

PURPOSE:

To provide the specification for purchasing flat cable festooning for crane systems.

SCOPE:

Harrington Items (Power): FC-44, FC-46, FC-48, FC-410, FC-412

Harrington Items (Control): FC-816, FC-816X, FC-1216

SPECIFICATIONS:

1. <u>GENERAL:</u>	Multi-conductor, 600 volt, flat cable designed for extra hard usage in either indoor or outdoor applications with continuous flexing conditions operating at -40 to 105° C. Must meet the requirements of UL VW-1 and CSA FT-1. Applications include festooning systems, power tracks, hoists, power carriage systems, and other extreme flexing applications.
2. <u>CONDUCTOR:</u>	Class K, flexible stranded, soft drawn, bare copper per ASTM B-174.
3. <u>INSULATION:</u>	Heat & moisture resistant, polyvinyl chloride (PVC) meeting the requirements of UL 62 and CSA C22.2 No 49 for flat cable wires. The insulation shall be acceptable for use in locations from -40 to 105° C. Thickness per Table 1.
4. <u>ASSEMBLY:</u>	At least one rip cord per group shall be provided for easy jacket stripping.
5. <u>COLOR CODE:</u>	See Table 1.
6. <u>JACKET:</u>	Heat and moisture resistant, yellow polyvinyl chloride (PVC) meeting the requirements of UL 62 and CSA C22.2 No 49 for flat cable wires. Thickness per Table 1.
7. <u>CERTIFICATION:</u>	The cable shall carry appropriate certifications from UL and CSA in accordance with the appropriate national standards for the USA and Canada for flat type cable. Product shall also be RoHS Compliant and comply with NEC Article 400.
8. <u>MARKING:</u>	Information to be printed on the overall jacket shall be according to marking and identification requirements of the applicable standards. Likewise, intervals at which the information appears shall be determined by applicable standards. UL and CSA certification numbers shall also be printed on jacket.
9. <u>DIMENSIONS:</u>	See Table 1 and Figure 1.
10. <u>PACKAGING:</u>	Cable shall be wound on reel and tagged per UL62. Tag shall be firmly attached to reel, but removable (e.g. no glue and not shrink wrapped to reel)



SPECIFICATION
Flat Festoon Cable

Table 1 – Specifications & Dimensions

HHI Item Number	NUMBER & Circuit Conductor Size (AWG)		Average Insulation Thickness (mils)	Average Jacket Thickness (mils)	Nominal Cable Dimensions A x B (in.)	Nominal Cable Weight (lbs/ft)	Allowable Ampacity (amps)*	Color Code
	Size	Avg. # Strand/gauge						
FC-44	4/C #4	418/30	60	60	0.510 x 1.710	0.75	95	1 – Black 2 – Red 3 – Blue 4 – Green
FC-46	4/C #6	266/30	60	45	0.435 x 1.470	0.58	75	
FC-48	4/C #8	168/30	45	45	0.360 x 1.190	0.45	50	
FC-410	4/C #10	105/30	30	35	0.275 x 0.870	0.24	40	
FC-412	4/C #12	65/30	30	35	0.235 x 0.750	0.16	30	
FC-816	8/C #16	65/34	30	35	0.210 x 1.130	0.18	15	1 – Black 2 – Red 3 – Blue 4 – Orange 5 – Yellow 6 – Brown 7 – Red/Black 8 – Green
FC-816X	8/C #16							Same as FC-816 except: 8 - Blue/Black
FC-1216	12/C #16							1 – Black 2 – Red 3 – Blue 4 – Orange 5 – Yellow 6 – Brown 7 – Red/Black 8 – Blue/Black 9 – Orange/Black 10 – Yellow/Black 11 – Brown/Black 12 – Green

* Per NEC Table 400.5(A) – Allowable Ampacity for Flexible Cords and Cables Based on Ambient Temperature of 30C.

