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.

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 bellow the Tornar® BOP Cleaner. You can now clean the Wellhead and BOP in one run.



- 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 and 11.50 |
|---|----------------|
| 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 |
| Min recommended pump rate | 3,500 lpm |
| Max rotation speed | 150 rpm |
| Max working temp | 150°C |
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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 150 rpm rotation
- Large flow by area
- High circulation rates (6500lpm)



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