ZH83723 Circular Connectors (MIL-C-83723 Type), to +260 °C

83723 type · 65 dB shielding · to +260 °C



Shell sizes	8 to 24
Contact sizes	20, 16, 12 (7.5–23 A)
Temperature	–65 to +200 °C (+260 °C sealed)
Shielding	65 dB at 100 MHz

Key features

- Built to GJB 4337, MIL-C-83723 type
- Classes A (black anodized), R (nickel), W (cadmium), K (fire-resistant stainless), Y (hermetic stainless)
- Self-sealing grommet, interfacial seal and O-ring
- Anti-decoupling device
- RFI shielding 65 dB at 100 MHz
- Silicone, high-temperature silicone (260 °C) or fluorosilicone grommets
- Marine-environment shielded version (ZH83723R): titanium or stainless shells, acid salt spray and acid atmosphere rated, 65 dB shielding at 100 MHz

Specifications

Electrical

Parameter	Value	Condition
Withstanding voltage, condition I	1500 / 500 / 375 / 200 V	Sea level / 15,000 / 21,000 / 33,000 m
Withstanding voltage, condition II	2300 / 750 / 500 / 200 V	Sea level / 15,000 / 21,000 / 33,000 m
Insulation resistance	≥ 5000 MΩ / ≥ 100 MΩ	Normal / humidity
RFI shielding	65 dB	100 MHz

Environmental

Parameter	Value	Condition
Operating temperature	–65 to +200 °C	–65 to +260 °C sealed versions
Sealing	1 atm differential	
Salt spray	500 h or 48 h	By finish
Humidity	95–98 % at 20 ± 5 °C	

Marine version (ZH83723R)		
Parameter	**Value**	**Condition**
Shell	Titanium alloy (TA) or passivated stainless steel (K); hermetic versions Y, TAY	
Shell-to-shell conductivity	≤ 200 mΩ	
Temperature	–65 to +200 °C	
Acid atmosphere	28 days, pH 3.5 ± 0.5	
Acid salt spray	5 cycles of 48 h (24 h spray + 24 h drying), pH 3.5 ± 0.5	
Random vibration	1 g²/Hz, 41.7 g rms, 8 h per axis	
Shock	2940 m/s²	
Hermetic receptacle leak rate	≤ 1 × 10^{-8} Pa·m³/s	0.1 MPa differential
Contacts	22D 5 A, 20 7.5 A, 16 13 A, 12 23 A	

Versions

Series code	Version	Notes
ZH83723…M	Marine-environment shielded version (ZH83723R)	Titanium or stainless shells, 28 days acid atmosphere, 5 × 48 h acid salt spray cycles; hermetic receptacles ≤ 1 × 10^{-8} Pa·m³/s

Contact sizes and current ratings

Contact size	Engaging diameter	Contact resistance	Current rating
20	1.0 mm	7.4 mΩ	7.5 A
16	1.6 mm	3.8 mΩ	13 A
12	2.4 mm	2.2 mΩ	23 A

Connector types

Code	Type	Finishes
0	Square-flange receptacle	A, R, W, K
1	Round-flange hermetic receptacle	Y
2	Square-flange hermetic receptacle	Y
3	Shielded plug	A, R, W, K
4	Self-locking plug	A, R, W, K
6	Plug	A, R, W
7	Jam-nut receptacle	A, R, W, K

How to order

ZH83723[type] M [finish][R][shell][contacts][contact][key][seal]

Example: **ZH837230MTAR1005PNV** — Marine square-flange receptacle, titanium, engine-bay version, shell 10, 5 contacts, pins, key N, fluorosilicone seals

Code segment	Options
Type	**0** Square-flange receptacle
Type	**3** Shielded plug
Type	**1** Round-flange hermetic receptacle
Type	**2** Square-flange hermetic receptacle
Type	**7** Jam-nut receptacle
Class	**M** Marine environment
Finish	**TA** Titanium
Finish	**K** Stainless steel
Finish	**Y** Stainless steel, hermetic
Finish	**TAY** Titanium, hermetic
R	**R** Engine-bay environment (types 0 and 3)
Shell	**08–24** Shell size
Contact	**P / S** Pin / socket
Key	**N, 1–9, Y** Key positions (shell 8 has no alternate keys; 18, 20, 24 have 5)
Seal material	**F** Gray silicone (200 °C)
Seal material	**V** Fluorosilicone (200 °C, oil resistant)

The ordering code above is for the marine version; standard ZH83723 part numbers are quoted on request.

Standards

- **GJB 4337 (MIL-C-83723 type)** — Chinese counterpart of the MIL-C-83723 type.

Request a quote or drawing: https://sinoxh.com/request-a-quote/?product=ZH83723