



# Multicleat/Multistrap System 378 series

- 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



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







### **Multicleat**

	Base Options						Cable Size				Liner							
	Two Bolts		Single Bolt			Trefoil &		Single ()							7	īwo Bol	ts	
		77	е <del>а</del>	<u>a</u>	-	Standard Heavy Duty	ت <u>ا</u>	n Gle	n) le	n)	377LSF	AB / AD			JB			
	Aluminium	Aluminium Epoxy Coated	Stainless Steel	Stainless Steel	Standard		Minimum Individual Cable Diameter (mm)	Maximum Individual Cable Diameter (mm)	Minimum Individual Cable Diameter (mm)	Maximum Individual Cable Diameter (mm)		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)
	АВ	AD		PF -	01	51	24	34	36	65	01 02	126	100	0.468	0.54	120	100	0.63
					02	52	30	41	60	85		126	100	0.479	0.57	120	100	0.641
					03	53	37	47	80	90		122	96	0.520	0.576	126	100	0.727
			JВ		04	54	43	54	85	110		122	96	0.535	0.595	126	100	0.742
					05	55	50	60				132	106	0.569	0.636	132	100	0.757
					06	56	56	67				132	106	0.583	0.657	132	100	0.771
					07	57	63	73				176	150	0.716	0.798	152	125	0.94
378					08	58	69	80				176	150	0.729	0.818	152	125	0.953
					09	59	N/A	N/A	105	120		122	96	0.547	0.614	126	100	0.754
						36	72	85				230	200	-	0.832	230	200	-
						37	82	95				230	200	-	0.864	230	200	-
						38	92	105			05	284	242	-	1.449	230	200	-
						39	102	115				284	242	-	1.480	290	250	-
						40	112	125			06	284	242	-	1.511	290	250	-
						41	122	135			00	284	242	-	1.542	290	250	-
						42	132	145				290	242	-	1.572	290	250	-

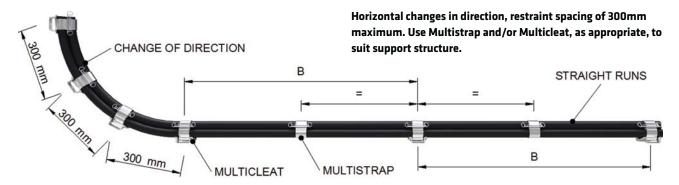
Example ordering code: 378 AD 58 Multicleat with a 377 LSF 02 Liner  $\,$ 

### **Multicleat/Multistrap Selection and Spacing for Fault Current Rating**

Multicleat / Multistrap	Spacing 'b' m Max		Circuit ent 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.



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



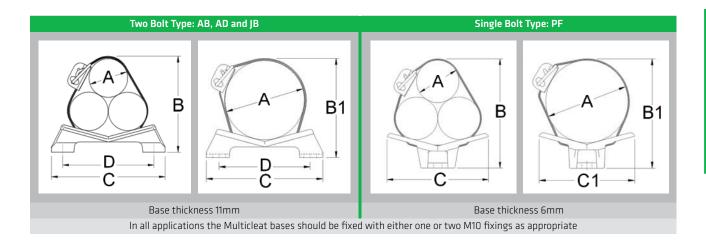


#### **Dimensions and Weights** Single Bolt AB or AD or JB PF Base Width (mm) 0.669 95 92 76 76 76 0.480 0.519 99 96 113 116 0.668 100 0.491 0.538 76 82 113 0.783 121 11 104 104 0.566 0.622 121 118 0.802 135 138 104 108 0.581 0.641 135 138 0.824 146 120 120 0.634 0.701 147 0.845 160 0.648 0.722 120 134 161 1.022 172 146 146 0.890 0.972 173 1.042 186 146 160 0.903 0.992 187 0.593 0.660 0.821 148 104 148 1.454 190 1.486 210 1.520 230 250 2.551 2.582 270 2.613 290 2.643 315

### **Multistrap**

		Opt	ion	Cable	e Size	We	Liner	
				Tref	oil &			
		Standard	Heavy Duty	Minimum Individual Cable Diameter (mm)	Maximum Individual Cable Diameter (mm)	Weight (kg) Standard Duty (01-09)	Weight (kg) Heavy Duty (51-42)	377LSF
	АВ	01	51	24	34	0.160	0.199	
		02	52	30	41	0.171	0.218	01
		03	53	37	47	0.184	0.24	UI
		04	54	43	54	0.211	0.259	
		05	55	50	60	0.225	0.278	
		06	56	56	67	0.240	0.299	
		07	57	63	73	0.253	0.322	0.2
377		08	58	69	80		0.342	02
7//				N/A	N/A			
			36	72	85		0.356	
		37		82	95		0.388	05
			38	92	105		0.422	US
			39	102	115		0.453	
			40	112	125		0.484	0.0
			41	122	135		0.515	06
			42	132	145		0.545	

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



# **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.

