J599HR High-Vibration 38999 Series III-Type Plugs

400 g shock · 1.5 g²/Hz random vibration · 1000 mating cycles



Coupling	Triple-start thread, double-locking
Shock	400 g, 3 ms
Random vibration	1.5 g²/Hz, 100–2000 Hz
Mating cycles	1000
Shell sizes	9 to 25
Temperature	–65 to +200 °C

Key features

- Mates with J599 Series III receptacles; uses the J599 Series III insert arrangements
- Composite double-locking anti-decoupling coupling nut — no lock wire or other locking aids needed
- Shock 400 g and random vibration 1.5 g²/Hz, above the standard Series III plug (300 g, 1 g²/Hz)
- Weight saving about 42 % with stainless-steel shells and about 10 % with aluminum shells
- Blind mating, scoop-proof, EMI/RFI shielded
- Aluminum, stainless-steel or titanium shells; rated for acid salt spray, acid atmosphere and mold
- Left-hand (-U) plugs for bulkhead feed-through receptacles

Specifications

Electrical

Parameter	Value	Condition
Withstanding voltage, service rating M	1300 Vrms / 800 Vrms	Sea level / 21,000 m, mated
Withstanding voltage, service rating N	1000 Vrms / 600 Vrms	Sea level / 21,000 m, mated
Withstanding voltage, service rating I	1800 Vrms / 1000 Vrms	Sea level / 21,000 m, mated
Withstanding voltage, service rating II	2300 Vrms / 1000 Vrms	Sea level / 21,000 m, mated
Insulation resistance	≥ 5000 MΩ / ≥ 1000 MΩ / ≥ 100 MΩ	Room temperature / high temperature / humidity

Mechanical

Parameter	Value	Condition
Coupling	Triple-start thread with composite double-locking coupling nut	
Durability	1000 mating cycles	
Shock	400 g, 3 ms	Standard J599 Series III plug: 300 g
Sine vibration	10–2000 Hz, 60 g (140–2000 Hz), 3 × 12 h	High-temperature cycling
Random vibration	50–2000 Hz, 1.5 g²/Hz (100–2000 Hz), 2 × 8 h	Maximum temperature; standard plug 1 g²/Hz

Mechanical		
Parameter	**Value**	**Condition**
Random vibration	25–2000 Hz, 5 g²/Hz (100–300 Hz), 2 × 8 h	Ambient temperature

Environmental		
Parameter	**Value**	**Condition**
Operating temperature	–65 to +200 °C	–65 to +175 °C with cadmium finish
Damp heat	10 cycles of 24 h	
Altitude	≤ 30,480 m	
Marine environment	Acid salt spray, acid atmosphere and mold	

Shell materials and finishes

Code	Shell material	Finish	Shell conductivity	EMI shielding	Temperature	Salt spray
W	Aluminum alloy	Olive-drab cadmium	—	—	–65 to +175 °C	Acid salt spray rated
K	Stainless steel	Passivated	—	—	–65 to +200 °C	Acid salt spray rated
TA	Titanium alloy	None	—	—	–65 to +200 °C	Acid salt spray rated

Contact sizes and current ratings

Contact size	Engaging diameter	Contact resistance	Contact resistance (hermetic)	Current rating
26	0.508 mm	≤ 26 mΩ	—	2 A
22D	0.76 mm	≤ 14.6 mΩ	≤ 28 mΩ	5 A
20	1.02 mm	≤ 7.3 mΩ	≤ 12.0 mΩ	7.5 A
16	1.58 mm	≤ 3.7 mΩ	≤ 8.5 mΩ	13 A
12	2.41 mm	≤ 1.83 mΩ	≤ 5 mΩ	23 A
10	3.20 mm	≤ 1 mΩ	—	33 A

Plug dimensions

Shell	Code	Coupling thread B	Ø A max (mm)
9	A	M12 × 1-6g	21.80
11	B	M15 × 1-6g	25.00
13	C	M18 × 1-6g	29.40
15	D	M22 × 1-6g	32.50
17	E	M25 × 1-6g	35.70
19	F	M28 × 1-6g	38.50
21	G	M31 × 1-6g	41.70
23	H	M34 × 1-6g	44.90

Shell	Code	Coupling thread B	Ø A max (mm)
25	J	M37 × 1-6g	48.00

How to order

J599HR/26 M [finish][shell][arrangement][contact][key][-U]

Example: **J599HR/26MKB35SN** — Shielded plug, marine environment, stainless steel, shell 11, arrangement 11-35, socket contacts, key N

Code segment	Options
Type	**26** Shielded plug
Class	**M** Marine environment
Finish	**W** Aluminum, olive-drab cadmium (enclosed areas)
Finish	**K** Stainless steel, passivated (exposed areas)
Finish	**TA** Titanium alloy (exposed areas)
Shell	**A–J** Shell 9, 11, 13, 15, 17, 19, 21, 23, 25
Arrangement	**—** As J599 Series III
Contact	**P** Pin
Contact	**S** Socket
Key	**N** Normal
Key	**A–E** Alternate keys
Plug side	**(none)** Right-hand plug
Plug side	**-U** Left-hand plug (for feed-through receptacles)

Mating receptacles are the J599 Series III receptacles.

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

Standards

- **GJB 599 Series III (interface)** — Mates with GJB 599 Series III receptacles; vibration and shock ratings above the GJB 599A-1993 level.

Request a quote or drawing: https://sinoxh.com/request-a-quote/?product=J599HR