NORMA Stainless Steel Cable Cleats

Electrical Solutions | Cable Supporting and Retaining Solutions



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Protection against harsh conditions and high short-circuit currents

- Approved by DNV(Det Norske Verltas) and ABS(Amerlcan Bureau of Shipping)
- Support and retain the cables and conductors within the cable tray system
- Prevent damage in short-circuit condition
- Reduce the mechanical load exerted to the cable and conductors in every conditions
- Designed for use within industrial and hazardous areas, as well as specialist applications
- Maximum operating temperature of 120° C

Applications

NORMAFIX™ Cable cleats are perfect for use within industrial and hazardous areas, as well as specialist applications such as oil and gas, shipbuilding, petrochemical, railway and underground, etc.

Electrical and mechanical characteristics

Construction Data of the Cable Cleats	
Cleat Material	Composite
Frame	50mm x 2.1mm, marine Grade, non-magnetic 316L
Closure Hardware	Stainless steel 316L, M8/M10 bolt and nylon lock nut *(M6/M12/without bolt option is available upon request)*
Integral Pad	Low smoke, low fume, halogen free
Mounting Bolt	Provided with the cable cleat
Tools Required	Wrench

Performance on the Cable Cleats IEC 61914:2015	
Resistance to Electromechanical Force	Tested cable outder diameter: 35mm 9.5.2 180kA (peak) 300mm spacing 9.5.3 125kA (peak) 600mm spacing
Lateral Load Test	Average 25kg
Axial Load Test	Pass
Max and Min Temperature	-40°C~ 120°C
Needle Flame Test Resistance to Impact	30 seconds
Resistant to UV light Test	1000 hours
Resistance to Impact	Very heavy

Cable cleat selection guide

01. Know the Cables

- Which type of cable is being used, Single or Multi-Conductor?
- What is the outer diameter of Cables?
- What is the available short circuit current (RMS or IP Peak) of the cable?
- If a ground wire is installed in the cleats, know the outer Diameter of the ground wire.

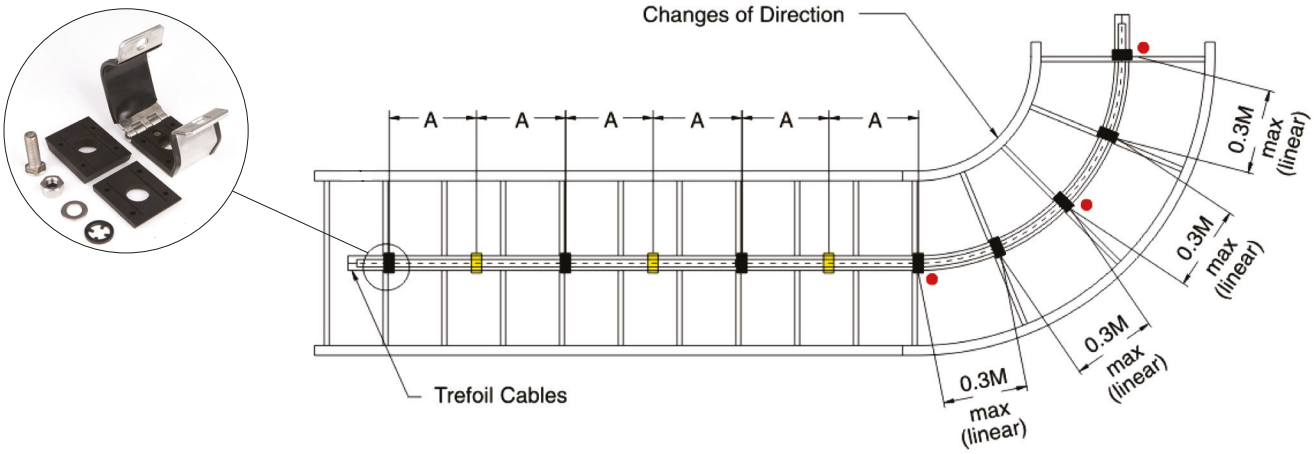
02. Know the System

- What is the cable formation, Single or Trefoil?
- What type of the cable tray is installed?

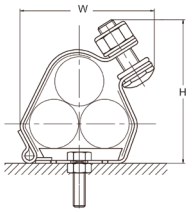
03. Determine the Cleat Space for Installation

Single Conductor Short Circuit Withstand Table

Max. Cable Cleat Spacing (A)		Spacing Between Conductor Centers (mm)																			
		23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59	61
mm	inch	IP peak (KA)																			
300	11.81	145	152	158	163	169	174	180	185	190	194	197	204	208	212	217	221	225	229	233	237
600	23.62	103	107	111	115	119	123	125	130	134	137	139	144	147	150	153	156	159	162	165	168
900	35.43	84	87	91	94	97	100	103	106	109	112	113	117	120	122	125	127	130	132	134	137
1200	47.24	72	76	79	81	84	87	90	92	95	97	98	102	104	106	108	110	112	114	116	118



NORMA Cable Cleats - Trefoil







FPSO internal area *Refinery infrastructure*

NORMAFIX™ CABLE CLEATS - TREFOIL

Product Code	Cable Range		Dimensions		Bolt	Product No.
	Min. Diameter	Max. Diameter	H	W		
	mm	mm	mm	mm		
FF-T1323	13	23	73	68	M8	0309 0001 001
					M10	0896 0001 001
FF-T2125	21	25	75	72	M8	0309 0001 002
					M10	0896 0001 002
FF-T2329	23	29	80	79	M8	0309 0001 003
					M10	0896 0001 003
FF-T2531	25	31	83	82	M8	0309 0001 036
					M10	0896 0001 036
FF-T2733	27	33	84	85	M8	0309 0001 005
					M10	0896 0000 037
FF-T2935	29	35	89	90	M8	0896 0000 006
					M10	0309 0001 006
FF-T3238	32	38	92	96	M8	0896 0000 007
					M10	0309 0001 007
FF-T3541	35	41	98	100	M8	0896 0001 008
					M10	0309 0001 008
FF-T3844	38	44	100	106	M8	0309 0001 009
					M10	0896 0000 009
FF-T4248	42	48	104	113	M8	0309 0001 010
					M10	0896 0001 010
FF-T4551	45	51	107	120	M8	0309 0001 011
					M10	0896 0001 011
FF-T4753	47	53	110	122	M8	0309 0001 012
					M10	0896 0001 012
FF-T4955	49	55	113	125	M8	0309 0001 013
					M10	0896 0001 013
FF-T5157	51	57	115	127	M8	0896 0001 014
					M10	0309 0001 014
FF-T5359	53	59	118	135	M8	0896 0001 015
					M10	0309 0001 015
FF-T5561	55	61	122	138	M8	0896 0001 016
					M10	0309 0001 016
FF-T5763	57	63	125	141	M8	0896 0001 017
					M10	0309 0001 017

- Actual products may vary due to product enhancement.
- M6/M12/without bolt option is available upon request.

NORMA Cable Cleats - Trefoil

NORMAFIX™ CABLE CLEATS - TREFOIL						
Product Code	Cable Range		Dimensions		Bolt	Product No.
	Min. Diameter	Max. Diameter	H	W		
	mm	mm	mm	mm		
FF-T5965	59	65	126	145	M8	0896 0001 018
					M10	0896 0200 001
FF-T6167	61	67	131	148	M8	0896 0001 019
					M10	0309 0001 019
FF-T6369	63	69	134	153	M8	0896 0001 020
					M10	0309 0001 020
FF-T6571	65	71	139	155	M8	0896 0001 021
					M10	0309 0001 021
FF-T6773	67	73	143	156	M8	0309 0001 022
					M10	0896 0001 022
FF-T6975	69	75	146	161	M8	0309 0001 023
					M10	0896 0001 023
FF-T7177	71	77	150	164	M8	0309 0001 024
					M10	0896 0001 024
FF-T7379	73	79	154	166	M8	0896 0001 025
					M10	0896 0200 003
FF-T7581	75	81	157	170	M8	0309 0001 026
					M10	0896 0001 026
FF-T7783	77	83	160	174	M8	0896 0001 027
					M10	0896 0200 004
FF-T7985	79	85	162	178	M8	0896 0001 028
					M10	0896 0200 005
FF-T8187	81	87	168	181	M8	0896 0001 029
					M10	0896 0200 006
FF-T8389	83	89	172	185	M8	0896 0001 030
					M10	0309 0001 030
FF-T8896	88	96	180	195	M8	0896 0001 031
					M10	0309 0001 031
FF-T96103	96	103	189	203	M8	0896 0001 032
					M10	0896 0200 002
FF-T103111	103	111	198	206	M8	0896 0000 033
					M10	0309 0001 033
FF-T111119	111	119	207	215	M8	0896 0001 034
					M10	0896 0200 007
FF-T119128	119	128	216	223	M8	0309 0001 035
					M10	0896 0001 035

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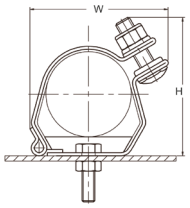
NORMA Cable Cleats - Single







FPSO deck



Power transmission tower



NORMAFIX™ CABLE CLEATS - SINGLE

Product Code	Cable Range		Dimensions		Bolt	Product No.
	Min. Diameter	Max. Diameter	H	W		
	mm	mm	mm	mm		
FF-S2832	28	32	60	57	M8	03090002001
					M10	08960002001
FF-S3034	30	34	61	59	M8	03090002002
					M10	08960002002
FF-S3236	32	36	63	61	M8	08960002003
					M10	03090002003
FF-S3438	34	38	65	63	M8	03090002004
					M10	08960002004
FF-S3640	36	40	67	64	M8	03090002005
					M10	08960002005
FF-S3842	38	42	69	65	M8	03090002006
					M10	08960002006
FF-S4044	40	44	70	68	M8	03090002007
					M10	08960002007
FF-S4246	42	46	71	69	M8	03090002008
					M10	08960002008
FF-S4448	44	48	73	72	M8	03090002009
					M10	08960002009
FF-S4650	46	50	74	73	M8	03090002010
					M10	08960000010
FF-S4852	48	52	75	77	M8	03090002011
					M10	08960000011
FF-S5054	50	54	78	78	M8	03090002012
					M10	08960002012
FF-S5256	52	56	79	80	M8	03090002013
					M10	08960002013
FF-S5458	54	58	80	82	M8	03090002014
					M10	08960002014
FF-S5660	56	60	81	85	M8	03090002015
					M10	08960002015
FF-S5862	58	62	82	87	M8	03090002016
					M10	08960002016
FF-S6064	60	64	85	88	M8	03090002017
					M10	08960002017

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NORMA Cable Cleats - Single

NORMAFIX™ CABLE CLEATS - SINGLE						
Product Code	Cable Range		Dimensions		Bolt	Product No.
	Min. Diameter	Max. Diameter	H	W		
	mm	mm	mm	mm		
FF-S6266	62	66	87	90	M8	03090002018
					M10	08960002018
FF-S6468	64	68	89	91	M8	03090002019
					M10	08960002019
FF-S6670	66	70	90	92	M8	08960002020
					M10	08960102020
FF-S6872	68	72	92	94	M8	03090002021
					M10	08960002021
FF-S7074	70	74	95	97	M8	03090002022
					M10	08960002022
FF-S7276	72	76	97	99	M8	08960002023
					M10	03090002023
FF-S7478	74	78	98	102	M8	03090002024
					M10	08960002024
FF-S7680	76	80	100	104	M8	03090002025
					M10	08960002025
FF-S7882	78	82	102	106	M8	03090002026
					M10	08960002026
FF-S8084	80	84	105	107	M8	03090002027
					M10	08960002027
FF-S8286	82	86	107	110	M8	03090002028
					M10	08960002028
FF-S8488	84	88	109	111	M8	03090002029
					M10	08960002029
FF-S8690	86	90	110	113	M8	03090002030
					M10	08960002030
FF-S9094	90	94	115	121	M8	03090002031
					M10	08960002031
FF-S94118	94	118	133	139	M8	08960002032
					M10	03090002032
FF-S118130	118	130	140	144	M8	08960002033
					M10	03090002033

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Power distribution substation

Protection of the Cable Management System

Cable supporting and retaining solutions – Wherever in the world you are, and whenever you need an effective solution to secure electrical cables and provide effective short circuit protection, NORMA stainless steel cable cleat is always your first choice. Superior quality in every detail. No compromise.

Secure electrical cables. Perfect for use within industrial and hazardous areas,

NORMA Group is a global market and technology leader in engineered joining technology, offering more than 40,000 high-quality products and solutions to approximately 10,000 customers for diverse applications (automotive and aftermarket, infrastructure, marine, oil and gas, shipbuilding, power, industrial, new energy, white goods, machine building, off-road, hardware distribution, water management, etc).

As a listed company, NORMA Group has its headquarters in Maintal near Frankfurt/Main, with 9,100 employees serving customers in over 100 countries. NORMA Group operates a global network of 30 production facilities as well as numerous sales and distribution sites across Europe, the Americas, and Asia-Pacific. In 2022, the company generated sales of over EUR 1.2 billion.



NORMA Cable Cleats Solutions for oil and gas, shipbuilding, new energy, electric power, railway and mining.

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