SpeedMaster™ is a dedicated contact module and insert package for SuperNine®, Mighty Mouse, and HiPer-D connectors. Optimized for high-speed Cat 6A Ethernet, the SpeedMaster™ 10G system offers industry-leading NEXT, return loss and insertion loss performance.
SpeedMaster™ High-Speed 10G Connection System
for Glenair SuperNine, Mighty Mouse, and HiPer-D connectors

SPEEDMASTER 10G NEXT-GENERATION HIGH-SPEED CONNECTION SYSTEM

The SpeedMaster Difference
SpeedMaster, the high-speed multi-contact solution for the Mighty Mouse, HiPer-D and SuperNine 38999 type family of connectors. Each SpeedMaster module consists of 4 pairs of pins or sockets incorporating industry standard size 22D contacts to provide 10G performance. Each module is individually shielded within the shell, and retained in place with a threaded ferrule. Additionally, module cavities are genderless allowing pin or socket interface for plugs or receptacles. Glenair offers these SpeedMaster contacts in 3 connector packages, including our small form factor Mighty Mouse Series 824 Locking Push/Pull, HiPer-D (M24308) hi-performance rectangular D-Sub, and our 38999 type “better than QPL” connectors allowing you to adapt and fit your application needs. These features result in a two fold benefit. An easily removable and repairable, shielded high performance contact packaged within robust industry standard connectors, helping to reduce network downtime and providing a connectorized solution to improve the overall network function and performance. Meet the demand for the next generation Cat 6A networks with SpeedMaster, the next generation contact system from Glenair.

<table>
<thead>
<tr>
<th>Cable Size</th>
<th>Cable Ø</th>
<th>Cable Size</th>
<th>Cable Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.280 (7.11)</td>
<td>5</td>
<td>.240 (6.10)</td>
</tr>
<tr>
<td>2</td>
<td>.270 (6.86)</td>
<td>6</td>
<td>.230 (5.84)</td>
</tr>
<tr>
<td>3</td>
<td>.260 (6.60)</td>
<td>7</td>
<td>.220 (5.59)</td>
</tr>
<tr>
<td>4</td>
<td>.250 (6.35)</td>
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SpeedMaster™ High-Speed Cable

<table>
<thead>
<tr>
<th>Cable P/N</th>
<th>Cable Category</th>
<th>Cable Construction</th>
<th>Wire Gage</th>
<th>Cable Dia.</th>
<th>Assembly Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>963-003-24</td>
<td>Cat 6A</td>
<td>SF/UTP</td>
<td>24</td>
<td>.280</td>
<td>A185082</td>
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<td>963-003-26</td>
<td>Cat 6A</td>
<td>SF/UTP</td>
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<td>963-037</td>
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<td>SF/UTP</td>
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<td>963-033-24</td>
<td>Cat 6A</td>
<td>S/FTP</td>
<td>24</td>
<td>.260</td>
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<td>933-033-26</td>
<td>Cat 6A</td>
<td>S/FTP</td>
<td>24</td>
<td>.220</td>
<td></td>
</tr>
</tbody>
</table>
HIGH-SPEED
SpeedMaster™
Pre-wired 10G high-speed contacts
858-102 10GBase-T Cat 6A Contacts

Pre-wired SpeedMaster assemblies are 100% tested and ready for use. Compatible with Glenair Series 80 Mighty Mouse, Series 28 HiPer-D or Series 23 SuperNine connectors with keyed size #8 cavities, these assemblies are available with three termination options: single-ended, SpeedMaster contacts on both ends, or with an RJ45 plug on one end. Contacts are wired per the guidelines of ARINC 664 Part 2 Appendix N.

## Connector Compatibility
- Glenair 824-009 and -010 Mighty Mouse
- Glenair 280-098 thru -103 HiPer-D
- Glenair 233-219, 233-220 SuperNine

## Contact Positions

### Mating Face of Pin Contacts

### Mating Face of Socket Contacts

## Specifications
- Operating temperature: -65°C to +200°C (SpeedMaster) or -40°C to +85°C (RJ45); cable dependent
- Meets EIA/TIA 568C.2-10 and IEC 60603-7-51 Cat 6A 500 MHz
- Characteristic Impedance: 100 ohms
- Insulation resistance: 200 megohms min.
- Durability: 500 mating cycles
**SpeedMaster™**

**Available connector packaging**

### MIGHTY MOUSE 824 LOCKING PUSH-PULL

- Quick-disconnect coupling
- Audible, visual, and tactile full-mate indicators

### HIPER-D M24308 INTERMOUNTABLE

- Advanced temperature, vibration and EMC/electrical performance
- Rugged machined one-piece shell

### SUPERNINE D38999 SERIES III TYPE

- Advanced performance, “better than QPL” D38999 Series III type bodies and shells
- Optimized for SpeedMaster contact modules

#### RECOMMENDED BACKSHELL

**377NS119** Aluminum Alloy Backshell

**Available connector configurations**

- 824-009-06 Plug
- 824-010-01 In-line Receptacle
- 824-010-00 Front Panel Mount, Jam Nut Receptacle
- 824-010-07 Rear Panel Mount, Jam Nut Receptacle

**Single Contact Module Insert Arrangement**

Ideally suited for CAT5E or CAT6A Ethernet applications

### Series 28 In-Line Connectors

- 280-101M Plug
- 280-098F Receptacle

### Series 28 Rear Panel Mount Connectors

- 280-102M Plug
- 280-099F Receptacle

### Series 28 Float Mount Connectors

- 280-103M Plug
- 280-100F Receptacle

**SpeedMaster HiPer-D Insert Arrangements**

<table>
<thead>
<tr>
<th>Series 233-219 SpeedMaster SuperNine connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>G6 = Plug 38999/26</td>
</tr>
<tr>
<td>05 = Receptacle, in-line</td>
</tr>
<tr>
<td>07 = Receptacle, jam-nut 38999/24</td>
</tr>
<tr>
<td>00 = Receptacle, wall mount 38999/20</td>
</tr>
<tr>
<td>CM = Receptacle, wall mount, metric clinch nuts</td>
</tr>
<tr>
<td>CS = Receptacle, wall mount, standard clinch nuts</td>
</tr>
<tr>
<td>D0 = Receptacle, wall mount, thru holes</td>
</tr>
<tr>
<td>HM = Receptacle, wall mount, metric helicoils</td>
</tr>
<tr>
<td>HS = Receptacle, wall mount, standard helicoils</td>
</tr>
<tr>
<td>T0 = Receptacle, wall mount, tapped holes</td>
</tr>
</tbody>
</table>

**Series 233-220 SpeedMaster SuperNine PC Tail connectors**

- 00 = Wall mount receptacle with slotted holes, standard standoff threads
- 10 = Wall mount receptacle with slotted holes, metric standoff threads
- CM = Wall mount receptacle with metric clinch nuts
- CS = Wall mount receptacle with standard clinch nuts
- HM = Wall mount receptacle with metric helicoils
- HS = Wall mount receptacle with standard helicoils
- 07 = Jam-nut receptacle

**Recommended Backshell**

**377NS119** Aluminum Alloy Backshell

**Dimensions in Inches (millimeters) are subject to change without notice.**