

General Information














Tolerances for Catalog Dimensions:

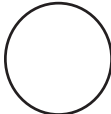
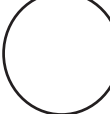





Length Dimensions	Tolerance	All Other Dimensions	Tolerance
1.0" - 5.0"	± .030	X.X"	± .030
5.1" - 10.0"	± .050	X.XX"	± .020
10.1" - 15.0"	± .060	X.XXX"	± .010

Note: Catalog Dimensions are for guidance only and are not to be construed as inspection standards.

This catalog is intended to present product data that will help the end user with design application. Marathon Special Products reserves the right to change or update without notice. Please visit www.marathonsp.com for the most up-to-date product information.

Wire Chart - based on UL Class B/C stranded wire (also known as code wire or rigid stranded wire).

													
SIZE	#14	#12	#10	#8	#6	#4	#3	#2	#1	1/0	2/0	3/0	4/0
DIAMETER	.073	.092	.115	.146	.184	.235	.281	.295	.335	.380	.420	.475	.530
AMPS	15	20	30	50	65	85	100	115	130	150	175	200	230

							
SIZE	250kcmil	300kcmil	350kcmil	400kcmil	500kcmil	600kcmil	750kcmil
DIAMETER	.580	.635	.690	.730	.820	.893	.998
AMPS	255	285	310	335	380	420	475

SCCR Information:

The requirements of the National Electric Code (NEC) and UL508A now require many electrical panels to carry a Short Circuit Current Rating (SCCR). Analyzing the SCCR of individual components and overcurrent protection devices is a method of determining the SCCR of an electrical assembly.

Many of Marathon's recognized and listed power blocks have now been tested and approved for higher SCCR. The higher ratings are based on proper wire sizes and the appropriate circuit protection device (fuses or circuit breakers). UL508A does allow default SCCR for power distribution blocks of 10,000A with no additional testing.

For detailed SCCR product information, please see the individual product data sheets available at:

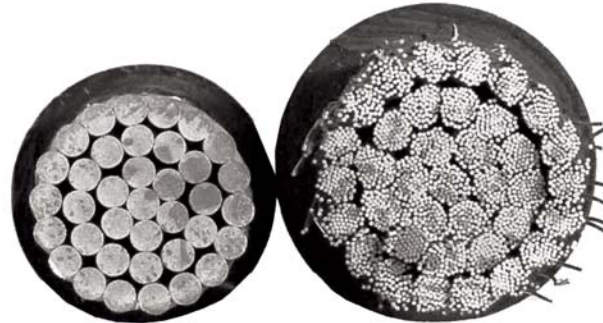
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Flexible Stranded Wire Information:

Traditionally bare wire terminals used on Power Blocks and Fuse Holders have only been evaluated for use with rigid (Class B & C) wire. The majority of MSP's terminals have been evaluated for use with flexible stranded wire classes such as Class G, H, I (DLO) and K per UL 486A-B. This enables customers to be UL and NEC compliant while using flexible classes of wire without the use of crimp type terminals. We also supply a range of studded products to allow for the use of crimp terminals, which are recommended for larger wire sizes (greater than #1 AWG).

Flexible stranded wire classes also bring additional considerations to address such as an increase in wire diameter and the number of strands per a given wire size. The photo to the right shows two 250 kcmil wires of different classes. The one on the left is the traditional Class B with 37 strands. The one on the right is a finely stranded Class K. Although they are the same wire classification of 250, you can see the Class K is larger in diameter. This illustrates the need to specify a terminal to accept a larger standard wire size. The table below shows the increase in strand count per each wire size.



Wire Gauge	AWG/kcmil						Wire Gauge	
	Rigid Stranded			Flexible Stranded				
	CSA Compact	Class B	Class C	Class G	Class H	Class I (DLO)		Class K
	Number of Strands*							
#20 AWG						10	#20 AWG	
#18						16	#18	
#16						26	#16	
#14	-			-	-	41	#14	
#12						65	#12	
#10		7	19			104	#10	
#8						168	#8	
#6	7			49	133	266	#6	
#4						420	#4	
#2						665	#2	
#1						836	#1	
1/0						1064	1/0	
2/0	19	19	37	133	259	1323	2/0	
3/0						1666	3/0	
4/0						2107	4/0	
250 kcmil						2499	250 kcmil	
300 kcmil						2989	300 kcmil	
350 kcmil						3458	350 kcmil	
400 kcmil	37	37	61	259	427	3990	400 kcmil	
500 kcmil						5054	500 kcmil	
600 kcmil						6065	600 kcmil	
750 kcmil		61		427		7581	750 kcmil	
1,000 kcmil						10101	1,000 kcmil	

*Specific quantity of strands for Classes G, H, I (DLO) & K may vary by manufacturer