary products as well as distributing a variety of cable management components beyond the telecom sector to a wide range of UK businesses, international corporations and public bodies.

Graphicshow Cable Accessories (GCA) Ltd
3 Ronell Place
41A Shire Hill Industrial Estate
Saffron Walden
Essex, CB11 3AQ
United Kingdom

Web: www.gcaltd.co.uk
Email: sales@gcaltd.co.uk
Tel: +44 (0) 1799 516016
Fax: +44 (0) 1799 516598
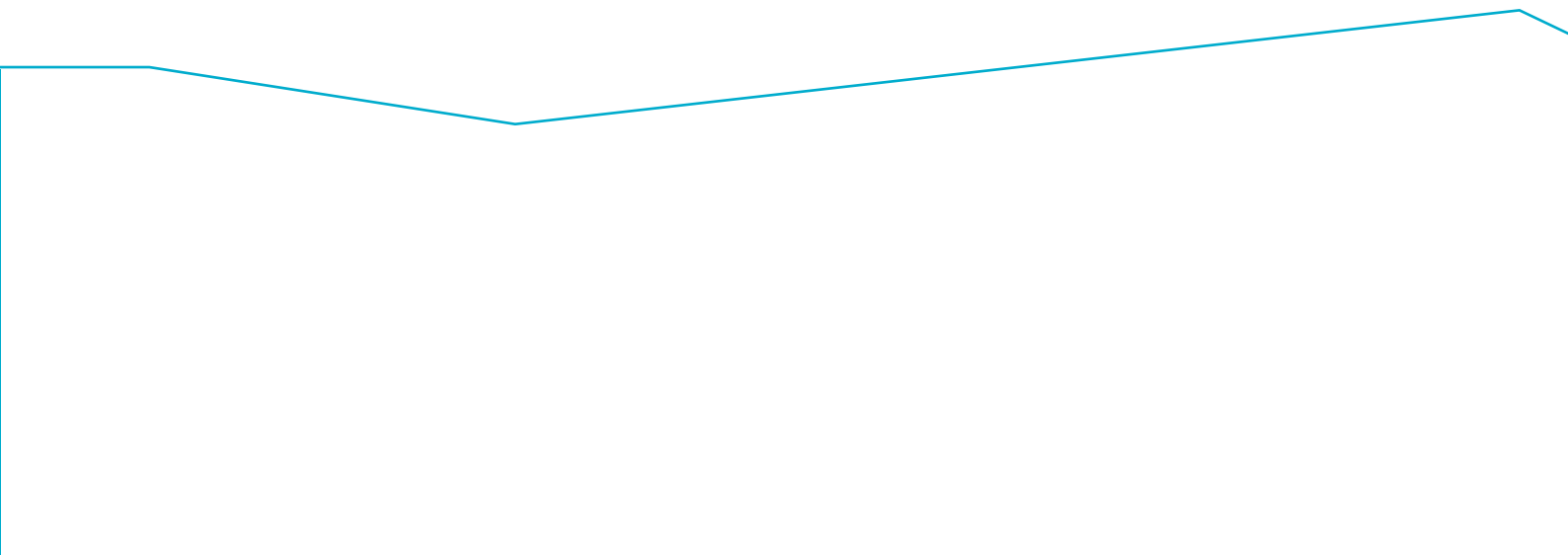Catalogue Edition: UNI-J Catalogue 2013/1
Copyright 2013 GCA Ltd

GCA Ltd holds ISO 9001: 2008 Quality Management Systems Certification

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DESIGN FEATURES

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NUT SEAT

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CHANNEL
SLOT VERTICAL

CLASSIC J-HOOK

INTER-STACK

THE UNI-J **POWER CABLE CLAMPING SYSTEM**

The UNI-J is an advanced clamping system for electrical power cables designed and manufactured in the UK by GCA Ltd. We have applied the valuable experience gained from the development of our successful patented clamping system for wireless telecoms antenna systems. This is an approved system for all major network operators, being sold in the UK and worldwide.

The patent pending UNI-J clamp incorporates many innovative features in its design and offers an advanced, secure and versatile solution in the electrical power cable fixing sector:

- SLIDE-LOCK: The UNI-J has two parts with the slide lock closure system providing maximum versatility and the perfect fit and security for your required cable when tightened with an M10/M8 or equivalent security nut recessed in the slide lock back. The STICK GROOVES (both parts) enable improved bite on cable outer jackets to eliminate slippage and assist clamping performance.

- SIZE-ADJUST: Each UNI-J clamp slide lock feature allows a variable cable diameter range of 11mm and currently a total diameter range of 24.5-80.5mm across 6 clamps, all of which can be interlocked and stacked with one another, regardless of cable size or clamp size.

- CHANNEL-T: This design feature allows for rapid and simple overhead fixing and locating of the UNI-J clamp to hanging or ceiling mounted metal channel systems, without any need for fixing components, whilst retaining excellent load bearing qualities. Once located, cables can be run in and then secured individually or as part of a system of stacked UNI-Js with just one threaded rod.

- INTERSTACK: The UNI-J clamp has an innovative back to back stacking design. Its matching width and INTERLOCK system across the range is unique and compatible between different UNI-J sizes to provide for fast, secure, space saving and simplified installation with reduced fixing component requirements. This allows mixed cable grouping.

- ANTI-THEFT: Cable theft was an important factor in our design of the UNI-J clamp. It provides the simplicity of a classic J with our slide lock system, making theft by unhooking or pulling impossible and dismounting the system is an unattractive time risk to cable thieves, more so if security nuts are used in high risk locations.

- CLASSIC-J INSTALL: Despite the UNI-J's advantages over a classic J hook, it has been designed to allow the simple installation of long cable runs, as with a classic J-hook style clamp. This can be done for single or multiple runs on the same fixing bolt.

- MULTI-FIT: The UNI-J has been designed to work in multiple fixing situations or aspects, on a wall/flat surface/system in any cable position as well as commonly used channel systems, fixed in a vertical or horizontal axis or on a hanging, overhead channel system. The UNI-J retains its stacking and interlocking benefits and multi size adaptability in all fitting situations.

- CHANNEL SLOT - VERTICAL & HORIZONTAL: The UNI-J features a double spine that adds strength but also enables stable location within channel systems to reduce twisting and ease installation

- ADD-STACK: The UNI-J incorporates a future-proofing feature allowing UNI-J installations to be added to on subsequent installs or additions at the same fixing point without disturbing the original installation or fixing, saving on labour costs and component costs.
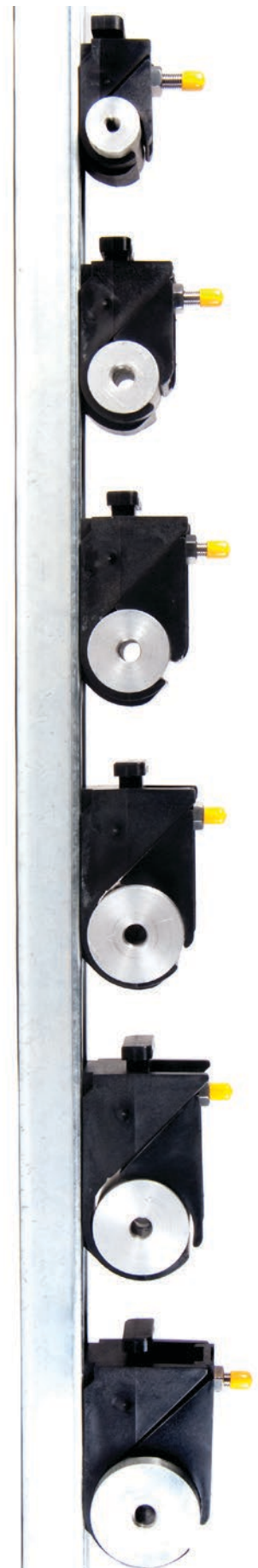
UNI-J POWER CABLE CLAMP
RANGE DIMENSIONS
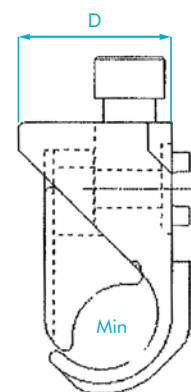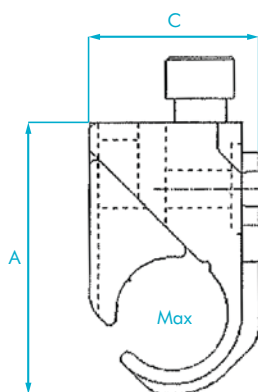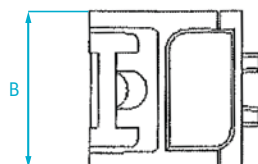
Product Code	Cable Size Accommodated	Clamp Dimensions				Unit Weight	Bag Qty	Outer Carton	Outer Carton
		Height	Width	Overall Depth	Stacked Depth				
	Min - Max mm	A mm	B mm	C mm	D mm	gms		Qty	Total Weight kg
J1 GFN	24.5 - 35.5	97	44	49	44	88	5	280	25.29
J2 GFN	33.5 - 44.5	118	44	62	57	142	5	180	26.21
J3 GFN	42.5 - 53.5	135	44	74	69	174	5	140	25.00
J4 GFN	51.5 - 62.5	146	44	78	73	194	loose	100	20.05
J5 GFN	60.5 - 71.5	158	44	86	81	226	loose	100	23.25
J6 GFN	69.5 - 80.5	166	44	100	95	238	loose	100	24.45
J1 FR	24.5 - 35.5	97	44	49	44	96	5	280	27.53
J2 FR	33.5 - 44.5	118	44	62	57	156	5	180	28.73
J3 FR	42.5 - 53.5	135	44	74	69	190	5	140	27.25
J4 FR	51.5 - 62.5	146	44	78	73	213	loose	100	21.95
J5 FR	60.5 - 71.5	158	44	86	81	248	loose	100	25.45
J6 FR	69.5 - 80.5	166	44	100	95	261	loose	100	26.75

NOTES:

1. Clamp size and material must be stated at time of order:
   GFN = glass filled nylon for standard clamps (LUL smoke emission compliant to BS 6853:1999/D8.3)
   FR = Flame retardant, low smoke and halogen free UL94V0 & LSZH grade clamp - see datasheet for more information
2. Outer carton weight of 0.65kg has been added to outer carton weight in the final column
3. Dimension C is protrusion when fitted to a wall. Dimension D is when fitted to channel or stacked.

SELECTION TABLE
UNI-J POWER CABLE CLAMP RANGE

Main & control power cables: for XLPE insulated PVC bedding, SWA with PVC or MDPE outer sheath 600/1000 volt grade to BS 5467 & EEMUA 133, single core cable to BS 7889/97

Conductor mm²	Stranded copper Conductors - SWA 600-1000 V			
	Single Core	Twin Core	Three Core	Four Core
25				J1
35			J1	J1
50		J1	J1	J1
70		J1	J1	J2
95		J1	J2	J2
120		J1	J2	J3
150	J1	J2	J3	J3
185	J1	J3	J3	J4
240	J1	J3	J4	J5
300	J1	J3	J4	J5
400	J2	J4	J5	J6
500	J2			
600	J3			
800	J4			
1000	J4			

Conductor mm²	Solid aluminium Conductors - SWA 600/1000 V			
	Single Core	Twin Core	Three Core	Four Core
25				J1
35				J1
50				J1
70				J1
95				J2
120				J2
150				J3
185				J3
240				J4
300				J4
400				
500				
600				
800				
1000				

Conductors No of cores	Multicore Cables SWA Mains &Control Cables PVC 600/1000V				
	1.5 mm²	2.5 mm²	4.0 mm²	16 mm²	25 mm²
5				J1	J1
7				J1	
12			J1		
19		J1	J1		
27	J1	J1	J1		
37	J1	J2			
48	J1	J2			

Unarmoured Main Cables PVC 600-1000 V	
Conductor mm²	Single Core
240	J1
300	J1
400	J1
500	J2
630	J2
800	J3
1000	J3

Armoured Mains cables PVC SWA 1900-3300V		
Conductor mm²	Single core	Three core
16		J1
25		J1
35		J2
50		J2
70		J2
95		J2
120		J3
150	J1	J3
185	J1	J3
240	J1	J4
300	J1	J4
400	J2	J5
500	J3	
630	J3	

THE UNI-J
INSTALLATION
IMAGES

These installation images show some of the design features incorporated into the UNI-J. The UNI-J clamp can be fitted to any flat surface or channel, horizontally, vertically or ceiling mounted. All clamp sizes are designed to interlock and stack with UNI-J clamps of the same or different size, regardless of the cable diameters mixed together at each fixing point or axis (vertical/horizontal).

WALL FIX

Although the UNI-J has many installation possibilities, it is still a standard clamp for a typical wall fix cable run on any angle, including vertical. It enables the usual fast install benefits of a classic J-hook with the added benefits of the variable slide lock, security and multiple stacking potential on one fixing. These fixings can be future proofed by leaving capacity for further J Clamps on the fixing threaded rod.

CEILING CHANNEL FIX (41X41MM)

The simple twist and hang feature of the CHANNEL-T for hanging channel enables rapid installation. The stacked and interlocking UNI-Js show mixed cable diameters to provide a secure and compact system on a single fixing bolt. This feature also applies to horizontal and vertical stacked fixings.
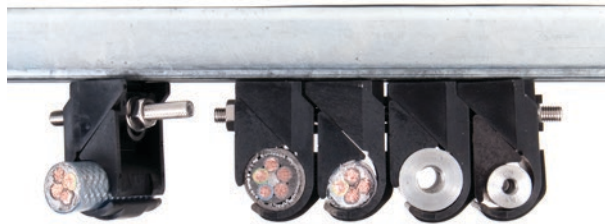
CEILING CHANNEL FIX (21X41MM)

The UNI-J CHANNEL-T is also compatible with shallow 21x41mm channel systems. Different sized UNI-J clamp cable sizes can be mixed at each 'stack'

VERTICAL AND HORIZONTAL

The UNI-J can be installed to clamp vertical or horizontal cable runs in wall fixed channel systems. The CHANNEL-SLOT feature provides a secure locating support for vertical and horizontal cable runs on channel and no channel adaptor is required. Stacking of mixed, interlocked UNI-J clamps can be achieved at each fixing.
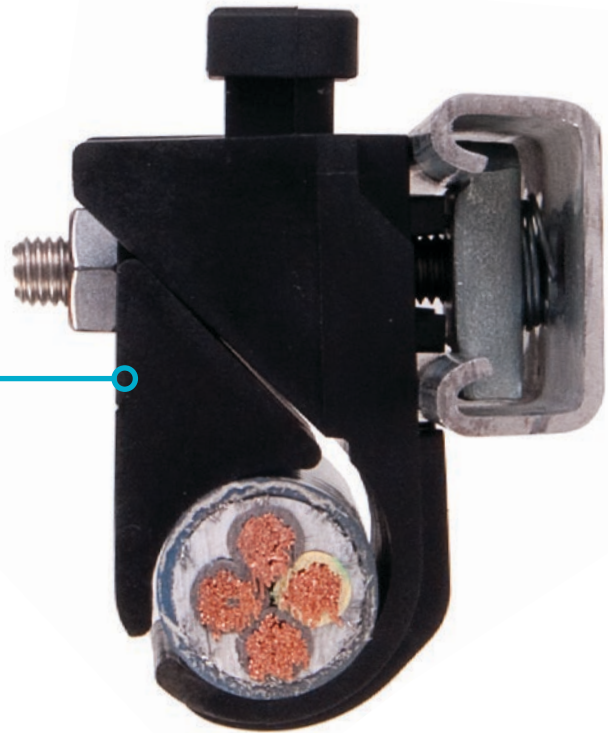
UNIVERSAL

The same features of the clamp will still be available for fixing horizontally or vertically to 21x41 channel. Stacking of mixed clamps and cables allows maximum versatility in all fixing situations.

EASY FIXING

Normal cable runs installed on classic J hooks can still be carried out with the UNI-J.

A   A first fix of the J section of the UNI-J using M10 nut and flat washer

B   Allows for the cable run to be installed, aligned and hung

C   Before a final fix of the securing SLIDE-LOCK
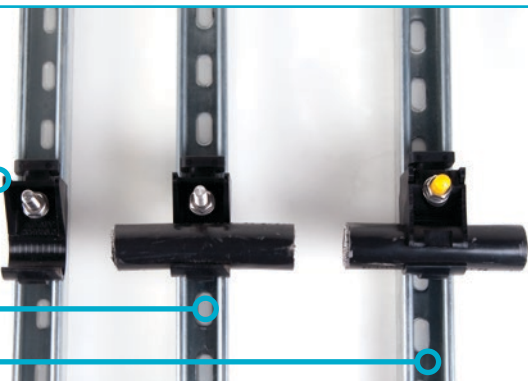
THE UNI-J LOAD BEARING & PULL TEST INFORMATION

The load bearing potential of the UNI-J clamp was fundamental to the design and materials used for the clamp.

All of our own and third party testing is carried out at loads far beyond the heaviest cables available for each clamp size. For example, the heaviest cable weight per metre that will fit in the UNI-J1 clamp is a $120mm^2$ armoured mains cable at 3.6kg per metre. Our horizontal cable run deflection test applied loads on a single J1 clamp of 150kg and the vertical slippage test applied a pull weight of 70kg, demonstrating the extraordinary load performance parameters of the UNI-J across each clamp size in the range whilst maintaining a compact and economical clamp design.

All of our test results must be analysed in conjunction with the list of heaviest cables per metre that will currently fit each UNI-J clamp size.

UNI-J Clamp Size	Heaviest Diameter Cable Available for Clamp Size (kg)	Weight Per Metre (kg)
J1	$120mm^2$ 2 core	3.60
J2	$95mm^2$ 4 core	5.20
J3	$300mm^2$ 2 core	8.20
J4	$300mm^2$ 3 core	11.55
J5	$300mm^2$ 4 core	14.80
J6	$400mm^2$ 4 core	19.30

NOTES: All example cables are XLPESWA 600/1000v to BS5467

TEST 1
CHANNEL-T LOAD BEARING

The UNI-J CHANNEL-T has been tested for its load holding capabilities when installed in steel channel (41x41mm). A continuous force was applied on the clamp without failure of the CHANNEL-T up to 320kg, when the steel channel grooves splayed and gave way. There was no visible damage to any parts of the clamp or CHANNEL-T element.

RESULT: No failure or damage to the CHANNEL-T feature for loads up to 320kg. Based on cable weights per metre the maximum load on a CHANNEL-T at per metre centres would be 19.3kg demonstrating a load capacity 16x anticipated use.

TEST 2
LOAD BEARING CAPACITY ON HORIZONTAL CABLE RUNS

Load Applied in Kilograms	Deflection on "J" Section of Clamp in Millimetres (mm)				
Weight (kg)	J1	J2	J3	J4	J5
30	0.42	0.34	-	-	-
40	0.48	0.46	0.66	0.86	-
50	1.23	0.59	-	-	2.00
60	1.47	0.70	0.93	1.87	-
80	2.03	1.47	2.22	3.45	-
100	2.95	2.07	3.38	5.18	5.00
150	5.84	4.89	8.13	20.27	14.00

TEST 2
LOAD BEARING HORIZONTAL CABLE RUN

This test rig was prepared to establish the load bearing capacity of the UNI-J clamp on standard horizontal cable runs. Deflection of 2mm of the J part was only noticeable with loads in excess of 3x (J5) and 20x (J1) maximum anticipated cable weight loading per metre in industrial applications.

RESULT: The full clamp range supported continuous loading of 150kg without failure or damage to the clamp. This demonstrates the clamps strength at ranges from 40x (J1) to 8x (J5) anticipated applicable loads without any clamp failures.

TEST 3
CABLE SLIPPAGE
ON VERTICAL CABLE RUNS

Size of Cable Tested	Tested Cable Weight per Metre	Clamp Size – Heaviest Cable Available	Total Pull Weight Applied	Slippage in Clamp (minimum 24 hours loading)
3 Core 35mm²	1.80kg	J1 – 3.60kg	70kg	NIL
4 Core 70mm²	4.10kg	J2 – 5.20kg	90kg	NIL
4 Core 120mm²	6.70kg	J3 – 8.20kg	100kg	NIL
4 Core 185mm²	9.65kg	J4 – 11.55kg	120kg	NIL
4 Core 240mm²	12.40kg	J5 – 14.80kg	150kg	NIL

TEST 3
CABLE SLIPPAGE ON VERTICAL CABLE RUNS

The test rig was constructed with horizontal channel and a single clamp fixed for a vertical cable run utilising the UNI-J channel slot. The size and weight of the cables tested are listed in the table above to provide correct outer jacket materials within the UNI-J stick grooves. All cables were 2 metre lengths drilled out to accommodate a threaded rod for load hanging. Loads were applied for a minimum of 24 hours.

RESULT: No slippage detected for pull loads in excess of 10x anticipated maximum applications for each clamp size.

UNI-J POWER CLAMP
TECHNICAL DATA

MATERIAL

STANDARD CLAMP (GFN)

30% glass fibre filled black nylon 6 with 2% carbon black for enhanced UV resistance. Compliant with BS6853 *see across.*
• **Product code example**: J1 GFN

FLAME RETARDANT & LSZH CLAMP (FR)

Flame retardant, low smoke & zero halogen grade, 30% glass fibre filled nylon 6 with 2% carbon black for enhanced UV resistance. *See flammability across.* LSZH data on request.
• **Product code example**: J1 FR

FIXING METHODS

The UNI-J clamping system works in a variety of fixing applications but is primarily designed for clearance maximum M10 threaded rod/set screws/bolts but will work with M8 where a flat washer is used.

FIXING ON CEILING CHANNEL
The channel must be fixed across the line of the cable run. The recessed captive bolt seat is designed for stacking/pulling clamps together on hanging channel using the Channel-T. In this fixing scenario only M10 is suitable to enable use of the nut seat.

WALL FIX
The UNI-J will work with metal rawlplug and chemically fixed wall fixings, ideally with M10 threaded rod, but M8 is also suitable as long as flat washers are used behind the final fixing nut.

FIXING TO WALL MOUNTED CHANNEL
UNI-J Clamps support horizontal and vertical cable runs. Normal install would use a conventional M10 spring channel nut (zeb). An additional nut and washer are used if 'running in' cable on the J section before later securing of the slide lock (*see image page 7*).

SMOKE EMISSION TESTING

The standard GFN UNI-J clamp range is certified to the requirements of vehicle category Ia, Ib and II in accordance with the procedures specified in BS 6853: 1999 appendix D, clause D8.3. Tests carried out by Interscience Fire Laboratory Test No: ICL/H12/1866 Rev 1.

FLAMMABILITY

UNI-J Clamp (FR) material testing: flame retardant UL94V-0 (>1.6mm), Test method for flammability at 1.6mm thickness to UL94 equivalent V0/1.6 rating. UNI-J exceeds 1.6mm in all clamp sizes. FMV SS302 to test method ISO 3795 <100 mm/min. Glow wire test to IEC 695, rating 960.

IDENTIFICATION

Each UNI-J clamp shows its J reference (eg J1-J6) on both halves of the clamp. The inner face of the larger "J" section has the range of overall diameters for that particular clamp, and the patent application number.

CLAMP WORKING LOADS

See previous tests, pages 8-11 or contact us for more information and certification.

OPERATING TEMP. RANGE
Minus 40°c to plus 100°c

COUNTRY OF ORIGIN
Manufactured in the United Kingdom

COLOUR
Black only. Other colours special order

PATENT APP NUMBER
1004988.0

STANDARD
CHANNELS

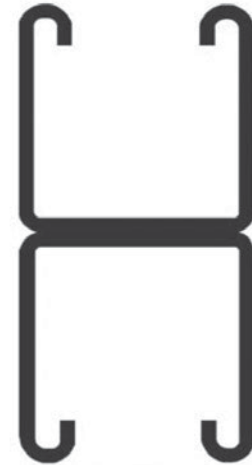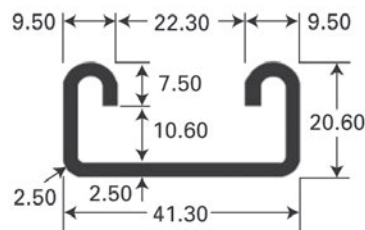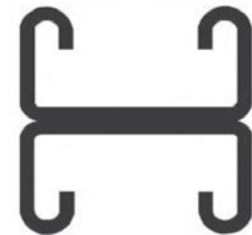| British Standard	Complies with BS EN 6946
Data Sheet	Available on request
Standard Length	3.0 metres and 6.0 metres
Standard Thickness	2.5mm
Standard Finish	Galvanised to BS EN 10346 (G)
Special Finish	Hot-Dip Galvanised to BS EN ISO 1461 (HDG)
Cable Tray	Please contact us

CH101
Weight 2.6 kg/m
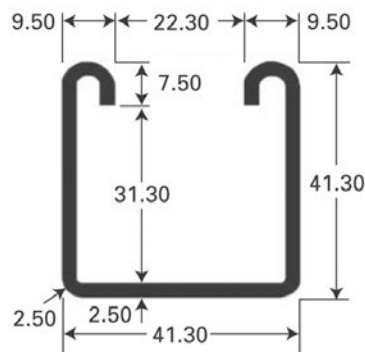
CH103
Weight 5.2 kg/m

CH104
Weight 1.8 kg/m

CH105
Weight 3.6 kg/m

SLOTTED CHANNELS

Channels are available with pre-punched
slots to facilitate easy fixing

CH150
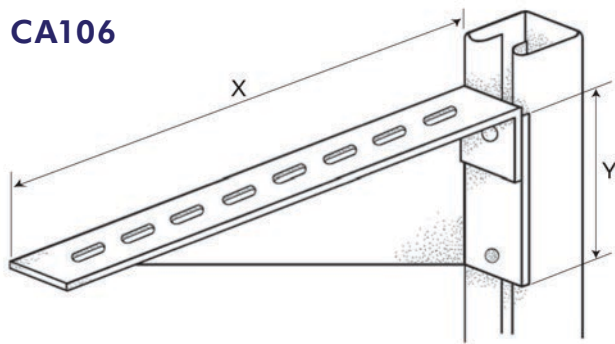Size 41x41mm

CH151
Size 41x21mm
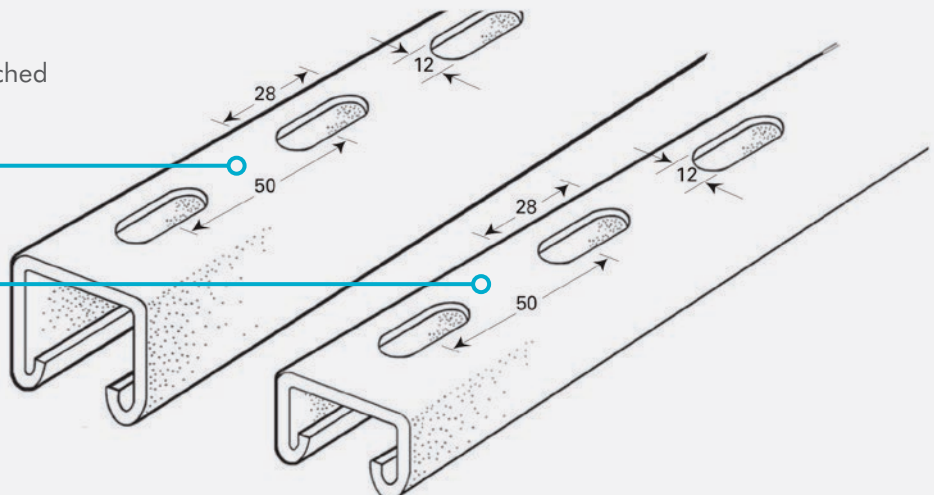
CANTILEVER **SUPPORTS**

CANTILEVER ARMS
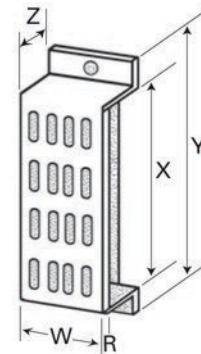
Dimension A
150mm
225mm
300mm
450mm
600mm
750mm

CA101   **CA104**   **CA105**
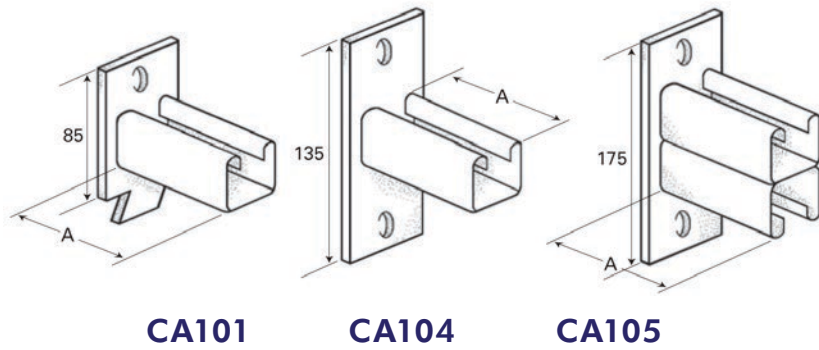
CANTILEVER TRAY BRACKETS
CA106

STAND-OFF TRAY BRACKETS
CA107

Product Code	x mm	y mm
CA106/100	100	70
CA106/150	150	70
CA106/225	225	90
CA106/300	300	90
CA106/450	450	130
CA106/600	600	130
CA106/750	750	130
CA106/900	900	130

Product Code	x mm	y mm	z mm	w mm	Return R
CA107/50	55	105	25	55	-
CA107/75	80	130	25	55	-
CA107/100	105	155	50	55	-
CA107/150	155	205	50	55	10
CA107/225	230	280	75	55	10
CA107/300	305	355	75	55	10
CA107/450	455	505	75	55	10
CA107/600	605	655	75	55	10
CA107/750	755	805	75	55	10
CA107/900	905	955	75	55	10

Galvanised Mild Steel BS EN 10346
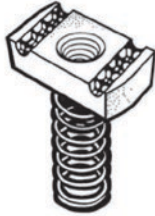
CHANNEL NUTS
STANDARD FINISH - BRIGHT ZINC PLATED TO BS7371

LONG SPRING
CN701/

Deep
Channel

CN701/6 M6
CN701/8 M8
CN701/10 M10
CN701/12 M12

SHORT SPRING
CN702/

Shallow
Channel

CN702/6 M6
CN702/8 M8
CN702/10 M10
CN702/12 M12

NO SPRING
CN703/

Deep
Channel

Shallow
Channel
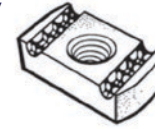
CN703/6 M6
CN703/8 M8
CN703/10 M10
CN703/12 M12

PLASTIC
END CAPS

CL505 - Black   **CL506** - Black
CL515 - White   **CL516** - White
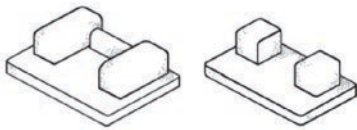
CLOSURE
STRIP

/W White PVC
/G Galvanised to BS EN 10346

Deep
Channel

Shallow
Channel
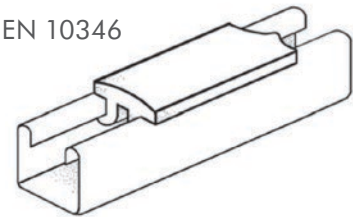
PURLIN
'D' CLIP

PD - Hole diameter 11mm

20   54
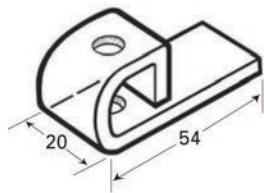
FLANGE
CLAMP

FC-1 - M8
FC-2 - M10
FC-3 - M12
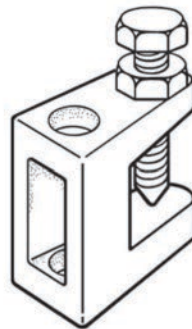
WEDGE
NUTS

FX400/
M6
M8
M10
M12

25
19
12
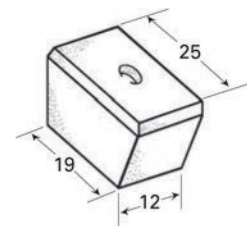
CONE POINTED
SET SCREWS

FX386 - M10x40mm
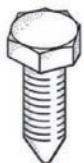
DROP-IN ANCHORS

Product Code	Thread Size (mm)	Anchor Dia (mm)	Thread Depth (mm)	Overall Length (mm)	Setting Tool Product Code
FX366	6	8	10	25	FX372
FX367	8	10	12.75	32	FX373
FX368	10	12	16	40	FX374
FX369	12	15	16	50	FX375

FIXINGS
BZP to BS7371 or A2 SS to BS3506

THREADED ROD
(MS or A2 SS)

FX275/
M6
M8
M10
M12

SQUARE PLATE WASHERS

40   40

CB101/06 (M6 fixing)
CB101/08 (M8 fixing)
CB101/10 (M10 fixing)
CB101/12 (M12 fixing)
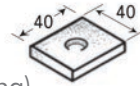
FULL HEXAGON NUTS

FX154
M6, M8
M10, M12

PLAIN FLAT WASHERS

FX198/

Int Dia	Ext Dia
M6	12
M8	17
M10	21
M12	24

PENNY / MUDGUARD WASHERS

FX202/

Int Dia	Ext Dia
M6	30mm
M8	30mm
M10	30mm

SPRING WASHERS
(SINGLE COIL)

FX206/
M6
M8
M10
M12

SHAKE PROOF WASHERS

FX213/
M6
M8
M10
M12

HEXAGON HEAD SET SCREWS

FX132/

M6x12	M8x16	M10x20	M12x22
M6x16	M8x20	M10x25	M12x25
M6x20	M8x25	M10x30	M12x30
M6x25	M8x30	M10x35	M12x35
M6x30	M8x35	M10x40	M12x40
M6x35	M8x40	M10x50	M12x50
M6x40	M8x50	M10x60	M12x60
M6x50	M8x60	M10x80	M12x80
M6x60			
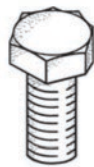
TRAY BOLTS & NUTS

FX281/
M6x12
M6x16
M6x20
M6x25
M6x30
M6x35
M6x40
M6x50
M6x60
M6x70

THREADED ROD COVER CAPS

FX276/
M6
M8
M10
M12

THREADED ROD CONNECTORS

FX384/
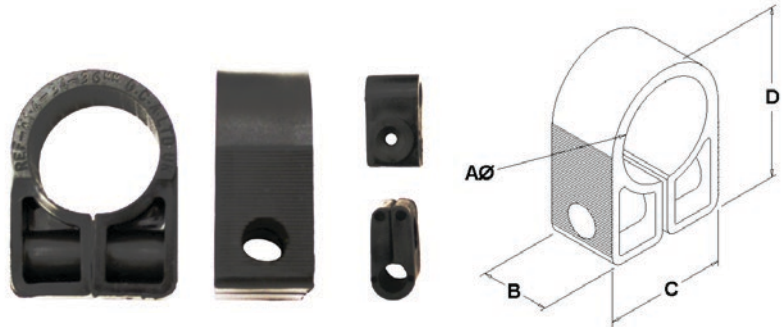M6
M8
M10
M12

EYE BOLTS

FX385/
M6x80
M8x80
M10x80
M12x80

More channel support system accessories including tray brackets, jointing, bare plates and beam clamps, are available

SINGLE GRAPHICLEAT

Single graphicleats are made with 6mm or 10mm bolt holes (as indicated by part number).

Part Number	Colour	A	B	C	D	Weight	Pack Qty	Box Qty
BW0.3-6	Black	5.0-7.6	16	16	27	0.004	100	3000
BW0.4-6	Black	7.5-10.1	16	17	29	0.005	100	2500
BW0.5-6	Black	10.1 - 12.7	16	17	30	0.005	100	3000
BW0.6-6	Black	12.6 - 15.2	16	20	33	0.005	100	2400
BW0.7-6	Black	15.1 - 17.8	20	25	36	0.005	100	2400
BW0.8-6	Black	17.7 - 20.3	20	26	38	0.007	100	3000
BW0.9-6	Black	20.2 - 22.8	20	29	42	0.009	50	400
BW1.0-6	Black	22.7 - 25.4	22	33	46	0.01	50	400
BW0.3-10	Black	7.3	18	13	32	0.005	100	4000
BW0.35-10	Black	8.1	18	13	32	0.005	100	4000
BW0.4-10	Black	9.5	18	15	32	0.005	100	4000
BW0.5-10	Black	11.5	18	15	37	0.005	100	3000
BW0.6-10	Black	15	18	18	38	0.005	100	2400
BW0.7-10	Black	16.5	18	22	39	0.007	100	3000
BW1.2-10	Black	28	26	38	55	0.03	50	400
BW1.4-10	Black	34	26	44	61	0.05	50	400
BW1.6-10	Black	39	26	48	65	0.05	50	350
BW2.0-10	Black	49	26	58	75	0.04	25	300
BW2.25-10	Black	56	26	64	81	0.04	25	300
BW2.5-10	Black	60	31	70	87	0.05	20	200

Material: Low Density Polyethylene (Datasheet on request)

TWO BOLT CLAMPS

Part Number	Colour	A	B	C	D	Weight	Pack Qty
2F-51-57	Black	51-57	54	76	103	0.09	25
2F-58-64	Black	58-64	55	82	103	0.10	25
2F-65-70	Black	65-70	56	89	130	0.12	15
2F-71-76	Black	71-76	57	95	130	0.13	15
2F-77-83	Black	77-83	58	100	130	0.15	10
2F-84-90	Black	84-90	59	108	130	0.15	10
2F-91-97	Black	91-97	60	115	150	0.15	10
2F-98-105	Black	98-105	61	122	150	0.15	10
2F-106-112	Black	106-112	62	130	161	0.15	10
2F-113-120	Black	113-120	63	138	169	0.15	10
2F-121-128	Black	121-128	64	148	177	0.15	10
2F-129-135	Black	129-135	65	158	185	0.15	10
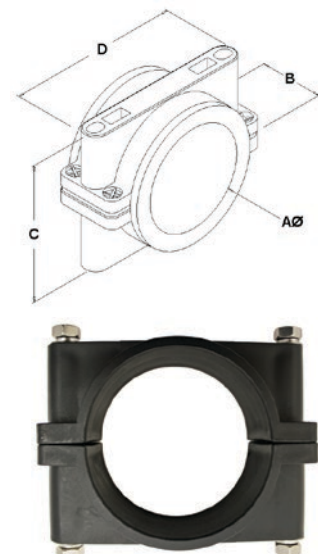
Material: Polypropylene (Datasheet on request)

SINGLE GRAPHICLAMP

All two piece single clamps are designed to precisely fit the cable diameter. Manufactured in high grade polypropylene with 2% carbon black UV stabilised to prevent degradation or breaking.
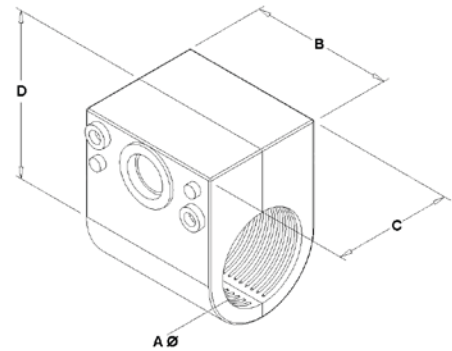
Part Number	Cable Size	Colour	Cable Dia A	B	C	D	Weight	Pack Qty	Box Qty
BW0005.4mm	5.4mm	Black	5.4	44	22	32	0.01	50	1000
BW00-7.5mm	7.5mm	Black	7.5	44	25	32	0.02	50	800
BW00-8.5mm	8.5mm	Black	8.5	44	25	32	0.02	50	800
BW0-11mm	11mm	Black	11	44	26	33	0.02	50	800
BW1-13mm	13mm	Black	13	44	27	35	0.02	50	600
BW2	16mm	Black	16	44	27	40	0.02	50	600
BW4	21mm	Black	20	44	33	47	0.03	50	400
BW5	28mm	Black	28	44	42	50	0.04	25	300
BW7	40mm	Black	40	44	55	65	0.06	20	280
BW8	50mm	Black	50	44	65	75	0.08	20	200
BW9	57mm	Black	57	44	75	85	0.09	20	160

Bolt Hole Size: M10 or M8 Material: Polypropylene.
Tolerance on Cables accomodated: + 1mm, - 0.5mm

PIPE ADAPTOR

Suitable for use with interlocking Graphiclamps on undrilled pipe or flat surfaces. Pipe attaching the adaptor should be less than 50mm for BPA25mm and greater than 50mm for BPA50mm+.
Attachment by hose clips or by 1/2" - 3/4" stainless steel banding (stocked)
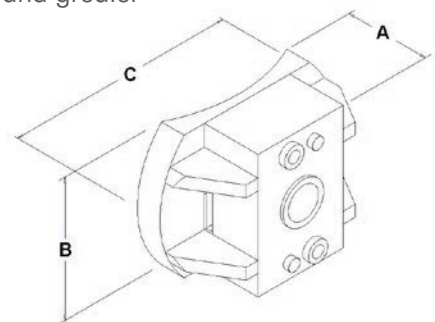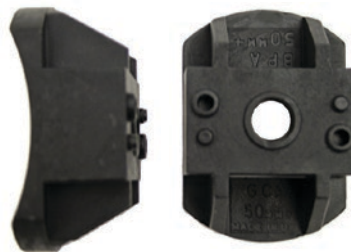
Part Number	Colour	Pipe Diameter	Nut Size	A	B	C	Weight	Pack Qty	Box Qty
BPA25mm	Black	Up to 50mm	M10	30	44	62	0.02	25	500
BPA50mm+	Black	Over 50mm	M10	30	44	62	0.03	25	500
BPA50+6	Black	Over 50mm	M6	30	44	62	0.03	25	500

Bolt Hole Size: M10 or M6 Material: Polypropylene