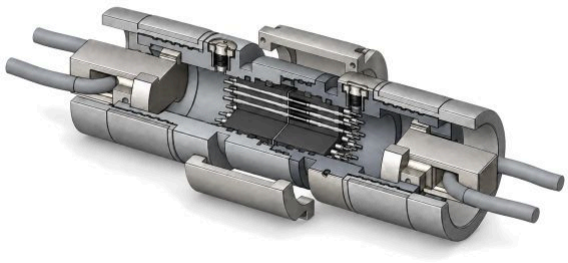
SM Load-Bearing Underwater Connectors for Towed Arrays, 50 kN

50 kN axial load · 450 m · oil-filled pressure-balanced



Depth	450 m
Pressure rating	4.5 MPa mated
Contacts	30 to 67
Current rating	7.5–115 A
Axial load	50,000 N

Key features

- Load-bearing members for Kevlar strength members; 50,000 N axial pull
- Oil-filled, pressure-balanced structure with PU jacket and clamp rings
- Radial and axial sealing; 4.5 MPa hydrostatic pressure when mated
- Contacts from size 20 (7.5 A) to size 2 (115 A), chosen to your needs
- Titanium shell, 1000 h salt spray
- Custom contact counts, cable types and lengths on request

Specifications

Pressure, depth and load

Parameter	Value	Condition
Water depth	450 m	
Hydrostatic pressure, mated	4.5 MPa	
Axial load	50,000 N	

Electrical

Parameter	Value	Condition
Dielectric withstanding voltage	1500 VAC	
Insulation resistance	≥ 1000 MΩ	Room temperature and after environmental tests

Mechanical and environmental

Parameter	Value	Condition
Durability	500 mating cycles	
Vibration	10–500 Hz, 98 m/s²	
Shock	735 m/s² peak, half-sine, 6 ms	
Salt spray	1000 h	Titanium
Mold resistance	Grade 1, 28 days	GJB 150A

Versions

Series code	Version	Notes
SM45 / SM46 / SM66 / SM85	Outside diameter 45, 46, 66 or 85 mm	
SM...T / SM...Z	Plug / receptacle	
-01 / -02	One or two load-bearing holes	

Contact sizes and current ratings

Contact size	Engaging diameter	Contact resistance	Current rating	Wire size
20	1.02 mm	≤ 7.3 mΩ	7.5 A	AWG 22, 24, 26
16	1.59 mm	≤ 3.7 mΩ	13 A	AWG 20, 22, 24
14	1.93 mm	≤ 2.5 mΩ	20 A	AWG 14, 16, 18
12	2.39 mm	≤ 1.83 mΩ	26 A	AWG 12, 14, 16
6	5 mm	≤ 1 mΩ	65 A	AWG 6, 8, 10
2	7 mm	≤ 0.6 mΩ	115 A	AWG 2, 4, 6

How to order

SM [size] [type] [contacts] [contact] -[load-bearing holes]

Example: **SM46Z44J-01** — 46 mm size, receptacle, 44 pin contacts, one load-bearing hole

Code segment	Options
Size	**45 46 66 85** Maximum outside diameter in mm
Type	**Z** Receptacle
Type	**T** Plug
Contacts	**30 44 56 67** Number of contacts
Contact	**J** Pin
Contact	**K** Socket
Load-bearing holes	**01** One
Load-bearing holes	**02** Two

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