

Tornar® Circulation Valve

Clean and solids-free wellbore

The Tornar® Circulation Valve removes debris from the wellbore rapidly and reliably. Its unique design utilizes Tornar® flow ports to create a powerful cyclone to clean and optimize well fluid velocity.



TORNAR®

Benefits

- Secure wellbore integrity
- Reduced downtime
- One run BOP and wellhead cleaning
- Large flow areas
- Cyclone effect keeps solids afloat
- Increased fluid pressure for more effective cleaning
- No limitations on running speed
- No run in hole restrictions

Specifications

Size	8.30
Max OD, in	8.30
Drift ID, in	2.25
Tool Joint OD	6 5/8
Nozzle diameter, mm	Ø18mm x 12
Max tripping speed in casing	200 ft/min
Recommended cleaning speed in casing	0.5 ft/min
Recommended rotation speed while cleaning	15 rpm
Max pump rate	6,500 lpm
Min recommended pump rate	3,500 lpm
Max rotation speed	75 rpm
Max allowed Tensile (lbs)	1,175,450 lbs
Torsional Strength (ft. lbs)	116,206 ft. lbs
Pressure rating - shifting sleeve*	1200 - 1700 psi
Shifting method	2 3/4" steel ball
Max working temp	150°C
Material main body	AISI 4145M
Connection	NC-50 box/pin

* can be used without the shifting sleeve

Applications

- Cleaning debris from wellbores in any wellbore cleanup operations
- Cleaning wellheads in combination with BOP and riser cleaning
- Boosting annular velocity above plug
- When extra circulation is required

Features

- Optional flow split sleeve
- Tornar® flow ports
- Stabilizer blades for support on low side
- Drill pipe or premium connection
- One piece mandrels. No parts lost in hole
- Up to 75 rpm rotation
- Large flow by area
- High circulation rates (6500lpm)

The Tornar® Circulation Valve can be integrated as a part of a complete wellbore cleaning string used during displacement process for optimum fluid velocity and cleaning. Improper cleaning can possibly damaging or plugging the productive zone, and impeding the running of the completion assembly. Proper cleaning contributes to a successful completion and reduces the potential for wellbore contamination.

The Tornar® Circulation Valve can also be integrated as a part of the Tornar® Sub Sea BOP cleaning string for cleaning Wellhead areas prior to cleaning BOP and Riser. The Tornar® Circulation Valve is then positioned below the Tornar® BOP Cleaner. You can now clean the Wellhead and BOP in one run.



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