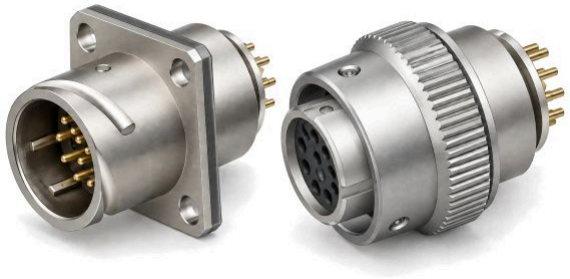
YMG Marine Corrosion-Resistant Bayonet Circular Connectors

Bayonet coupling · hyperboloid sockets · 3 to 62 contacts



Coupling	Bayonet
Contacts	3 to 62
Current rating	3–50 A
Temperature	−55 to +200 °C
Mating cycles	1000

Key features

- Bayonet quick coupling with five-key polarization for blind mating
- Hyperboloid wire-spring sockets: smooth mating, low contact resistance
- Pin or socket contacts in either plug or receptacle; solder termination
- Rain-tight sealing; stainless-steel shells rated 1000 h salt spray
- EMI shielding ≥ 45 dB from 100 MHz to 1 GHz
- Printed-circuit-board receptacles (YMGB), straight and 90° backshells, rain-tight sealing caps
- Custom contact counts, cable lengths and materials on request.

Specifications

Electrical

Parameter	Value	Condition
Rated voltage	500 V	Room temperature and damp heat
Rated voltage	250 V	Low pressure
Withstanding voltage	1500 V / 1125 V / 300 V	Room temperature / damp heat / low pressure
Insulation resistance	≥ 5000 MΩ / ≥ 100 MΩ	Room temperature / damp heat
EMI shielding	≥ 45 dB	100 MHz to 1 GHz

Mechanical and environmental

Parameter	Value	Condition
Coupling	Bayonet	
Durability	1000 mating cycles	
Vibration	10–2000 Hz, 196 m/s²	
Shock	980 m/s²	
Acceleration	980 m/s²	
Operating temperature	−55 to +200 °C	
Humidity	95 % RH at 60 °C	

Mechanical and environmental		
Parameter	**Value**	**Condition**
Sealing	Rain-tight	Not for immersion
Materials	Thermoset insulator; silicone rubber seals; gold-plated copper-alloy contacts	

Versions

Series code	Version	Notes
YMG...T	Plug	
YMG...F	Square-flange receptacle	P: rear thread for backshell; D: no rear thread
YMGB...F / ...N	PCB receptacles, square flange or jam nut	
YMG-AP, -AP01, -GP	Straight and 90° backshells	Cable clamp, 360° shielding, O-ring seal to connector
YMG...B / ...C	Rain-tight sealing caps for receptacle / plug	

Shell materials and finishes

Code	Shell material	Finish	Shell conductivity	EMI shielding	Temperature	Salt spray
1	Aluminum alloy	Electroless nickel	—	≥ 45 dB, 100 MHz–1 GHz	–55 to +200 °C	48 h
11	Copper alloy	Electroless nickel	—	≥ 45 dB, 100 MHz–1 GHz	–55 to +200 °C	500 h
40	Stainless steel	Passivated	—	≥ 45 dB, 100 MHz–1 GHz	–55 to +200 °C	1000 h

Contact sizes and current ratings

Contact size	Engaging diameter	Contact resistance	Current rating	Wire size
Ø0.635	0.635 mm	≤ 25 mΩ	3 A	Solder cup Ø0.7 mm
Ø1.0	1.0 mm	≤ 4.5 mΩ	5 A	Solder cup Ø1.2 mm
Ø1.5	1.5 mm	≤ 2.5 mΩ	10 A	Solder cup Ø1.7 mm
Ø2.0	2.0 mm	≤ 1.25 mΩ	20 A	Solder cup Ø2.6 mm
Ø3.0	3.0 mm	≤ 0.75 mΩ	40 A	Solder cup Ø3 mm
Ø3.5	3.5 mm	≤ 0.7 mΩ	50 A	Solder cup Ø4.8 mm

How to order

YMG [shell] [type] [contacts] [contact type] [rear] [finish] [key] [-option]

Example: **YMG16T3K1P40** — Plug, shell 16, 3 gold-plated socket contacts, rear thread for backshell, passivated stainless steel, key position N

Code segment	Options
Shell	**16 – 39** 16, 18, 20, 22, 24, 27, 30, 33, 36, 39

Code segment	Options
Type	**T** Plug
Type	**F** Square-flange receptacle
Contacts	**e.g. 3** See the insert arrangement table below
Contact type	**Z1** Gold-plated pin
Contact type	**K1** Gold-plated socket
Rear	**P** Rear thread for backshell
Rear	**D** No rear thread (receptacles)
Finish	**1** Aluminum alloy, electroless nickel
Finish	**11** Copper alloy, electroless nickel
Finish	**40** Stainless steel, passivated
Key	**(none)** Normal key position N
Key	**W X Y Z** Alternate key positions
Option	**-08** Shielded flange gasket (receptacles)

Receptacle example: YMG16F3Z1P40W-08 — square-flange receptacle, shell 16, 3 gold-plated pins, rear thread, stainless steel, key W, shielded flange gasket.

Insert arrangements

Arrangement	Contacts	Contact sizes
16-3	3	3 × Ø1.5 mm
16-4	4	4 × Ø1.0 mm
16-7	7	7 × Ø1.0 mm
16-4-1	4	2 × Ø1.0 mm, 2 × Ø1.5 mm
16-10	10	10 × Ø0.635 mm
18-3	3	3 × Ø3.0 mm
18-4	4	4 × Ø1.5 mm
18-7	7	7 × Ø1.0 mm
20-7	7	7 × Ø1.5 mm
20-10	10	10 × Ø1.0 mm
20-10-1	10	6 × Ø1.0 mm, 4 × Ø1.5 mm
20-11	11	11 × Ø1.0 mm
22-10	10	10 × Ø1.0 mm
22-4	4	4 × Ø3.0 mm
24-3	3	3 × Ø3.0 mm
24-4	4	4 × Ø3.0 mm
24-5	5	5 × Ø3.0 mm
24-8	8	4 × Ø1.0 mm, 4 × Ø3.0 mm
24-10	10	10 × Ø1.5 mm
24-12	12	12 × Ø1.5 mm

Arrangement	Contacts	Contact sizes
24-14	14	14 × Ø1.0 mm
24-19	19	19 × Ø1.0 mm
27-14	14	14 × Ø1.5 mm
27-14-1	14	6 × Ø1.0 mm, 8 × Ø2.0 mm
27-19	19	14 × Ø1.0 mm, 5 × Ø1.5 mm
27-19-1	19	19 × Ø1.0 mm
27-26	26	26 × Ø1.0 mm
27-4	4	4 × Ø3.5 mm
27-12	12	8 × Ø1.0 mm, 4 × Ø3.0 mm
30-12	12	4 × Ø1.5 mm, 8 × Ø2.0 mm
30-15	15	13 × Ø1.5 mm, 2 × Ø2.0 mm
30-19	19	10 × Ø1.0 mm, 4 × Ø1.5 mm, 3 × Ø2.0 mm, 2 × Ø3.0 mm
30-22	22	10 × Ø1.0 mm, 6 × Ø1.5 mm, 6 × Ø2.0 mm
30-24	24	24 × Ø1.0 mm
30-30	30	30 × Ø1.0 mm
30-32	32	32 × Ø1.0 mm
30-12-1	12	12 × Ø2.0 mm
33-22	22	18 × Ø1.5 mm, 4 × Ø2.0 mm
33-24	24	24 × Ø1.5 mm
33-27	27	17 × Ø1.0 mm, 4 × Ø1.5 mm, 2 × Ø2.0 mm, 4 × Ø3.0 mm
33-30	30	30 × Ø1.0 mm
33-35	35	35 × Ø1.0 mm
36-37	37	37 × Ø1.0 mm
36-40	40	34 × Ø1.0 mm, 4 × Ø1.5 mm, 2 × Ø2.0 mm
36-41	41	31 × Ø1.0 mm, 10 × Ø1.5 mm
36-55	55	55 × Ø1.0 mm
36-17	17	7 × Ø1.5 mm, 4 × Ø3.0 mm, 6 × Ø3.5 mm
39-16	16	16 × Ø3.0 mm
39-35	35	16 × Ø1.0 mm, 13 × Ø1.5 mm, 2 × Ø2.0 mm, 4 × Ø3.0 mm
39-36	36	18 × Ø1.0 mm, 6 × Ø1.5 mm, 12 × Ø2.0 mm
39-37	37	37 × Ø1.5 mm
39-47	47	39 × Ø1.0 mm, 4 × Ø1.5 mm, 2 × Ø2.0 mm, 2 × Ø3.0 mm
39-48	48	32 × Ø1.0 mm, 12 × Ø1.5 mm, 4 × Ø2.0 mm
39-51	51	43 × Ø1.0 mm, 8 × Ø1.5 mm
39-55	55	55 × Ø1.0 mm
39-62	62	62 × Ø1.0 mm

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