



Checkguard*

Flexible subsea blowout prevention

Applications and Benefits

GE's Checkguard drop-in check valves prevent return flow during a kick and are suitable for most drilling situations in which return flow through the drill string is a risk and normal operation requires the benefits of a full-bore sub. By preventing upward flow through the drill pipe, but allowing fluid to be pumped downward to circulate the well, the valves provide the driller with the means to control the drill pipe pressures when required, significantly improving and simplifying well control.

Checkguard valves can be installed:

- While stripping drill pipe into the hole, to control upward pressure in the drill pipe
- Prior to shearing drill pipe, to protect against the release of well pressure
- While tripping, to contain upward well bore pressure in the drill pipe, allowing the top connection to be open

Key Features

By managing the back flow coming from high-pressure formations, Checkguard valves provide superior well control on demand. Our retrievable drop-in check valves are installed on an as-needed basis, allowing the retrieval of other through-string tools without affecting measurement-while-drilling tools. Checkguard's innovative design includes:

- Abrasion-resistant materials, including a tungsten-carbide coated ball seat and ceramic ball
- Erosion-resistant hardened flow passages
- Positive closure – after traveling down the drill string, the check valve lands on the landing sub sleeve and latches positively into place
- Wireline retrievable, to eliminate the need to trip the drill string
- 15,000-psi working pressure to match the highest pressure BOP equipment

The GE Oil & Gas Checkguard Advantage

Checkguard valves provide optimal flexibility and functionality. They can be installed on an as-needed basis and don't affect measurement-while-drilling tools or retrieval of other through-string tools. They remain top side until needed, are retrievable by wireline and significantly improve well control.



Engineering Data

15,000 psi NACE trim Checkguard

Assembly		Check valve			Landing sub			
No.	L-Sub End Connection	O.D. (inches)	Bore (inches)	Weight (lbs)	O.D. (inches)	Bore (inches)	Length (inches)	Weight (lbs)
27	NC 31 (2 ⁷ / ₈ IF)	1.6875	0.625	5	4.125	1.625	36.00	105
	NC 38 (3 ¹ / ₂ IF)				4.75			
	WT 38				5.125			
	XT 39				5.00			
35	NC 38 (3 ¹ / ₂ IF)	2.1875	0.875	13	4.75	2.125	36.00	120
	4 ¹ / ₂ FH				6.00			
	NC 46 (IF)				6.25			
	NC 50 (4 ¹ / ₂ IF)				6.375			
	4 ¹ / ₂ RRH				5.75			
	4 ¹ / ₂ RRHBXB				5.75			
	3 ¹ / ₂ EUE				5.00			
	4 ¹ / ₂ NVAM				5.00			
	WT40				5.50			
	WT40 box x XT39 pin				5.375			
	WT40 box x XT38 pin				5.25			
	DS55				7.00			
	HT50				7.00			
	NC46				6.50			
XTM50 box x NC50 pin	4.50							
43	NC 50 (4 ¹ / ₂ IF)	2.6875	1.375	18	6.125	2.625	36.00	230
	NC 50 (4 ¹ / ₂ IF)				6.25			
	NC 50 (4 ¹ / ₂ IF)				6.375			
	NC 50 (4 ¹ / ₂ IF)				6.50			
	HT55-375				7.13			
	XT50				6.63			
	5 ¹ / ₂ FH				7.00			
	NC 50 (4 ¹ / ₂ IF)				6.625			
48	NC 50 (4 ¹ / ₂ IF)	3.00	1.6875	23	6.375	2.9375	36.00	220
	5 ¹ / ₂ FH				7.00			
	6 ⁵ / ₈ RRH				7.75			
	6 ⁵ / ₈ RRH RXB				7.75			
	6 ⁵ / ₈ FH				8.00			
	6 ⁵ / ₈ RRH				8.00			
	NC 50 (4 ¹ / ₂ IF)				6.625			
	XT57				7.00			
	XT54				6.63			
	XT65				8.00			
	6 ⁵ / ₈ FH				8.25			
	6 ⁵ / ₈ FH				8.50			
	WT 56				7.75			
	XT57				8.00			
	WT50 box X HT55 pin				7.125			
	XT57				7.375			
XT57 box X HT55 pin	7.00							

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