FIBER OPTIC CONNECTION SYSTEM

Next Generation High-Density (NGCON)

Sea and Air

The Glenair Next Generation MIL-PRF-64266 (NGCON) fiber optic connection system is a high-performance solution for air, sea, and space applications. Developed with the NGCON design consortium, the system combines proven technology from standard MIL-PRF-28876 and MIL-DTL-38999 Series III designs with new innovations including rear-release genderless contacts, high-density packaging, and removable alignment sleeve retainers (ASR).

NGCON fiber optic connectors in a non-environmental "inside-the-box" cable assembly, terminated to commercial fiber optic connectors

- Conforms to MIL-PRF-64266 (NGCON) military standard.
- M28876 Double-start ACME mating threads, D38999 Series III style rear accessory threads.
- Multimode and singlemode capable
- Removable alignment sleeve retainer (ASR) for easy maintenence
- Rear release precison genderless termini, IAW MIL-PRF-29504/18, /19, /20
- 1.25 mm diameter ceramic ferrules and alignment sleeves
- Environmental o-ring sealing on terminus
- Receptacles compatible with M28876 panel cutouts
- Anti-decoupling (ratchet) mechanism on plug connector
- Keyed connectors and termini available for singlemode APC

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MIL-PRF-64266 COMPLIANT

NGCON Next Generation

Fiber optic connection system

Rugged Fiber Optic CONNECTORS

Rear-release precision genderless termini IAW MIL-PRF-29504 with integral environmental O-ring

Plug, wall-mount, and jam-nut receptacle configurations

Removable alignment sleeve retainer (ASR) for easy maintenance with integrated guide pins for superior axial aignment

Genderless Termini IAW MIL-PRF-29504 and Supported Fiber Media

P/N Non-Keyed	P/N Keyed	ØA (Micron)	Typical Fiber Type	Typ. Fiber Size (Core/ Cladding/Coating) [Micron]	Ref. M29504/18 Non-Keyed	Ref. M29504/20 Keyed
181-043-1250C	181-043K-1250C	125.0	SM	9/125	M29504/18-01Y	M29504/20-01Y
181-043-1255C	181-043K-1255C	125.5	SM	9/125	M29504/18-02Y	M29504/20-02Y
181-043-126SC	181-043K-126SC	126.0	SM/MM	9/125, 50/125, 62.5/125	M29504/18-03Y	M29504/20-03Y
181-043-126C	181-043K-126C	126.0	MM	50/125, 62.5/125	M29504/18-26Y	M29504/20-26Y
181-043-127C	181-043K-127C	127.0	MM	50/125, 62.5/125	M29504/18-27Y	M29504/20-27Y
181-043-142C	181-043K-142C	142.0	MM	100/140	M29504/18-42Y	M29504/20-42Y
181-043-145C	181-043K-145C	145.0	MM	100/140	M29504/18-45Y	M29504/20-45Y
181-043-156C	181-043K-156C	156.0	MM	62.5/125/155	M29504/18-56Y	M29504/20-56Y
181-043-157C	181-043K-157C	157.0	MM	62.5/125/155	M29504/18-57Y	M29504/20-57Y
181-043-173C	181-043K-173C	173.0	MM	100/140/172	M29504/18-73Y	M29504/20-73Y
181-043-175C	181-043K-175C	175.0	MM	100/140/172	M29504/18-75Y	M29504/20-75Y

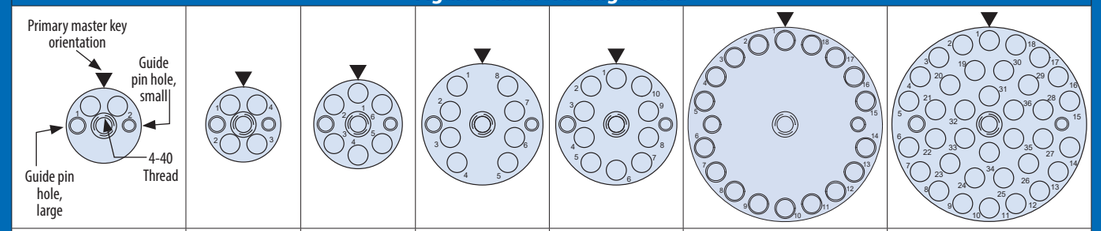
NGCON Materials and Finishes

Code	Material	Description
ME	Aluminum Alloy	Electroless Nickel
MT		Nickel-PTFE, Grey
ZN		Zinc-Nickel, Olive Drab
ZR		Zinc-Nickel, Black
Z1	Stainless Steel	Passivate

NGCON Connector Sizes, Insert Arrangements, Thread Specificaitons

Shell Size	Shell Size Code (Ref)	Insert Arrangement	AA Thread	BB Thread
11	B	2 or 4	M15 x 1.0-6g 0.100R	.7500-.1P-.2L-DS
13	C	6	M18 x 1.0-6g 0.100R	.8750-.1P-.2L-DS
15	D	8 or 10	M22 x 1.0-6g 0.100R	1.0625-.1P-.2L-DS
23	H	18 or 36	M34 x 1.0-6g 0.100R	1.5000-.1P-.2L-DS

Figure I: Insert Arrangements



Shell Size 11 Arrangement 2	Shell Size 11 Arrangement 4	Shell Size 13 Arrangement 6	Shell Size 15 Arrangement 8	Shell Size 15 Arrangement 10	Shell Size 23 Arrangement 18	Shell Size 23 Arrangement 36

Plug front face shown. Receptacle front face - opposite

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