

## Vari-Cleat Data Sheet

The Vari-Cleat cable cleats are available for trefoil, single and bundled cable applications where moderate levels of short circuit withstand are required. The unique patented compact design allows the separate over-strap to be installed after the cables have been positioned.

The cleat consists of a cast aluminium base (to BS 1490: 1988) with an A4 (316L) stainless steel over-strap and bracket, and M8 A4 fasteners (to BS3692:2001) incorporated a Nyloc nut. Vari-Cleats can be tailor made to your individual requirements by specifying the following variants and fixing positions (see tables below): Polyester or Kelvar coated bases, a silicone LSF Liner, and M8 A4 stainless steel flanged nut.

Recommended fixing methods include using either 8mm, 10mm or 12mm bolts, available as extras. A Retention Strap can be fitted between wider spaced cleats for more economical installation.

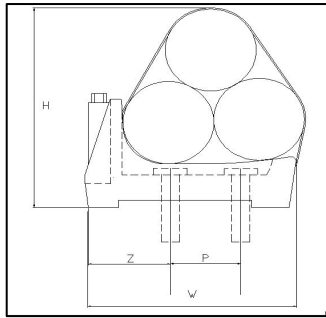


### Selection Table for Single & Trefoil Applications

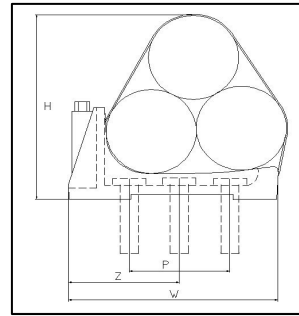
Part No.	Suffix (See Right) 1, 2 + 3	Cable Range no liner		Cable Range with liner		Fixing Holes
		Trefoil Dia.mm	Single Dia.mm	Trefoil Dia.mm	Single Dia.mm	
VC-AN1-		21-24	36-43	19-22	31-38	2xM8
VC-AN2-		22-26	41-48	21-24	36-43	2xM8
VC-AN3-		24-28	44-51	23-26	39-46	2xM8
VC-AN4-		26-30	49-54	25-29	44-51	2xM8
VC-BN1-		29-33	51-59	27-31	46-54	2xM8
VC-BN2-		30-35	55-63	29-33	50-58	2xM8
VC-BN3-		32-37	60-68	30-36	55-63	2xM8
VC-BN4-		34-38	64-70	33-38	59-68	2xM8
VC-CN1-		37-42	68-76	35-40	63-71	2xM8
VC-CN2-		39-44	72-81	37-42	67-76	2xM8
VC-CN3-		42-47	76-85	39-45	71-80	2xM8
VC-CN4-		44-48	81-87	44-48	76-86	2xM8
VC-DN1		47-53	86-96	47-51	81-91	2xM8+1xM10
VC-DN2-		50-56	91-100	49-54	86-95	2xM8+1xM10
VC-DN3-		54-59	96-105	52-57	91-100	2xM8+1xM10
VC-DN4-		56-60	101-106	55-60	96-106	2xM8+1xM10
VC-EN1-		59-63.5	105-112	58-62	100-107	2xM8+1xM10
VC-EN2-		62-67	111-118	61-66	106-113	2xM8+1xM10
VC-EN3-		65-70	118-125	64-69	113-120	2xM8+1xM10
VC-EN4-		68-74	125-132	67-73	120-127	2xM8+1xM10
VC-FN1-		71-76	125-140	69-74	120-135	3xM12
VC-FN2-		74-80	132-145	72-78	128-140	3xM12
VC-FN3-		78-84	139-152	76-82	134-147	3xM12
VC-FN4-		82-88	148-160	80-86	143-155	3xM12
VC-GN1-		84-91	145-160	82-89	140-155	3xM12
VC-GN2-		88-95	155-170	86-93	150-165	3xM12
VC-GN3-		92-99	165-180	90-97	160-175	3xM12
VC-GN4-		96-103	175-190	94-101	170-185	3xM12
VC-HN1-		98-106	170-190	96-104	165-185	3xM12
VC-HN2-		102-110	180-200	100-108	175-195	3xM12
VC-HN3-		106-114	190-205	104-112	185-200	3xM12
VC-HN4-		110-118	200-215	108-116	195-210	3xM12

<p><b>Suffix 1</b></p> <p>A No Liner          B Lined          C Heavy Duty No Liner          D Heavy Duty Lined</p> <p><b>Suffix 2</b></p> <p>N Natural          P Polyester-Black          K Kelvar          C Kelvar &amp; Flange nut</p> <p><b>Suffix 3</b></p> <p>0 Standard Holes</p>
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## Cleat Dimensions in mm



Base Sizes:  
AN, BN & CN.



Base Sizes:  
DN, EN, FN, GN & HN.

Part No.	Base Fixing Thickness V	Trefoil		Single		Cleat Mounting		Base Width	Weight g
		H	W	H	W	P	Z		
VC-AN1-	25	80	82	78	82	25	37	74	373
VC-AN2-	25	84	82	80	82	25	37	74	373
VC-AN3-	25	88	83	84	82	25	37	74	373
VC-AN4-	25	92	86	87	82	25	37	74	373
VC-BN1-	22	94	97	89	97	25	38	74	430
VC-BN2-	22	97	97	93	97	25	38	74	430
VC-BN3-	22	101	100	98	97	25	38	74	430
VC-BN4-	22	105	104	102	97	25	38	74	430
VC-CN1-	19	105	117	101	117	25	49	76	490
VC-CN2-	19	109	117	105	117	25	49	76	490
VC-CN3-	19	115	118	111	117	25	49	76	490
VC-CN4-	19	121	124	117	117	50	49	76	490
VC-DN1-	19	126	138	121	138	50	74	78	610
VC-DN2-	19	132	141	126	138	50	74	78	610
VC-DN3-	19	138	147	131	138	50	74	78	610
VC-DN4-	19	144	153	135	138	75	74	78	610
VC-EN1-	16	147	163	139	163	75	86	80	730
VC-EN2-	16	154	167	145	163	75	86	80	730
VC-EN3-	16	160	174	152	163	75	86	80	730
VC-EN4-	16	167	181	159	164	75	86	80	730
VC-FN1-	14	170	187	169	193	90	98	82	880
VC-FN2-	14	177	194	173	189	90	98	82	880
VC-FN3-	14	185	201	181	193	90	98	82	880
VC-FN4-	14	193	210	187	195	90	98	82	880
VC-GN1-	14	197	217	186	215	114	110	82	970
VC-GN2-	14	205	225	196	215	114	110	82	970
VC-GN3-	14	213	233	206	217	114	110	82	970
VC-GN4-	14	221	240	214	219	114	110	82	970
VC-HN1-	17.5	229	247	218	240	136	123	84	1170
VC-HN2-	17.5	237	255	229	243	136	123	84	1170
VC-HN3-	17.5	245	263	234	245	136	123	84	1170
VC-HN4-	17.5	252	271	244	245	136	123	84	1170

## Testing Information

Vari-Cleats have been tested in line with the European Standard of 'Cable Cleats for Electrical Installations' BS EN 50368:2003. Typical results are detailed below:

Properties	BS EN 50368:2003 Classification Clause	Units / Classification	Vari-Cleat Composite	Vari-Cleat Metallic
Cleat Type	(6.1, 6.1.3) (6.1, 6.1.1)	Composite/Metallic	-	-
Impact Resistance	6.2, 6.2.5, 9.3	Very Heavy Classification (>6.7kg @ 300mm)	Pass	Pass
Resistance to Electro Mechanical Force.	6.3, 6.3.2.2, 9.4	kA @ 300mm Centres Standard Cleat (Category1)	118 (Peak)	Refer to Ellis Patents
Resistance to Electro Mechanical Force.	6.3, 6.3.2.2, 9.4	kA @ 300mm Centres Heavy Duty Cleat (Category1)	132 (Peak)	Refer to Ellis Patents
Temperature for Permanent Application	6.4	°C	-40 to 60°C	-40 to 150°C
Needle Flame Test	6.5, 10.0	Application Time (seconds)	120	120
Lateral Load Test	9.2	Newtons (N)	11200	13800
Axial Movement Test	9.5	Newtons (N)	380	640