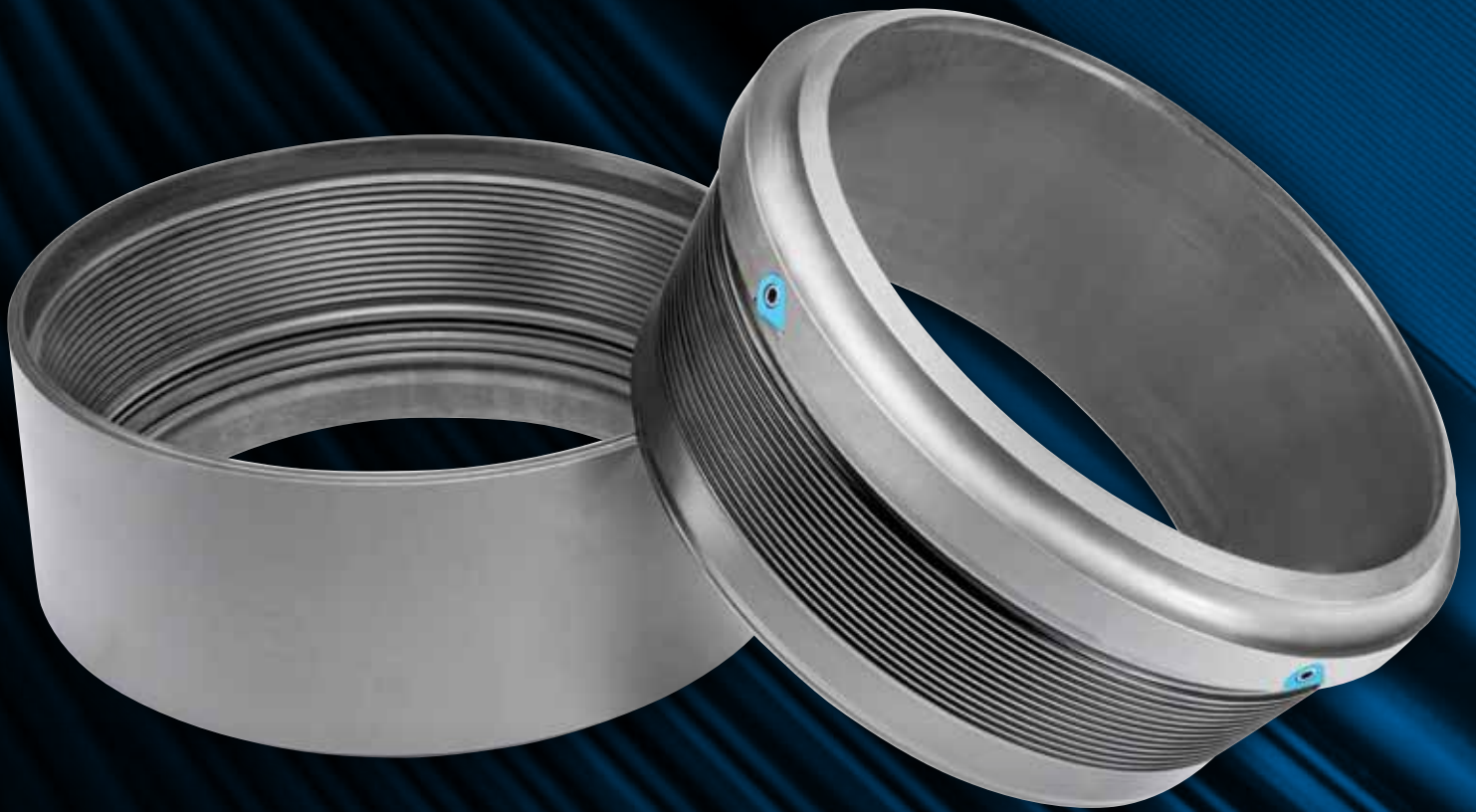


GE Oil & Gas  
Subsea Systems

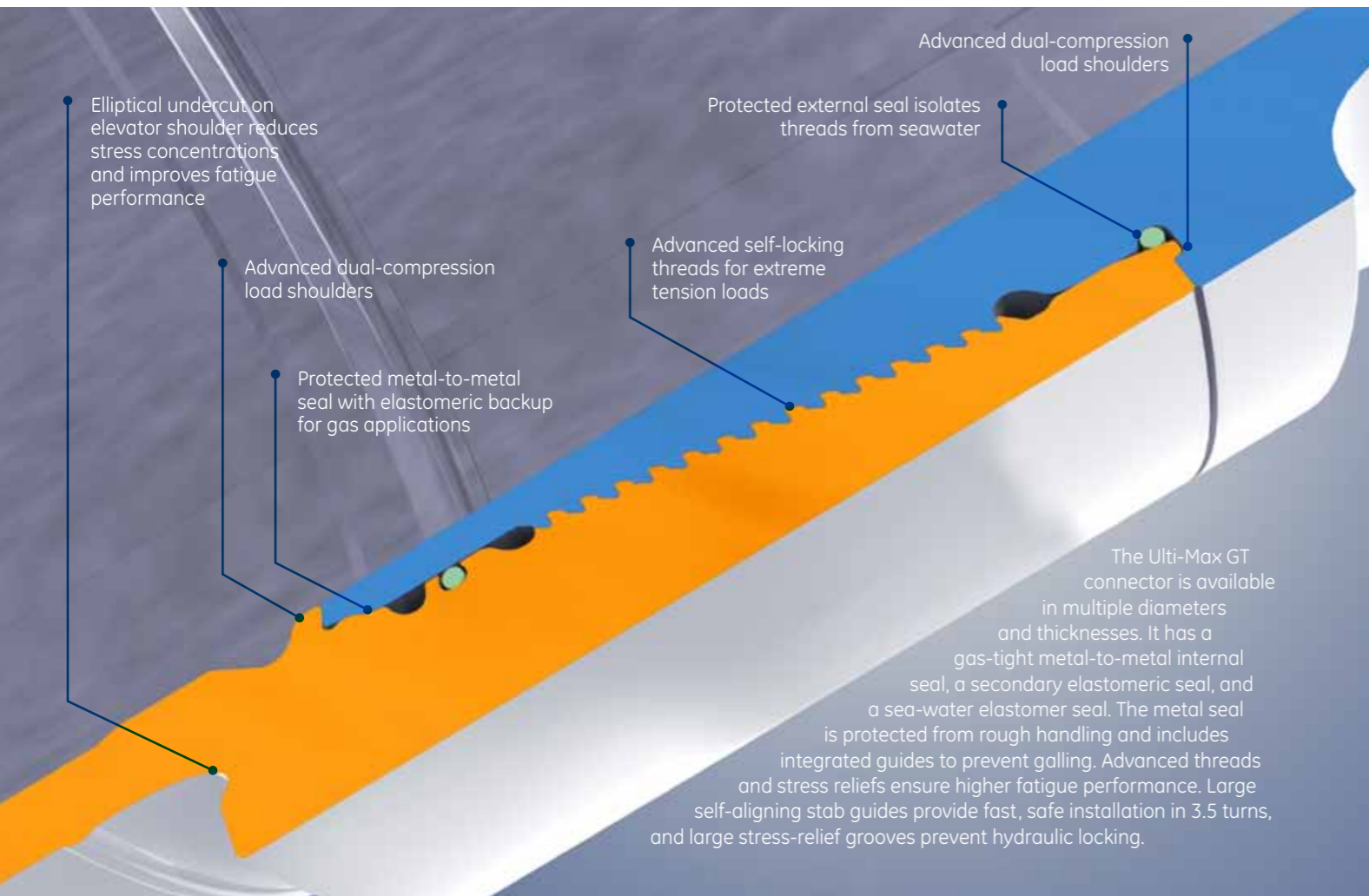


# Ulti-Max™ GT

High-performance gas-tight casing connector  
for offshore drilling operations







# Fast & secure

## Optimizing safety and rig time

Our patent pending new anti-rotation keys have higher torque capacity than conventional designs, minimize loose parts and can be set in under 30 seconds. The cam and bolt are easily installed with a 3/16" Allen key – no special tools, hammering or explosive cartridges required. This is a big change in operating ease that translates directly into wider international regulatory compliance, safety and optimized rig time.



To activate the Ulti-Max GT video: launch the Clevar app and point your device at the blue anti-rotation key



This brochure has Augmented Reality features that are visible with the Clevar iPhone/iPad app. Download it for free from the Apple app store, launch it and point your device camera at images in this brochure to see multimedia content.

Ulti-Max™ GT is the latest advance in weld-on casing connectors. It combines all the features of our widely used RL-3M connector with new materials and design advantages – all in a more compact, lightweight and cost-effective package.

After a rigorous design and testing program, Ulti-Max GT sets entirely new standards for application range, safety, ease of use and reliability. By significantly speeding up casing string installation, this innovative connector also improves rig productivity.

## Key design features and benefits

- Easy make-up: extended stab guides with self-aligning and locking threads
- Speed: gas-tight metal-to-metal seal connection with as little as 40 kip-ft in only 3.5 turns
- Anti-rotation: patent pending new key design is easily and safely installed in less than 30 seconds with no special tools for between 49,500 and 62,500 ft-lbs of torque capacity (depending on connector size and yield strength) with three keys
- Rejection prevention: protected metal seal designed for rough handling with integrated guides to prevent galling
- Single-thread start: optimizes fatigue performance while minimizing the effects of back-out on sealability and pre-load loss

For more information about the Ulti-Max GT connector, please contact your local sales representative or email [UltiMax.GT@ge.com](mailto:UltiMax.GT@ge.com)

connector  
**meets or exceeds**  
pipe grade & weight

For many existing applications, the connector and pipe are intentionally mismatched (e.g., 95 ksi connector for X80 pipe) to ensure that the connector meets production requirements.

The Ulti-Max GT however, meets pipe capacity while matching the raw material yield strength to the pipe grade (e.g., 80 ksi connector for X80 pipe). Not only does this significantly improve welding ease and strength, but it paves the road for future reliability needs as operators must deal with continually deeper waters and higher pressures. With X100 pipe just around the corner for many operations, Ulti-Max GT will easily deliver 100 ksi versions without the need to redesign.

tested  
**above & beyond**

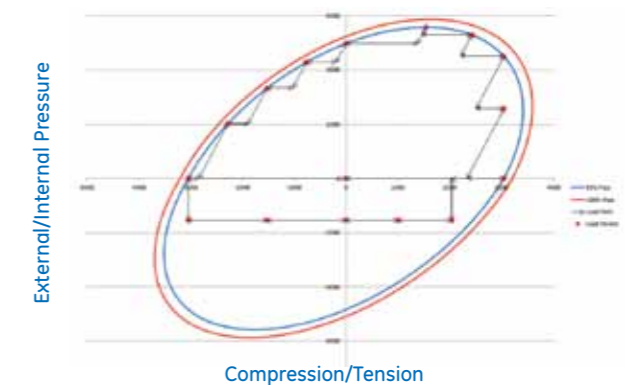
Ulti-Max GT has passed GE's most extensive connector test regimen ever, including a wider range of key safety components and higher standards than covered by typical testing programs.

**Meets or exceeds all ISO 13679: 2011 CAL I-E requirements**

- Tension
- Compression
- Bending
- Internal and external pressure

**Goes beyond ISO 13679 for additional assurance**

- Backup O-ring gas tested under ISO load conditions
- Sea-water seal gas tested for extreme upset conditions – with high-pressure gas in the thread annulus behind the backup O-ring
- Comprehensive FEA simulating ISO loading, with additional specialty FEA for anti-galling and individual seal performances at worst-case tolerances



Example of an ISO 13679 CAL I-E load sequence performed on the Ulti-Max GT

Ulti-Max GT	Connector material	Compatible pipe grades	Tension (kip-ft) <sup>(A)</sup>	Compression (kip) <sup>(B)</sup>	Bending (kip-ft) <sup>(A)</sup>	Internal pressure (psi) <sup>(A)</sup>	Collapse pressure (psi) <sup>(A)</sup>	Anti-rotation capacity (ft-lbs) <sup>(B)</sup>	Max. OD/Min. ID (in)	Pin/Box length (in)	Make-up loss (in)	Weight (lb)			
Diameter x wall thickness															
20" x 0.438"	70 ksi	X56, X65, X70	1,884	1,884	752	3,062	-520	49,500	21.88/18.62	9.32/9.24	6.86	291			
	80 ksi	X80	2,153	2,153	859	3,500	-520	56,500							
20" x 0.500"	70 ksi	X56, X65, X70	2,144	2,144	850	3,494	-770	49,500							
	80 ksi	X80	2,450	2,450	971	3,994	-770	56,500							
20" x 0.625"	70 ksi	X56, X65, X70	2,663	2,663	1,042	4,364	-1,520	49,500							
	80 ksi	X80	3,043	3,043	1,191	4,988	-1,520	56,500							
20" x 0.812" <sup>(C)</sup>	80 ksi	X56, X60	2,937	2,937	1,128	4,852	-2,590	56,500	21.88/18.25						
	95 ksi	X65, X70	3,426	3,426	1,316	5,660	-2,820	62,500							
22" x 0.750"	70 ksi	X56, X65, X70	3,505	3,505	1,501	4,759	-1,920	55,000	24.182/19.88	12.19/12.19	8.66	477			
	80 ksi	X80	4,006	4,006	1,715	5,439	-1,980	62,500							
22" x 0.812"	70 ksi	X56, X65, X70	3,784	3,784	1,611	5,149	-2,310	55,000							
	80 ksi	X80	4,324	4,324	1,841	5,885	-2,430	62,500							
22" x 0.875"	70 ksi	X56, X65, X70	4,065	4,065	1,721	5,546	-2,700	55,000							
	80 ksi	X80	4,646	4,646	1,967	6,338	-2,880	62,500							
22" x 1.000"	70 ksi	X56, X65, X70	4,618	4,618	1,933	6,330	-3,690	55,000							
	80 ksi	X80	5,278	5,278	2,209	7,235	-3,870	62,500							
22" x 1.500"	70 ksi	X56, X65, X70	6,762	6,762	2,706	9,433	-8,520						TBD		
	80 ksi	X80	7,728	7,728	3,092	10,780	-9,460								

(A) Capacity values are calculated at yield per API 5C3 (B) Compression capacities are calculated at buckling (C) For this size only, the connector yield strength is higher than the pipe to meet pipe capacity (a design that meets pipe capacity with same yield strength is currently in development) (D) Assumes 3 anti-rotation keys installed

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GE imagination at work