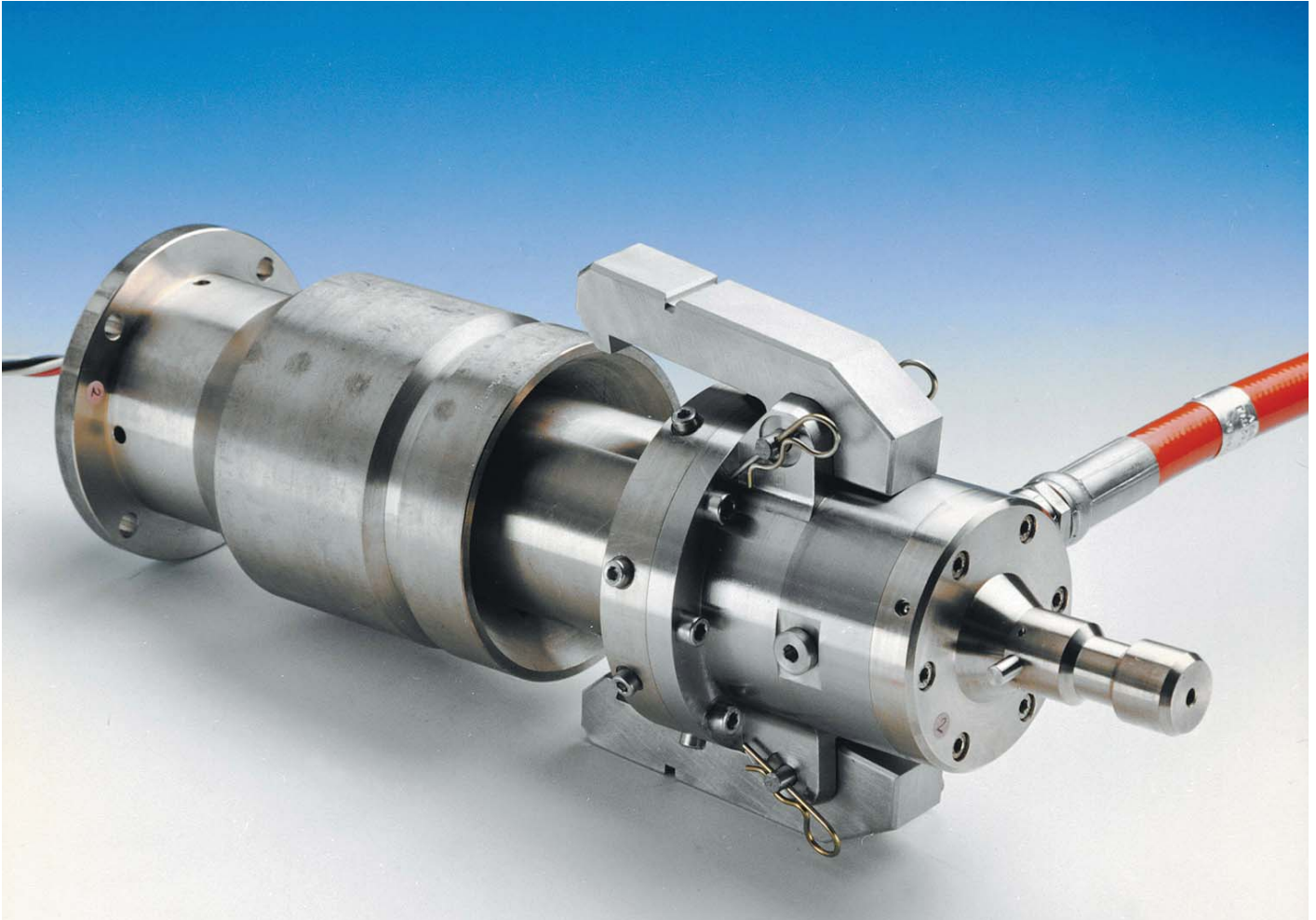


Subsea Control System 8830



Description

SOURIAU'S 8830 push-pull connector is designed for sea-bed coupling to well-heads and other subsea equipment even in polluted water, for diverless operations. It is mated and unmated by an electrohydraulic manipulator arm typically actuated from a remote operated tool ROT.

In umate condition, connectors are always protected from the external environment.

During coupling a self cleaning and wiping action is provided by an oil flushing system and a protective cylinder retracts automatically on the female connector.

Results obtained

- Product passed SOURIAU in-house qualification test.
- External qualification in customer lab ($R_i = 10\text{ G}\Omega$ after 100 matings/dematings in less than 2 hours).
- Use in North Sea offshore programs since 10 years.

Advantages offered by Souriau technological option

Automatic push-pull connection.
No limit on pollution content (electrical butt contacts always protected from the outside environment).

No need to use silicone grease prior to underwater coupling.
Possible cleaning of male and female interfaces before coupling (pressurized oil jet).

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Main technical characteristics

Electrical

- Current capacity: 7,5 AMP per contact.
- Number of contact: 4.
- Working voltage: 600 V.
- Test voltage: 1500 V.
- Insulation resistance: $\geq 100 \text{ M}\Omega$

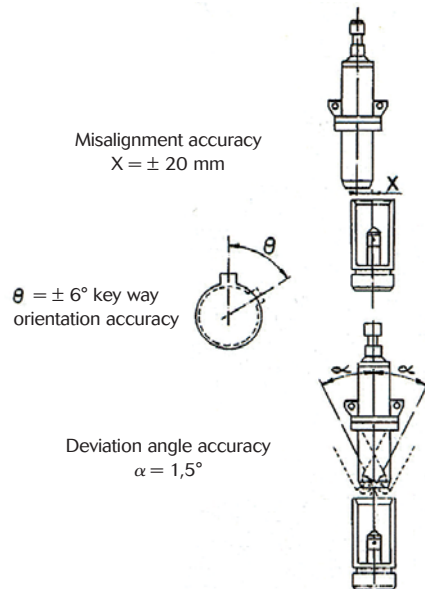
Environment

- Temperature operating: 0°C to $+60^\circ\text{C}$.
- Temperature rating: -40°C to $+70^\circ$.
- Design pressure: 150 bar (1500 meters).
- Muddy and sandy water.

Endurance

- SOURIAU design necessary mating force: 100 daN.
- Maximum mating force to withstand: the connectors can withstand a mating force of 8900 Newton without any damage.
- Number of mating cycles: 100 mating cycles minimum without degradation of the electrical properties.
- Insulation resistance after 100 mating cycles: 100 M Ω minimum.
- Time life: 20 years underwater mated.

Mating tolerances



Mating process

No mating or demating will take place with power on.

Dimensions (in mm)

