Tornar[®] Circulation Magnet

Reliable well cleaning

High circulation magnetic wellbore cleaning

The Tornar® Circulation Magnet retrieves magnetic objects and particle debris from the wellbore rapidly and reliably. Its unique design utilizes the most powerful magnetic elements, combined with thru-magnet Tornar® flow ports, for fishing and wellbore cleaning operations.



Benefits

- Thru magnet Tornar® flow ports clear particle debris to ensure full contact
- $-\$ Up to 1000 kg lifting capacity
- No limitations in running speed
- No run in hole restrictions

Applications

- Wellbore cleaning operations
- Retrieval of magnetic objects from the wellhore
- Run as integral part of drillpipe toolstring to attract and retain magnetic debris

Features

- Thru-magnet Tornar® flow ports
- One piece mandrel
- Stabilizer blades for support on low side
- Up to 75 rpm rotation
- Multi-magnet element
- Drill pipe connection

Magnetic debris is a serious oilfield challenge, and is responsible for many of the operational difficulties and costs of well production and maintenance, particularly in high deviations and hostile conditions. Even small objects can severely jeopardize well control and integrity, with potentially hazardous consequences to people, the environment and well components.

Designed to remove magnetic objects and accumulated debris from the wellbore rapidly and efficiently, the Tornar® Circulation Magnet is equipped with the strongest magnetic elements available - with a lifting capacity of over 1000 kg with full contact. Its unique thru-magnet Tornar® flow ports create a powerful cyclone effect around objects and the surrounding wellbore, ensuring full contact with the magnet and optimal debris extraction.

Specifications

Casing size, in [mm]	9 5/8 [244.5] and up
Max running speed in casing	No limit
Nozzle diameter, in [mm]	0.79 [20] x 12
Max pump rate, gal/min [l/min]	1,453 [5,500]
Min recommended pump rate, gal/min [l/min]	845 [3,200]
Max set down weight on magnet, lb [kg]	6,614 [3,000]
Max magnet lift capacity, lb [kg]	3086 [1400]
Max rotation speed, RPM	75
Max OD, in [mm]	8.30 [210.8]
Connection	NC50 Boxup
Temperture rating, °F [°C]	39 - 302 [4 - 150]

12 x 12 circulation ports in magnet nose sub





