

Vulcan Range-Taking Cable Cleat Data Sheet

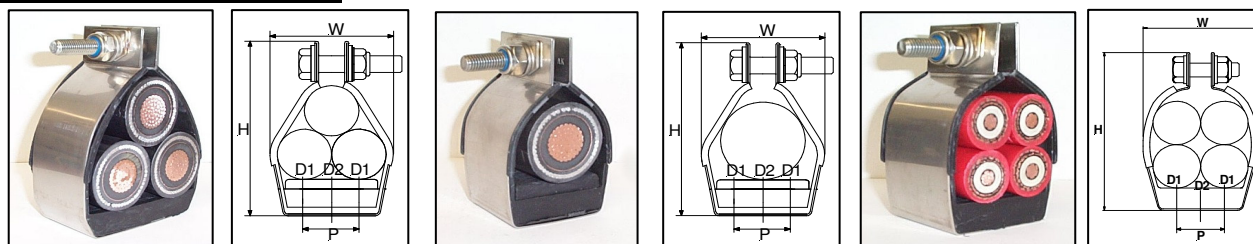
Vulcan cable cleats are available for trefoil, single, quad and bundled cable applications where moderate levels of short circuit withstand are required. The unique compact design allows easy installation where space is limited. Manufactured in type 316L stainless steel (BS EN 10088:1995), they offer ultimate protection against the harshest environmental conditions. The cleats are supplied with an M10 A4 stainless steel clamping bolt and an M10 A2 stainless steel Nyloc nut (BS3692:2001), for offshore use we recommend the use of an M10 A4 stainless steel Nyloc nut (BS3692:2001) which should be specified at the time of ordering, an M10 stainless steel washer and a Low Smoke & Fume Zero Halogen Polymeric washer (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 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	P mm	D1 mm	D2 mm	Weight g
VRT-01	23	28	33	50	67	93	25	10.2	10.2	290
VRT-02	27	32	43	58	73	101	25	10.2	10.2	290
VRT-03	30	35	49	64	78	107	25	10.2	10.2	300
VRT-04	33	38	55	70	84	113	25	10.2	10.2	300
VRT-05	36	42	58	75	95	118	50	10.2	10.2	390
VRT-06	40	46	63	84	100	125	50	10.2	10.2	390
VRT-07	44	50	73	90	108	135	50	10.2	10.2	400
VRT-08	48	55	83	100	118	144	50	10.2	10.2	410
VRT-09	51	58	86	104	122	149	50	10.2	10.2	420
VRT-10	55	62	88	110	136	154	75	10.2	10.2	540
VRT-11	59	66	90	115	140	163	75	10.2	10.2	550
VRT-12	63	70	100	125	148	171	75	10.2	10.2	560
VRT-13	67	74	107	132	156	178	75	10.2	10.2	570
VRT-14	71	78	120	145	164	187	75	10.2	10.2	580
VRT-15	74	82	125	150	172	193	75	10.2	10.2	590
VRT-16	77	85	132	153	178	199	75	10.2	10.2	600

Selection Table for Quad Cable Application

Part No	Quad Cable Dia.		Dimensions					
	Min Dia. mm	Max Dia. mm	W(max) mm	H(max) mm	P mm	D1 mm	D2 mm	Weight g
VRQ-01	23	25	68	105	25	10.2	10.2	300
VRQ-02	26	27	69	105	25	10.2	10.2	260
VRQ-03	28	32	75	110	25	10.2	10.2	300
VRQ-04	33	42	98	140	25	10.2	10.2	370
VRQ-05	43	47	111	142	50	10.2	10.2	420
VRQ-06	48	50	113	146	50	10.2	10.2	360
VRQ-07	51	57	123	164	50	10.2	10.2	380
VRQ-08	58	63	163	174	50	10.2	10.2	520
VRQ-09	64	70	172	183	50	10.2	10.2	550

Testing Information

Vulcan 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	Vulcan Trefoil Test Data	Vulcan Single Test Data	Vulcan Quad Test Data
Cleat Type	6.1, 6.1.3	Composite	-	-	-
Impact Resistance	6.2, 6.2.5	Very Heavy Classification (>6.7kg @ 300mm)	Pass	Pass	Pass
Resistance to Electro Mechanical Force	6.3, 6.3.2.1, 9.4	kA @ 900mm Centres M10 Fixings (Category1)	93.6 (Peak) 41.8 (RMS)	Refer to Ellis Patents for further details.	Refer to Ellis Patents for further details.
Resistance to Electro Mechanical Force	6.3, 6.3.2.1, 9.4	kA @ 300mm Centres M6 Fixings (Category1)	135 (Peak) 60 (RMS)	Refer to Ellis Patents for further details.	Refer to Ellis Patents for further details.
Resistance to Electro Mechanical Force	6.3, 6.3.2.1, 9.4	(Category2)	Refer to Ellis Patents for further details.	Refer to Ellis Patents for further details.	Refer to Ellis Patents for further details.
Temperature for Permanent Application	6.4	°C	-40 to 60	-40 to 60	-40 to 60
Needle Flame	6.5, 10.0	Application Time (seconds)	>120	>120	>120
Lateral Load Test	9.2	Newtons (N)	Refer to Ellis Patents for further details.	* 9000	Refer to Ellis Patents for further details.
Axial Load Test	9.5	Newtons (N)	800	500	900

* The cleats deflected less than half the diameter of the cable.

Figures 1 and 2: Short Circuit Test Rig.

