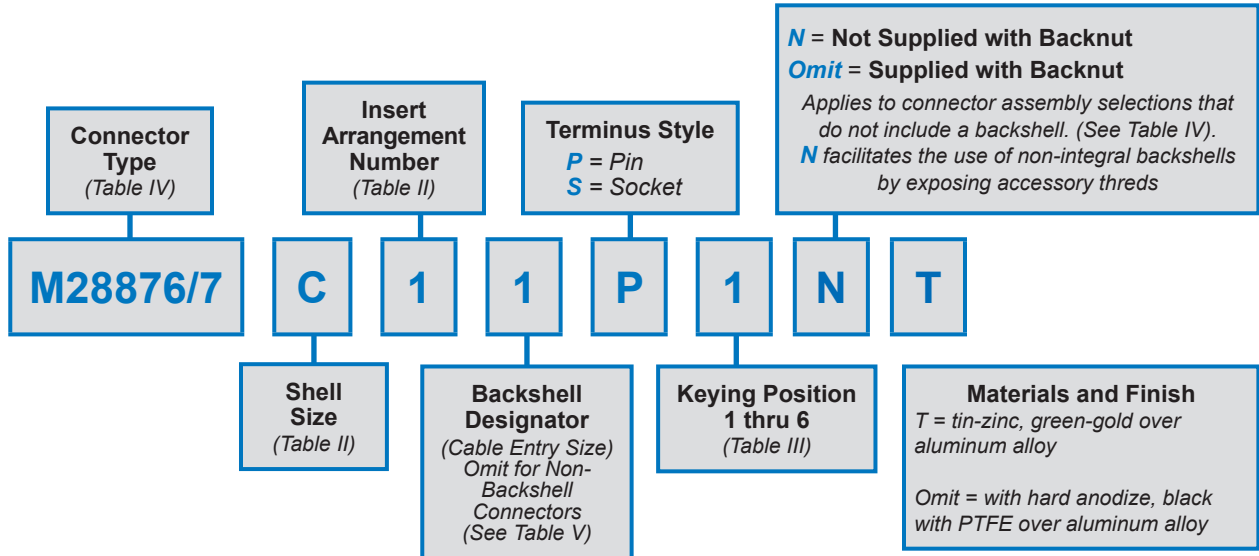




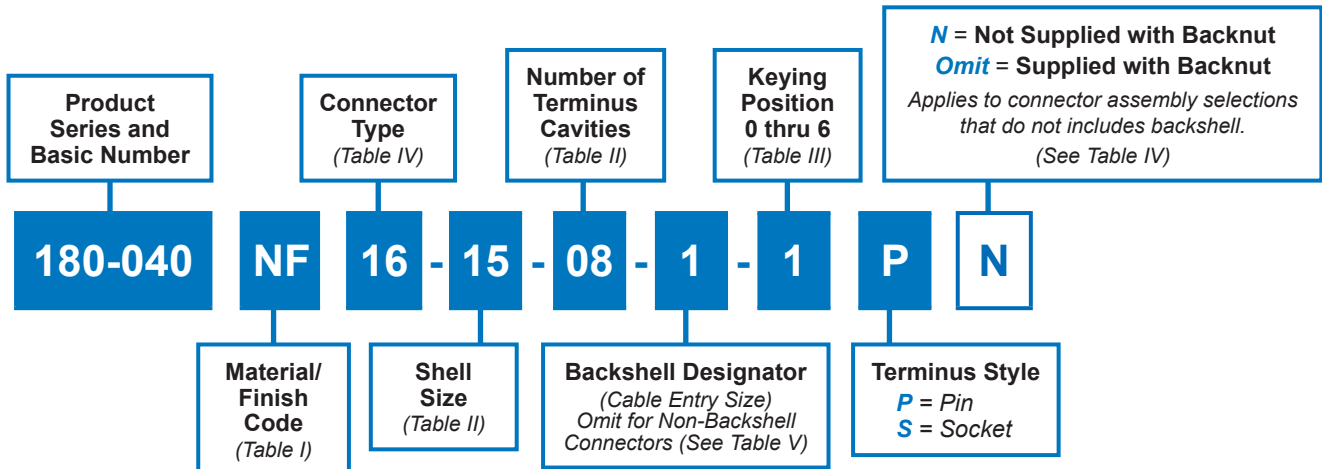
MIL-PRF-28876 QPL Fiber Optic Connectors  
180-040  
How to Order



Military QPL M28876/1 through /14 fiber optic connectors



Glenair commercial equivalent MIL-PRF-28876 type fiber optic connectors



# MIL-PRF-28876 QPL Fiber Optic Connectors

## 180-040

### How to Order



Code	Material	Finish Description
<b>GB4</b>	Aluminum Alloy	Hard Anodize, Black with PTFE
<b>M*</b>		Electroless Nickel
<b>ME</b>		Electroless Nickel
<b>MT*</b>		Nickel-PTFE, Grey
<b>NF</b>		Cadmium, Olive Drab
<b>TZ</b>		Tin-Zinc, Green-Gold
<b>ZR</b>		Zinc-Nickel, Black

\*Inactive for new design. Use "ME" finish  
Refer to Appendix for material/finish details

Mil-Spec		Commercial	
Shell Size	Insert Arrangement	Shell Size	Number of Cavities
<b>A</b>	<b>1</b>	<b>11</b>	<b>02</b>
<b>B</b>	<b>1</b>	<b>13</b>	<b>04</b>
<b>C</b>	<b>2</b>	<b>15</b>	<b>06</b>
	<b>1</b>		<b>08</b>
<b>F</b>	<b>2</b>	<b>23</b>	<b>18</b>
	<b>1</b>		<b>31</b>

Consult factory for QPL status

Backshell Designator	Max Allowable Cable Diameter by Shell Size			
	A (11)	B (13)	C (15)	F (23)
<b>1</b>	.250 (6.4)	.285 (7.2)	.500 (12.7)	.866 (22.0)
<b>2</b>	.346 (8.8)	.346 (8.8)	.250 (6.4)	1.000 (25.4)
<b>3</b>		.453 (11.5)	.375 (9.5)	.600 (15.2)

Connector Type	Backshell Type	MIL-Spec	Commercial
Wall Mount Receptacle	None	M28876/1	<b>03</b>
	Straight	M28876/2	<b>13</b>
	45°	M28876/3	<b>23</b>
	90°	M28876/4	<b>33</b>
In-Line Receptacle	Straight	M28876/5	<b>15</b>
Plug	None	M28876/6	<b>06</b>
	Straight	M28876/7	<b>16</b>
	45°	M28876/8	<b>26</b>
	90°	M28876/9	<b>36</b>
Jam Nut Receptacle	None	M28876/11	<b>04</b>
	Straight	M28876/12	<b>14</b>
	45°	M28876/13	<b>24</b>
	90°	M28876/14	<b>34</b>

### Material and Finish

- A. M28876 part numbers supplied with two finish designator options driven by part number formulation (see above).
- T = Tin-Zinc, Green-Gold over Aluminum Alloy
- Omit = Hard Anodize, Black with PTFE over Aluminum Alloy.
- See Table I for commercial plating options.
- B. Hardware: Aluminum alloy/chem film, stainless steel/passivate
- C. Insert: Aluminum alloy/anodize
- D. Seals and boot: Fluorosilicone

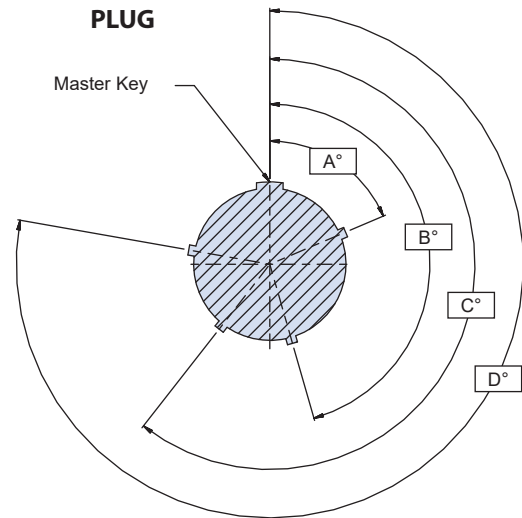
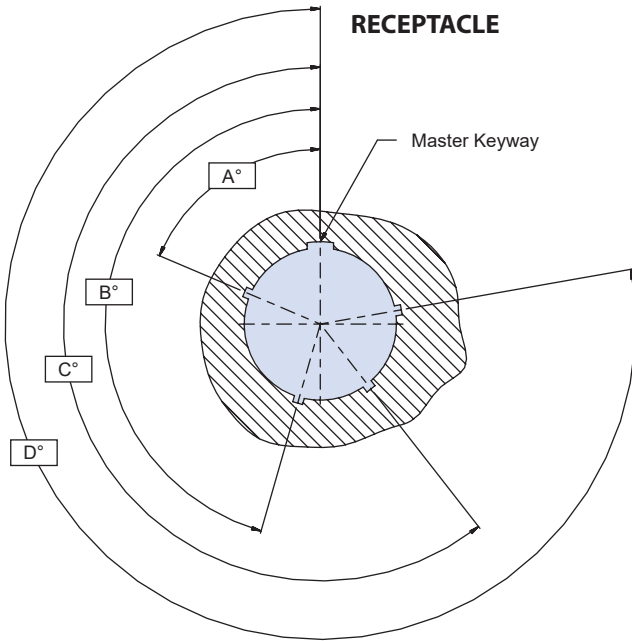
### Notes

Termini (Not Supplied with Connector):  
M29504/14 - Pin terminus, MIL-Spec  
M29504/15 - Socket Terminus, MIL-Spec  
M29504/03 - Dummy Terminus, MIL-Spec  
181-039 - Pin Terminus, MIL-Spec Style  
181-040 - Socket terminus, MIL-Spec Style  
181-051 - Dummy Terminus, MIL-Spec Style  
Backnut retained using thread-locking compound  
Shell size 13 backshell designator 3 connector supplied less boot  
Consult factory for termination and assembly tools/procedures  
Operating Temperature Range: -55° to +125°C.

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



**Key Positions for MIL-PRF-28876 (180-040) fiber optic connectors**



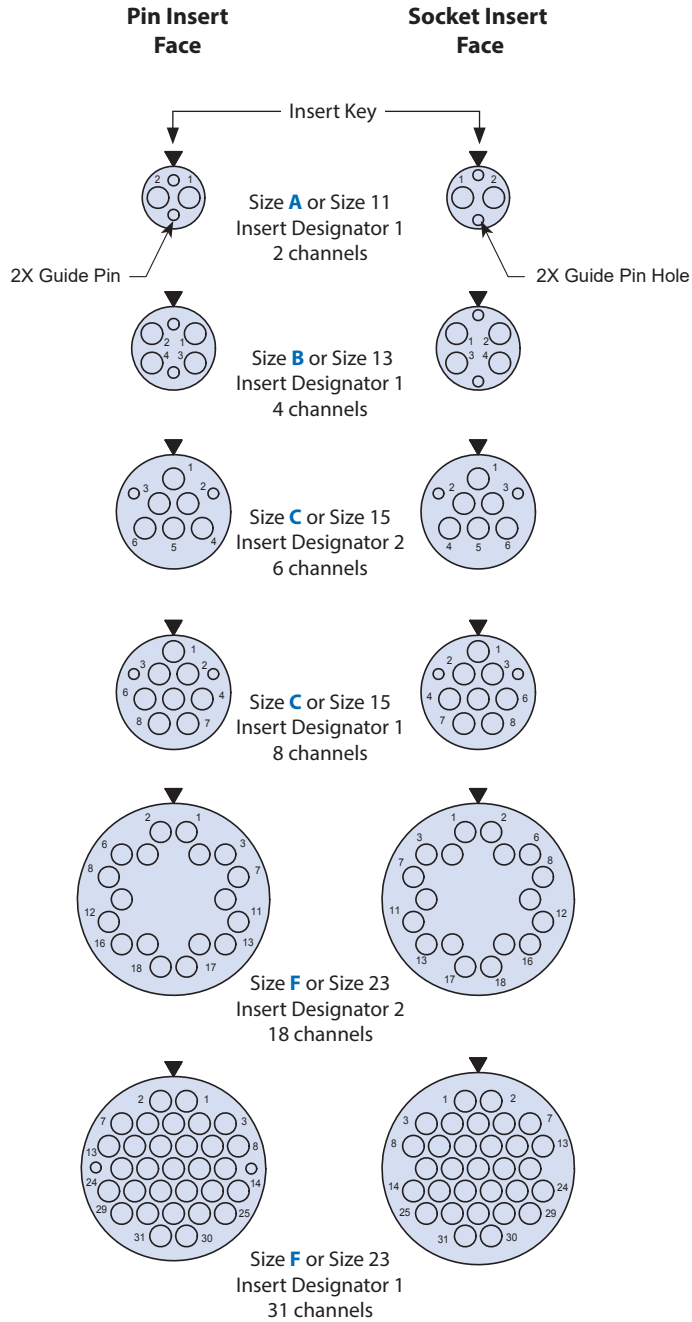
**Table III: Keying Position**

Shell Size	Key Position	A°	B°	C°	D°
11 and 13	0*	-	-	-	-
	1	95	141	208	236
	2	113	156	182	292
	3	90	145	195	252
	4	53	156	220	255
	5	119	146	176	298
	6	51	141	184	242
15 and 23	0*	-	-	-	-
	1	80	142	196	293
	2	135	170	200	310
	3	49	169	200	244
	4	66	140	200	257
	5	62	145	180	280
	6	79	153	197	272

\*0 indicates universal keying arrangement and is available on commercial equivalent plug connector only.

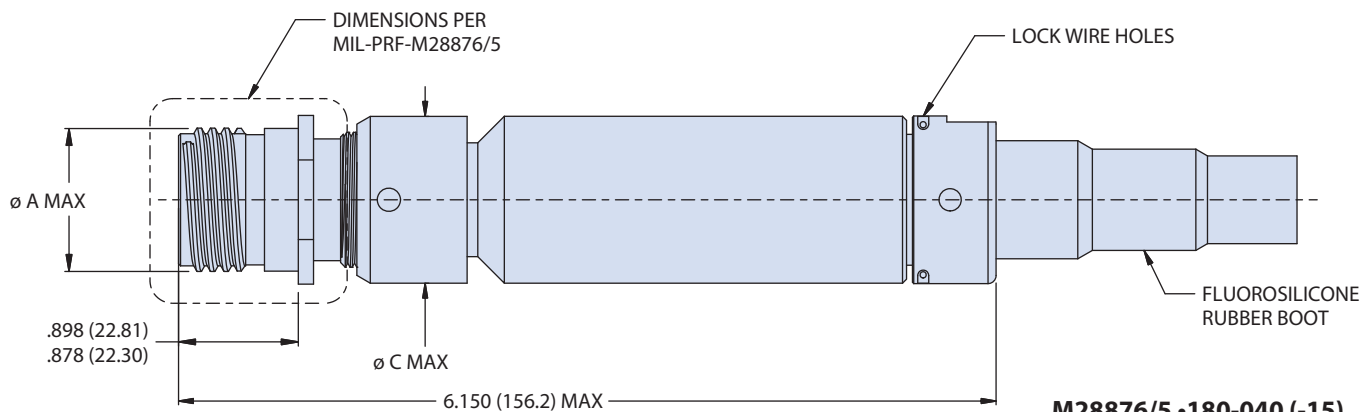
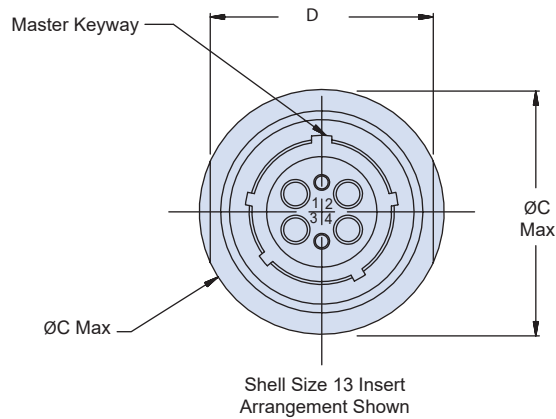
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**Insert arrangements for MIL-PRF-28876 (180-040) fiber optic connectors**




**MIL-PRF-28876 QPL in-line receptacle connector**

Table I				
Shell Size	ØA Max	ØB Max	ØC Max	D
11	0.750 (19.1)	0.960 (24.4)	0.963 (24.5)	0.768 (19.5)
13	0.875 (22.2)	1.085 (27.6)	1.088 (27.6)	0.893 (22.7)
15	1.062 (27.0)	1.255 (31.9)	1.275 (32.4)	1.080 (27.4)
23	1.500 (38.1)	1.763 (44.8)	1.719 (43.7)	1.518 (38.6)


**M28876/5 • 180-040 (-15)**  
**IN-LINE RECEPTACLE WITH**  
**STRAIGHT BACKSHELL**