J599A8 38999 Series III-Type Multi-Fiber Optical Connectors

2 to 32 fibers · ≤ 0.6 dB multimode · ≤ 0.8 dB single-mode

Fibers	2 to 32
Insertion loss	≤ 0.6 dB MM / ≤ 0.8 dB SM
Fiber types	9/125, 50/125, 62.5/125, OM3
Coupling	Triple-start thread
Temperature	–55 to +125 °C
Mating cycles	500

Key features

- 2, 4, 6, 8, 12, 16, 24 or 32 fiber channels in shell sizes 11 to 25
- Ceramic ferrules and alignment sleeves for precise optical alignment; termini to ARINC 801
- Removable crimp termini; pin termini protected against damage during mating
- Triple-start threaded coupling with anti-decoupling; five key positions, blind mating
- Aluminum, stainless-steel or titanium shells for marine environments
- VAB adjustable-angle backshell: straight, 45° or 90° cable exit with cable clamp
- High channel count in a small, light shell, immune to electromagnetic interference

Specifications

Optical

Parameter	Value	Condition
Insertion loss, multimode	≤ 0.6 dB	62.5/125 µm
Insertion loss, single-mode	≤ 0.8 dB	9/125 µm
Fiber types	Multimode 62.5/125, 50/125, OM3 50/125; single-mode 9/125	
Termini	Ceramic ferrule with alignment sleeve, removable crimp	

Mechanical

Parameter	Value	Condition
Coupling	Triple-start thread with anti-decoupling device	
Durability	500 mating cycles	
Shock	490 m/s²	
Vibration	10–2000 Hz, 0.1 g²/Hz	

Environmental

Parameter	Value	Condition
Operating temperature	–55 to +125 °C	

Environmental		
Parameter	**Value**	**Condition**
Marine environment	Stainless-steel and titanium shells for exposed locations	

Versions

Series code	Version	Notes
J599A8/20	Square-flange receptacle	
J599A8/26	Plug	
VAB	Adjustable-angle backshell	Straight, 45° or 90° exit, anti-rotation, cable clamp

Shell materials and finishes

Code	Shell material	Finish	Shell conductivity	EMI shielding	Temperature	Salt spray
W	Aluminum alloy	Olive-drab cadmium	—	—	−55 to +125 °C	For enclosed areas
K	Stainless steel	Passivated	—	—	−55 to +125 °C	For exposed areas
TA	Titanium alloy	None	—	—	−55 to +125 °C	For exposed areas

Fiber count by shell size

Shell	Code	Fibers	Plug Ø A max (mm)
11	B	2	24.9
13	C	4	29.3
15	D	6	32.3
17	E	8	35.6
19	F	12	38.4
21	G	16	41.5
23	H	24	44.8
25	J	32	48.2

J599A8/20 receptacle dimensions

Shell	Code	Thread D	E (mm)	F (mm)	G (mm)	H (mm)
11	B	M15 × 1-6g	26.2	20.62	18.26	3.25
13	C	M18 × 1-6g	28.6	23.01	20.62	3.25
15	D	M22 × 1-6g	31	24.61	23.01	3.25
17	E	M25 × 1-6g	33.3	26.97	24.61	3.25
19	F	M28 × 1-6g	36.5	29.36	26.97	3.25
21	G	M31 × 1-6g	39.7	31.75	29.36	3.25
23	H	M34 × 1-6g	42.9	34.93	31.75	3.91

Shell	Code	Thread D	E (mm)	F (mm)	G (mm)	H (mm)
25	J	M37 × 1-6g	46	38.1	34.93	3.91

How to order

J599A8/[type] M [finish][shell][fibers][key]-[fiber type]

Example: **J599A8/20MKD06N-S** — Square-flange receptacle, marine environment, stainless steel, shell 15, 6 fibers, key N, single-mode 9/125

Code segment	Options
Type	**20** Square-flange receptacle
Type	**26** Plug
Class	**M** Marine environment
Finish	**W** Aluminum, olive-drab cadmium
Finish	**K** Stainless steel, passivated
Finish	**TA** Titanium alloy
Shell	**B–J** Shell 11 to 25
Fibers	**02–32** See fiber-count table
Key	**N** Normal
Key	**A–E** Alternate keys
Fiber type	**M** Multimode 62.5/125
Fiber type	**MI** Multimode 50/125
Fiber type	**MIV** Multimode OM3 50/125
Fiber type	**S** Single-mode 9/125

Termini are not included with the connector and are ordered separately.

Cadmium finish W is not RoHS compliant and is supplied on request.

Standards

- **GJB 599A Series III (interface)** — Shell and coupling to the GJB 599A Series III interface, the Chinese counterpart of MIL-DTL-38999 Series III.
- **ARINC 801** — Fiber-optic termini.

Request a quote or drawing: https://sinoxh.com/request-a-quote/?product=J599A8