Multicleat/Multistrap System

378 Series

Features and Benefits

- Suitable for use with cable diameters 24 to 145mm.
- Large range take on each size.
- Single or double bolt fixing.
- Operating temperatures -60°C to +105°C.
- All straps manufactured from non-magnetic 316L Stainless Steel.
- Plain Aluminium bases - for normal industrial areas or outdoor unpolluted areas.
- Epoxy coated Aluminium versions or Stainless Steel available for harsher environments.
- Bespoke tensioning adaptor included with every cleat and strap.
- Liners are made from LSOH materials.
- Suitable for single core cables laid in trefoil formation with high fault current capacities.
- Suitable for use with all standard ladder and tray systems.
- Suitable for groups of dissimilar cables.
- LUL APR Product ID 1996.
- Patent number 2082242.

Consisting of Aluminium or Stainless Steel bases with a Stainless Steel strap complete with a tensioning clip the BICON™ Multicleat system offers the best flexibility for cable fixing available on the market today. With an unprecedented test portfolio and service record, the Multicleat system should be your first choice for trefoil and single cables installations requiring a high system fault current rating.
Multistraps are used as intermediate restraints and are positioned centrally between a pair of Multicleats. The standard and heavy duty products have different short circuit ratings related to their installation spacings. Please consult the following information in order to make the correct selection.
All Multicleats and Multistraps now come with a disposable shear torque tensioning adapter. This was introduced in response to customer requests to improve the closure of the cleats and also better control the tension applied during installation. The adapter fits into the open end of the winding pin and is used with a standard 13mm socket wrench. Thus simplifying installation. When the correct tension has been applied the adapter shears off LSOH material liners are available for both the Multicleat and Multistrap. The LSOH conform to BS6853. Please contact the Prysmian Components technical team who will be able to offer the correct advice to suit your individual installation.

Installation Sequence

Fasten base to support with M10 fixings. Loop strap through base and around cables.
Standard duty = 2 loops.
Heavy Duty = 3 loops.

Pull slack into outer loop. Insert split pin from right hand side around outer layer of strap about 10mm from end. Push plastic shear torque adaptor fully onto the end of the split pin and attach 13mm socket wrench. To tension the strap rotate key anti-clockwise with the socket wrench until the adaptor shears.

Remove the shear torque adaptor and wrench. Swing the key over and engage in slots in clip.

Multicleat

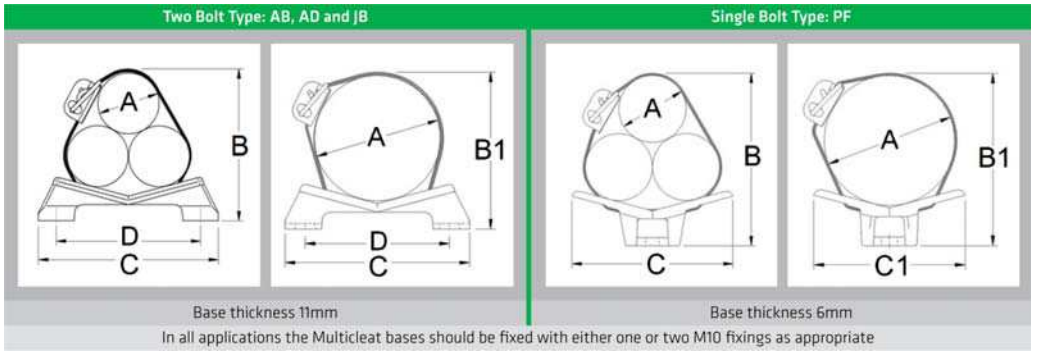
Base Options						Cable Size				Liner	Dimensions and Weights																	
Two Bolts			Single Bolt			Trefoil ⁂		Single ○			Two Bolts										Single Bolt							
											AB / AD				JB				AB or AD or JB		PF							
	Aluminium	Aluminium Epoxy Coated	Stainless Steel	Stainless Steel	Standard	Heavy Duty	Minimum Individual Cable Diameter (mm)	Maximum Individual Cable Diameter (mm)	Minimum Individual Cable Diameter (mm)	Maximum Individual Cable Diameter (mm)	377LSF	Max Width C (mm)	Hole Centres D (mm)	Weight (kg) Standard Duty (01-09)	Weight (kg) Heavy Duty (01-09)	Max Width C (mm)	Hole Centres D (mm)	Weight (kg) Standard Duty (01-09)	Weight (kg) Heavy Duty (01-09)	Max Height Trefoil B (mm)	Max Height Single Cable B1 (mm)	Base Width (mm)	Max Width Trefoil C (mm)	Max Width Single Cable C1 (mm)	Weight (kg) Standard Duty (01-09)	Weight (kg) Heavy Duty (51-42)	Max Height Trefoil (mm)	Max Height Single Cable B1 (mm)
378	AB	AD	JB	PF	01	51	24	34	36	65	01	126	100	0.468	0.54	120	100	0.63	0.669	95	92	76	76	76	0.480	0.519	99	96
					02	52	30	41	60	85		126	100	0.479	0.57	120	100	0.641	0.668	100	113	76	82	85	0.491	0.538	113	116
					03	53	37	47	80	90		122	96	0.520	0.576	126	100	0.727	0.783	121	11	104	104	104	0.566	0.622	121	118
					04	54	43	54	85	110		122	96	0.535	0.595	126	100	0.742	0.802	135	138	104	108	100	0.581	0.641	135	138
					05	55	50	60			02	132	106	0.569	0.636	132	100	0.757	0.824	146	-	120	120		0.634	0.701	147	
					06	56	56	67				132	106	0.583	0.657	132	100	0.771	0.845	160	-	120	134		0.648	0.722	161	
					07	57	63	73				176	150	0.716	0.798	152	125	0.94	1.022	172	-	146	146		0.890	0.972	173	
					08	58	69	80				176	150	0.729	0.818	152	125	0.953	1.042	186	-	146	160		0.903	0.992	187	
					09	59	N/A	N/A	105	120		122	96	0.547	0.614	126	100	0.754	0.821	-	148	104	-	120	0.593	0.660	-	148
						36	72	85				230	200	-	0.832	230	200	-	1.454	190	-						-	
						37	82	95				230	200	-	0.864	230	200	-	1.486	210	-						-	
						38	92	105			05	284	242	-	1.449	230	200	-	1.520	230	-						-	
						39	102	115			06	284	242	-	1.480	290	250	-	2.551	250	-						-	
						40	112	125				284	242	-	1.511	290	250	-	2.582	270	-						-	
						41	122	135				284	242	-	1.542	290	250	-	2.613	290	-						-	
						42	132	145				290	242	-	1.572	290	250	-	2.643	315	-						-	

Example ordering code: 378 AD 58 Multicleat with a 377 LSF 02 Liner

Multistrap

Option				Cable Size		Weight		Liner
		Standard	Heavy Duty	Trefoil ⁂ Minimum Individual Cable Diameter (mm)	Trefoil ⁂ Maximum Individual Cable Diameter (mm)	Weight (kg) Standard Duty (01-09)	Weight (kg) Heavy Duty (51-42)	377LSF
377	AB	01	51	24	34	0.160	0.199	01
		02	52	30	41	0.171	0.218	
		03	53	37	47	0.184	0.24	
		04	54	43	54	0.211	0.259	
		05	55	50	60	0.225	0.278	02
		06	56	56	67	0.240	0.299	
		07	57	63	73	0.253	0.322	
		08	58	69	80		0.342	
				N/A	N/A			
			36	72	85		0.356	
			37	82	95		0.388	05
			38	92	105		0.422	
			39	102	115		0.453	06
			40	112	125		0.484	
			41	122	135		0.515	
			42	132	145		0.545	

Example ordering code: 377 AB 53 Strap with a 377 LSF 01 Liner

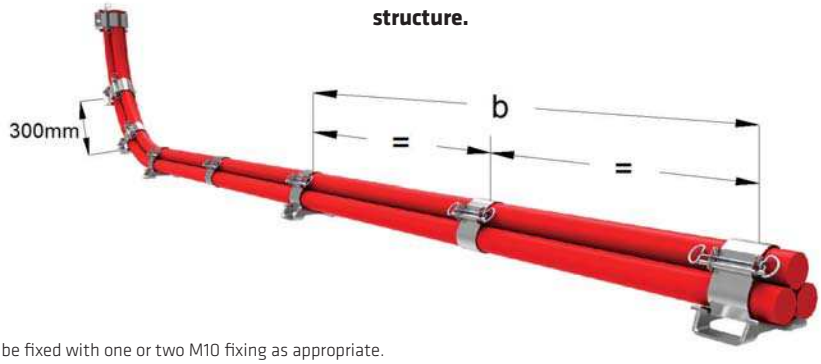


Multicleat/Multistrap Selection and Spacing for Fault Current Rating

Multicleat / Multistrap	Spacing 'b' m Max	Short Circuit Current kA		Cleat Spacing at vertical change of direction (mm)
		rms	peak	
Standard Duty	1.8	43	114	300
Heavy Duty	1.5	50	130	300
Heavy Duty	1.2	71	184	300

Important note: To ensure adequate restraint, Multistrap **MUST** be used at the mid-point between cleats on all horizontal and vertical straight runs.

Changes in direction require restraint spacing of 300mm maximum. Use Multistrap and/or Multicleat, as appropriate, to suit support structure.



Note: Bases should be fixed with one or two M10 fixing as appropriate.

Miscellaneous Arrangements

Multicleat/Multistrap System

The Multicleat / Multistrap system is ideally suited for securing groups of cables of differing sizes. The Prysmian technical help team will be able to match the correct cleat /strap to for the size and fault rating of the cable arrangement.

Prysmian Cables & Systems Limited,
Oak Road, Wrexham Industrial Estate, Wrexham, LL13 9PH, UK

Commercial Enquiries,
Sales Office Tel: 0845 767 8345,
International Sales Office Tel: +44 2380 295481

www.biconcomponents.co.uk

Doc Ref: Multicleat/Multistrap System - 07/15-01