

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, FIBER OPTIC, CIRCULAR, PLUG AND RECEPTACLE STYLE,  
MULTIPLE REMOVABLE TERMINI, SCREW THREADS,  
LIGHT DUTY BACKSHELL, ENVIRONMENT RESISTING

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring fiber optic connectors described herein  
shall consist of this specification sheet and MIL-PRF-28876.

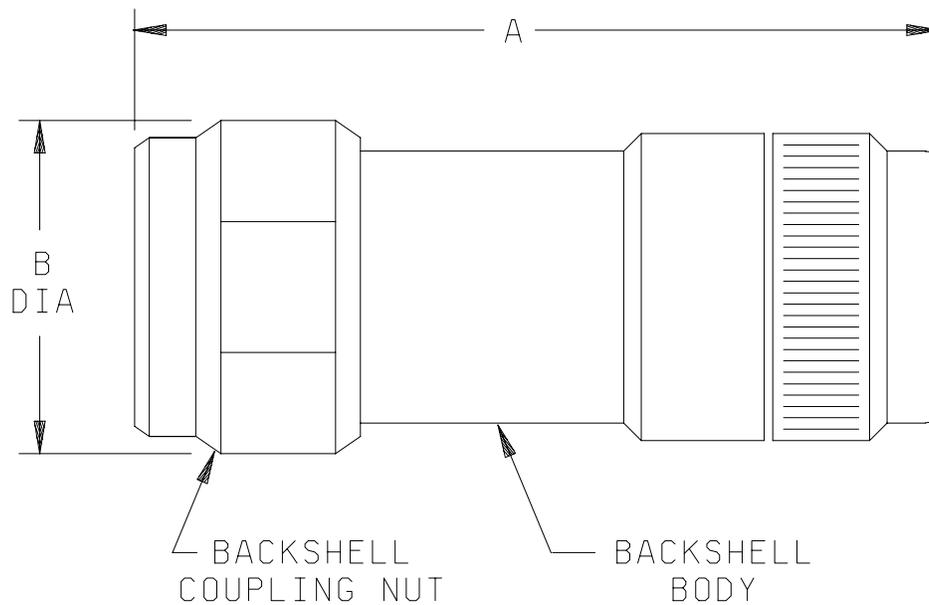


FIGURE 1. Light duty backshell.

MIL-PRF-28876/30

Shell Size	Shell size designator	Dimension A maximum	Dimension B (diameter) maximum
11	A	3.50 (88.9)	1.20 (30.5)
13	B	3.50 (88.9)	1.20 (30.5)
15	C	3.50 (88.9)	1.50 (38.1)
23	F	3.50 (88.9)	2.25 (57.2)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Dimensions apply to plated/finished part.
4. Metric equivalents (mm) are in parentheses.
5. For mating key dimensions, see figure A-7 of MIL-PRF-28876.
6. Backshell internal configuration not shown. The backshell interface dimensions shall be in accordance with figure A-7 of MIL-PRF-28876.

FIGURE 1. Light duty backshell - Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1 herein and MIL-PRF-28876, figure A-7. When mated to a plug or receptacle, the backshell shall hold the plug or receptacle insert in proper position (see MIL-PRF-28876, figure A-6).

Weight: 4 ounces (114g), maximum.

Fiber optic cable:

Cable diameter: .071 inch (1.80 mm) to .094 inch (2.39 mm).

Cleaning procedures: Each shipment of connectors shall include recommended cleaning procedures. The following wording or equivalent is recommended "To clean, use lint free wipe dampened with alcohol and blow dry with air."

Cable pull-out force: Not less than 15 lbs (67 N).

Cable seal flexing: Not applicable.

External bending moment: Not applicable.

Impact: Not applicable.

Crush: Not applicable.

Water pressure: Not applicable.

Freezing water: Not applicable.

Sand and dust: Not applicable.

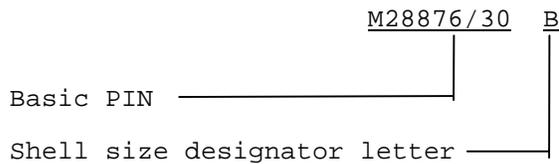
Electromagnetic effects: Not applicable.

Salt spray: Not less than 96 hours.

Fluid immersion: Not applicable.

Marking:

PIN: Marked on coupling ring of the backshell.



Mating counterpart: Backshell mates with MIL-PRF-28876/1 receptacle, MIL-PRF-28876/6 plug, and MIL-PRF-28876/11 receptacle.

Installation and removal tools: Adjustable or 1.25 inches (31.8 mm) open end wrench, strap wrench, and scissors.

Qualification by similarity: If a manufacturer has previously qualified a connector backshell to MIL-PRF-28876/27, and candidate light duty connector backshells meet the visual and mechanical, size, weight, identification marking, workmanship, insertion loss, return loss, cable pull out, twist, thermal shock, temperature cycling, life aging, flammability, fungus resistance, and ozone exposure inspections herein, then the candidate light duty backshells are qualified to this specification sheet. This qualification by similarity is applicable only if the same metallic backshell materials, coatings, and platings are used for both the MIL-PRF-28876/27 connector backshell and the light duty connector backshell. (Note that will be removed: the following tests were assessed as not requiring retest: vibration, shock, temperature humidity cycling, and salt spray.)

NOTES:

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-PRF-28876, this specification sheet references the following documents:

MIL-PRF-28876/1  
MIL-PRF-28876/6  
MIL-PRF-28876/11  
MIL-PRF-28876/27

CONCLUDING MATERIAL

Custodians:

Army - CR  
Navy - SH  
Air Force - 11  
DLA - CC

Preparing activity:  
Navy-SH

Agent:  
DLA - CC

Review activities:

Navy - AS  
Air Force - 13, 19, 93, 99  
DIA - DI  
NASA - NA

(Project 6060-0144-20)

NOTE: The activities listed above were interested in this document on the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://www.dodssp.daps.mil/>.