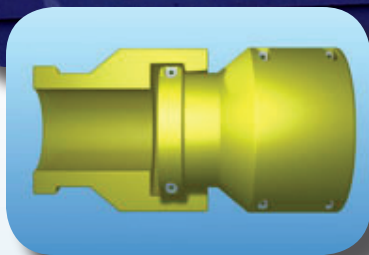
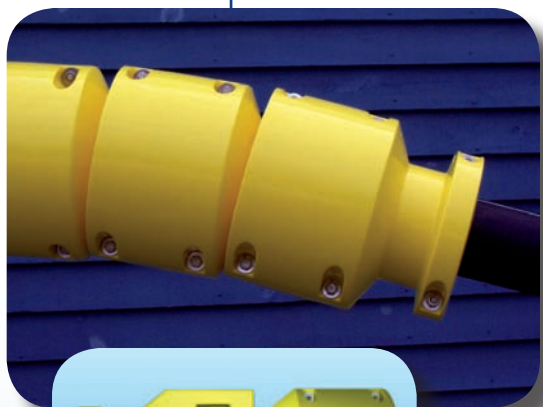


## Bend Restriction

### InFlex™ – Static Bend Restrictors

Our InFlex™ bend restrictors are manufactured as interlocking modules designed to prevent the flexible pipe or umbilical from bending beyond its Minimum Bend Radius (MBR). Designed for static terminations, each module is allowed to move a small angular distance under an external load. If the bending moment attempts to push the flexible beyond its MBR, the modules will lock, forming a smooth curve or locking radius, transferring the load into the restrictor and preventing over bending.

Cast from high-performance polyurethane elastomers, InFlex™ bend restrictors are manufactured as half shells to allow for offshore installation. Shells are bolted together to form a complete assembly.



### Flex-Lok™ – Buoyant Bend Restrictors

In subsea field design, it can be advantageous to combine buoyancy and bend restriction. Our Flex-Lok™ buoyant bend restrictors are engineered to support, decouple load, and prevent over bending of umbilicals, flying leads and other flexibles in deepwater. The buoyancy elements are manufactured from an impact-resistant grade of Flotec™ syntactic foam. Maximum service depths can be specified to 4000m and beyond. These elements are then fastened around a high-performance polyurethane elastomer inner core that is bolted around the flexible.

Each element is cast as a half shell allowing the product to be fitted at any stage of deployment. As with standard bend restriction, each module is allowed to move a small angular distance forming a locking radius preventing over bending.

**FLOTATION  
TECHNOLOGIES**

*A company with depth*

Flotation Technologies, Inc. is a world leader in the engineering, design and manufacture of deepwater buoyancy systems using high-strength Flotec™ syntactic foam and polyurethane elastomers.



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