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Vulcan + Range-Taking Cable Cleat Data Sheet

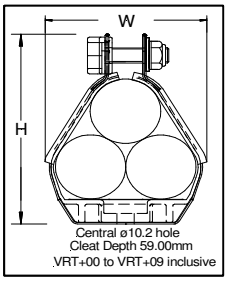
Vulcan + cable cleats are available for trefoil, single, quad and bundled cable applications where moderate levels of short circuit withstand are required. The unique patented compact design allows easy installation where space is limited. Manufactured in type 316L stainless steel (BS EN 10088:1995), they offer ultimate protection against the harshest environmental conditions. The cleats are supplied with an M10 stainless steel clamping bolt, an M10 stainless steel Flange nut and a Low Smoke & Fume Zero Halogen Polymeric Head Retainer (MDS01 Data Sheet).

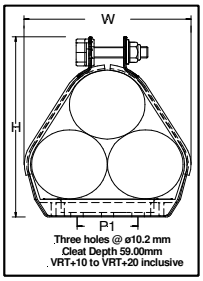
To protect and cushion the cables during short circuit conditions, the cleat comes with an integral Low Smoke & Fume Zero Halogen Polymeric liner and removable base pad (MDS01 Data Sheet).

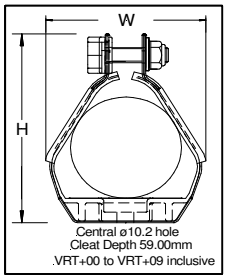
Recommended fixing methods include using either one or two M10 bolts (available as extras). A ProTect Intermediate Strap (details from Ellis Patents) can be fitted between wider spaced cleats for more economical installation.

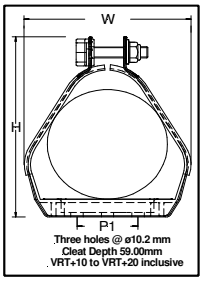
* Material Data Sheet MDS01 is available upon request.

Vulcan + Cable Cleats





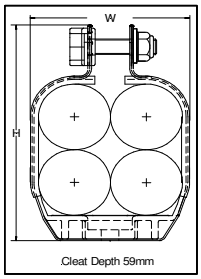




Selection Table for Trefoil & Single Application

Part No	Trefoil Cable Range		Single Cable Range		Dimensions				
	Min Dia. mm	Max Dia. mm	Min Dia. mm	Max Dia. mm	W(max) mm	H(max) mm	P1 mm	Base Holes Ø mm	Weight g
VRT+00	19	24	30	42	60	93	n/a	10.2	251
VRT+01	23	28	38	50	63	98	n/a	10.2	258
VRT+02	27	32	43	58	72	106	n/a	10.2	269
VRT+03	30	35	49	64	79	112	n/a	10.2	279
VRT+04	33	38	55	70	85	118	n/a	10.2	284
VRT+05	36	42	58	75	96	125	n/a	10.2	319
VRT+06	40	46	63	84	105	133	n/a	10.2	331
VRT+07	44	50	73	90	112	140	n/a	10.2	391
VRT+08	48	55	83	100	121	149	n/a	10.2	405
VRT+09	51	58	86	104	126	154	n/a	10.2	411
VRT+10	55	62	88	110	134	162	50	10.2	442
VRT+11	59	66	90	115	143	170	50	10.2	453
VRT+12	63	70	100	125	152	177	50	10.2	460
VRT+13	67	74	107	132	161	185	75	10.2	524
VRT+14	71	78	120	145	169	192	75	10.2	536
VRT+15	74	82	125	150	176	199	75	10.2	542
VRT+16	77	85	132	153	183	205	75	10.2	544
VRT+17	81	89	136	156	190	216	75	10.2	618
VRT+18	85	93	139	159	200	225	75	10.2	628
VRT+19	89	97	142	162	200	235	75	10.2	637
VRT+20	93	101	150	170	215	240	75	10.2	646

Selection Table for Quad Cable Application



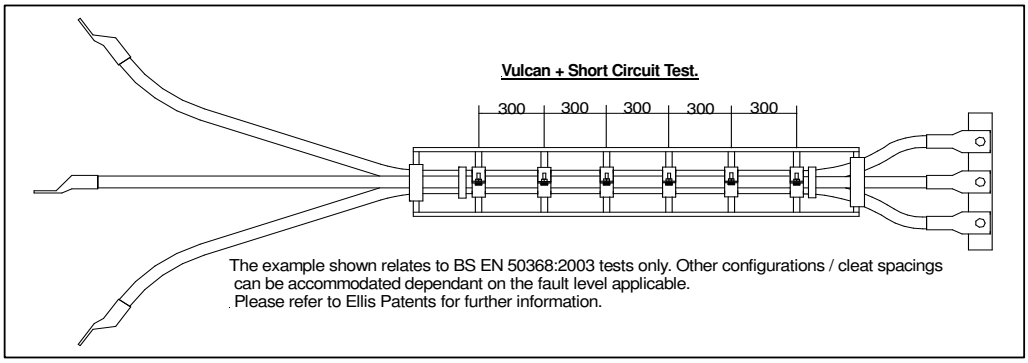
Part No	Quad Cable Dia.		Dimensions				
	Min Dia. mm	Max Dia. mm	W(max) mm	H(max) mm	P1 mm	Base Holes Ø mm	Weight g
VRQ+01	23	25	68	110	n/a	10.2	284
VRQ+02	26	27	70	113	n/a	10.2	286
VRQ+03	28	32	80	128	n/a	10.2	318
VRQ+04	33	42	103	148	n/a	10.2	378
VRQ+05	43	47	120	165	n/a	10.2	452
VRQ+06	48	50	121	170	n/a	10.2	467
VRQ+07	51	57	140	190	50	10.2	486
VRQ+08	58	63	150	200	50	10.2	499
VRQ+09	64	70	170	218	75	10.2	581

Testing Information

Vulcan + Cleats have been tested in line with the International Standard of 'Cable Cleats for Electrical Installations' IEC 61914:2009. Typical results are detailed below:

Properties	IEC 61914:2009 Classification Clause	Units / Classification	Vulcan + Trefoil Test Data	Vulcan + Single Test Data	
Cleat Type	6.1, 6.1.3	Composite	-	-	
Impact Resistance	6.3, 6.3.5, 9.2	Very Heavy Classification (5.0kg @ 400mm)	Pass	Pass	
Resistance to Electro Mechanical Force *(Undertaken at Damstra Laboratories NL)*	6.4, 6.4.3, 9.5	kA @ 300mm Centres M10 Fixings *(Withstanding one short circuit)*	132 (Peak) 59.2 (RMS) *(Report No. PDL-06.037.1)*	Refer to Ellis Patents for further details.	
Resistance to Electro Mechanical Force *(Undertaken at Damstra Laboratories NL)*	6.4, 6.4.4, 9.5	kA @ 600mm Centres M10 Fixings *(Withstanding more than one short circuit)*	104 (Peak) 48.7 (RMS) *(Report No. PDL-07.161.2.1)*	Refer to Ellis Patents for further details.	
Temperature for Permanent Application	6.2	°C	-40 to 60	-40 to 60	
Needle Flame	10.0, 10.1	Application Time (seconds)	>120	>120	
Lateral Load Test	9.3	Newtons (N)	3000	5830	
Axial Load Test	9.4	Newtons (N)	1000	280	

Figures 1 and 2: Short Circuit Test Rig.



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