

VIRTUS™ FLOWLINE TYPE CONNECTOR (FTC)

Reliable, robust flowline connections for all offshore applications

Connectors are a vital interface linking the major components of every subsea field. The nature of each interface, and hence the choice of connector, plays a major role in the field architecture, constructability, and through-life operation of a subsea development.

Designed with the field-proven Retlock® clamp connection technology, FTC delivers a wide range of connection solutions for rigid and flexible flowline jumpers and pipes.

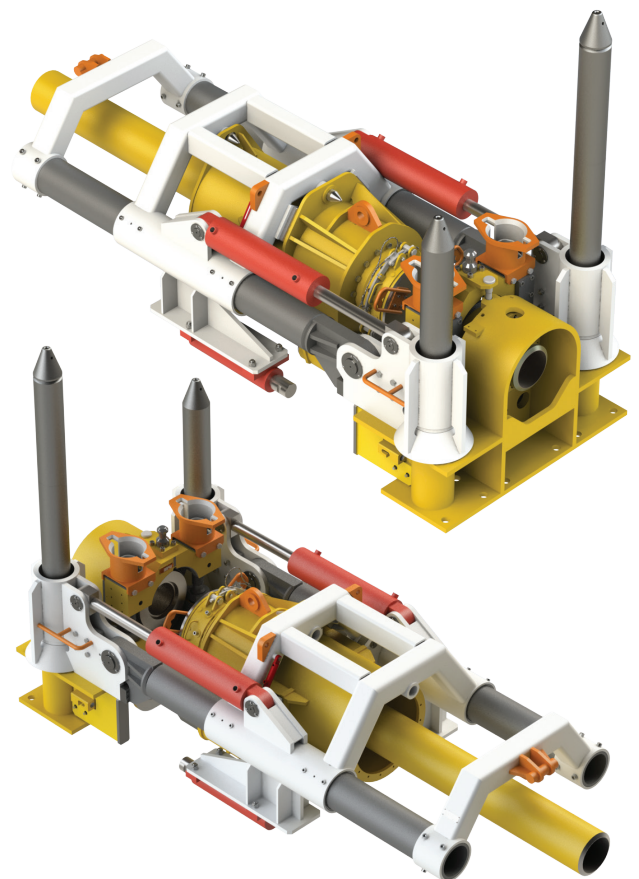
Built on a proven, 25-year service track record, every FTC provides the highest reliability, adaptability, and cost effectiveness. With FTC, operators can minimize their development risks while maximizing the potential of each asset.

APPLICATIONS:

- Horizontal or stab and hinge-over connection of rigid or flexible flowlines, where both the tree and manifold are already on location
- Seamlessly links Christmas trees, manifolds, pipeline end terminations, and riser bases from any manufacturer
- Can make connections outside the well cluster, such as risers and long jumpers to satellite wells and export lines
- Suitable for both conventional and high-pressure/high-temperature developments in shallow or deep water
- Suitable for both mono- and multi-bore configurations

BENEFITS AND DIFFERENTIATORS:

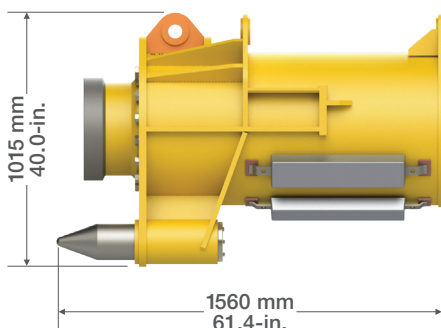
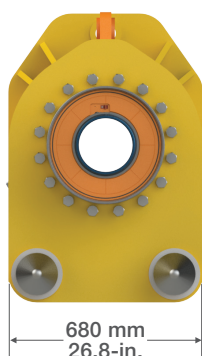
- Widely field-proven Retlock clamp connection technology provides a robust clamping solution for all installations and orientations
- Available in either horizontal or stab and hinge-over designs using the same connection tool
- Offers reliable, cost-effective, and adaptable installation and connection of both rigid and flexible flowline jumpers
- Available for fast-track delivery within six months
- All subsea tools operable by a workclass ROV
- Wet parking capability allowing for reliable, rapid installation in one ROV dive
- Compact interface and modular design allow FTC to easily integrate within Christmas trees and manifold structures, with all key interfaces contained within the connection system components
- Subsea seal changeout without crane operations
- Light weight full pressure sealing blind
- AFGlobal subsea connection experts are available to offer support to any assets around the globe—24 hours a day, 7 days a week



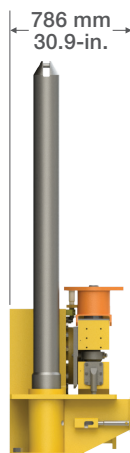
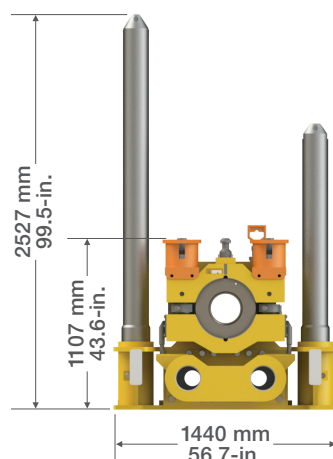
ANGULAR INSTALLATION TOLERANCES	± 5°
POSITIONAL INSTALLATION TOLERANCES	7.1-in (180mm) Radial Capture
LINE SIZES	6-in. to 8-in. 15 ksi / 6-in. to 12-in. 15 ksi
PULL IN FORCE	127,916 lbf (569kN)
CONNECTION TOOL STROKE	19.7-in (500mm)
CONNECTION STROKE TOOL WEIGHT	4740 lbs (2150 kg)
PORCH DIMENSIONS ¹	56.7 x 43.6 x 30.9-in without guide posts (1440 x 1107 x 786 mm) 56.7 x 99.5 x 30.9-in with guide posts (1440 x 2527 x 786 mm)
PORCH WEIGHT ¹	3,527 lbs (1600 kg) without guide posts 4,520 lbs (2050 kg) with guide posts
PULLHEAD DIMENSIONS ¹	26.8 x 61.4 x 40-in (680 x 1560 x 1015mm)
PULLHEAD WEIGHT ¹	2293 lbs (1040 kg)
WROV SKID	Optional
CONTROL SYSTEM	AFG Controls
ROV POWER REQUIREMENT	115v AC 207 bar, 40lpm HPU, RS232 or RS485 Comms
ELEVATION ABOVE SEA FLOOR LIMIT	N/A
HUB CONFIGURATIONS	As above - concentric
PORCH ATTACHMENT TYPES	Welded/Bolted preferred

¹ Sizes and weights disclosed above/below for 6-in. and 8-in. 15 ksi systems.
Please see Retlock® Clamp brochure for data related to the clamping and sealing technology.

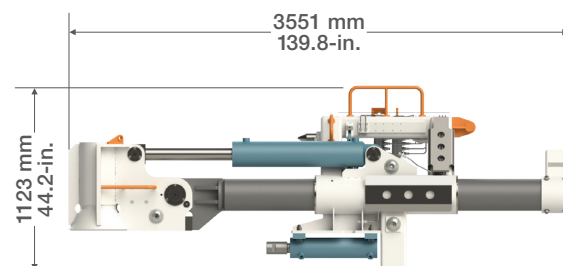
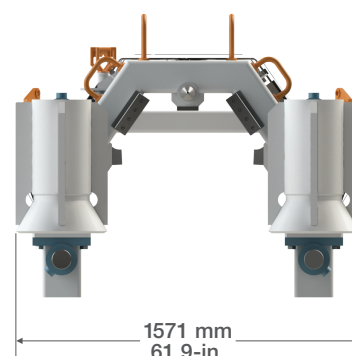
PULLHEAD



PORCH



PULL-IN TOOL



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