

**INCH-POUND**

MIL-PRF-28876/29E  
4 October 2004  
SUPERSEDING  
MIL-C-28876/29D  
9 July 1992

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, FIBER OPTIC, CIRCULAR, PLUG AND RECEPTACLE STYLE,  
MULTIPLE REMOVABLE TERMINI, SCREW THREADS,  
90° 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.

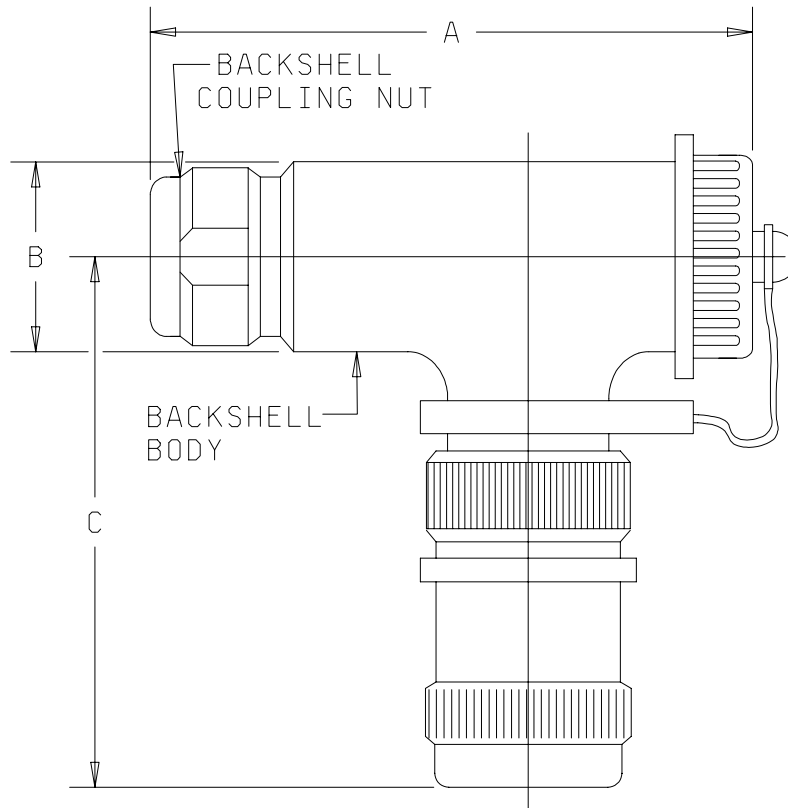


FIGURE 1. 90° backshell.

MIL-PRF-28876/29E

Shell Size	Shell size designator	Backshell dash number	Dimension A maximum	Dimension B maximum	Dimension C maximum
11	A	1L, 2L, 3L	4.2 (107)	1.2 (30.5)	3.0 (76)
		1, 2, 3	3.2 (81)	1.2 (30.5)	
13	B	1L, 2L	4.3 (109)	1.2 (30.5)	3.1 (79)
		1, 2	3.2 (81)	1.2 (30.5)	
15	C	1L, 2L, 3L	4.3 (109)	1.3 (33)	3.1 (79)
		1, 2, 3	3.2 (81)	1.3 (33)	
23	F	1, 2, 3	6.500 (165.10)	2.250 (57.15)	4.200 (106.68)

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. Straight 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: 6.4 ounces (181.44g), maximum.

Fiber optic cable:

Cable diameter: .315 ± .020 inch (8.00 ± 0.51 mm), or .425 ± .043 inch (10.80 ± 1.09 mm), or .817 ± .049 inch (20.75 ± 1.24 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".

MIL-PRF-28876/29E

Marking:

PIN: Marked on coupling ring of the backshell (see table I).

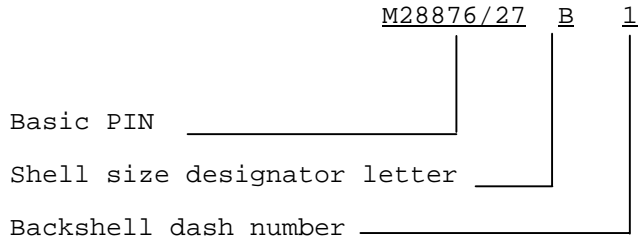


TABLE I. PIN designators.

Shell size	Designator	Backshell dash number	Cable diameter range
11	A	1L, 1	.240 - .250 (6.10 - 6.35)
		2L, 2	.280 - .315 (7.11 - 8.00)
		3L, 3	.305 - .346 (7.75 - 8.79)
13	B	1L, 1	.280 - .315 (7.11 - .800)
		2L, 2	.305 - .346 (7.75 - 8.79)
15	C	1L, 1	.495 - .515 (12.57 - 13.08)
		2L, 2	.380 - .423 (9.65 - 10.74)
		3L, 3	.423 - .465 (10.74 - 11.81)
		4L, 4	.305 - .346 (7.75 - 8.79)
23	F	1	.768 - .866 (19.51 - 22.00)
		2	.900 - 1.000 (22.86 - 25.40)

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

MIL-PRF-28876/29E

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

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

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 6060-0144-19)

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/>.