



*Customized slip ring solutions*

Member of **BEVENIC**  
GROUP



Combinent is specialized in making customer-specific slip ring solutions for rotating electric applications in demanding environments onshore and offshore. Combinent solutions are found in bulk material handling, wind energy, defence, marine, oil spill response and recovery and many other industrial fields.

### Slip ring assemblies



	Packaged units	Large splitted units	Built-up units
<b>Power ways</b>	No. of ways: any, typically 4–5. Voltage: up to 690 V. Current: typically 100–400 A, up to 800 A.	No. of ways: any, typically 4–5. Voltage: up to 690 V. Current: typically 100–400 A, up to 800 A.	No. of ways: any, typically 3–10. Voltage: up to 2500 V. Current: up to 5000 A.
<b>Signal ways</b>	No. of ways: any, typically 20–30. Current: typically 10 A.	No. of ways: any, typically 3–10. Current: typically 10 A.	No. of ways: any. Current: typically 10 A.
<b>Size</b>	Inner bore ø: any, typically 0.5 m–2 m. Available also without inner bore.	Inner bore ø: up to several meters.	All sizes available. Inner bore available. Splitted versions available.
<b>Enclosure &amp; accessories</b>	Includes enclosure (up to IP 54) with bearings, wiring, connectors and terminal boxes. Heaters and revolving monitor sensors available.	Includes enclosure (up to IP 54) with heater, bearings, wiring, connectors and terminal boxes. Revolving monitor sensors available.	Enclosure (up to IP 54), bearings, wiring, connectors and terminal boxes available.
<b>Other specific features</b>	Also Ex-proof designs available. Low maintenance need. For low and medium speed applications.	Low maintenance need. For low and medium speed applications.	For low and medium speed applications. Check for high speed availability.
<b>Typical use applications</b>	Rotating bulk material handling equipment e.g. in pulp&paper and energy power plants.	Rotating bulk material handling equipment e.g. in pulp&paper and energy power plants.	High-powered motors and generators. Power transmission in general industry. Industrial machines. Portal and mobile cranes.



### Pancake type units



### Molded units



### Rotary joints for fluids and gases



Power ways

No. of ways: any, typically 2–10.  
Voltage: up to 690 V.  
Current: typically up to 30 A, also higher current available.

Signal ways

No. of ways: any, typically 2–10.  
Current: typically < 10 A.

Size

Inner bore  $\varnothing$ : typically 0.1–1 m.  
Splitted versions available.

Enclosure & accessories

Enclosure (up to IP 54), bearings, wiring, connectors and terminal boxes available.

Other specific features

For low and medium speed applications.  
Low profile designs.  
Low maintenance need.

Typical use applications

Medical equipment, test and measurement equipment, producing and controlling equipment.

No. of ways: any, up to several dozens.  
Voltage: up to 690 V  
Current: typically up to 40 A, also higher current available.

No. of ways: any, up to 200.  
Current: < 10 A.

Outer  $\varnothing$ : typically < 10 cm,  
also larger  $\varnothing$  available

Enclosure (up to IP 54), bearings, wiring, connectors and terminal boxes available.

For low and medium speed applications.  
Good for data and video transfer.  
Precious metal contacts available.  
Low maintenance need.

Packaging machines, rotary welding machines, leisure rides, ship propulsion systems, radars, rotary display lightning, weapon systems.

No. of ports: up to 10.  
Size: 1/8"–2".  
Pressure: 16–300 bar.

Inner bore  $\varnothing$ : up to 6".

Integration with electrical slip ring, enclosure (up to IP 54), bearings, wiring, connectors and terminal boxes available.

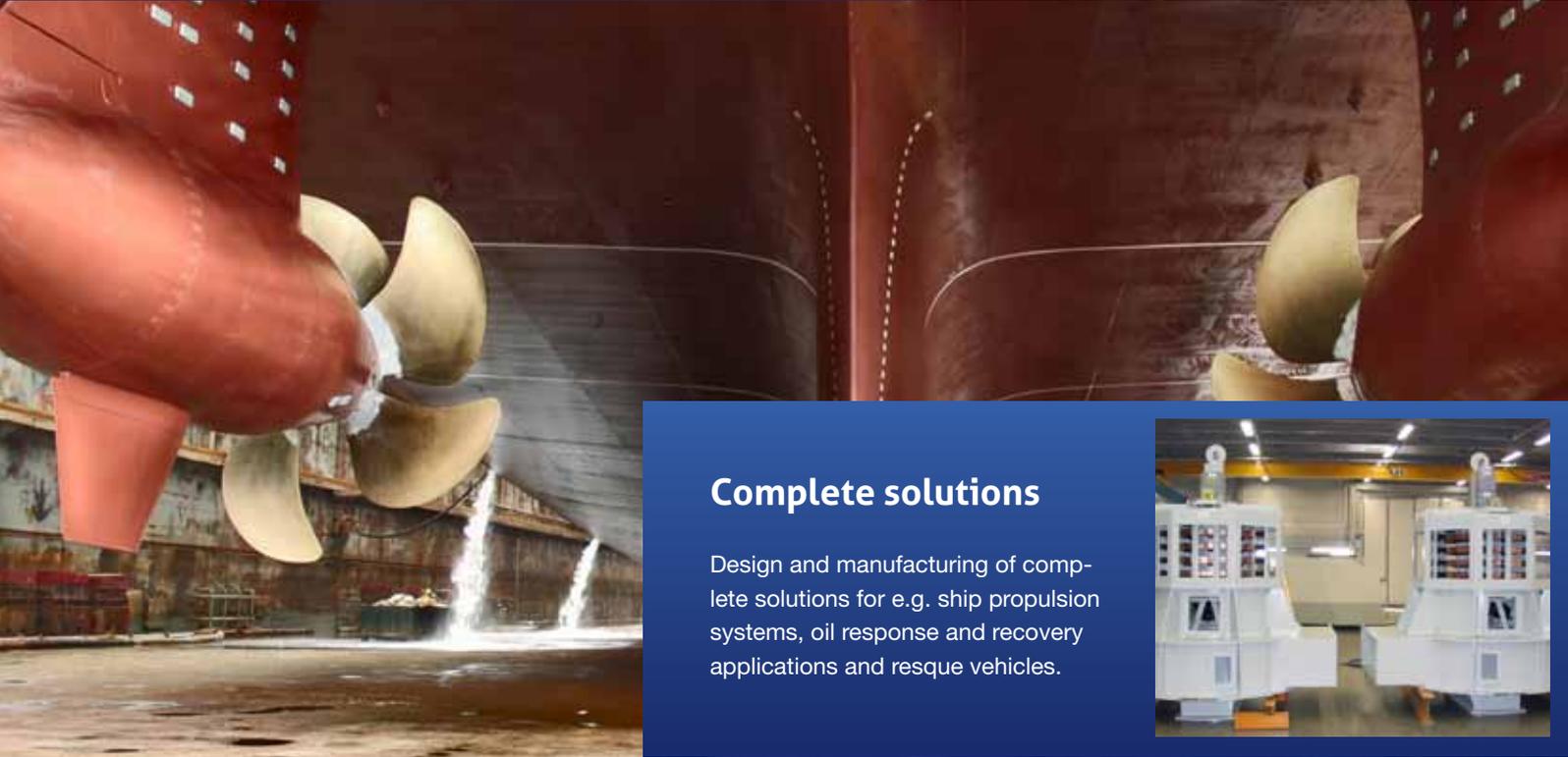
Channels for fluids and gases integrated into single unit.  
Material: nickel plated steel and stainless steel.  
For low speed applications.

Ship propulsion systems, winches, cranes, rescue vehicles.



## Defence equipment

Design and manufacturing of special products and slip rings for armored vehicles, radars, ships and weapon systems.



## Complete solutions

Design and manufacturing of complete solutions for e.g. ship propulsion systems, oil response and recovery applications and rescue vehicles.



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