



- A.** Single-piece housings of impact-resistant Polycarbonate Lexan® feature both high physical and dielectrical strength. Superior tolerance characteristics to extreme cold or heat.
- B.** Connector Springs are made of quality tempered 301 stainless steel designed to maintain constant pressure to the contacts. Resists vibration arcing.
- C.** Contacts are designed to provide for a unique Ramplock action which allows the contacts to be easily mated yet securely locked in position when the housings are connected.
- D.** Solid copper contacts are plated with pure silver (99.9%) to ensure superior connection and maximum conductivity with low resistance. Contacts are securely crimped to cables.

## SY50, 120, 175, & 350 AMP Connectors

- Single piece housings of impact resistant polycarbonate offer both high physical strength and superior dielectric properties
- Silver plated solid copper contacts offer low resistance for superior conductivity
- Self cleaning contact design resists arcing by keeping conductive surfaces clean and free of corrosion
- Contacts have flared and heat treated barrels that readily accept fine stranded wire and allow easy, quality crimping
- Integral stainless steel springs maintain constant pressure on the contact to insure a consistent, low resistance connection



### Connector Specifications

Specifications	Part Number SY50	Part Number SY120	Part Number SY175	Part Number SY350
UL amperage*/voltage rating	50AMPS/600VDC	120AMPS/600VDC	175AMPS/600VDC	350AMPS/600VDC
Operating temperature range	-20° to 105°C	-20° to 105°C	-20° to 105°C	-20° to 105°C
Current Rating*	50AMPS on 6AWG wire produces 30°C rise	120AMPS on 2AWG wire produces 35°C rise	175AMPS on 1/0AWG wire produces 30°C rise	350AMPS on 300MCM wire produces 30°C rise
Insulation withstanding test voltage (VOLTS, DC)	2200DC	2200DC	2200DC	2200DC
Maximum wire insulation diameter	0.44"/11mm	0.50"/13mm	0.75"/19mm	1.10"/28mm
Average contact retention force	Approximately 50lbs	Approximately 150lbs	Approximately 300lbs	Approximately 500lbs
Average contact resistance	With 1 1/4" (32mm) of 6AWG wire 200 micro-ohms	With 1 1/2" (38mm) of 2AWG wire 150 micro-ohms	With 1 3/4" (45mm) of 1/0AWG wire 100 micro-ohms	With 2 1/2" (64mm) of 300MCM wire 50 micro-ohms
Vibration resistance	Excellent	Excellent	Excellent	Excellent
Mating cycles	10,000 For disconnect use only	10,000 For disconnect use only	10,000 For disconnect use only	10,000 For disconnect use only
Impact resistance	High	High	High	High
Environmental restrictions	Protected - No hydrocarbon fluids	Protected - No hydrocarbon fluids	Protected - No hydrocarbon fluids	Protected - No hydrocarbon fluids
Average mating and unmating force	15lbs (6.75kg)	20lbs (9.00kg)	25lbs (11.25kg)	30lbs (13.50kg)
Available colors	gray, red, black, blue, and yellow	gray and blue only	gray, blue, orange, yellow, and red	gray, blue, red, yellow, green, and orange

\* For largest wire or cable size